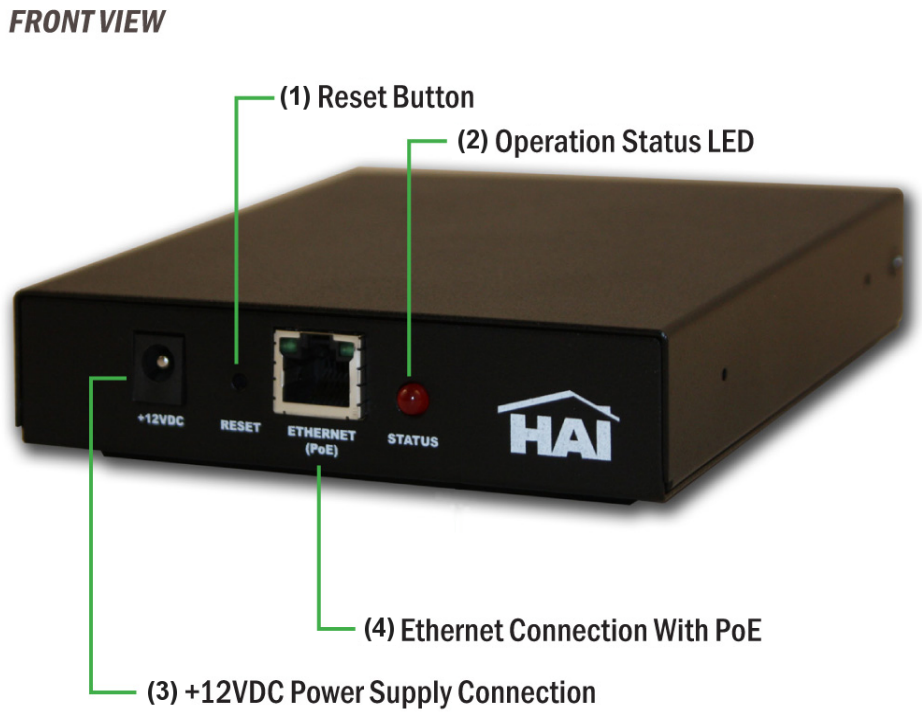
Model 86A00-1 Home Theater Extender (HTX)

DESCRIPTION

The Model 86A00-1 Home Theater Extender (HTX) allows you to extend your home control to the audio/video equipment in your home theater. The HTX communicates over Ethernet with an HAI IP-based touchscreen. The HAI IR database includes over 300,000 IR codes and has a built-in IR receiver so that additional IR codes can be learned.

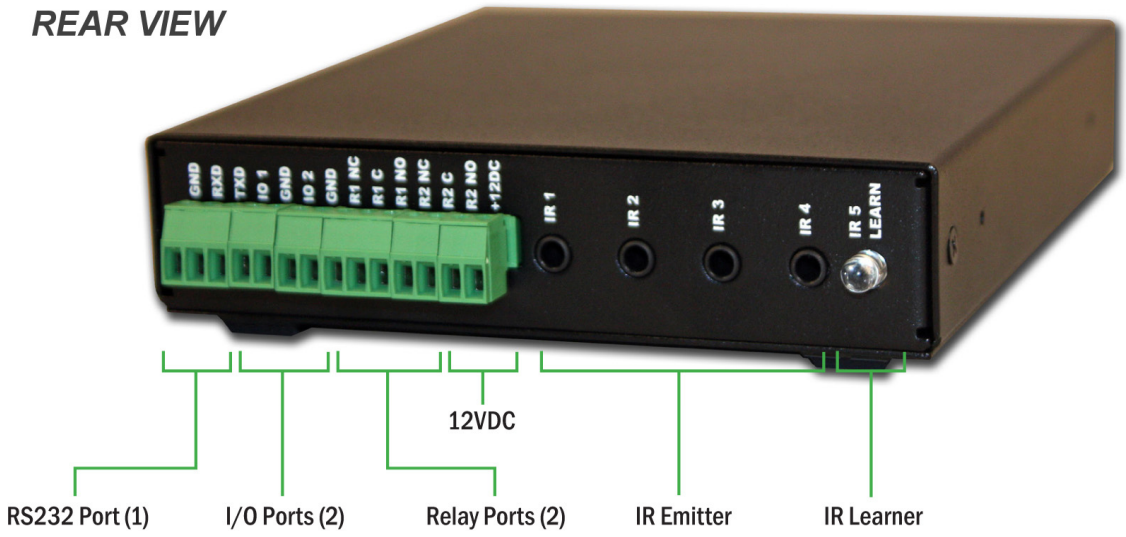
The HTX is an IEEE 802.3af compliant Power over Ethernet (PoE) Powered Device (PD). The HTX may be powered via PoE or from the supplied AC Adaptor.

The HTX is equipped with serial, digital, and IR ports as well as Form-C relays to interconnect with home theater equipment. It also has a built-in web server for simple configuration from any web browser.



1. Reset Button:
   a. Quick press and release – resets the HTX.
   b. Press and hold until the Operation Status LED goes out removes all previously stored network settings.
   c. Press and hold until the Operation Status LED comes back on will default the HTX to factory settings.
2. Operation Status LED:
   a. Solid red during normal operation
   b. Flashes during activity such as IR emitting or during discovery.
3. +12VDC Power Supply Connection:
   a. This is the power connector for the optional +12VDC AC Adaptor.
4. Ethernet Connection With PoE:
   a. Connects the HTX to a 10BaseT network.
   b. Compatible with all 10/100 network switches.
   c. This connection supports PoE.

Home Automation, Inc.
4330 Michoud Boulevard | New Orleans, Louisiana 70129 | 800.229.7256 | 504.736.9810 | Fax 504.253.2955 | www.homeauto.com



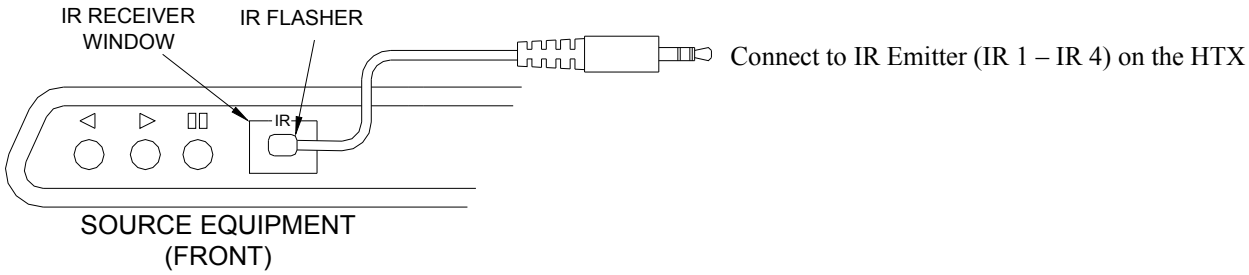
RS232 Port: Standard serial communications for bi-directional control. Bauds are available from 300 through 115200.

I/O Ports: The 2 I/O ports can be configured to act as a digital input or a digital output. For use with voltage and current sensors to detect the power state (on/off) of a device. Digital outputs are rated for 10mA at 3.3VDC.

Relay Ports: The 2 Form-C relays allow control of any device which requires a contact closure, like a motorized screen or blinds. They can also source and switch 12VDC for power amplifier triggers. The relays are rated at 2A at 30VDC.

12VDC: This is a general purpose 12VDC voltage output that can be used to power a device or sensor that is rated up to 250mA.

IR Emitter: Connect the 3.5mm connector for each of the supplied IR flashers to the IR Emitter jacks on the HTX. The IR flasher is used for sending IR data to control IR equipment.



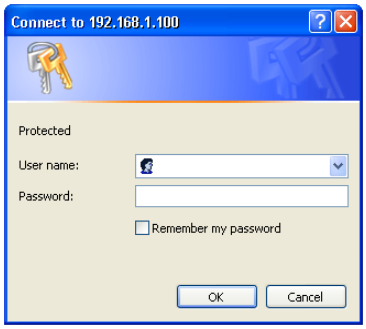
IR Learner: The IR Learner is a built-in IR receiver that is used to add custom IR codes to your Automation Studio IR Library.

GND	RS-232 Ground
RXD	RS-232 Receive Data
TXD	RS-232 Transmit Data
IO 1	Can be configured as a digital input or digital output
GND	Ground
IO 2	Can be configured as a digital input or digital output
GND	Ground
R1 NC	Relay 1 Normally Closed: Connected to R1 Common when Relay 1 value is “0”
R1 C	Relay 1 Common
R1 NO	Relay 1 Normally Open: Connected to R1 Common when Relay 1 value is “1”
R2 NC	Relay 2 Normally Closed: Connected to R2 Common when Relay 2 value is “0”
R2 C	Relay 2 Common
R2 NO	Relay 2 Normally Open: Connected to R2 Common when Relay 2 value is “1”
+12DC	General purpose voltage output, + 12VDC, 250mA maximum
IR 1 – IR 4	IR Emitter Ports 1-4: Accepts standard 3.5mm tip-positive IR emitters
IR 5 LEARN	IR Receiver: Infrared learner target

CONFIGURATION

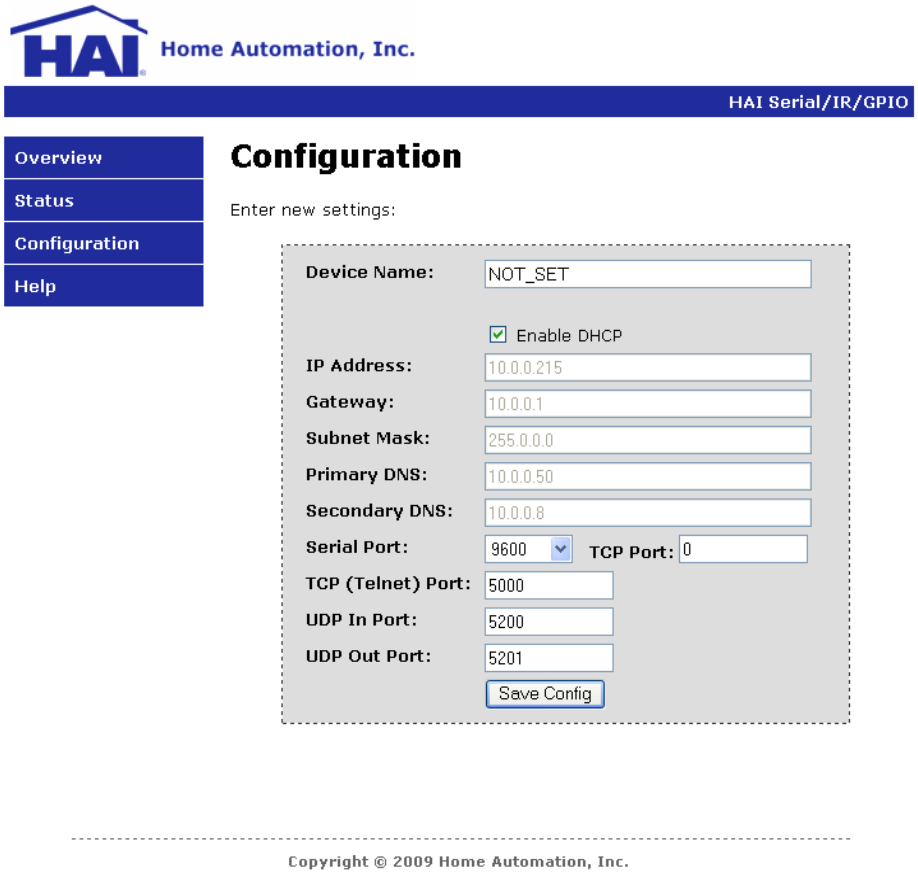
The network settings of the HTX can be configured by navigating to the built-in web server from any web browser. The HTX is shipped from the factory with DHCP enabled. The HTX will accept an IP address and other network parameters from a DHCP server on the network. DHCP facilitate easy first-time setup; however, we recommend that you assign the device a static IP address outside your router's DHCP range to ensure that the HTX will always be available at the same IP address.

Open a new browser window and type in the IP address of the HTX to be configured. The HTX Overview page will appear. This page contains information such as the device's MAC address, current firmware revision, and the number of inputs, outputs, and relays.



Select the Configuration button on the menu bar to configure the network settings and serial port settings. The configuration page is protected with the following credentials:

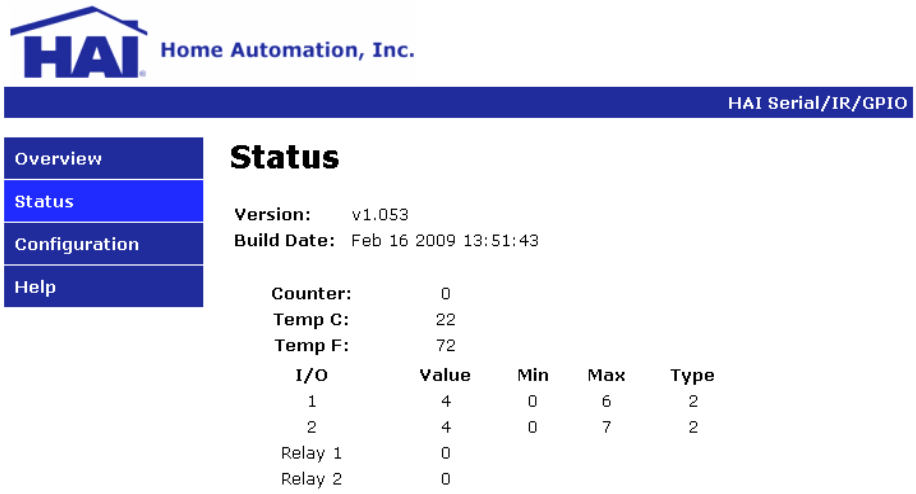
User name: admin
Password: homeauto



1. You can give a custom name to the HTX so that it can be easily identified.
2. To configure a static IP address, disable DHCP by removing the check from the "Enable DHCP" checkbox.
3. Enter the static IP address.
4. Enter the Gateway.
5. Enter the Primary DNS.
6. Enter the Secondary DNS.
7. If used, enter the baud rate for the Serial Port.
8. When all of the settings have been entered, click the "Save Config" button.

Note: An HTX can be discovered on the network by using HAI Automation Studio and highlighting the HTX in the list of devices, right-clicking it, and then selecting "Discover".

To view the status of inputs, outputs, and relays, select the Status button.



PROGRAMMING

You can program actions of the HTX by using HAI Automation Studio. Actions give you the ability to issue IR codes, Serial commands, and Relay commands on the HTX. For IR codes and Serial commands, you must specify the port and the respective IR codes or Serial commands. For Relay commands, you must specify the relay to be controller and the state it will be set to.

Also for the IR or Serial actions, a conditional selection is optionally allowed that is based on the specified state of a digital input.

For additional information, visit the HAI Automation Studio Learning Center at http://www.homeauto.com/training/automationstudio.

SPECIFICATIONS

Network Connectivity:	10-Base-T
Protocols:	TCP, UDP, HTTP
Power:	802.3af Compliant PoE or 12VDC 500mA external
Configuration:	HAI Automation Studio, Web Browser
LED indicators:	Status, Link, Activity
Enclosure:	20ga Steel, keyhole slots for wall mounting
Dimensions:	4.5” x 5” x 1” (115mm x 127mm x 25.5mm)