1 Overview
The UHBX-3S Manager is a Windows GUI that can be installed to remotely control and monitor the UHBX-3S device via a USB connection. It also allows you to manage the EDID by learning it from a desired LCD monitor connected to any output, importing any custom EDID into the device, or exporting the device’s EDID to a file. In addition, this GUI provides you an ability to update any future firmware into the device if needed.

2 Installation Prerequisites
The UHBX-3S Manager is recommended to run on PC with Windows 7 or XP version.
- The .NET Framework 2.0 or later is required prior to installing the UHBX-3S Manager. Most new PCs running with Windows 7 or XP version come with Microsoft .NET Framework 2.0 or later installed.
- If .NET Framework 2.0 or later is not installed on your PC, you can install it from a folder called Framework 2.0 or download it from the Microsoft website.

3 Software Installation
- Install the software by executing the Setup.exe program from the installation source directory. If the software was installed previously, uninstall it first.
- Once the UHBX-3S Manager installation is completed, its icon should appear on your desktop as well as under Programs\Hall Research\UHBX-3S Manager
The UHBX-3S Manager does not require an installation of any USB drivers. The Windows operating system will automatically detect and identify the appropriate USB driver when the UHBX-3S device is connected for the first time.

4 Operation

The UHBX-3S Manager will be up and running by double clicking its desktop icon or its program menu selection, the main screen in Figure 1 will be displayed as below.

Once, the UHBX-3S Manager detects a valid connected UHBX-3S device, its control and status menu will be enabled as shown in Figure 2.
4.1 Controls
The UHBX-3S Manager provides you more control and flexibility of the device than the front panel.

4.1.1 Video
The EDID passed to the source can be set to either emulate or pass-thru by selecting the desired radio button in Figure 3.

- **Emulate**: The internally stored EDID is passed to the source. This EDID can be a factory default or a learned EDID from one of the sink LCD monitors or device connected to an output.
• **Pass-thru**: The EDID passed to the source comes from a sink LCD monitor connected to an output.

**Learn** – An EDID can be learned from a sink LCD monitor connected to any outputs. Once, an output is selected, just click the **Learn** button to learn the EDID from the connected monitor or device.

### 4.1.2 Set RS232 Start Channel

The UHBX-3S’s output can be referenced by a number from 1 to 99, which makes communicating to a desired remote serial receiver easier when there are more than one UHBX-3S devices connected in daisy chain.

By default, **Output1** of each device starts with number 1, and this number will be incremented by one for the next output. If **Output1** is changed to 12, then **Output2** and **Output3** will be 13 and 14 respectively.

This output channel numbering is used to transmit/receive data to/from the specified serial receiver without intruding the rest of the receivers in the system.

**Current Connection** – allows you to view the current output connection that the controller is connected to in addition to the baud rate, and the parity that the controller is communicating at with the remote serial receiver.

### 4.1.3 Miscellaneous

This button is used to send a 500ms Hot Plug Detect signal to the video source.
4.1.4 Video Blanked
The output video can be blanked or un-blanked by selecting the corresponding box as shown in Figure 8.

![Video Blanked](image)

Figure 8 – Video Blanked

4.2 Status
The UHBX-3S Manager provides you an instant status update on the input video, the HDBaseT connection, and the current EDID passed to the source.

4.2.1 Input Video
The input video status is indicated by an LED on/off. When the LED is on, it means the indicated video type is detected; otherwise, its LED will be off.

![Input Video](image)

Figure 9 – Input Video

4.2.2 HDBaseT
The HDBaseT status is also indicated by an LED on/off. When the LED is on, it means the indicated HDBaseT connection is detected; otherwise, its LED is off.

The cable length is measured in feet, and it is not applicable when the connection is in long reach mode. The calculation may vary according to cable quality.

![HDBaseT Status](image)

Figure 10 – HDBaseT Status

4.2.3 EDID Data
The data shown in the EDID table is periodically scanned to ensure the checksums for each block is valid. When an invalid checksum is detected, the last byte (location 256) will be highlighted. This invalid checksum can cause connectivity problems.
You cannot learn an EDID that has an invalid checksum either from the GUI or from the front panel.

5 Menu
The UHBX-3S Manager consists of three main menus, which allow you to easily perform more specific desired tasks.

5.1 File
The File menu consists of the Exit tool selection as shown in Figure 12.
- **Exit** – Exit the UHBX-3S Manager.

5.2 Tools
The Tools menu consists of the following menu items as shown in Figure 13.
- **Factory Defaults** – restore the device to factory default settings.
- **Import EDID** – Import an EDID (256-byte binary into the unit.
- **Export EDID** – Save the current EDID as a 256-byte binary file. This file can be edited and reloaded using Import EDID tool selection.
- **HDBaseT Programmer** – can be used to update the HDBaseT output module.
- **Firmware Update** – allow you to field upgrade the device application firmware.

### 5.3 Help

The **Help** menu has the following tool selection.
- **About...** - display the current version of UHBX-3S Manager.

### 6 Firmware Update

The firmware update can be found under the **Tools** menu. When the **Firmware Update** is selected, the UHBX-3S Manager will open a Firmware Update window as shown in Figure 15.

Once a firmware file is selected, the Upload button will be enabled so that you can upload a new firmware into the unit.
After the firmware update is completed successfully, the UHBX-3S will be running as normal.

7 HDBaseT Programmer

The HDBaseT Programmer is only supported by the UHBX-3S firmware version 1.2 or later. This HDBaseT programmer can be used to program the local HDBaseT extender modules inside the UHBX-3S unit. There are a total of 3 modules, or one module is used at each HDBaseT output.

The HDBaseT Programmer can be found under the Tools menu. When the HDBaseT Programmer is selected, the UHBX-3S Manager will open an HDBaseT Programmer window as shown in Figure 17.

Next, select a firmware to program it into a desired HDBaseT output module. A desired output module is selected by having its box checked. If all three modules are needed to be programmed, all three boxes next to Outputs 1-3 must be checked.

Once, it is ready for program, just click the Program button.

NOTE: A remote programming will be in the future firmware update.
Figure 17 – HDBaseT Programmer

The HDBaseT Programmer will verify the firmware in the module after it has been programmed as shown in the following figures. A completed or failed status will be shown.

Figure 18 – HDBaseT Programming

Figure 19 – HDBaseT Verification

Figure 20 – HDBaseT Complete