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Updating a Thickness Gage to be Compatible with Windows 8 or Windows 10 USB

Overview: With Windows 8 and Windows 10 there can be USB enumeration problems between the host computer and a thickness gage. Windows can report a "USB device not recognized" error in the bottom right of the screen shortly after the thickness gage is plugged into the computer via USB. Below is a list of all the gages and the versions of software which have this issue:
- EHC-09 (color and mono) v3.26 and below
- UPG-07 (color and mono) v1.15 and below
- EHC-03 v1.0

If your thickness gage software version falls within one of the above versions, and you need to connect it via USB to a computer running Windows 8 or Windows 10, then the below sequence of steps will guide you through the update process so that the thickness gage can properly enumerate via USB with Windows 8 or Windows 10.

Requirements: Below is a list of the needed items to perform the update to the thickness gage.
- A computer running either Windows XP or Windows 7 which has Data XL installed on it. If Data XL is not installed on the computer, it can be downloaded at the following link:

  http://www.danatronics.com/ultrasoundsupport.html
  At the time of this document, the latest version of Data XL is v3.7.3.

- A version of software for the thickness gage that is compatible with the USB protocol used in Windows 8 and Windows 10. Below is a list of the different gages and software versions which are compatible with the USB protocol found in Windows 8 and Windows 10:
  - EHC-09 (color and mono) v3.27 and above
  - UPG-07 (color and mono) v1.16 and above
  - EHC-03 v1.1 and above

  The thickness gage software can be found at the following link:
  http://www.danatronics.com/ultrasoundsupport.html

- A USB A to mini b cable. This is used to connect the thickness gage to the computer via USB.

Upgrade Steps:

1. The thickness gage first needs to be connected to the computer via USB in a special sequence. With the gage powered off and the down button on the gage being pressed, connect it to the computer via the USB cable. Holding the down button while being powered up puts the gage into upgrade mode.

2. Launch Data XL.

   2a. Click on the "Software Upgrade" tab located in the upper portion of Data XL.

   2b. Click on the "Select File To Download" button which will launch an open file dialog box. Select the file to update the thickness gage with. In this example the file "color_ehc09_v3_27.bin" was chosen.

   2c. Click the "Start Download" button which will commence with the software update. Shortly after, the update program will proceed to update the thickness gage. Once the update is completed the screen will display a message to "Unplug USB cable to turn off power". At this point the software update process is completed and the thickness gage will now successfully enumerate via USB with a computer running Windows 8 or Windows 10.