

GRL Laser Tag Rotterdam - how to and source code

February 20, 2007



UPDATE: !!!!! LASER TAG 2002 IS RELEASED - Feb 2008 !!!!!

The main event of the GRL Rotterdam tour - 'L.A.S.E.R TAG' - 60mw geek graffiti madness. Watch the [video here](#) on the [Graffiti Research Lab](#) website.

In the spirit of GRL's and [Eyebeam's](#) open source beliefs, we are posting the code and executable for the Laser Tag application online for you to download, dissect, reuse and hopefully improve. The code is C++ and compiled in a super old school Codewarrior IDE for windows but it is OpenGL based and written using [openFrameworks](#) which is a cross platform library for writing creative code. So it should be very straight forward to run in Visual Studio, DevC++ or even xcode on a mac.

In its simplest form the Laser Tag system is a camera and laptop setup, tracking a green laser point across the face of a building and generating graphics based on the laser's position which then get projected back onto the building with a high power projector.

There are a bunch of things you need to do to get Laser Tag up and running yourself, so here follows the required equipment and setup instructions. This will assume that you using windows but it will also apply for other OSs too.

EQUIPMENT

We used:

- 1 PC Laptop - ASUS A8JS - Core 2 Duo 1.83 Ghz 1GB Ram Nvideo Geforce Go 7300 256MB - VGA and DVI out.
- 1 Panasonic PTD5600U 5000 ANSI Lumens 1024x768 DLP Projector.
- 1 Watec 221S Security/Astronomy Camera with manual iris zoom lens.
- 1 Bogen magic arm and super clamp.
- 1 Pinnacle PCTV USB capture card.
- 1 60mW Green Laser (super illegal in a lot of places and very dangerous)
- and loads and loads of AAA batteries.



SETUP

Location:

Choose a building or wall that the laser shows up well on. If using a building make sure the lights aren't on as this will make the tracking of the laser beam harder (also it is not a good idea to point powerful lasers at a building with people in it) .

Pick a spot far enough back that the projector can overshoot the building by a couple of feet on all sides.



Alignment and calibration:

If the building is vertically orientated and the projector can handle it, put the projector on its side so you are using the full image of the projection.

Fix the projector in place and then fix the camera underneath the lens of the projector so that it is looking at the projection area. Allow the camera to see a little more than the projection area so that you can designate an area as a clear button.

Make sure all the settings on the camera are set to manual - no auto exposure or gain control etc. Adjust the color balance of the camera so that it looks as natural as possible - make sure any lights in the shot don't look green as this will confuse the tracking system.

Software setup:

Set your resolution of your screen to 1024 by 768.

Connect the projector to the PC and in your display control panel set the display mode to horizontal span. This should span the Desktop across the laptop screen and the projector so that you have one large screen of 2048 by 768 resolution. If you have access to OpenGL and 3D preferences in the control panel, set all settings to performance.

Connect the camera to the usb capture card and the capture card to the PC. You can use [Amcap](#) to make sure you can capture video okay.

Start the app and you should see something like the image bellow.
Follow the instructions in the diagram to align the camera to the projection surface.

LASER TAG SETUP

1 Move the corners of the texture so that they line up with the corners of the projection surface. You need to press L to show the edge lines.

The red box is the clear area, use the Clear X and Clear Y values in settings to move this to an area outside of the yellow box that will act as a clear button for the system.

2 Select the corners of the yellow quad to line up to the corners of the projection area. If the image is inverted or back to front swap the corners of the yellow quad over to it matches the output.

fps is 50.79
activity is 0

SETTINGS:
U&D arrow keys to select parameter
L&R arrow keys to decrease or increase
h shows/hides gui
l shows/hides edge lines
u reloads last saved settings
c clears buffer
s saves settings to file

Slide	0
Verticle mode	1
Use blobs	1
Motion diff	1
Use camera	0
Drips mode	1
Fade out	0
Slant brush	1
Clear zone	1
Brush width	5
Drips freq	11
Activity thresh	10
Min blob size	3
Jump dist	80
Line resolution	65
Clear X pt	14
Clear Y pt	78
Clear thresh	46
Hue Point	0.405000
Hue Thresh Width	0.330000
Sat Threshold	0.180000
Value Threshold	0.210000
Fade out amnt	0.989000

VideoIn: Select sub region Warped Video Thresh Video

Here shows the projection areas overlayed with what is being drawn. You should see the projection lined up with the overlay. The small box should be tracking the laser point.

Adjust the color balance of the camera and the Hue, Sat and Val settings above so only the laser pointer is showing up in the thresh video.

Once the camera is aligned to the projector hide the white alignment lines on the projected image by pressing L.
Turn down the iris of the camera to the point where the surface is as dark as possible but the laser still shows up strong.

Settings:

The settings for the app are saved in an xml file so once you have made your adjustments hit the S key to save your changes.
The up and down arrows on your keyboard will run through the list of settings and the left and right arrows can adjust the values.

The first settings you will want to adjust is the four at the bottom - which define the color tracking of the laser.

Hue Point - should be the value of green that the camera sees the laser as.

Hue Thresh - is how wide a range from the hue point it should consider.

Sat Thresh - is the minimum amount of saturation.

Value Thresh - is the minimum brightness.

Anything that is outside the range of these settings will show up as black in the Thresh Video anything that is within (hopefully only the laser point) should show up white.

Here is an explanation of the rest of the settings:

Slide - slides the screen over so you can see what is being projected
Verticle mode - if the projector is being used on its side.
Use blobs - should stay on, blob tracking ended up being more reliable than motion difference.
Motion diff - don't touch
Use camera - toggle between using the live camera and an included test video.
Drips mode - when on, small drips of paint will descend from the letter forms.
Fade out - slowly fades the image over time - alternative to clear button.
Slant brush - toggles chisel brush and fatcap mode
Clear zone - Use an area of the image as a clear zone, if the laser is detected there it clears the image.

Brush width - Size of brush
Drips freq - How many drips you want - lower is more
Activity thresh - This determines the time before starting a new line, the background screen should flash red whenever a new line begins.
Min blob size - the smaller this value the more sensitive to noise it will be but also the smoother the line motion.
Jump dist - the max distance to draw a line between two captured points, any distance greater means it starts a new line.
Line resolution - how many points to interpolated a line with, higher number means smoother line but uses more cpu.
Clear X - adjust x position of clear area.
Clear Y - same for y
Clear thresh - lower means a more sensitive clear area , higher less sensitive - adjust so that only laser point clears image.

NOTES

Once everything is setup be very careful not to bump either projector or camera as even a move of a 1mm will be enough to mess the alignment.

The settings are saved in settings.xml file - if you want to back up your settings for a location just zip the file and rename it.

If you are pushed for framerate - try overclocking your graphics with hacked drivers from [laptopvideo2go](#), you will notice quite a difference!

Press h to hide all gui except the projected image, this can also give you a bump in the framerate too.

DOWNLOAD

UPDATE: !!!!! LASER TAG 2002 IS RELEASED - Feb 2008 - [Download Here](#) !!!!!

[665 Comments](#)

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by Scytale • [www](#) • [Reply](#)

Absolutely awesome. That's why the hacker ethic says "you can create art and beauty with a computer". Thanks for releasing the software, maybe we're going to have some fun with it. Although we might need to find a replacement for the Laser...

By the way, if you don't want to get into trouble with Flickr, you should link the photos back to their corresponding photo pages.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/5/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by Theo • • [Reply](#)

Cheers for the feedback.

Didn't know that about flickr I'll take care of it before they Goatse me :)

Hope you find the code useful!

Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/6/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/11/22 by Paulo • • [Reply](#)

Hey there,

I am a photo-journalist from Portugal, but i've studied in the city of Leeuwarden- Friesland- for 6 months, and one night I saw people doing these laser tags and I was simply amazed. I myself have a background of graffiti sketches and tags,so although I have

followed photography I am still quite interested in the visual arts,if I am naming it wrong I apologize.I have a Clasus balance nw-128 laptop, 2.0 ghz, 128 mb graphics card, ando also a Canon MVX3i Mini DV Camcorder. I would love to get into this, but I ask if there is any equipment that you could point out to me, but something not as expensive and as professional,but that can still do a nice job? I ask not because I don't take it seriously, but to begin I think something more accessible would suffice.
I enjoyed reading and seeing the video about this initiative.
Best of luck, the world needs to see diferently!

Cheers!!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1116/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by alberto • [www](#) • [Reply](#)

...compliments great stuff!
I wonder to try it soon with a Christie 25.000 lumen projector...and maybe change colours....real art painting...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/91/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by Theo • [www](#) • [Reply](#)

No - from what I hear those projectors are hard to come by - and expensive! Also if they are that bright it might make it harder to didtinguish the laser point. If you have a spare one though I am up for giving it a try!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/93/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/06 by Mathieu • • [Reply](#)

Hello, I m working in a french event company. I m very fond of your "laser tag" technic. I d like to use it on a coming event in september in Paris.

Do you realize / produce / commercialize yourself this work? If yes, do you have a formal presentation and a phone number / contact to send us? If not, is this work "free of use" by other companies? I mean can we produce it ourself?

Thank you in advance for your quick answer ! And well done for your work.

Mathieu

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/327/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/11/07 by AJ • • [Reply](#)

I'm curious, will any projector work?
This has to be the sweetest thing i have laid my eyes on
Awesome Work
And Continue your great work

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/679/>

Re:

2011/12/12 by IPPOLITPetuhov34 • • [Reply](#)

недорогие сантехнические работы любой сложности

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1863/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by cb • [www](#) • [Reply](#)

this is the greatest show of digital art i have ever seen. -- did you guys specifically choose the 5600u because of high lumen output ?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/7/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by Theo • [www](#) • [Reply](#)

Actually we got that one because it was liquid cooled and could be put in almost any position without damaging the bulb. Also because it was DLP you get a pretty good contrast ratio. We got two of them because we thought we would need to double them up or something but we only ended needing one it was so bright.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/8/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/09/22 by battery • • [Reply](#)

We specialize in batteries, laptop AC adapters. All our products are brand new, with the excellent service from our laptop battery of customer service team.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1084/>

Re:

2011/12/18 by ROBERSON18Carmella • • [Reply](#)

Houses are not very cheap and not everybody can buy it. But, personal loans are created to support people in such kind of cases.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1876/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by Kevin Neberman • • [Reply](#)

beautiful. I just downloaded the source code and hopefully ill have it running tonight on my projector ;D

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/9/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by Anonymous • • [Reply](#)

thanks for the tut/source :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/10/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by cale • • [Reply](#)

This is awesome! Thanks for making it open source.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/12/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by Michael Flessas • [www](#) • [Reply](#)

Way awesome. I'm impressed.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/14/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by BG • • [Reply](#)

Won't that blind someone?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/15/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

Yeah - you have to be super careful. That is why it is better if you do it against an empty building or large wall or something. The laser snuff clip at the end was very irresponsible :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/20/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Stan • • [Reply](#)

Nice, the idiotic, but funny part of aiming that laser at a person reminded me of a very fun weapon in a great game: HALO! The glow looked exactly like the plasma pistol fully charged..... Anyways, I'm gonna try to set up a smaller scale of it, and stick it on the Remote Controlled Tank I've got, In addition to the airsoft cannon and the new GPS system so that the UAV can calibrate it! Once it's done I'll send you guys a video of the entire armada in action! Plus the laser is pretty powerful, but is small compared to the 120mW laser on the tank.... prototype for a anti-munitions defense system....

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/72/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by Alain • [www](#) • [Reply](#)

Hi there, great project! It makes me think of the project in Germany where they put up a huge amount of light bulbs in each window of a huge building and those lights were then controlled by people who would send SMS through a website. Can someone find the link to that site?

Also, can someone post where we can purchat the 60 mW laser? I've seen one here but it looks HUGE, is that what's needed?

http://cgi.ebay.ca/New-High-Quality-Animation-Green-Laser-Disco-Lazer-60MW_W0QQitemZ140088484183QQihZ004QQcategoryZ14984QQssPageNameZWDVWQQrdZ1QQcmdZViewItem

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/16/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

The project in germany was called Blinkin Lights I think. That is a seriously large laser - what you want is the ones in the consumer electronics sections http://electronics.listings.ebay.ca/Gadgets-Other-Electronics_Laser-Pointers_W0QQfromZRR4QQsacatZ94881QQsocmdZListingItemList
We also bought a lot from <http://www.wickedlasers.com>

If you are doing it on a smaller scale you won't need 60mW - you could even get away with 8mW. Obviously it is best to use the laser lowest power possible.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/22/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/20 by Alain • • [Reply](#)

Is this the camera that you are suggesting we buy for this project?

<http://www.spytown.com/wat-221s.html>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/18/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

Yeah that is the one. Make sure you set all settings to manual and get the color balance right. Also we used this lens <http://www.spytown.com/13vm2812as.html>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/24/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Giles • • [Reply](#)

The german Blikin Lights things is here. They played Pong on the building too: <http://www.blinkenlights.de/interactive.en.html>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/23/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by robert • • [Reply](#)

Incredibly great! Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/28/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Sean • • [Reply](#)

Will a 50mW laser such as the following work? (http://cgi.ebay.com/Powerful-Astronomy-50mw-50-mw-Green-Laser-Pointer-Pen_W0QQitemZ280083694171QQihZ018QQcategoryZ14954QQrdZ1QQcmdZViewItem)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/29/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

Yes 50mW would be fine - even as low as 8mW would be okay it depends how far etc

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/43/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/03/10 by John Doe • [www](#) • [Reply](#)

How many MW to reach the moon? Beer Company Experiments with "Moonvertising"
<http://moonvertising.com/public/agegate.aspx?ReturnUrl=%2fdefault.aspx&AspxAutoDetectCookieSupport=1>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/903/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Sean • • [Reply](#)

When I get rich I am going to do this.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/30/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by J R • • [Reply](#)

Thanks for posting the source code! I am making this my summer project. I am going to try to hook this up to a synthesizer, a sound system and make laser music with it. I will post my progress. Thanks again!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/32/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by bram • [www](#) • [Reply](#)

Hi, What does this awesome machine cost?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/33/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

well with all the equipment listed around \$8000

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/44/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by binks • • [Reply](#)

Does it have to be 60mW Green Laser
can it be 50mW? Its will only be on a near by wall

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/34/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

you could prob get away with 8mW - 50mW would def work!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/45/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by RikkieLow • • [Reply](#)

Is there a cheaper way to do it for a school senior show project on the future of graffiti? I am broke :)
thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/35/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

Well if you can get hold of a pc, a projector and a camera of some sort - you might be able to get it to work. The important thing with the camera is to be able to turn off all the auto 'features'

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/46/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Physics is Cool • • [Reply](#)

Will any camera work as long is its captured by the computer?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/36/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

The important thing with the camera is to be able to turn off all the auto 'features' - So auto exposure, auto iris, backlight compensation, white balance etc.

Then in theory any camera will work.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/47/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Jason stiebs • • [Reply](#)

Alright this is great. And I have a projector and a webcam. So in theroy this should would. But when I plug in my firewire webcam the captured input has all verticles lines but you can kinda make out colors. Is this cause im using a firewire? (note this is really short distance like 4 feet)

And if I wanted to change the lasers color to red for instance i should just change the hue point correct?

Thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/37/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

Hmm - some firewire cameras work. DV ones don't unfortunately. Usually if Amcap can see it, then you can use it.

With the red laser thing - that is correct, just change the hue point. The green lasers tend to appear brighter.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/48/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Anonymous • • [Reply](#)

Thank you for the reply. Well the interesting thing is Amcap does see it but like you said DV cameras won't work and thats what I'm using so I will either find a webcam or recompile the program to accept 720x720(?) and hope the computer can handle it.

Great Project/

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/63/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Theo • [www](#) • [Reply](#)

Hey I am almost certain the computer won't be able to handle it as pixels wise that is 4.5 times the amount of data to process. When you are doing many operations on the image even doubling the amounth of data can be crippling. I would suggest going analog out of the DV cam and use a cheap capture card.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/64/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Newyouth • • [Reply](#)

Fantastic job guys! Lazars are aways cool and have some great applications, but this is just FUN. nice work :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/41/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Ryan • • [Reply](#)

Any tips on using a firewire video input, like from a DV cam? I've tried, but the setup program seems to lock up at: "Capture device doesn't support 320 by 240. Reverting to 720 by 480."

Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/42/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

yeah DV cams are tricky. Unfortunately the code is set to use 320 by 240 (720 is just too slow for the computer vision stuff). To fix this you can use \$50 usb capture card (pinnacle pctv usb or wintv usb) with your DV cameras analog out - or recompile the code to resize the DV cam to a 320 by 240 image (much harder).

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/49/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Ryan • • [Reply](#)

Thanks for the quick reply. Too bad about the lack of DV cam support, they're so ubiquitous that it would make the project just that much simpler for folks on a budget. Anyway, this is a fantastic idea, very creative. Thanks again for sharing the concept, the code, and your knowledge. Keep up the good work!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/53/>

I cant download the source

2007/02/21 by Adam • • [Reply](#)

I cant download the source code. is there another link that I can get it from?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/50/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Chris Putnam • • [Reply](#)

Now all you need to do is combine this with the Wiimote software so it doesn't involve illegal death lasers.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/52/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/02 by Dr. Jones • • [Reply](#)

That'd be a fantastic idea, but unfortunately the wiimote tracks motion by picking up a pair of infrared emissions from the sensor bar, so you'd need to build some sort of high-powered infrared emitter pair and put them on top of the building!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/451/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/11/24 by Robin van Steenberghe • • [Reply](#)

What you can do, is get the IR filter off the Wiimote and use it in place of the camera. It supports 1024x768 motion tracking with 100Hz. Not sure about the light sensitivity though.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1117/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Anonymous • • [Reply](#)

wow great work. i think i have all the equipment besides the laser and capture card...hope i can get it to work.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/54/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Anonymous • • [Reply](#)

wait quick question...when you say camera do you mean camera or camcorder? or will both work

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/55/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Theo • [www](#) • [Reply](#)

should be a video camera - ideally the one described or something similar. though a webcam or other video device recognised by your pc could work.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/56/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Anonymous • • [Reply](#)

so a digital camera will not work?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/57/>

Re:

2012/01/05 by AnaSHEPARD • • [Reply](#)

All people deserve good life time and home loans or just secured loan would make it much better. Because people's freedom relies on money state.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1921/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Tyler Richards • • [Reply](#)

a couple of my friends and myself love what you guys did, around how much did the setup cost you, and where could i buy the material for it

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/58/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by Spoonicus • [www](#) • [Reply](#)

How cpu intensive is the program? i've noticed you have a rather beastly machine running your rig. could one get away with a more modest machine? What would be the minimum recommended cpu/gpu specs?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/59/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Theo • [www](#) • [Reply](#)

Prob need to be minimum 3.2Ghz P4 - there is quite a lot of heavy number crunching going on. Also the nvidia graphics cards can do horizontal span which is important.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/62/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/21 by adam • • [Reply](#)

hey, i have a projector and a tablet pc, could this be adapted to take the input directly from my tablet? if so how would i do so?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/60/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Theo • • [Reply](#)

See post below :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/75/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by SyS64738 • [www](#) • [Reply](#)

Well, this is just plain wonderful. Urban art mixed with "legal" defacements. This makes a point in the history of the communication i guess. Kudos to you also for releasing the project in an open source way!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/61/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Kate • [www](#) • [Reply](#)

Hey guys

I'm a journalism student at the London College of Fashion and am really interested in finding out more about lasertag if anyone would be keen to talk with me please let me know.
This stuff looks so cool

Kate

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/67/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Brandon • • [Reply](#)

I have a webcam that shows up in Amcap, but no projector.

I'm assuming the projector is required? :P

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/68/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Theo • [www](#) • [Reply](#)

Well you will need the projector to have it show up on the building/wall - if you just want to test the software you don't need to have a projector

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/73/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by gabriel • [www](#) • [Reply](#)

i'm not into programing and stuff but i'm curios if it can be allso colored. if you can do someting like paint? and if it's posibile how it can be done

ths and by the way SUPER COOL STUFF

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/69/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by kaiz • • [Reply](#)

yes i'm admirative. wonderfull application of laser devices.

i'm also interested with the question about tablet pc, Pen Tablets and similar drawing devices : any chance to use it as an input in your program ? or is there another program able to handle it somewhere on the web ?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/70/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Theo • [www](#) • [Reply](#)

well in the code you would have to switch the x and y vars to the mouse x and y scaled down to a 320 by 240 coordinate system.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/74/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Anonymous • • [Reply](#)

quote : "well in the code you would have to switch the x and y vars to the mouse x and y scaled down to a 320 by 240 coordinate system."

well but i'm not in programming, so if someone else with programming skills can do it and publish the modified executable, it would be great for me in an educational low-cost optic for children.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/76/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by k47 • • [Reply](#)

just for info, if you guys want to test the software : i have no laser and no expensive camera, but i got the software to work just by moving the (green)power led of my laser mouse (logitech mx610) in front of my cheap webcam. works great

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/71/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by corncutter • [www](#) • [Reply](#)

yeah, awsum

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/78/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/22 by Patryk • [www](#) • [Reply](#)

This is great.

I'm planning on building this project myself. I've already got the software to work, and couple other things. I would like to get some more info about the video input. Can someone please contact me?

Thank you,
Patryk

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/80/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by Theo • [www](#) • [Reply](#)

Hey just send me an email, look in the info section for it. Be happy to help.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/105/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by David Macchione • [www](#) • [Reply](#)

Where can i get one of the 60mW Green Lasers i have everything else and does the type of projector matter?>
PLZ email me

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/82/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by Theo • [www](#) • [Reply](#)

www.wickedlasers.com

In regards to the projector - the brighter the better :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/86/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by LaserDoug • • [Reply](#)

One thing to consider, which might allow for using a lower power laser. If you were to put a suitable green optical filter in front of the camera, and then only project graphics in a non-green color, then the camera can only see the laser spot through the filter, so you may be able to crank up the gain of the camera, and use a lower powered laser. This might also allow one to use a red laser pointer at much lower cost if you were to use a red filter (any photo/video store), and then project in high visibility green. Keep in mind that green is at the top of the eye response curve, so you could also use less of a projector, depending on the projection surface. Meantime, great project, am anxious to try it myself! Thanks! D.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/88/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by Theo • [www](#) • [Reply](#)

Yeah that makes sense - it is definatley better to filter out as much as possible before you get to the image processing stage. One of the problems though is that the laser is so bright the camera does not see much of the green - of course dropping the power will help of course.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/94/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by light-o-matic • [www](#) • [Reply](#)

Nice! I'll have to try it. Have you tried putting a 532nm dichroic filter (or reflector) on the camera?? That would cut out most of the ambient light, allowing only the laser. More contrast, less laser power needed...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/90/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by Theo • [www](#) • [Reply](#)

No we didn't - that sounds nice though? Is that just for the green spectrum or is it more just a very high threshold filter?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/92/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by LaserDoug • [www](#) • [Reply](#)

Sorry about the formatting.. You can get specific 532 narrowband filters, however they tend to have low transmission specs, which cut the amount of light to the camera. You could use a much wider band filter such as a dichroic type that is used in lighting instruments. These have the benefit that you can angle tune them for color selection, and quite large ones aren't that expensive. Even good quality plastic type lighting gel may work if the clarity is good.

I've included my URL for some of my laser stuff that folks here may be interested in.

Thanks again!

D.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/96/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by Theo • [www](#) • [Reply](#)

Thanks - I think for the next outing we will experiment with that - it is always useful to be able to do that stuff before you even take it into the computer, especially if you can't turn off the lights in the building (we had people running around every night to make sure the lights were off).

I looked at your website, I am super impressed. We have been talking about making a laser projector for a while now but that thing is amazing! I can't believe how good the colors look. Do you have any videos of it in action?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/106/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/23 by NotLarry • [www](#) • [Reply](#)

Sweet. I borrowed projector out of the office, picked up a \$3 red laser pointer at the store and snagged my kids eye toy. Within an hour they were drawing on the side of the house. This is going to be their science project this year. Thanks for the code.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/102/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by Theo • [www](#) • [Reply](#)

Wow that is awesome! If you have any pics of it I would love to see!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/104/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by Anonymous • [•](#) • [Reply](#)

sry for reapeping myself but i realy whant un answer: i'm not into programing and stuff but i'm curios if it can be allso colored. if you can do someting like paint? and if it's posibile how it can be done

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/107/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by gabriel • • [Reply](#)

sry for reapeeting myself but i realy whant un answer: i'm not into programing and stuff but i'm curios if it can be allso colored. if you can do someting like paint? and if it's posibile how it can be done

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/108/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by Theo • [www](#) • [Reply](#)

yes it is possible - just any color but green - otherwise it will intefer with the green laser tracking.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/180/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by viktor • • [Reply](#)

really awesome project!

my question is: was your beamer used upside down? i havent set it up with beamer yet but on my sec. monitor the drips are dripping upwards. swapping the corners of the yellow rect dindnt help either. is there an option to invert the image or do i have to code it in myself?

thx for this awesome program again!
bye

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/181/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Theo • [www](#) • [Reply](#)

Ahh ha - I was waiting for this question to pop up. The Drips were programmed very quickly and so I didn't have time to add a setting to change their direction etc. If you can find the drips function in the source code it is a simple matter of changing x++ to x-- and then making sure they don't go off the edge of the image (massive memory error will occur) - otherwise just turn the drips off in the settings, it is still impressive without. :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/190/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Kriz • • [Reply](#)

Grate project guys

The way to fix the drips is play with the corners of the white rectangle in the projection window. This is much easier then messing wit the code (also safer).

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/234/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by LaserDoug • [www](#) • [Reply](#)

I don't have any live video of the full color laser video projector. I do have some video of a single color (argon only) LV projector that I built to the project on a water curtain at a theme park in Italy, Gardaland. I also have some live video tape of it in the shop showing it's interior while

working. Also, it may be entirely possible to do the "writing" using a IR

laser diode type pointer, and then using a video camera in night vision mode which puts an IR filter in front of the chip. All consumer video camera's are very sensitive to the near IR and if you were to hack certain green laser pointers, you can remove their internal fundamental IR pump diode filters and get an IR laser pointer, at

very high (and illegal) power. It would be much better to get an 800 and some nm laser diode and build it into a pointer, then you could project ANY color you wanted as the scanner camera would just be looking for IR instead of visible.

It might not be as cool looking as a nice high power green pointer though!

D.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/183/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Theo • [www](#) • [Reply](#)

Yeah I was wondering about IR lasers. I use IR filters on my cameras for a lot of stuff that I do - just so you don't have to worry about what you are projecting. I didn't realise that making an IR laser was so straightforward. But it makes sense - if the laser can produce heat that it should transmit in the infrared spectrum too right? The only downside I can see to using this method would be any infra-red light coming from the building - but maybe the level would be pretty low in comparison to the laser so you could just close the iris of the camera down or something. One of the other reasons we just projected white is to make the image as bright as possible. But if we could get a brighter projector it would be fun to experiment with color 'tagging too'

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/191/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by TallNeil • [www](#) • [Reply](#)

You guys need to come to Burning Man! I wonder if you had the funding if you could project to the surrounding mountains? Eitherway large scale interactive art like this is what BurningMan is all about.
Just go...you only live once.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/184/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by Anonymous • [www](#) • [Reply](#)

even though i am going through s-video and amcap can see it i get a error (check URL attachment)
any ideas?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/185/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Theo • [www](#) • [Reply](#)

This should be an easy fix if you can recompile the app.

make sure before VI->setup(0); you have a line VI->setPhyCon(0, VI_S_VIDEO); (in testapp.cpp)

The app is set to use Composite by default. If you don't feel like rebuilding the app plug the camera into the composite (yellow rca port) port of the capture card.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/192/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Anonymous • • [Reply](#)

"This should be an easy fix if you can recompile the app.

make sure before VI->setup(0); you have a line VI->setPhyCon(0, VI_S_VIDEO); (in testapp.cpp)

The app is set to use Composite by default. If you don't feel like rebuilding the app plug the camera into the composite (yellow rca port) port of the capture card."

thank you for the help

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/206/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Theo • [www](#) • [Reply](#)

I compiled an S-video app - see the update at the end of the post.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/230/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by LaserDoug • [www](#) • [Reply](#)

I've had a project that I've been working on in various forms since about 1986. I fear that if I ever took it to Burning Man, it could cause severe mental distress/religious conversion amongst the crowds. Imagine a 20-30ft plasma ball with live video wrapped around the diameter, yet it can be packed up into a few roadcases, or "flown" with only needed about 500lbs of lift. I may yet have funding for it before I "burn up", but I'm not getting any younger (but still somewhat dangerous...)
D.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/187/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/24 by ET • • [Reply](#)

Anyone interested in tweaking this code for use on...dare I say it...a Mac?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/189/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Theo • [www](#) • [Reply](#)

The code it self is built with openFrameworks <http://openframeworks.cc> which is cross platform. To make this run on a mac you would need to replace the videoinput capture system with quicktime code (part of openFrameworks) and find the OS X compatible version of Intel's IPP. It is very possible to get this tuning on a mac but it would be a fair amount of work.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/193/>

Clean Graffiti

2007/02/25 by nh • [www](#) • [Reply](#)

Love this project. It'd be interesting to know how long this has been in development. I also worked on a project in my final year at uni with a similar concept although mine was more product design centred and works in a different way. Shares the overall concept though of the possibility of creating huge graffiti artwork on buildings. Check it out on my coroflot link. http://www.coroflot.com/nick_hunter also check the video out at: <http://video.google.co.uk/videoplay?docid=753660817452444876&hl=en-GB>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/194/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Andy • • [Reply](#)

this is fantastic... i would love to make one myself however i lack the technical knowledge of what is happening here. Can someone point me to a 'beginners' site or explain how it all works? ie, how does the laser drawing stay up on the building, why is the camera needed and also what is the use of the software etc? i am really dumb but would like to find out some more informaiton on this.
Thanks kindly

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/195/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by tye • • [Reply](#)

any chance anyone got the software just to run, tried compiling it got errors

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/196/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Theo • [www](#) • [Reply](#)

Did you compile it with the Codewarrior IDE included on this page? That should just work straight away.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/199/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Seth • • [Reply](#)

This is the coolest project I've seen. I'm setting one up in my home theater and wondering, does anyone know what the hue point of a red laser is? or how I can figure it out? And again, A+ on this one!!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/204/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Anonymous • • [Reply](#)

crap...can anyone please recompile it for s-video for me? im terriable at it. if you can please let me know

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/207/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Theo • [www](#) • [Reply](#)

I compiled an S-video app - see the update at the end of the post.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/229/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Mike • • [Reply](#)

I'll gladly take a stab at compiling this for OS X. I'd like to get it running on my Powerbook. (Although it's been a while since I've done anything in C++.) Any idea when Openframeworks will have a public release?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/208/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Mike • • [Reply](#)

Nevermind that, didn't even check to see if the libraries had been included. I'll post any progress with this.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/209/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Theo • [www](#) • [Reply](#)

Cool man look forward to seeing it.

Things that will you'll run across:

The video capture library is windows only but openFrameworks can capture using quicktime on a mac. Check out the ofQtVideoGrabber class. Also the XML parser might not be cross platform and that is used pretty heavily to read and save the settings. Also you'll need Intel's IPP for OS X. If you want an Xcode project set up for openFrameworks send me an email and I'll send you a link.

Oh and quite a big thing is that there is no IPP for G4 based laptops only the newer intel macbook (and macbook pro).

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/212/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Technomorph • • [Reply](#)

Sorry, please ignore my previous post regarding the mac questions. I'll follow this link here instead.

Thanks to the other poster for taking a stab at this. I for one greatly appreciate this and to Theo for developing this wonder tool! This truely has been one of the most exciting technological art pieces I have seen in a while (and I've been to Burninman 5 times....and this is so Burningman!).

If there is any support, help, whathave you regarding getting this Mac version going let me know. I've not programmed in a while, but I know my way around a computer and am a good problem solver. Even if you need me to find out info (IE like finding these modules in the library).

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/241/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/09 by technomorph • • [Reply](#)

Hey Mike,
Any luck with the Mac conversion yet?

thanks

Kerry

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/371/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by jesse • [• Reply](#)

hey man.

thrilling stuff you have. i'd like to compile the code and start some tests, but i can't extract the zip file. is there a password i need to open it? something else i'm missing?

thanks,
jesse

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/210/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by Theo • [www](#) • [Reply](#)

There is no password on the zip archive. It unzips for me just fine. Did you download the one from impssble.com? Try winrar, that works for me.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/213/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/25 by jesse again • [• Reply](#)

i even tried 1429, that guy's pin from the video.
hilarious.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/211/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/26 by meico • [www](#) • [Reply](#)

Awesome project! Thanks especially for sharing the code and exe. :)

Unfortunately, I had some issues getting the system running properly...

I couldn't get any hue point (or threshold values) to work for my red laser pointers (in a dark room with a white wall). :(It looked like it almost worked but not quite (as if something was wrong with the hue point algorithm). Have you tried the system with a red laser?

The default output was tilted 90 degrees and when I used "vertical" mode to fix this everything was upside down- since there was no "flip" mode I couldn't fix this without turning my camera or projector upside down. :(

Any fixes for the above?

Thanks.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/214/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/26 by Theo • [www](#) • [Reply](#)

In regards to the Laser point - firstly does the camera see it as red or is it so bright that it appears white to the camera? If so adjust your camera settings so that the image is dark enough for the laser to appear red. A good way to test the color thresholding is to take some image that has a wide variety of colors and put it on the wall - then with the saturation at brightness at 0.2 and hue width at 0.3 then go up and down with the hue point and see when the red parts in the images start showing up.

It is also useful to do all the tracking stuff before you even switch the projector on. Another problem it could be is that with the projector so close to the wall the projection is too bright and is interfering with the tracking.

In regards to the image being upside down, that is no problem. Just switch the corners of the yellow quad around - this will flip the image vertically and fix your problem (its mentioned in step 2 of the guide above).

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/215/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/26 by Kane • [www](#) • [Reply](#)

great job man, very well done for making this open source. keep inspiring
-kane

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/216/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/26 by limiwinks • • [Reply](#)

can anyone please recompile it for s-video? i cant seem to get it. let me know if you can

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/217/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/26 by Max • • [Reply](#)

I second this, I have been trying several different cameras and have had no luck using s-video.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/224/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Theo • [www](#) • [Reply](#)

I compiled an S-video app - see the update at the end of the post.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/228/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/26 by Ro1 • • [Reply](#)

Awesome!

I have one question, will this work using a decent webcam against a building/wall? (not a house but an actual building maybe half the size of the one in the video)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/221/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Theo • [www](#) • [Reply](#)

Sure why not! Give it a go :)

Make sure you adjust your webcam settings (you can do this with amcap) so that all the auto stuff is turned off and the image is bright enough to see the laser pointer.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/227/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/26 by Max • • [Reply](#)

I have almost everything needed (just need a different camera or a way in with the svideo port. My question is this: Right now when I run the program after changing the monitor properties to "extend my windows desktop" to the other monitor output (my BENQ projector) the other side does not display the projected image. I dont know what else to try.

Also has anyone found a cheap webcam or something similar that has worked for them? My DV camera comes in fine on AMCap but is scrambled on the software. I am probably going to try a point and shoot camera next to see if that gets me anywhere.

Any help is greatly appreciated.

Thank you,
Max

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/222/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Theo • [www](#) • [Reply](#)

I compiled an S-video app - see the update at the end of the post.

If that still doesn't work a logitech quickcam will do the job.

First open it up in Amcap and make sure you change all the quickcam settings to manual - auto exposure white balance etc. Make it so it looks good in amcap and those settings will be saved when you run it in the laser app.

In regards to the projector you need to specifically set Horizontal Span in the Nvidia graphics card settings. If you don't have an Nvidia graphics card then I don't think it will work.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/226/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/26 by Eloi Maduell • • [Reply](#)

THANKS FOR MAKING IT O.S !!!!!!!!!!!!!!!
there's a way !!!!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/223/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/26 by LaserDoug • • [Reply](#)

Just wanted to mention in regards to possibly using IR instead of visible for the tracking.. Quite a few of the lower cost green lasers pointers that have come out of Asia are lacking a IR blocking filter on the output. This in some cases allows many milliwatts of both the 808nm pump diode IR, as well as the 1064 fundamental IR from the YAG section of the laser. The 808nm would be easily picked up by any video camera that can run in nightvision mode. The idea would be to put a visible blocking filter in front of your green pointer, and see if you can still pick up the tracking spot on a camera set for nightvision. Due to the high power of the IR pump diode, I would guess that there is enough leakage from even "good" green pointers to give IR tracking..

D.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/225/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Theo • [www](#) • [Reply](#)

Yeah I just tried it - I put a Kodak 87C filter in front of the green laser and my IR camera saw just as much light with the filter as without. That is pretty handy to know I guess they (the chinese) forgot the filter after all :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/231/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by MP • • [Reply](#)

with a 3500 lumun projector what sort of maximum projection range from a building am i looking at.Thanx

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/232/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Ro1 • • [Reply](#)

so an ati graphics card (x1600) is out of the question? strictly nvidia?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/238/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/28 by Theo • [www](#) • [Reply](#)

well unless it can do nvidia style horizontal span than yes - google around for hacked drivers etc - on my laptop I had to install modified drivers to do horz span.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/251/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/10 by Kerry • • [Reply](#)

Hey Theo,

More on the MacBook Pro - Boot Camp front. So I got Laser Tag up and running on my MacBook Pro. After figuring out how to configure the system to get dual montior set up going. I then open up Laser Tag and the Windows Desktop still stay up on the 2nd Monitor (projector).

My video card is a ATI Radeon X1600

Can you point your laser to a point where i might find assistance in getting them to work with Laser Tag?

God I'm so close to having this running on my Mac!!! I can't wait!!!

I've been drooling for too long!

Kerry

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/529/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/27 by Ro1 • • [Reply](#)

Which logitech quickcam are you referring to? Thanks in advance!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/239/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/28 by Anonymous • • [Reply](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/246/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/28 by Gixor • • [Reply](#)

If I could handle it on OS (Mac) it would be awsome. But Openframeworks isn't open yet :-/

Anyway greets from Luxembourg! Would be nice to see you here!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/248/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/28 by Theo • [www](#) • [Reply](#)

IT will be soon :) We are finishing the website at the moment. Sign up to the mailing list and you will get to test it in advance.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/252/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/28 by Gixor • • [Reply](#)

thx for msg.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/255/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/28 by Gordon Sumner • • [Reply](#)

They Theo thanks for incredibly fast responses to everyone's queries, thats really great. I was wondering if this software/projector could be manipulated into creating motion that reacts to other motion. Such as the classic game "PONG," one object in motion strikes the ball which reacts to a different direction. Would it be possible to create this kind of visual effect with this technology? Certainly not saying it isn't already 100 % amazing, but wondering what it's limits were.
Thank you :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/249/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/02/28 by Theo • [www](#) • [Reply](#)

Like dynamic animations drawn by the laser? With the different drawings reacting to other elements?

I did something similar with some kids drawing software i made - <http://muonics.net/blog/index.php?postid=9>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/253/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/01 by Low-Key • [www](#) • [Reply](#)

Theo, this is just a beautiful concept and application. Truly creative and geeky. I love it. Much respect.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/273/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/01 by Theo • [www](#) • [Reply](#)

Cheers man :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/275/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/01 by jose • • [Reply](#)

HOW MUCH WOULD ONE OF THESE THINGS COST AND DO YOU SELL IT

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/274/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/01 by Theo • [www](#) • [Reply](#)

Well not really - but you are welcome to give it a go.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/276/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/01 by Cloner • • [Reply](#)

Great idea and great prog. But I cannot span the screen to the projector so that it becomes one 2048x768 screen. I guess that many people with ATI videocards will have same problem - and the projector will stay black. Can you redo the program that it actually uses the second monitor directly (without need of horizontal span)?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/277/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/01 by Theo • [www](#) • [Reply](#)

Hmm From what I read you can download ATI's HydraVision software which lets you span your desktop across both monitors. Otherwise I think there is also a windows display option too I think.

the other easier option is to set the projector as your primary display and then set the 'slide' value in the laser tag software to 1.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/278/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/02 by uzair malik • • [Reply](#)

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Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/280/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/02 by Max3 • • [Reply](#)

Hi! I'm really intrigued by the project. But I can't watch the video. My dial-up connection doesn't work with Yuotube. Is there any link from which I can download the video file? Thanks.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/281/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/03 by Theo • [www](#) • [Reply](#)

Its quite large but here you go:

http://graffitiresearchlab.com/rotterdam/laser_tag_WEB.mov

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/286/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/02 by Afonso • • [Reply](#)

hi, first of all i want to thank you for releasing the source code, i have one question regarding the color of the the projected image, using a 2100 lumens projector i can only see a white line and in the video and in the photos the color of the projected image is blue/green, my know how of c++ is none but if you can point me where i can change the color... (maybe glColor3f(1,1,1);... dunno)...

regards from portugal :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/282/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/03 by Theo • [www](#) • [Reply](#)

No actually it is white - it just appears blue green in the video/photos. It has to be white because we are doing hue sat val tracking and this way the projection does not interfer with the laser.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/287/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/02 by Zumbrota • [www](#) • [Reply](#)

Thought you all might be interested in a related bit of coolness. I ran across an artist in the SoCal desert doing light projection art at random places. Really gets your attention at midnight.
<http://www.guerillalight.com>

She's using a program called Kaleidica and some other visual tools. see

<http://www.visualinstrument.com>

Once I get hold of a projector I'm off to graffiti art onto some old buildings.

z

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/283/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/03 by jesse • • [Reply](#)

Theo!!! awesome, super super awesome. absolutely correct, no password. i am one step away from recreating this badass art. camera settings are perfect, only the laser beam shows up in the thresh window, i can '\\paint\\' in the warped video area, i can clear the buffers by hitting the beam in the red box.

i have an intel graphics driver on my laptop, which has a setting to explicitly allow '\\horizontal spanning\\'. both graphics windows are 1024x768.

i cannot, however, get the projector to output the paint. it will output my mouse cursor, if i slide my cursor too far to the right (or the left, if i make the projector my primary display)

might you have a suggestion towards trouble-shooting the output?

thanks,
jesse

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/288/>

enough buggin'

2007/03/03 by jesse • • [Reply](#)

WOOOHOOOOO! got it man!

from an earlier post, set the laptop to be secondary and the projector as primary, and then use the slide function from the software!!!
AWESOME!!!!
we are gonna paint TONIGHT!!!!!!

would still like to figure out how to get the output to the projector without using it as primary monitor, so we can change paramters live while painting.

do you have any insight into that?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/289/>

Re: enough buggin'

2007/03/05 by Theo • [www](#) • [Reply](#)

Well done man! I would love to see the results of your laser escapades - please send me some pics if you have them!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/318/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/04 by Andre Jaeger • [www](#) • [Reply](#)

Hallo!

I'm from Germany, i use Pangolin LD2000 Software and Output Board (www.pangolin.com) I wish to use my 10-50Watts (!) DPSS Laser for projection, and not a Video Beamer, can you upgrade yor software for this ? Thanks Andre

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/291/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/05 by Theo • [www](#) • [Reply](#)

Wow that is some serious gear!! - I don't know if we could get it working. I have a feeling the LASER projection might intefer with the LASER tracking. What does your system need in order to work?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/317/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/04 by Christian Merz • • [Reply](#)

Thanks for the software. After some problems with ATI grafics card and exteded desktop in my notebook i'll use slide function of your software and flip the image on projector side. Now its working and i'm happy. Using a red filter in front of the projektor will draw the graffiti in red. This will also increase the trakking reliability of my green laser point.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/292/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/05 by Theo • [www](#) • [Reply](#)

Yeah sorry about that - I always use Nvidia, I assumed it was easily doable on other cards too.

Nice hack with the red filter btw - please send me some pics - I would love to see your setup etc!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/316/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/05 by Leon • [www](#) • [Reply](#)

Wow! this is really impressive stuff. Totally inspiring concept. And full respect for making this freely available.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/293/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/06 by mathieu • [www](#) • [Reply](#)

Hello,

I m working in a french event company. I m very fond of your "\"laser tag\"" technic. I d like to use it on a coming event in september in Paris.

Do you realize / produce / commercialize yourself this work? If yes, do you have a formal presentation and a phone number / contact to send us?

If not, is this work "\"free of use\"" by other companies? I mean can we produce it ourself?

Thank you in advance for your quick answer ! And well done for your work.

Mathieu

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/328/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/10 by Theo • [www](#) • [Reply](#)

If you can get it running yourself - you are free to do whatevr you want! :) One of the benefits of open souce.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/375/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/09 by Vincent • • [Reply](#)

Hi,

I'm living in Paris , working in IT, and would be very interested in building such a laser tag system in cooperation with you :)

You can contact me at 20100p arobase gmail point com.

kudos to the GRL team for such innovation in Graffiti science !

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/458/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/16 by Matt • • [Reply](#)

Which version of Windows are you using this on? I am having some troubles with the app expanding to the second screen in WinXP

Thanks,

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/473/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/06 by cb • • [Reply](#)

Excellent program! I have one problem with it though. I am seeing only the 'config' part of the program on my first monitor. My projector shows nothing but my desktop background. How would I go about fixing this?

Running XP with nVidia gfx card. Resolution is set to 1024x768 on both screens.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/337/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/07 by Theo • [www](#) • [Reply](#)

In display options make sure you set it to Horizontal Span mode.

If there isn't the option, download hacked drivers from laptopvideo2go.com this enables horizontal span in your nvidia settings.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/358/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/08 by ximo • • [Reply](#)

An idea for you.. Assign some keys on the keyboard to change color, then you could use the keyboard as a palette to "dip" your pencil (laser) and then paint with the chosen color. Take it one step further and use some sort of custom keyboard with colored buttons or something.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/363/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/08 by Lee • • [Reply](#)

I get only so far in opening the program. Its starts up a command prompt window and starts loading stuff. Its gets to, Media Type is RGB24 converted to RGB_24 and it just stops. How to I make it keep going?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/368/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/10 by Theo • [www](#) • [Reply](#)

Do you have a video signal coming in? Usually this happens when the capture card is connected but the camera is not or something like that. What is your setup.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/374/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/11 by Guy Montag • [www](#) • [Reply](#)

i finally got it to work! check out my site for the vid!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/412/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/13 by Theo • [www](#) • [Reply](#)

Nice video man!!! I sent it to the rest of the peeps.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/415/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/12 by Lee • • [Reply](#)

Actually, I been getting some crazy stuff happening with that too. I use AmCam or whatever that program is called to see if my camera is working and to begin with it will work. And then I try to run that program and it gets to that point. I open AmCam again and nothing is being shown. I am using a Sony DVCam but running out of the AV output into a USB capture device.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/413/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/12 by Lee • • [Reply](#)

Strange, When using AMCap I get no video coming through but when I use the cheap program that came with my USB capture device it seems to work. Could it be my USB capture device that isn't letting it work?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/414/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/13 by Theo • [www](#) • [Reply](#)

Could you paste or email me what the console is outputting - it should give a list of messages related to the videocapture.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/416/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/13 by Lee • • [Reply](#)

Thanks for your help but not to worry. I got it going. I found out it was jsut my lame USB Capture device. I bought it cheap hoping it would work. But I went out and got a Pinnacle PCTV one and it worked first time! Cheers anyway!!
Its such a sweet program... Has anybody compiled it to work on Mac yet?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/417/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/13 by Vikarious • • [Reply](#)

Hiya! This app is amazing!

Can I use your images and videos to make a french how-to?

I tried as soon as you released your app, and then bought a 50mW green laser (because red laser isn't powerful enough).

It always impresses me when I start up everything and plays with it!

I tried both nvidia and ati videocards, but I still have to rotate the projector 90° left to have the drips in the good direction. I use some color lenses to change color but it would be great to have a color option in your app, because the lens destroys the projected image..

Thank you releasing us your app!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/418/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/13 by Theo • [www](#) • [Reply](#)

Sure - sounds good! The drips you should be able to get working just by adjusting the corners of the two quads I think. Do you have any pics of your setup? I would love to see.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/419/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/13 by Vikarious • [www](#) • [Reply](#)

Check LaserTag section in my website!

But for now there is only my testing setup.

I will go a night in my school to make a huge P-Bombing (there is a perfect batiment without any window and perfectly white).

I will take videos/pictures !

Thank you again! Great work

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/420/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/14 by Guy Montag • [www](#) • [Reply](#)

you dont have to rotate your projector to get the drips in the right direction..i justrotated the corners of the white line (shown by hitting \"L\")

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/421/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/14 by hocine • • [Reply](#)

i need your system for the france place
can you send me a mail just for details
regards

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/422/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/14 by manoubi • [www](#) • [Reply](#)

Hi,

very cool project :-)

and for macintosh ? any solution ?

i will try it in france and in tunisia (jugurtha table in kalaat senane)

enjoy

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/423/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/14 by milo • [www](#) • [Reply](#)

Impressing technology, love the works.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/424/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/16 by Anonymous • • [Reply](#)

Will this do the job?

<http://www.pegasussl.co.uk/60mw-green-laser-p-145.html>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/425/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/16 by Theo • [www](#) • [Reply](#)

Haha no - you just need a laser pointer. try wickedlasers.com

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/426/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/17 by Tech • [www](#) • [Reply](#)

hi there,

Greetings from Singapore...Would like to ask if any mofel of projector in the market is suitable for this project? am i right to say that its depends on how har can it goes?

Thanks..do send me a reply on this..

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/427/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/17 by Tech • [www](#) • [Reply](#)

hi there,

Greetings from Singapore...Would like to ask if any model of projector in the market is suitable for this project? am i right to say that its depends on how far it can go?

Thanks..do send me a reply on this..

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/428/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/18 by Lee • • [Reply](#)

has anybody compiled this for Mac?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/429/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/18 by neri • • [Reply](#)

That was Boston! awww i soo wish i would have seen that!

Will you guys be doing this again in MA?

I really want to try this out but lets see if i can make this work with a low budget. :-/

thanks for providing all this info!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/430/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/20 by Jake2K • [www](#) • [Reply](#)

Nice work guys, really interesting stuff. I live in Clearwater, FL. and there is a building in the downtown area that has writing on the side(looks like what you guys did) mostly it's just a weird symbol(it's owned by scientologists), which made me think it was just a projector or something but the other night it said \"Happy Birthday\" and it looked like handwriting so I think they might be using this method. I'll try and get some pics of it soon.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/431/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/20 by Mike • • [Reply](#)

Hey Theo - so much fun. My buddy and I have been inspired by you guys to give it a shot here in VT. We're actually cooking it up all from scratch - thus far we have our green pointer (one of those Thinkgeek jobbies) being tracked through a Logitech Quickcam (v4l) - pain that it uses YUV (we're converting to RGB successfully) - and are tracking properly (and fast!)... between us, we should have most of the glut pieces done tonight and maybe even some calibration. I'll let you know how it goes for the sake of an anecdote. Thanks for the inspiration and a super fun project. Nothing quite like getting your computer follow a laser dot (it's almost a little creepy :)

Peace!

Mike

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/432/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/21 by Theo • [www](#) • [Reply](#)

Wow, that is awesome! I am super curious to see the results. Can you post an update when you get it working, it is always nice to see how other people solve the same problems.

What are you using for videocapture? You might be interested in my videoInput library (although it sounds like you have it figured out) <http://muonics.net/school/spring05/videoInput/>

Cheers

Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/433/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/22 by Nick • [• Reply](#)

Hey - I really want to try this but I'm having problems. I'm using a webcam and this is the output I get from the app:

```
Couldn't find preview pin using SmartTee
Checking crossbar
You are a webcam...
crossbar? 1
Default Format is set to 320 by 240
Trying different capture size 320 by 240
Media Type is RGB24 converted to RGB_24
Could not connect pins - RenderStream()
```

Then the app opens but I have no vid input and it just runs the demo. Any ideas?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/434/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/24 by noob • [www](#) • [Reply](#)

Is the webcam on? the program should start the webcam. then you arrow key down to ""use camera"" and make it a 1 instead of a 0. this will replace the demo with the live camera feed.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/435/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/24 by Carl Topham • [www](#) • [Reply](#)

First off this is brilliant. I don't know how much money it will cost to recreate it but I sure want to try it, even if its just on my house! Going a few posts back up to the idea of pong or something... Is it possible that you can have two cameras set to two different laser colours [red and green +more] and then use one colour for each paddle? or for multi colour paintings. That would be awesome. Buliding size photoshop springs to mind.
Keep up the wgreat work

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/436/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/24 by Tiki Tom • [• Reply](#)

what framerate were you getting in rotterdam?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/437/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/26 by Theo • [www](#) • [Reply](#)

about 52-57 fps with the camera. with the demo video it was about 45 fps

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/440/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/26 by Theo • [www](#) • [Reply](#)

Hmm are you sure your camera is not open in another application? That is usally whent he camera is already connected

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/438/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/26 by Theo • [www](#) • [Reply](#)

Tracking two different colors could totally work! You could def do a pong of sorts.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/439/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/31 by Scott • [• Reply](#)

I am very interested in this and the pong idea is highly interesting using a red and green laser as the controllers

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/444/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/26 by Alexander Crook • [www](#) • [Reply](#)

Hey, I couldn't help but notice on GRL's main site that there was a new video (Free Avone) in which there are some pretty cool effects (affects?) used on the projection. Do you know where I could get this new update?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/441/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/31 by Theo • [www](#) • [Reply](#)

That is actually from Evan Roth's Graffiti Analysis project. It is not part of Laser Tag you can see it here [here](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/445/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/28 by ryan • [• Reply](#)

theo would another projector work? best cost on that one is about \$5k???

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/442/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/31 by Theo • [www](#) • [Reply](#)

Sure! We just wanted that one because it was bright and it could handle being on its side.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/446/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/03/30 by Alex Tabaczka • [• Reply](#)

Would anyone have any idea on how to compile this for the mac? I have xcode and the source, but i don't know anything beyond that....?

any input would be awesome, i need somewhere to start...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/443/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/02 by Lee • [• Reply](#)

Im with Alex. Has anybody compiled this for Mac? I have been playing around in scode but am a bit of a newbie and wouldnt have a clue what to do!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/452/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/30 by Andreu Robusté • [www](#) • [Reply](#)

Can you send me de xcode for mac version?

It's possible that we know how to copilate for a mac version.

thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/535/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/01 by Moritz • • [Reply](#)

Is there any chance of getting a high resolution version of this amazing "one love" picture from rotterdam? would love to print it out. personal use only!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/447/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/02 by Theo • [www](#) • [Reply](#)

Click on the image and it will take you to the flickr page where you can get the full res image.

:)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/448/>

Projector

2007/04/02 by Ali McElhoney • • [Reply](#)

Just wondering if a Lumens 1400 projector would be suitable for this to work outdoors. And also what you think the range would be on this. Thinking of purchasing one as the 5000 is a little expensive the 1400 is a lot cheaper...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/449/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/02 by Theo • [www](#) • [Reply](#)

Hard to say!

I would see if you can test it out - most likely you could do something if you were maybe 20m away but more would be pretty dim. Try a 3000 if you can!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/450/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/03 by Eugi • [www](#) • [Reply](#)

This is a great project!

But I can't get the software working, I've already tried it on two different PCs and with several web-cams.

On the first PC, I start the exe, it does see the camera, but then it says "You can now grab my frame" and it crashes.

On the second PC, it arrives always at the same point but before crashing, it says something like "error loading movie" and then crashes...

I tried also the demo included with the video input library, and there I can see the images of the camera well.

I can't understand what is wrong, so please help me!

I need the program working before May 5th, since we were organising a graffiti party ;)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/453/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/12 by Theo • [www](#) • [Reply](#)

Hmm did you make sure that all the files that were downloaded on the PC were present? Oh you might also need to install quicktime player too (free from apple). The camera issues is a strange one - can you send me the output of the console so I can debug it?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/464/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/03 by Steve Rowledge • • [Reply](#)

Wicked app. I have 1 problem when running it. Just black screen, a block for mouse cursor, ***** Videoinput library - 171 - TFW06 ***** and a flashing cursor. What am I doing wrong? Any help and assistance appreciated.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/454/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/12 by Theo • [www](#) • [Reply](#)

Hmm no idea. Do you have a camera plugged it? Download AmCap and see if your camera shows up in there. IF it does it should work with the Laser Tag app. you might also need to download quicktime for pc from apple.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/465/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/03 by Tom • • [Reply](#)

Hey guys, awesome video! You\\ve done some really creative work here. One question - what is the music you used in the video? I love reggae and Id love to get ahold of that song. Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/455/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/12 by Theo • [www](#) • [Reply](#)

don carlos laser beam :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/466/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/05 by Florian • • [Reply](#)

Hi

How can i find out wich settings i need for my red laser? I think try to find it with 3 values is very difficult. Thanks for help.

Florian

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/456/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/08 by buki • • [Reply](#)

Theo, first of all this things is amazing. I was wondering if u could make this thing clear for me because i dont really understand it :S. You connect a cam with laptop and projector. Then u install the software on the laptop. When this is done, do u create the image first on the laptop or do u create it on the building and it gets captured by the laptop???? How long will the image stay on the building. As long as it has power or what??? Can u try it out with a simple projector on a wall just to make sure it works or does it have to be one of these big ones???? Thanks...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/457/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/09 by Tiki Tom • • [Reply](#)

any advice on hell1 editing/substitution?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/459/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/10 by CR0S • • [Reply](#)

hello thanx for his beautiful toolz !!!! what do you think about LONG THROW LENS adapter on a videoprojector 1500 lumens ? do you think i could make something similar with your 4000 lumens because a 4000 lumens is to expensive for most of us ... if someone have an idea like a fresnel lens to improve a 1500 lumens projector tell me !

bless

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/460/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/12 by Theo • [www](#) • [Reply](#)

Hmm 1500 is 1500. Don't think it will make much difference. the important thing is brightness not range really. Try it with 1500 but get the brightest one you can afford.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/468/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/11 by panda • • [Reply](#)

Just wondering, if I already have a laptop that can run it(Its an Alienware, it better be able to handle it), and a camera that I think should be able to capture it(It cost nearly 2000\$ U.S. and can capture in HD) what projector would you reccomend to put on a wall around 20x20?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/461/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/12 by Theo • [www](#) • [Reply](#)

2000-3000 prob - really depends on the ambient light in the location.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/469/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/12 by steve • • [Reply](#)

hey is it possible to just buy one of these allready calibrated n ready to go ?
hit me back *****@hotmail.com

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/462/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/12 by locohasa • • [Reply](#)

Wow just waht i have always wanted. I have just built the system it works a treet whish i new coding so i could play with the src. My kids enjoyed standing infront of the wall it was projected on and using a green touch could draw on the walls. This capture software is cool i wish to use it in some future projects, possibly a virtual dancemat and people tracking/projecting. I shall keep you informed.
respect to all who risked there eyesite sorting this out. P.s FREE AVONE

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/463/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/12 by Theo • [www](#) • [Reply](#)

Nice man - can you post a small picture? Would love to see it :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/470/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/12 by Theo • [www](#) • [Reply](#)

You prob want to keep the saturation and value the same as how the app currently is and then just adjust the hue variable till the laser is isolated. If the laser is showing up white - bring down the brightness in the camera settings. Also make sure auto whitebalance is off and set the whitebalance manually to provide a true a balance as possible.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/467/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/14 by Tom • • [Reply](#)

thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/471/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/15 by Matthew • • [Reply](#)

What's the odds of using a different wavelength?

One that can still be seen by the camera but will not harm the eye?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/472/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/17 by Juan • [www](#) • [Reply](#)

Hi

Excellent community

Just one question: will a 30Mw laser work instead of the 60Mw?

Thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/474/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/23 by Theo • [www](#) • [Reply](#)

Yes :) 30mW should be fine.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/477/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/18 by Fernando • [www](#) • [Reply](#)

Hi, I want to know if I can use the software to project in buildings, is there any legal implication if I use it?, do I have to pay?, I really want to do the game, but I dont want later a legal implication for the use of your software. Thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/475/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/23 by Theo • [www](#) • [Reply](#)

Nah man - do what ever you would like with it. Though we would love to see the results!

Cheers

Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/478/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/23 by Andreu • • [Reply](#)

Hi, I want know if there are some similar program for Mac?

thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/479/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/24 by arf • • [Reply](#)

This is THE coolest thing I've ever seen in my life! :D

I wish I could afford all the systems needed ;)

Great work guys! I'd love to see you fool around with this stuff live ^_^

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/480/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/26 by electronictechsupport.com • [www](#) • [Reply](#)

Would this be a solution for DV cam (or full res)?...only process every 5th pixel or so?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/481/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/04/28 by philip • • [Reply](#)

so interested in using this on a mac

any info

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/482/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/01 by John Grant • • [Reply](#)

Theo,

Hey, Ive gotten everything all up and running but i am running into a few problems...

HP DV9000
60mW laser
Panasonic DVX100a
proxima c445 projector
PCTV USB2 (using analog)

Were only getting 28-30FPS MAX on a GeForce 7600 with a laptopvideo2go hack. We have our 3d settings set to full performance.. Any idea why or solution?

Also, while tracking and setting everthing up the system tracks the laser perfectly fine, looks amazing in the preview GUI window, but when we slide all hell breaks loose. We are seeming to get random jumps in the tracking (cuts out) and random lines showing up for no reason what so ever. Although when switched back to GUI everything works flawlessly. Problems only happen with the slide.

Any ideas?

Also what distance was the rotterdam sequence projected from, seems like getting such a big canvas like that took a few hundred feet to set back from.

Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/483/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/01 by dustin schild • • [Reply](#)

will someone please compile this for a mac!!!!!!!!!!!!!!!!!!!!!!Please!!!!!!!!!!!!!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/484/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/02 by aliuz • [www](#) • [Reply](#)

Hi,

can you explain me more why do y need to do horizontal span?

Because when i am doing this on my ATI i get a view of working program on the projector... what is my problems?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/486/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/02 by Andrew /mspKIDS crew • [www](#) • [Reply](#)

the laser tag setup, can't work with a duplicate screen, it need extended your laptop screen because the video signal that go out for the projector interprets that the image of the projector is an extension of the program. I don't know if I explain good, sorry for my english.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/540/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/02 by Ted • • [Reply](#)

I've just about got this working...

Dell M1210 laptop (GeForce Go 7400, hacked drivers)
HP3130 projector
60Mw Green Laser
Microsoft Webcam

everything seems to be okay - I can setup the system, change the screen settings, display the box, etc... however I can't capture/display any images. I'm wondering if it has to do with the webcam rather than something beefier???

please help!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/487/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/08 by Theo • [www](#) • [Reply](#)

Most likely it is the camera. You need the camera image to be as dark as possible (almost black) but still see the laser as a bright point. You should be able to adjust the camera settings. Setting auto color balance and auto exposure off is a big help. Make sure all the settings are set to manual and that the shutter speed is fast enough so that nothing but the laser shows up. That should work. If you need to adjust the camera properties download my videoInput library and run the CW demo app [videoInput](#). Hit the 's' key twice to bring up the settings of the camera.

Hope that helps - theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/493/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/02 by RanOver • • [Reply](#)

Everyone looking for a laser ought to goto <http://www.wickedlasers.com> !! Their lasers are top quality and have 125mW lasers. Thanks!! Hopefully I'll be Lasertagging soon! This is awesome.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/488/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/03 by John Grant • • [Reply](#)

Theo,

We got the FPS up now by using a mac running bootcamp will all settings set to high performance. Were now getting 50-70 FPS which is killer!

That has somewhat solved the problem of the jumping, but now our problem is tracking. When testing on both a 20ft distance and 100+ ft difference we cant get the laser to track and write in sync with the projection. I mean when we right an I on the wall with the laser the projection will write the I 2ft-4ft ABOVE where the laser was writing. We have the camera under the projector just still cant figure out whats going on any idea? we have the lens shift up all of the way, could that be the problem?

Thanks again!

-John

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/489/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/08 by Theo • [www](#) • [Reply](#)

Hey John,

Glad to hear that you got it running 50-70fps is a good rate. The alignment is totally normal. What you need to do is hit L so that the projector is projecting the white border lines. You then want to align the yellow lines of the camera box to those white lines, so the corners match. If you have to do slide mode just have a friend shine the laser pointer where each corner is - so the camera can see the point and then match the yellow corner to each point. Once all 4 points are lined up save the settings and you should be good to go. I think all this info is in the instruction graphic above. Hope it works - theo.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/492/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/09 by Kerry • • [Reply](#)

Hey John,

Can you give us further details on your Boot Camp install?

I've just installed BootCamp and windows XP.

It took me a while to get the 2nd display up, but now I'm trying to get it to work with the built in eyesight on my MacBook Pro but the app quits out before I can see what happens (what the error is).

Would getting the Pinnacle PCTV card help?

thanks

Kerry

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/523/>

Any danger?

2007/05/06 by Leila • • [Reply](#)

I had a great time with your YouTube posting. Thanks for posting such great renegade art! Here is where I saw it:

http://www.groonk.net/blog/mt-archives/cat_technology.php

Is there any danger if someone in the building looks out while the laser is flashing by?

With friends, I toyed with lasers a long time ago, and would like to share a technique I hope you enjoy.

We took two pieces of clear, thin glass (microscope slides), put a little clear glue in between, and shined the laser through the 'sandwich', squished it around a bit. It creates amazing displays of light.

I'd be curious what a couple of nesting lenses would do, and colored glass, cut crystal and a prism would do.

Have fun playing with your lasers! I look forward to seeing your next YouTube Show!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/490/>

Re: Any danger?

2007/05/08 by Theo • [www](#) • [Reply](#)

Actually there is. What we have been told is that if you get it in your eye it will make you blind so quick that you won't have time to react. I don't know if this is true for long distances but I wouldn't want to find out :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/491/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/08 by Theo • [www](#) • [Reply](#)

ATI cards don't do horizontal span I think. Though someone told me that they got it working with a different ATI setting. Without horizontal span you have to use the 'Slide' option in the menu of the laser tag app. This makes setting up harder as you have to go back and forth as you align the camera and projector. But I have done it several times. It is not fun but it still works :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/494/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/08 by Erika Dodge • • [Reply](#)

So, hypothetically, how much would one charge to set up a gig like this...we are looking to have something like this at a client event, and are looking into production costs. Any information would be helpful.

thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/495/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/17 by Fernando • • [Reply](#)

Theo, this project is absolutely awesome.

When i try to run the application everything seems to be okay until i turn on the camera (sony DCR-HC40) and presents an error message: filter grabbing error loop infinitely in the CMD screen...and when i stoped the application reboot my pc.

In the sw Amcap camera seems ok (320 x 240)

Could you help me?

Thanks

From Theo: Hey it must be a compatibility issue with my video capture library. We are going to make a crossplatform laser tag with openframeworks very soon. So I will try and include the fix in that version. Thanks for being patient!

Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/496/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/18 by Ali Mcelhoney • [www](#) • [Reply](#)

Theo, wicked piece of open source there mate, cheers. Me and a couple of lads have got it working at our uni, and it looks great on the stereoscopic projector, massive!

But we really want to get it mobile, i'm running on a MacBook Pro and i've been trying to figure out how to recompile the software in xCode, but i've been having no luck getting it to do its thing, not much of a programmer i'm afraid. Any help would be greatly appreciated, many large buildings out there a beggin for this new era of bombing!

Ali

Reply from theo to lazy to use form: Hey Ali, Thanks for the feedback. The code is actually quite a mess at the moment as it was written super fast. Porting it to xcode would be a pain as it is, but I think I will rewrite it for os x and pc really soon, because we will release it as a demo app in openFrameworks. Do you have any pictures off it running on the stereoscopic projector? I would love to see! Oh also you can run it on your mac book if you boot it into windows xp. It should work.

theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/497/>

Cheaper Laser Pen?

2007/05/18 by V • [www](#) • [Reply](#)

Now I see you need a 60mw Laser pen, if you watch this video you can save some cash by getting a cheap 5mw one and "fix" it up. This will save you some green enabling one to get a better projector.

I don't know if this was already brought up, as I didn't read all the posts on here.

<http://www.tricklife.com/view.php?id=417>

Tell me if this works, that would be fucking sweet.*

From theo:

Thanks for that looks really good - I am going to get my guys in the lab to test it!

:)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/498/>

Re: Cheaper Laser Pen?

2009/05/05 by Kitty • • [Reply](#)

openframeworks is a complete and utter plagiarization of microsoft technologies. It also doesn't run nearly as well.

I don't see the point in using it when both are free.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1235/>

Re:

2011/12/29 by Phoebe20MOON • • [Reply](#)

Following my own investigation, billions of persons in the world receive the personal loans at different creditors. Thus, there is a good chance to find a consolidation loan in every country.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1896/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/21 by doron • • [Reply](#)

i've been looking at a lot of what grl does and these projects don't seem to be really cheap, where do you guys get you funding from?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/500/>

no video signal via pinnacle 510 USB

2007/05/23 by Wolf • • [Reply](#)

Hi,

this is absolutely excellent stuff! Thanks so much for releasing this software freely to play around with. I wanted to test it with a camera connected to a laptop via a *pinnacle 510 USB* but I can't get the software to find the incoming video, neither does AmCap. However, the image displays fine in XP's MovieMaker. The pinnacle box has s-video, composite and dv entries, tried all of them to no avail. Tried two different cam's with it as well, a JVC HD100 and a GY-DV5001. Has anyone ever successfully used the pinnacle 510 usb with the soft? Any ideas how to resolve the problem? I'm not much of a programmer at all, but if there's something simple to try out i'd be willing to give it a shot... any help's greatly appreciated. would definitely LOVE to try this setup out asap.

thanks,

wolf

reply from theo:

Hey Wolf,

I don't know what to suggest - if you can't see it in Amcap - that is pretty strange. I would suggest maybe seeing if they have newer drivers online. And making sure you install all the driver options. It might be not be showing as a capture device but some custom media device instead. I usually use the cheaper version of this and we had no problems with it. So you know, the software is designed to capture via the RCA port - so best to try that one when testing it out.

Sorry I can't be of more help - theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/501/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/25 by def northern • • [Reply](#)

First off, fantastic project, looks amazing...:-)

second, is there a way (and would you mind) if we were to contact you directly for some advice? we are a group of activists / writers who are currently looking at setting up something similar to work with in the UK, and possibly across Europe over the summer / autumn, themed content. We have some of the equipment, and a budget to cover the rest, but need a bit of advice, as we are keen to get it right from the off.

We are particularly keen to explore this (and other 'clean' forms of writing and expression) as we have had a number of arrests over the past couple of months, with some of our group waiting on court appearances, heavy fines and possible custodial sentences. We wouldn't take up

much of your time - look forward to your reply!

ND :-)

REPLY FROM THEO:

Sure please send me an email and I would be happy to help. My email is just my name at this site. Look forward to hearing from you!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/502/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/26 by James Ho • [www](#) • [Reply](#)

Thanks a lot bad boy! I set it up in my basement, and it is the wildest toy I have ever played. I was wondering that if I set it up during a local art festival, who all exactly should I give credit for??? GRL? Agent Watson? Both? Or more? People are going to be asking about it, I would like to make signs, so people know that someone else way smarter than me designed this thing. Thanks again!!!

REPLY FROM THEO:

Hey nice video on your site!! I am always happy to see other people who get it working. For credit you can just say Graffiti Research Lab. Please send us a link to any pics and videos you get of it at the festival, we love that stuff!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/503/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/27 by Anonymous • • [Reply](#)

On the topic of IR laser pointers being used, you can get surplus military targeting lasers for pretty decent prices, in the class 3b range (5-500wm). I have an AIM-1/MLR that has an effective targeting distance (the camera can spot it accurately) of 2 miles - that of course is way farther then you could manage to project the image in the first place, but...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/504/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/27 by pera • [www](#) • [Reply](#)

Excellent work! :D

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/505/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/27 by MagentaJoe • • [Reply](#)

Too many posts to read them all. This is GREAT but is a laser pointer and a camera really needed? Why not just use something like a wacom tablet and a pen to write the graffiti? No special software would be required other than something that has black background and coloured foreground. Then you could switch colours etc etc.

REPLY FROM THEO:

True! but it wouldn't be laser tag then - just MS Paint and a Wacom. The idea was to give writers and the public an invisible interface where they could actually treat the building how they would treat a wall with a spray can. Some of the magic would have been lost if it was just with a wacom. Also color is actually not that great with large projections as you need as much light as you can get so regular white on black tends to be the most impressive.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/506/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/29 by Mike • • [Reply](#)

This is really cool, but I have a few problems:

I have to have my camera mounted upside down in order for everything to match up correctly.

I can only get the drips to go to the left or up...

I cannot get the monitor/projector set up correctly, I have to set my projector as default and still use the 'slide' button.

Also, it seems to be quite slow, even though I have a fairly good video card.

Anyway, this is still really cool, thanks for posting the program!

PS- do you know the exact hue point etc for a red laser pointer? I kinda found it so that it works, but maybe it could be better adjusted...

FROM THEO:

You have to keep playing with both the yellow camera quad and the white projection quad. You can move the corners so that they line up and the drips are going in the right direction.

The Slide thing is a pain - but it is possible to get it working in that mode.

It being slow is probably the processor. You can always try hiding the gui elements though to see if that does anything. It could be that you don't have your camera dim enough. The camera should be black really with just the laser showing up as a bright red dot. If you need to adjust your camera settings - use Amcap.

Red laser is just above 0.1 from what I remember - but you really have to adjust it per laser - as the color is affected by the camera too.

Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/507/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/05/30 by David • • [Reply](#)

hey, great project, love the simplicity but the effectiveness. just wanted to know if it works with different coloured lasers? if not, could you make an update?

FROM THEO:

Check 'Hue Point'

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/508/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/01 by Güliz • • [Reply](#)

Hello,

The thing is amazing and i'm working for the advertising agency at Turkey. We would like to use it on a coming event. Do you produce this project or maybe you can visit our country and also you can do this amazing thing for us. Please contact wit us. Could you give us your number that we can reach you.

Please send me a reply mail on this. Thank u for your quick answer.

Thanks a lot.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/510/>

...
[Comment pending moderation](#)

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/02 by KrazyKitty • • [Reply](#)

Heres an idea... use an IR laser and an IR filter on the camera, and you would probably have better control...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/511/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/03 by Jean-Pierre Fayt • [www](#) • [Reply](#)

Hi Alberto,

I work in a small belgian company which is specialised in high power projection.

I suggest not to use the 25k as it is huge (external power supply and big weight and size), and so expensive; the 16k and 20k models are by far bright enough.

My company can rent this equipment at very reasonable price, please contact dvr@adcprod.be

As an example, we do the building projections for Todaysart in Den Haag.

This is NOT a business opportunity for me, I am only an employee, but I am involved in some hip-hop projects and I think this park of high-

power projectors we have could be usefull.

Unfortunately, I do not own the equipment, but feel free to e-mail Daniel VanRuysevelt if you want a really great H-P projector.

Cheers,

Jean-Pierre Fayt

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/512/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/09/22 by Clare Middleton • [Reply](#)

Hi Guys

Can any one help me Project a movie onto the World Trade Centre in Rotterdam for a client of ours - Let me know

Thanks

Clare

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1297/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/03 by Jean-Pierre Fayt • [www](#) • [Reply](#)

Hi Theo,

I would like you and all the persons interested to know that my company can supply Christie projectors of 6, 9, 16 and 20 thousands ansi lumens at reasonable price.

I myself am personally involved in hip-hop events but unfortunately I do not own the equipment, and therefore cannot offer it.

Still we are a small company of 6 persons and like to do art as often as possible, like the todaysart festival in Den Haag where we did the building projections for the last three years.

For prices please e-mail Daniel VanRuysevelt at dvr@adcprod.be,

and for technical questions please e-mail Xavier Cauwe at xac@adcprd.be,

this because I myself am "the traveller" and spend most of my time on gigs abroad.

Here are some feedbacks 'bout the posts i've read:

Using a Christie 25.000 lumens is to me not such a good idea as it is a huge (external power supply) and very expensive projector, and the 16 and 20 k's are already very bright.

The YAG pointers output 532 nanometers (primary green), coming from a 1064 nm (IR) source.

As I see it from your videos, converting them to IR output would make it nearly impossible for the untrained operaotr to point at the building.

Yet about your concern regarding the IR emission from the building itself you should not worry, it is no way near the power of a YAG.

Colouring is of course the next logical step, along with spraypaint characteristics; and most feasible too with high-power projectors; a short threshold filter of 532 nm on the camera would be the best idea as far as my knowledge goes.

Best regards,

Jean-Pierre

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/513/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/04 by Matthew • [www](#) • [Reply](#)

hi Great work

is there any other camera that you would recomend to try this

thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/516/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/06 by Thomas • [Reply](#)

Hi,

I have a problem and I want to ask you for help. I'd like to buy a green laser, but I'm not sure which of these lasers 240mW or 50mW strong will be better to buy for using. I'm going to use this laser in the night, but I need need only visible laser dot on object, not flash beam. Please, can you tell me, if is necessary to use only laser without flash beam? Can be decetor of laser dot mistaken by using a stronger laser with flash beam or will be function without any problem?

FROM THEO:

50mW would do it! 240mW is way TOO MUCH :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/518/>

...

Comment pending moderation

Re: Projector Question

2007/06/06 by CS • • [Reply](#)

How will I know if a projector can be turned on its side?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/520/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/07 by André Rangel • [www](#) • [Reply](#)

Hi Theo :) Really very nice Artwork! In July 2006 i've presented for the first time graffonic <http://indicio.net/graffonic/> where i used similar processes, in a much smaller scale but with audio output. In my piece i use a red pointer instead of a green. I am improving my work in order to allow new possibilities. Just to let you know and maybe we can change some info in a near future.

Best wishes,

André

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/521/>

IR Laser Graffonic

2007/06/07 by André Rangel • [www](#) • [Reply](#)

Hi all :) I am also developing a new version of the <http://indicio.net/graffonic/> piece using a IR laser pointers sponsored by an American company, they are not military exclusives. If you need more information about wavelengths and power, please let me know. About infrared light, i did this installation using ir filter in front of the camera <http://3kta.net/rework>

Best wishes,

André

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/522/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/09 by Kerry • • [Reply](#)

Hey Theo,

Trying to run in BootCamp, the app seems to quit out before I can figure out what's going on.

Trying to run it on MacBook Pro. Was hoping to use the built in iSight. But seem like it wants to switch it to 320 x 240 which it can't. (i was able to figure this out when I also had a Firewire camera plugged in and the APP would hold on that screen).

So am thinking I need to get the Pinnacle USB capture. But I can only find the Pinnacle PCTV Pro which has the TV tuner. Will this work still?

thanks

Kerry

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/524/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/09 by Kerry • • [Reply](#)

Hey theo,

Just one other question.

When I try to run the .exe that is in the main folder. It says that the link is wrong (it's trying to locate an alias on your website or something)

So just to make sure I'm trying to run the right app for Laser Tag that it is in the BIN folder and it is simply called APP.

Is that correct?

thanks

Kerry

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/525/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/09 by kerry • • [Reply](#)

Hey Theo,

Just wanted to follow up on the iSight in Bootcamp. After trying to get the Application up and running (it would quit out before I could read)....I kept doing that again until I could read it and it said I had Quicktime issues. So I installed Quicktime and was able to get the program open and running. The 1st try the camera had frozen on a still image. I quit out and re-opened and it's now working. I'm going to later tonight hook up the projector and aim the laser away and will report back how it went with the iSight and Bootcamp. Looking forward to the fun.

Since there are limitations on the iSight (no Zoom etc) I was wondering if I can use a Firewire Camera hooked up (it shows up in my input devices in Windows Control Panel).

How about a USB cam vs the USB capture card and additional camera?

thanks much.

I thought I was going to have to buy a PC to run this. But Bootcamp is seeming to get me there!

Kerry

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/526/>

Way too cool

2007/06/10 by ecobore • • [Reply](#)

Hey Theo, this stuff is incredibly cool - I hand it to you guys making it all open source - C21st heros! And just keep on ignoring all those commercial queries! Would love to run this on my Macbook but NOT in bootcamp! Who out there is a Mac guru inspired to do this?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/527/>

Big question !

2007/06/10 by Andreu Robusté • [www](#) • [Reply](#)

I want know if there are the same program in MacOS X version or an other similar program in Mac version ??

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/528/>

Re: Big question !

2007/06/26 by André Rangel • [www](#) • [Reply](#)

Hi Andreu :) Check <http://indicio.net/graffonic> it is a os X App.

All the best,

André

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/533/>

Re: Big question !

2007/07/02 by Andreu Robusté • [www](#) • [Reply](#)

I have seen that you like to work with Max/Msp. I'm a member of a max/msp crew of Barcelona. Our name is mspKids and we investigate and experimental instalations about the sound and video with Sonoscop and (orchestra chaos) in CCCB (contemporary culture centre of Barcelona). if you want to take ours paches you can enter in our blog.
You only have to copy&paste :)

here, are a pach for jitter and wii remote, that you can move and generate audio and video in real time with the movements of the wii remote.

<http://mspkids.blogspot.com>

we are in contact.
see you.

Andreu

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/541/>

...

Comment pending moderation

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/21 by .jonah • [www](#) • [Reply](#)

I was super bummed that monitor span was needed to get this working as intended as my two laptops have ATI and Intel GMA chips. So, after reading the other posts here and a bit of googling, I found: [UltraMon](#).

Now it is dual-display on both. Here's how:

1. Install UltraMon (You don't have to install any of the sub-options if you don't want.)
2. Launch UltraMon from the systray and setup a new hotkey for "\"Maximize window to desktop\"".
3. Set your task bar to auto-hide.
4. Launch Theo's App.
5. Press you hot key combo!

You're golden with probably any video chipset that does dual displays.

Cheers,
.jonah

P.S. We're gonna play with this in conjunction with a kids graffiti workshop. Maybe pix to follow.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/531/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/22 by stÄ@phane \\\ \ • • [Reply](#)

just wonderful, i dream about that since my first tags in 1992 !!
i want make the same now !!!
congratulations guys...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/532/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/28 by four • • [Reply](#)

cant get software to work can somebody help me with a step by step using dev-c++
thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/534/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/06/30 by pato • [www](#) • [Reply](#)

I got it working on a macbook pro, booting windows, with ultramon, and isight (which works better than any webcam i tried).. works perfectly smooth indoors with cheap laser. (60 to 70 fps !!).. so fun! waiting for openframeworks to code some plugins!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/536/>

sad in nz

2007/06/30 by matt • • [Reply](#)

dude cool cant wait to try but one thing i live in nz and its illegal to buy strong lasers and i dont feel responsible enough and i 'm broke so... can i use a red \$2 shop laser and an old 3700 Lumens projector and a ps2 eyetoy plugged into a pc (with all the right drivers) and if not can you tell me the absolute cheapst way to do it

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/537/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/01 by Theo • [www](#) • [Reply](#)

New Laser Tag 2.0 mac/windows/(linux?) coming soon.

Stay tuned!!

Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/539/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/03 by budowa domów • [www](#) • [Reply](#)

Good article and site. Congratulations

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/542/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/03 by John Grant • • [Reply](#)

hey if you need beta testers i'd be more then happy to test for you, i've been working with this system for over 2 months now (as you can see from the previous posts, and hope i could provide some feedback for you.

<http://brokenartist.com/lasertag>

theres a open dir of the last \"big\" shoot in Chicago for looptopia...

LMK if you need beta help from a macbookpro user!

Thanks!

-John

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/543/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/05 by Garrett • • [Reply](#)

Hi

The tutorial uses a 60mw green laser, will a 60mw red laser do or is there something particular about green lasers that make them work better?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/544/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/06 by sharp_shooter • • [Reply](#)

trying to mess around a bit with the source code... when i open the codewarrior project i always get a number of error messages that some libs are missing (e.g. glfw and audiere). they are indeed not part of the .zip file and used in some components. could it be that you forgot to include some subdirs in /lib/?

thanks for this great tool,
respect

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/545/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/09 by Theo • [www](#) • [Reply](#)

hmm strange - there is no use of glfw or audiere in that project - I just downloaded the src from my site and tested it - it should compile fine. try from a fresh copy first and also try "remove object code" from the build menu. Did you install the codewarrior ide with all 3 updates?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/547/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/22 by ant-1 • • [Reply](#)

hi theo great app, thanks for making it open source. i installed it on my pc and bought a microsoft vx-1000 web cam. i opened amcap and the cam worked fine. so i ran the program no problems. but when i changed the video feed for the camera the background on the app turned red. no signal from the camera. the program says that there are 2 devices detected. a panasonic wich i guess its the demo video and the microsoft x-v 1000. also im connecting the camera directly to the usb port. please help theo your my only hope. hahahahaha. no really, please help.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/666/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/09 by possan • • [Reply](#)

Awesome, we'll try to set up a show around here, got my wicked laser today...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/546/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/10 by Chris • • [Reply](#)

Hey Theo,

Man this is awesome! Reading through all the comments has also been really useful. I'm a student at MIT, and we're planning to use your code to get this going on a large building we have here. Its going to be a cool activity for incoming students. I'll let you know how it goes! (or plead for help). We have a pretty huge projector, so it should look good!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/549/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/11 by Theo • [www](#) • [Reply](#)

Here is a little test video from the new cross platform LaserTag system, built with [openFrameworks](#).

<http://muonics.blip.tv/file/299069/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/550/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/13 by bolesco • • [Reply](#)

Firt of all.. this is a very brilliant idea you people have !
i'll try to use it here in brasil...
but i have one little problem... i dont use Windows pc !
what should i do ?!
buy one just for that ?! rssss
is there a Mac OS X soft version !@?
thanks for the good work !

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/551/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/13 by Fran Verde • • [Reply](#)

Hi,

I'm trying to conect diferents cameras. I'm from Seville (Spain) and my videocamera is Pal. When I conect by fireware that camera the program show me that it's working at 30-35 fotogrames per second. My camera work at 25 fotogrames per second. The image of the camera is very strange.

On the other hand, if I connect a web-cam by usb, the program work at 25 fotogrames per second but in this case show me a ERROR. I need Help... sorry for my english.

Thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/553/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/14 by Theo • [www](#) • [Reply](#)

Hey - please paste the messages from the console window when the app runs - that should help me figure out the problem.

Also it doesn't work with firewire - has to be 320 by 240 video.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/556/>

Cameras and Cameras... NTSC / PAL

2007/07/13 by Fran Verde • • [Reply](#)

Need help with the camera!!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/554/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/14 by Andreu Robusté • [www](#) • [Reply](#)

Theo, Can you explain me how I can to take the internal code of the program laser tag setup, we want to probe to modificate it, we have some ideas for do more and diferents possibilities. thanks, and sorry for my english.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/555/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/14 by Theo • [www](#) • [Reply](#)

Hey! the new version coming out soon will be much easier to adapt. See the most recent post on my blog to see what I mean. Probably be 14 days more before it comes out.

Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/557/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/17 by maxomat • [www](#) • [Reply](#)

GREAT!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/559/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/17 by Ben Wood • • [Reply](#)

OOOHHH activity flowing through my vains.

Voice to the silent.

Thank you.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/560/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/22 by Deadeye • • [Reply](#)

Hey there,

i just got to thank you for this great programm. I really hope you will be developing more and more versions with lots of functions, like a selectable color for the graphics. Maybe even a good way to change the direction of the drips below the writings. I still haven't figured out how to get them running down and not sideways, without turning the beamer.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/565/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/23 by Theo • [www](#) • [Reply](#)

New version is super configurable :)

To get the drips to go down rotate both quads (camera and projection quad) so that they stay lined up but that the drips now drip down instead of sideways.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/567/>

ElecrtonicGraffitiRgbNewGraffonicVersion

2007/07/23 by Andre Rangel • [www](#) • [Reply](#)

Hi Theo :) I heard wonders about your set up at Barcelona. Congratulations. I've just published a new version of Graffonic that can "paint" in rgb. Check <http://indicio.net/graffonic>

Cordially, Andre

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/568/>

Re: ElecrtonicGraffitiRgbNewGraffonicVersion

2007/07/31 by Ali Mcelhoney • • [Reply](#)

Andre that looks really cool. V. impressed! Good work.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/572/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/24 by glenneroo • [www](#) • [Reply](#)

So does anyone want to share a Visual Studio project? Preferably 6.0 but 2003 will also work :) I\\'m trying to get my Wii working with it.. and/or to write a patch for VVVV to output the same visual effects and then i could hook up just about anything. There\\'s also an MPX patch to read in cards, which could probably be hacked to just work on any colored laser pointer as well.. hmm hmm so many ideas, so little time. *hack hack hack* ;)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/569/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/28 by Dan • • [Reply](#)

when you download the app and ide what are the steps to follow. Like, which one first or after you extract then what. Totally lame question but I do not want to mess up because the download took forever due to my slow connection. Thanks mate.

FROM THEO:

Install the IDE - hit yes to all stuff except runtime for Java and 'do you want to register' - just hit close on that one.

Install all the updates without restarting - after the third one it will say that the libraries need to be recompiled. hit yes. should bring up codewarrior. click on the green arrow and then wait till it is done (5-25 mins depending on your pc).

Then you should be ready to open up the laser tag codewarrior project file.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/570/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/31 by Ali Mcelhoney • • [Reply](#)

Theo,

really excited about laser tag 2.0 finally my macbook pro will be complete!!! quick question though the camera on all your pictures and video footage that you use for tracking, is it a Watec 221s?

I'm looking into buying one but I want to make sure that this camera (http://www.watec.net/english/color/wat_221s.html) is the right one!

Where did you get yours from and how much was it?

VERSION 2.0! VERSION 2.0! VERSION 2.0! Bangin!!

Ali

FROM THEO:

It was a 221S with a super wide to zoom manual iris lens. It was about â¬700 - A rip off really, as you can get it for \$450 in the US.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/571/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/12 by Ali • • [Reply](#)

Is the lens an added extra?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/589/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/31 by Dan • • [Reply](#)

after loading ide and updates, codewarrior opens and a Release Win32 x86 and Debug Win32 x86 opens. Which green arrow do I select. Then where do I go to open the laser app. I'm so F\ING lost on this. This is Fookin\' embarrassing. Thanks mate.

FROM THEO:

It is the Green Arrow on its own.

If you turn on file extension viewing in your folders the project file for laser tag is the one that ends .mcp

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/573/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/07/31 by Jonas Saucedo • [www](#) • [Reply](#)

nice stuff, do you can sell me one of this entirely machine??

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/574/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/01 by Alexander Melo • [www](#) • [Reply](#)

Hello,

Here's a video from my setup in Rio de Janeiro - Brazil

www.dogmagraphics.com.br/grafite.zip

Can't wait to see version 2.

FROM THEO:

WOW nice video!!!!!!

super dope :) Sending it to the rest of the boys!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/576/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/02 by Alexander • [www](#) • [Reply](#)

Thanks. :-)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/581/>

LASER TAG ROCKS DOWNTOWN LA!

2007/08/01 by Tddd Lazer • [www](#) • [Reply](#)

Last weekend CHECK IT OUT!!!

- 6500 lumen projector
- firewire webcam
- MacBook Pro
- Modded Leadlight

Also, we came up with a new technique: oue a low power red laser to the green so they're perfectly aligned. Turn the red one on continuous

Also, we came up with a new technique. got a low power red laser to the green so they're perfectly aligned. Turn the red one on continuous. Now you have a pointer to see where you will write with the green beam. Eliminates the guessing!

REPLY FROM THEO: Dope!!!! Seriously nice shit man! good idea with the red Laser - thats what snipers use them for :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/578/>

...

Comment pending moderation

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/03 by gluedemon • [www](#) • [Reply](#)

hey guys we\\re a urban art crew from mexico city we plan to make laser grafitti in our country, we already got everything to make it where can I write you to explain you more about our project, and also to put you on the credits.

regards

Glue Demon

REPLY FROM THEO: email me theo @ this website address

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/582/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/06 by Glue Demon • [www](#) • [Reply](#)

Theo: we would like to reach you via email 'cause we want to do Laser graffiti in Mexico City and we already have all the setup but would like to explain to you our project to see if it's ok.

Hope you read this and reply

regards

Glue Demon

Da-Flow Team

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/583/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/09 by possan • [www](#) • [Reply](#)

i'm working on an modified version of the program, renders the strokes a bit different and in higher resolution, moved the ui out of the render, no code released yet, need to get the output-distortion working first...

screenshot: <http://www.possan.se/downloads/42f79bcc-e872-4c2e-afb2-1f0770393f8a/painter2.JPG>

REPLY FROM THEO: Dope! that looks seriously nice! Any video yet?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/584/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/10 by coldweapon • • [Reply](#)

Hi.I've almost made it but one step left.I connect the projector to my laptop and set the display mode to horizontal span as you say.But when I run the app, my projector display nothing.The video card of my laptop is Nvidia Geforce Go 7400. So I have to make the projector projects exactly what the desktop displays and use the "slide" command to do the demo(black background & white brush)

REPLY FROM THEO:

If you can see you extended desktop on the projector then the app should work. Make sure your combined res is set to 2048 by 768

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/585/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/10 by coldweapon • • [Reply](#)

where\\s my comment I just submitted

where's my comment. I just submitted.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/586/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/10 by coldweapon • • [Reply](#)

Hi guys. I resolved the problem of horizontal span. But the brush is still white. why???

REPLY FROM THEO:

The brush is always white. Were you expecting otherwise?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/587/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/10 by John Grant • • [Reply](#)

So when is the release going to be... I am checking your site everyday to see it is!!!

LMK

Thanks!

-waiting with baited breath

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/588/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/13 by NSO • • [Reply](#)

Theo, thanks for everything. Can't wait to see the v2. Is it available for beta testers?

NSO - BNA - GSE

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/590/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/13 by rodolfo rendon • • [Reply](#)

I WORK FOR THE MEXICAN GOVERNMENT. YOUR IDEA IS VERY GOOD. WITH WHO COULD I SPEAK TO HAVE MORE DETAILS TO WORK ON THIS PROJECT?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/591/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/13 by badkarma • • [Reply](#)

would this work for the camera to usb connection?

http://www.amazon.com/o/ASIN/B000234SMQ/ref=s9_asin_image_1/002-3749568-8817664?pf_rd_m=ATVPDKIKX0DER&pf_rd_s=center-2&pf_rd_r=1G6ZMYJRZCAK4A2XJ8C3&pf_rd_t=101&pf_rd_p=278240301&pf_rd_i=507846

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/592/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/13 by Fernando • [www](#) • [Reply](#)

I have developed a new version from brazil where we are able to change de color. There are more 3 settings (R, G and B). Plus some tests and I will send the new version.

Reply From Theo: Nice!!! Love to see video / code! :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/593/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/14 by Possan • • [Reply](#)

Thanks for the response... no video yet, i got to have it running in a month or so because we're scheduled to do a small performance then, maybe i'll post a video preview someday problem is that i'm using my firewire video camera for capturing the laser so i'm one camera short :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/594/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/14 by Jason • • [Reply](#)

I've seen in a couple places the acronym \"L.A.S.E.R.\" around this site and the GRL site. We all know that \"laser\" really is an acronym for \"Light Amplification by Stimulated Emission of Radiation.\" but no one ever uses periods like I've seen around here. Do you guys use \"laser\" to stand for something else?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/595/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/14 by JasonLH • • [Reply](#)

I built a proto system last night. The software is so good that it only took an hour to be up and running. thanks Theo! I used a standard red laser pointer from office depot (

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/596/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/14 by Theo • [www](#) • [Reply](#)

Cool - glad it worked!

To be honest the code is pretty gnarly - that is why the next one is much cleaner.

Also thanks for the email - I would definitely like the help - I be in contact shortly!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/597/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/14 by JasonLH • • [Reply](#)

looks like my previous post got cut short. the URL to the Youtube video showing off the ultra basic setup (digital camera and office laser pointer):

<http://www.youtube.com/watch?v=AfhFpWdHWdU>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/598/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/15 by Sean L • [www](#) • [Reply](#)

Hello there

I was just wondering if you could tell me where to buy one of these 60mw green laser.

Thanks
Sean

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/599/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/21 by sr • • [Reply](#)

just got mine here...
<http://wickedlasers.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/604/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/15 by Sean • • [Reply](#)

Hey, since the maximum power laser we can buy is 5mW, can this still work? What about at a much closer range? Please contact me
Abraxas_2_0_0_5@yahoo.com

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/600/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/16 by nib • • [Reply](#)

Luckily, I have a 20mw green laser pointer lying around, a projector (mounted indoors, though), and a stream-able camera. It worked! Amazingly, some really cool open source software finally works on my system. Now, if only it had a resizable separate window for the projection...

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/601/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/16 by Alex • • [Reply](#)

Hey Theo! Awesome project you guys are developing!!

Im not quite sure how to get it to work though.. I followed the instructions above but no luck.

I downloaded the app and amcap. Im using just my webcam as i saw other people were getting results with them. When opening amcap y gets the video feed from the webcam just fine. But when i run your app it does its thing in DOS and then opens fine but the feed that its getting is from a video of a building (which came in the downloaded zip file. How can i switch from that video to the "live" feed from the webcam?

Any help would be appreciated! I read ALL the comments took me over an hour but i got some real good tips out of many people!

Alex

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/602/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/22 by eugi • • [Reply](#)

read the settings :P

Use camera - toggle between using the live camera and an included test video.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/606/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/17 by Nicholas Lee Dugle • • [Reply](#)

I wish to get involved
I have yet to see anything like this in the states, and it would go off man.

Hit me up

nicholasdugle@comcast.net

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/603/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/21 by Jesse • • [Reply](#)

Hi There,

I need to hire someone to get my company in NYC set up with a laser tag program for an art instillation that we\\re woking on for a building. Does anybody do this? We have to act fast.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/605/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/23 by Jason • • [Reply](#)

Jesse,

I might be able to help you out. Please contact me at jasonheidecker@gmail.com.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/612/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/12 by Mike • [www](#) • [Reply](#)

Hey, If you're still looking for help, I'd be glad to help you out. Just give me a shout at morrisf89@hotmail.com or feel free to call 289-668-4847

-Mike

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/660/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/22 by william • • [Reply](#)

I am French.

I want to make the machin but my english is very bad. so i dont understand the notice.

Can you help me?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/607/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/22 by Ryan • • [Reply](#)

Keep up the good work Theo! Anxiously awaiting version 2!

For anyone out there who wants to project in different colors, there's a manual workaround. A very handy tool to have for lots of projects is a theatrical lighting gel swatchbook, which is a small book of anywhere from dozens to hundreds of samples of lighting gels. They are used in the film / video / theater industries to plan and test lighting. You can get them pretty cheap(for example: http://www.adorama.com/ROSB.html?searchinfo=swatch&item_no=1)

Then just fan open the swatch book and place the desired color filter in front of your projector lens. I've had good luck with this technique. The individual filters may not be large enough to cover the lens if you have a giant projector, but they work fine on my unit.

p.s. - Thanks a lot to Jonah for the tip mentioned above about using UltraMon to span the desktop!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/608/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/22 by Ryan • • [Reply](#)

Oh, and also, I've noticed that the Line Resolution setting appears to have no effect. Whether it's set at 25 or 150, the line looks the same. Any ideas?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/609/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/22 by Paul • • [Reply](#)

Hey there.

Is there any chance to get only the paint dripping effect alone?

I dont really need the whole tracking thing.

Thanks!!!!

Paul Zumbrink

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/610/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/22 by Paul • • [Reply](#)

Seriously though, It would be pretty cool to have that dripping as an after effects pluggin, or something like that.
Do you know about it?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/611/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/23 by Mark Thompson • • [Reply](#)

Hello Theo...

Very good work you are doing !

I Want to make it work on my Mac PowerBook G4.. Is that possibel now, or i will have to wait until version 2 !?

Thank u for the help!

Mark.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/613/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/23 by Will Barry • [www](#) • [Reply](#)

Hi Theo..

i've been looking around for the Laser Tag Mac app but can't find.

Where can i download the Mac version ?!

keep the good work !

Congrats..

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/614/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/23 by Alex • • [Reply](#)

thank you "eugi" that was pretty obvious... my bad! lol

well so i got everything to work just fine with the projector and i am using a red laser pointer for the moment. But i have a few questions...

The response from the moment i move the laser to when the projector projects light is kind of slow. Do you think this can be due to the laptop im using? Its a p4 3.0 win xp, 1gb ram, nvidia 64mb video card.

The other issue is.. the movement is just fine but for some reason the projector is projecting light (the stroke) something like 30-50 cms (1 foot) away from the laser.. so it is not right where im pointing with the laser. Any ideas why? is there a setting i have to tweak to have the projection right on the laser? (so it is more precise)

One last thing, the drips are going in the wring direction (i had to flip the projector to get the stroke in the right direction, any idea how to fix the drips? (rotate them in some way).

By the way, i dont know if this helps but im using a webcam as part of my setup.

Will i have a better trak if i have a more powerful laser? or a better camera? my current laser is 0.95 mw strong and is color red.

thank you all!

Alex

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/615/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/24 by Nick • [www](#) • [Reply](#)

I'm don't know \alot\ about programming, but i can read and edit code, and I wanted to mess around with some of the code you all of written with C++ and openFrameworks. The only problem is... I can't get anything to recompile. I'm using Dev C++. I'm not sure if I have openFrameworks set up right, or which .cpp or .h I should compile first, blah blah. As I said, I'm not the great at the knowing the fudamentals of programming. sorry, and thanks for any help

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/616/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/24 by trak • • [Reply](#)

hey buddy, Im looking at setting up a laser tag system similar to yours. I want to know what would be the difference if i used the PT-D3500U, 3500 ANSI Lumens DLP Projector?? Cheers

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/617/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/25 by trak • • [Reply](#)

hey mate, When choosing a projector do you have to stick does throw distance really matter. Because the alternate projector you have suggested, the BenQ PB8253, has a relatively small throw distance compared to the Panasonic projector you use. Does this mean you can not project on as large of a surface. Also does this effect how close you have to be to the wall??

Thanks for your help

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/618/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/25 by James helligan • • [Reply](#)

your slackin on this version #2... about 23 days past... if you cant deliver dont say so... dont mean to bust your ass but come on!!!!!! at least release a beta.....

-James

REPLY FROM THEO:

If I released a beta then I would have a gazillion help / feature requests which would slow me down even more. The post for version 2 was just to show that it is being worked on. Write the code yourself if you think I am 'slackin'! :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/619/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/28 by Alex • • [Reply](#)

Hey guys any idea why the projection is not right ontop of the laser? Everything's working great but for some reason the projection is a foot or so away from the laser. For example, if i draw a line from top to bottom with the laser, the projector will draw that exact same line from top to bottom but a foot or so to the right of the laser... there is probably a quick fix for this.. let me know thanks!!

Alex

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/620/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/29 by Theo • [www](#) • [Reply](#)

Just adjust the camera quad so either it matches the projected quad (use the L key) or just keep adjusting the camera quad till the laser and projected paint line up.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/621/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/08/29 by Alex • • [Reply](#)

i cant see what im doing wrong... When i hit L i get the \"edge\" projection. So that is working fine but when i change the shape of the yellow \"quad\" (videoIn: Select Sub Region) nothing changes in the projection.. it should, right? what am i doing wrong?

thanks for you help guys!

Alex

REPLY FROM THEO:

Hey Alex, Nothing will change in the projection until you draw with the laser. What I usually do is:

get the edges of the projected quad to the edges of my surface so I am happy with the shape.

Then shine the laser at each corner of the projected quad and look in the camera video and drag the nearest corner of the yellow quad to that position.

This way you know that the yellow quad is exactly lining up with the projected quad.

I don't know if that helps.

Also if you are doing it really close up and with a wideangle lens the laser and the paint will never line up perfectly as there is a circular lens distortion which is hard to take into account.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/622/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/09/06 by Will Barry • • [Reply](#)

Hi Theo..

Please just tell me if i can use my MAC G4 for this. I Do some video projections on the wall of the buidings on the streets.. and i`d love to do the laser tag as well... its amazing...

please tell me if its possible for me !

thank you !

Will

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/624/>

WOW

2007/09/11 by MMMATOOO • • [Reply](#)

I've tried this laser graffiti writer in Austria on Ars Electronica and i was really impressed. Good luck to whole GRL.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/632/>

...

[Comment pending moderation](#)

Re: GRL Laser Tag Rotterdam - how to and source code

2007/09/17 by dujoducom • • [Reply](#)

Hey, I've had limited experience with c++ and openFrameworks, but I thought I would try giving this shot. I've been able to successfully compile the openFrameworks examples going through the tutorial on their site for visual c++, but I can't seem to get this to compile. Does anyone have any tips for compiling? I'm using the "new projector from existing code" feature of Microsoft VC++ Express edition.

Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/637/>

John

2014/05/22 by Smithd67 • • [Reply](#)

Hi there! I could have sworn I've been to this blog before but after checking through some of the post I realized it's new to me. Nonetheless, I'm definitely happy I found it and I'll be bookmarking and checking back frequently! dgkegafaabagdecc

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2228/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/09/18 by dujoducom • • [Reply](#)

err, \"new project\" from existing code I mean.

I just read what I wrote and realized it was very vague, so I'll go into more detail.

It seems like the compiler is having trouble finding include files even though they are in my folder structure. I'm getting a lot of can not find file errors, I think the compiler for some reason doesn't know where to look for the files.

Here is an example error: I>c:\\openframeworks\\v0.02\\app\\lazer_test_013_day1\\src\\classes\\analysis\\axisfinder.h(3) : fatal error C1083: Cannot open include file: '\\ofMain.h': No such file or directory

So it can't find a file which is clearly there.

In the past I've mostly compiled stuff that already has an .sln file, not just the code. I've used what little knowledge I have about project references and includes but I still can't figure it out

REFERENCES AND METHODS BUT I STILL CAN'T FIGURE IT OUT.

I realize this is probably a beginner c++ issue and definitely not a lasertag issue, but if anyone can help or point to a good article about project dependencies or something I would definitely appreciate it.

REPLY FROM THEO:

Hey! I am glad you are getting into openFrameworks. We found the easiest way to make new projects is to just duplicate one of the example projects and rename the folder so ofGraphicsExample becomes ofMyTestExample or something. Please also sign up to the openFrameworks forum as there will be much more thorough support there!

Cheers,
Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/638/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/09/18 by Astro black • • [Reply](#)

whats up bro..

Can i use a Green laser with 127mW of output (Fusion Series) !? Or this will confuse the sYstem !?

thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/639/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/09/18 by Astro Black • • [Reply](#)

hey man..

when u gonna release the laser tag v.2 for us...

can`'t wait for that!

thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/640/>

Would you apply a license to your sourcefiles?

2007/09/19 by Art • • [Reply](#)

Could you explicitly state in your source code and distribution what license your code is distributed under?

Popular open source licenses are given at:

<http://www.opensource.org/licenses/category>

under

:: Licenses that are popular and widely used or with strong communities(9) ::

Thanks.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/641/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/09/20 by Riot Junkie • • [Reply](#)

Kate,

I have just started setting this up myself using a webcam minus a projector. Even got it to work in a dark room with a torch instead of laser pointer! Let me know if you still need help.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/642/>

Re: hello from japan

2007/09/24 by Botch • [www](#) • [Reply](#)

Hello

I like it very much, and would like to use it in Japan for my events. Tel me what to do.

Thanks,
Botch

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/643/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/09/28 by Noah • • [Reply](#)

when I hook the camera up and open the program, the video appears to be split into three segments within the video feed. Whenever It detects the laser , 3 dots appear. Does anybody know of this problem or a fix??

thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/644/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/09/28 by Arcane • [www](#) • [Reply](#)

I have acquired (2) Barco 6400 projectors, both with 1.27:1 lenses on them. What type of lens is used in your units? This one has a very short throw. Election time is drawing near, this needs to be running.

Thanks,
Arcane

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/645/>

...

[Comment pending moderation](#)

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/02 by Guerrilla • [www](#) • [Reply](#)

I'm using the same Panasonic PT-D5600U projector they are using. The stock 5600 lens is a 1.30:1. Your Barco's will need about 10 amps AC, have some serious power available. In my opinion your Barco's should work fine. Only way to find out is to get out and run some tests.

Pick up a cheap VGA splitter box (eBay) to use both of them.

Theo might have other info for you, but I thought I would chime in since he hasn't been on here in a week, busy dude I would imagine.

-Guerrilla

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/647/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/02 by Sman • • [Reply](#)

I am having trouble getting the software to run on my laptop. I have a windows 2000 system. When I try to run the application \\\\" I get an error.

[code]

X:\\\\WORK\\\\PROJECTS\\\\GRLROT~1\\\\GRL_RO~1\\\\LASERT~1\\\\app\\\\LAZER_~1\\\\bin is not accessible.

The folder was moved or removed

[/code]

Why can\\'t I run it?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/648/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/04 by pamir kiraner • • [Reply](#)

hello,

we are an event company in istanbul . we would like to use the laser tag in one of our events ...and hopefully help to make the code better ... is it free of charge to use this ?

thanks.

pamir

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/649/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/05 by ZHANG YI • • [Reply](#)

Hello

I've a PC webcam Philips SPC 900nc. It can sun under the soft AMCap program but it can not be run under Laser Tag app.exe, means that only black or nothing in the small windows. Please tell me tha solution.

Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/650/>

Need Help

2007/10/05 by ZHANG YI • • [Reply](#)

Hello

I've a PC webcam Philips SPC 900nc. It can run under the soft AMCap program but it can not be run under Laser Tag app.exe, means that only black or nothing in the small windows. Please tell me the solution.

Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/651/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/06 by Guerrilla • [www](#) • [Reply](#)

Sman -

Instead of running LASERAPP.exe - Try this to access the app.exe directly.

From the main download files:

LaserTag013SrcAndApp / app / LAZER_TEST_013_DAY1 / bin / app.exe

Run the \"app.exe\" and it should load up for you.

What I did was create an app.exe shortcut on my desktop to make it easier to run while out in the field.

-Guerrilla

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/652/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/07 by Acura • [www](#) • [Reply](#)

Thanks for your time and energy. It's refreshing to see somone who is thoroughly excited.
Once again...thanks.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/653/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/07 by Daniel • [www](#) • [Reply](#)

hi! i have downloaded the 100mb file, and have tried to run the application, but it said it couldn't find \"app.exe\", which i found in one of the other folders, so i pointed it to that, and a black window came up, but then an error came up and said \"cannot find file named \"zlib.dll\"\"
what is does this mean, and how do you fix it?

thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/654/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/07 by Daniel • [www](#) • [Reply](#)

oh, well i figured that out, but now it isn't getting any feed from my webcam? it just has a picture of that building with a laser buzzing around it? why isn't my video in there?

thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/655/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/08 by Daniel • • [Reply](#)

well now i have somehow fixed that problem, but now there is another one? the image appears to be upside down, because when i move my laser side to side, it goes up and down on the projector, and when i move it up and down, it goes side to side?? oh and also, the drips run UP the screen instead of down?? how could i fix this?
thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/656/>

Help!Help!

2007/10/08 by ZHANG YI • • [Reply](#)

Hello every one, I've a webcam, but the laser tag program does not take my webcam, it can detect the webcam at the beginning DOS mode.
Thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/657/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/09 by Mike • [www](#) • [Reply](#)

Hey guys, As everyone else has said awesome project, I to hope to get one up & running. Problem is I have a DV cam, sony that i'm using through firwire and amcap see it just fine. now The app runs fine heres what I get from the app:

VIDEOINPUT SPY MODE!

SETUP 1: Looking For Capture Devices.
SETUP: 0) Microsoft DV Camera and VCR
SETUP: 1 Device(s) found

SETUP: Looking For Capture Devices.
SETUP: 0) Microsoft DV Camera and VCR
SETUP: 1 Device(s) found

my id=0 dName = M.
SETUP: Couldn't find preview pin using SmartTee
SETUP: Checking crossbar
SETUP: You are a webcam or snazzy firewire cam! No Crossbar needed.
SETUP: crossbar? 1
SETUP: Default Format is set to 720 by 480
SETUP: Capture Device doesn't support 320 by 240. Reverting to 720 by 480
FILTER: All Good - Buffer Size is 1036800 bytes
STATUS: You can now grab my frame :)

But as you will see in this screenshot, when i get the video via the camera in the app it comes out looking all... interlaced? jumbled up? sorry im not sure of the technical terms... any thoughts??

screenshot: www.vaneykmedia.com/screen.jpg

Thanks for any help... I know it's only a 50\$ capcard but if I can get around it with what I have why not try right?? Thanks.. Mike

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/658/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/11 by Alfie • • [Reply](#)

Hi Theo!

Currently assembling all of the materials and have a few questions:

1. Will any USB 2.0 Video Capture product work? Can you provide a link to the actual Pinnacle PCTV USB Video Capture Card you used?
Can't seem to find it on Amazon.com

2. Is a 15.4" Macbook Pro Core Duo 2.0 with 256 MB X1600 video card sufficiently powerful for this project?

Thanks in advance for your help on this.

P.S.

Not a programmer or a computer scientist here so I don't really know about re-compiling the program for the Mac platform. Was thinking of dual booting to Windows XP

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/659/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/13 by jojo • • [Reply](#)

peace, fellow discordians! power to the pixelheads! :) seriously, fantastic werk and please, never stop... couple tech ??s- we are planning a high-profile championing of this idea (GRL WILL get due shouts! :) but need to know your thoughts on using a high-contrast ratio LCD (specifically, an Eiki LC-X71 - got s PLENTY of lumens (5500) and we can get one of several lenses (1.3-4.2), but not sure if you have any experience with LCD vs DLP - saw the previous threads about the Pan's liquid-cooled and ok-to-90° advantages, but thoughts on LCD vs DLP tech? experience? Also, any thoughts on using a B&W cammy vs color? ie, Watec 525EX - seems to have manual controls, but waiting to get full specs - thoughts? experience?? will appreciate the feedback, cause we're hoping to do this SOON - 4 major US cities on the SAME NIGHT! yeeeah, baby! thanx, PTFO...
joj

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/661/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/13 by Bobby Delaney • • [Reply](#)

Hey man! This is frickin amazing!!! I'm sitting in my room watchin a group of guys do this on a building outside my window!!! I'm studying illustration out in Chicago, and would like to be able to do this kind of stuff! except I'm a bit of a techno-tard... Can anyone give me a "Dummies" guide to getting all these things working together?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/662/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/16 by Darcy Ataman • • [Reply](#)

is it possible to rent this set-up somewhere? I'm looking to do a socially conscious project with it in Canada. thank you.

d

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/663/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/17 by R&L • • [Reply](#)

Hey,

This is great, I got everything to work EXCEPT that when I write sometihng, it doesnt get recorded on the screen. What i mean is, It tracks the laser perfectly, does everything its supposed to do, but then no writting, so its a very nice white dot going all over the screen but nothing getting written to it, what could I be doing wrong? any ideas anyone?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/664/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/24 by Spritely Monkey • [www](#) • [Reply](#)

I had that problem and found it was just a matter of playing with the threshold values of hue etc and perhaps toying with the camera settings too. Rest assured nothing is actually wrong.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/670/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/22 by ZHANG YI • [www](#) • [Reply](#)

Change your video camera to support 320x120.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/665/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/23 by Daniel • [www](#) • [Reply](#)

i have the same problem with my jvc-cam and firewire connection. i think it does not support the firewire connection as its working fine if i connect via usb.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/667/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/23 by Eva • [www](#) • [Reply](#)

Wow! Full respect for making this freely available. Thanks for this really impressive stuff.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/668/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/24 by Agent Spritely • [www](#) • [Reply](#)

Throwies were cool. This might just be better. Worked first time with very little tweaking. Bought a 10mv laser off ebay - easily powerful enough for most applications (with added benefit of not burning skin/blinding etc), plugged in a webcam and projector and had a play. Fantastic! To make drips run down the screen just change line 47 of testApp.h from cx++; to cy--; and recompile.

Rest assured we will put this to excellent use! Thanks again.

www.spacehijackers.co.uk

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/669/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/30 by atman • [www](#) • [Reply](#)

Theo ! (or anyone)

I'm 99% there !

but I keep running in to a little problem.

when I run the LaserTag and I've got the Pinnacle PCTV plugged in (usb) it says \"device can't support 320 X 240\" so it tries to run it at 720 X 840 and it gets going,, and the camera passes through,, but it looks very very bad. Like there's no vertical sync. I'm on my fourth different PCTV card now,,, and still no luck. Please help !!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/674/>

...

[Comment pending moderation](#)

Re: GRL Laser Tag Rotterdam - how to and source code

2007/10/31 by ZHANG YI • • [Reply](#)

Could you tell me which part is concerned the drawing color; should I change the drawing color?

Thank you

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/676/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/11/02 by YI • • [Reply](#)

Where is the variable that I can change the color of graffiti?

Thank you

Yours Yi

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/677/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/11/06 by buntermacher • [www](#) • [Reply](#)

Just in short. Thx and respect for it!

grtz
wkd
+++

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/678/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/11/16 by Mitchell Daniel • [www](#) • [Reply](#)

Thats the dopest ever how much does it cost for all the equipment?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/680/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/11/26 by BUCSI ARPAD • [www](#) • [Reply](#)

hi everybody

we are students at the academy of arts in budapest and we are happy to see what you can do, but we have got a problem. maybe can help us.

whwen we start the app that stops at

and before said that SETUP:COULNDT FIND PREVIEW PIN USING SMARTTEE

SETUP:checking crossbar

SETUP:you are not a webcam\ setting crossbar

SETUP:found physical interface-composite

SETUP: ccrossbar? 1

SETUP: default format is set to 720 by 576

SETUP: trying diferent capture size 320 by 240

SETUP: Media Type is yuy2 converted to rgb24

in this point everytime stops.

If you can explain something to me, to us we will be glad.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/684/>

Version 2

2007/11/28 by Ali McElhoney • • [Reply](#)

Theo my friend, any news on a mac compatitble version 2 yet?!?!)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/685/>

Re: Version 2

2007/12/07 by Theo • • [Reply](#)

Yup it is done - check:

<http://muonics.net/blog/index.php?postid=26>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/698/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/12/05 by Adrian • • [Reply](#)

as I can contact them?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/690/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/12/07 by Theo • • [Reply](#)

Check my latest blog post - it is done :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/697/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/12/14 by Azimuth • • [Reply](#)

We are stoked on using this software but are running into a bit of difficulty.

We are using macbook g4, canon x11s camera, canon lv7250 projector, and lastly a 5mw green laser.

Where we are running into problems is camera detection. We have the camera running through firewire and when we hit c to calibrate it it doesn't work. Nor is it being detected. Is there a work around you are familiar with? We are hoping to get the "word" out and the generator & sound-system are ready to go. Please help !!!! Thanks so much for this wonderful app !!!!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/720/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/12/14 by Theo • • [Reply](#)

check my latest blog post - laser tag 2.0 is out with native mac versions.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/721/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/12/21 by panocia • • [Reply](#)

Hi Theo Genius !

I am wondering if your fantastic program can support more than one projector. We are in the process to setup a huge projected surface and we would like to use 2 or more projectors which can cover partly the area projected. Like 3 projectors in parallel horizontally....can we do it ? Any suggestion ? do we have to change the code ? easy ? thanks in advance !!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/735/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/12/27 by Carolyn • • [Reply](#)

Greetings!

I'm a Mac user is there any software out there that you know of so that I can do this with my mac??

Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/747/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/12/28 by Anthony • • [Reply](#)

We're going to build this and I'm psyched! Quick question, we have a Canopus aDVC110, will that work in place of a Pinnacle PCTV USB capture card? Does anyone have a link to a good capture card? Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/748/>

Re: GRL Laser Tag Rotterdam - how to and source code

2007/12/30 by Travis • [www](#) • [Reply](#)

hey saw the video on youtube and thinks its rlly crazy. i have the lazer and all for it but will any projector work? im not planning on using it on a huge building just the sides of houses etc? plz e-mail travtothemax@hotmail.com with the subject "lasers" thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/750/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/01/03 by Tyler • • [Reply](#)

FREAKIN' AMAZING. I want one! So, where did you guys buy your 60mW Green Laser at? And do you reckon that they are illegal in a small town in Canada?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/762/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/01/06 by Ian • • [Reply](#)

Hey the prject is awesome and I have everything working except, I can't get my usb/dv camcorder to work with the application, any suggestions?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/770/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/01/07 by Theo • • [Reply](#)

try the newer release - its posted here:

<http://muonics.net/blog/index.php?postid=26>

Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/771/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/01/10 by gustavo • • [Reply](#)

wow that was f&*king awesome. its refreshing to know that people are putting smarts and the streets together. please come to Washington dc and show these uptight f\$&kers something they'll never forget. one.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/785/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/01/23 by Nathan • [www](#) • [Reply](#)

for this to work you need a projector with a high (5000_ lumen output. and the one used in this project costs \$4000 - \$9000.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/806/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/01/27 by Panos • • [Reply](#)

Nice work Theo...fantastic. I have a sony 1200 lumens projector, a red laser 5mw and a cheap cam (0,5 mpixel). I made it work, but the lines they are slow and clumsily drawn.i mean that i'm moving the laser point and the line appear after a second(i can't draw free forms). Is the camera doing that or something else?. I forgot to tell that my laptop specification is: 64mb video card onboard, 1,70 cetrino mobile technology, 512ram, winxp and sp2.

I thank in advance...Ôhe greek.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/811/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/01/27 by Theo • • [Reply](#)

Firstly you might want to try the new software (check the latest post on my blog) and also in it - try it with the Advanced Quad disabled - this should help a lot. you also might need a brighter laser.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/812/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/01/27 by Panos • • [Reply](#)

All tests are with the new software and the andvaned Quad disable... and the problem it remains. The first think i thought is the camera, because its a messenger cam(low quality), so you move your hand and you see the moved hand after a "second"!!!, if you know what i mean. Tell me your opinion about my thought, also is all specification of my staff ok for this project? And one last question: Because i dont have a brighter laser now.. if i test the currentlaser getting closer to the wall?

Thanks again... the greek

Comment Trackback URI : <http://www.muonics.net/blog/bblog/trackback.php/15/813/>

mamama

2008/01/29 by sheva • [www](#) • [Reply](#)

[Search](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/825/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/02/03 by Alexander Ferrioli • • [Reply](#)

I use the version 2 at home as the 1st doesn't seem to go onto the 2nd screen (projector). i use it at home in my room and have to severely change the camera settings. My dad likes it very much. as it only inside, i don't think i need a bright projector just yet, though. i hope to use the software on close buildings around my area, with the owner's permission, of course.

I think that the LaserTag2 is SOOOO good.

From Alex :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/832/>

Where to buy lasers

2008/02/06 by Ref • [www](#) • [Reply](#)

If you want to get a cheap laser that will do the job, check out dealextreme.com. Their 'true 30mw' green laser will do the trick. Referring people to wicked lasers should be a crime..lol. Waaaay overpriced, underspeced, bad customer service. Check out my listed website for more places to get lasers and laser related items. Id love to see someone use the source to this project and create the same thing with a laser projector. =D

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/844/>

Re: Where to buy lasers

2008/02/06 by Ref • [www](#) • [Reply](#)

..and that site is laserpointerforums.com, for those too challenged to click the link. :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/845/>

public use

2008/02/07 by pamir kiraner • • [Reply](#)

hi guys,
we are an event company based in turkey we would like to use laser tag for some events we organize (like flashmobs ect) it wont be commercial work .
please contact me for collaboration possibilities.
waiting for your e mail
best regards.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/848/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/02/11 by Big Tex • • [Reply](#)

ok, i saw the post from the college kid and i'm in the same boat can someone in plain language walk me through how to cheaply make this work.

Thank you

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/851/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/02/11 by read • • [Reply](#)

i can't seem to get the software to work, when ever i try to put jmyron into processing i get a error message saying it can't be modified. need

help

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/852/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/02/12 by Gabriel • [www](#) • [Reply](#)

We need to experiment with Vikuiti from 3M

It is a bad-ass projection film that can be die-cut. You project on the back of it. I have seen it at lots of malls and retailers.

It is kind of pricey though. a 4x8 sheet is like 3k. I have been slowly ordering samples from 3M using my work address.

you can form it to substrates too.

w00t!

~G

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/853/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/02/13 by matthew mastrangelo • • [Reply](#)

amazing simply amazing anyway can u use an ordinary webcam or so for the motion capture if doing this on small scale not on a building but in a room or gym and do u need the pinnacle usb capture card in order for the program to work i have a 200mw laser pointer and i saw this and i thought it would be an amazing project if u can let me know about if u can use an ordinary webcam or camcorder using the svideo connection that would help me a lot thanks

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/854/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/02/18 by Theo • • [Reply](#)

a web cam should be fine for the small scale.

check my latest laser tag post on my blog for the details.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/864/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/02/18 by Anonymous • • [Reply](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/863/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/02/23 by anonymous • • [Reply](#)

what is the price range of all this stuff?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/871/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/02/25 by rico • [www](#) • [Reply](#)

why is this tagging not with the red lasers possible?

cheers from germany

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/874/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/03/19 by Oscar • • [Reply](#)

Yo

trying to set up a rig.. using a jvc digital video camera through a videobus and i'm getting an image in amcap but it's crap.. real low quality image and lasertag 2.0 isn't picking up a device [1]? would appreciate some pointers

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/914/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/03/19 by Oscar • • [Reply](#)

alright so i've cracked it.. hooked it up to a webcam instead and have just been drawing on my living room wall.. very nice. may well take this further

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/915/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/03/20 by nana • • [Reply](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/918/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/03/26 by Alys • [www](#) • [Reply](#)

I am a huge admirer of this work! It is truly breathtaking...

Alys Beach, Florida is hosting a \"Digital Arts\" festival on August 30th, and we looking for artists to participate. This work with the laser tag really inspired us to plan this event.

Some photos of our growing resort town can be seen at www.pbse.com/abfl/digital_graffiti. The concept is for digital artists like ya'll to come to the town and use our town as a canvas! As you can see, the architecture is influenced by the homes of Bermuda and Antigua Guatemala and is characterized by its clean white stucco facades.

Visitors will be invited to meander through the community's many courtyards and pedestrian walkways and experience a wide range of digital arts 'experiences.' Again, this work is fantastic and we would be thrilled to work with some of you digital artists.

I look forward to hearing from you as soon as possible!

If interested, please email events@alysbeach.com

Ps...we ordered our laser today to try the laser tag program. I can't wait to try it!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/934/>

Re:

2012/03/20 by PickettMagdalena23 • • [Reply](#)

Houses and cars are quite expensive and not everybody is able to buy it. Nevertheless, loan are created to aid different people in such kind of situations.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1976/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/03/30 by sdgsdg • • [Reply](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/943/>

Re: GRLsdf Laser Tag Rotterdam - how to and source code

2008/03/30 by sdf • • [Reply](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/944/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/08 by fdff • • [Reply](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/953/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/08 by FDFD • • [Reply](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/954/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/14 by Dan • • [Reply](#)

We did a similar thing in a drama studio with a ceiling about 150ft high and mounted the projector camera rig facing down then got people wearing black clothes and helmets with green LED's on them to walk around, amazing effect, the trails follow them around, we also put another video camera up there to record what it saw but having problems uploading to youtube - will post again with link when I can.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/959/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/16 by [X] CALABOCA • • [Reply](#)

Hy Theo,

We're from Rio de Janeiro, Brasil. I'm starting to do some laserTAG improvments. I'm translating the software to portuguese, add new brushes, change some codes, to optimize and some interface add. But i'm not a programmer, i'm new to that, but trying hard to learn. I wanna know if there is any way to add midi interface to control what i want to, for examlle a knob to the brush size. If its possible, what I have to do? what kind of strings, etc, should i've looking for... And another thing. It is possible to add 2 cams at the same time, for diferent things. Because i want to try using reacTIVision system to control. How heavy to the system this could be? Its possible?

Thanks.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/968/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/18 by Theo • • [Reply](#)

Ohh cool! Nice!

Yeah we desperately need a better interface for changing settings without having a photoshop style interface on the side of the projection (that would ruin it). A wireless gamepad is also an option.

For midi / camera stuff send me an email we can chat further. theo@(this site)

Cheers!

theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/974/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/18 by Gauperoni • • [Reply](#)

do u think a group of 13 year olds could do this in 7 weeks?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/975/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/22 by mr Frank • • [Reply](#)

We want to project on this:
http://www.deerns.nl/uploaded_images/Gasunie_kantoor.jpg

Can you say anything about a distance needed to project.
And then can we do it with a 5k beam?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/978/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/22 by Theo • • [Reply](#)

wow - that is a nightmare to project onto.

1 - it is lit up which will wash out the projection and make tracking very hard

2 - too many windows - the laser can't be tracked over the windows and all the lights in the windows would need to be turned off.

3- the shape would make it difficult unless you just did a small area.

For projection as a rule you need 1.3-1.5 times the distance from the surface, as the width you want the projected image to appear.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/979/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/22 by mr Frank • • [Reply](#)

hmmm... but still want to do it. I talked to some guy who works in the building.

Maybe if he can makes sure the lights on the top floors are turn off?

But I guess we need to take one angle of the building because it is slightly V shaped.

But you think we can still pull it off with a 5K projector?

Otherwise I have to see if we can get a bigger one, I know some people who have a 12K.

Thanx for replying, it helps

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/982/>

good

2008/04/22 by good cosmetic • • [Reply](#)

I'm agree with you.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/980/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/22 by mr Frank • • [Reply](#)

hmmm... but still want to do it. I talked to some guy who works in the building.

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Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/983/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/04/25 by yoyoyo bob • • [Reply](#)

what type of camra do u use picture or webcam

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/988/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/05/01 by Flatbroke • • [Reply](#)

Thanks for the software! Last night we got it working and projected onto the "Daughters of the Confederacy" building here in Charleston, SC. Our weak link right now is our old Sony Camcorder, going to upgrade cameras and steup up to 75 mW laser for future projects.

Can you recommend specific color settings for the software to read the laser, or does it vary greatly based on the camera? We just played with the settings til it worked, but could never get it perfect.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/995/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/05/18 by kenneth • • [Reply](#)

my friends and I are planning to do this against the side of our school and i was wondering if you could use an SVGA (800x600) because i have an Epson S5 SVGA LCD Projector

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1014/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/05/18 by kenneth • • [Reply](#)

my friends and I are planning to do this against the side of our school and i was wondering if you could use an SVGA (800x600) because i have an Epson S5 SVGA LCD Projector

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1015/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/06/19 by JOSEPH • • [Reply](#)

Trying to set this up for the first time using a Mac Book Pro and connected to a panasonic AG-DVX 100b cam corder via firewire. I pull up the software but none of the shortcuts you mention like "c" for camera settings also the overall interface looks completely different than the one described in your instructions. What am i doing wrong or not doing at all?!?!?! Thanks for your feedback in advance!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1039/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/06/20 by Theo • • [Reply](#)

Check the Laser Tag 2.0 post - <http://www.muonics.net/blog/index.php?postid=26>

:)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1040/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/06/27 by battery • • [Reply](#)

[...]Good site I "Stumbledupon" it today and gave it a stumble for you.. looking forward to seeing what else you have..later[...]

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1046/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/06/28 by tom • • [Reply](#)

[...] more on the Health Benefits of Saunas Blog Posted in Home [...]

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1047/>

Re:

2011/09/14 by NancySingleton33 • • [Reply](#)

I had got a desire to start my company, however I did not earn enough amount of cash to do that. Thank goodness my fellow advised to take the business loans. Therefore I took the car loan and made real my dream.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1748/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/07/14 by abaco creativo • • [Reply](#)

hey guys, this is amazing, i love to try this, i do have the laptop and the projector, but the code...uhm..i do need help with that, i am not that savy with tech., could i please have a hand

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1055/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/07/29 by Paul Thwaites • • [Reply](#)

hey i love this i want to know if i was to set this up for a room in my house how much would it cost?? because i would love to have something like this setup

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1058/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/07/31 by Karl • • [Reply](#)

When I launch the .exe for laser tag, I get a little Windows window that pops up informing me that the application is installed improperly and that i should try reinstalling it. Any ideas how to remedy this?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1061/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/08/02 by Evan • • [Reply](#)

if i owned a laser already that has an output power of around 250mw, will this still work or will it be so strong that it might pick up the beam and the dot?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1065/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/08/07 by Zorg • • [Reply](#)

Before buy a cheap green laser pointer, read this page about IR power in green lasers !!
<http://www.felesmagus.com/pages/lasers-cheap.html>

Save your money, and buy your lasers only from reputable dealers.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1066/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/09/06 by Bret McDanel • • [Reply](#)

Just tried this in linux with wine, and it runs, but it really hates my cam, and if it accesses it then it crashes (I will blame wine on this one).

I am however suggesting that others who have a cam that this likes they may be able to use it this way.

For reference, if it cannot access /dev/video it will display the control pane just like it would in windows. I might look at a backtrace and see why it breaks when accessing the camera because that may be a bug in this software which could be repaired. I did however get the same printed errors in windows (in vmware) so that leads me to believe that wine is returning something different and causing the breakage.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1080/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/09/22 by michael • • [Reply](#)

great to see the kids to something useful on the streets ;)

—
Dexflu T-Shirts from Europe - Vienna

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1089/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/10/10 by Paul • • [Reply](#)

Hey Everyone:

Wouldn't this project be easier with a drawing-screen type setup? Wacom makes a tablet that acts also as a display. If you were to recode the part of the application that looks for the laser point you'd be able to eliminate the laser (making it more legal in some places and safer everywhere). Of course, that does take the fun out of having an excuse for a really powerful laser.

In any case, the tablet would allow you to draw, quite literally, on the image of the building or target surface, without having to develop gigantot motor skills related to drawing that well that large. You'd have the image right there in the display.

The wacom tablet can be found at their site and, for those of us (like me) who are financially impaired, they do have different sizes.

<http://www.wacom.com/cintiq/index.cfm>

Another option might be the Axiotron ModBook. Slightly pricey but it would reduce the number of items to keep track-of and power. The other advantage of having this option is that the camera is already part of the computer. You can change what it looks at by creating a mirrored device that will do that for you, or you can buy one. If you set this up just in front of the projector people could see, real time, what they're doing on the building as they do it. Just like the laser only smaller. It would integrate a number of images on the display as it is.

I have included a link for one you can build:

<http://www.instructables.com/id/Per-i-Sight%3a-MacBook-iSight-Periscope/>

Or you can buy the manufactured one:

<http://www.mungaimirrors.co.uk/huckleberry/ilisp.php>

I am not entirely sure what or how I'm going to manifest my own "piss off" to the corporate greedmonsters but I certainly feel something percolating. Your work has most assuredly had a profound influence on me and how near I am to ~doing~ something. It has been hard to figure out ~what~ to do in the face of all the evil and lies of powerlessness and isolation. Financial issues also complicate the process.

Finding other people to help and or participate seems to be a tad of a challenge and I'm not sure how to manage that. It doesn't help that I'm already paranoid by nature. With everyone else equally paranoid (and with a rather trigger happy police force where I'm at) collaboration for anything, much less questionable artistic expression, has proven to be dangerous for a few.

Thank you for BEING!

Most sincerely,

Paul

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1090/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/10/16 by tomR • • [Reply](#)

Theo. you rock. i am 5% away from working it but that 5% is killing me, i see everything but i cant get the laser to trace, i dont know what i am doing wrong, i am setting it up exactly like the pics you are showing here <http://muonics.net/blog/index.php?postid=26> but i cant get it to work, help please, help.

by the way..i love u man, you rock

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1094/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/10/18 by Raoul • • [Reply](#)

Thanks for being awesome :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1097/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/10/18 by Raoul • • [Reply](#)

Thanks for being awesome :)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1098/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/10/31 by wow gold • • [Reply](#)

Theo. you rock. i am 5% away from working it but that 5% is killing me, i see everything but i cant get the laser to trace, i dont know what i am doing wrong, i am setting it up exactly like the pics you are showing here <http://muonics.net/blog/index.php?postid=26> but i cant get it to work, help please, help.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1100/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/10/31 by wow gold • • [Reply](#)

Theo. you rock. i am 5% away from working it but that 5% is killing me, i see everything but i cant get the laser to trace, i dont know what i am doing wrong, i am setting it up exactly like the pics you are showing here <http://muonics.net/blog/index.php?postid=26> but i cant get it to work, help please, help.

by the way..i love u man, you rock

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1101/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/11/01 by Theo • • [Reply](#)

Adjust the camera settings so the image is as dark as possible.

Turn off auto gain / auto shutter / auto exposure.

Set the shutter speed to be fast which gives you a higher capture rate and also and darker image. The image should be as dark as possible with the laser still being a clear light dot.

Then once you have that you should play with the tracking settings (mainly saturation thresh and brightness thresh) till you get the point being tracked well.

Hope that helps!

Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1104/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/11/07 by Rados • • [Reply](#)

This is freaking awesome!!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1107/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/11/14 by Kraig • • [Reply](#)

I've been looking at Rotterdam, and it looks awesome! Great work!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1109/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/11/28 by Busby SEO Test • • [Reply](#)

thanks for the sharing of those ideas, great!!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1118/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/12/16 by hanenya • • [Reply](#)

In Moscow there was a contractor a red rain which offers that that similar? In any case if in Moscow you are ready to offer similar - necessarily address to me. I am ready to organise advertising a projection to a tower Federation. With me it is possible to communicate hanenya@miraxintv.com

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1127/>

Re: GRL Laser Tag Rotterdam - how to and source code

2008/12/18 by conner H. • • [Reply](#)

you guys really did work when creating this i am 20 from the states and i have used the system once and it worked awesome i plan to use it to promote several local clubs in the area but i will give all of you the props saying you are the creators and the best thanks so much will submit a video if i am emailed back peace out

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1130/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/01/15 by Ryan • • [Reply](#)

Ok i feel very stupid but im confused on how to get this up and running like actually running the application on my computer if someone could simply tell me it would be great

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1143/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/01/19 by kremer • • [Reply](#)

Help me, I can not download this application. I searched everywhere (on every fileshare forexample <http://rapidpedia.com> and nothing :().

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1150/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/01/19 by bobby • • [Reply](#)

kremer, try search better. I know, this aplication upload on this resource.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1151/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/01/23 by zanna • • [Reply](#)

Kremer, maybe you search not hard, there are many source with its application. Maybe you can not use <http://rapidpedia.com> ? Try find by google.com.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1156/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/01/23 by austin • • [Reply](#)

hey guys, i just want to start off by saying your program is awesome...too bad i can't get it to work. I am having a problem with setting up the camera. When i start up the program, the DOS thingy reads, error to allocate(sp)video usage, or something like that (i am not near my computer with the program at this time) another error says something about the camera and please test it with AMCap which i did and everything is fine. Please help....sorry for the vague information

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1157/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/02/03 by -Dmitry- • • [Reply](#)

Всем американским буржуям привет!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1161/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/02/03 by -Dmitry- • • [Reply](#)

Всем американским буржуям привет!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1162/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/02/10 by inwogold • • [Reply](#)

ffxi gil

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1165/>

HELP!

2009/02/25 by Big Tex • • [Reply](#)

ok i'm been frustrated for 3 months by this project. I have all the components but can't get it to work

can someone walk me through, step by step (numbered) starting with Turning the damn computer on to the very end. Imagine you are walking an idiot, who is very slow. LoL..

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1178/>

HELP!

2009/02/25 by Big Tex • • [Reply](#)

ok i'm been frustrated for 3 months by this project. I have all the components but can't get it to work

can someone walk me through, step by step (numbered) starting with Turning the damn computer on to the very end. Imagine you are walking an idiot, who is very slow. LoL..

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1179/>

Re: HELP!

2009/03/05 by Theo • • [Reply](#)

Glad you are frustrated - you work for a marketing company. So why would I want to help you set it up when you are most likely trying to use it for some tacky marketing events.

Forgive me if I am wrong in this case - but Laser Tag is for non-commercial usage and non-promotional / non-marketing only.

What you ask for has already been provided anyway - a step by step guide to setting up Laser Tag - many other people have managed to run it with the instructions provided - you shouldn't need more than that.

Theo

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1192/>

Re: HELP!

2009/05/01 by Big Tex • • [Reply](#)

Theo,

In the spirit of "marketing" let me get down with you. my name "big tex marketing" is just that. I am a brand, I want this shit for myself, you can't pay me enough to "sell" it. i don't do tacky shit. I understand your apprehension and not here to argue my point, i respect what GRL is doing and wanted it.

keep up the good work

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1234/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/02/28 by JIM • • [Reply](#)

What's the odds of using a different wavelength?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1186/>

Great!

2009/03/05 by Jon • • [Reply](#)

This is sweet! Hopefully I'll be able to try it out soon

This is great. Hopefully I'll be able to try it out soon.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1193/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/03/17 by serge • • [Reply](#)

bonjour

pouvez vous me donner un lien pour le logiciel et une doc en francais merc d'avance

serge

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1215/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/04/03 by SkaFreak • • [Reply](#)

Thanks for all the work you put into this Theo. Finally got around to gathering all the components and can't wait to start throwing some laser art around campus. Not sure how often you check this page, but with how many people just ask for help I figured it would be nice to just drop a thanks.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1224/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/04/05 by Nan • • [Reply](#)

I'm interested in acquiring this setup. What brand of laser pointer would you recommend? I realize that one that is less than 60 mW would work, but since 60 mW lasers can be acquired for only \$200, I think it is cost effective to go this way. Is there one in particular that will last a long time and be reliable?

Also, since projectors are very expensive, I ended up dumpster diving and getting one from Kodak. I'm not sure how bright it is, but what would you say the minimal brightness for a projector would be for this? I aim to use this outdoors from some distance, although perhaps not as far as you were doing it.

Thanks for your time!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1225/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/04/23 by Sam Chambers • • [Reply](#)

Hi,

I am currently organising a arts and new media festival in England and we are hoping to use your cool laser tagging for an exhibit. Will the software work on mac or is it best to use a pc laptop?

Many Thanks,
Sam Chambers

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1230/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/05/06 by Richard • • [Reply](#)

A commercial product called Afterglow (www.afterglow.biz) was just released. The product is expensive but it allows a presenter to use the product with PowerPoint or any program. Does Laser Tag work with other programs? Also, does anyone know of any inexpensive solutions to do the same thing with a laser pointer for business use?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1237/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/05/12 by gymhyoungsang • • [Reply](#)

Hello. Republic of Korea is in the advertising business that I gimhyeongsang.

Very many of you are interested in laser tag.

Your company's technology and products, and I want to know-how.

Please permit me a favor, please give us more I'd like to share the word.

I'm sorry because my English language skills.

I'll let you know my contacts

Hi let you know my contacts.

Name: gimhyeongsang

Address: 105-706 Republic of Korea, Gwangju Metropolitan City West Hotel geumhodong haegwang Rainbow Apartments

Phone :062-351-5353

Cell Phone :010-3030-5353

E-mail: smssw@naver.com

Please always full of good only.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1239/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/05/15 by Alex • • [Reply](#)

Wow that looks absolutely great! I will try it very soon. Thanks a lot.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1244/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/05/28 by Jake • • [Reply](#)

Man , thats awesome, open source to lol, how do we operate this on a projcetor?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1246/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/05/31 by seo • • [Reply](#)

keep up the good work seoand

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1248/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/06/11 by Anonymous • • [Reply](#)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1255/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/06/12 by Teo • • [Reply](#)

Hi,

I'm a visual artist from italy, i'm interested to create a mod of your sw for a live vjset, can i have your support? for questions or suggestions?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1257/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/06/19 by hullrotterdamferry • • [Reply](#)

That's great stuff ... and open source too.

hats off to you!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1260/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/06/22 by Juan Carlos Vega • • [Reply](#)

I wrote a week ago, but my comentary got erased. the software is runnig but nothing happens. We have a benq projector (1500 lumens) a HP laptop, a 1.3 mp web cam and a radio shack with and output power less than 5 mW. It's this enough or I need other equipment? I downloaded the laser tag 2002 pc app xp.

The thing is that i draw with the laser but nothing happens on the wall.

Do you have instructions in spanish?

Thanks

Juan Carlos

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1261/>

***Reliable* laser recommendations?**

2009/07/03 by SortaAnonymousUK • • [Reply](#)

First off, this rocks. Urban art, lasers, interactive projections, opensource. Kudos to Theo and Zachary.

I'm trying to get a rig up for my wedding in a couple months, almost got a basic system up (HP laptop, Dell projector, cheap webcam, cheap 30mW laser from \$someplace on the net), but the laser's crapped out (duff mechanics, I think). Any recommendations for a *reliable* 15-30mW laser for this (on a tight time and \$ budget, so can't afford to Be Wrong).

(Name withheld, in case my g/f sees this..)

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1268/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/09/05 by Andy • • [Reply](#)

Does anyone know the .plist(mac preference) file this creates on a mac. I made some changes to the Openframeworks preferences, and now it just opens and quits real quick.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1292/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/11/02 by DsW • • [Reply](#)

Erm, hi,im 16 and from Manchester, England and my friends and I are huge fans of yours I was wondering if you could email me some tips?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1315/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/11/28 by Alışveriş • • [Reply](#)

Thank you in advance for your quick answer ! And well done for your work.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1330/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/11/30 by uggekiss • • [Reply](#)

cheap ugg boots
discount ugg boots
women's ugg boots
purchase ugg boots
ugg crochet boots
ugg christmas sale
ugg tall classic
ugg classic short
classic cardy
ugg bailey button
bailey ugg button boots
ugg mayfaire boots
ugg boots mayfaire
argyle knit uggs
ugg nightfall boots
classic ugg sundance boots
ugg rainier boots
ugg classic tall
buy ugg classic cardy boots
ugg stripe cable nit boot
ugg women lo pro boots
ugg classic tall chestnut
ugg grey classic tall boots
ugg classic mini boots
purchase ugg boots
women boots
ugg

deckers uggs



Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1331/>

cheap ugg

2009/12/01 by ugg boots • • [Reply](#)

Ugg online
Cheap ugg boots
Discount uggs boots
Ugg ultra short
Ugg classic

Cheap ugg
Ugg sale
Ugg classic tall
Shopping for ugg botts

buy ugg boots
ugg brand boots
ugg boots
ugg ultra short
uggs discount boots

shopping for ugg boots
ugg ultra short
ugg new style
uggs discount boots

ugg classic tall
australian ugg boots
wholesale uggs
wholesale shoe

buy uggs boots
baby uggs
uggs outlet
shopping for ugg boots

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1333/>

Re: cheap ugg

2010/01/23 by kamilcan • • [Reply](#)

very nice informations i have found you from google for my questions and i take the answers of my questions thanks for it have a nice day
Regards.

acı cehre vajinismus saç ekimi saç ekimi notebook

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1357/>

<http://www.mybagsvip.com>

2009/12/02 by replica hangbags • • [Reply](#)

Interesting thing!
This is my first time comment at your blog.
Good recommended website.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1334/>

Re: <http://www.mybagsvip.com>

2009/12/02 by replica watches • • [Reply](#)

<http://www.watchvisa.com>
[url=<http://www.handbagssell.com>]replica handbags[url]
replica handbags

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1335/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/12/06 by replica hangbags • • [Reply](#)

John McCain replica hangbags to send replica hangbags the bill replica handbags back to replica handbags committee to replica handbags restore more replica handbags than \$400 bill.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1339/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/12/14 by Tech • • [Reply](#)

hi Theo,
where can i download the older version of laser tag software, thanks

and i want to know i had this problem of fps of below 20fps when connected to projector when using the 2nd version.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1341/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/12/26 by Marko • • [Reply](#)

How much will cost you projector.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1347/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/12/26 by Aron • • [Reply](#)

hi Theo,

have an interesting problem for you. I've been using LaserTag2002 on my Macbook Pro just fine until tonight, when I was using another OpenFrameworks based program called Quase-Cinema. Accidentally hit "reset to defaults" and quit the app, which I suppose saved some kind of awful prefs in OF that now make it so I can't even open LaserTag or Quase Cinema.

Tried reinstalling, to no avail. Error I get in console has to do with no valid package in file /Library/ScriptingAdditions/Adobe Unit Types.osax/Contents/MacOS/Adobe Unit Types.

Any idea if you can help a brother out? Thanks!

-Aron

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1348/>

Re: GRL Laser Tag Rotterdam - how to and source code

2009/12/27 by masallar diyarı • • [Reply](#)

Diyar-i edebiyat masal diyari ruha Sanliurfa online filmler forum site mirc mirc indir masal oyun masallar masal dinle edebiyat forum film izle film sesli masal Thanks!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1349/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/01/01 by tototomtom • • [Reply](#)

Many thanks, we had a lots of fun with your software

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1352/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/01/18 by orash • • [Reply](#)

HELP NEEDED

I would like to use your system to SAVE LIVES
it's really serious.
Could you contact me about that?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1355/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/01/19 by TommeeT • • [Reply](#)

Awesome work Theo & your crew! Love it. Thank you!

So finally got a good laser pointer and got the software working well with my computer and camera.
OK, now I'm keen to set it up for graf artist friends to let loose on some big spaces around AK...

The thing I need to ask/check with you about is the bit about not using it for commercial purposes. How does that work if it's set up at like outside a club night and the night has some sponsors like Red Bull or some drinks brands? Is that OK?
I saw that they were gonna use it at the Big Day Out here in Auckland and all over Oz. Is that OK with you? I'm asking because that's a really big heavy sponsored event.

Like is it sweet as long as people don't use it to advertise specific products up there, just stick to tags, graf and artwork?

Would be good to clear on this as I don't want to abuse your guys trust that you've shown by putting it out there as open source.

Nuff respect!

TommeeT

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1356/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/01/24 by pauljohnson • • [Reply](#)

how can i get one of the laser it is real cool how much would you sell it for

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1358/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/01/24 by pauljohnson • • [Reply](#)

how can i get one of the laser it is real cool how much would you sell it for

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1359/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/02/04 by Phill • • [Reply](#)

Check out the video demonstration of the SENSAA companie. They use this Graffity laser system for marketing events. His web is

<http://www.sensaa.com/es/laser-graffiti>

See you

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1362/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/02/12 by Moses • • [Reply](#)

I got this working with the on board camera on my laptop but I want to get some distance on it.

I have a 3600 lumen projector, a 60mW laser, a dv camera and an ATI capture card.

in AMCap when I open it up it shows static but when i click to Options/Crossbar Video Input/Video Composite, the video shows fine.

When I open the Laser Grafitti software it just shows static like its defaulting to the digital tuner on the capture card.

is there a way to manually set the crossbar in the laser grafitti software?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1368/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/02/13 by Moses • • [Reply](#)

Totally got this working. Since the capture card was defaulting to the digital tuner, I ran the composite video through a VCR. This allowed me to use a coaxial cable which could be put into the digital tuner.

Works beautifully. Thanks so much for this. You guys are geniuses.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1369/>

ゲイ・ホモ

2010/02/15 by ゲイ・ホモ • • [Reply](#)

<http://douga.01kyou.com/> エロ動画
<http://kyounyu.01kyou.com/> 巨乳動画
<http://bakunyu.01kyou.com/> 巨乳動画
<http://hitoduma.01kyou.com/> 人妻動画
<http://tousatu.01kyou.com/> 盗撮動画
<http://tikan.01kyou.com/> ロリ動画
<http://nakada.01kyou.com/> 中出し動画
<http://rape.01kyou.com/> レイプ動画
<http://kanin.01kyou.com/> 痴漢動画
<http://merutomo.01kyou.com/> メル友
<http://osiri.01kyou.com/> アナル動画
<http://rezu.01kyou.com/> レズ動画
<http://taison.01kyou.com/> ゲイ動画・ホモ動画
<http://sukato.01kyou.com/> スカトロ動画
<http://smdouga.01kyou.com/> SM動画
http://jyukujyo.01kyou.com 熟女動画

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1370/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/02/24 by Elkonuo • • [Reply](#)

The SENSAA enterprise offers his graffiti laser system for marketing events. We operate in all Europe and we can adapt our technology to every customer's need. Check out our video demonstration in our website:

<http://www.sensaa.com/es/laser-graffiti>

Regards

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1372/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/02/25 by jad • • [Reply](#)

Very good well informed ty you for the information. From the guys at Bloggles

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1373/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/02/27 by Jordan • • [Reply](#)

I can confirm the cameras projectors used are very expensive indeed.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1374/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/02/27 by Jordan • • [Reply](#)

I can confirm the cameras projectors used are very expensive indeed.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1375/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/03/01 by Ednidos • • [Reply](#)

This is great software! Thanks for developing. Check out new applications like this:
<http://www.youtube.com/watch?v=AyL15YbxhC0>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1377/>

chopard watches

2010/03/10 by chopard watches • • [Reply](#)

And many of their pre-Oscar media comments seemed to montblanc watch suggest they did -- well, they didn't. But they were smart montblanc watches to stick with another presentation montblanc innovation introduced last year, with the lead rado watch acting categories pairing each nominee with a colleague rado watches offering an individualized tribute.

http://www.watchsell.com/product.php?id=26&categories_id=36

http://www.watchsell.com/product.php?id=28&categories_id=36

http://www.watchsell.com/product.php?id=29&categories_id=36

http://www.watchsell.com/product.php?id=31&categories_id=36

http://www.watchsell.com/product.php?id=32&categories_id=36

http://www.watchsell.com/product.php?id=33&categories_id=36

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1378/>

Re: chopard watches

2012/07/05 by nees • • [Reply](#)

[url="http://www.maccosmetics-ol.com/"]benefit cosmetics[/url]

[url="http://www.maccosmetics-ol.com/mac-cosmetics-foundation-concealer-bb-cream-c-1_15.html"]cheap mac foundation[/url]

[url="http://www.maccosmetics-ol.com/mac-cosmetics-eyelinereyliner-gel-c-1_11.html"]wholesale mac eyeliner[/url]

[url="http://www.maccosmetics-ol.com/mac-cosmetics-mac-wonder-woman-series-c-1_26.html"]wholesale MAC Wonder Woman Series[/url]

[url="http://www.maccosmetics-ol.com/mac-cosmetics-mac-surf-baby-series-c-1_31.html"]wholesale MAC Surf Baby Series[/url]

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2041/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/03/10 by Kyle • • [Reply](#)

You guys are awesome, I really want to try this laser tag, I want to surprise every city by your marvelous invention. I really like new technology that's why all of my research papers are all tech topics.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1379/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/03/15 by Mike Sisk • • [Reply](#)

Thanks so much for this awesome program. I love it. here is some video of my setup in action.

<http://www.youtube.com/watch?v=xlocq5buPuk>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1380/>

Wholesale Electronics - Wholesale Electronics shop

2010/03/28 by teresa • • [Reply](#)

<http://www.global-e-world.com/Mini-Flashlight/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1385/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/03/29 by Mike Sisk • • [Reply](#)

So I had the L.A.S.E.R. tag running great on my MacBook Pro but then on saturday night my laptop did an auto software update and now I

have problems. The programs starts fine and runs the demo video but when I change the use camera setting from "0" to "1" and program crashes when i restart it. It won't even open. Also pressing "c" does not bring up the camera setting anymore. The only way I can get it to start again is if i go into the setting.xml file and manually change the use camera setting back to "0." Anyone have any possible fixes? I really need help. Had some big plans for this setup in the coming months. I really hope I can get this fixed. Please Help!!!

mike
zupermike@yahoo.com

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1387/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/03/29 by Mike Sisk • • [Reply](#)

So I had the L.A.S.E.R. tag running great on my MacBook Pro but then on saturday night my laptop did an auto software update and now I have problems. The programs starts fine and runs the demo video but when I change the use camera setting from "0" to "1" and program crashes when i restart it. It won't even open. Also pressing "c" does not bring up the camera setting anymore. The only way I can get it to start again is if i go into the setting.xml file and manually change the use camera setting back to "0." Anyone have any possible fixes? I really need help. Had some big plans for this setup in the coming months. I really hope I can get this fixed. Please Help!!!

mike
zupermike@yahoo.com

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1388/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/05/11 by per • • [Reply](#)

I have exactly the same problem. Sometimes i can start the program if i try and try over and over again, it will start on the 10-15 try. Will there be any update for that Mac OSX bug?

/ Per

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1432/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/03/30 by mbt shoes • • [Reply](#)

By now, the MBT shoes is the best online shop with good reputation, all cheap MBT shoes at wholesale price. MBT shoes is the first physiological footwear that has a positive effect on the whole body. It is really a good chance for shopping.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1390/>

<http://www.nikestarsonsale.com>

2010/04/07 by basketball shoes • • [Reply](#)

Nike translated into Chinese.basketball shoes

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1393/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/04/12 by essays • • [Reply](#)

Really nice, cool))) I like laser show, especially if it is great.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1398/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/05/06 by Pool • • [Reply](#)

i love it,its amazing.

Pool

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1428/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/08/14 by allanparker07 • • [Reply](#)

Hi I'm Allan parker call me Parker, I'm a interior designier and removalist in Sydney.I provide all kinds of furnitures and fittings interior design. Cheap house removals with hourly \$55.All international removals and local(australia) is done.Visit my site:
removalists

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1487/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/08/14 by allanparker07 • • [Reply](#)

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removalists

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1488/>

cheap christian louboutin boots

2010/08/15 by christian louboutin discount • • [Reply](#)

Escape flocks ofchristian louboutin shoes, and get a bit of a workout hiking into the Black Canyon of the Yellowstone, where wide stretches of river and prolific hatches support a healthy cutthroat and rainbow population. The best louboutin wedding shoes are pretty remote, so plan on making a multi-day trip. Camping in the Christian Louboutin Short Boots is the best way to get acquainted with its incredible variety of flora and fauna, steaming geysers and bubbling thermal mud pots, spectacular christian louboutin tall boots and river canyons, and extraordinary vistas. Yellowstone has front-country camping facilities at a dozen sites scattered around the park. And backcountry permits are available at most christian louboutin discount and visitor centers.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1490/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/09/06 by Ann • • [Reply](#)

Thanks for information! search

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1501/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/09/06 by yuan724521@163.com • • [Reply](#)

Everybody must be know some famous brands of the world,just like the Handbags:Hermes handbags, Chanel Handbags, shoes about Christian Louboutin, Christian Louboutin, Louis Vuitton, Gucci bags, Chanel.Every brand will make you more charming.But do you think of that some day you can get it to your own,that's it,here has the proof that this is the truth.You will be shock by it.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1503/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/09/22 by blue scarf • • [Reply](#)

well done.thank you for information.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1507/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/09/24 by Bruce • • [Reply](#)

I don't mean to sound sacreligious to all you purist's out there, but is there any way to just buy one of these???
Much respect.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1508/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/09/24 by Bruce • • [Reply](#)

Also, how does all this hook up, physically??? Like, how do you hook up the laser and interface it to the rest of the system? How is it all "wired"???!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1509/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/09/24 by DanMP3 • • [Reply](#)

oh, well i figured that out, but now it isn't getting any feed from my webcam? it just has a picture of that building with a laser buzzing around it? why isn't my video in there?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1510/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/09/27 by pokern • • [Reply](#)

nice!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1512/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/10/05 by internet marketing melbourne • • [Reply](#)

The thing I need to ask/check with you about is the bit about not using it for commercial purposes. How does that work if it's set up at like outside a club night and the night has some sponsors like Red Bull or some drinks brands? Is that OK?
I saw that they were gonna use it at the Big Day Out here in Auckland and all over Oz. Is that OK with you? I'm asking because that's a really big heavy sponsored event.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1514/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/10/09 by NFL Jerseys • • [Reply](#)

I wanted to thank you for this great read!! NFL Jerseys I definitely enjoying every little bit of it I have you bookmarked to check out new stuff you post

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1520/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/10/09 by ugg boots • • [Reply](#)

I just clicked over from another site and figured I should take a look around. Like what I see so now I'm following you. Look forward to checking out your some of your posts again.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1522/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/10/17 by TonyTrance • • [Reply](#)

Laser Tag Chicago is the next raw deal. Sears Tower Special, get ready for it.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1528/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/10/18 by Ruta • • [Reply](#)

Hi, great work, wanna do my bit and spread the word, was hoping you may be able to recommend a cheaper camera than the Watec, or give me the main specs i should be looking for, i've managed to have it up and running but my present camera is not powerful enough. Any help would be much appreciated, ta

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1529/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/10/24 by ASD • • [Reply](#)

cheapwow gold Site.We have the cheapest wow gold Prices.Buy WOW Gold for Sale with the best service and fastest delivery.We also provide free WOW Guide,Strategy.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1542/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/11/06 by Kyle Head • • [Reply](#)

I would like to setup a Miami,FL chapter and I could help setup chapters all across the nation and world. I would like to speak someone about having graffiti research sponser my event IC 4-D. Ic 4-d is going to Washington DC (dec 11th) and I would love to show case this new innovative art form. Please send me an email at iccustomdesign@ymail.com

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1555/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/11/07 by louis vuitton bags • • [Reply](#)

The last round, can be said to peak showdown, both teams are super giants, are traditionally strong teams. In the end, our team Taishan 2-0 at home to Dalian International Team Lectra. As I sat in front of the television camera can see the entire stadium of fans who are boiling, and Shandong team finally broke a record:

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1558/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/11/08 by Laser pointers • • [Reply](#)

wow,really amazing and creazy.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1561/>

Re: GRL Laser Tag Rotterdam - how to and source code

2010/11/09 by ugg boots uk • • [Reply](#)

Wearing jewelry is also a change of seasons matching problem. Early spring, wear jade, emerald and malachite and other jewelry, be very refreshing and vibrant spirit. Flowers bloom in the season, wearing ruby, turquoise and other jewelry, the color will be even more beautiful and moving. Sapphire, aquamarine, lapis lazuli and amethyst jewelry, etc., will be great in the summer style. Topaz, opal, amber, agate and other jewelry, can bring the feeling of coming autumn. In the trees bare, silver snow flying in winter, should wear Daizi Jing, garnet and moonstones and other jewelry, can cause arises spontaneously mystery.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1562/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/04/27 by Heather Freeman • • [Reply](#)

LaserTag2002SnowLeopard crashes as soon as I try to launch it.... I'm running OS 10.5.8 on a MacBook Pro... wasn't sure if this is the only version and if there's another version I should try? Thanks, awesome stuff!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1654/>

GHD Hair Straightener Australia

2011/07/23 by GHD Hair Straightener Australia • • [Reply](#)

Most of sexuality with caution and now I understand that your hair safe while straightening the hair so that it can not generate the ghd can damage the hair. GHD heats up your locks and direct construction of individual wool, if a refresher with the other pseudo loops. You also want a great offer and finally less expensive editions, what you learn advanced while in the store. You will receive a special product of GHD Hair Australia , it is true that you are buying research. They also your coat for the crowd to unite as a body with specific powers GHD Hair Straightener . In today's market is one of the most popular brands in the GHD Hair stylists are among the most famous hairdressers in the world is used. Celebrities are also a big fan of rectifiers GHD Straightener .

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1714/>

DFFDSFD

2011/07/27 by christina • • [Reply](#)

If you want to know if your husband will cheat, you may want to take a close look at your father-in-law.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1723/>

replica watches

2011/07/27 by replica watches • • [Reply](#)

Replica swiss watches are watches designed exactly the same as the authentic ones. Many people buy swiss replica watches. There, invicta 3609, zodiac v-wolf models, hot replica swiss, You may like them.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1724/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/07/29 by MAC Cosmetics Outlet • • [Reply](#)

MAC Cosmetics Outlet

[url=<http://www.macseries.com/>]MAC Cosmetics[/url]

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1732/>

Air Max TN

2011/07/29 by Air Max TN • • [Reply](#)

Don't waste an opportunity to tell someone you love them.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1733/>

air griffey max 1 grey

2011/08/02 by air griffey max 1 grey • • [Reply](#)

air maxes 2011

2011 air max

Air Ken Griffey Max 2 Shoes become more and more popular in this season.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1734/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/08/22 by magicjewelrybox • • [Reply](#)

Are glad to be your space, very like your article, and very welcome you to our website to see Oh, thank you

Pandora Jewelry

Pandora Bracelets

Pandora Earrings#

Pandora Charms#

Pandora Rings#

Pandora Necklaces#

Pandora Pendants#

Pandora Bangles

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1735/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/08/24 by blackhawks jersey • • [Reply](#)

It really a useful idea. I will have a trial of this idea as soon as possible as have already frustrated by burberry dresses and burberry men for a long time. Thank you very much for your continuously post of effective tips. It really do me a great favor. If you have more information about burberry online shop can you tell me and i also like hermes bags, my boyfriend want me to buy wholesale replica Handbags but i can't find a shop that sell replica hermes, as i always want to be a burberry women before and i search burberry outlet online for a long time, but i only get the result of burberry purse, then i walk into marketing and marketing center, to find hermes sale, and i find a good display of hermes Handbags and hermes birkin bags, my sister want me to buy new burberry but i only find replica burberry it really drive me crazy! you know, next month i will marry with my boyfriend and i want to look some tiffany co jewelry and tiffany engagement rings, i search tiffany outlet shop for a long time they are all replica tiffany, so if you find good tiffanys jewelry and pandora jewellery or pandora jewellery beads also cheap nfl jerseys or jersey supply and religion jeans you can leave a email to me! thank you! Hermes Scarf Hermes Scarves burberry coats nike air max

jersey supply and religion jeans, you can leave a email to me: thank you. Hermes scarf Hermes scarves scarves coats like an mma
2011 white air maxnike griffey max burberry sweater burberry woolscarf true religions jeans true religion jeans outletbears jersey blackhawks
jerseyken griffey shoes
air griffey max
ken griffey jr shoes
air griffey max 2

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1736/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/09/05 by laptop battery • • [Reply](#)

How to prolong inspiron 1525 batteryinspiron 1525 battery's life?Well,the dv6000 battery is lithium-ion battery.It works on ion movement between the positive and negative electrodes.The easiest way to give your t61 battery an early death is to damage it.And the two most common causes of damage inspiron 6400 battery are from overheating and using an AC adapter with the wrong voltage.Use a cooling pad when using hp g60 battery.Clean your desk,dust will get into the vents and clog the cooling fan making hp dv7 battery have worse life.Consider taking your pa3399u battery out when using your laptop plugged into AC power.You do not need to discharge g4 powerbook battery fully and recharge constantly.For a new dell d800 battery ,you're not supposed to store it empty.And t60 battery left out of the machine will lose charge over time. You're not supposed to leave the dell d620 battery in the machine and run on AC all the time. Doing so will kill the life expectancy.You're not supposed to charge cycle the dell d630 battery frequently, as the long-term life expectancy is measured in charge cycles. You're not supposed to deep discharge the nv52 battery.You're not supposed to use the dell inspiron 6000 battery before it has finished charging.Well,my question is two-fold,Which of these are true?how to maximizing the long-term life of a pa3534u battery.I'm fairly sure that (c) is true, as I have been a lot more careful about charge-cycling than I was with my previous m1210 battery.This dv2000 battery is still at about 90% of the original capacity after a year.

I usually run my laptop with the inspiron 1545 battery.My advice is to avoid using the inspiron 1501 battery for just a few minutes.If you use the sony bps13 battery,drain the a1185 battery, then recharge once it gets down below 5-7%.Otherwise, keep it on AC power, with or without the inspiron 1520 battery inside. This has worked well for me.If u this this is good advice for extending your hpdv4 battery life,just do it like I said.Then u can own long life laptops batteries.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1741/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/09/05 by laptop battery • • [Reply](#)

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Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1742/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/09/19 by Moncler Outlet • • [Reply](#)

The most advantageous competencies found out even although laptop computer pc purchasing can Moncler Outlet be the extended warranties which could be offered on laptop computer computers. Moncler Outlet they are insurances that will safeguard their investment, and guys and ladies choose this ensureDiscount Moncler Sale element to possess numerous many years offered from the deal. Moncler jackets for Men Most laptop computer computer systems start out owning a 90 day time ensure but some element provides of as very much as three years.Moncler Jackets for Men on Sale Some for the pleasant competencies found out even although laptop computer computer systems purchasing are high-end images and touch screens. they are luxurious competencies that numerous guys and ladies really feel are not necessary, Moncler Long Down Coat but high-tech pc end users adore them. For somebody that does film editing for just about any living, Moncler Fashionable Down Coat they spend particular thought toward the film editing competencies which could be built-in to some pc systems.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1752/>

Re:

2011/09/14 by Ortiz26Katherine • • [Reply](#)

Do you recognize that it is correct time to receive the business loans, which would make you dreams real.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1750/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/09/25 by e-cigarett • • [Reply](#)

Do you know how does it work?

electronic cigarette performs as a traditional cigarette.as we know It looks like, feels like and tastes like a real cigarette and also provides the sensation of smoking a traditional cigarette,it will supply a different taste to you, but without flame,fire, tobacco, tar, carbon monoxide, ash, stub or smell found in traditional cigarettes.

i think you will love them
<http://www.health007.net/10ml-dekang-ejuice-eliquld-vanilla-24mg-p-80.html>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1764/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/09/27 by UGG Boots Xmas Sale • • [Reply](#)

This element will also reduce the arranged on and tear for the center for the method and may extend the lifestyle cycle for the laptop computer computer, UGG Boots Xmas Sale and effect the pace by which pictures show up in your laptop computer pc screen.UGG Boots Retail Stores One for the competencies found out even although laptop computer pc purchasing UGG Sundance II Boots On Sale will create how very much memory space you can upgrade some time cutting the road. guys and ladies routinely ask what the upgrade competencies are over a laptop computer pc preceding UGG Tularosa Route Cable Boots to they ask what the operation method will in all probability be the actuality that is build for the pc system. once they ask about upgrade competencies they are really asking about a element referred to since the memory space slots.Cheap UGG Roxy Tall Boots The connectivity competencies found out even although laptop computer pc purchasing is relatively extremely important for guys and ladies that would rather browse the internet occasionally, and relatively extremely crucial that you all those that telecommute for just about any living.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1765/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/09/29 by May GUO • • [Reply](#)

Santa Fe series together with the original cut suede leather trim with antique beads as a decoration, highlight the hippie style. Reconnaissance series a perfect blend of relaxed and refined elegance of the natural elements. 2011 autumn and winter, UGG ladies for men to bring a new sailing jacket series.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1773/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/10/01 by discounted p4 laptops • • [Reply](#)

i like your article, i have read many articles about this topic and every-time i learn something new i don't think it will ever stop always new info , Thanks for all of your hard work!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1774/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/10/06 by Jacob • • [Reply](#)

Oh

I now understand, how to make lasers that look very beautiful when reflected in a building. I really like it when a laser show begins. Can you teach me, how to make proficiency level laser light? I want to try it and want to show these attractions for prom night.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1776/>

Re:

2011/10/06 by Adams35Francesca • • [Reply](#)

Don't have cash to buy a house? You not have to worry, just because it's achievable to take the home loans to work out such kind of problems. Hence get a term loan to buy all you require.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1778/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/10/08 by mark • • [Reply](#)

Has a solution been found for the MAC OS Snow Leopard bug? I had Laser Tag running for a about a minute and then it crashed. Now when I try to open it, it will try to launch my isight camera (the little light beside the cam turns green-for about a second or two) then it shuts the program down. I go into the settings.xml file reset the use camera value to 0 and I can get the program running but no camera. Any help would be great - thanks mark

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1781/>

Re:

2011/10/09 by HerreraMarion35 • • [Reply](#)

Don't have cash to buy some real estate? Don't worry, just because it is real to receive the personal loans to work out all the problems. Thus take a credit loan to buy everything you require.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1783/>

Re:

2011/10/09 by credit loans • • [Reply](#)

I propose not to hold off until you get enough amount of money to buy different goods! You should just take the loan or just auto loan and feel comfortable

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1784/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/10/10 by LucazBrewz • • [Reply](#)

I live in the united states , Los Angeles
I have a site that I show for men
<http://www.factspenisenlargement.com> & <http://www.vigrxplusworks.com>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1785/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/10/14 by discounted laptops • • [Reply](#)

Many families have now shifted their focus to purchasing their kids computers instead of wasteful video games as they spend more time in the home and less on out door activities. The idea of buying refurbished or used computers was at one time considered a bad idea but in today's market it is excellent money saving option. Kids in today's world can put a computer to good use as they are required in many schools.
<http://www.cheapestusedcomputers.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1788/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/10/18 by UGG Pas Cher • • [Reply](#)

Je suis reconnaissant aux étudiants, apportez-moi la joie, permettez-moi sans soucis. Je fais une fille sentimentale en une vivante et gaie, assistant Ganaighen.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1805/>

Re:

2011/10/19 by ROBBIEChaney21 • • [Reply](#)

People in the world take the personal loans in various creditors, because that is simple.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1808/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/10/20 by brand new dell laptops • • [Reply](#)

Along with all the best deals on laptops, don't forget to look for all those bonuses and perks that merchants like to throw in this time of year. Things like free accessories, coupons off other products and even free or expedited shipping from time to time! Every merchant has a different deal so take the time to browse through the list before deciding on which Christmas laptop sales to choose! Just sit back with a nice hot cup of coffee, and start clicking away. Your new laptop is out there. We should know, after all, we found the deal for you!
<http://www.refurbishedp4.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1809/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/10/20 by gucci bags • • [Reply](#)

People in the world take the personal loans in various creditors, because that is simple.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1811/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/10/27 by uggs outlet online • • [Reply](#)

People in the world take the personal loans in various creditors, because that is simple.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1814/>

refurbished computers

2011/11/04 by refurbished computers • • [Reply](#)

Along with all the best deals on laptops, don't forget to look for all those bonuses and perks that merchants like to throw in this time of year. Things like free accessories, coupons off other products and even free or expedited shipping from time to time! Every merchant has a different deal so take the time to browse through the list before deciding on which Christmas laptop sales to choose! Just sit back with a nice hot cup of coffee, and start clicking away. Your new laptop is out there. We should know, after all, we found the deal for you!

<http://www.refurbishedp4.com>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1820/>

Re:

2011/11/09 by mortgage loans • • [Reply](#)

I took my first personal loans when I was not very old and that aided my family very much. But, I need the secured loan once again.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1824/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/11/09 by Refurbished Dell Laptops • • [Reply](#)

It's a blog with full of latest and spectacular informations - This blog has helped me to gain much more information I would like to appreciate the blog owner for his efforts

<http://www.refurbishedp4.com>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1825/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/11/09 by cheap burberry • • [Reply](#)

cheap burberry

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1826/>

Re: GRL Laser Tag Rotterdam - how to and source code2011/11/14 by Nathan • • [Reply](#)

I'm having a problem where the camera is picking up the actual paintbrush strokes as if it were the laser pointer. So, the brush will start freaking out, stop following the laser pointer and painting on its own. The only fix we've figured out so far is using the darkest colored brush (blue), so it doesn't get picked up. It also only works when we don't designate a color to track (rather, we set it to just track based on brightness). Do you think this is a problem w/ the quality of our camera? Or is it the laser pen? Any insight would be much appreciated.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1832/>**canada goose jackets**2011/11/15 by canada goose jackets • • [Reply](#)

Silence, dead silence!

Drinking out loud in the forest after the storm, the whole atmosphere as if frozen in general, many students went towards him cast a strange look.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1833/>**Re: GRL Laser Tag Rotterdam - how to and source code**2011/11/20 by taisibei • • [Reply](#)

the Best Replica Handbags on sale. such as [url=http://www.voguebagsale.com/gucci-handbags-c-1.html][b]Replica Gucci Handbags[/b][/url], [url=http://www.voguebagsale.com/louis-vuitton-handbags-c-2.html][b]Replica Louis Vuitton Handbags[/b][/url], [url=http://www.voguebagsale.com/hermes-handbags-c-3.html][b]Hermes Replica Handbags[/b][/url], Quality Assurance, Free Shipping, Discount, All in Here. What are you waiting for?

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1835/>**Nike Shox Shoes Sale| Nike shox conundrum /NZ/R4/Agent ...**2011/11/21 by Nike Shox Monster • • [Reply](#)

Nike Shox Qualify Brown Shoe Company Inc. said Monday that its third-quarter profit jumped sharply as the sale of a business unit offset soft sales.Nike Shox Agent.The Nike Shox 0'Leven shoe company also said it will continue to trim its business to improve its profitability,Nike Shox Monster announcing plans to exit several business lines and close stores nationwide.Nike Shox DeliverThe company, based in St. Louis, owns Nike Shox NZshoe brands such as Naturalizer and Dr. Scholl's, as well as the Famous Footwear chain.Brown Nike Shox NZ 2.0 Shoe has been struggling recently as shoppers have cut back Nike Shox R4their spending amid the tough economic times.Nike Shox Turbo The company had already closed some underperforming stores, a distribution center and sold its men's basketball and lifestyle shoe brand "And 1."Nike Shox TL1,The company said it will exit several businesses,Nike Shox TL3 including all of its children's wholesale and some women's specialty and private brands.Nike Shox Navina.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1836/>**I look for such article along time,today i find it finally,Thanks for taking the time to write that，****<http://www.monclerjacketscoats2011.com/>**2011/11/22 by canada goose jackets • • [Reply](#)

canada goose jackets

canada goose parka

canada goose coats

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1839/>**Re: GRL Laser Tag Rotterdam - how to and source code**2011/11/23 by louis vuitton outlet • • [Reply](#)

I enlisted the help of some fellow geeks after I'd spent more than 80 hours customizing campaigns on all there of the major providers; Google UGG Halendi Sandals burberry bags,Louis Vuitton Monogram Multicolore Ballerina in Blue chanel bags, Bing and Yahoo.?? Now; Yahoo and Bing are merging so that's good news because you'll be able to get your rejections in just one place.? As you can imagine Google holds the market.? Many people who still have hotmail end up getting Bing chosen for them automatically while some savvy people have figured out how to change their default search engine.My basic complaint with Google is this.? The entire campaign can "look like" everything is green or approved but in actuality your PPC ads are not running.?? The keyword research tool is fabulous but it really needs to tell you what keywords are known as unusable.? This would save a lot of time.Bottom line is that I have tried and abandoned PPC on Google Ugg Ashur Boots 5760 Chestnut For Sale chanel handbags,Chanel Women Sneaker burberry scarf, Bing Chanel 6280-black with letters louis vuitton outlet,Chanel Bags uggs clearance, Yahoo and Miva.? If anyone has another with a track record of providing PPC please respond to this article and share your results good or bad.?? Until then I'm afraid those of us that despise porn pop-up pages and spam email are in for nothing but more porn pop-ups and spam email.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1842/>

discounted laptops

2011/11/26 by discounted laptops • • [Reply](#)

One of the options the default blogger comments lack is the option to reply to an individual comment. In fact it was one of the reasons i changed from blogger comments to Disqus comments. I have however come across a cool blogger hack that will enable comment replies for blogger.

<http://www.cheapestusedcomputers.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1848/>

ugg boots

2011/11/29 by nodewest@gmail.com • • [Reply](#)

All time is no time when it is past. So everyone should cherish every day life. Don't afraid and go on doing your like.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1852/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/12/06 by ugg outlet • • [Reply](#)

I must pay attention to because of this whenever they any nearby Only two slacking at the same time commitment .

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1855/>

Lenovo IdeaPad S9

2011/12/07 by Lenovo IdeaPad S9 • • [Reply](#)

Make it Easy to Comment I leave a lot of comments on a lot of blogs each week – but there is one situation where I rarely leave a comment – even if the post deserves it – blogs that require me to login before making a comment. Maybe I'm lazy (actually there's no maybe about it) or maybe there's something inside me that worries about giving out my personal details..

<http://www.electrocomputerwarehouse.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1857/>

cheapest refurbish discounted computers

2011/12/10 by cheapest refurbish discounted computers • • [Reply](#)

If we discuss about technology, the most important need these days are computers. Buying computers is a kind of investment, as good as your investment is, as good the results will. Parents are very concern about the basic need of their child's basic educational need which is computer. Cheap computers are available in many places like different online sellers for example Electro computer warehouse.

<http://www.cheapestusedcomputers.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1858/>

cheapest refurbish discounted computers

2011/12/10 by cheapest refurbish discounted computers • • [Reply](#)

If we discuss about technology, the most important need these days are computers. Buying computers is a kind of investment, as good as your investment is, as good the results will. Parents are very concern about the basic need of their child's basic educational need which is computer. Cheap computers are available in many places like different online sellers for example Electro computer warehouse.

<http://www.cheapestusedcomputers.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1859/>

cheapest refurbish discounted computers

2011/12/11 by cheapest refurbish discounted computers • • [Reply](#)

Computer gifts for Christmas are great. Save money and add meaning during the holiday season by making gifts yourself...

<http://www.cheapestusedcomputers.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1860/>

Dell laptops Reviews

2011/12/12 by Dell laptops Reviews • • [Reply](#)

Computer gifts for Christmas are great. Save money and add meaning during the holiday season by making gifts yourself...

<http://www.cheapestusedcomputer.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1861/>

Canada goose sale

2011/12/14 by Canada goose sale • • [Reply](#)

the violence sparked by his church's action, including the violent violent canada goose solaris parka violent protest at a United Nations complex in Afghanistan Saturday
left at least 11 people dead - and 20 killed killed new canada goose 2011 killed in weekend violence. Jones said his beliefs are more important even at expense of American soldiers. Perhaps in the long run, run, canada goose kids run, we may save hundreds or thousands, Jones said. When asked

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1865/>

Canada Goose Jackets

2011/12/14 by Canada Goose Jackets • • [Reply](#)

increased during the quarter of this year by 27 percent compared with the the canada goose coats sale the first quarter of last year, which Centre attributes to May 21 campaign. Centre increased

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1866/>

Canada Goose Jackets

2011/12/14 by Canada Goose Jackets • • [Reply](#)

convinced that the end is upon us, despite centuries of predictions? That's hard to answer, but psychologists and religious scholars say say Cheap Canada Goose say it derives from a number of very human urges: the fear of death to the desire for justice to to goose down jackets

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1867/>

Lenovo IdeaPad S9

2011/12/15 by Lenovo IdeaPad S9 • • [Reply](#)

Computer gifts for Christmas are great. Save money and add meaning during the holiday season by making gifts yourself...

<http://www.electrocomputerwarehouse.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1868/>

Lenovo IdeaPad S9

2011/12/15 by Lenovo IdeaPad S9 • • [Reply](#)

Computer gifts for Christmas are great. Save money and add meaning during the holiday season by making gifts yourself...

<http://www.electrocomputerwarehouse.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1870/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/12/16 by Lenovo IdeaPad S9 • • [Reply](#)

Christmas Presents are always add value to your life. Gifts your precious ones by adding this meaning to your loved ones by choosing your own gifts. Save money and time...

<http://www.electrocomputerwarehouse.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1871/>

Christmas gift

2011/12/17 by Christmas gift • • [Reply](#)

Christmas Presents are always add value to your life. Gifts your precious ones by adding this meaning to your loved ones by choosing your own gifts. Save money and time...

<http://www.cheapestusedcomputer.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1872/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/12/18 by uggs outlet • • [Reply](#)

<http://www.officialuggbootsoutlet.com>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1874/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/12/20 by lebron james shoes • • [Reply](#)

cheap oakley sunglasses <http://www.cheapoakleyssunglassesmall.com>
kobe V basketball shoes <http://www.kobebasketballshoes-mall.com>
cheap gucci belts <http://www.cheapguccibelts-malls.com>
cheap ray ban sunglasses <http://www.raybansunglasses-wholesaler.com>
cheap gucci belts <http://www.fakeguccibelts-mall.com>
cheap puma shoes <http://www.cheappumashoes-mall.com>
lebron james shoes <http://www.lebronjamesshoes-mall.com>
kids shoes <http://www.kidsshoesmall.com>
kids shoes <http://www.cheapkidsshoes-mall.com>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1879/>

ugg boots sale uk

2011/12/25 by ugg boots sale uk • • [Reply](#)

Los Alamos facility -- the birthplace of the atomic bomb bomb classic ugg boots uk bomb -- was shrouded in secrecy long before it was by smoke after the Las Conchas fire began Sunday.It contains contains ugg boots classic short contains approximately 20,000 barrels of nuclear waste, former top security
Glen Walp said. It's not contained within a concrete, brick-and-mortar-type brick-and-mortar-type ugg boots nightfall brick-and-mortar-type building, but rather in a sort of fabric-type building

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1889/>

ugg boots

2011/12/29 by ugg boots • • [Reply](#)

a close-up of what is appears to be the shriveled shriveled ugg boots classic mini shriveled up body of a tiny extra-terrestrial being. Like the of pop culture, the dead creature in the YouTube video video ugg boots classic short video has an enlarged gray head and huge, dark eyes.We him over there. ... We found him around two hours hours uggs bailey button hours ago. ... It must have been lying here for the translation beneath the video says.But UFO believers shouldn't get get ugg boots adirondack get their hopes up too high.Video Is 'Clearly a Hoax

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1898/>

Re: GRL Laser Tag Rotterdam - how to and source code

2011/12/30 by chi flat iron • • [Reply](#)

great one

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1901/>

Re:

2012/01/01 by loan • • [Reply](#)

This is great that we can take the mortgage loans and it opens up completely new possibilities.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1904/>

ugg boots sale uk

2012/01/02 by ugg boots sale uk • • [Reply](#)

Arbor, Mich., with his wife, Diane, who was the only to share his secret. Bridgeforth's two grown sons only recently recently ugg boots classic crochet recently learned of their father's past.He even severed ties with mother to keep his identity secure.Bridgeforth got a job working working

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1910/>

canada goose

2012/01/04 by canada goose • • [Reply](#)

video is most certainly the of pranksters.It's clearly a hoax, he said.The first big red red canada goose mens expedition parka red flag is the way the video was shot, he Instead of just stumbling upon the alien, the camera man man Canada Goose Danmark man gives the viewer a wide-angle so-called establishing shot of landscape before zooming right onto the alien as he and and canada goose and his friend find it.This is film-making 101. We see in sitcoms, we see this in virtually every film in in Canada Goose Jakke in order to establish a place and scene for the

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1917/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/01/10 by longchampoutlet • • [Reply](#)

longchamp bags bulk at a warehouse store, then take it home and it down into meal-sized portions (four chicken breast halves, four four longchamp le plage tote large four to six pork chops, 1 pound of beef stew etc.) in plastic zippered bags. Since I'm already fussing with with cheap longchamp bag with the zippered bags, I go ahead and load in spices, vegetables, and sauces needed for my favorite slow cooker cooker Longchamp Le Pliage Medium cooker recipes. I then freeze it all together in the bag. The night before this meal comes up on my my longchamp le plage my meal plan, I thaw it overnight in the fridge,

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1926/>

tory burch outlet online

2012/02/01 by tory burch outlet online • • [Reply](#)

Great post, I believe blog owners should learn a lot from this blog its very user pleasant.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1935/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/02/06 by Faith Melissa • • [Reply](#)

blog [url=http://www.fronter.com]blog[/url] blog blog http://www.fronter.com

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1936/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/02/17 by Arno • • [Reply](#)

Hello!

Thanks for this "how to" article, excellent!!!
For a watec 231S camera, is a 5-100 mm zoom lens F 1.8 is ok???

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1953/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/03/02 by MBT shoes • • [Reply](#)

Description: whether you also for the hot summer shoes mbt shoes on sale feel sad and anxious?Don't worry, by Swiss designer to create the MBT will help you solve this problem.Tannin shoes is mbt shoes clearance absolutely summer losing mbt shoes single goods, coupled mbt sandals with the color of reinforced heel and toe pads senior suede, leather laces and natural rubber (information, quotes) sole suitable day dress, and MBT sneakers, deep blue is right belongs to the mature steady dress evening dress.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1961/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/03/03 by mac.series@yahoo.cn • • [Reply](#)

Great deals on [url=http://www.cheapoakleyssunglassesoutlet.com/]Cheap Oakley Sunglasses[/url]! Fascinating prices and saving up to 69%! It blended the art of Oakley Sunglasses Outlet with the science of precision ...DESXIAOXIN <http://www.cheapoakleyssunglassesoutlet.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/1962/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/04/25 by nike shoes • • [Reply](#)

[url=http://www.cheapnikelebron9.net/]Lebron James Shoes[/url]
[url=http://www.cheapnikelebron9.net/]Nike zoom rookie[/url]

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2003/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/06/06 by Fashion Skirts • • [Reply](#)

very good,I like this post very much.Keep on!
<http://www.beautygown.com/bridal-accessories-c-1044.html>, bridal accessories wholesale
<http://www.beautygown.com/bridal-accessories-c-1044.html>, bridal gown accessories

very good,I like this post very much.Keep on!

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2021/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/06/19 by wholesale jordan shoes • • [Reply](#)

oakley Good article. thank you for your posts.oakley sunglasses but i think you can join into my link, and you can find that fashionable feeling in here await you.frogskins

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2033/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/06/20 by George • • [Reply](#)

I am organizing an event at the NY Public Library main branch at 42st and 5th ave
Please contact me if interested in being apart of this event

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2034/>

Re:

2012/09/12 by mortgage loans • • [Reply](#)

Do you know that it's correct time to get the loan (goodfinance-blog.com), which will help you.

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2072/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/09/26 by burberry outlet online • • [Reply](#)

space station astronaut Ron Garan. "Welcome to the International Space Station for the last time.""And time.""And burberry bags time.""And it's great to be here," Ferguson said.Space Junk: Old 1970s RocketThere is no word

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2080/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/09/29 by burberry outlet online • • [Reply](#)

blem.Tannin shoes is mbt shoes clearance absolutely summer losing mbt shoes single goods, coupled mbt sandals with the color of reinforced heel and toe pads senior suede, leather

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2084/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/10/07 by juana • • [Reply](#)

Good one

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2087/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/10/08 by jones • • [Reply](#)

Good post thanks for posting

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2089/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/10/10 by hermes handbags birkin • • [Reply](#)

hermes handbags birkin <http://www.top1hermeshandbags.net>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2091/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/10/28 by cheap jerseys • • [Reply](#)

cheap jerseys <http://www.wholesalecheapnfljerseysshop.com/>

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2100/>

Re: GRL Laser Tag Rotterdam - how to and source code

2012/11/06 by george • • [Reply](#)

Good one

Comment Trackback URL : <http://www.muonics.net/blog/bblog/trackback.php/15/2102/>

longchamp outlet

2012/11/06 by longchamp outlet • • [Reply](#)

big worry now -- who will officiate their vows ceremony, ceremony, longchamp le pliage large ceremony, scheduled for June 2013? "My husband is a minister," said. And so are her brother, father and father-in-law. "I "I longchamp outlet "I am going to have a problem picking," said Range. was estranged from my dad until 2001 and found him him longchamp le pliage large him again. It's between my father and my father-in-law. I

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longchamp outlet

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U.S.Mourdock is the third Republican Senate candidate, all of them them longchamp le pliage large them men, who has made waves with his views on and abortion. In August, Rep. Todd Akin said during an an longchamp outlet an interview in August that "the female body has ways try to shut that whole thing down" and block pregnancy pregnancy Longchamp Embroidered Bags pregnancy in cases of what he called "legitimate rape." Akin

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certainly a fantastic piece of work ... It has relevant information. Thanks for posting this. Your blog is so interesting and very informative.Thanks sharing. Definitely a great piece of work Thanks for your work.

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2014/04/04 by david • • [Reply](#)

Nice!!!

when I download the code?

Thanks!

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