CU University of Colorado
Boulder

Rachel RAMA4942 <rama4942@colorado.edu>

Fwd: Questions about remote control of treadmill [ref:_00D708PxE._5003n2O6RFr:ref]

14 messages

Alaa Ahmed <alaa@colorado.edu>   Tue, May 26, 2020 at 3:03 PM
To: Rachel Marbaker <Rachel.Marbaker@colorado.edu>

> More info from Bertec on using the SDK with MATLAB.
>
> alaa
>
>
> Begin forwarded message:
>
> **From:** Support <support@bertec.com>
> **Subject: Re: Questions about remote control of treadmill [ref:_00D708PxE._5003n2O6RFr:ref]**
> **Date:** May 26, 2020 at 12:44:03 PM MDT
> **To:** "alaa@colorado.edu" <alaa@colorado.edu>
>
>
> Hi Alaa,
>
> Here is the last bit that I have readily available for the SDK being used with Matlab:
>
> For using the SDK with Matlab, I recommend starting with a look at this forum that mentions using matlab and a
> need to use mex files to compile the code for the c files:
> https://biomch-l.isbweb.org/threads/30984-integration-of-Bertec-force-plate-with-matlab-software
> [Just make sure to click all the way through the conversation using the navigation at the top. The mention of mex
> files is with this comment: jbaxter44 Re: integration of Bertec... 02-13-2018, 04:15 PM)]
>
> To do mex files as was mentioned in the other webpage you will need this help page:
> https://www.mathworks.com/help/daq/sdk/buildadaptor.html
> There was a good example at the end on how to load a function from a similar library from this page:
> https://www.mathworks.com/help/matlab/ref/loadlibrary.html
> The example either uses or references the calllib function. I'm copying the help page on the function just because
> you will need to determine from the list that you called using the libfunctions function which is the input arguments
> and what is the output.
> https://www.mathworks.com/help/matlab/ref/calllib.html
>
>
> A quick note for the examples: The example codes are command prompt window accessible only. To run the
> examples through the command prompt window, I think this forum is helpful:
> https://forums.ni.com/t5/Digital-I-O/Bertec-force-plates-with-NET/td-p/3756782
>
> For good to read files besides the manuals, there are the DLL files, the library and header files, and C++ files.
>
>
> Let me know if you need any other help.
>
> Regards,
> Carley
>
>
> ref:_00D708PxE._5003n2O6RFr:ref

Alaa Ahmed <alaa@colorado.edu>   Thu, Jun 4, 2020 at 1:15 PM
To: Support <support@bertec.com>
Cc: Rachel Marbaker <Rachel.Marbaker@colorado.edu>

Hi Carley,

Thanks again for your help. One quick question about recording from the dual-belt treadmill. We can only connect for some reason to one belt at a time, even though we have the amplifiers for both belts connected to the computer (via separate USB ports). Are we doing this correctly or does the example provided not iterate through devices?

We also think that some of our issues may be because our computers are running 64bit Windows (and Matlab). Are these files compiled on a 32 bit machine?

Thank you!

Alaa and Rachel

> On May 26, 2020, at 3:02 PM, Alaa Ahmed <alaa@colorado.edu> wrote:
>
> Thanks so much Carley. This is great. I will let you know how we progress!
>
> Best,
> Alaa
> [Quoted text hidden]

Support <support@bertec.com>   Fri, Jun 5, 2020 at 8:39 AM
To: "alaa@colorado.edu" <alaa@colorado.edu>
Cc: "rachel.marbaker@colorado.edu" <rachel.marbaker@colorado.edu>

Hi Alaa and Rachel,

It sounds like maybe the sync connector has not yet been added. I've attached a Guide Sheet on how to do this. Even if you are wanting the signal to be digital you will need the sync ends connected.

And then to answer your other question, I believe it is compiled on a 64 bit machine. But our software developer has a lot of virtual machines as well as access to more than one PC with different specs, and one of those could be a 32 bit. The cpp file is currently sitting in the "32 bit" portion of the SDK folder, so it's not impossible or improbable that it is 32 bit. It may be historically kept at a 32 bit version because of the programs that used to heavily require the code were 32 bit programs. I've reached out to the Engineering Manager to get you a more exact answer.

Regards,
Carley

--------------- Original Message ---------------
From: Alaa Ahmed [alaa@colorado.edu]
Sent: 6/4/2020 2:15 PM
To: support@bertec.com
Cc: rachel.marbaker@colorado.edu
Subject: Re: Questions about remote control of treadmill [ref:_00D708PxE._5003n2O6RFr:ref]

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📄 **SYNC Cable Image and Information.pdf**
157K

Alaa Ahmed <alaa@colorado.edu>   Fri, Jun 5, 2020 at 8:51 AM
To: Support <support@bertec.com>
Cc: Rachel Marbaker <Rachel.Marbaker@colorado.edu>

Thanks Carley!

alaa

> [Quoted text hidden]
> [Quoted text hidden]
> <SYNC Cable Image and Information.pdf>

Support <support@bertec.com>   Fri, Jun 5, 2020 at 9:42 AM
To: "alaa@colorado.edu" <alaa@colorado.edu>
Cc: "rachel.marbaker@colorado.edu" <rachel.marbaker@colorado.edu>

Hi Alaa and Rachel,

So going over to Engineering they had a few items for me.

- The x64 sub folder in the zip folder should have all of the 64 bit items you need. The cpp file should work with either the 32 or 64 bit library file, but you need to make sure to grab the 64 bit version of the library from that sub folder.

- If you have a 64 bit computer, 64 bit version of matlab, and there is an additional plug-in required for this (like Visual Studio) then there may be a version issue with the Visual Studio program if you continue to run into problems after using the 64 bit library file. They recommended to check Visual Studios after you re-attempt with the 64 bit version.

- One of them had a comment that it is easier to use simulink since it's already a controller. I don't have much info about simulink. I have used it once a long time ago, but if you are using simulink and are running into issues then let me know. Maybe the engineering staff can provide some guidance.

- If you need another resource for the adapter:
https://www.mathworks.com/help/daq/build-custom-adaptors.html
[Quoted text hidden]

Alaa Ahmed <alaa@colorado.edu>   Fri, Jun 12, 2020 at 11:47 AM
To: Support <support@bertec.com>
Cc: Rachel Marbaker <Rachel.Marbaker@colorado.edu>

Hi Carley,

We did connect the sync connectors as you described, but running the BertecExample.exe still does not identify the two plates. We still only see one of them. Is the BertecExample.exe setup to iterate through multiple devices, or is that a modification that we should make to the code and recompile?

Also - BertecAcquire only sees the single plate as well. Is there a way for it to see both?

If there is number we could reach you at (or the engineers), it may be easier to explain over the phone.

Thanks so much!

Best,
Alaa and Rachel

> On Jun 5, 2020, at 8:39 AM, Support <support@bertec.com> wrote:
>

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Support <support@bertec.com>   Mon, Jun 15, 2020 at 12:26 PM
To: "alaa@colorado.edu" <alaa@colorado.edu>
Cc: "rachel.marbaker@colorado.edu" <rachel.marbaker@colorado.edu>

Hi Alaa and Rachel,

We can schedule a troubleshooting session. If the two plates connected in Acquire will not show properly, then that is where we need to start first. I'll have time tomorrow at 4 pm ET and Thursday afternoon (1:30 through 4 pm ET). Let me know if either of those dates work for you. I would plan for an hour.

I would need a phone number to call, and then during the call we may want to get on a remote session. I may also request some pictures.

Regards,
Carley

--------------- Original Message ---------------
From: Alaa Ahmed [alaa@colorado.edu]
Sent: 6/12/2020 12:47 PM
To: support@bertec.com
Cc: rachel.marbaker@colorado.edu
Subject: Re: Questions about remote control of treadmill [ref:_00D708PxE._5003n2O6RFr:ref]

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Alaa Ahmed <alaa@colorado.edu>   Tue, Jun 16, 2020 at 9:51 AM
To: Support <support@bertec.com>
Cc: Rachel Marbaker <Rachel.Marbaker@colorado.edu>

Thank you Carley.

Thursday at 12pm MDT (2pm ET) works for us.

My phone number is 7202393832

If that time works for you, then I can set up a zoom meeting.

Thank you!

Alaa

Alaa A. Ahmed

Associate Professor
Department of Integrative Physiology
Department of Mechanical Engineering
University of Colorado
Boulder, CO 80309-0354
office: +1.303.492.6063

fax: +1.303.492.4009
email: alaa@colorado.edu
website: www.colorado.edu/neuromechanics

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Support <support@bertec.com>   Wed, Jun 17, 2020 at 9:17 AM
To: "alaa@colorado.edu" <alaa@colorado.edu>
Cc: "rachel.marbaker@colorado.edu" <rachel.marbaker@colorado.edu>

Hi Alaa and Rachel,

I have the meeting set on the calendar. For the remote session, it will actually be better if we can use a program called splashtop. That way if any changes need to be made to Acquire or other Bertec Software, I can make those for you and walk you through the changes as well.

Here is a link for splashtop:
https://sos.splashtop.com

If we need to use a video conference software in addition to the remote session, then we can use Microsoft Teams or the Zoom program, if that is your preference. I would just need a link for the Zoom meeting.
[Quoted text hidden]

Alaa Ahmed <alaa@colorado.edu>   Thu, Jun 18, 2020 at 6:45 AM
To: Support <support@bertec.com>
Cc: Rachel Marbaker <Rachel.Marbaker@colorado.edu>

Thank you Carley.

We will install splash top on the computer we are having connect to the treadmill.

If needed I can send a zoom meeting link, but I'll hold off for now and see how things go.

See you soon!

Best,
alaa
[Quoted text hidden]

Support <support@bertec.com>   Thu, Jun 18, 2020 at 12:04 PM
To: "alaa@colorado.edu" <alaa@colorado.edu>, "rachel.marbaker@colorado.edu" <rachel.marbaker@colorado.edu>

Hi Rachel,

Could you send me your phone number or call 614-450-0331 and request me?
We can then get started on troubleshooting.
[Quoted text hidden]

Rachel Marbaker <Rachel.Marbaker@colorado.edu>   Thu, Jun 18, 2020 at 12:05 PM
Reply-To: Rachel.Marbaker@colorado.edu
To: Support <support@bertec.com>

Hi Carley,
My phone number is 7193731748. Thank you!

[Quoted text hidden]

Support <support@bertec.com>   Thu, Jun 18, 2020 at 1:45 PM
To: "rachel.marbaker@colorado.edu" <rachel.marbaker@colorado.edu>

Hi Alaa and Rachel,

I already have an update for you about the SDK. So, the reason for my SDK confusion is apparently that the SDK on our website is out of date. We are supposed to have someone managing the site updating these things, so sorry about that. I'll make sure that SDK on the site gets corrected. The SDK is supposed to handle multiple plates, and you will find that works in this version (html has info about this newer SDK):

http://downloads.bertec.com/Bertec_Device_SDK_October_2019.zip
http://downloads.bertec.com/Bertec_Device_SDK_October_2019.html
[Quoted text hidden]

Support <support@bertec.com>   Thu, Jun 18, 2020 at 1:46 PM
To: "rachel.marbaker@colorado.edu" <rachel.marbaker@colorado.edu>, "alaa@colorado.edu" <alaa@colorado.edu>

Hi Alaa and Rachel,

Sorry about the second email, but I realized after it sent that Alaa was not on the recipients' list.
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