Getting Started with TriggerBox 2.0

Revision 1.0

Description
This quick start guide provides you with the resources to get you started on 3D scanning with the TriggerBox 2.0.

Downloading FlexScan3D Software
The TriggerBox 2.0 is a tool designed specifically to be compatible with FlexScan3D. You can download the software from the Polyga Accounts Page (https://www.polyga.com/my-account/downloads/) or by contacting your distributor. To create a download account, please contact us at: https://www.polyga.com/contact/

Instructions for installing and activating FlexScan3D using an installation ID or dongle can be found in the User Manual at http://www.polyga.com/FS3DHelp/Manual/Default.htm.

Customer Support
For access to support resources and troubleshooting guides, visit https://www.polyga.com/hdi-support-center/

If you have any issues, please contact:

Email: support@polyga.com
Web: https://www.polyga.com/contact/
## Connecting the TriggerBox 2.0

<table>
<thead>
<tr>
<th>#</th>
<th>Component</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 x USB 3.0 Cameras</td>
<td>Connect both your Polyga-licensed Basler USB 3.0 cameras to the TriggerBox.</td>
</tr>
<tr>
<td>2</td>
<td>HDMI</td>
<td>Connect your projector to the TriggerBox with an HDMI cable. Turn your projector on.</td>
</tr>
<tr>
<td>3</td>
<td>Ethernet</td>
<td>Connect your PC to the TriggerBox with a CAT5 ethernet cable.</td>
</tr>
<tr>
<td>4</td>
<td>Power (5V, 4A)</td>
<td>Ensure that all components are connected to the TriggerBox before power supply is connected.</td>
</tr>
</tbody>
</table>

Once the TriggerBox is powered on, you should soon observe focus patterns displayed through your projector. If no focus patterns are displayed, please ensure that all the instructions above were followed in order.
Configure Network Adapter Settings

Ensure that your device’s network adapter subnet matches the subnet on your PC. The TriggerBox 2.0 ships with the following default network settings.

<table>
<thead>
<tr>
<th>Setting</th>
<th>Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Address</td>
<td>11.12.13.1</td>
</tr>
<tr>
<td>Subnet Mask</td>
<td>255.255.255.0</td>
</tr>
</tbody>
</table>

To adjust the settings for your device’s Network Adapter, go to Control Panel > Network and Sharing Center > Change Adapter Settings. Right-click the desired network and select Properties.

On the Networking tab, select Internet Protocol Version 4 (TCP/IPv4), and then click Properties.
Ensure that DHCP is disabled and that the subnet matches the subnet of the sensor. For example, you can enter 11.12.13.x for the IP address, where x is any value between 0 and 255 that isn’t 1.

After configuring your network settings, to confirm that your TriggerBox is connected properly, open a web browser at the IP 11.12.13.1. You should reach a status portal.

If you are having trouble connecting to your TriggerBox through a web browser, ensure that no firewall settings are interfering. If you can connect but are having issues within Flexscan3D, ensure that the Status messages for your TriggerBox match those from the image above.
If you have purchased a USB-Ethernet bundle, then you can use our USB Network configurator tool to configure your Network Adapter. The tool is installed as part of the Flexscan3D package. Simply connect your TriggerBox to the adapter with an ethernet cable. Connect the adapter to a USB 3.0 port on your PC and select “Detect and config USB adapter”.

![USB Network Configurator Tool](image)

**TriggerBox in Flexscan3D**

To begin using your scanner through the TriggerBox, you must first do a calibration. It is important to note that Flexscan3D only supports the TriggerBox as of version 3.3.10.x.

**Calibrating the TriggerBox**

To calibrate the scanner through a TriggerBox, you must first create a new HDI Advance scanner.
Once a new HDI Advance is created, you can select your TriggerBox in the projector dropdown menu. If the TriggerBox does not appear in this list, select `<Add TB2 manually>` and enter the TriggerBox’s IP address.

With the TriggerBox selected, your cameras will be configured automatically. You are now ready to begin calibrating. For more information on how to calibrate an HDI Advance Scanner, see the **FS3D User Manual**. Once you your scanner is successfully calibrated, you are ready to start scanning.

**Setting up the ScanBox**

Using your scanner as a ScanBox within Flexscan3D, allows you to seamlessly transition your scanner between different PCs without having to re-calibrate. Once you have a calibration, simply export that calibration onto your TriggerBox, where it will be saved permanently. Under the scanners menu, select **Export** and **To TriggerBox**.

Now you can add your scanner as a ScanBox in Flexscan3D and begin scanning.
**Updating the TriggerBox**

To update the firmware of your TriggerBox, add the TriggerBox as a ScanBox and select **Update Firmware**. In the file explorer select the **Polyga.zip** file and click **Open**.

To change the TriggerBox’s IP Address, select **Network Config**. Enter the new IP Address and click **Confirm**.