

# UHBX-8X Software

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# 1. Windows™ Software Installation

## 1.1. General

The UHBX-8X graphical user interface (GUI) is a Windows™ software used to configure advanced settings of the UHBX-8X. Use of the software requires USB connection of the PC to the device. A USB cable (Type A to Mini-USB) is required for this connection.

The GUI can monitor and configure several devices simultaneously. Therefore, for PC's that have multiple USB ports or with the use of external USB hubs, it is possible to use the same GUI and address each device individually.

## 1.2. Installation Prerequisites

- A PC with Windows XP™ OS or later
- USB port
- Microsoft™ .NET Framework 2.0 or later (most recent OS including Windows 7 and 8 typically include this and no action is required). If .NET Framework 2.0 or later is not installed on your PC, the Microsoft™ website has free downloads available.

## 1.3. Software Installation

- If an earlier version of this particular software was previously installed, UNINSTALL the program first from either the Add/Remove Programs section of the control panel or by running the previous installation SETUP.EXE and selecting “remove application”.
- Install the software by executing the SETUP.EXE program from the installation source directory
- Accept the default settings, but if you want to specify a particular installation directory other than the default, you may do so.
- Once the UHBX-8X software installation has completed, either click the desktop icon or navigate the Start Menu to  
Start ⇒ Programs ⇒ Hall Research ⇒ UHBX-8X



## 2. Using the Software

### 2.1. General

The UHBX-8X is a Windows GUI that can be installed to remotely monitor and make additional settings of the UHBX-8X device via a USB connection. It also provides the ability to upload update any future firmware release in the device.

### 2.2. USB Device Detection

The PC should automatically configure the USB port after connection to the UHBX-8X (using standard Windows™ USB drivers) and does not require any special USB drivers to be installed. Once connected to a USB port of the PC, Windows™ will detect and use the appropriate USB driver. The first time you connect the device to the PC, you may experience a short delay and a windows notification pop-up message may be shown.

This detection and driver installation only occurs when the UHBX-8X is connected to the PC for the first time. Afterwards, reconnected devices automatically configure themselves with no delay or message.

- If no UHBX-8X device is attached to the PC, the on-screen fields are disabled (grayed out) But once, the PC detects a valid connection to a UHBX-8X device, its control and status menu will be enabled.

### 2.3. Controls

The UHBX-8X GUI provides you advanced control and connection status of the device.

#### Set HDBaseT Mode

The HDBaseT outputs can be individually set to either Auto or Long Reach mode.

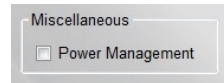
- **Auto** - When set to Auto, the HDBaseT output will follow the current mode on the receiver. Auto is the default setting as shipped from the factory. If you are using a Model U1-1BT-R receiver which does not support the Long Reach mode, then this setting must remain in Auto mode. Also when connected to a UHBX-R-PD receiver that has its own mode switch, leave this setting in Auto, since the receiver has its own hardware mode switch and you can set the mode at the receiver

- Long Reach** - When set to Long Reach, the HDBaseT output will have the strongest signal from the sender to the receiver. However, this mode does not support deep color or 4K video. This mode is recommended if your cable is long (100 m or longer), or if you are experiencing occasional video dropouts, even if the UTP cable is not that long! If your receiver can support this mode, Long Reach provides the best chance to resolve most issues caused by ground loops, electromagnetic or static discharge interference, or if you are using lower quality UTP cables, is to put the link in Long Reach mode if the receiver supports it. However, you must be aware that in this mode the max resolution supported is 1080p @ 60 Hz 8-bit (24 bit total) color. Deep color and 4K (UHD) video is not supported in LR mode.

Set HDBaseT Mode	1	2	3	4	5	6	7	8
Auto	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Long Reach	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Miscellaneous

- Power Management** – When selected, the UHBX-8X device will check for the presence of source video and sink HPD (whether there is a display connected and if turned on). If neither source video nor HPD are detected, the HDBaseT extender module at the output is placed in low power mode. If you are not extending IR or RS-232 to the remotes, we recommend that you enable Power Management. This will ensure that when there is no video from the source, or if the display is turned off, the HDBaseT chipsets will be placed in low power mode. The reason you may not want to enable this mode when extending RS-232 or IR, is because when the link is in low power, baud rates higher than 9600 or IR signals with modulation can not be reliably extended. The default state is Power Management off.



## 2.4. Status

The UHBX-8X GUI provides real time status indication of the HDBaseT links and the current RS232 output channel selection and baud rate setting for that channel.

HDBaseT	1	2	3	4	5	6	7	8
Link	■	■	■	■	■	■	■	■
Video	■	■	■	■	■	■	■	■
Long Reach	□	□	■	□	■	□	□	□
PoH	■	■	■	■	■	■	■	■
Approx Length (m)	40	65	n/a	58	n/a	40	80	74

### HDBaseT

The HDBaseT status display on the GUI is similar to the one on the unit's front panel.

One additional feature of the GUI display is display of the approximate UTP cable length. The cable length is measured in meters, and it is not applicable when the connection is in Long Reach mode. The calculation may vary according to cable quality.

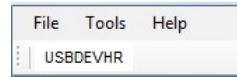
### Current RS232 Connection

The GUI shows the current output that the controller is connected to for RS232 communication. In addition, baud rate, and the parity settings are also displayed.

RS232 Connection	
Output:	1
Baud:	19200
Parity:	None

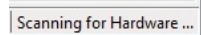
## 2.5. Device Name

Assigns a descriptive name to the UHBX-8X device that is a maximum 8 characters long. This information is stored in the device. Assigning unique Device Names to each device is useful to identify each device. This can prove handy if you are going to connect multiple devices simultaneously to a PC and use the software to control several at once. The FACTORY DEFAULT name is USBDEVHR.



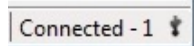
## 2.6. Status Bar

The bottom bar of the screen shows the USB connection status as follows:



This indicates the software has not detected any UHBX-8X devices and is searching the USB ports for devices.

All controls and status are disabled until a valid UHBX-8X device is



When the Link LED is flashing, it is indicating the HDBaseT extender module at the specified output is in Low Power mode due to either +5V video source or HPD sink LCD being not detected.

attached and properly identified by the software.

The number of UHBX-8X devices will be shown; once, they are connected to the PC.

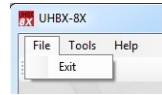
## 2.7. Tool Bar Menu

The UHBX-8X GUI consists of three main menus, which allow you to easily perform more specific desired tasks.

### File

The **File** menu consists of the Exit selection as shown.

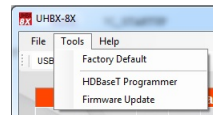
- **Exit** – Exit the UHBX-8X GUI.



### Tools

The **Tools** menu consists of the following menu items as shown.

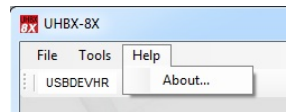
- **Factory Defaults** – Restore the device to factory default settings.
- **HDBaseT Programmer** – Can be used to update any HDBaseT extender module.
- **Firmware Update** – Allow you to update any future device firmware.



### Help

The **Help** menu has the About selection as shown.

- **About...** - Display the current version of UHBX-8X GUI, device firmware, and USB serial number.



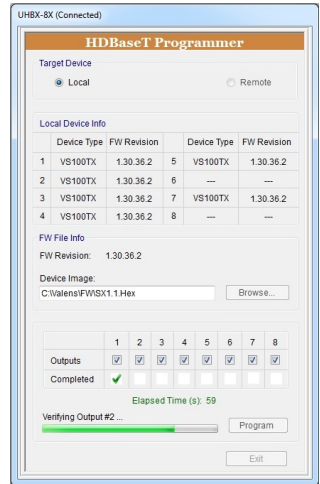
## 2.8. HDBaseT Programmer

This HDBaseT programmer can be used to program the local HDBaseT extender modules inside the UHBX-8X device. There are a total of 8 modules, and 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-8X GUI will open an HDBaseT Programmer window as shown above.

Next, select a firmware to program it into a desired HDBaseT output module. If all eight modules are needed to be programmed, all eight boxes next to Outputs 1-8 must be checked.

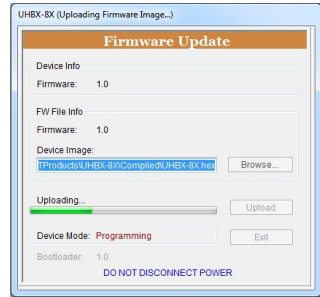
Once, it is ready for program, just click the **Program** button. The HDBaseT Programmer will verify the firmware in the module after it has been programmed. A completed or failed status will be shown.



## 2.9. Firmware Update

The firmware update can be found under the **Tools** menu.

After the firmware update is completed successfully, the UHBX-8X will be running as normal.



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