NXG-EPG
User Manual

NXG

Electronic Program Guide Module

Stock #	Model Name	Description
6790	NXG-EPG	Electronic Program Guide Module

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

Purchase Location Name:	
Purchase Location Telephone Number:	
NXG-EPG Module Serial Number:	

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Reverse engineering or disassembly is prohibited.

Cross-Reference & Hyperlinking Usage

This guide makes use of hyperlinks for the Table of Contents, some cross-reference linking between sections, and external hyperlinking to web addresses. This has been done to assist the reader in finding the information they are seeking in a much quicker way. In addition to hyperlinking, the Table of Contents also makes use of the bookmarking feature present in the Adobe Reader application.

Product and Documentation Updates

Download the latest User Manual (PDF) by visiting our website. Navigate to the product page by entering the full Model Name or Stock Number in the search field. Upon reaching the product page, the "User Manual" download link will be located beneath the product image. **Firmware Updates** are available under "Tech Support" in the "Resources" section of the website. General instructions for the FTP site, as well as updating your firmware, are provided on this page.

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** for further information.

Table of Contents

Section 1 – General & Safety Instructions

STOP

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
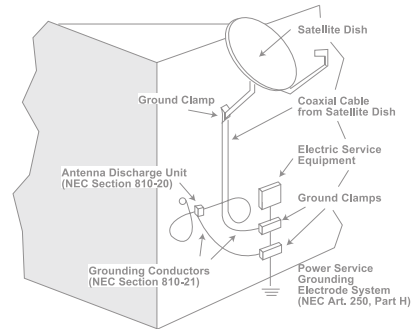

NOTE TO CATV SYSTEM INSTALLER

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.

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 overcurrent 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.

➡ 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.

Section 2 – Product Summary

2.1 Revision History & Reason

This is the first release of this manual.

2.2 Product Application & Features

Application:

The **NXG-EPG (Electronic Program Guide Module)** is part of Blonder Tongue's flagship NeXgen Gateway (NXG) platform, which supports full two-way service provider content delivery to enterprise properties via traditional coaxial cable, fiber or Ethernet.

The **NXG-EPG** module allows the content service provider to offer a custom program guide for the property's unique channel lineup. The **NXG-EPG** module can be configured to input a gracenote IDs (TMS) guide data source file from gracenote.

The **NXG-EPG** can be customized to include the property's logo, images, or JPEG/PNG banner advertisements in the header or footer sections of the electronic program guide. This allows the property to sell local ad space to local businesses to increase revenue or advertise special events at the property. The content service provider or property owner can also design the colors and font sizes to match their current branding.

The **NXG-EPG** output is an MPEG-2 1080i video program, available in both IP and RF QAM formats supporting major and minor channels via the NXG QAM and/or IP output modules, so it can be displayed on TV's with or without set top boxes. The program guide provides an easy way for guests to find their favorite TV content through a scrolling grid-based list instead of channel surfing, thus improving the guests overall TV experience.

NXG-IP Features:

- Three different Guide Theme options with easy-to-use GUI to enhance user experience
- Customizable with property or company logo
- Utilizes gracenote IDs (TMS) guide data source file
- Supports JPEG banner advertisements for ad revenue
- Enhances Guest experience

Description:

a **STATUS LED:**

    LED is Off = Indicates the module is not correctly connected or receiving power.

    LED is Green = Indicates the module is running without errors.

    LED is Red = Indicates that one or more errors have been detected.

2.3 Module Specification

Input

Guide Data:	From Service Provider via Master Controller Module 1Gb RJ45

Alarms/Monitoring

Front Panel Indicator:	1x Status LED
Remote Monitoring/ Control:	NeXgen Gateway Controller webpage interface

General

Dimensions: (W x D x H)	1.15" x 15.5" x 7.0" (29 mm x 394 mm x 178 mm)
Power:	Via NXG Mainframe back plane
Power Consumption:	11 W
Weight:	2.0 lbs (0.9 kg)
Operating Temperature:	32 to 122 ℉ (0 to 50 ℃)
Storage Temperature:	-13 to 158 ℉ (-25 to 70 ℃)
Operating Humidity:	0 to 95% RH @ 35 ℃ max, non-condensing
Storage Humidity:	0 to 95% RH @ 35 ℃ max, non-condensing

2.4 Module Installation

For general module installation instructions, please refer to the NXG Base Platform User Manual.

Section 3 – Choosing the Program Guide Theme

3.1 Before You Begin

There are various steps to setting up the EPG Module, however the two most important are choosing the Program Guide Theme and setting up the Network IP configurations.

3.2 "Guide" > "Theme" Tab

In this step, you will be choosing the theme of the Program Guide that suits their application best. As shown below, the screen allows the user to choose between 3 different layouts and specifies information, advantages, and disadvantages about each option. For more information about the different theme types, see under **Step 4** in this guide or refer to the manual. The "**Theme**" selection tab is shown below and example layouts are shown on the next page.
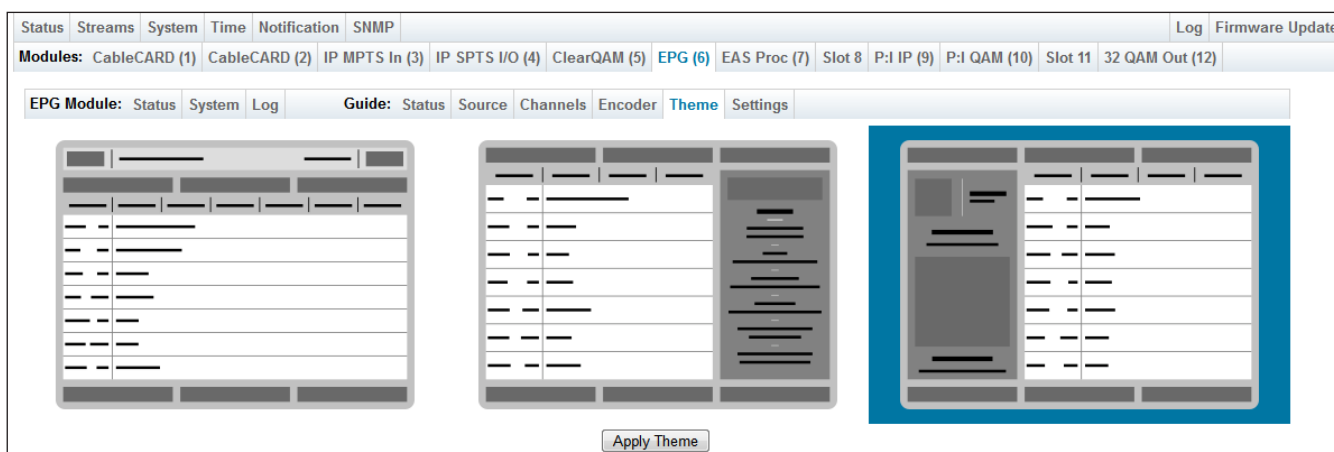

Figure 3.2a - "Theme" Tab - Choosing a Theme Layout

① Theme 1 - General Information:
- Dynamically Generated to minimize empty space
- Includes a configurable top banner
- Includes up to 6 banner images

Advantages:
- High Program name information density

Disadvantages:
- Smaller channel/program fields
- Smaller font sizes in program grid region

Figure 3.2b - "Theme" Tab - Theme 1

② Theme 2 - General Information:
- Dynamically Generated to minimize empty space
- Configurable widget right of program grid
- Includes up to 6 banner images

Advantages:
- Larger channel/program fields
- Larger font sizes in program grid region

Disadvantages:
- Low program name information density

Figure 3.2c - "Theme" Tab - Theme 2

3.2 Choosing the Program Guide Theme (continued)

3 **Theme 3 Information:**

- Dynamically Generated to minimize empty space
- Configurable widget left of program grid
- Includes up to 6 banner images

Advantages:

- Larger channel/program Fields
- Larger font sizes in program grid region

Disadvantages:

- Low program name information density

Figure 3.2c - "Theme" Tab - Theme 3

The Settings tab will allow you to further customize your chosen theme as shown below. See **Section 7** for more information on the Settings screen (Figure 3.2d).
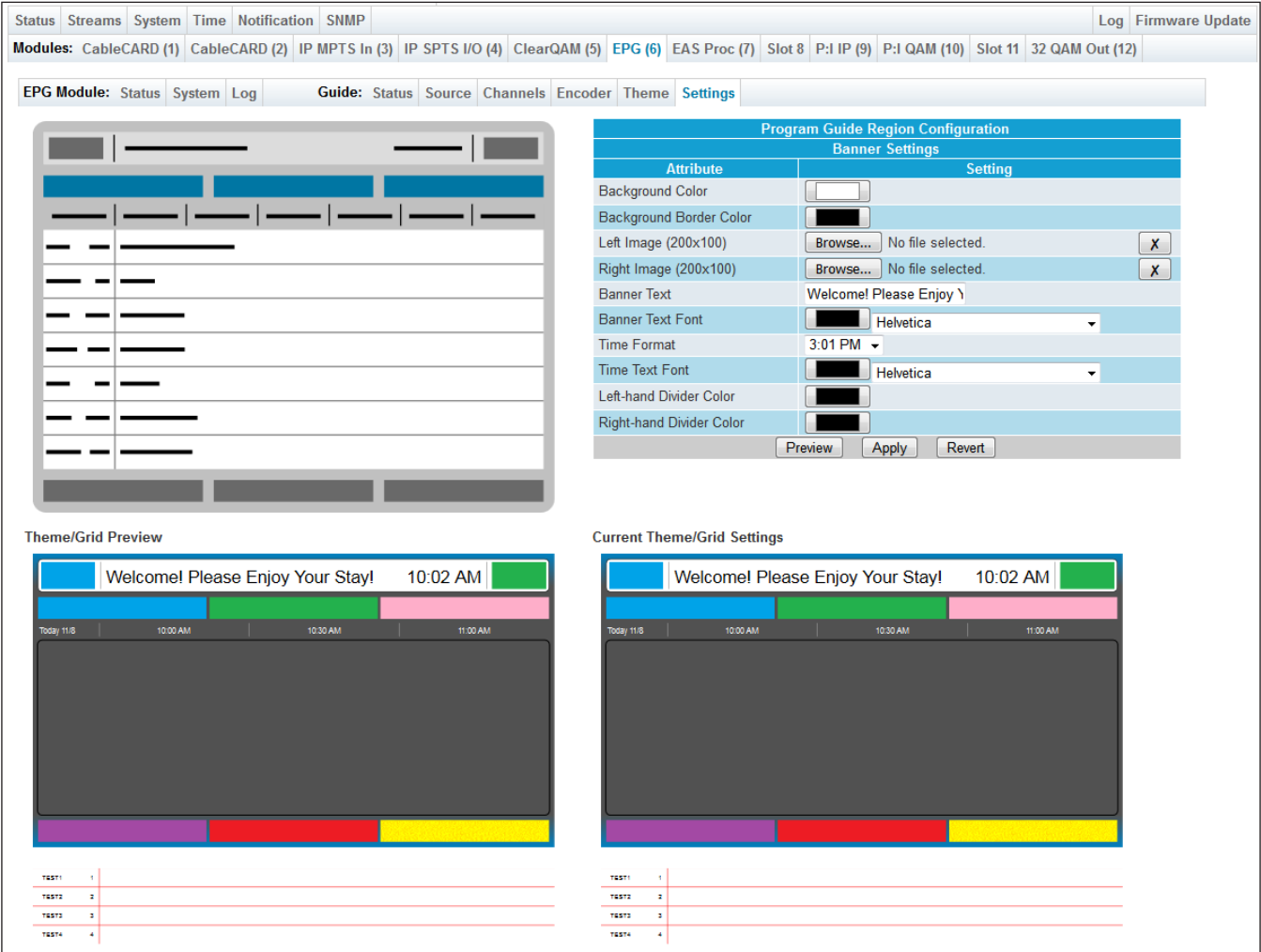

Figure 3.2d - "Settings" Tab - Theme Customization Settings

Section 4 – Setting up the Network IP Configuration

4.1 Before You Begin

For this step, you **MUST** set the network configuration in two places within the module, as explained below in the following sub-sections.

4.2 Network IP Configuration

1 Navigate to the "**EPG Module > System**" tab (Figure 4.2a) and then set the IP address of the EPG module to be on the same subnet as the Master Controller's subnet. Press the [**Apply Settings**] button to finalize the changes.

Figure 4.2a - "System" Tab

In the module example used here, the IP address of the Master Controller, for remote control of the NeXgen, is set to **172.16.181.55**. Because of this, the EPG module should be on the same subnet with a different Host ID.

As shown above, the EPG has been set to **172.16.181.250**. This is due to the 250 host ID being available in the network the NeXgen is currently set up in.

2 Next, click on the "**Guide > Source**" tab and set up the EPG Data Provider and the IP address (and username/password) for the remote FTP to obtain the Guide data.

Figure 4.2b - "Source" Tab

Section 5 – Basic Configuration: EPG Module

5.1 Before You Begin

After the inital two steps are complete, you can proceed with configuring the rest of the module. For this setup overview, we will briefly go over the tabbed sub-sections and settings under "**EPG Module**".

5.2 "EPG Module" > "Status" Tab

The "**EPG Module**" > "**Status**" tab (Figure5.1) is a "read-only" screen which displays the general health and module information at a glance. The information is provided as a quick way to monitor the module or assist with troubleshooting issues that may arise.

Figure 5.2 - "EPG Module" > "Status" Tab - Full View

In the section entitled "**Status**", the following parameters about the module health are displayed:

① **Status:** Indicates the current status of the module. Status Messages:

> **Ok** - No issues at the current time

> **Error** - One or more errors have occurred. Check system log for more information on error(s).

② **Temperature:** Indicates the current temperature of the module.

In the section entitled "**Information**", the parameters shows the following module-specific information:

③ **Model Number:** Indicates the model number of the module installed.

④ **Serial Number:** Indicates the serial number of the module installed.

⑤ **Software Version:** Indicates the software version of the module. To update software, please see Section 8.

⑥ **Backplane Firmware Version:** Indicates the backplane firmware version for this module. Backplane version is only needed for tech support and software debugging.

⑦ **Slot Location:** Indicates the slot location on the platform chassis where the module is currently installed into.

5.3 "EPG Module" > "System" Tab

The "**System**" tab (Figure 5.3) allows the user to manage the module configuration through the following controls:

The "**Module Reboot**" section allows the user to reboot the module from this screen.

① Reboot Click this button to reboot the module.

5.3 "EPG Module" > "System" Tab (continued)

Figure 5.3 - "EPG Module" > "System" Tab

The "**Settings Configuration**" section allows the user to back-up and re-load the configuration settings.

2 [Default Unit Settings] Resets the module back to the Factory defaults. It is always recommended to save the existing configuration file before resetting to the default values .

3 [Download Configuration File] Downloads the current module configuration file.

4 [Browse...] [No file selected.] Browse and select a Configuration File.

5 [Load & Apply Configuration File] After choosing file, click this to load and apply the configuration file.

The "**External Ethernet Settings**" section allows the user to configure the following ethernet settings.

6 **MAC Address:** the Media Access Control (MAC) Address is a read-only field that serves as a unique identifier assigned to the network.

7 **IP Address:** the static IP address that is assigned to the unit, allowing the user to access it via the web interface. Pressing the IP reset button temporarily returns unit to factory default of 172.16.70.1.

8 **Subnet Mask:** the subnet mask allows the user to access the unit from another network via the web interface. Factory Default is 255.255.255.0 for local subnet.

9 **Default Gateway:** the gateway address of unit, allowing the user to access it from another network via the web interface. The gateway address should be in the same subnet as IP Address.

10 **Primary DNS:** the primary Domain Name Server (DNS) hosts the controlling zone file, containing all the authoritative information for a domain.

11 **Secondary DNS:** the secondary Domain Name Server (DNS) contains read-only copies of the zone file, and gets its info from a primary server in a communication known as a zone transfer.

The "**Time Settings**" section allows the user to set the following parameter:

12 This control allows the user to choose the time zone, shown in UTC format.

13 [Apply Settings] Click to apply and save the EPG Module System configuration changes.

Section 6 – Basic Configuration: Guide

6.1 Before You Begin

This configuration overview briefly goes over additional settings within the sub-tabs under "Guide:".

6.2 "Guide" > "Status"

The "**Guide > Status**" tab displays the status of the guide data and other related guide information.

Figure 6.1 - "Guide" > "Status" Tab

6.2 "Guide" > "Source"

The "**Guide > Source**" tab provides the following useful options and information:

Figure 6.2a - "Guide" > "Source" Tab - External EPG Data Provider

1 **EPG Data Provider**: The following options are available:

- Gracenote TMS (Figure 6.3a)
- Random (Figure 6.3b)

2 **Scheduled Download/Processing of EPG Data**:

- The [**Force Processing Now**] button forces the EPG to obtain the guide data immediately.
- Scheduling of how often the Guide data is obtained can be set in Hours and Minutes.

3 **EPG Data Source Configuration:**

- When using an external source in "**EPG Data Provider**", the FTP URL and Username/password can be set to pull the guide data from a remote server. (Figure 6.3a)
- When set to **Random** in "**EPG Data Provider**", this section will allow the user to set up how many channels to randomly generate. (Figure 6.3b)

6.2 "Guide" > "Source" (continued)

Figure 6.2b - "Guide" > "Source" Tab - Random Provider

6.4 "Guide" > "Channels"

The "**Guide > Channels**" (Figure6.4a and 6.4b) tab allows the user edit the channels displayed on the grid.

Figure 6.4a - "Guide" > "Channels" Tab

1 To **add** a channel (Figure 6.4a) to the grid, enter your information in the top row. Once finished, click [Add] .

2 To **edit** an existing channel (Figure 6.4b) on the grid, click [Edit] and the information will load and become editable on the top row. The user can then edit "**Type**", "**Name**", "**Virtual Channel**", and "**Description**".

      Note: When in edit, the row being edited will be highlighted in yellow (Figure 6.4b).

Figure 6.3b - "Guide" > "Channels" Tab

3 While editing, clicking [Clear] under the "**Remove**" column allows the user to remove settings on the channel currently being edited. (Figure 6.4b)

4 Once all configurations are complete, click [Update] to apply the edits to the grid. (Figure 6.4b)

5 To **remove** an existing channel on the grid, the user clicks the [X] button in the "**Remove**" column.

6 The "**Display Order**" column allows the user to see the count of channels currently added to the grid within the first row. The user can move each channel up ([↑]) or down ([↓]) to set the order as seen on the grid.

6.4 "Guide" > "Channels" (continued)

While adding or editing a channel, the following settings can be configured:

- **Type:** The available options are "**Default**" and "**Custom**".
- **Data Source:** This can only be configured when adding a new channel to the grid.
- **Name:** User-defined setting.
- **Virtual Channel:** User-defined setting.

Section 7 – Additional Theme Configuration

7.1 Before You Begin

This configuration overview briefly goes over additional settings that are configurable within the sub-tabs under "Guide" that affect the theme of the program guide.

7.2 "Guide" > "Encoder"

The "**Guide** > **Encoder**" tab (Figure 7.2) provides the following useful options and information:
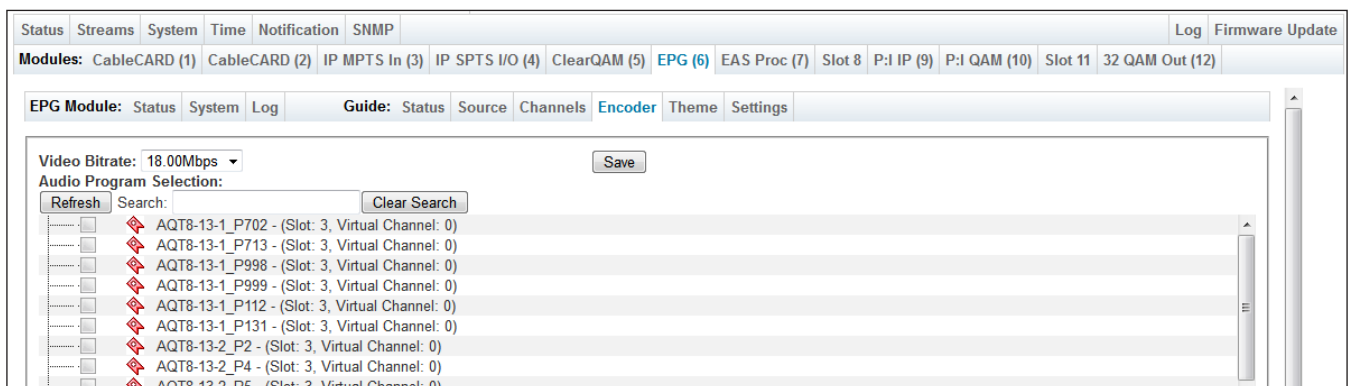

Figure 7.2 - "Guide" > "Encoder" Tab

① **Video Bitrate**: allows user to set the Video Bitrate for the guide channel.

② **Audio Program Selection**: allows the user to select an Audio stream from the available streams on the NeXgen platform. This stream will play in the background while the guide is on display.

7.3 "Guide" > "Theme"

The "**Guide** > **Theme**" tab (Figure 7.3), allows the user to choose a theme based on the needs of their application. Each theme layout has a unique area to set up information. These areas differ from one another in the type and amount of information which can be displayed depending on how it is set up. Along with the information given on-screen about the three choices, the following information can help in deciding which theme best suits your application. Settings for these unique areas are summarized as follows:

① **Theme #1:** Banner Settings - Appears above the top image row

- Background color and Border color
- Banner Text (user-defined) and Font color/style
- Time Format (4 options) and Font color/style

- Left Image and Right Image Uploads (200 x 100 px)
- Divider Left and Right colors (only if images are used)
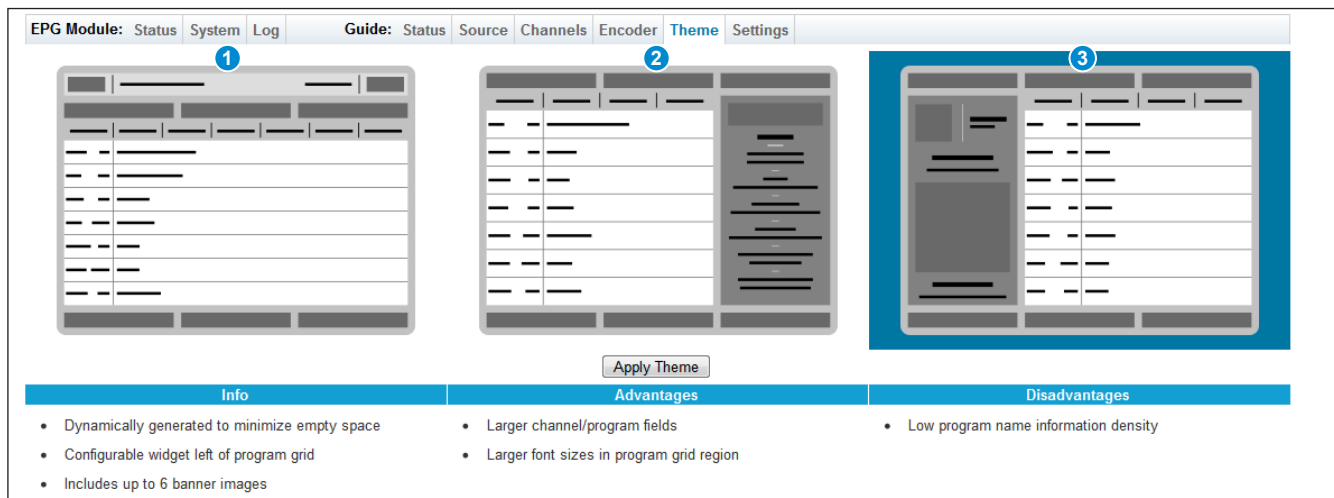
7.2 "Guide" > "Encoder" (continued)

Figure 7.3 - "Guide" > "Theme" Tab

2 **Theme #2:** Events Widget Settings (Left Side)

- Background color and Border color
- Image - shown at top of widget (550 x 175 px)
- Time Format (4 options) and Font color/style
- Date Format (2 options) and Font color/style
- Header Text (user-defined) and Font color/style (max. 64 characters)
- Events Header Text (user-defined), Font color/style, Header divider color (max. 64 characters)

- Events Text (user-defined), Font color/style, Events divider color (max. 49 characters)
  - up to 7 events can be shown
  - Primary and Secondary text on two rows
- Divider Left and Right colors (only if images are used)

3 **Theme #3:** Movie Image Widget Setting (Right Side)

- Background color
- Logo/Time Divider color
- Logo Image - shown at top of widget (275 x 175 px)
- Time Format (4 options) and Font color/style
- Date Format (2 options) and Font color/style
- Header Text (user-defined) and Font color/style (max. 64 characters)

- Movie Upper Text (user-defined) and Font colors/styles (max. 64 characters)
  - Primary and Secondary text on two rows
- Movie Image (550 x 400 px)
- Movie Lower Text (user-defined) and Font colors/styles (max. 64 characters)
  - Primary and Secondary text on two rows

7.4 "Guide" > "Settings"

The "**Guide** > **Settings**" tab (Figure 7.4a) allows the user to configure has several areas within each theme. Click on each area (left) to access its configuration settings (right). Configurable areas includes the following:

- Background Settings
- Top Image Row Settings (3 Images)
- Program Grid Header Settings

- Program Grid Settings
- Bottom Image Row Settings (3 Images)
- Widget specific to each theme.

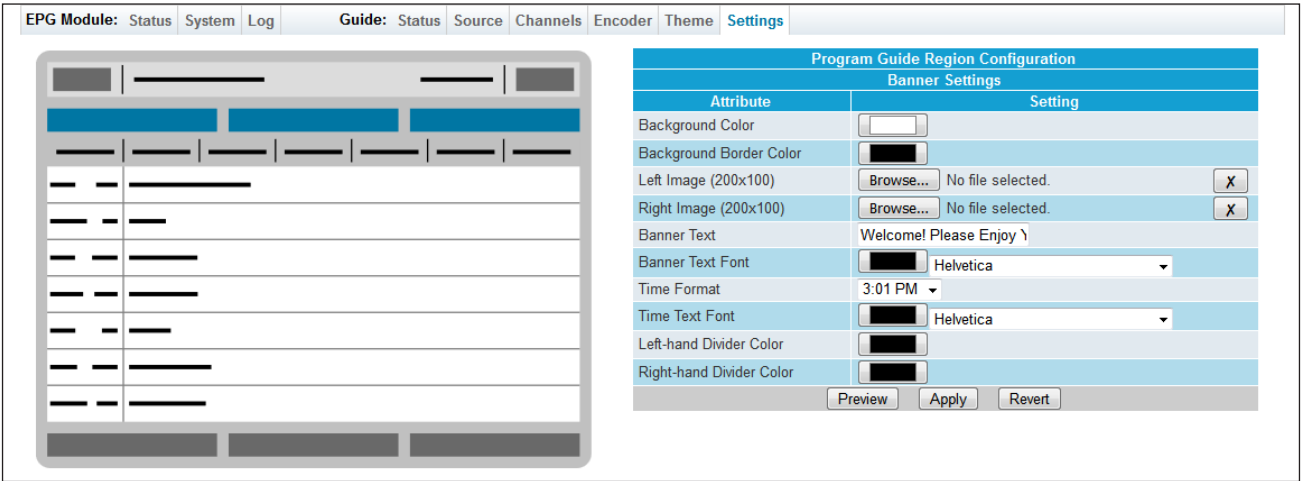**Figure 7.4a - "Guide" > "Theme" Tab - Configuration Settings**

Below the configurable areas (Figure 7.4b), a preview is shown of the theme settings displaying both the currently saved settings and a preview of any settings changes made. This is especially useful to compare current settings against any improvements you may want to make.
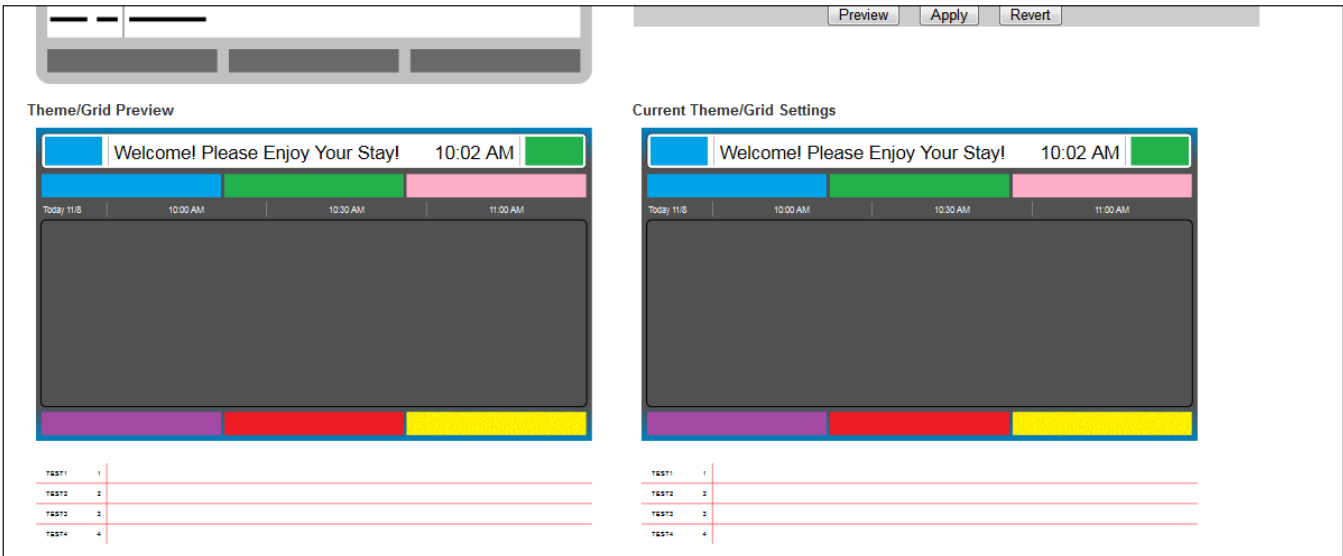

Figure 7.4b - "Guide" > "Theme" Tab - Theme Previews

Section 8 – Firmware Updates

The "Firmware Update" tab (Figures 8a, 8b, 8c, and 8d) is part of the Master Controller Module interface, and is used for all installed modules. It is located on the right side of the main menu allowing the user to review currently installed firmware versions and provides a quick and easy way to apply any new updates.

Figure 8a - "Firmware Update" Tab

1 Check "**Firmware Version**" to ensure you have the latest firmware. To determine if a new firmware update has been released, please go to our website at: (www.blondertongue.com/page/resources/tech-support/firmware-updates/)

Click the "Download Firmware Updates" link and then scroll down to the "NeXgen Gateway" folder to view the NXG module folders.

Note: There is a check of the file name versus module ID to eliminate a user inadvertently updating any modules with incorrect files. Multiple module updates can be performed simultaneously after uploading the files.

2 Under the "**Firmware Update Files**" section, the user can use [Browse...] and [Upload File] to select and send the module update file(s) into the NXG Platform. See a view of the file when uploaded to the platform as shown below on Figure 8b.

Figure 8b - File when uploaded

3 Update the Firmware version by clicking the [Update] button. The update status and progress will show under the "**Status**" columns. Below are the firmware updates as they appear while in-progress (Figure 8c) and upon completion (Figure 8d). After the update is complete, the user **MUST** reboot the module to finish applying the updates.

Note: After clicking the "**Update**" button, please allow a few seconds for the file to load.

Figure 8c - Update In Progress

4 Once the update progress is complete, the user **MUST** click the [Reboot] button (as shown on Figure 8d) in order to apply and finalize the update.

Figure 8d - Completed Update

When firmware updates are complete, the user can remove the loaded file by clicking the [X] button shown on Figure 8b next to the "Upload File" button under "Firmware Update Files".

Section 9 – Troubleshooting

For technical support please contact us at 1-800-523-6049 between the hours of 8am and 5pm EST.

Please refer to the operation manuals of each module for additional information.

Extended Warranty Program

STANDARD TERMS & CONDITIONS OF THE EXTENDED WARRANTY

A.   THE EXTENDED WARRANTY AGREEMENT (EWA)

If during the period following the expiration of the Blonder Tongue Manufacturers' Standard Warranty (Copy Included) the products which constitute the subject matter of the extended warranty, manifest any manufacturing or similar such defects then Blonder Tongue shall at its option repair or replace the product. It is emphasized that the extended warranty is in effect an extension of the Blonder Tongue Warranty and covers the items stipulated in Paragraph B to the exclusion of the terms in Paragraph C of this agreement. Eligibility to purchase EW is limited to 90 days following initial shipment on selected products of sufficient value.

The product/products included in this extended warranty agreement are listed in the invoice that accompanies the EWA. Term of the extension will be _____ year(s). Purchase Order is required for extended warranty coverage.

B.   WHAT IS COVERED?
1.   If a product has been determined to have failed, which falls within the Terms & Conditions of this EWA, Blonder Tongue Inc. may at its sole discretion repair, modify or replace its component parts that are defective at 100% coverage for parts and labor.
2.   A loaner unit may be available on request; PO required.
3.   Product is manufactured by Blonder Tongue.
4.   Extended warranty period is up to and not to exceed 24 months and sold in increments of 12 months. Order # 9981 for 1 year and #9982 for 2 year extensions.
5.   Return of repair or replaced product shipping costs for ground shipments.
6.   Firmware upgrades at no charge with automatic notification.

C.   WHAT IS NOT COVERED?
1.   The warranty does not cover any defects caused by foreign objects /connection errors .
2.   Use other than by the customer at the declared address appearing in this document.
3.   Failure by the end user to comply with the manufacturers' instructions for installation, maintenance or use.
4.   The use of accessories which have not been approved by Blonder Tongue.
5.   The application and/or use of any incorrect or abnormal electrical supply to the product.
6.   Any defect in wiring or electrical connections which does not form part of the product at the time of the original purchase.
7.   Neglect, misuse, or willful abuse of the product.
8.   Any repairs or attempted repairs of the product by any person other than Blonder Tongue Service Department.
9.   Any modification of the product by any person other than Blonder Tongue Service Department.
10.   Fire, flood, war, civil disturbance, industrial action, acts of God or any other causes beyond the reasonable control of Blonder Tongue.
11.   Any defect caused by lightning strike or power surges.
12.   Shipping costs to return products to Blonder Tongue for warranty service.
13.   Blonder Tongue will not in any circumstances be liable for any consequential loss or damages suffered by the customer whether directly or indirectly related defect in the product to the extent permissible by law.
14.   Repairs may not be effected without prior authorization from Blonder Tongue Laboratories.

D.   GENERAL
1.   The customer shall notify Blonder Tongue Laboratories in writing within ten days of any change of his or her address.
2.   Customer must provide original **purchase receipt** and **serial number** to initiate extended warranty coverage.
3.   The fee paid for the warranty is not refundable under any circumstances unless cancelled within seven days of purchase.
4.   The customer shall take all reasonable precautions to maintain the product is maintained in good working order.
5.   The warranty contract ceases to exist if the product is replaced or a credit is given to the customer. Any monies paid for the warranty contract are forfeited and not refundable. This is only applicable when the product is out of the manufacturer's warranty.
6.   The extended warranty period as stated on the Extended Warranty Agreement shall be the governing period notwithstanding any additional supplier warranty on specific components.
7.   The warranty shall in no way effect the terms and conditions of the sale agreement in terms of which the customer bought the product.
8.   The extended warranty is limited to the terms and conditions herein contained
9.   No agreement, varying, adding to, amended, deleting, or cancelling this warranty shall be effective unless given in writing (email is acceptable) and signed by or on behalf of both parties.
10.   The cost of the extended warranty is 8% of the purchase price for a 1 or 2 year extension beyond the Blonder Tongue standard warranty. e.g. A product price of $1000 will be $80 for the 1st year (12 mos) and additional $80 for 2 year (24 mos) extension for a total of $160.
11.   Warranty product return postage paid to: Blonder Tongue Laboratories, Inc.
Attn: Warranty Service Dept.
1 Jake Brown Road
Old Bridge, NJ 08857

Contact Blonder Tongue at 800-523-6049 ext. 555 to order extended warranty service.

Limited Warranty

Seller will at its sole option, either repair or replace (with a new or factory reconditioned product, as Seller may determine) any product manufactured or sold (or in the case of software, licensed) by Seller which is defective in materials or workmanship or fails to meet the applicable specifications that 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 for all stock hardware products (other than those specifically referenced herein below having a shorter warranty period); (ii) for a period of one (1) year from the date of original purchase, with respect to all MegaPort™, IPTV products, test equipment and fiber optics receivers, transmitters, couplers and integrated receiver/distribution amplifiers; (iii) 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 from Seller) with respect to all software products licensed from Seller (other than Core Product Software) that is (a) developed for a specific function or application, (b) complimentary to and does not function without the Core Product Software, and (c) listed with a specific model number and stock number in Seller's Price List ("**Non-Core Software**"); (iv) for a period of ninety (90) days from the date of original purchase, with respect to non-serialized products and accessories, such as parts, sub-assemblies, splitters and all other products sold by Seller (other than Core Product Software and Refurbished/Closeout Products) not otherwise referred to in clauses (i) through (iii) above. The warranty period for computer programs in machine-readable form included in a hardware product, which are essential for the functionality thereof as specifically stated in the published product specifications ("**Core Product Software**") will be coincident with the warranty period of the applicable hardware product within which such Core Product Software is installed.

Software patches, bug fixes, updates or workarounds do not extend the original warranty period of any Core Product Software or Non-Core Software.

Notwithstanding anything herein to the contrary,

(i) Seller's sole obligation for software that when properly installed and used does not substantially conform to the published specifications in effect when the software is first shipped by Seller, is to use commercially reasonable efforts to correct any reproducible material non-conformity (as determined by Seller in its sole discretion) by providing the customer with: (a) telephone or e-mail access to report non-conformance so that Seller can verify reproducibility, (b) a software patch or bug fix, if available or a workaround to bypass the issue if available, and (c) where applicable, replacement or damaged or defective external media, such as CD-ROM disk, on which the software was originally delivered;

(ii) Seller does not warrant that the use of any software will be uninterrupted, error-free, free of security vulnerabilities or that the software will meet the customer's particular requirements; and the customer's sole and exclusive remedy for breach of this warranty is, at Seller's option, to receive (a) suitably modified software, or part thereof, or (b) comparable replacement software or part thereof;

(iii) Seller retains all right, title and interest in and to and ownership of all software (including all Core Product Software and Non-Core Software) including any and all enhancements, modifications and updates to the same; and

(iv) in some cases, the warranty on certain proprietary sub-assembly modules manufactured by third-party vendors and contained in Seller's products, third party software installed in certain of Seller's products, and on certain private–label products manufactured by third-parties for resale by Seller, will be of shorter duration or otherwise more limited than the standard Seller limited warranty. In such cases, Seller's warranty with respect to such third-party proprietary sub-assembly modules, third-party software and private-label products will be limited to the duration and other terms of such third-party vendor's warranty, if any. In addition, certain products, that are not manufactured by Seller, but are resold by Seller, may carry the original OEM warranty for such products, if any. The limited warranty set forth above does not apply to any product sold by Seller, which at the time of sale constituted a Refurbished/Closeout Product, the limited warranty for which is provided in the following paragraph.

Seller will at its sole option, either repair or replace (with a new or factory-reconditioned product, as Seller may determine) any product sold by Seller which at the time of sale constituted a refurbished or closeout item ("**Refurbished/Closeout Product**"), which is defective in materials or workmanship or fails to meet the applicable specifications that are in effect on the date of shipment of that product or fails to meet such other specifications as may have been expressly agreed upon in writing between the parties, for a period of ninety (90) days from the date of original purchase. Notwithstanding the foregoing, in some cases the warranty on certain proprietary sub-assembly modules manufactured by third-party vendors and contained in Seller products, third party software installed in certain of Seller's products, and on certain private–label products manufactured by third-parties for resale by Seller will be of shorter duration or otherwise more limited than Seller limited warranty for Refurbished/Closeout Products. In such cases, Seller's warranty for Refurbished/Closeout Products constituting such third party proprietary sub-assembly modules, third party software, and private-label products will be limited to the duration and other terms of such third-party vendor's warranty, if any. In addition, notwithstanding the foregoing, (i) certain Refurbished/Closeout Products that are not manufactured (but are resold) by Seller, may carry the original OEM warranty for such products, if any, which may be longer or shorter than Seller's 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, serial number if applicable, or other satisfactory proof of purchase and a brief description of the defect, must be shipped freight prepaid to Seller at the following address: One Jake Brown Road, Old Bridge, New Jersey 08857.

This warranty does not cover failure of performance or 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) exposure to unusual physical or electrical stress, abuse or accident or forces or exposure beyond normal use within specified operational or environmental parameters set forth in applicable product specifications, (vi) lack of reasonable care or (vii) wind, ice, snow, rain, lightning, or any other weather conditions or acts of God.

OTHER THAN THE WARRANTIES SET FORTH ABOVE, SELLER MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND, EXPRESS OR IMPLIED, AS TO THE CONDITION, DESCRIPTION, FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR AS TO ANY OTHER MATTER, AND SUCH WARRANTIES SET FORTH ABOVE SUPERSEDE ANY ORAL OR WRITTEN WARRANTIES OR REPRESENTATIONS MADE OR IMPLIED BY SELLER OR BY ANY OF SELLER'S EMPLOYEES OR REPRESENTATIVES, OR IN ANY OF SELLER'S BROCHURES MANUALS, CATALOGS, LITERATURE OR OTHER MATERIALS. IN ALL CASES, BUYER'S SOLE AND EXCLUSIVE REMEDY AND SELLER'S SOLE OBLIGATION FOR ANY BREACH OF THE WARRANTIES CONTAINED HEREIN SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT F.O.B. SHIPPING POINT, AS SELLER IN ITS SOLE DISCRETION SHALL DETERMINE. SELLER SHALL IN NO EVENT AND UNDER NO CIRCUMSTANCES BE LIABLE OR RESPONSIBLE FOR ANY CONSEQUENTIAL, INDIRECT, INCIDENTAL, PUNITIVE, DIRECT OR SPECIAL DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT LIABILITY OR OTHERWISE OR ANY OTHER LEGAL THEORY, ARISING DIRECTLY OR INDIRECTLY FROM THE SALE, USE, INSTALLATION OR FAILURE OF ANY PRODUCT ACQUIRED BY BUYER FROM SELLER.

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 Seller, the customer shall ship such allegedly non-conforming or defective goods, freight prepaid to Seller for examination by Seller's inspection department and verification of the defect. Seller, at its option, will either repair, replace or issue a credit for products determined to be defective. Seller'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 Seller 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 Seller. Under no circumstances are products to be returned to Seller without Seller's prior written authorization. Seller reserves the right to scrap any unauthorized returns on a no-credit basis. Any actions for breach of a contract of sale between Seller and a customer must be commenced by the customer within thirteen (13) months after the cause of action has accrued. A copy of Seller's standard terms and conditions of sale, including the limited warranty, is available from Seller upon request. Copies of the limited warranties covering third-party proprietary sub-assembly modules and private-label products manufactured by third-parties may also be available from Seller on request. **(Rev 1021)**