slide-33

Timelapse slider controlled by an Android phone with a Bluetooth/Arduino

Project Information

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Code license
GNU GPL v2

Labels
Arduino, Android, Bluetooth, DLSR, Canon, EOS, Dynamixel, Robotis, MX28

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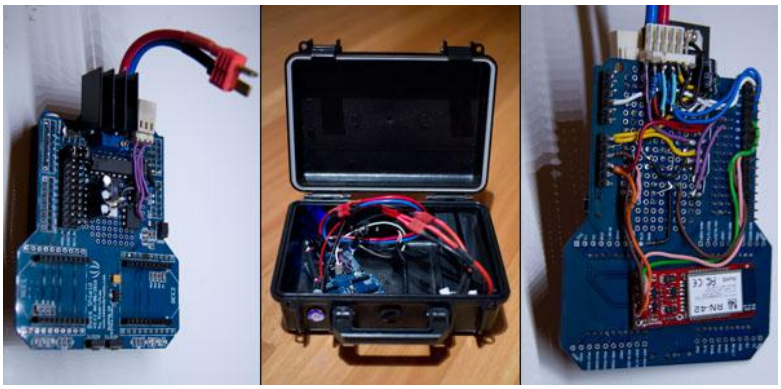
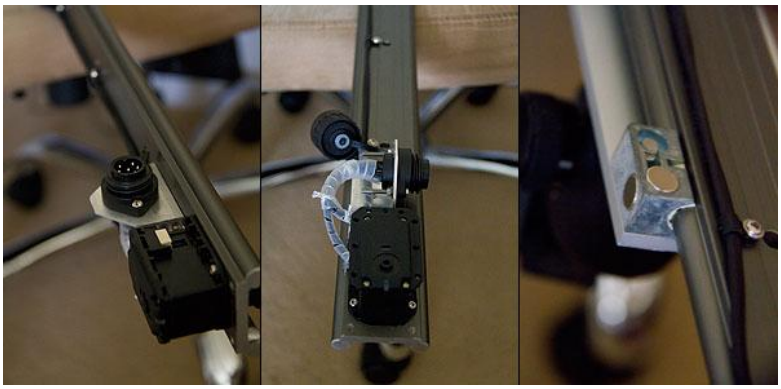




Back end is a Arduino (Freetronic USBDroid) which controls a motor/servo (Dynamixel MX-28) slider for both time-lapse sliding shots and video shots with wired/wireless shutter control and USB full control(ISO,Focus,WB,etc...)

Front end is a GUI via Android phone(still in development)

It's still very early days but with all the components but together there is a lot this unit will be able to do.

Update 25 April 2013 : A few errors have been fixed in Dynamixel Library

Update 28 June 2012 : Dynamixel Library re-written from the ground up and the Arduino now can control pan/tilt/slide

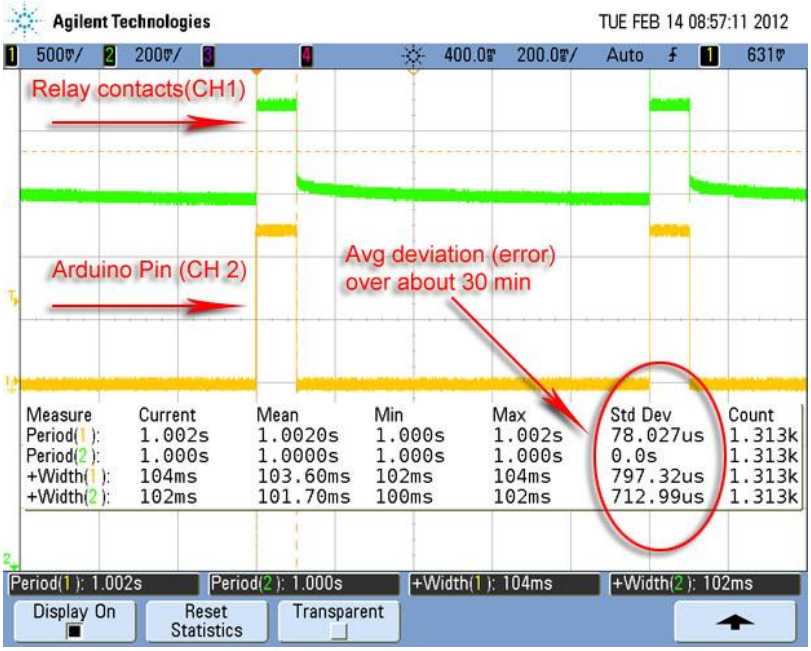
With the new library used there is no longer missed commands set to the MX-28 servo when in time lapse mode

Android App now has Pan and tilt control added

Update 10 April 2012 : Dynamixel Library now has example of how to set-up and program a Dynamixel Servo via a Arduino

Update 19 February 2012 : Android application added to download section

Update 14 February 2012 : Shutter trigger now uses timer interrupt 2 to limit trigger drift



Update 22 January 2012 : Time lapse section of code rewritten.

Update 17 January 2012 : Library and Arduino sketch in download section updated to work with Ardunio 1.0

Specification:

Min speed: 0.114 rpm

Max speed: 117 rpm

Max load: 24 kgf.cm

Resolution: 0.088 deg

Standby current: 300 mA

Max current 500 mA

EOS USB control (temporarily removed)

Wired/wireless shutter control

Hardware:

Qty:1 Igus Drylin 10x40 rail and carriage, (alternative and cheaper liner side (MakerSlide)

Qty:1 Dynamixel MX-28 servo

Qty:1 Ardiuno with on-board USB host

Qty:1 BlueSMiRF silver (Bluetooth)

Qty:2 HFS2 (MOS relay)

Qty:1 LM317 (voltage regulator)

Qty:1 74LS241 (Duplex buffer)

Qty:2 7.4V @5000mAh battery

Qty:1 Gates MXLS belt, belt from SDP-SI

Qty:1 Servo horn, Belt MXL pulley

Ardiuno Circuit (This schematic can be found in the download section as a PDF)