GEFEN

SYNER-G™

Software Suite

User Manual

Release A10

Technical Support

(800) 472-5555 (707) 283-5900 Int'l
8:00 AM to 5:00 PM Monday - Friday, Pacific Time

Fax

(707) 283-5901

Email

support@gefen.com

Web

http://www.gefen.com

Mailing Address

Gefen, by Core Brands
c/o Customer Service
1800 South McDowell Blvd.
Petaluma, CA 94954 USA

Product Registration

Register your product here: http://www.gefen.com/kvm/Registry/Registration.jsp

- Supported Windows® operating systems:
  - ► Windows XP
  - ► Windows Vista
  - ► Windows 7
  - ► Windows 8
- This software will only detect Gefen products that support the “discovery” feature.
- The Gefen Discovery Tool App is free and is available for both iOS™ and Android™ operating systems and can be downloaded from the Apple App Store and Google Play, respectively. See The Discovery Tool App (page 72) for more information.
- Refer to the Compatibility Table (page 70) for information on supported features for Gefen products which support the Gefen Syner-G Software Suite.

Licensing

This product uses software that is subject to open source licenses, including one or more of the General Public License Version 2 and Version 2.1, Lesser General Public License Version 2.1 and Version 3, BSD, and BSD-style licenses. Distribution and use of this product is subject to the license terms and limitations of liability provided in those licenses. Specific license terms and Copyright Notifications are provided in the source code.
For three years from date of activation of this product, any party may request, and we will supply, for software covered by an applicable license (e.g. GPL or LGPL), a complete machine-readable copy of the corresponding open source code on a medium customarily used for software interchange. The following software and libraries are included with this product and subject to their respective open source licenses:

- Qt

Table of Contents

This page left intentionally blank.

Syner-G
Software Suite

1 Getting Started

1. Download the Gefen Syner-G Software Suite from the Support section of the Gefen Web site.

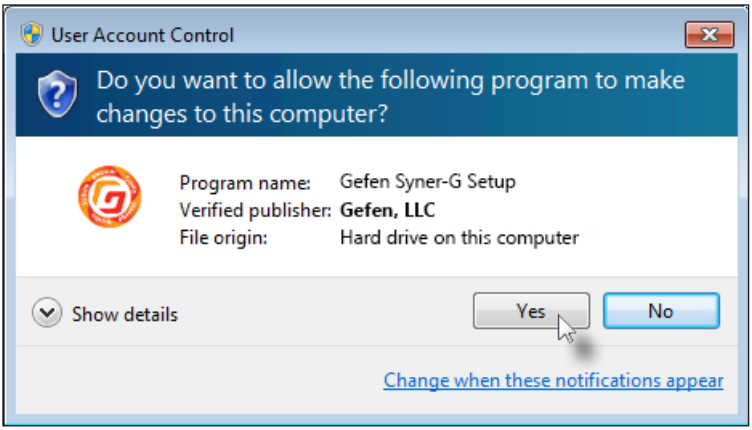
2. Extract the contents of the .zip file to a folder on the Windows® Desktop.

   There will be two files within the folder:

   - `Setup_GefenSyner-G_[version].exe`
   - Gefen Syner-G Software Suite User Manual

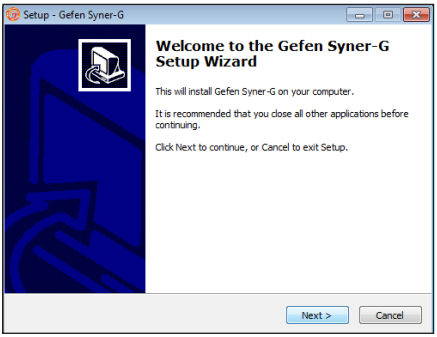
3. Double-click the `Setup_GefenSyner-G_[version].exe` file to launch the installation Wizard.

   If the following dialog box is displayed, then click **Yes** to continue with the installation Wizard.



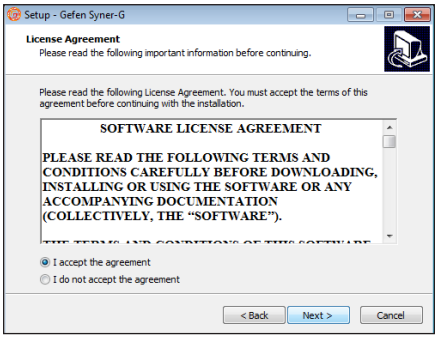
4. The **Welcome** dialog box will be displayed.

5. Click the **Next** button.

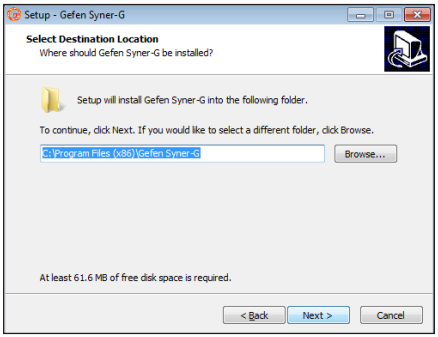


6. The **Software License Agreement** dialog will be displayed.

   Click the radio button next to **I accept the agreement**, then click the **Next** button.



7. The **Select Destination Location** dialog box will be displayed.

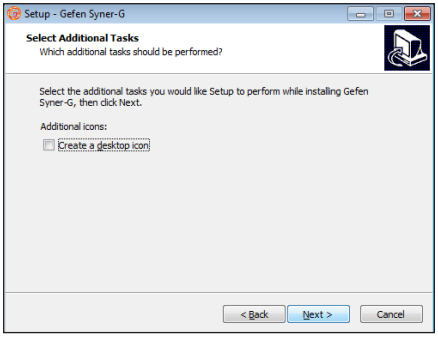


   The default installation path is:
   `C:\Program Files (x86)\Gefen Syner-G`

   Click the **Browse...** button to change the installation path. Otherwise, click the **Next** button to continue with the default installation path.

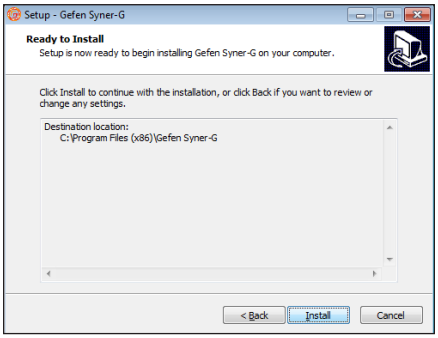
8. The **Select Additional Tasks** dialog will be displayed.

   To create an application icon on the Windows® Desktop, click the **Create a deskop icon** check box. Otherwise, click the **Next** button to continue.



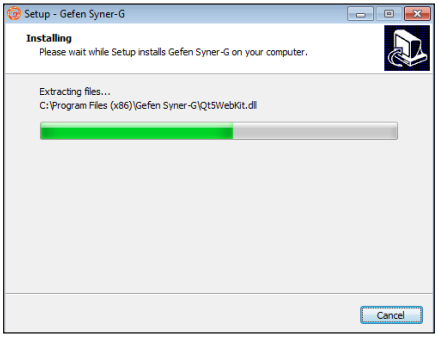
9. The **Ready to Install** dialog will be displayed.

   Click the **Install** button to begin the installation process.



10. The installation Wizard will begin installing the software.

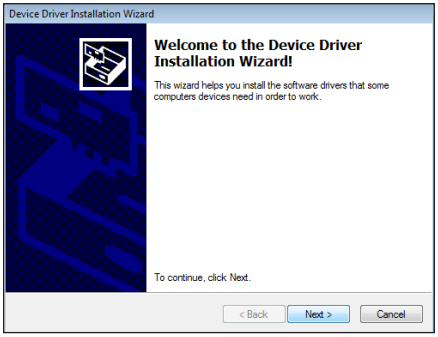
    To cancel the installation procedure, click the **Cancel** button.



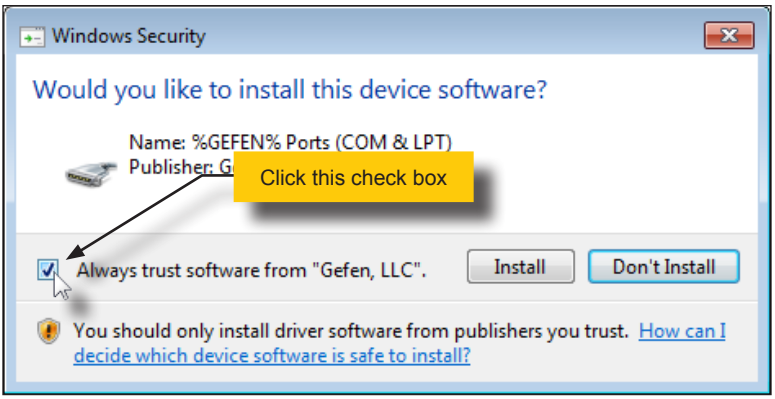
11. After the Syner-G Software Suite has installed, another setup Wizard will automatically launch.

    This secondary setup Wizard will install the necessary drivers.

    Click the **Next** button to continue.

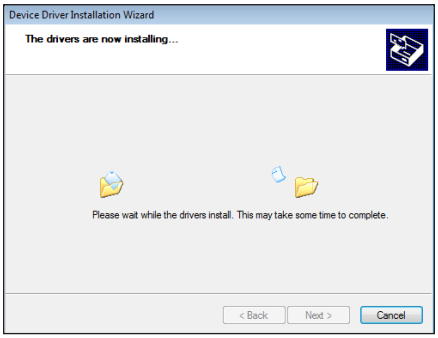


12. After clicking the Next button, the following dialog may appear, indicating that Windows is unable to identify the publisher of the driver software.



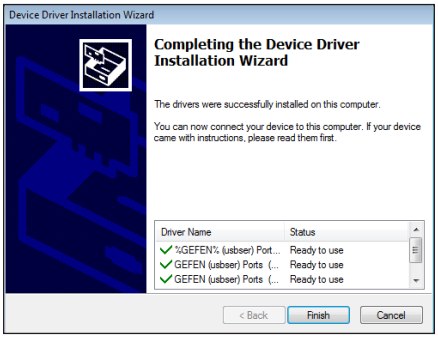
Click the check box next to **Always trust software from "Gefen, LLC"** and then click the **Install** button.

13. The installation Wizard will begin to install the device drivers.

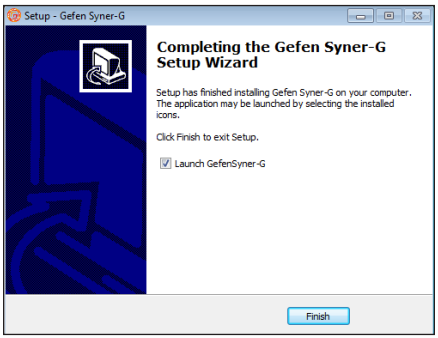


14. After a few seconds, the **Completing the Device Driver** dialog will be displayed.

    Click the **Finish** button.



15. The **Finish** dialog for the **Gefen Syner-G Software Suite** will be displayed.



The **Launch GefenSyner-G** check box will be checked. To launch the **GefenSyner-G** application, click the **Finish** button.

To launch the application at a later time, click the **Launch GefenSyner-G** check box to remove the check mark, then click the **Finish** button.

This page left intentionally blank.

This page left intentionally blank.

Syner-G
Software Suite

2 Basic Operation

Discover and Configure IP

The Gefen Syner-G Software Suite "Discovery" feature allows the configuration of any Gefen IP-based product to be discovered and configured from any Windows® PC. The Gefen product must support the discovery feature in order for the product to be listed within the Discover tab.

> **Information**
>
> The The Discovery Tool App (page 72) can be used in the same capacity as the **Discovery** portion of the Syner-G Software Suite. **Discovery and Configure IP**, **Manage a Product**, and **EDID Editor** screens are limited to the Syner-G Software Suite. The Gefen Discovery Tool App can be downloaded from the Apple App Store and Google Play, respectively.

In order for the Discovery feature to detect a Gefen product:

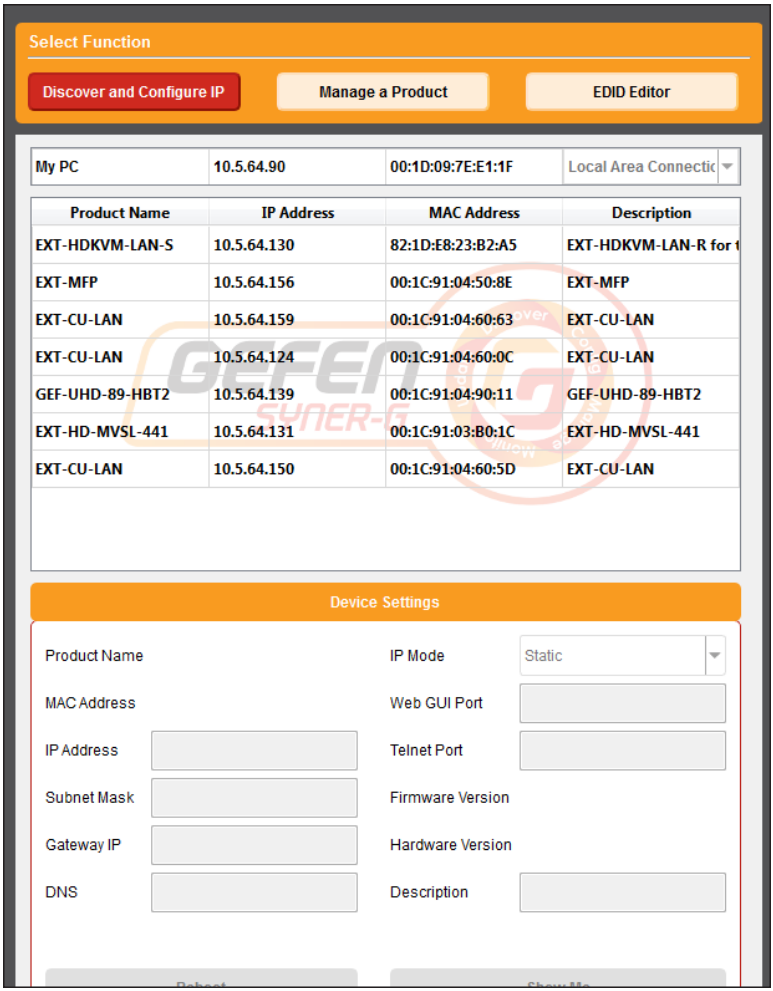
- The Gefen product must be connected to the same network as the computer that is running Syner-G.
- The Gefen product must support the discovery feature. Refer to the table, below, for a list of supported Gefen products.
- The discovery feature must be *enabled*. Refer to the User Manual of the Gefen product for more information on enabling and disabling the discovery feature.

1. Launch the Syner-G Software Suite from the Start Menu or using the shortcut from the Windows Desktop.

2. The **Discover and Configure IP** screen will be displayed and all Gefen IP-based devices that are connected to the network will be displayed.

> **Important**
>
> In order for a Gefen product to be identified by Syner-G, the Gefen product must support the *discovery* feature in order for the product to be listed within the **Discovery and Configure IP** screen.

3. The **Discover and Configure IP** screen will display the product name, IP address, MAC address, and the description of each Gefen product that is detected.



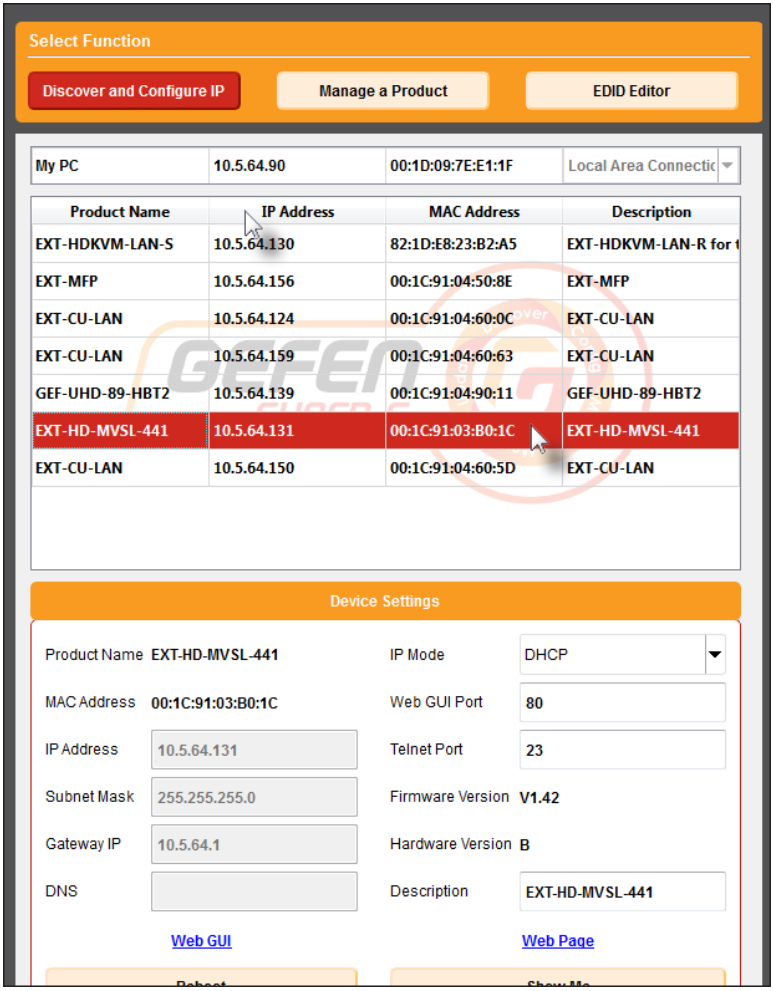
► If a Gefen product is added to the network, then Syner-G will automatically update the product list to include the new device within 15 - 30 seconds.

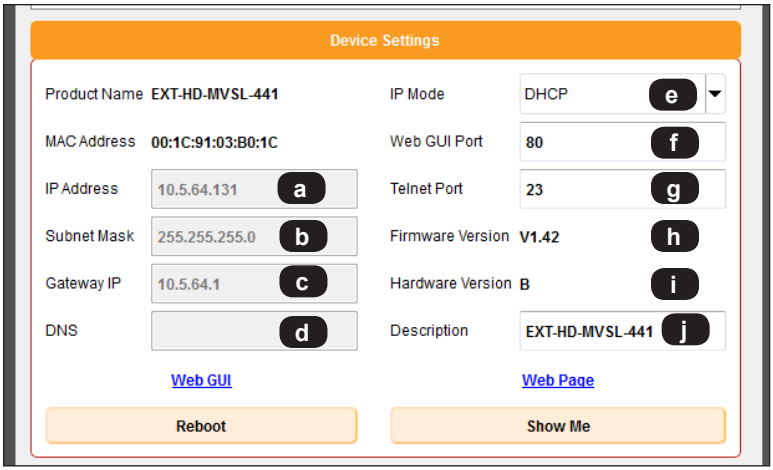
► If a Gefen product is removed from the network, then Syner-G will automatically update and remove the product from the list within 60 seconds.

Configuring Device Settings

The Syner-G Software Suite allows the network settings of the selected device to be changed. For this example, we will select the 4x1 Multiview Switcher for HDMI.

1. Select the desired network device from the product list.
2. The selected device will be highlighted in red.
3. IP and other settings for the selected device will appear under **Device Settings**, in the bottom-portion of the screen.





ID	Name	Description
a	IP Address	Enter the desired IP address of the device in this field. This option is only enabled if the **IP Mode** drop-down is set to `Static`.
b	Subnet Mask	Enter the desired subnet mask in this field. This option is only enabled if the **IP Mode** drop-down is set to `Static`.
c	Gateway IP	Enter the desired gateway address in this field.This option is only enabled if the **IP Mode** drop-down is set to `Static`.
d	DNS	Enter the desired gateway address in this field.This option is only enabled if the **IP Mode** drop-down is set to `Static`.
e	IP Mode	Select the IP mode from this drop-down list: `DHCP` or `Static`.
f	Web GUI Port	Enter the HTTP listening port in this field. The default setting is `80`.
g	Telnet Port	Enter the Telnet listening port in this field. The default setting is `23`.

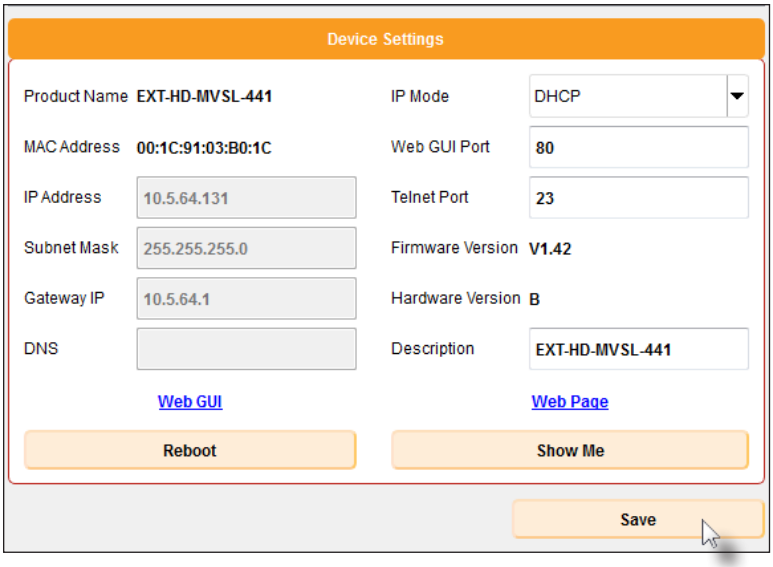
ID	Name	Description
h	Firmware Version	Displays the current firmware version used by the selected device.
i	Hardware Version	Displays the current hardware version used by the selected device.
j	Description	Displays the description used by the selected device to identify it on the network.

4. Click in the desired field to change the current value.

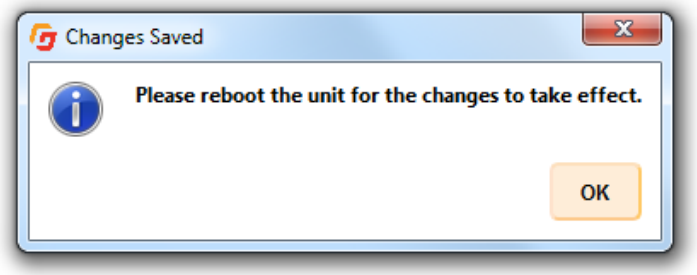
Information

When working with IP-based products, the IP Address, Subnet Mask, Gateway IP, and DNS fields cannot be modified unless the IP Mode is set to Static.

5. Click the **Save** button at the bottom of the screen.

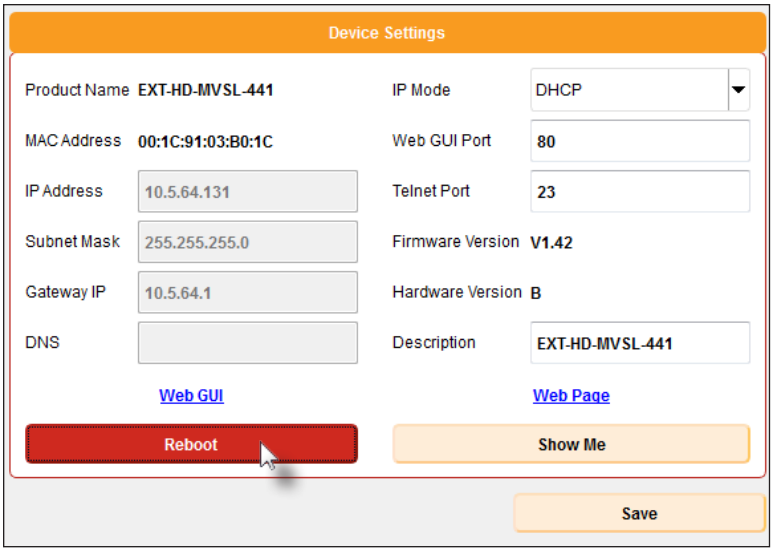


6. The following message box will be displayed:



7. Click the **OK** button to continue.

8. Click the **Reboot** button near the bottom-left portion of the interface. The button will turn red when it is clicked.



9. The device information, under Device Settings, will automatically be deleted as the device reboots.

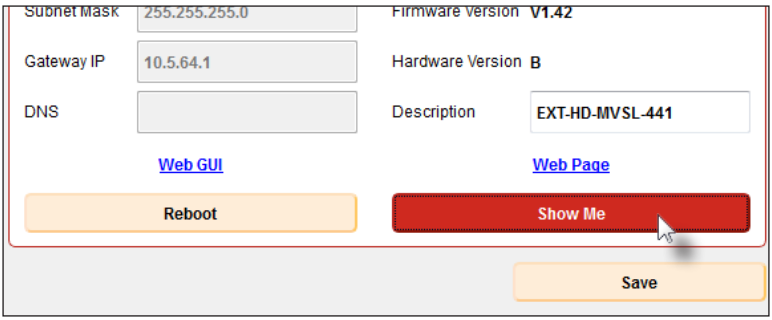
   Once the device is available under the product list, select the device again if necessary. The new network settings for the device will be displayed.

The "Show Me" Feature

When the Syner-G Software Suite discovers a Gefen device on the network, the "Show Me" feature can be used to physically identify the device. If a Gefen network device is discoverable by the Syner-G Software Suite, then the "Show Me" feature is also supported by that product.

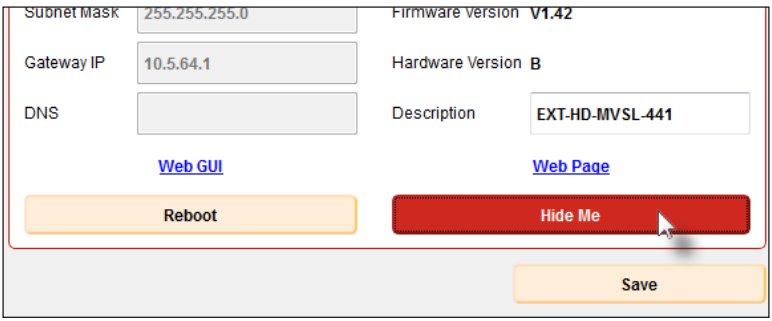
1. Select the desired device under the product list.

2. Click the **Show Me** button near the bottom-right corner of the interface. The button will turn red when it is clicked.



3. Refer to the documentation accompanying the Gefen product being used for more information on the **Show Me** feature.

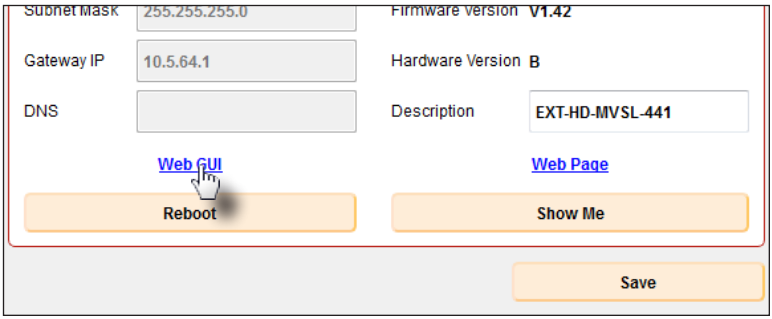
4. Click the **Hide Me** button to stop the Power LED from flashing. The button will turn red when it is clicked.



Accessing the Web Interface

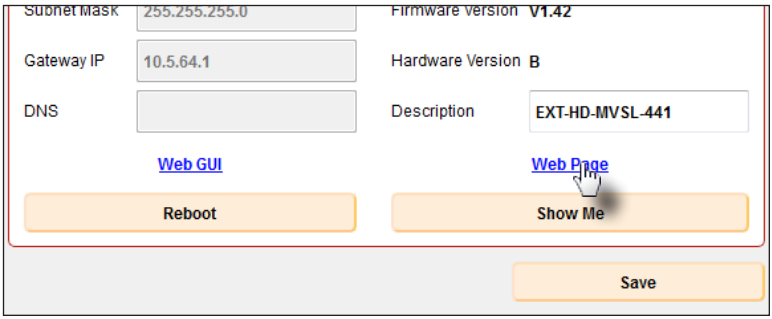
If a Gefen product has a Web interface, click the **Web GUI** link near the bottom-left portion of the screen, under **Device Settings**.

The Web GUI will differ between products. Refer to the product's User Manual for details on each setting.



Accessing the Web Product Page

To display the product Web page for the selected product, click the **Web Page** link near the bottom-right portion of the screen, under **Device Settings**.



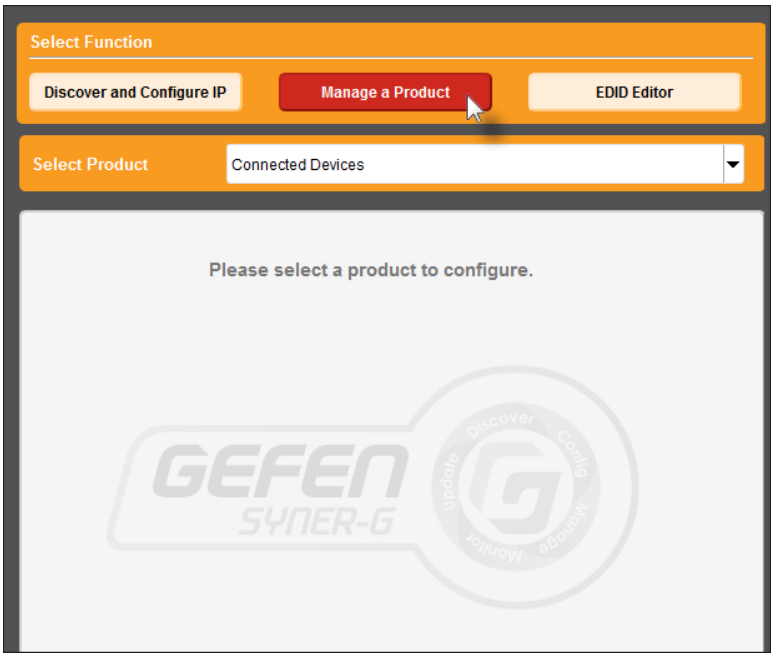
Manage a Product

The Manage a Product screen allows management of various product-dependent settings. Before launching Syner-G, makre sure that a USB cable is connected between the compatible Gefen product and the computer that is running the Syner-G software.

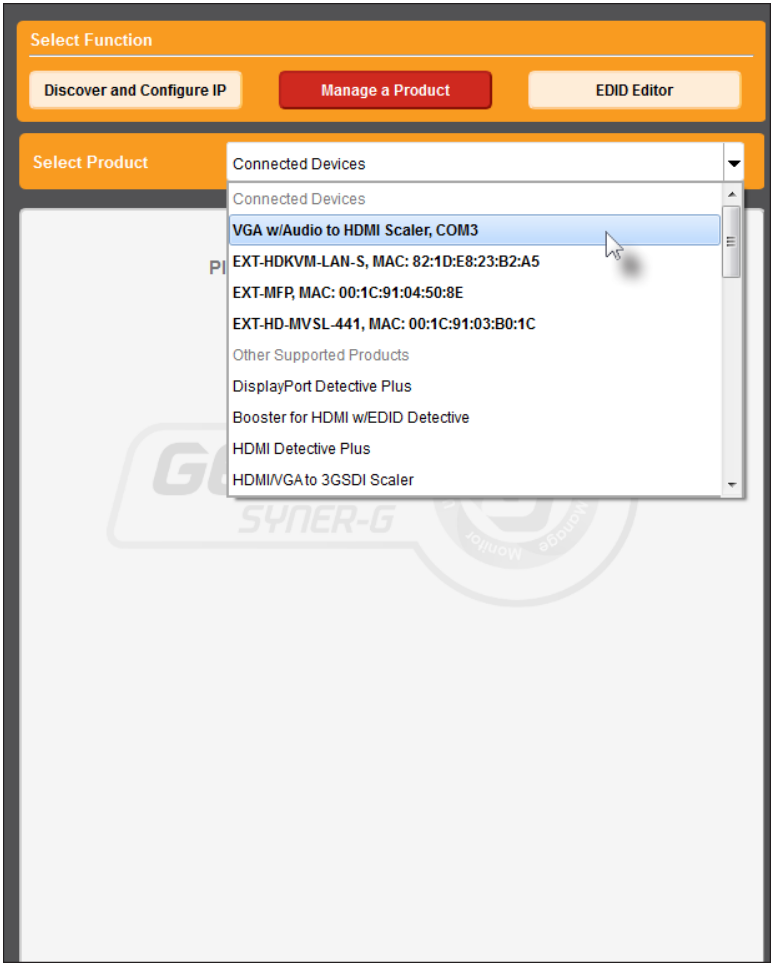
> **Information**
>
> Available features within the **Configure** tab will vary, depending upon the product that is selected. Refer to the Compatibility Table (page 70) for more information.

1. Launch the Syner-G Software Suite from the Start Menu or using the shortcut from the Windows Desktop.

2. Click the **Mange a Product** button.



3. Select the connected device from the **Select your product** drop-down list.



If the product is not displayed in the Product drop-down list, verify the following:

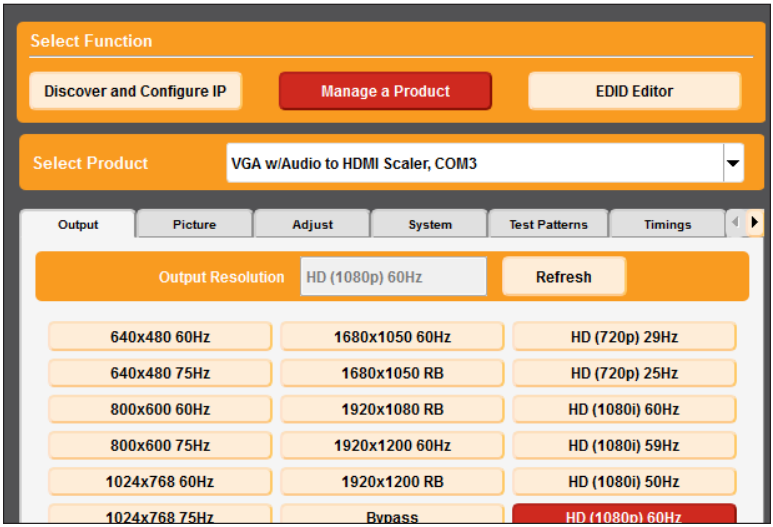
► The compatible Gefen product is connected to the computer that is running the Syner-G Software Suite, using a USB-to-Mini USB cable.

Note that if the product is not connected, then the device will not be available from the **Select your product** drop-down list.

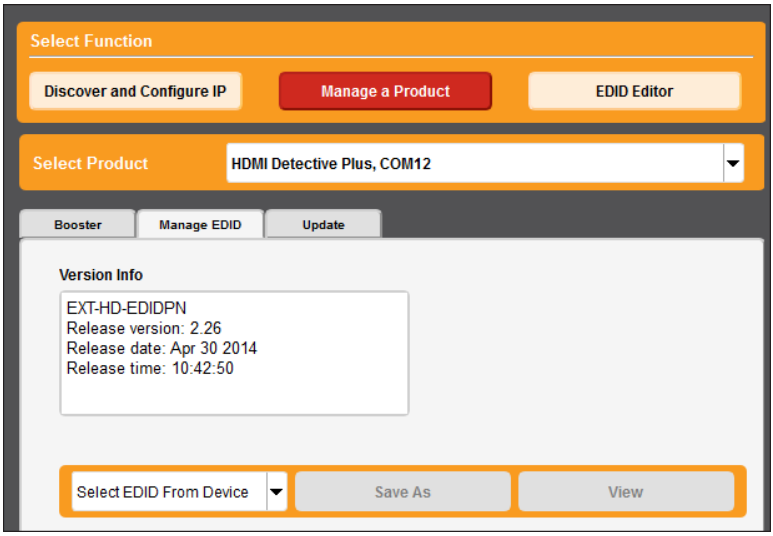
► Make sure that the virtual COM port is installed and functioning correctly under Control Panel.

4. The screen will be populated with settings or features, based on the product that is selected.

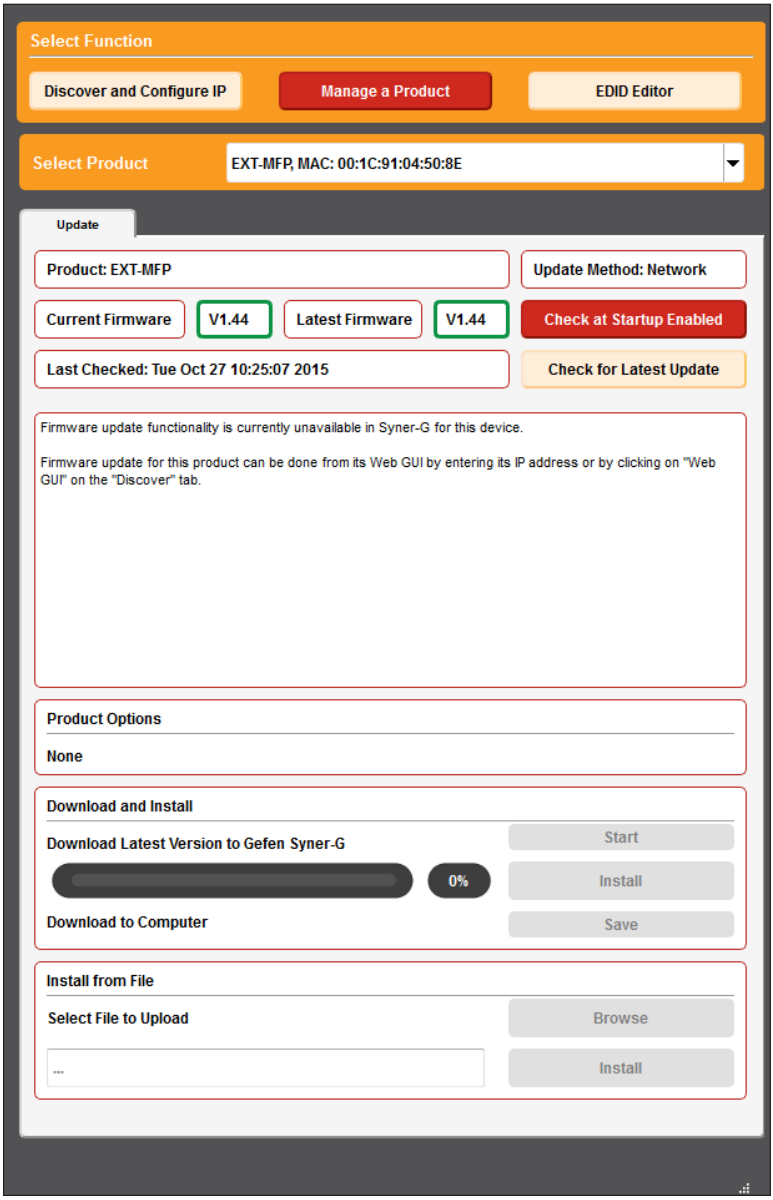
   ► If the selected product supports real-time control of audio and/or video settings, such as the Gefen VGA w/Audio to HDMI Scaler, then the screen will appear as shown:



   ► If the Gefen HDMI Detective Plus is seleted (and connected), then the following screen will be displayed.



► Finally, if the selected product does not support control settings, then the **Update** tab will be displayed, as shown below. However, since the Gefen Multi-Format Processor (selected) is a network device, the firmware update process will be performed using the product's built-in web interface. Refer to the product's User Manual for more information.



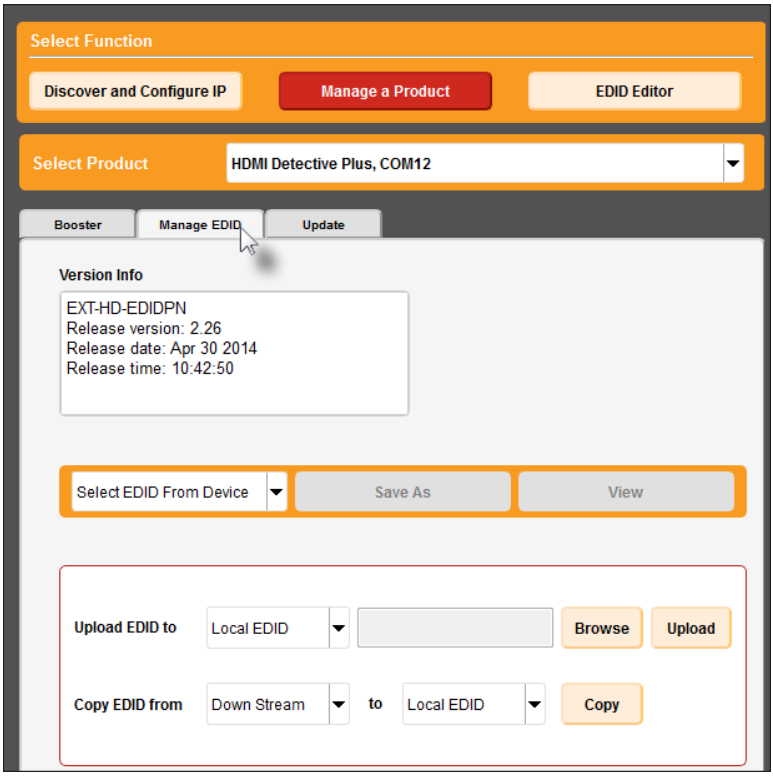
Downloading an EDID

EDID data can be downloaded from the connected Gefen Detective device to a local file. Note that the Downstream EDID or Bank EDID data cannot be downloaded to a file. To download this EDID data, it must first be copied to the Local EDID. See Copying an EDID (page 27) for more information on copying EDID data.

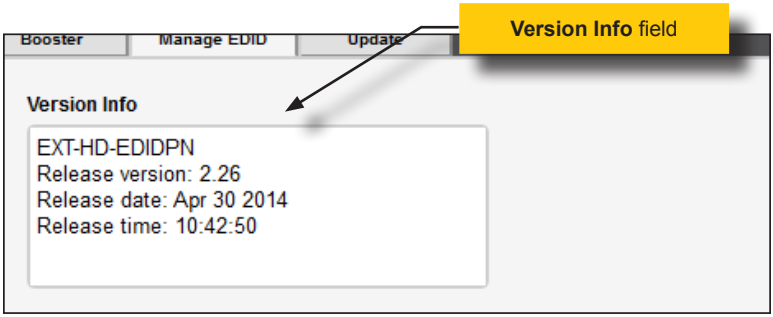
Important

To use this feature, the selected product must support the downloading of EDID data. In the example, below, we will be using the Gefen HDMI Detective Plus.

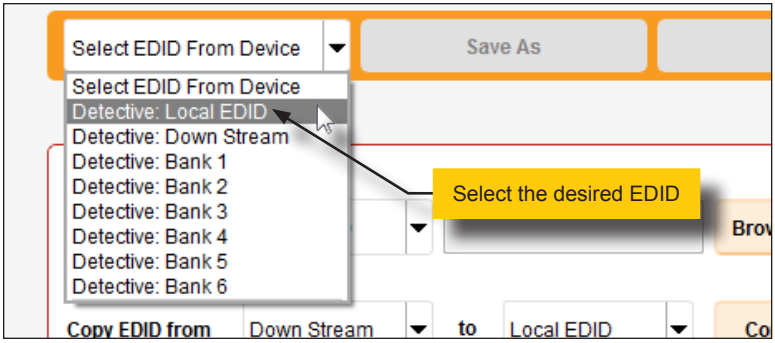
1. Click the **Manage a Product** button and select the connected product from the drop-down list.
2. Click the **Manage EDID** tab.



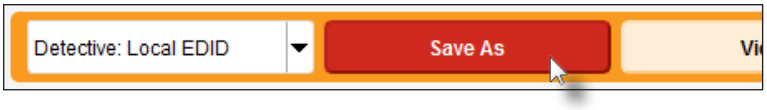
3. Information about the currently selected device will be displayed in the **Version Info** field.



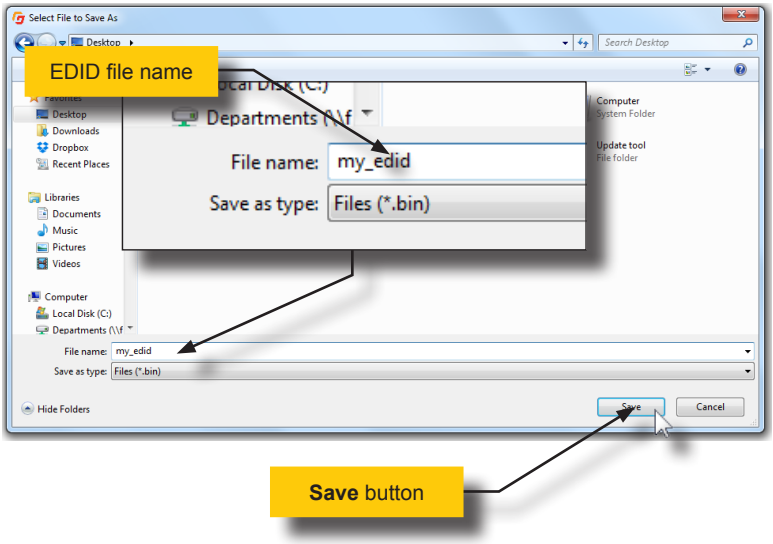
4. Click the drop-down list next to the **Download** button, and select the desired EDID. In this example, we will select `Detective: Local EDID`.



5. Click the **Save As** button.



6. The Windows **Save File** dialog will be displayed. Select the desired folder and specify the name of the file in the **File name** field, within the **Save File** dialog. Make sure to specify the `.bin` extension to the filename.



7. Click the **Save** button.

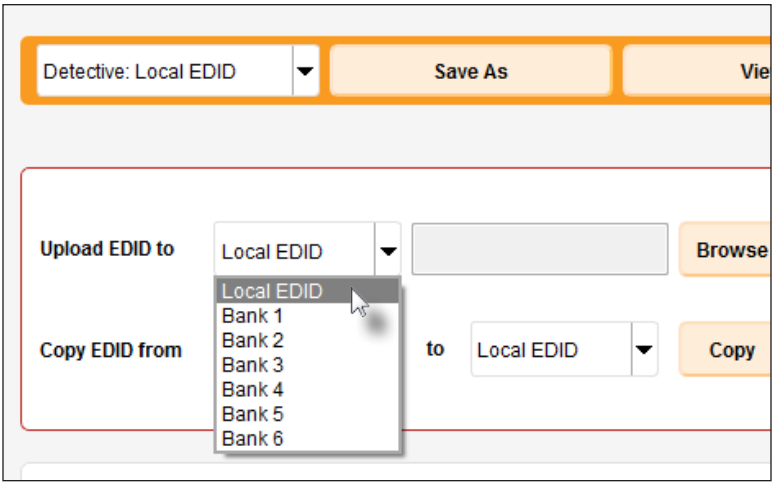
Uploading an EDID

1. Click the **Manage a Product** button and select the connected product from the drop-down list.

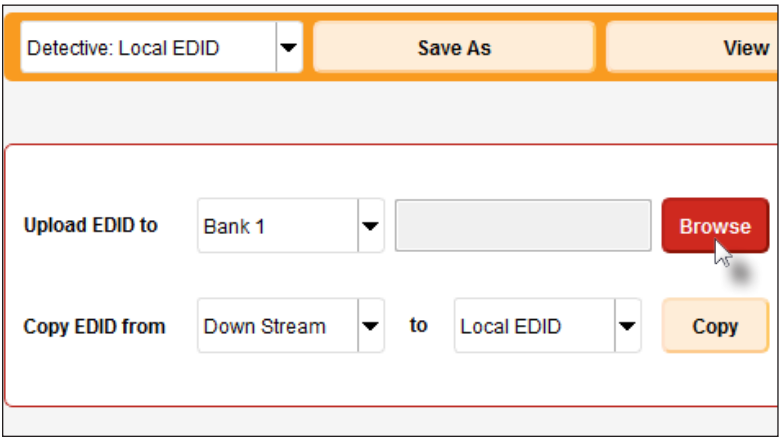
2. Click the **Manage EDID** tab.

3. Click the **Upload EDID to** drop-down list to select the location where the EDID will be uploaded. The EDID can be uploaded to the Local EDID or an EDID bank.

   In the example below, we will select **Bank 1**.



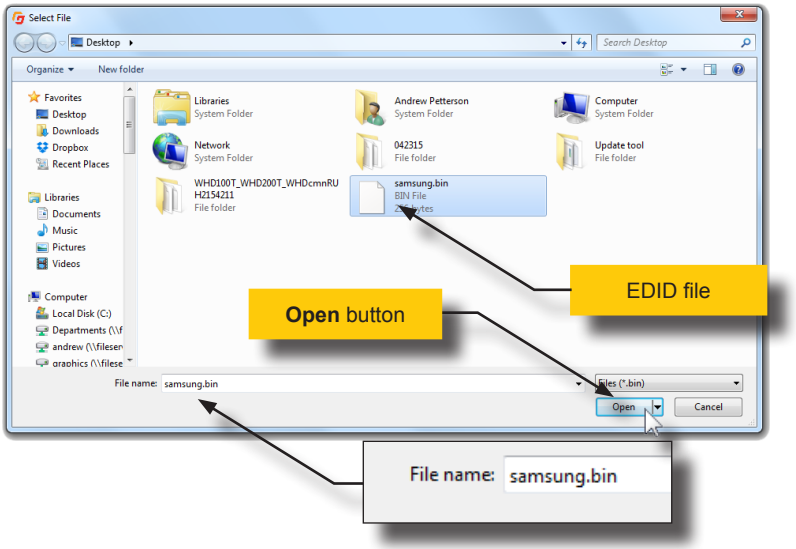
4. Click the **Browse** button.



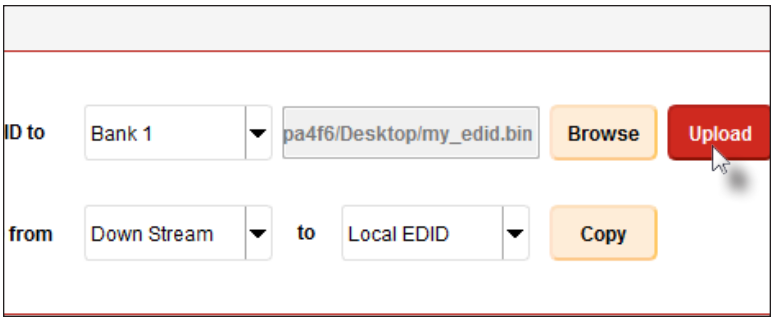
5. The Windows **Select File** dialog will be displayed.

6. Select the desired EDID file. The EDID file must be in `.bin` format.

7. Click the **Open** button.



8. Click the **Upload** button.



9. In the lower-left corner of the interface, the “Uploading...” message will appear as the EDID is uploaded. Once the operation is complete, the “Upload Complete.” message will be displayed.

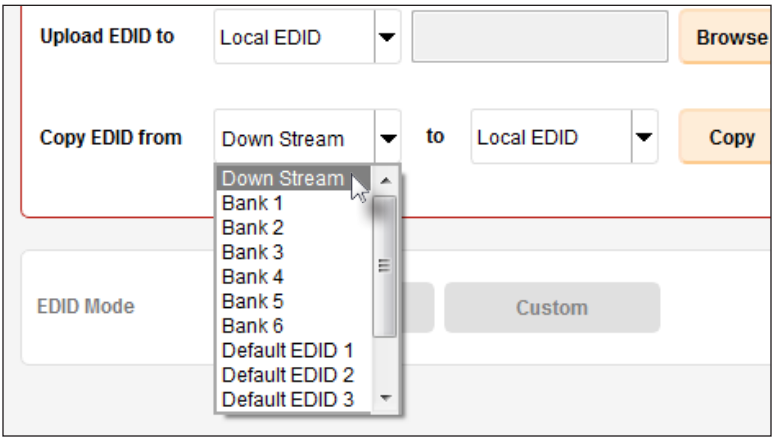
Copying an EDID

1. Click the **Manage a Product** button and select the connected product from the drop-down list.

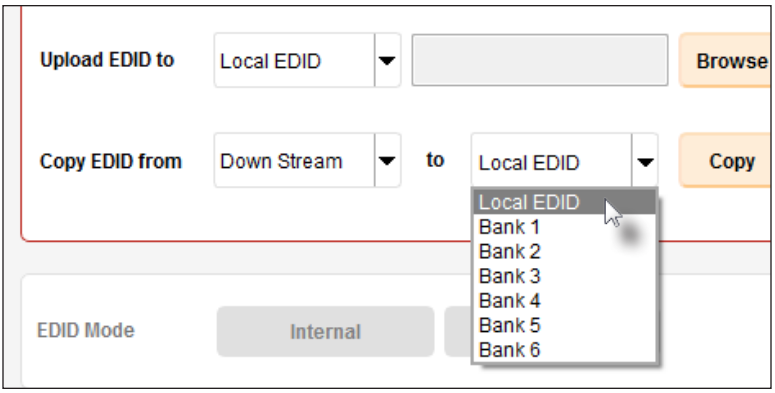
2. Click the **Manage EDID** tab.

3. Click the **Copy EDID from** drop-down list to select the location from where the EDID will be copied. The EDID can be copied from any of the following locations:
   The downstream EDID, an EDID bank, or a default EDID location

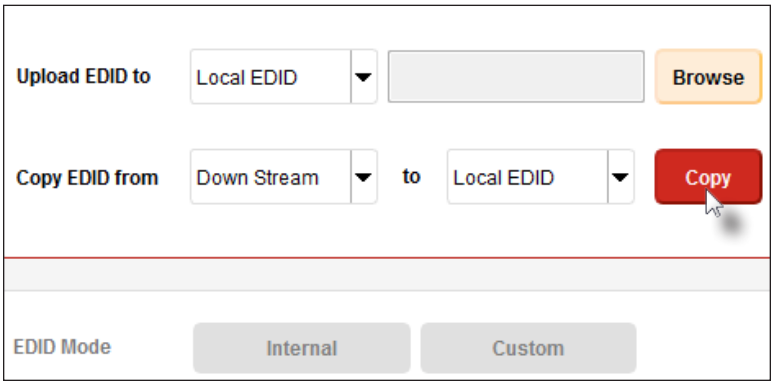
   In the example below, we will select **Down Stream**.



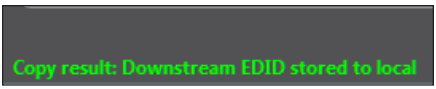
4. Click the **Copy EDID** to drop-down list to select the location to where the EDID will be copied. The EDID can by copied to the Local EDID or to an EDID bank.



5. Click the **Copy** button.



6. In the lower-left corner of the interface, the “Copying...” message will appear as the EDID is uploaded. The copy-result message will vary, depending upon the copy operation.



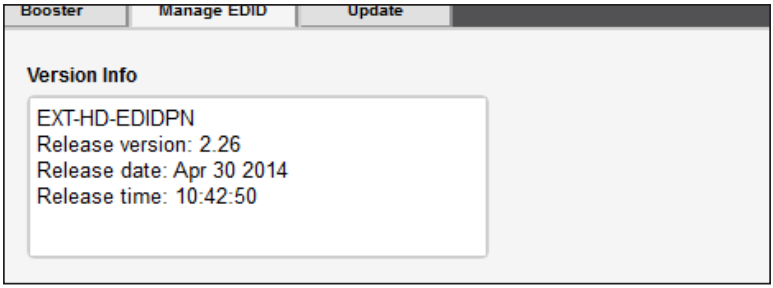
In this example, since we copied the downstream EDID to the local EDID, the “Copy result: Downstream stored to local.” message is displayed.

Viewing an EDID

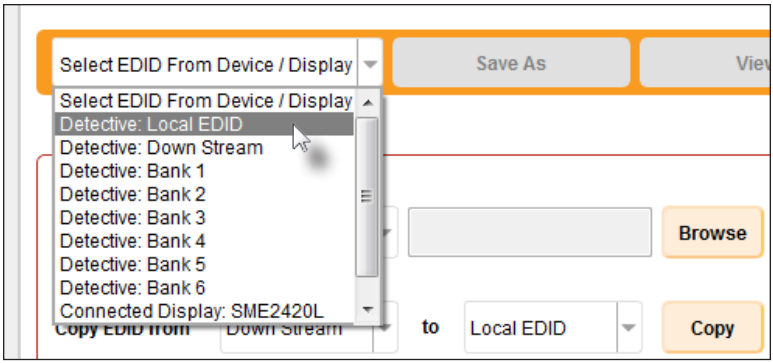
1. Click the **Manage a Product** button and select the connected product from the drop-down list.

2. Click the **Manage EDID** tab.

   In this example, we will select the HDMI Detective Plus (Gefen part no. EXT-HD-EDIDPN).

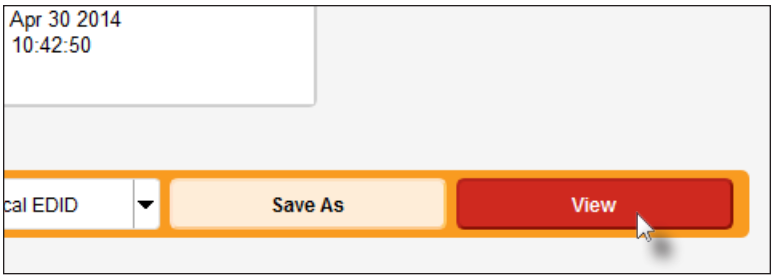


3. Click the **Select EDID From Device / Display** drop-down list to select the desired EDID.



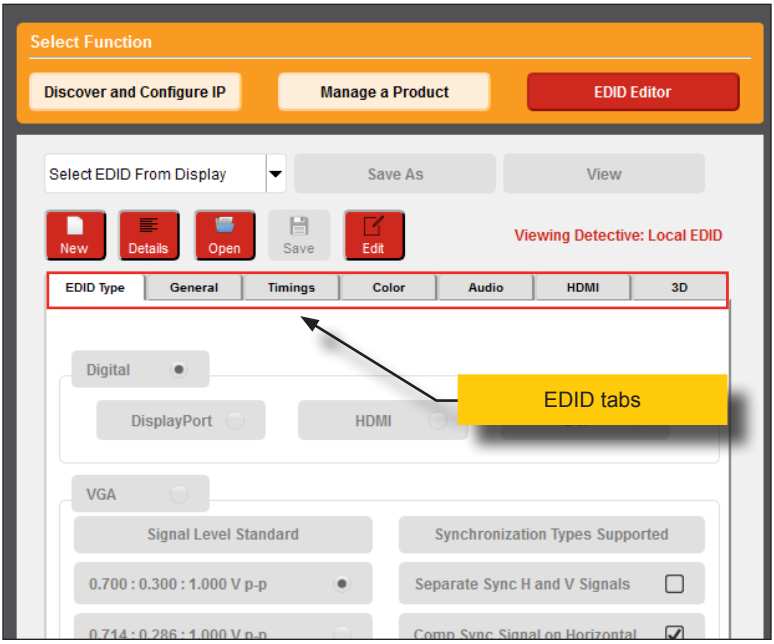
Note that the display, which is connected to the computer, is also available in the drop-down list. In this way, we can download, view, and/or edit the EDID from the display (sink) device.

4. Click the **View** button.



5. After a few seconds, Syner-G will also switch to the **EDID Editor** screen. See EDID Editor (page 44) for more information.

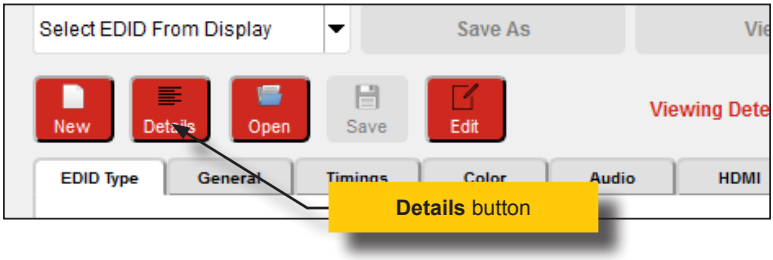
6. Click the desired EDID tab to view specified information on the EDID. Note that some sections within a tab use scroll bars to indicate that more information is available.



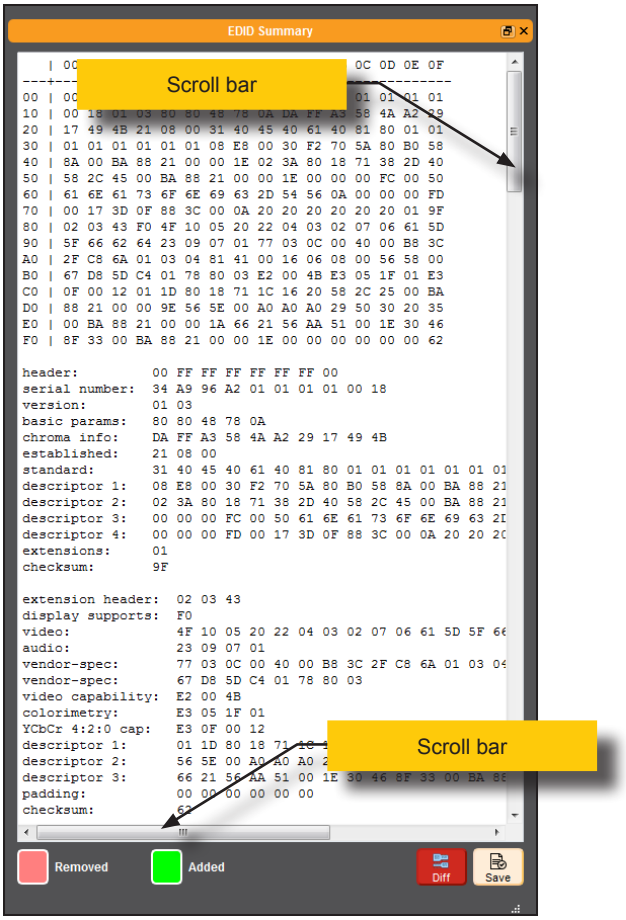
Information

Video cards which use Intel® chipsets will only retreive the first block (128 bytes) of the EDID.

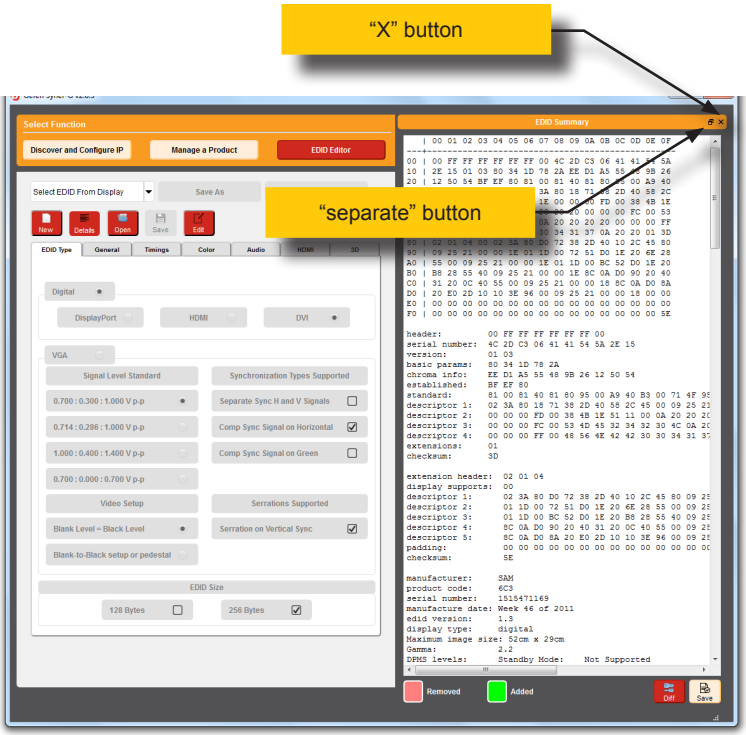
7. Click the **Details** button.



8. The **EDID Summary** window will be displayed. Use the horizontal and vertical scroll bar, as needed, to view the EDID information.



9. Click the button, in the upper-right corner of the **EDID Summary** window to separate the **EDID Summary** window from the main Syner-G window:



10. Double-click the window title bar of the detached EDID Summary to reattach it to the main window. it to the main Syner-G window.

11. To close the **EDID Summary** window, either click the button, in the upper-right corner of the **EDID Summary** window or click the **Details** button in the main Syner-G window.

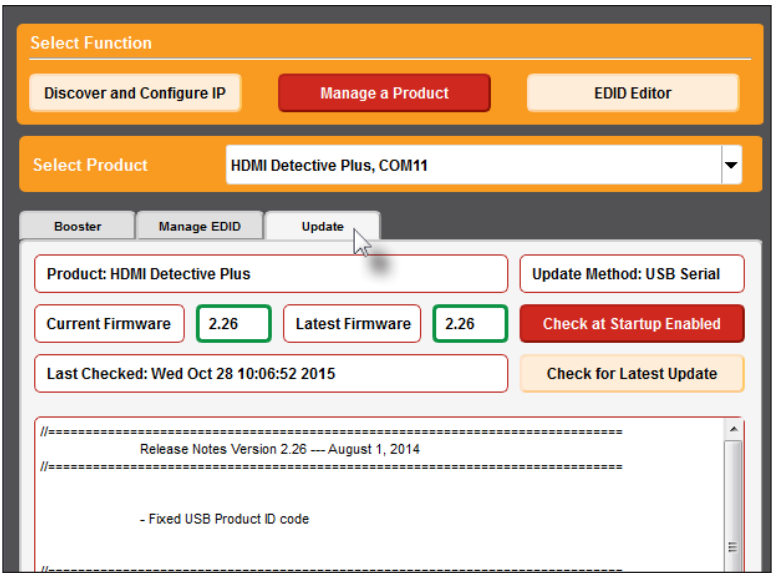
Automatic Update Procedure

Important!

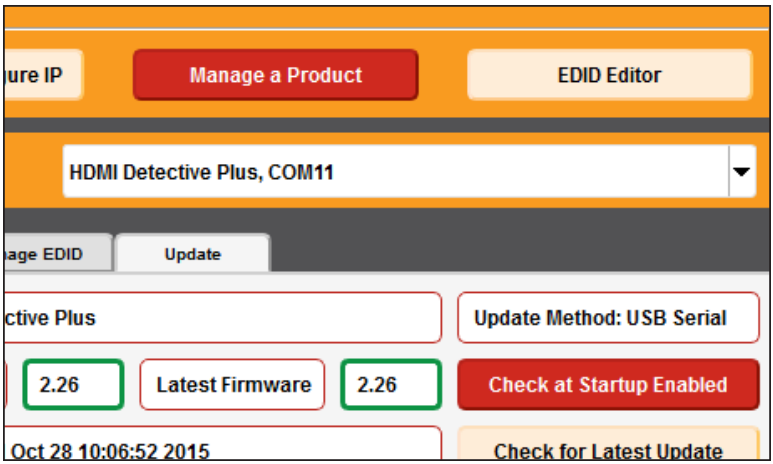
Before launching the Syner-G Software Suite, make sure that the unit to be upgraded is powered-on and that an RS-232 cable is connected between the unit and the computer that is running the Syner-G Software Suite.

1. Make sure that the computer, that is running the Syner-G Software Suite, is connected to the Internet.
2. Launch the Syner-G Software Suite from the Start Menu or using the shortcut from the Windows Desktop.

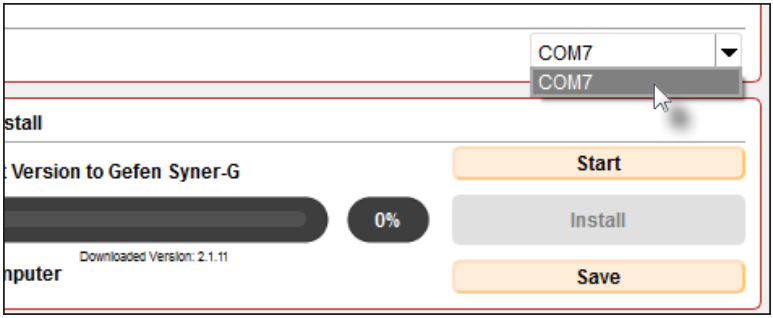
3. Click the **Manage a Product** button.
4. Select the product to be updated from the drop-down list.
5. Click the **Update** tab.



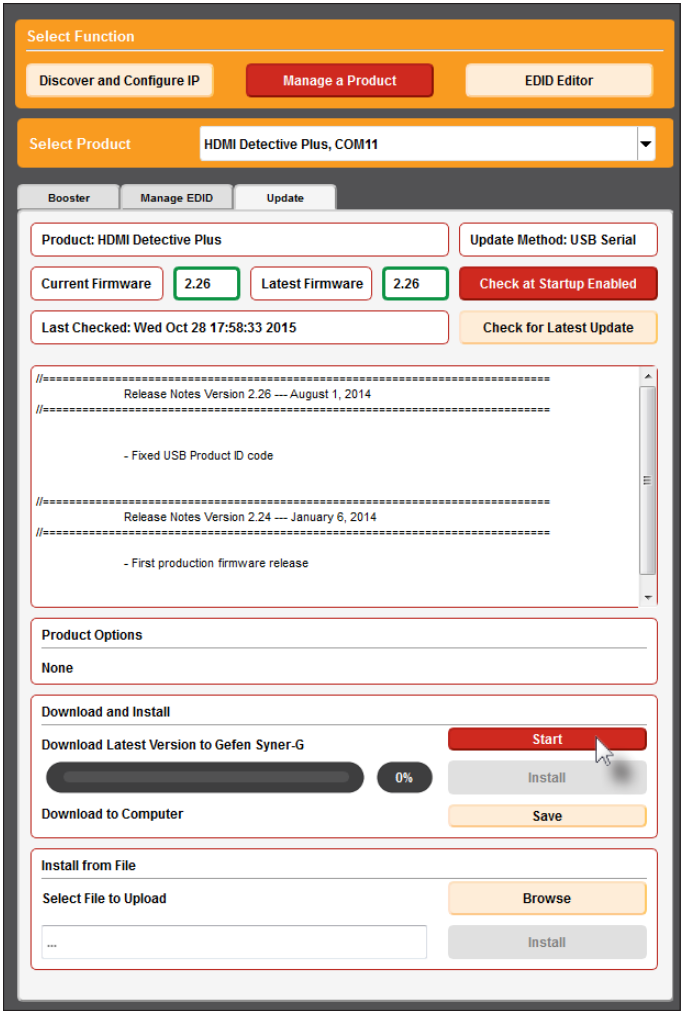
6. Once the product is selected, the following information will be displayed near the top-portion of the screen. In this example, the Gefen HDMI Detective Plus uses USB for updating. The latest firmware for the selected product will also be displayed. In this case, the latest firmware is version 2.26.



If a the device being updated uses an RS-232 cable, then a COM Port drop-down list will be provided, as shown:



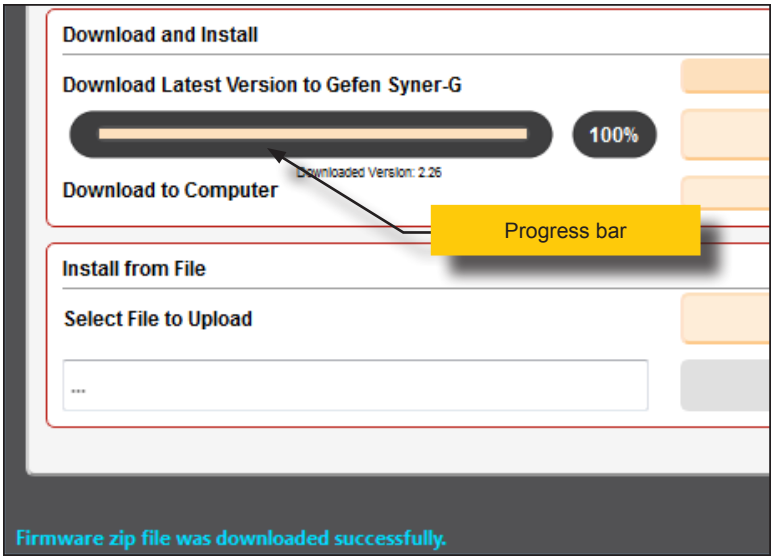
7. Click the **Start** button to begin downloading the firmware.



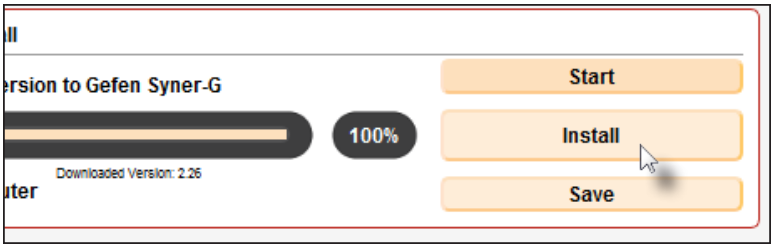
The Syner-G Software Suite will automatically download the firmware file for the selected product. This process should take a few seconds.

Once the download process has completed, the progress bar will indicate 100%, as shown on the next page.

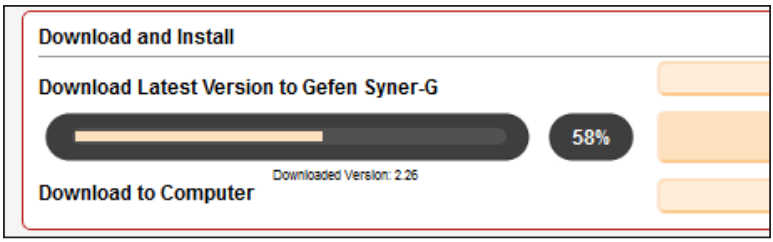
A message will also appear at the bottom of the window, indicating that the firmware file was successfully downloaded.



8. Click the **Install** button to begin installing the software.

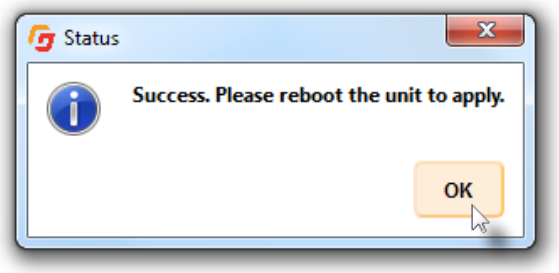


9. The installation process will begin and the progress bar will indicate the current status.



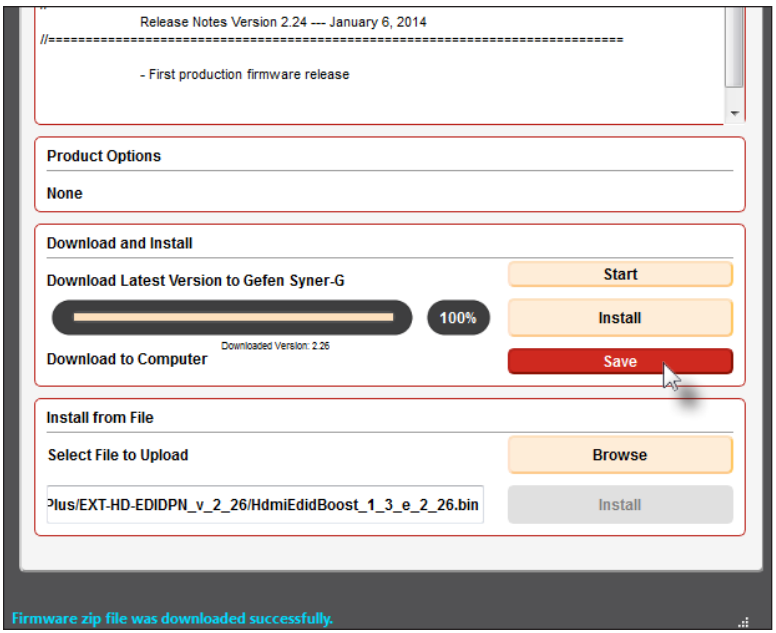
10. After the installation process has completed, the following message box will be displayed.

11. Click the **OK** button and follow the directions that were provided on the message box.



Saving the Firmware File

If you wish to save the firmware file to a specified location on your computer, click the **Save** button. The **Save File** dialog box will be displayed. Select to desired location and then click the **Save** button on the **Save File** dialog box. This is also useful when using Syner-G on another computer that is not connected to the Internet. See Manual Update Procedure (page 38) for more information.



Manual Update Procedure

This method can be used if the computer being used does not have an Internet connection. Download the firmware using another computer, then transfer the file to the computer which is connected to the Gefen product and running the Syner-G software.

Important!

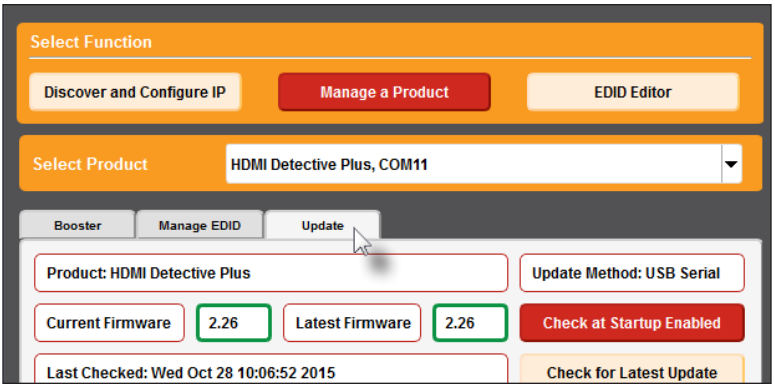
Before launching the Syner-G Software Suite, make sure that the unit to be upgraded is powered-on and that an RS-232 cable is connected between the unit and the computer that is running the Syner-G Software Suite.

1. Download the required firmware from the Support section of the Gefen Web site using a computer that has an Internet connection.

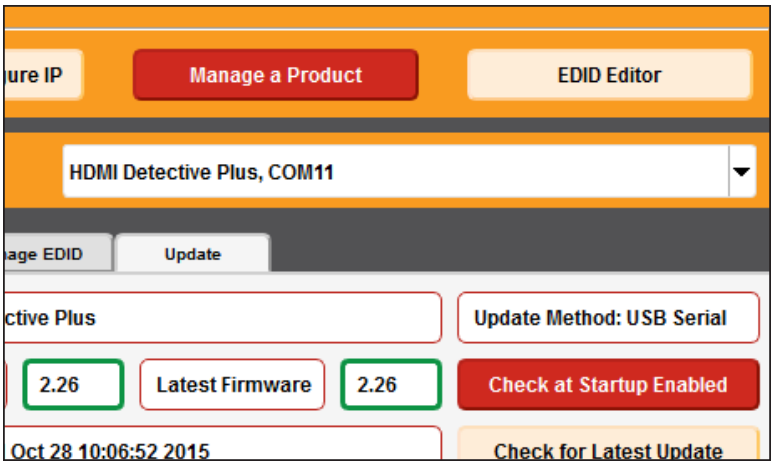
   Do not extract the file(s) from the `.zip` file.

2. Launch the Syner-G Software Suite from the Start Menu or using the shortcut from the Windows Desktop.

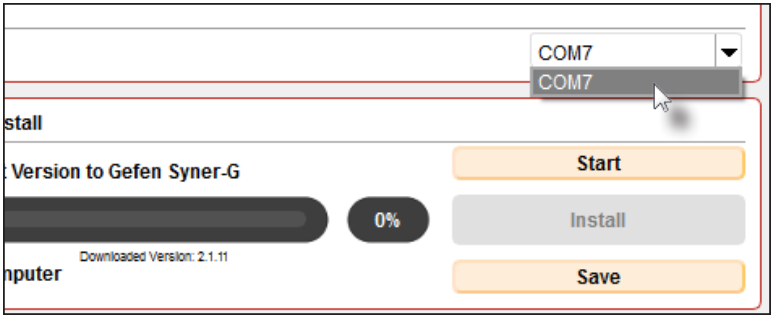
3. Click the **Manage a Product** button.
4. Select the product to be updated from the drop-down list.
5. Click the **Update** tab.



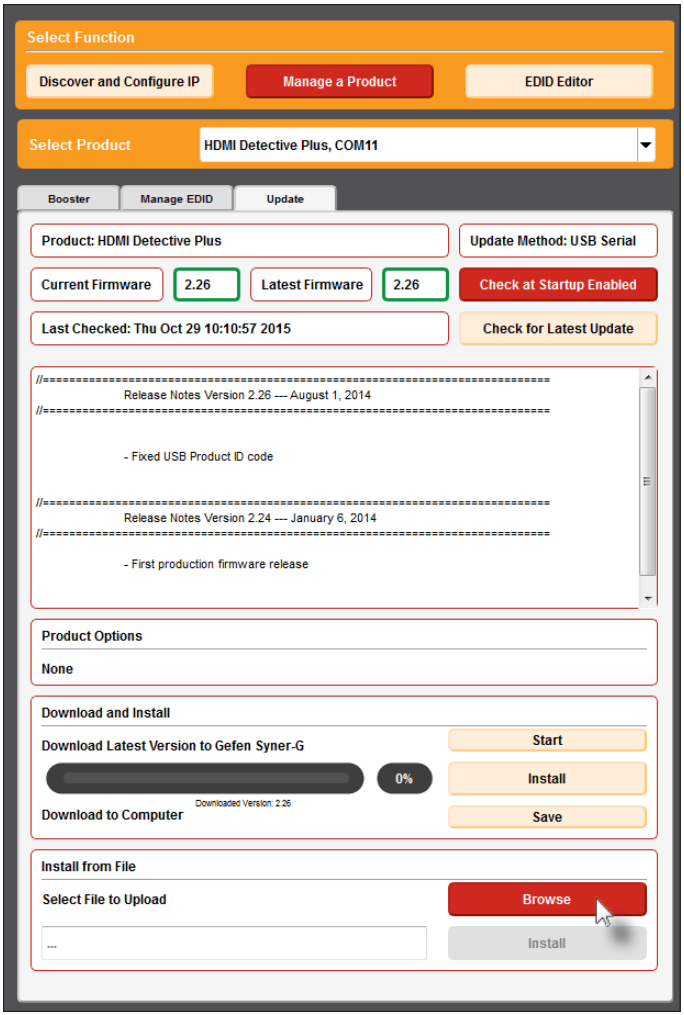
6. Once the product is selected, the following information will be displayed near the top-portion of the screen. In this example, the Gefen HDMI Detective Plus uses USB for updating. The latest firmware for the selected product will also be displayed. In this case, the latest firmware is version 2.26.



If a the device being updated uses an RS-232 cable, then a COM Port drop-down list will be provided, as shown:



7. Click the **Browse** button, under the **Install from File** section.



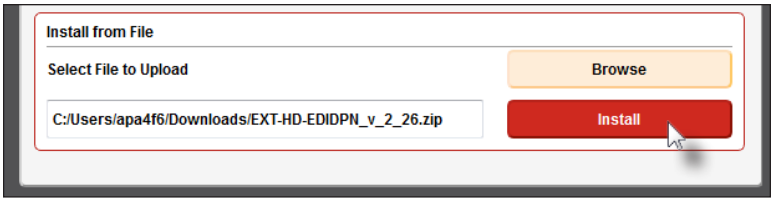
8. The **Select File** dialog will be displayed.

9. Select the firmware file. The firmware file must be in `.zip` format. Do not extract the contents from the `.zip` file.

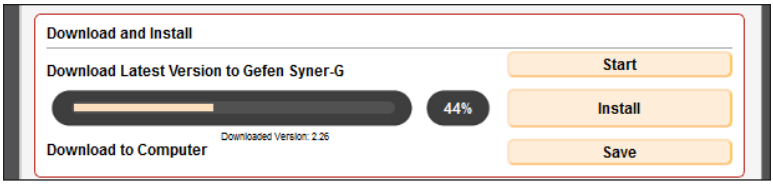
10. Click the **Open** button on the **Select File** dialog.

11. The selected file will be displayed in the **Select File to Upload** field.

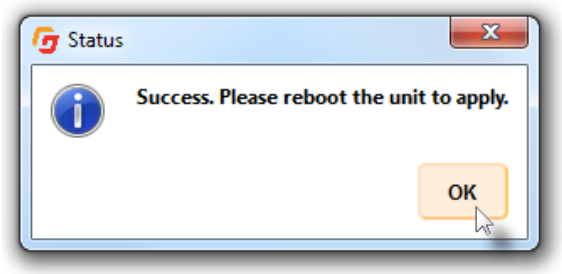
12. Click the **Install** button.



13. The installation process will begin and the progress bar will indicate the current status.



14. After the installation process has completed, the following message box will be displayed.



15. Click the **OK** button and follow the directions that were provided on the message box. After the installation process has completed, click the **OK** button in the message box that is displayed.

16. The firmware upgrade process is now complete.

This page left intentionally blank.

Syner-G
Software Suite

3 Advanced Operation

We've already seen a basic example of using the **View** button, under the **Manage a Product** screen, to view an EDID. In this next section, we will be going through the process of creating / editing an EDID. The **EDID Editor** screen provide the ability to create and edit a new EDID as well as opening, saving, and viewing EDID files.

Warning!

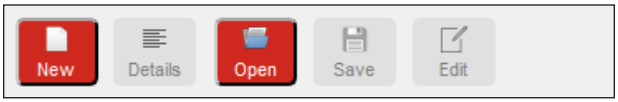
Modifying or creating an incompatible EDID may result in no picture being displayed or possible damage to the display (or other sink device).
This section is intended for advanced users, only.

Using the EDID Wizard

The next several sections will take you through the process of creating a new HDMI EDID using the EDID wizard. The following sections ***only*** illustrate the EDID-creation process and does not necessarily create a working or valid EDID.

1. Click the **EDID Editor** tab.

2. Once the **EDID Editor** screen is displayed, the following buttons are available:



- **New**
  Click this button to create a new EDID in *Wizard Mode* or *Normal Mode* (see next page for details).

- **Details**
  Click this button at any time to display the **EDID Summary** window. This button is available if a new EDID is being created or when an EDID is being viewed. See Viewing an EDID (page 29) for more information.

- **Open**
  Click this button to open an EDID file (.bin) for editing.

- **Save**
  Click this button to save the changes to the EDID that is being edited. This button is only available if the **Edit** button has been clicked.

- **Edit**
  Click this button to edit the currently viewed or loaded EDID. Once this button is clicked it will be disabled until another EDID is selected.

There are two methods by which the Syner-G Software Suite allows you to create an EDID from scratch:

- **Wizard mode**
  Uses a step-by-step process to assist in the process of creating a new EDID.

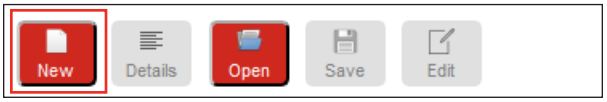
- **Normal mode**
  Allows us to click on any of the tabs (EDID Type, General, Timings, etc.) in any order to create / edit the EDID.

To introduce the process of modifying EDID data, we will illustrate the creation of an HDMI EDID using *Wizard Mode*.

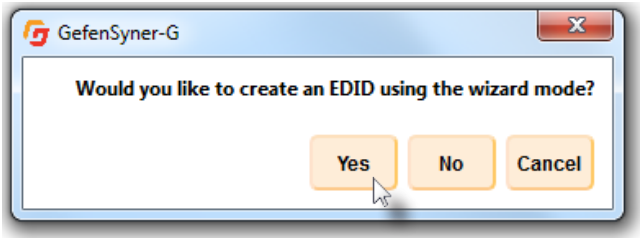
Warning!

The following steps only illustrate the creation process and do not create a valid EDID. Gefen is not responsible for the misuse of any EDID that is created by the user, which can result in the non-operation or damage to sink and/or source devices.

3. Click the **New** button.



4. The following message box will be displayed:



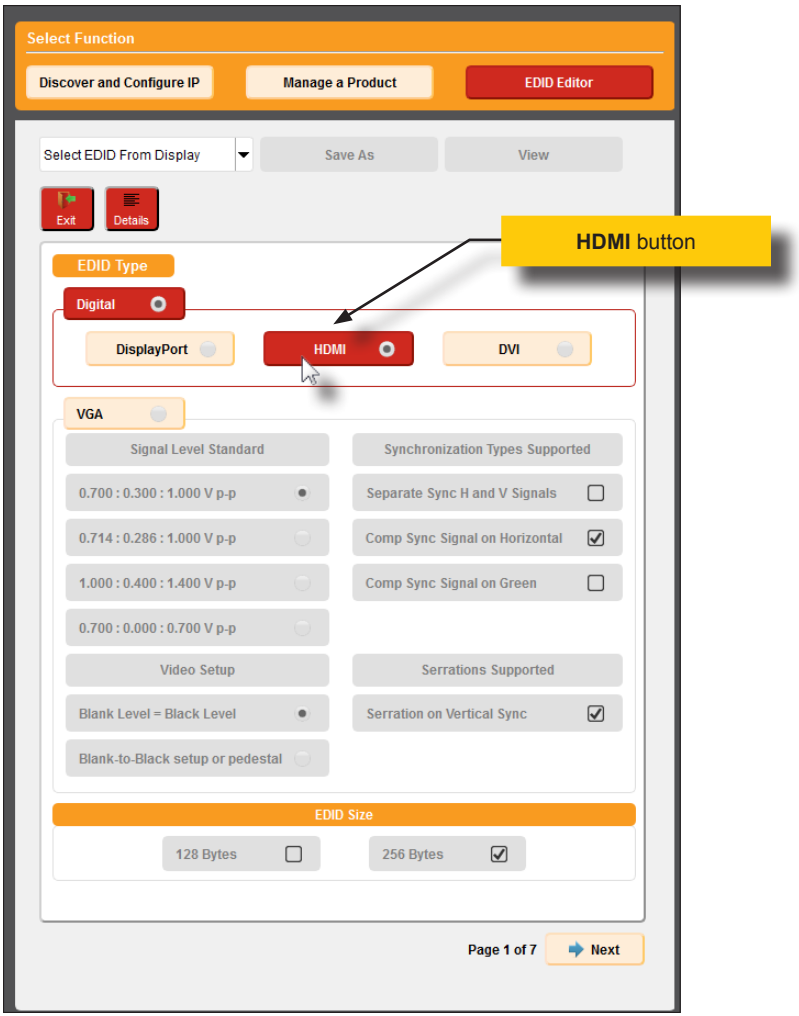
5. Click the **Yes** button to create the EDID using *Wizard Mode*.

6. The **EDID Type** section will be displayed.

Setting the EDID type

1. The **Digital** button will be selected, by default.

2. Select the type of interface: **DisplayPort**, **HDMI**, **DVI**, or **VGA**. For this example, make sure that **HDMI** is selected.

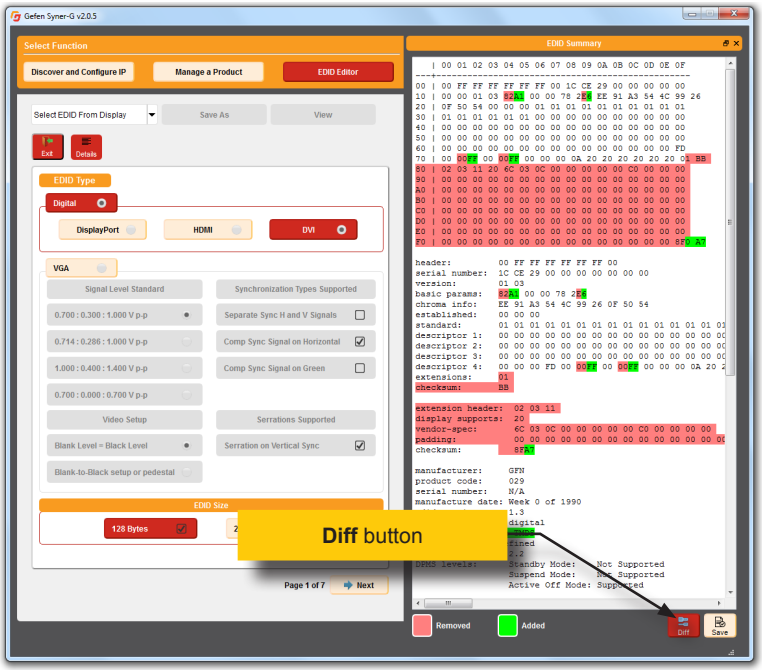


3. Under the **EDID Size** section, select the size of the EDID. If the EDID type is set to **HDMI** or **DisplayPort**, then the size of the EDID can only be 256 bytes.

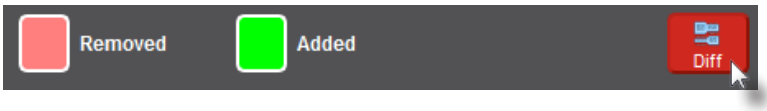
4. Click the Next button at the bottom of the page.

5. Click the **Details** button. The EDID Summary window will also highlight the differences between EDID types:

   ► Click the **DVI** button. Items that differ from the HDMI EDID will be highlighted.



   ► Refer to the legend, at the bottom of the **EDID Summary** window. Items marked in red indicate that the section has been removed. Items that are highlighted in green indicate a section that has been added.



   ► Clicking the **Diff** button will turn off the highlighting and display only the DVI EDID information. Click the Diff button again to see the differences between the EDID types.

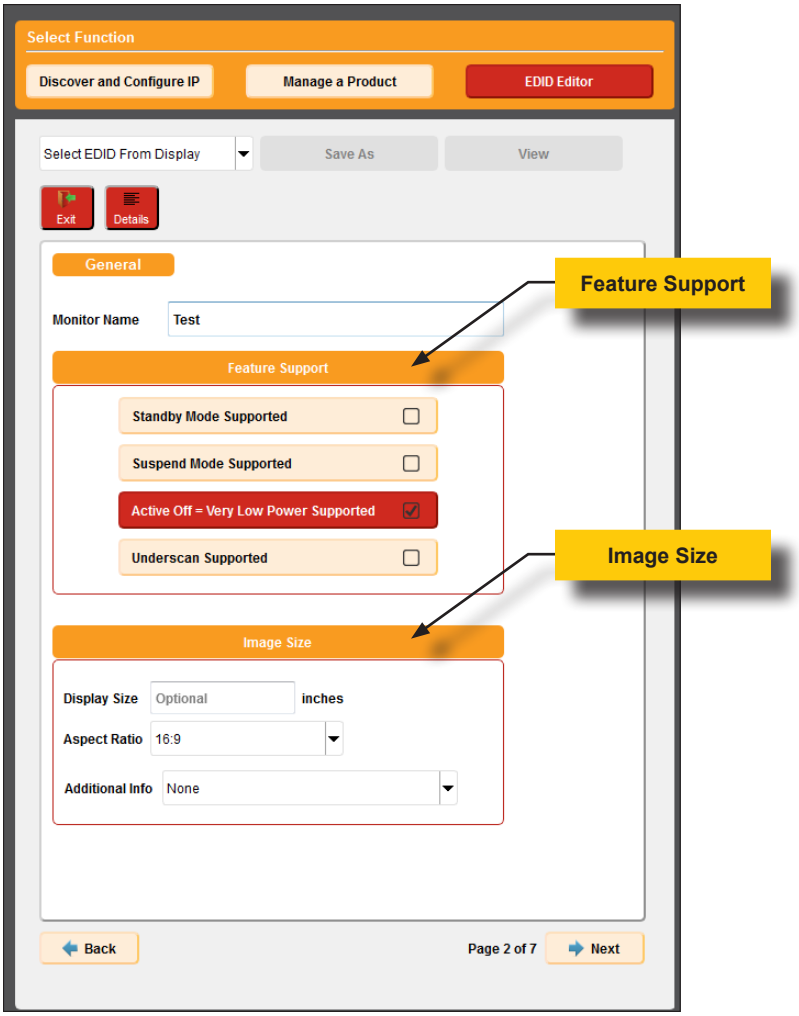
6. Click the **Details** button, again, to close the **EDID Summary** window.

7. Select **HDMI** for the **EDID Type**, again.

8. Click the **Next** button, under the EDID Size section, to proceed to page 2 of the Wizard. The current page number is always indicated near the **Next** button while in *Wizard Mode*.

General Settings

1. Optionally, enter the name of the monitor in the **Monitor Name** field.
2. Make any desired changes under the **Feature Support** and **Image Size** sections.

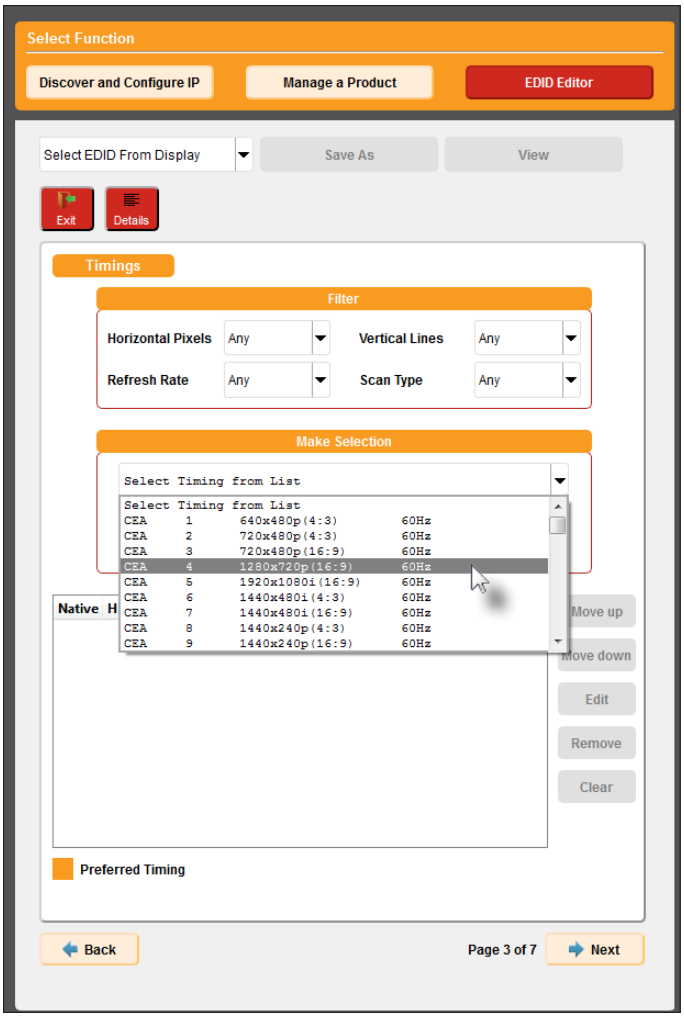


Note that at any time, if you need to return to a previous page in the Wizard, click the **Back** button.

3. Click the **Next** button.

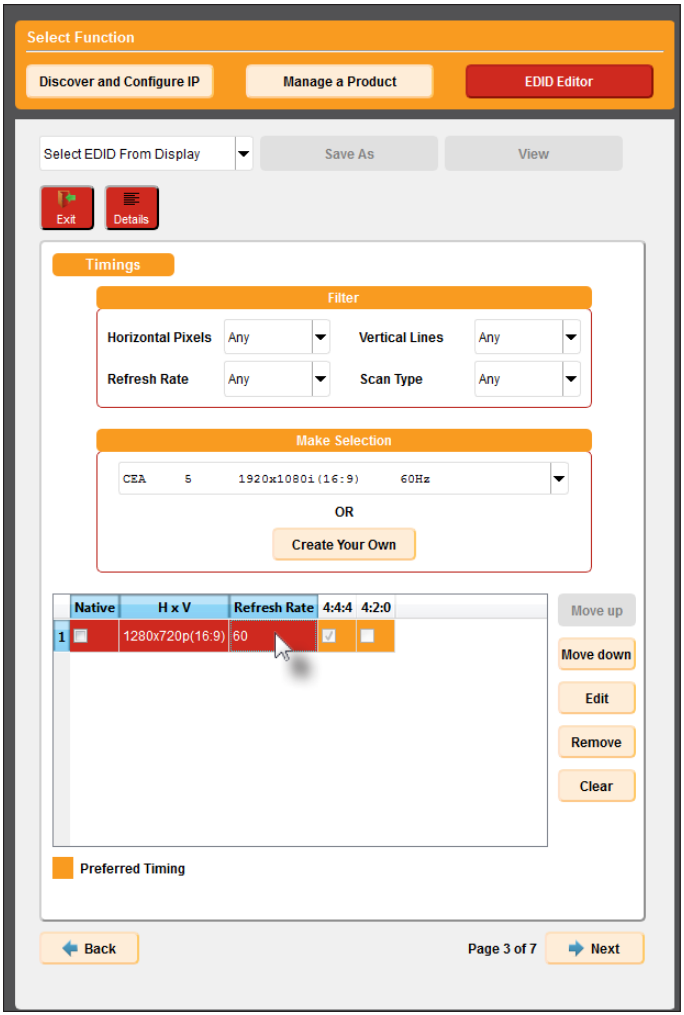
Adding Timings

1. Select a desired timing from the **Make Selection** drop-down list.



Once a timing is selected from the **Make Selection** drop-down list, it is automatically added to the timing list, as shown on the next page.

At least one timing must be added to the list before clicking the **Next** button.



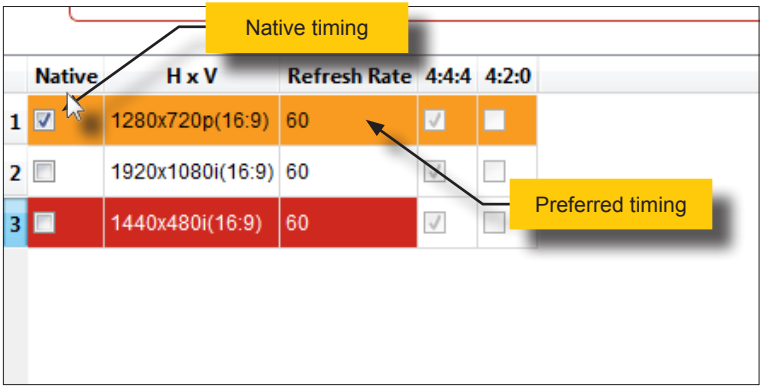
2. Continue adding timings, as desired, from the **Make Selection** drop-down list.

   ► The last timing to be added to the list will always be highlighted in red and will indicate the currently selected timing in the list.

   ► To create a native timing, check the **Native** check box, next to the desired timing.

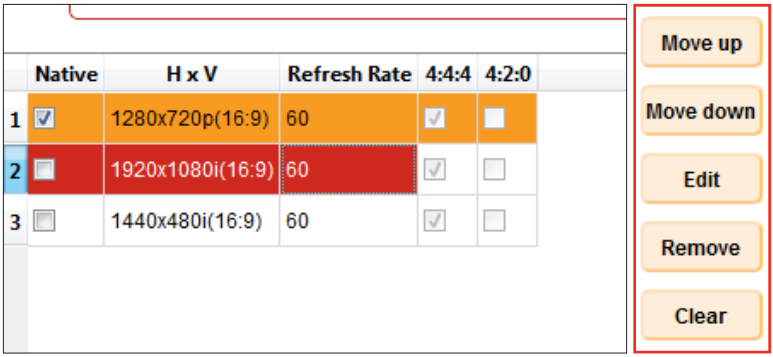
   ► Use the horizontal scroll bar to view the details of each timing.

   ► To limit the number of available timings from the **Make Selection** drop-down list, use the drop-down boxes under the Filter section. Timings can be filtered by **Horizontal Pixels**, **Vertical Lines**, **Refresh Rate**, and/or **Scan Type**.



Note that the **Native** timing does not necessarily need to be the **Preferred** timing.

3. Use the buttons to the right of the list box to move, edit, clear, or delete timings. Note that the first timing listed (highlighted in orange) will always be the *preferred timing*.



- **Move up**
  Moves the selected timing up one row.

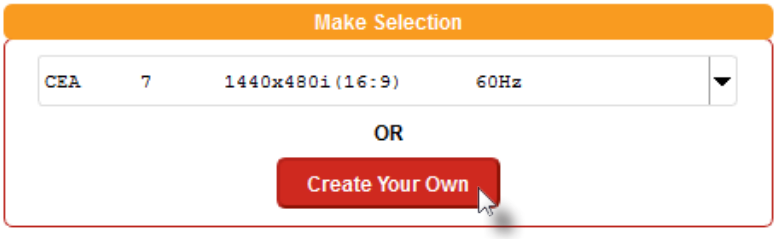
- **Move down**
  Moves the highlighted timing down one row.

- **Edit**
  Opens the **Create Custom Timing** window, allowing detailed modification of the currently selected timing. See the next page for more information.

- **Remove**
  Deletes the currently selected timing from the list.

- **Clear**
  Deletes all timings from the list.

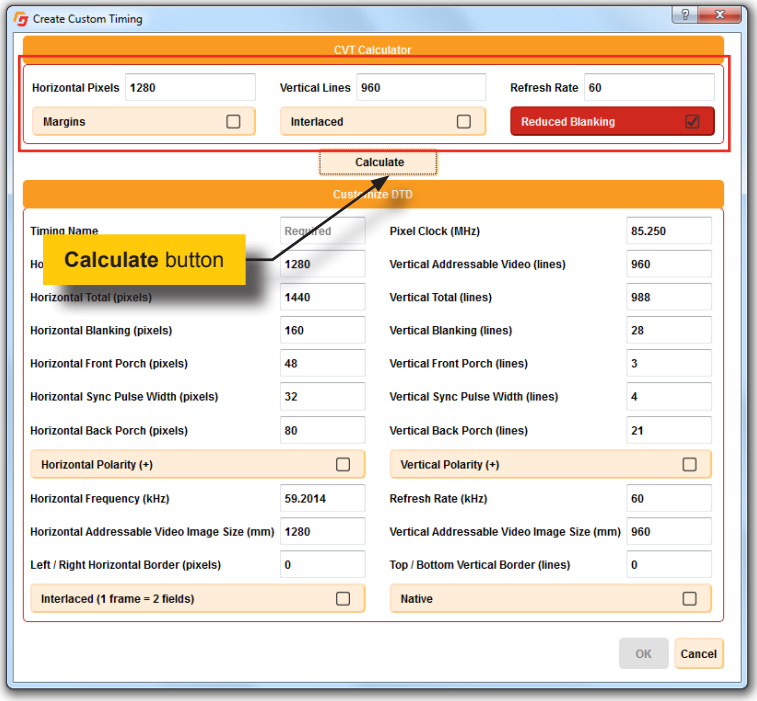
4. To create a custom timing, click the **Create Your Own** button, under the **Make Selection** drop-down list.



5. The **Create Custom Timing** dialog box will be displayed.

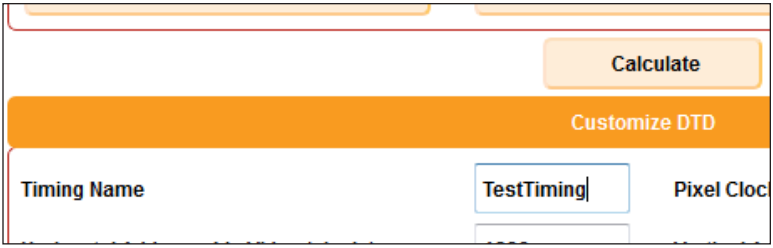
6. Enter the desired **Horizontal Pixels**, **Vertical Lines**, and **Refresh Rate** values.

7. Include **Margins**, **Interlaced**, and/or **Reduced Blanking**, if desired, by clicking these buttons.

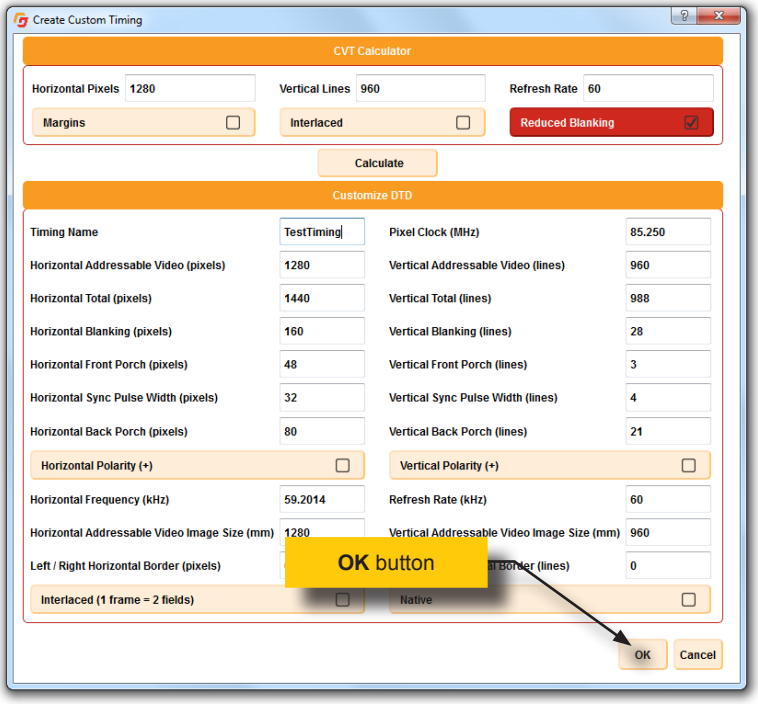


8. Click the **Calculate** button.

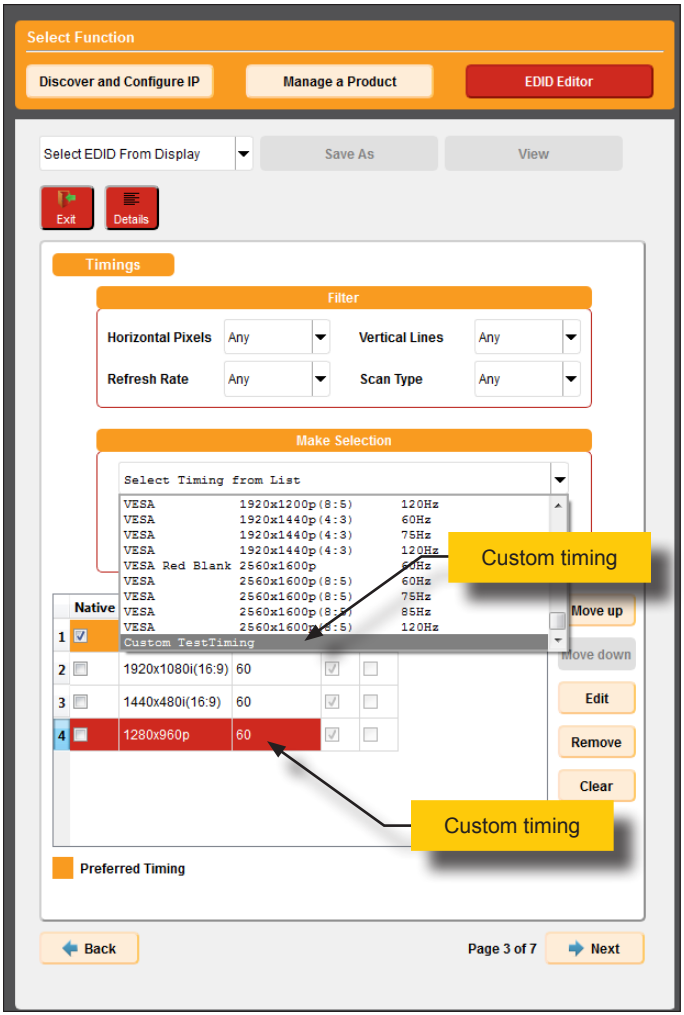
9. Provide a name for the timing in the **Timing Name** field.



10. Click the **OK** button.



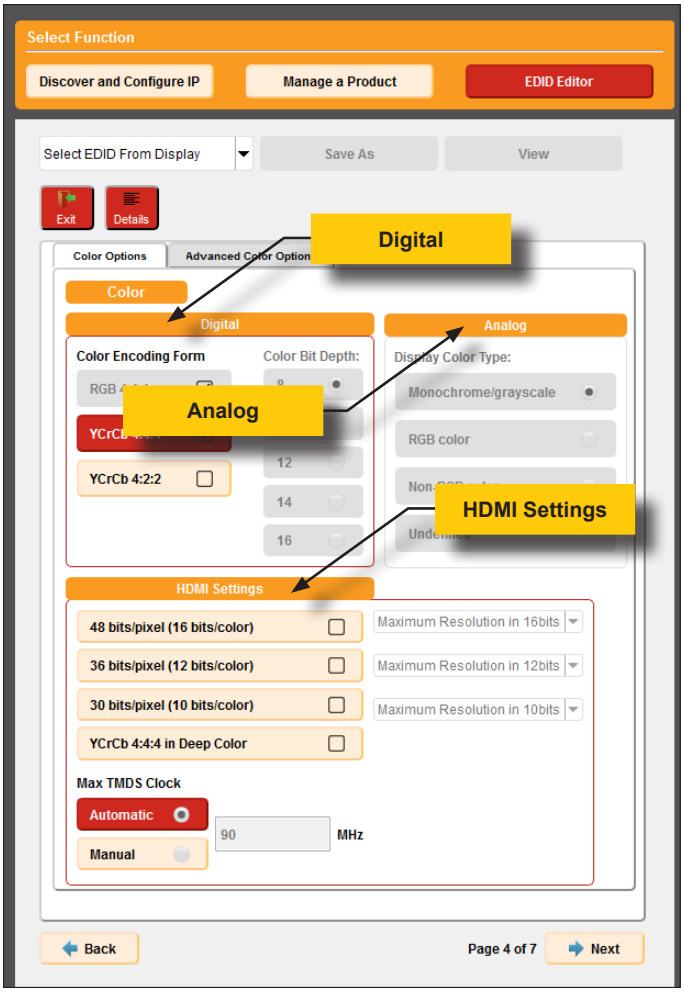
11. The new timing will be added to both the timing list and the drop-down list.



12. Click the **Next** button to continue to the next page.

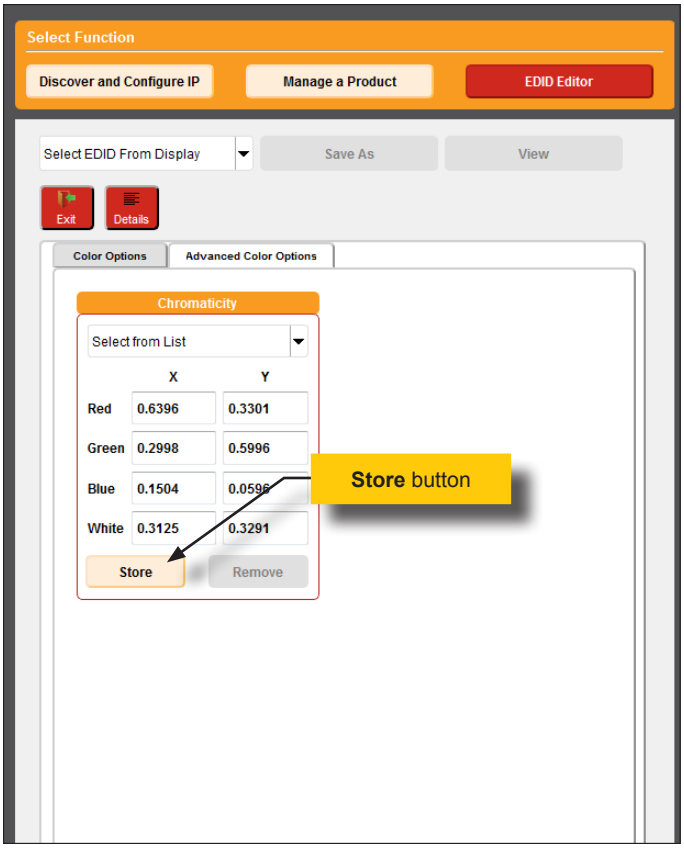
Color

1. Under the Color Options tab, make the desired changes under the **Digital** (digital EDID only) and **HDMI Settings** (HDMI only). The **Analog** section is only available when creating an analog EDID.

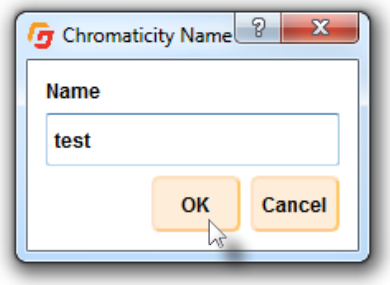


2. Click the **Advanced Color Options** tab to access the **Chromaticity** section. This section allows you to store, delete, and select chromaticity settings.

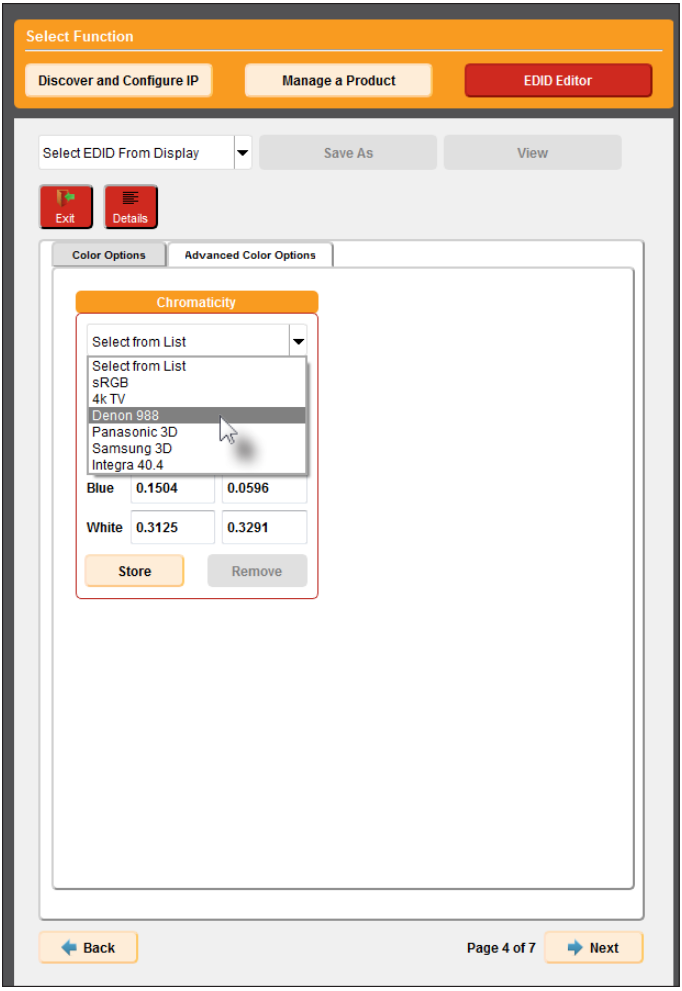
► **Storing a Chromaticity Preset**
Click the **Store** button to save the current chromaticity settings and add them to the drop-down list.



After the **Store** button is pressed, provide a unique name for the preset in the dialog box, then click the **OK** button.



► **Selecting a Chromaticity Preset**
Click the drop-down list under the **Chromaticity** section. Change the settings, if desired, and store the new preset. See the previous page for information on storing a preset.



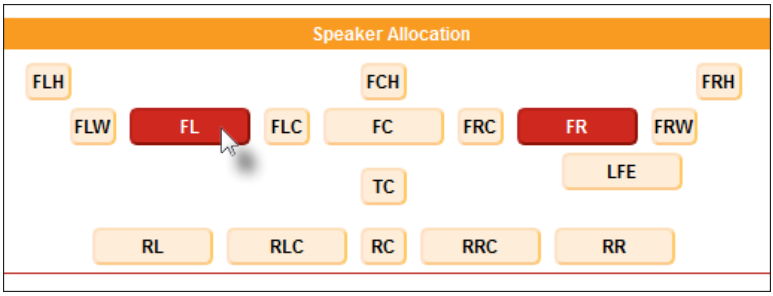
► **Removing a Chromaticity Preset**
After selecting the preset, click the **Remove** button. *Note that the chromaticity preset will be removed immediately from the drop-down list, and cannot be restored.*

3. Click the **Next** button to continue.

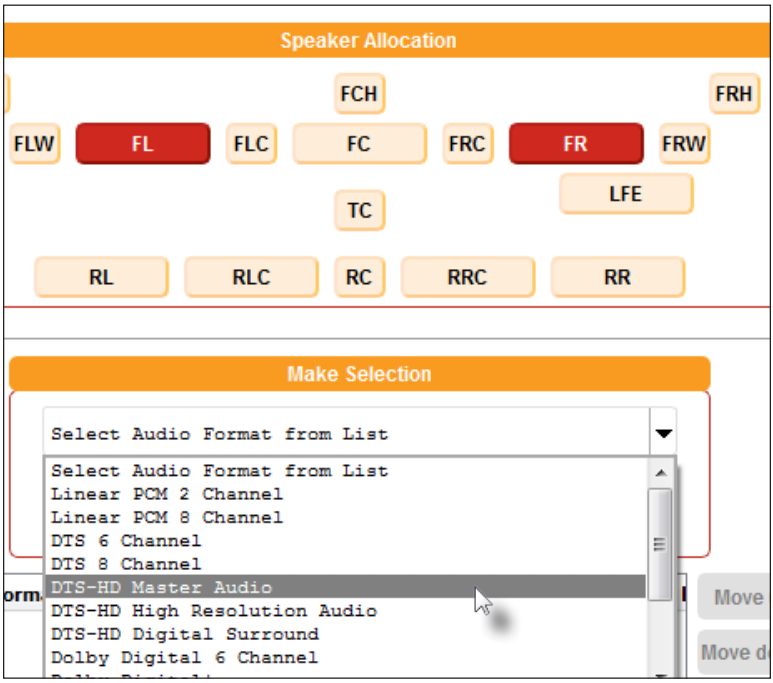
Audio Settings

1. By default, audio support will be disabled. To enable audio support, click the **Enable Audio Support** button.

2. Select the desired speaker channels by clicking the buttons under the **Speaker Allocation** section. If an audio channel is *enabled*, it will be highlighted in red.



As with timings, an audio format can be selected from the **Make Selection** drop-down list.



3. Once a timing is selected from the **Make Selection** drop-down list, it is automatically added to the audio format list, as shown on the next page.

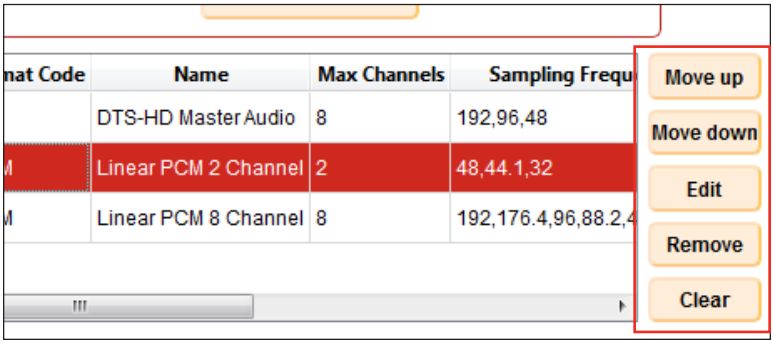
4. Continue adding audio formats, as desired, from the **Make Selection** drop-down list.

   ► The last audio format to be added to the list will always be highlighted in red and will indicate the currently selected timing.

   ► Use the horizontal scroll bar to view the details of each timing.

	Audio Format Code	Name	Max Channels	Sampling Frequ
1	DTS-HD	DTS-HD Master Audio	8	192,96,48
2	Linear PCM	Linear PCM 2 Channel	2	48,44.1,32
3	Linear PCM	Linear PCM 8 Channel	8	192,176.4,96,88.2,4

5. Use the buttons to the right of the list box to move, edit, clear, or delete audio formats within the list.



- **Move up**
  Moves the selected audio format up one row.

- **Move down**
  Moves the selected audio format down one row.

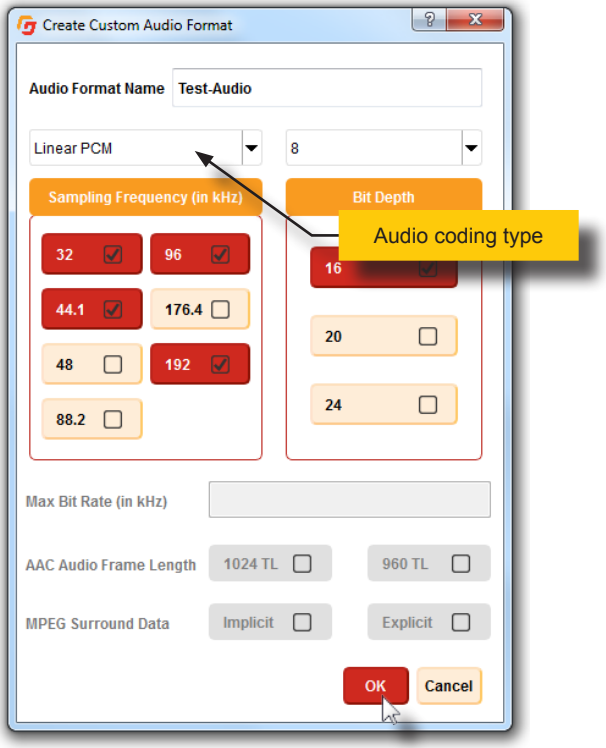
- **Edit**
  Opens the **Create Custom Audio Format** window, allowing detailed modification of the currently selected audio format.

- **Remove**
  Deletes the currently selected audio format from the list.

- **Clear**
  Deletes all audio formats from the list.

6. To create a custom timing, click the **Create Your Own** button, under the **Make Selection** drop-down list.

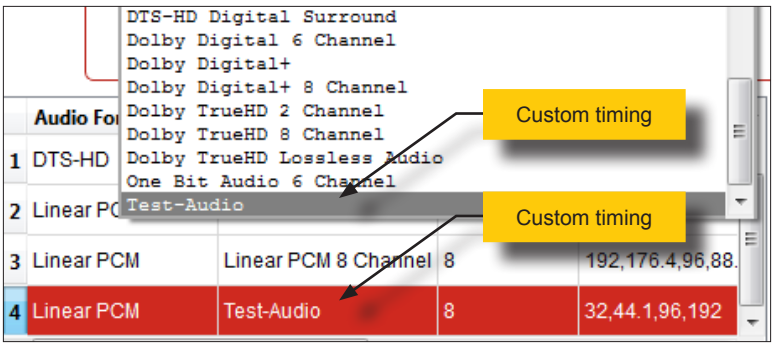
7. The **Create Custom Audio Format** dialog box will be displayed:



8. Provide a name for the new audio format in the **Audio Format Name** field.

9. Select the desired audio options. Note that available options are dependent upon the audio coding type.

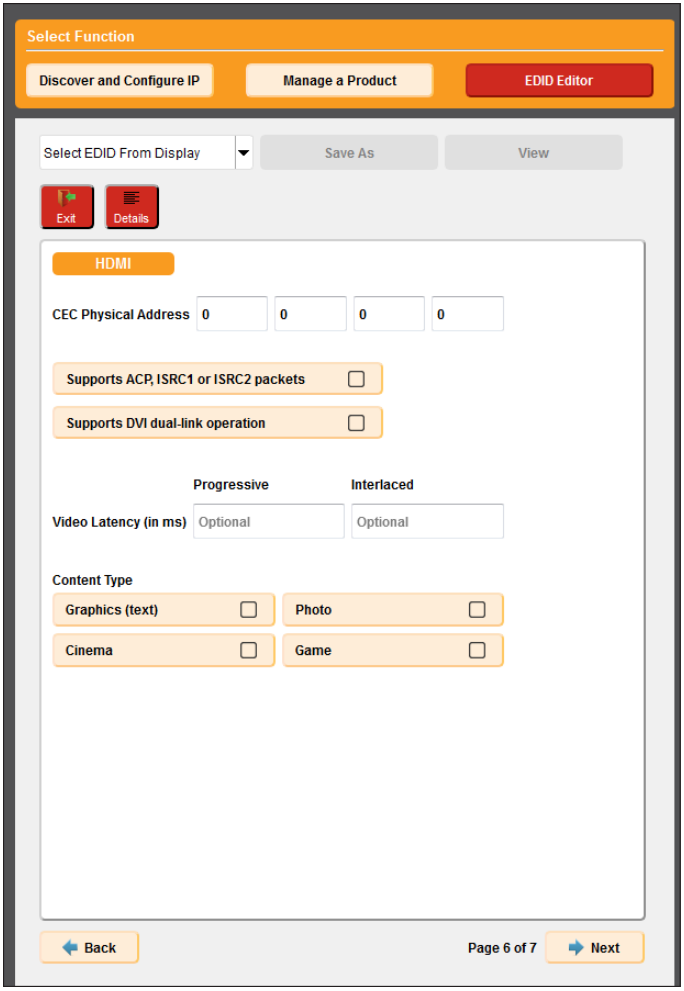
10. Click the **OK** button save the changes and return to the **Audio** screen. The new audio format will be added to both the list of audio formats and to the drop-down list.



11. Click the **Next** button. Note that the following section is only available if an HDMI EDID is being edited or created.

HDMI Settings

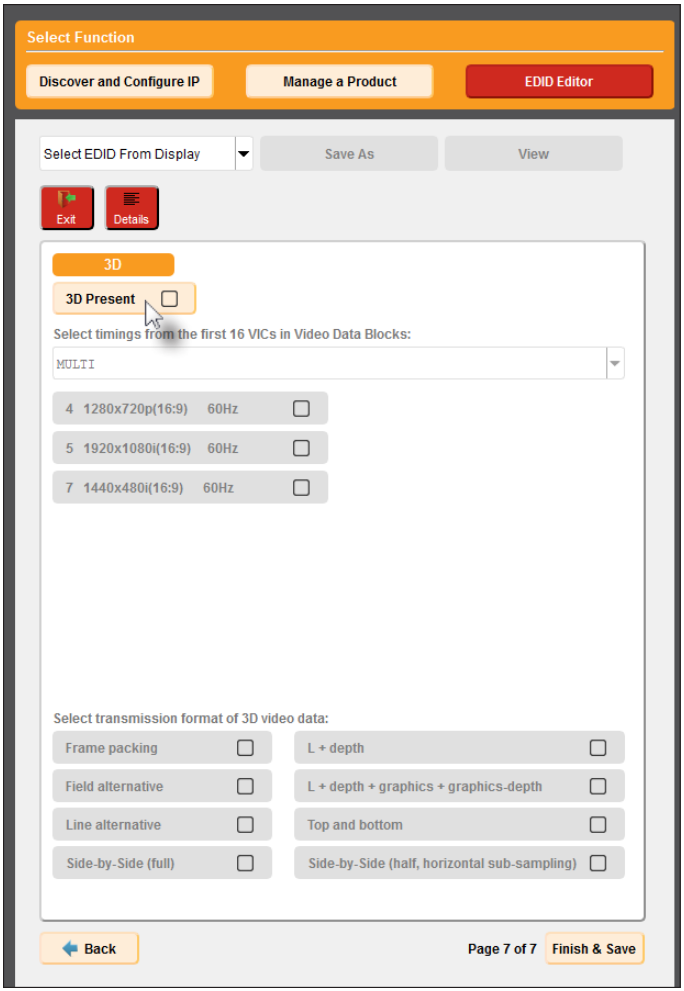
1. Enter the CEC address in the **CEC Physical Address** field. The fields for **Video Latency** are optional.



2. Specify any remaining setting on this page, then click the **Next** button.

3D Settings

1. By default, this option is *disabled*. Click the 3D Present button to allow this EDID to support 3D processing.

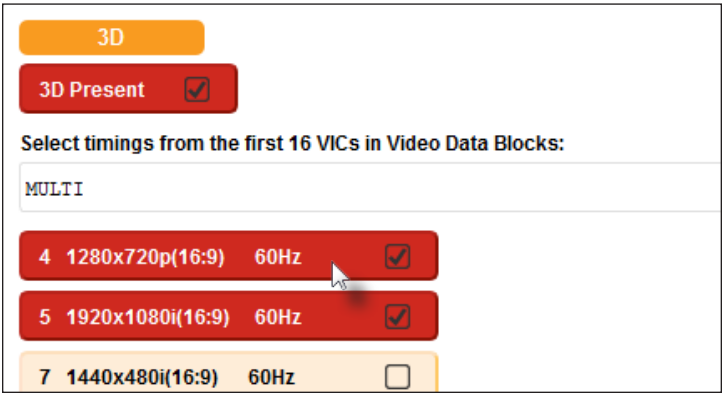


2. Select the 3D timing(s) that the EDID will support. There are two methods.

   ► To set multiple timings, click the drop-down list and select `MULTI`. Once `MULTI` is selected, click the desired timings that will support 3D. In the example, on the following page, we have selected 720p and 1080i.

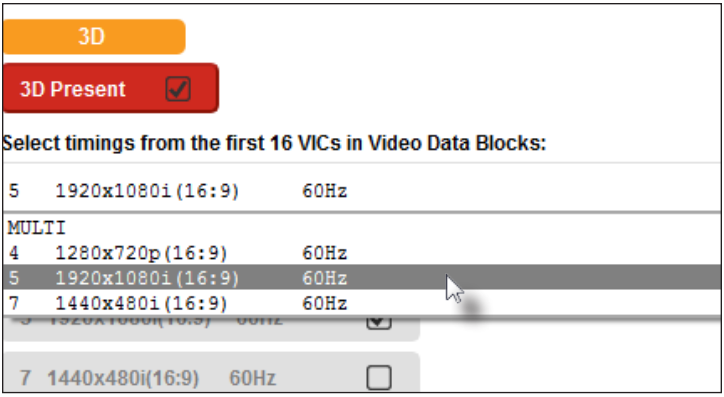
3. Select the 3D timing(s) that the EDID will support. There are two methods:

   ► To set mutliple timings, click the drop-down list and select `MULTI`. Once `MULTI` is selected, click the desired timings that will support 3D. In the example below, we have selected 720p and 1080i.

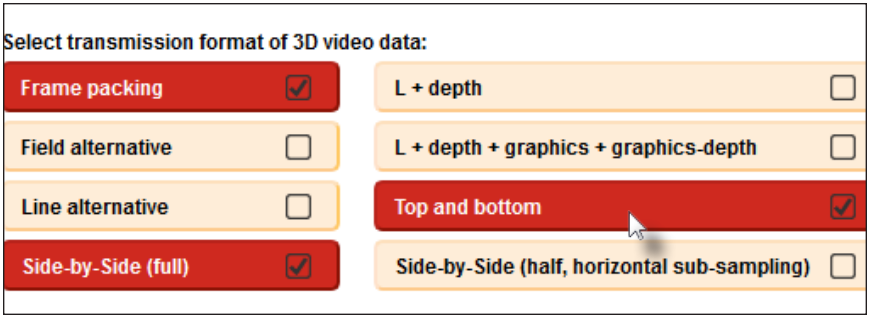


   ► To set a single timing, select the desired timing from the drop-down list.

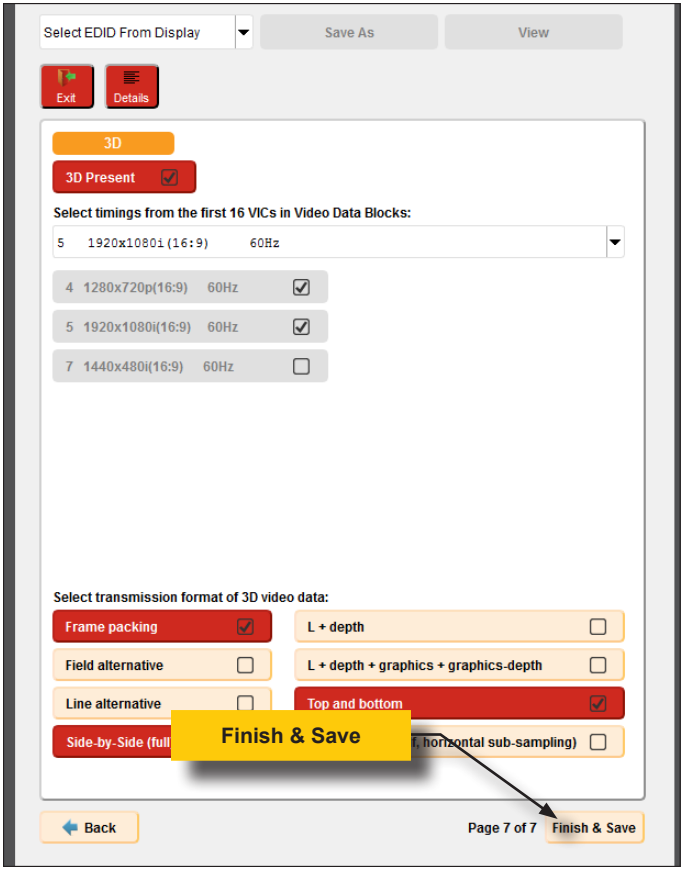
   Once the desired timing is selected, the other buttons (representing the other timings), will become disabled.



4. Specify the transmission format of the 3D video data, near the bottom of the page.



5. Click the **Finish & Save** button to save the EDID to a file.

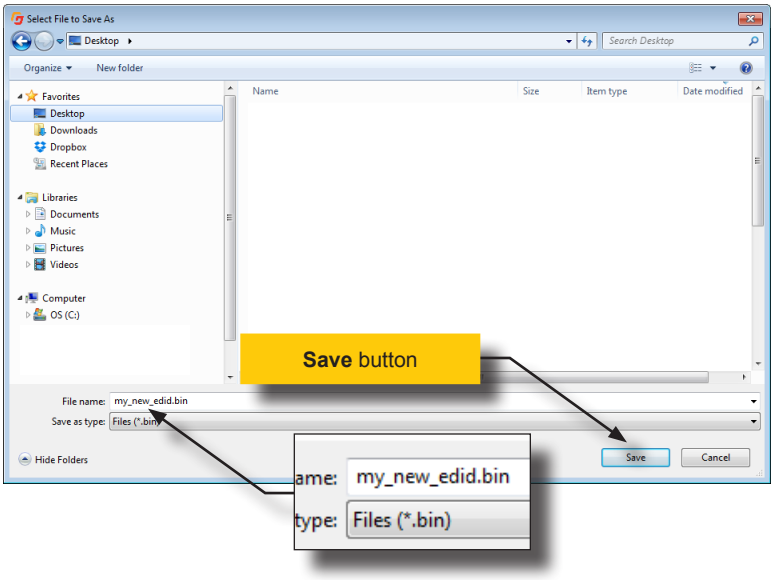


6. The **Select File to Save As** dialog will appear.

7. Select the folder where the EDID file will be saved.

8. Type he name of the EDID file in the **File name** field. In the example below, we are using the name `my_new_edid.bin`.

   The EDID file must have the `.bin` extension, as shown.



9. Click the **Save** button on the **Select File to Save As** dialog.

10. The EDID creation process is complete.

This page left intentionally blank.

Syner-G
Software Suite

4 Appendix

Compatibility Table

Each column to the right of the Gefen part number lists each of the supported features. Checkmarks indicate that the feature is supported by the product.

Gefen part number	Discover	Manage	Configure	Update
EXT-3G-HD-C				✓
EXT-CU-LAN	✓			
EXT-DP-EDIDP		✓	✓	✓
EXT-DVI-16416				✓
EXT-DVIK-MV-41				✓
EXT-DVIKA-HBT2		✓		✓
EXT-DVIKVM-LAN-LR	✓			
EXT-DVIKVM-LAN-LRX	✓			
EXT-DVIKVM-LAN-LS	✓			
EXT-DVIKVM-LAN-LTX	✓			
EXT-DVIKVM-LANR	✓			
EXT-DVIKVM-LANRX	✓			
EXT-DVIKVM-LANS	✓			
EXT-DVIKVM-LANTX	✓			
EXT-HD-3G-C		✓	✓	✓
EXT-HD-EDIDPN		✓	✓	✓
EXT-HD-MVSL-441	✓			
EXT-HD-SL-444	✓			
EXT-HD-VWC-144	✓			
EXT-HD2IRS-LAN-R	✓			
EXT-HD2IRS-LAN-S	✓			
EXT-HD4K2K-848	✓		✓	
EXT-HDBOOST-141		✓	✓	✓
EXT-HDKVM-LANR	✓			
EXT-HDKVM-LANRX	✓			
EXT-HDKVM-LANS	✓			
EXT-HDKVM-LANTX	✓			
EXT-HDVGA-3G-SC		✓	✓	✓
EXT-IP-2-RS2322	✓			
EXT-MFP	✓		✓	
EXT-UHD-88	✓		✓	

Gefen part number	Discover	Manage	Configure	Update
EXT-UHDA-HBT2		✓		✓
EXT-VGA-DVI-SC		✓	✓	✓
EXT-VGAA-HD-SC		✓	✓	✓
EXT-VGAKVM-LANR	✓			
EXT-VGAKVM-LANS	✓			
EXT-WHD-1080P-LR-TX				✓
EXT-WHD-1080P-LR-TX-EU				✓
EXT-WHD-1080P-LRR				✓
EXT-WHD-1080P-LRR-EU				✓
EXT-WHD-1080P-LRS				✓
EXT-WHD-1080P-LRS-EU				✓
EXT-WHD-1080P-SR-TX				✓
EXT-WHD-1080P-SR-TX-EU				✓
EXT-WHD-1080P-SRR				✓
EXT-WHD-1080P-SRR-EU				✓
EXT-WHD-1080P-SRS				✓
EXT-WHD-1080P-SRS-EU				✓
GEF-3GSDI-16416				✓
GEF-3GSDI-16416-PB				✓
GEF-DVI-16416				✓
GEF-DVI-16416-PB				✓
GEF-DVI-848DL				✓
GEF-DVI-848DL-PB				✓
GEF-DVIKVM-848DL				✓
GEF-DVIKVM-848DL-PB				✓
GEF-MOD-16416				✓
GEF-MOD-32432				✓
GEF-UHD-89-HBT2		✓		✓
GTB-HD4K2K-848	✓			
GTB-UHD-HBT2		✓		✓

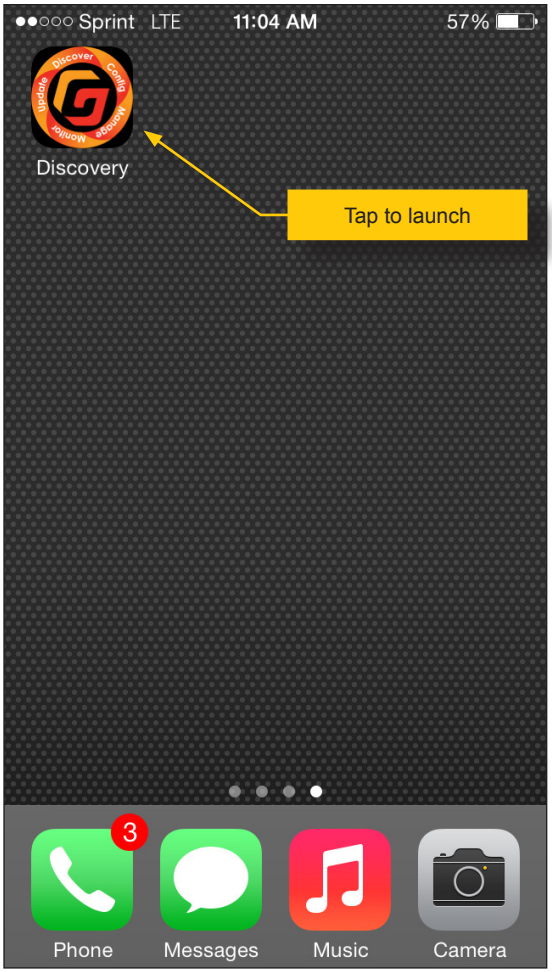
The Discovery Tool App

The Gefen Discovery Tool App allows you to “discover” and configure Gefen devices on your network, from the convenience of your smartphone.

The Gefen Discovery Tool App is free and is available for both iOS™ and Android™ operating systems and can be downloaded from the Apple App Store and Google Play, respectively.

1. Download and install the Discovery Tool App. Shown below, is the Gefen Discovery Tool as it appears in the Apple App Store.

2. After the Gefen Discovery Tool has been installed, tap the icon to launch the Gefen Discover Tool.

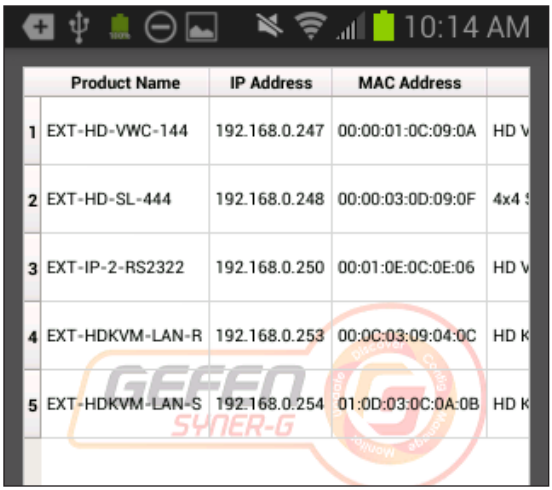


3. After a few seconds, the following screen will appear. As seen below, both the iOS (left) and Android (right) screens will look the same.

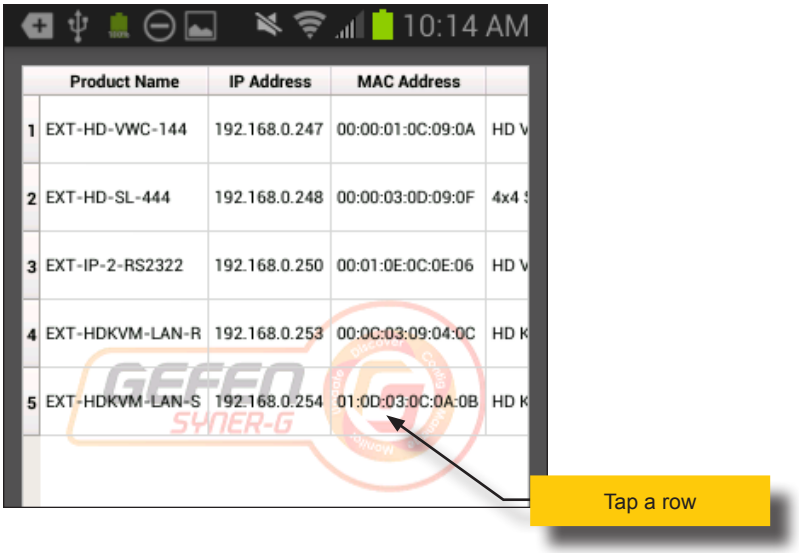
4. Make sure you are connected to a Wi-Fi network and tap the **Find Devices on Network** button to begin the search process.

5. A progress bar will be displayed as the Gefen Discovery Tool searches the network.

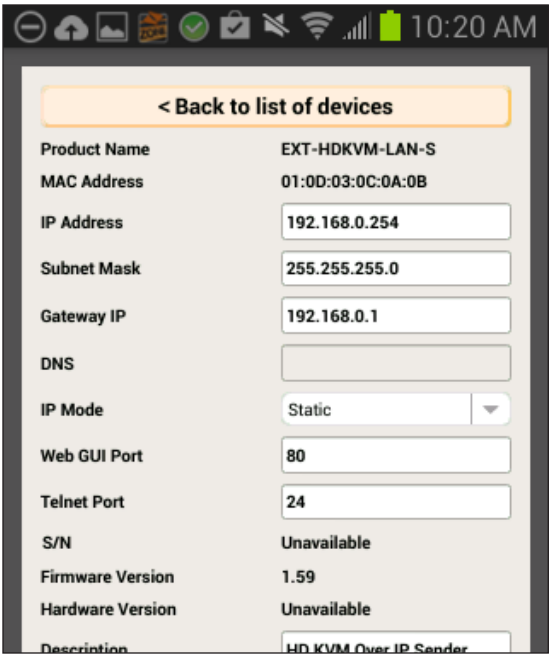
6. If devices are found, the Gefen Discovery Tool will list them:



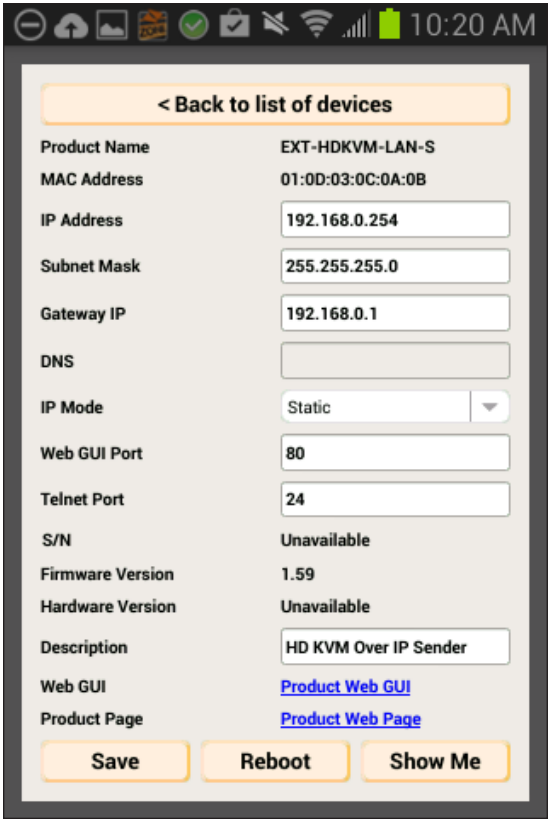
7. Tap the row of the device to get more information about that device. In the following example, we will select row 5 (EXT-HDKVM-LAN-S).



8. Information on the selected device will be displayed.



9. The Gefen Discovery Tool App provides the same functionality as the **Discover** portion of the Gefen Syner-G Software Suite. See Discover and Configure IP (page 10) for more information.



10. Click the **Back to list of devices** button to return to list of devices.

This page left intentionally blank.

1800 South McDowell Blvd. Pelatlum, CA 94954
1-800-472-5555 1-707-283-5900
www.gefen.com support@gefen.com