



## INSTRUCTION MANUAL

# QT-HWS-II

QT-Headend Web Server-II

Stock No. 2728

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We recommend that you write the following information in the spaces provided below.

Purchase Location Name:
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QT-HWS-II Serial Number:

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## Section 1 — General & Safety Instructions



The STOP sign symbol is intended to alert you to the presence of REQUIRED operating and maintenance (servicing) instructions that if not followed, may result in product failure or destruction.



The YIELD sign symbol is intended to alert you to the presence of RECOMMENDED operating and maintenance (servicing) instructions.



The LIGHTNING flash symbol is intended to alert you to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electrical shock.

**TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER FROM THIS UNIT.  
NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**

**WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE**

### NOTE TO CATV SYSTEM INSTALLER

This reminder is provided to call the CATV System Installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

## Safety Instructions

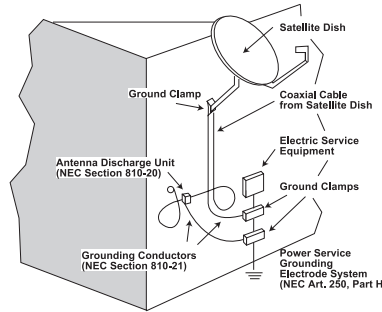


**YOU SHOULD ALWAYS FOLLOW THESE INSTRUCTIONS TO HELP ENSURE  
AGAINST INJURY TO YOURSELF AND DAMAGE TO YOUR EQUIPMENT.**

- Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature per Section 2.3.
- Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.
- Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- Reliable Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).
- Read all safety and operating instructions before you operate the unit.
- Retain all safety and operating instructions for future reference.
- Heed all warnings on the unit and in the safety and operating instructions.

## Safety Instructions - continued

- Follow all installation, operating, and use instructions.
- Unplug the unit from the AC power outlet before cleaning. Use only a damp cloth for cleaning the exterior of the unit.
- Do not use accessories or attachments not recommended by Blonder Tongue, as they may cause hazards, and will void the warranty.
- Do not operate the unit in high-humidity areas, or expose it to water or moisture.
- Do not place the unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall, causing serious personal injury and damage to the unit. Install the unit only in a mounting rack designed for 19" rack-mounted equipment.
- Do not block or cover slots and openings in the unit. These are provided for ventilation and protection from overheating. Never place the unit near or over a radiator or heat register. Do not place the unit in an enclosure such as a cabinet without proper ventilation. Do not mount equipment in the rack space directly above or below the unit.
- Operate the unit using only the type of power source indicated on the marking label. Unplug the unit power cord by gripping the plug, not the cord.
- The unit is equipped with a three-wire ground-type plug. This plug will fit only into a ground-type power outlet. If you are unable to insert the plug into the outlet, contact an electrician to replace the outlet. Do not defeat the safety purpose of the ground-type plug.
- Route power supply cords so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.
- Be sure that the outdoor components of the antenna system are grounded in accordance with local, federal, and National Electrical Code (NEC) requirements. Pay special attention to NEC Sections 810 and 820. See the example shown in the following diagram:



- We strongly recommend using an outlet that contains surge suppression or ground fault protection. For added protection during a lightning storm, or when the unit is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the lines between the unit and the antenna. This will prevent damage caused by lightning or power line surges.
- Do not locate the antenna near overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing the antenna, take extreme care to avoid touching such power lines or circuits, as contact with them can be fatal.
- Do not overload wall outlets or extension cords, as this can result in a risk of fire or electrical shock.
- Never insert objects of any kind into the unit through openings, as the objects may touch dangerous voltage points or short out parts. This could cause fire or electrical shock.
- Do not attempt to service the unit yourself, as opening or removing covers may expose you to dangerous voltage and will void the warranty. Refer all servicing to authorized service personnel.
- Unplug the unit from the wall outlet and refer servicing to authorized service personnel whenever the following occurs:
  - The power supply cord or plug is damaged;
  - Liquid has been spilled, or objects have fallen into the unit;
  - The unit has been exposed to rain or water;
  - The unit has been dropped or the chassis has been damaged;
  - The unit exhibits a distinct change in performance.
- When replacement parts are required, ensure that the service technician uses replacement parts specified by Blonder Tongue. Unauthorized substitutions may damage the unit or cause electrical shock or fire, and will void the warranty.
- Upon completion of any service or repair to the unit, ask the service technician to perform safety checks to ensure that the unit is in proper operating condition.

### Returning Product for Repair (or Credit)

**A Return Material Authorization (RMA) Number is required on all products returned to Blonder Tongue, regardless if the product is being returned for repair or credit.** Before returning product, please contact the Blonder Tongue Service Department at 1-800-523-6049, Ext. 4256 or visit our website: [www.blondertongue.com](http://www.blondertongue.com) for further information.

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## Section 2 — Product Summary

### 2.1 Revision History & Reason

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This is the third issue of the Instruction Manual.

The reason for this revision was to clarify user login.

The reason for the second revision was to reorganize the format and sequence of the information provided.

### 2.2 Description

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The Blonder Tongue QT Headend Web Server is an optional accessory product to allow remote monitoring and control of a QAM Transcode Series II (QTM II) module over the Internet. The QT-HWS-II eliminates the need to load any special software onto a computer and uses a standard web browser to access the unit. It can also be used with any computer, Macintosh® or PC, etc. and at any location that has a web browser with Internet access including your home, office or anywhere on the road.

### 2.3 Features & Benefits

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- Permits complete remote monitoring & control of all units at a headend location
- Works on any computer — MAC or PC compatible
- Easy to use graphical interface through a standard web browser
- No software installation is required

### 2.4 System Requirements

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The QT-HWS-II is designed to run with minimal system requirements shown below:

Operating System:	Any that supports Web Browser Interface
Network Interface Card:	Any that supports Ethernet Protocol
Web Browser:	Microsoft Internet Explorer® 6.0 or later recommended JavaScript Enabled Required
Display resolution:	1024 x 768 recommended, 800 x 600 required
Processor:	Minimum Pentium® III or equivalent recommended
Memory:	Minimum 256 MB recommended

### 2.5 Getting Started

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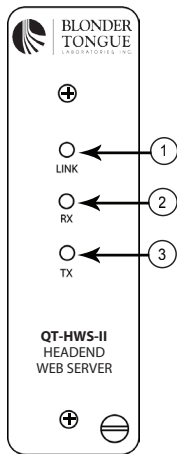
You will need several cables to allow the Headend Web Server II to function properly. Below is a list of the required cables:

- RJ-11 Extension Cable, Stock No. 2722  
Standard cross pinning for communication — see Appendix A for details
- RJ-11 Jumper Cables for Daisy Chaining QT-PCM units, Stock No. 2721  
Custom built jumper cables – Straight pinning for data — see Appendix A for details
- RJ-45 Ethernet Data Cable — Included with Stock No. 2722  
Standard Ethernet Cable — Straight pinning for data

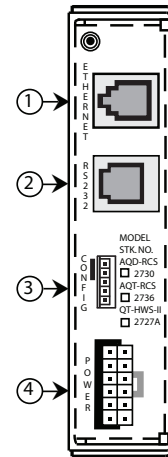


**STRAIGHT PINNING MEANS THAT EACH CONTACT IS STRAIGHT PINNED TO IT'S RESPECTIVE CONTACT (1-1, 2-2, 3-3, ETC.). CROSS PINNING MEANS THAT CONTACTS ARE PINNED TO THE OPPOSITE CONTACT. SEE APPENDIX A FOR WIRING DETAILS.**

## 2.6 Front & Rear Interfaces



1. **Ethernet Link** – LED Indicator
2. **Ethernet Receive** – LED Indicator
3. **Ethernet Transmit** – LED Indicator



1. **RJ-45 Ethernet Connector**  
– Connect to Internet (via Router, Modem, etc.)
2. **RJ-11 RS-232 Serial Data Connector**  
– Connect to QT-PCM
3. **Configuration Header**  
– For Factory & Restore Default Use Only
4. **12-Pin Power Connector**  
– Connect with QT-PCM power/data cable

## 2.7 Specifications

### Programming

IP Addressing: Fixed Static IP

User Name & Password: Software Settable

Administrator & View Modes

### Mechanical

Module Dimensions (W x H x D): 1.5 x 5.25 x 11.31 in., 38 x 133 x 287 mm

Chassis Dimensions (W x H x D): 19 x 5.25 x 12 in., 483 x 133 x 305 mm

Mounting (W x H): Standard 3 EIA Unit Height – 19 x 5.25 in., 483 x 133 mm

Module Weight: 1.5 lbs., .68 kg

### General

Power Requirement: 5 VDC, 200 mA

Operating Temperature: 0° to +50° C

Storage Temperature: -20° to +70° C

Humidity: 0 to 95% RH

### Controls

RJ-45 Ethernet Connector

RJ-11 RS-232 Serial Data Connector

12-pin Power Connector

### Indicators

Ethernet Link LED

Ethernet Receive LED

Ethernet Transmit LED



## Section 3 – Unpacking & Installation

### Unpacking and Handling

Each unit is shipped with all equipment assembled, wired, factory tested, and then packaged in an appropriate shipping container. Ensure that all accessories are removed from the container and packing material before they are discarded.

### Mechanical Inspection

Inspect the front and rear of the equipment for shipping damage. Make sure the equipment is clean, and no wires, cables, or connectors are broken, damaged or loose.

### Precautions

Adherence to the initial installation precautions outlined below will help prevent problems arising during the installation and future maintenance of the unit.

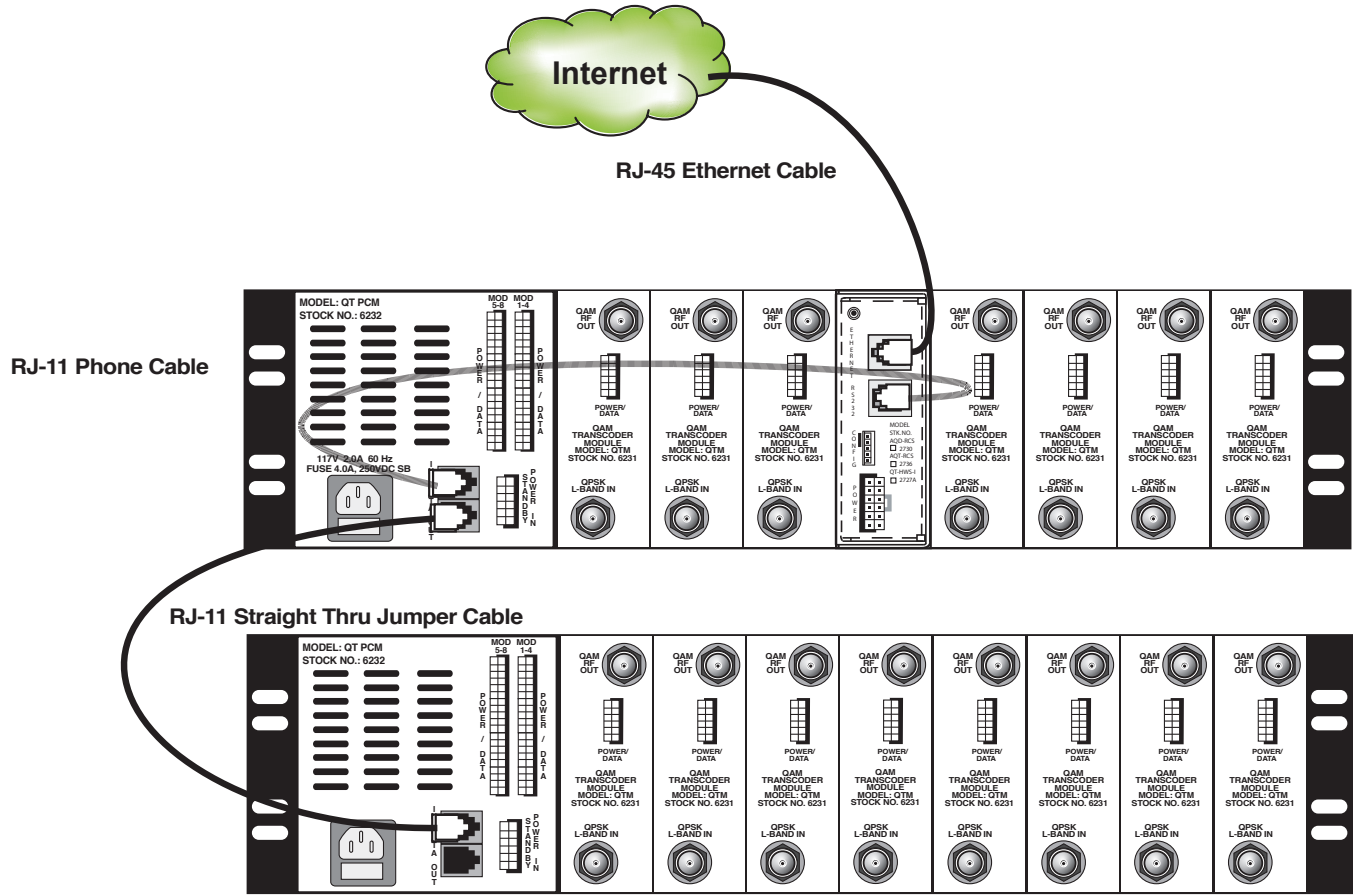
### 3.1 Installing the QT-HWS-II

The QT-HWS-II is designed to occupy any single module slot in the QT rack chassis. Slide the QT-HWS-II unit into the desired chassis slot and connect the 12-pin power/data cable from the QT-PCM to the QT-HWS-II unit. Tighten the retaining screw on the front panel to secure the unit in the chassis.



**THE QT-PCM WILL APPROPRIATELY POWER THE QT-HWS-II UNIT BUT WILL TREAT IT AS A “NOT PRESENT” ON THE LCD READOUT WINDOW AND IN THE WEB INTERFACE – THIS DOES NOT INDICATE A PROBLEM AND IS THE NORMAL CONDITION.**

### 3.2 Wiring Diagram



IT IS RECOMMENDED TO PLACE THE QT-HWS-II UNIT IN THE MIDDLE SLOT OF THE TOP QT RACK IN THE HEADEND. THE MIDDLE SLOTS IN THE QT CHASSIS ARE SUBJECT TO THE MOST HEAT. THE QT-HWS-II HAS THE CAPABILITY TO MEASURE THE AMBIENT TEMPERATURE. PLACING THE QT-HWS-II IN THIS LOCATION IN THE RACK WILL PROVIDE THE MOST VALUABLE DATA ABOUT THE OVERALL TEMPERATURE OF THE ENTIRE RACK. IT IS ALSO RECOMMENDED THAT IF ALL CHASSIS SLOTS ARE NOT USED, THAT EMPTY SLOTS START AT THE MIDDLE OF THE RACK AND BE ALTERNATED TO ENCOURAGE BETTER AIR FLOW.

## Section 4 - Configuring

The QT-HWS-II features an easy-to-use web interface and is designed to be accessed by using a standard HTTP web browser. The QT-HWS-II is optimized for use with Microsoft® Internet Explorer™ 6.0 or later and requires Javascript to be enabled. The unit may be accessed locally or remotely. Remote access is defined as a connection to the unit over a LAN, a WAN, or the Internet. Local access is defined as a direct connection to the unit from the personal computer's network interface card.

- A standard "straight through" RJ-45 Ethernet cable is used for a Remote Access configuration
- A "Cross" RJ-45 Ethernet cable is required for a direct connection.

To Access the QT-HWS-II:

- Open a web browser on your computer
- Enter the default IP address in the address line on your browser — **http://172.16.70.1**

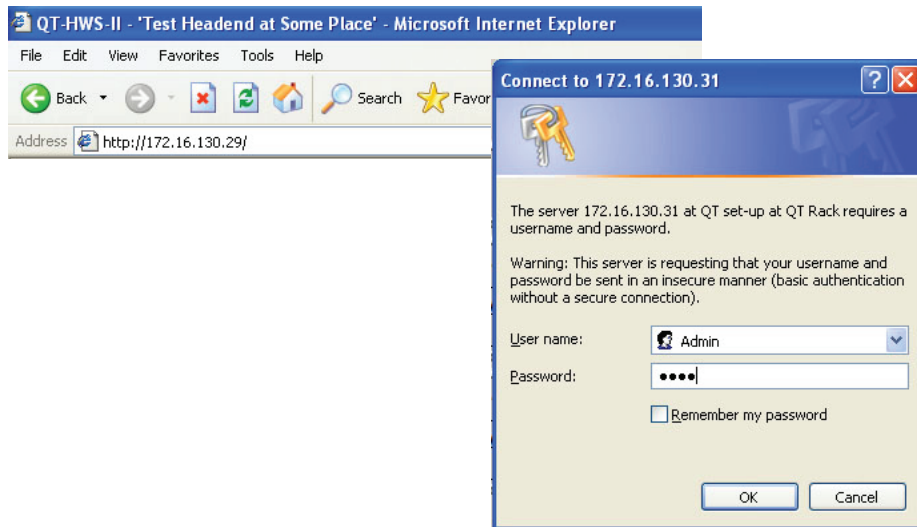


**IT MAY BE NECESSARY TO ADJUST YOUR COMPUTER'S IP ADDRESS SETTINGS TO ENSURE THAT THE SAME SUBNET ADDRESS IS SET TO PERMIT FIRST-TIME COMMUNICATION TO THE QT-HWS-II.**  
**ADJUST YOUR IP ADDRESS FROM AUTOMATICALLY OBTAIN OR ANOTHER FIXED ADDRESS TO 172.16.70.2 (ANY LAST DIGIT OF 2-254 MAY BE USED) & SUBNET MASK TO 255.255.0.0**

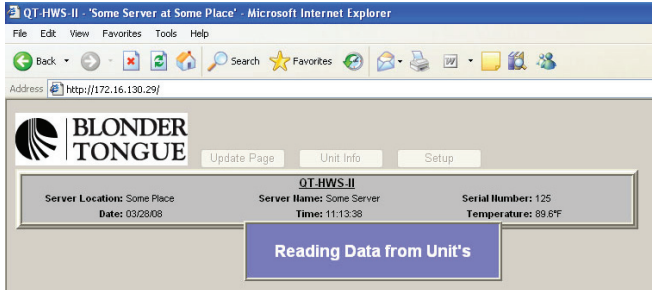
- Enter the User Name and Password and Click Submit



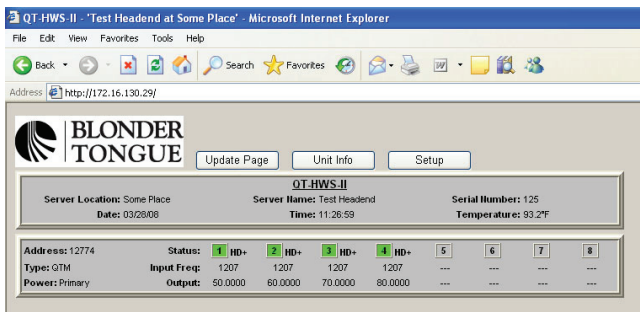
**ADMINISTRATOR ACCESS:    USERNAME: Admin    PASSWORD: Pass**  
**READ ONLY ACCESS:        USERNAME: Guest    PASSWORD: Pass**



If the User Name and Password are correctly entered then the QT-HWS-II will attempt communication. This is a real-time serial communication process and may require several seconds to get a status response.



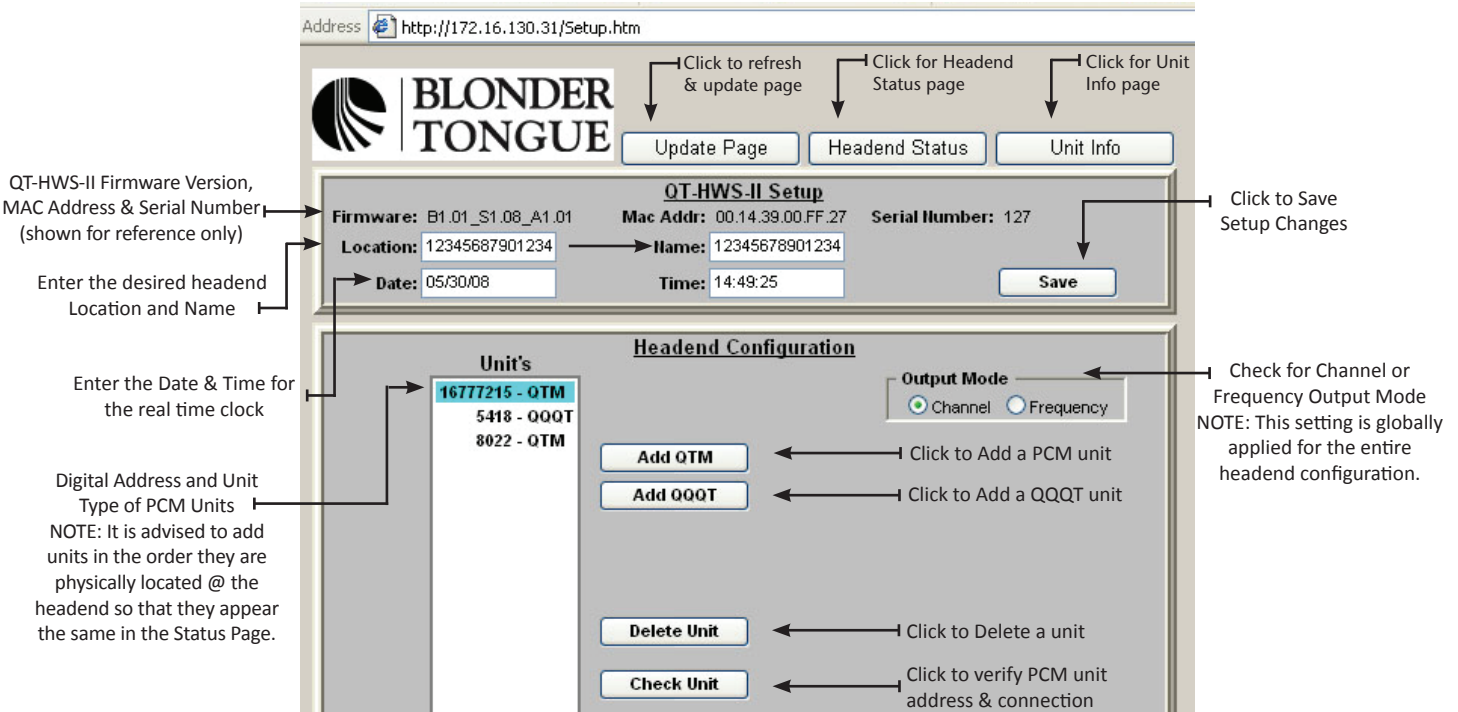
The "Reading Data from Units" message will be displayed during the communication process. After a status response is received the Headend Status screen will be displayed. This is a real-time data communication process in which the QT-HWS-II is reading the data from each QTM module and may take a few moments to complete—please be patient.



Click the Setup button to proceed to the Setup Page - this permits the entry of the QT-PCM unit digital addresses into the QT-HWS-II.

#### 4.1 QT-HWS-II Setup Page

The QT-HWS-II Setup Page is used to enter headend site information as well as the digital address of each respective PCM unit connected and deployed in the headend. The digital address of the PCM unit must be entered in order for the Headend Web Server to communicate correctly in real time. The QT-HWS-II is designed to communicate with earlier versions of the QAM Transcoder family of products. In the rest of the manual, we will make reference to PCM to cover all three generations of Power Control Modules, or PCM.

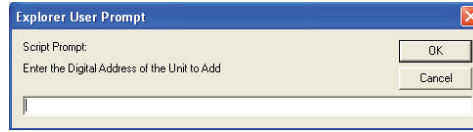


Enter the desired information in the upper portion of the Setup Page and Click the Save button to apply the information to non-volatile memory. Use the lower portion (Headend Configuration) to enter, remove, and verify QT-PCM or QQQT units. The digital address of an QT-PCM must be first entered into the QT Headend Web Server-II before it can communicate. The QT-PCM digital address can be displayed by accessing the Interactive menu using the UP/DN arrow navigation keys on the front panel LCD menu of each PCM unit. For more detailed instructions on how to obtain the Serial Number of the QT-PCM unit, please refer to the QT-Series Instruction Manual.

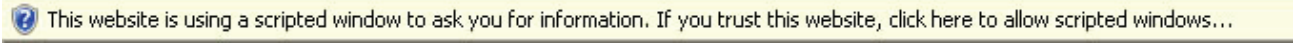
## 4.2 Adding a PCM

1. Click the Add QTM / QQQT button to display the script dialog box.

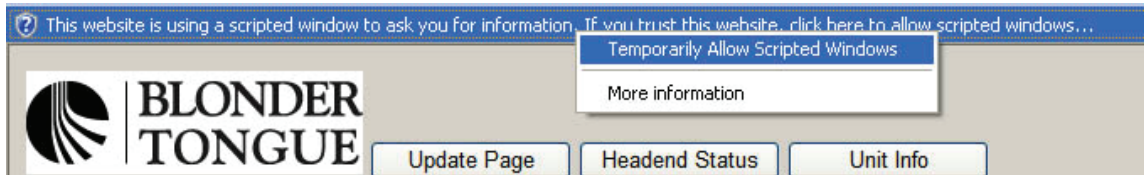
*NOTE: The QT-HWS-II uses Javascript for the Add Unit dialog box to pop up, this may need to be enabled in your browser.*



*NOTE: QQQT must be version 5.0*



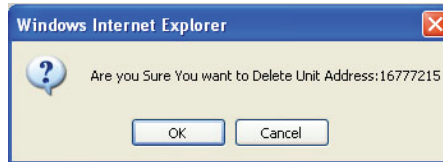
- Click anywhere on the warning bar (as shown above & below), then select the Allow Scripted Windows option.



2. Enter the digital address of each PCM unit to be installed in the QT-HWS-II for the respective location.  
The QT-PCM digital address can be displayed by accessing the Interactive menu using the UP/DN arrow navigation keys on the front panel LCD menu of each PCM unit. Best results are achieved by entering the PCM addresses in the top-to-bottom order that they are physically installed in the rack.
3. Click OK to Enter the PCM digital Address.

## 4.3 Deleting a PCM

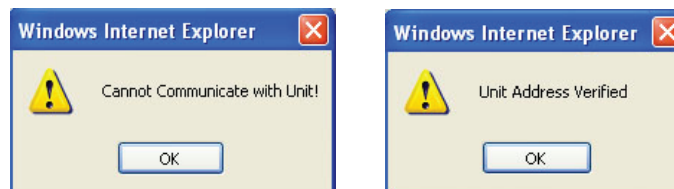
1. Click the Delete PCM button to remove a PCM address from the installed list.  
The confirmation dialog box will appear.
2. Click OK to remove the PCM address.



## 4.4 Checking a PCM address & communication

The QT-HWS-II has an innovative, built-in tool to test the communication to a PCM address entered in the list. ***This helps to ensure that the correct entry was made and that the wiring to the unit is correct.*** Any unit installed can be checked at anytime or sequence in the process and it does not matter where the unit physically resides in the headend chain.

1. Highlight a PCM address in the list by clicking on it.
2. Click the Check PCM button to query the digital address highlighted.



The QT-HWS-II will attempt to communicate with the highlighted unit and report back a verification for successful communication or a cannot communicate message if the attempt failed. This helps to ensure that all units entered are correctly connected and the digital address matches the on-screen entry.

If the "Cannot Communicate with PCM" error message is displayed:

1. Verify the PCM address is entered in the list correctly - the QT-PCM digital address can be displayed by accessing the Interactive menu using the UP/DN arrow navigation keys on the front panel LCD menu of each PCM unit.
2. Check the cabling on the rear of the QT-HWS-II and respective QT-PCM.

Ensure a standard 4-pin cross phone cable (RJ-11) is used from QT-HWS-II to the RJ-11 IN port of the first QT PCM and a straight thru RJ-11 jumper is used from the OUT port to the IN port of each subsequent PCM unit. (See Appendix A for Cable Details)





### 4.7 View Mode

SNR	QPSK	8PSK
Marginal	7–9 dB	9–11 dB
Good	10–12 dB	11–13 dB
Best	>12 dB	>13 dB

### 4.8 Modify Mode

The QT-HWS-II Modify Mode Page permits changes for each QT module connected to the QT-PCM. Individual module changes may only be made from this page with the Administrator logon.

## 4.9 Administration Page

The QT-HWS-II Administration Page provides the ability for an operator to adjust the IP as well as Username and Password settings for the unit.

The Administration may only be accessed by typing the URL of the QT-HWS-II followed by a forward slash and Admin.htm, for example: <http://172.16.70.1/Admin.htm>



**THE ADMINISTRATION PAGE IS A HIDDEN WEB PAGE TO PREVENT UNWANTED MODIFICATIONS TO THE CRITICAL IP USERNAME AND PASSWORD SETTINGS. IT MAY ONLY BE ACCESSED BY USING THE ADMINISTRATOR LOGON.**

### A - Display Only Fields

- Serial #:** Serial number of the QT Headend Web Server
- Firmware Rev:** Displays the revision of firmware-may be used for troubleshooting purposes
- MAC Address:** Media Access Control Address is a hardware address that uniquely identifies an QT-HWS-II on a network

### B - Editable Fields

- IP Address:** IP Address of the QT-HWS-II-Default IP Address is 172.16.70.1
- Subnet Mask:** A mask used to determine which subnet an IP Address belongs to-Default subnet mask is 255.255.255.0
- Default Gateway:** IP Address of a node (router) on the network that serves an access point to another network-Default gateway is 172.16.70.254
- Admin ID:** Case sensitive user identification for Administrative access and privileges-Default Admin ID is "Admin"
- Admin Password:** Case sensitive password for Administrative access and privileges-Default Admin Password is "pass"
- View ID:** Case sensitive user identification for view only and privileges-Default View ID is "Guest"
- View Password:** Case sensitive password for view only and privileges-Default View Password is "pass"
- FTP ID:** Case sensitive user identification for file transfer protocol (FTP) access-Default FTP ID is "FTP"
- FTP Password:** Case sensitive password for file transfer protocol (FTP) access and privileges, Default FTP Password is "pass"

### C - Action Buttons

- Factory Defaults Button :** Resets the QT-HWS-II back to factory default settings and deletes all stored configurations, IP addresses, and identifications stored.
- Reset Unit Button:** Press the Reset Unit button to perform a warm power reset of the QT-HWS-II unit. Refresh the page on your web browser to continue.
- Cancel Button:** Does not apply changes made to the QT-HWS-II Administration page and resets the values to the previously saved state.
- Save Button:** Applies and saves the current QT-HWS-II network settings, user identifications, and passwords to non-volatile memory.



#### 4.10 Software Default Reset

The QT-HWS-II can be reset back to its factory default settings if the IP Address, Admin ID, and Admin Password are known by clicking the Factory Defaults button on QT-HWS-II Administration page. It will delete all data that may have been entered in the QT-HWS-II but will not effect the programming or status of any deployed QT module.

If the IP Address, Admin ID, and Admin Password are known, then perform the following steps:

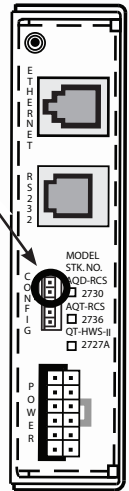
1. Access the Administration page (Admin.htm) by typing the appropriate URL in the browser address bar
2. Click the "Factory Defaults" button. The following prompt will appear:
3. Click the OK button to reset all values to their factory defaults
4. Power cycle the QT-HWS-II for the new settings to take effect



#### 4.11 Temporary Hardware Admin Default Reset

If the IP Address and/or Admin ID or Password of the QT-HWS-II are not known, then perform the following steps to "temporarily" set the QT-HWS-II to its default Admin access settings:

1. Facing the QT-HWS-II, place a 2-pin jumper across the top most two pins of the five pin "CONFIG" header, indicated as shown on the right.
2. Power cycle the QT-HWS-II
  - A. The unit should now be "temporarily" configured for the default IP Address (172.16.70.1)
3. Log into the Admin page — <http://172.16.70.1/Admin.htm>
  - A. Use the default username and password — "Admin" & pass
4. Change the IP Address, Subnet Mask, Gateway, Admin ID, Admin Password, etc. as required
5. Click the Save button
6. Remove the 2-pin jumper from the "CONFIG" header
7. Power cycle the QT-HWS-II
  - A. The unit should now be configured for the new Admin settings
8. To erase all entries and reset the unit to the factory default settings follow the Software Default Reset procedure



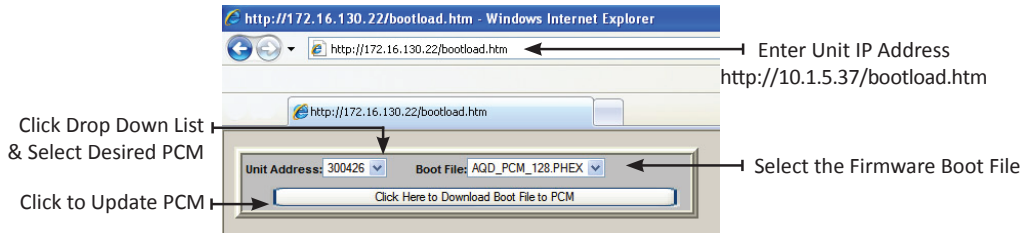
**AFTER A HARDWARE RESET A DIRECT CONNECTION TO THE QT-HWS-II MAY BE REQUIRED. A CROSS ETHERNET CABLE IS REQUIRED FOR A DIRECT CONNECTION.**

## Section 5 - Updating the QT-PCM Firmware



ANY QT-HWS-II UTILITY FUNCTIONS SHOULD ONLY BE PERFORMED IF DIRECTED BY A QUALIFIED BLONDER TONGUE TECHNICIAN!

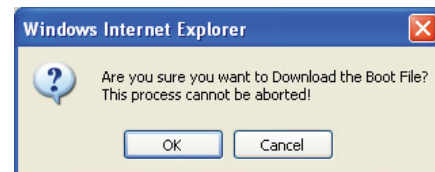
The QT-HWS-II provides the ability to locally or remotely upgrade the firmware revision of the QT-PCM unit. This is a hidden function. Enter the IP address of the QT-HWS-II in the browser address line followed by /bootload.htm as shown. The Bootload utility is a hidden utility function and requires the manual entry of the IP address followed by \*/bootload.htm.



1. To upgrade the QT-PCM firmware using the QT-HWS-II, click the drop down list and select desired PCM address. **Click the browser refresh button if not all PCM unit addresses are displayed in the drop down selection list.**
2. Select the appropriate bootload file, this file has a \*.PHEX file format extension, the name of the file contains the actual version number of the firmware.



THE QT-HWS-II IS PRE-LOADED WITH THE LATEST CURRENT RELEASED VERSION OF THE QT-PCM FIRMWARE. VISIT THE BLONDER TONGUE FTP SITE FOR ANY ADDITIONAL UPDATES @ [FTP1.BLONDERTONGUE.COM](http://ftp1.blondertongue.com), QT DIRECTORY AS SHOWN. SEE THE FTP FILE TRANSFER INSTRUCTIONS FOR DOWNLOADING A NEW FIRMWARE VERSION.

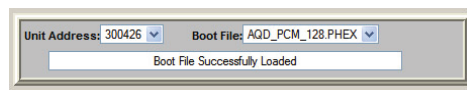


3. Click the "Click Here to Download Boot File to PCM" button.
4. Click OK on the confirmation message prompt.

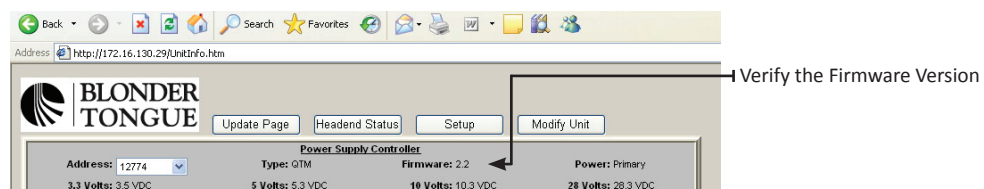


THE FIRMWARE UPGRADE PROCESS CAN NOT BE CANCELLED OR INTERRUPTED AFTER PROCEEDING. THE UPGRADE PROCESS TAKES APPROXIMATELY 1 MINUTE TO COMPLETE.

The QT-PCM LCD (if you are present at the headend to observe) will display "PROGRAM FLASH" during the upgrade process. The Backlight of the LCD will shut off upon completion and the PCM will reboot itself. The bootload web utility will display the successful completion message when finished.



The updated firmware version number can now be verified on the Unit Info page of the QT-HWS-II.



## Section 6 – Transferring Files Using FTP

### 6.1 Transferring Files to the QT-HWS-II using FTP

FTP — File Transfer Protocol is a commonly used protocol to transfer data from one computer to another over the Internet or a network that supports TCP/IP protocol. There are two computers or devices involved in an FTP transfer, a server and a client. The FTP server, running FTP server software, listens on the network for requests. The client, running FTP client software, initiates a connection to the server. Once connected the client can perform operations such as downloading or uploading files to the server. FTP servers by default listen on port 21 for incoming connections from FTP clients. The Blonder Tongue FTP site and the QT-RCS act as FTP Servers.

- FTP client software, such as FTP Commander (a free FTP client software program) is required to access and transfer files to QT-HWS-II unit. The appropriate username and password are required for transfer — default UN: "FTP" & PW: "pass" (these entries are case sensitive)



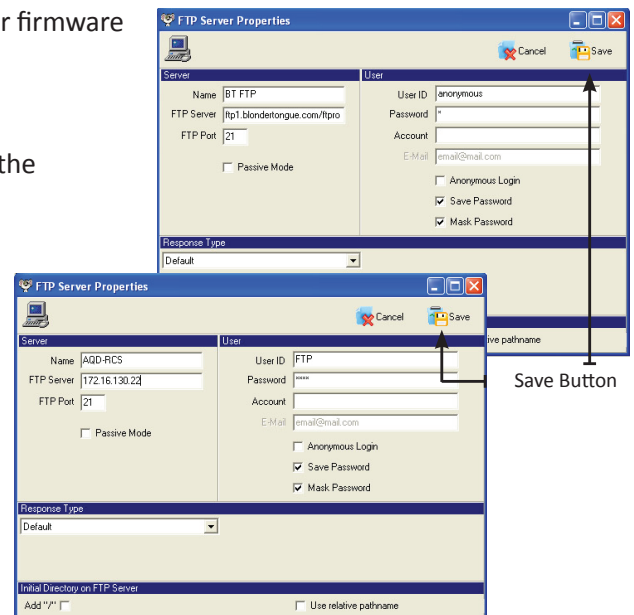
**FTP COMMANDER VERSION 7.33 CAN BE DOWNLOADED FROM THE BLONDER TONGUE FTP SITE, VERSION 8.X OF THE FTP COMMANDER SOFTWARE DOES NOT FUNCTION IN SOME COMPUTER SETUP ENVIRONMENTS AND THUS, NOT RECOMMENDED.**

- Navigate to the BT FTP site @ <ftp://ftp1.blondertongue.com/ftproot/>
- The standard Internet Explorer web browser may be used to access and download the FTP Commander freeware
- Proceed to the FTP Commander directory and download the executable file
- Install the FTP Commander freeware software on your desired PC

### 6.2 Transferring Files Using FTP Commander V 7.33

- Open the FTP Commander Software
- Click the "New Server" button (See picture) to create a new connection to the QT-HWS-II unit or the BT FTP site to download the replacement web pages and/or firmware
- Enter the required information in the FTP Server Properties window

- Name: Enter a desired name for the server connection
- FTP Server: Enter the IP address of the desired server such as the QT-HWS or BT FTP Site
- FTP Port: The QT-HWS-II & the BT FTP Site use the default FTP transfer port, Port 21
- User ID: Enter the appropriate Username (default for the QT-RCS is "FTP" and the BT FTP site is anonymous)
- Password: Enter the appropriate Password (default for the QT-RCS is "pass" and the BT FTP site uses no PW entry)
- Click the Save button



**USERNAMES AND PASSWORD ARE CASE SENSITIVE**

### 6.3 Uploading & Downloading Files

- Click the desired Server you created in the list of FTP Servers
- Click the Connect button to establish a connection to the desired server
- The connection should be established and the available files for download/upload should be displayed (AQD-RCS example shown at right)
- Select all the files on the FTP server to transfer and click the left arrow button to transfer to the open directory

## Section 7 – Updating Web Pages & Firmware

### 7.1 Updating the Web Pages

The QT-HWS-II uses Java enabled http web pages for the interactive communication process. From time to time Blonder Tongue may make updated web pages available that address operational or bug related items as well as make new features available. The web pages should only be updated after consultation with the Blonder Tongue Technical Engineering Group. Please refer to section 7.3 for step-by-step procedures.



**THE LATEST RELEASED WEB PAGES MAY BE DOWNLOADED FROM THE BLONDER TONGUE FTP SITE:  
FTP://FTP1.BLONDERTONGUE.COM/FTPROOT/QTSERIES/QT-HWSII/WEB\_PAGES/  
IT IS RECOMMENDED TO ALWAYS DOWNLOAD AND UPDATE ALL WEB PAGES IN THE FTP SITE DIRECTORY  
WHEN PERFORMING AN UPDATE.  
SEE THE "TRANSFERRING FILES TO THE QT-HWS-II USING FTP FOR ADDITIONAL INSTRUCTIONS.**

### 7.2 Updating the Firmware

The QT-HWS-II firmware may also be updated from time to time via FTP. The firmware file has a \*.firm file format extension, the name of the file contains the actual version number of the firmware. "HWSII\_103.firm" indicates HWS2 Server version 1.03. The firmware version can be verified by accessing the Setup and/or Admin page — the last three digits indicate the firmware version. The firmware should only be updated after consultation with the Blonder Tongue Technical Engineering Group. Please refer to section 7.3 for step-by-step procedures.

Verify the Firmware Version →

AQD Remote Configuration Server Setup		
Firmware: B1.01_S1.07_A1.09	Mac Addr: 00.14.39.FF.FF.03	Serial Number: 100
Location: Some Place	Name: AQD Server	
Date: 07/31/07	Time: 14:43:15	<input type="button" value="Save"/>

### 7.3 Updating the QT-HWS-II Firmware and/or Web Pages with BT FTP Site Files

1. Create a new directory on your local PC for the QT-HWS-II web pages and/or firmware files required to update the unit
2. Download all the files from the BT FTP as instructed above to the new directory on your local PC
3. Click Disconnect to close the connection with the Blonder Tongue FTP Site
4. Establish a connection with the QT-HWS-II unit (click the server you created for the QT-HWS-II and click the Connect button), the files on the HWS-II unit will be displayed
5. The web pages on the HWS-II unit must be deleted prior to updating. Select all the web page files, and click the delete button.

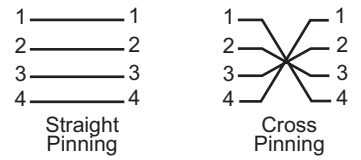
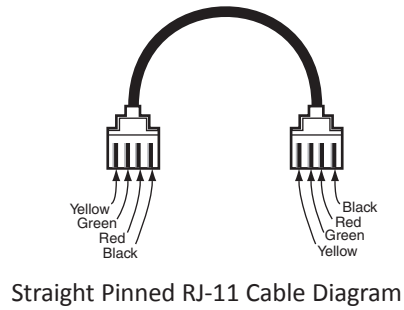
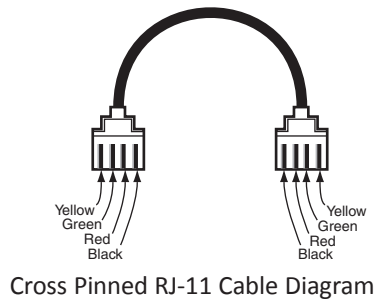


**DO NOT SELECT & DELETE FILES WITH A ".FIRM" OR ".PHEX" EXTENSION — THESE ARE FIRMWARE RELATED FILES AND WILL PREVENT THE HWS-II UNIT FROM OPERATING.**

6. Navigate to the directory on your local PC with the updated web pages/firmware files from the FTP site, select all the files, and click the right arrow button to transfer the updated web pages/firmware files to the HWS-II unit, as directed.
7. Log into the Admin page -<http://172.16.70.1/Admin.htm>
8. Press the Reset Unit button to perform a warm power reset

The screenshot shows the FTP Commander 7.33 interface. The top menu bar includes 'Connect Button', 'Disconnect Button', and 'Delete Button'. The main interface is split into two panes: 'Local computer' on the left and 'FTP Servers' on the right. The 'Local computer' pane shows a file list with columns for 'Filename', 'Size', and 'Date'. The 'FTP Servers' pane shows a similar file list for the server '172.16.130.22'. Between the panes are 'Left/Right Transfer Buttons' (two arrows). At the top of the interface are buttons for 'Connect', 'Disconnect', 'Stop Transfer', 'New Server', and 'Exit'. A status bar at the bottom shows transfer progress: '< 257 "/>

## Appendix A



Note: Straight pinning means that each contact is straight pinned to it's respective contact. Cross pinning means that contacts are pinned to the opposite contact.



# Limited Warranty

Blonder Tongue Laboratories, Inc. (BT) will at its sole option, either repair or replace (with a new or factory reconditioned product, as BT may determine) any product manufactured by BT which proves to be defective in materials or workmanship or fails to meet the specifications which are in effect on the date of shipment or such other specifications as may have been expressly agreed upon in writing (i) for a period of one (1) year from the date of original purchase (or such shorter period of time as may be set forth in the license agreement specific to the particular software being licensed), with respect to iCentral™ (hardware and software) and all other software products (including embedded software) licensed from BT, (ii) for a period of one (1) year from the date of original purchase, with respect to all MegaPort™, IPTV products, and fiber optics receivers, transmitters, couplers and integrated receiver/distribution amplifiers (including TRAILBLAZER™, RETRO-LINX™ and TWIN STAR™ products) as well as for DigiCipher® satellite receivers, and (iii) for a period of three (3) years from the date of original purchase, with respect to all other BT products. Notwithstanding the foregoing, in some cases, the warranty on certain proprietary sub-assembly modules manufactured by third-party vendors and contained in BT products and on certain private-label products manufactured by third-parties for resale by BT are of shorter duration or otherwise more limited than the standard BT limited warranty. In such cases, BT's warranty with respect to such third-party proprietary sub-assembly modules and private-label products will be limited to the duration and other terms of such third-party vendor's warranty. In addition, certain products, that are not manufactured but are resold by BT, carry the original OEM warranty for such products. The limited warranty set forth in this paragraph does not apply to any product sold by BT, which at the time of sale constituted a Refurbished/Closeout Product.

(b) BT will at its sole option, either repair or replace (with a new or factory-reconditioned product, as BT may determine) any product sold by BT which at the time of sale constituted a refurbished or closeout item ("Refurbished/Closeout Product"), which proves to be defective in materials or workmanship or fails to meet the specifications which are in effect on the date of shipment or such other specifications as may have been expressly agreed upon in writing, for a period of ninety (90) days from the date of original purchase. Notwithstanding the foregoing, in some cases the warranty on third party software and on certain proprietary sub-assembly modules manufactured by third-party vendors and contained in BT products and on certain private-label products manufactured by third-parties for resale by BT are of shorter duration or otherwise more limited than the BT limited warranty for Refurbished/Closeout Products. In such cases, BT's warranty for Refurbished/Closeout Products constituting such third party software, third-party proprietary sub-assembly modules and private-label products will be limited to the duration and other terms of such third-party vendor's warranty. In addition, notwithstanding the foregoing, (i) certain Refurbished/Closeout Products that are not manufactured (but are resold) by BT, carry the original OEM warranty for such products, which may be longer or shorter than the BT limited warranty for Refurbished/Closeout Products. All sales of Refurbished/Closeout Products are final.

To obtain service under this warranty, the defective product, together with a copy of the sales receipt or other satisfactory proof of purchase and a brief description of the defect, must be shipped freight prepaid to: Blonder Tongue Laboratories, Inc., One Jake Brown Road, Old Bridge, New Jersey 08857.

This warranty does not cover damage resulting from (i) use or installation other than in strict accordance with manufacturer's written instructions, (ii) disassembly or repair by someone other than the manufacturer or a manufacturer-authorized repair center, (iii) misuse, misapplication or abuse, (iv) alteration, (v) lack of reasonable care or (vi) wind, ice, snow, rain, lightning, or any other weather conditions or acts of God.

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All claims for shortages, defects, and non-conforming goods must be made by the customer in writing within five (5) days of receipt of merchandise, which writing shall state with particularity all material facts concerning the claim then known to the customer. Upon any such claim, the customer shall hold the goods complained of intact and duly protected, for a period of up to sixty (60) days. Upon the request of BT, the customer shall ship such allegedly non-conforming or defective goods, freight prepaid to BT for examination by BT's inspection department and verification of the defect. BT, at its option, will either repair, replace or issue a credit for products determined to be defective. BT's liability and responsibility for defective products is specifically limited to the defective item or to credit towards the original billing. All such replacements by BT shall be made free of charge f.o.b. the delivery point called for in the original order. Products for which replacement has been made under the provisions of this clause shall become the property of BT. Under no circumstances are products to be returned to BT without BT's prior written authorization. BT reserves the right to scrap any unauthorized returns on a no-credit basis. Any actions for breach of a contract of sale between BT and a customer must be commenced by the customer within thirteen (13) months after the cause of action has accrued. A copy of BT's standard terms and conditions of sale, including the limited warranty, is available from BT upon request. Copies of the limited warranties covering third-party proprietary sub-assembly modules and private-label products manufactured by third-parties are also available from BT on request. DigiCipher® is a registered trademark of Motorola Corp. (Rev 0509)



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