Installing the MATLAB Add-On

For the Digilent Analog Discovery
MATLAB Add-On

• Can be used to:
  – Create a signal that can be automatically loaded into the library of the Digilent Analog Discovery’s Arbitrary Waveform Generator
  – Toggle ON and OFF the output of the Arbitrary Waveform Generator
  – Collect the raw data from both of the oscilloscope channels of the Digilent Analog Discovery
  – Turn ON and OFF the dc power supplies on the Digilent Analog Discovery
Installation Instructions

• This add-on has been available since the release of MATLAB 2013a.
  – You create an account on the MathWorks website (www.mathworks.com) before installing the add-in.
  – The latest version of Digilent Waveforms will be automatically installed with the add-on.
    • Once installed, Waveforms can run independent of MATLAB when using the Digilent Analog Discovery.
    • You do not have to uninstall Waveforms if it is already installed on your computer, the latest version of the software will be reinstalled when you add the MATLAB add-on.
Auto-Installer

http://www.mathworks.com/hardware-support/digilent-analog-discovery.html

The MATLAB support package for the Digilent Analog Discovery will automatically be installed when you click on Get Support Package Now from the Mathworks webpage.

Note that the MATLAB Add-On only works with a Microsoft operating system.

Or following the instructions on the next slides.

Note: A Linux Debian Software Development Kit is available for Waveforms from Digilent

http://www.digilentinc.com/Products/Detail.cfm?Prod=WAVEFORMS
Steps 1-3

1. Launch MATLAB.
   a. The version must be 2013a or a more recent version.

2. Click on Add-Ons and select Get Hardware Support Packages.

3. Then, select Internet in the Support Package Installer pop-up window.
4. Select the button next to Install to select the support package for the Digilent Analog Discovery.

Then, click Next>.

Note that there are several other support packages for MATLAB that you may be interested in.
Steps 5-6

5. You will have to log into your MathWorks account at this point to continue the installation of the Digilent Analog Discovery Add-On.

6. Enter your email address and MathWorks account password in the next pop-up window.

I recommend that you create your MathWorks account before the Add-on installation.
Agreements

- You must agree to a MathWorks Auxiliary Software License Agreement and the Third-party software license for Digilent Waveforms. If you do not agree, the installation of the Add-On will be cancelled.

- You must agree to the installation of Waveforms, even if you already have the software package installed in order to complete the installation of the MATLAB Add-On.
After the installation is complete

• You have the option to go to a MathWorks webpage that has sample code that you can cut-and-paste to operate the Digilent Analog Discovery from MATLAB.
  – It is a good idea to read through the examples and run them to learn the commands used to send data files between MATLAB and the Digilent Analog Discovery.
  – You can also find these links along with other tutorials in the Getting Started Resources area in the lower left at:
    http://www.mathworks.com/hardware-support/digilent-analog-discovery.html