## FAQ's for Matter and Form Scan (PC)

## Why doesn't the Matter and Form software start?

If you double-click the Matter and Form scanner software icon, but the program never starts, it is probably being blocked by your antivirus software.

Some antivirus software may not recognize the Matter and Form software as being from a trusted source. It may block the software from loading/running after you've downloaded it.

To work around this, you will need to create an "Antivirus Exception" (in other words, give permission) for the anti-virus software to run the Matter and Form software. The Matter and Form software appears as EchoScan.exe in your directory.

The following link gives step-by-step instructions on how to add an exception to AVG, which is the antivirus software that seems to be causing the most issues:

http://smallbusiness.chron.com/set-program-trusted-avg-76320.html

If your antivirus software won't let EchoScan.exe run and it isn't AVG, do an internet search for "antivirus exception" plus your antivirus brand name to find out how to do it on your system.

## Why is my scanner is not being detected?

If your computer is unable to detect your scanner, you may see one or more unknown device(s) connected to your computer. You may also not see the Arduino or Logitech camera devices that the scanner uses in the list of connected devices, even though it's plugged in.

This can be caused by a number of reasons. The most common are: using unsupported USB cables and ports; system conflicts while assigning communication ports; or a corrupt or missing installation of the Windows Arduino Driver.

To figure out what is causing the scanner to not be detected, go through the following possible solutions, in order, unless your system identifies the issue for you:

#### Solution A Checking the USB cable

- Step 1: Ensure the scanner is directly connected to the PC through a functioning USB 2.0 port (**not through a USB hub or port replicator**) with the included USB cable.
- Step 2: Restart your PC
- Step 3: Download and install the current version of the Matter and Form software from https://matterandform.net/download/install
- Step 4: Start the Matter and Form software
- Step 5: Power the unit on

The scanner should be detected within 30 seconds. If it's not, go to Solution B.

#### Solution B Resolving communication conflicts

- Step 1: Uninstall the Matter and Form software application (if you already did this in Solution A, you can skip this step)
- Step 2: Disconnect any non-essential USB peripherals (i.e. 3D printer).
- Step 3: Restart you PC
- Step 4: Download & install the most current version of the Matter and Form software (if you already did this in Solution A, you can skip this step)
- Step 5: Start the Matter and Form software
- Step 6: Connect scanner to the PC via a USB 2.0 port and power the unit on

The scanner should be detected within 30 seconds. If it's not, go to Solution C.

#### Solution C Ensure the Arduino Driver is properly installed

- Step 1: Connect scanner to the PC via the USB 2 port and power the unit on
- Step 2: Go to Device Manager
- Step 3: Locate the Arduino device. It is probably under "Other Devices" because the driver is not installed.
- Step 4: Right click on the Arduino, choose "Properties"
- Step 5: In the Driver tab, next to "Driver Provider", you should see "Unknown". This indicates that there is no driver installed. If the driver is "Unknown", click the "Update driver" button. Otherwise, discontinue this solution and try Solution D.
- Step 6: In the next window, click "Browse my computer for driver software"
- Step 7: In the next window, click "Let me pick from a list of device drivers on my computer"
- Step 8: In the next window, you'll get a list of hardware types. At the bottom there is a "Next" button. Click the "Next" button.
- Step 9: In the next screen, ignore the list of devices and click the "Have Disk" button.
- Step 10: In the popup Install from Disk window, click the Browse button and browse to C:\Program Files\Matter and Form\drivers\Arduino and click on arduino.inf. Click the "Open" button. (Note this assumes you've installed the Matter and Form software in C:\Program Files)
- Step 11: Now click the "OK" button on the Install from Disk window.
- Step 12: You'll be presented with a list of compatible hardware. Choose "Arudino Leonardo" then click the "Next" button.
- Step 13: You'll be asked if you want to install the signed driver from Arduino, choose to do so.
- Step 14: Once it's installed, you can close the driver install windows.
- Step 15: Start the Matter and Form scanner software. The scanner should be detected within 30 seconds.

#### Solution D: Camera isn't connected or working

See next section – "Why isn't my camera working?"

If these don't work, contact us at <a href="mailto:support@matterandform.net">support@matterandform.net</a> for more help.

## Why isn't my camera working?

A non-working camera can be caused by either a conflict of the display driver or hardware failure.

To check for a camera display driver conflict, manually install the pre-packaged driver according to the instructions below. If the camera still doesn't work, contact us at <a href="mailto:support@matterandform.net">support@matterandform.net</a> for further troubleshooting.

#### Manually installing the pre-packaged camera driver

- Step 1: Connect scanner to the PC via the USB port and power the unit on
- Step 2: Go to Device Manager
- Step 3: Locate the Logitech HD Webcam C270 listed under the 'Imaging Devices' section
- Step 4: Right click on the device, and select "Update Driver Software" from the menu

- Step 5: Next, select the option for "Browse my computer for driver software"
- Step 6: Next, select the option for "Let me pick from a list of device drivers on my computer"
- Step 7: Next, select the "Have Disk..." button
- Step 8: Next, select the "Browse" button
- Step 9: Next, navigate to C://Program Files/Matter and Form/Drivers/Camera/Video
- Step 10: Next, click "IvPRO5v.inf" and complete the install process
- Step 11: Start the Matter and Form software

## Why do my scans have two layers?

Scans with multiple layers, sometimes called "shells" or "shelling", can be caused by a sub-optimal calibration, any movement of the scanner after calibration, or hardware defect.

Recalibrate the software after ANY movement of the scanner. If this still doesn't correct the issue contact us at <a href="mailto:support@matterandform.net">support@matterandform.net</a> for further troubleshooting.

## When scanning, why doesn't the screen display any points?

The current graphics driver installed on your system may not support the version of OpenGL required by the MF software. OpenGL is an interface that is used to render 2D and 3D graphics.

To see if you have the latest version of OpenGL for your graphics card driver, go to your system's graphic card manufacturer's website and download and install the latest device driver. To find who manufactured your graphics card, go to "Device Manager" and look under "Display Adapters".

# I get an application message that I don't have enough memory. What does the message mean? How can I fix it?

This message indicates that insufficient memory has been allocated by the Matter and Form software to display the specified number of 3D points in the software viewer.

In order to prevent or reduce the likelihood of this notification message, change the scanner software configuration file to reduce the value for displayable points.

- Step 1: Close the Matter and Form scanner software.
- Step 2: Go to the install directory (i.e. C:\Program Files\Matter and Form)
- Step 3: Go to the "Scanner" directory
- Step 4: Locate the file and "EchoScan.exe.Config" and open the file for editing in your preferred text editor.
- Step 5: Locate the Display Point Limit parameter. I will look like the following: <add key="DisplayPointLimit" value="3500000" />
- Step 6: Change the 3500000 to a lower number such as 2000000. (NOTE: This is the maximum number of points the software will display. This setting does **not** restrict the number of points that can be captured in a scan. This setting only affects how many points will be displayed.)
- Step 7: Save and close the file
- Step 8: Start the software and proceed to scan or mesh

(REMEMBER! Reducing the display point limit value will **not affect the quality** of the scan or mesh. The scan can be exported with full quality to be viewed in your preferred CAD software.)