3067VIP10G-3G-HW
Advanced Multi-Image Display Processors with 10G Interface
User Manual

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Version 1.0, August 2015

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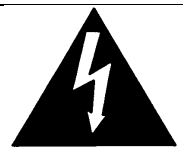
IMPORTANT SAFETY INSTRUCTIONS

	The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated “Dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.
	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (Servicing) instructions in the literature accompanying the product.

- Read these instructions
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC – SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE

WARNING
DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS ARE PLACED ON THE EQUIPMENT

WARNING
TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE

WARNING
THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE

INFORMATION TO USERS IN EUROPE

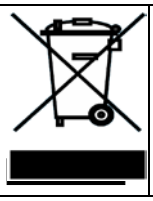
NOTE

CISPR 22 CLASS A DIGITAL DEVICE OR PERIPHERAL

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to the European Union EMC directive. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE

EN60065	Safety
EN55103-1: 1996	Emission
EN55103-2: 1996	Immunity



EN504192 2005
Waste electrical products should not be disposed of with household waste.
Contact your Local Authority for recycling advice

INFORMATION TO USERS IN THE U.S.A.

NOTE

FCC CLASS A DIGITAL DEVICE OR PERIPHERAL

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING

Changes or Modifications not expressly approved by Evertz Microsystems Ltd. could void the user's authority to operate the equipment.

Use of unshielded plugs or cables may cause radiation interference. Properly shielded interface cables with the shield connected to the chassis ground of the device must be used.

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Figures

REVISION HISTORY

REVISION	DESCRIPTION	DATE
1.0	First Release	August 2015

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1. OVERVIEW

The 3067VIP10G-3G-HW offers multiviewer functionality with up to 36 input streams and up to 4 outputs, all via 10G streaming physical interfaces. The 3067VIP10G-3G-HW displays inputs at any size, aspect ratio and position. 3067VIP10G-3G-HW device accepts uncompressed video over multiple 10G links as sources; and output mosaic uncompressed or JPEG2000 (optional) encoded signal over IP.

The 3067VIP10G-3G-HW provides the best quality input reproduction employing the latest in video processing technology developed by Evertz. The 3067VIP10G-3G-HW is a hot-swappable device which can be populated in an Evertz EMX6-FR, EMX3-FR, or EMX1-FR frame with an option for redundant power supplies.

The 3067VIP10G-3G-HW is VistaLINK® enabled, offering remote monitoring, control and configuration capabilities via Simple Network Management Protocol (SNMP). The 3067VIP10G-3G-HW is easily configurable via a web server interface. Layout creation can be performed in a live control environment using Evertz VUE software.

The 3067VIP10G-3G-HW is built on top of the industry leading 7867VIP product line and inherits key features such automatic aspect ratio adjustment per source, graticule generation, audio monitoring with level bar display, signal fault monitoring and under monitoring display. Used in conjunction with the SDI Gateway (IPG) series and 3080IPX & EXE, the 3067VIP10G-3G-HW integrates into a very flexible infrastructure to harness the many advantages provided by high bandwidth 10GE connectivity.

Features & Benefits

- Support up to 36 uncompressed video over 12 x 10GbE data ports
- Supports up to four mosaic uncompressed output over 10G (optional JPEG2000 encoded output, maximum of two)
- Uses Evertz next generation image processing technology present on other conversion products
- Output display resolutions of 720p and 1080p
- Full screen view of any input on an output
- Provides support for dynamic under monitor displays and tallies from routers and switchers
- Built-in AVM-Lite monitoring functionality
- Application specific customizable feature sets available as software options
- Minimal processing delay
- Real time control of display outputs via VUE software, and integration with VistaLINK® Pro, Magnum, VUE, and Mediator software suites.

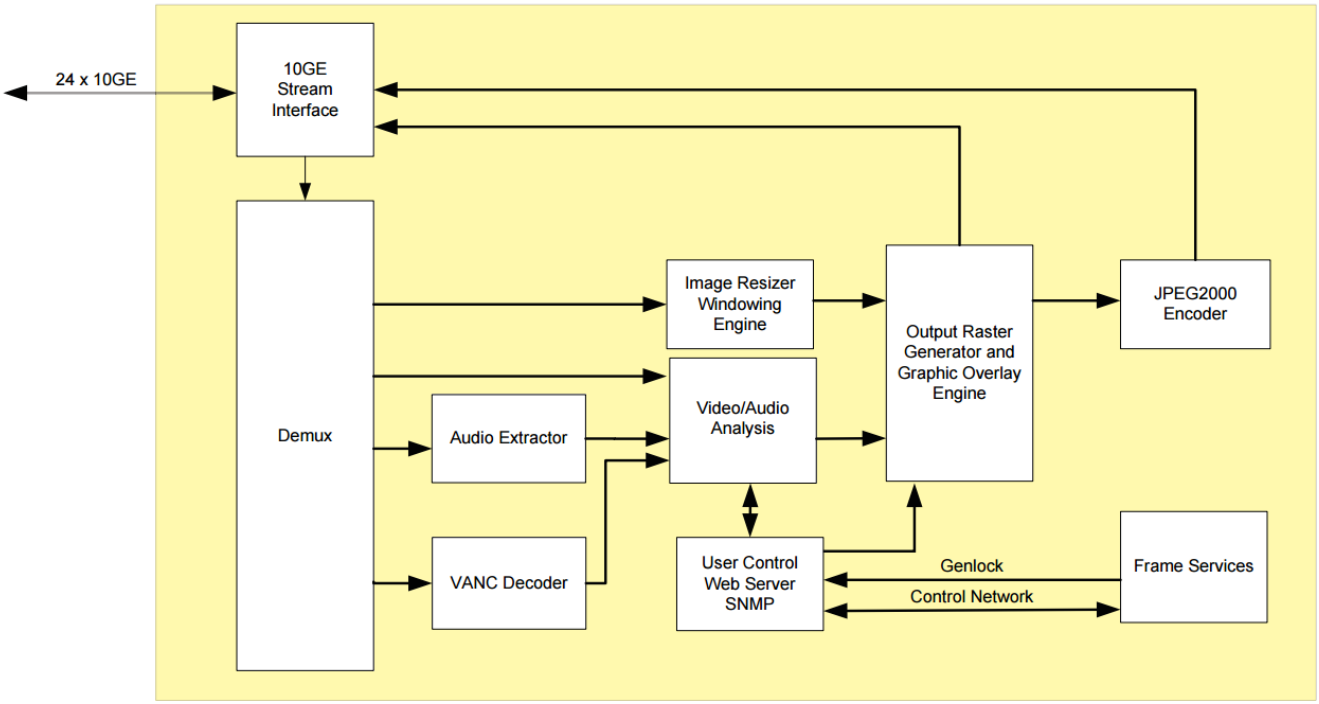

Figure 1-1: 3067VIP10G-3G-HW

2. TECHNICAL SPECIFICATIONS

2.1. INPUT

- **Format:** Uncompressed 3G/HD/SD over 10GE

2.2. OUTPUT

- **Format:** Uncompressed 3G/HD/ over 10GE (Optional: JPEG2000 over 10GE)
- **Resolution supported:** 1080p/59.94,1080p/60 1080p/50, 720p/59.94,720p/60 and 720p/50

2.3. CONNECTIVITY

- **Number of Connectors:** 24 (8 unused for future implementation)
- **Connector Type:** Female LC/UPC

2.4. GENLOCK INPUT

- **Type:** NTSC/PAL color black
- **Level:** 1V p-p nominal
- **Connector:** Uses frame Genlock BNC

2.5. ELECTRICAL

- **Voltage:** +12V DC
- **Power:** 135W
- **Compliance EMI/EFI**: Complies with FCC Part 15, Class A EU EMC directive

2.6. PHYSICAL (NUMBER OF SLOTS)

- **EMX3 Frame:** 2
- **EMX6 Frame:** 2

2.7. INPUT & OUTPUT OPTIONS

- **+36x4** Quad uncompressed mosaic output, 36 uncompressed 3G/HD/SD input over 10GE. Maximum of 36 images across 4 display.
- **+32x1** Single uncompressed mosaic output, 32 uncompressed 3G/HD/SD input over 10GE.
- **+32x2** Dual uncompressed mosaic output, 32 uncompressed 3G/HD/SD input over 10GE. Maximum of 32 images across 2 display.
- **+24x1** Single uncompressed mosaic output, 24 uncompressed 3G/HD/SD input over 10GE.
- **+24x2** Dual uncompressed mosaic output, 24 uncompressed 3G/HD/SD input over 10GE. Maximum of 24 images across 2 display.
- **+16x1** Single uncompressed mosaic output, 16 uncompressed 3G/HD/SD input over 10GE.
- **+16x2** Dual uncompressed mosaic output, 16 uncompressed 3G/HD/SD input over 10GE. Maximum of 16 images across 2 display.
- **+16x4** Quad uncompressed mosaic output, 16 uncompressed 3G/HD/SD input over 10GE. Maximum of 16 images across 4 display.
- **+12x1** Single uncompressed mosaic output, 12 uncompressed 3G/HD/SD input over 10GE.

2.8. MONITORING OPTIONS

- **+SM** Audio level, fault monitoring and Under monitoring display
- **+MCR** Dolby E monitoring, Loudness monitoring, CC/Teletext decode
- **+J2KE** JPEG 2000 encoded mosaic output (Maximum 2)

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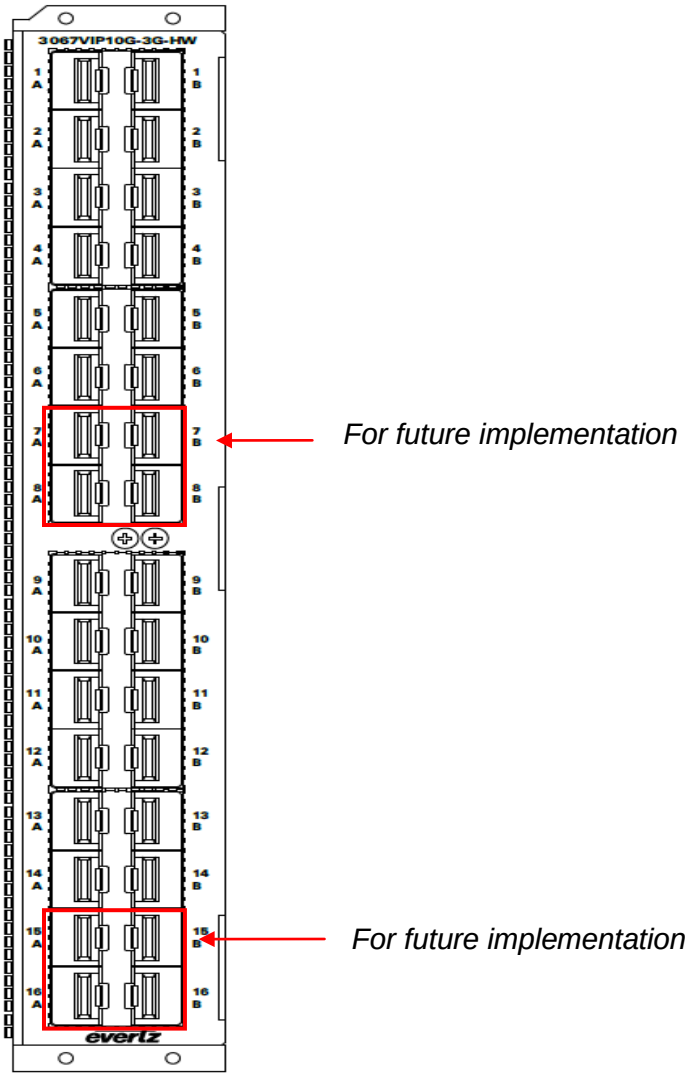
3. GETTING STARTED

3.1. REAR PLATE DESCRIPTION



SFP+: 10Gbps Data Ports

3.2. HARDWARE INSTALLATION

NOTE: SFP's must be ordered separately
To successfully install the 3067VIP10G you will require the following:

1. EMX3 or EMX6 frame with EMX-FC frame controller installed.
2. Frame controller connected to the VistaLINK® PRO Server IP address.
3. Two empty slots in the frame
4. Evertz Serial Ribbon Cable

Before handling the card it is important to minimize the potential effects of static electricity. It is therefore recommended that an ESD strap be worn.

Locate on the chassis 2 adjacent vacant slots. Unpack the 3067VIP10G and separate the rear panel from the main card. Insert the rear panel into the back of the chassis and secure using the screws provided. Once rear panel is secured, slide in module along the slot runners and mate into the rear panel. Take care to make sure card ejectors are partially open when sliding in module and closed tight when secured.

3.3. SETTING UP INITIAL NETWORK CONFIGURATION

The 3067VIP10G module requires a first time initialization to set up proper network parameters.

Procedure

1. Connect the Evertz serial upgrade cable (ribbon cable) to the 2x3 header at the front edge of the 3067VIP10G card.

2. Start a terminal program and configure the port settings.

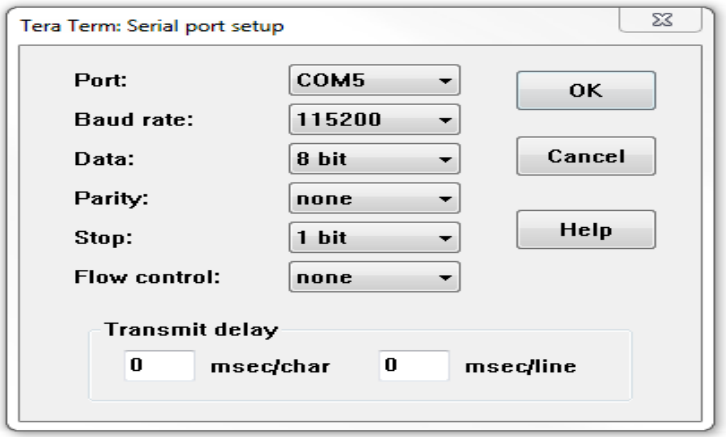


Figure 3-1: COM Port – Serial Port Settings

3. Boot up module, a login prompt will appear, enter:

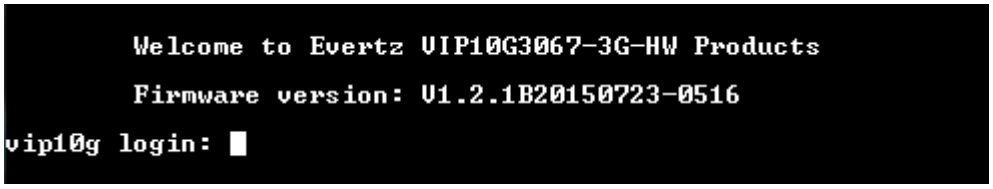


Figure 3-2: Serial Port – Login Prompt

- "**customer**" for user name <Enter>
- "**customer**" for password <Enter>

4. Once logged in, we will be configuring the network settings.

Figure 3-3: Serial Port – Main Menu

- Select <**1**> for the Network Setup menu.

5. In the Network Setup menu, we will be configuring the two control networks.

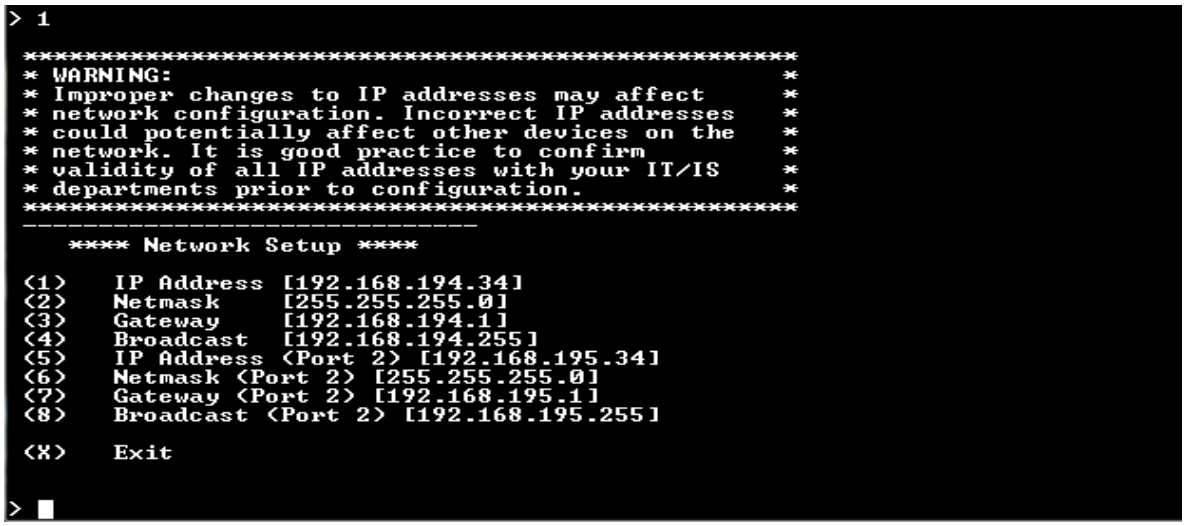


Figure 3-4: Serial Port – Network Setup Menu

- Set all network configurations for each control network.
- Select <**X**> to Exit.

6. Once all network settings are completed and exited back to main menu
   - Select <**X**> to Save and Exit.
   - Pull module out and push back in to reboot module.

4. WEB INTERFACE

Different product licenses will enable different product features. Depending on the product features enabled, there will be different tabs and controls that will need to be configured. For the purpose of this manual, we have enabled all product features.

After the card has been installed and configured with the required network addresses for the control ports, it can be completely configured using the web interface. To do this, simply type in the IP address of the **Control Port** on the 3067VIP10G-3G module in the web browser.

Note: We are assuming that the EMX3 or EMX6 frame is connected to the network and the computer is able to communicate to the frame on the Control Port IP address of the 3067VIP10G.

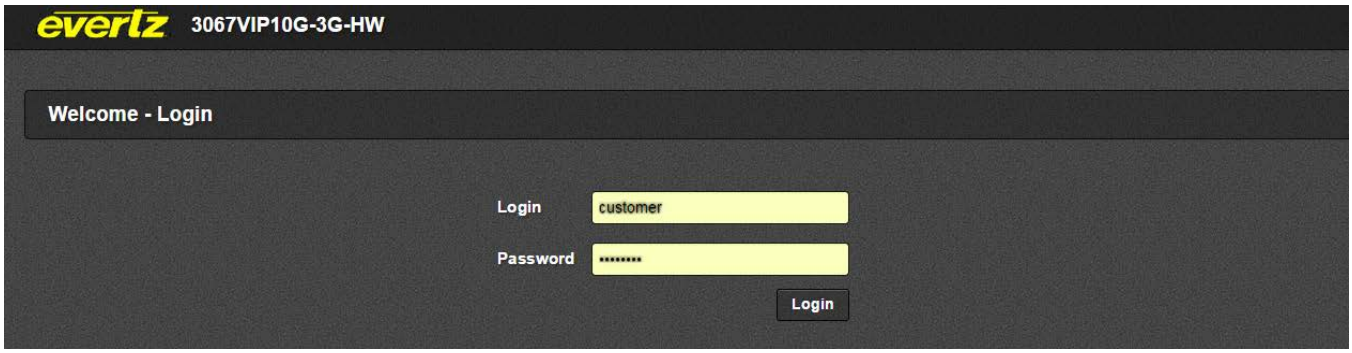


Figure 4-1: WebEASY® - Login In Menu

For login and password, type in "***customer***".

Due to the size of the certain menu tabs, we will be breaking up screen tab images into multiple images. Some of the screen shots will also require the user to zoom in to see the image more clearly.

4.1. SYSTEM TAB

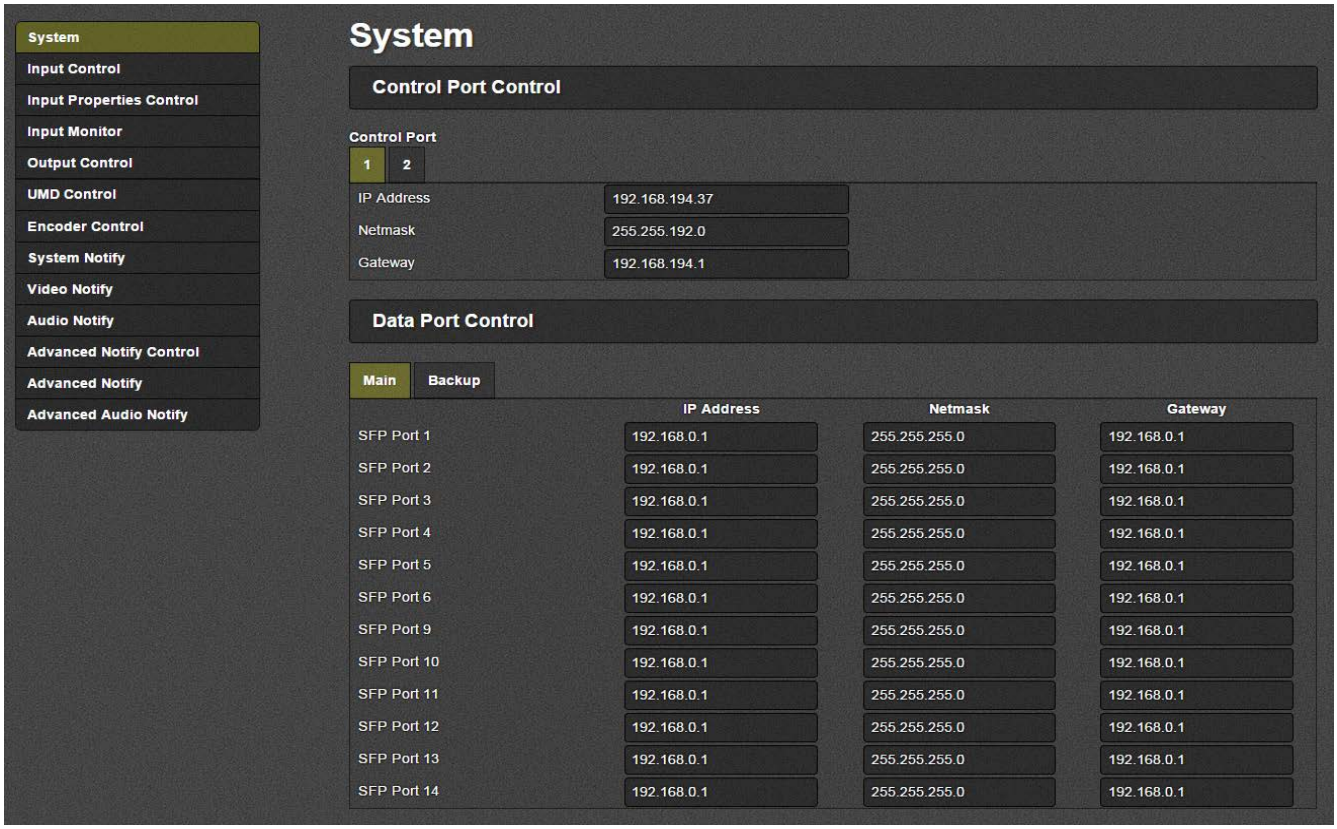


Figure 4-2: WebEASY® - System Tab - Part 1

Control Port Control *(must reboot in order for new settings to take effect)*
There are two control ports for configurations.

IP Address: This control allows the user to set the IP address on the Control Port. This control will also display the currently set IP address.

Netmask: This control allows the user to set the Netmask for the Control Port IP address. This control will also display the currently set Netmask.

Gateway: This control allows the user to set the Gateway for the Control Port. This control will also display the currently set Gateway address.

Data Port Control *(must reboot in order for settings new to take effect)*
There are 12 SFP Data Ports that can be configured for the main and another 12 for the backup.

IP Address: This control allows the user to set the IP address on the Data Port. This control will also display the currently set IP address.

Netmask: This control allows the user to set the Netmask for the Data Port IP address. This control will also display the currently set Netmask.

Gateway: This control allows the user to set the Gateway for the Data Port. This control will also display the currently set Gateway address.

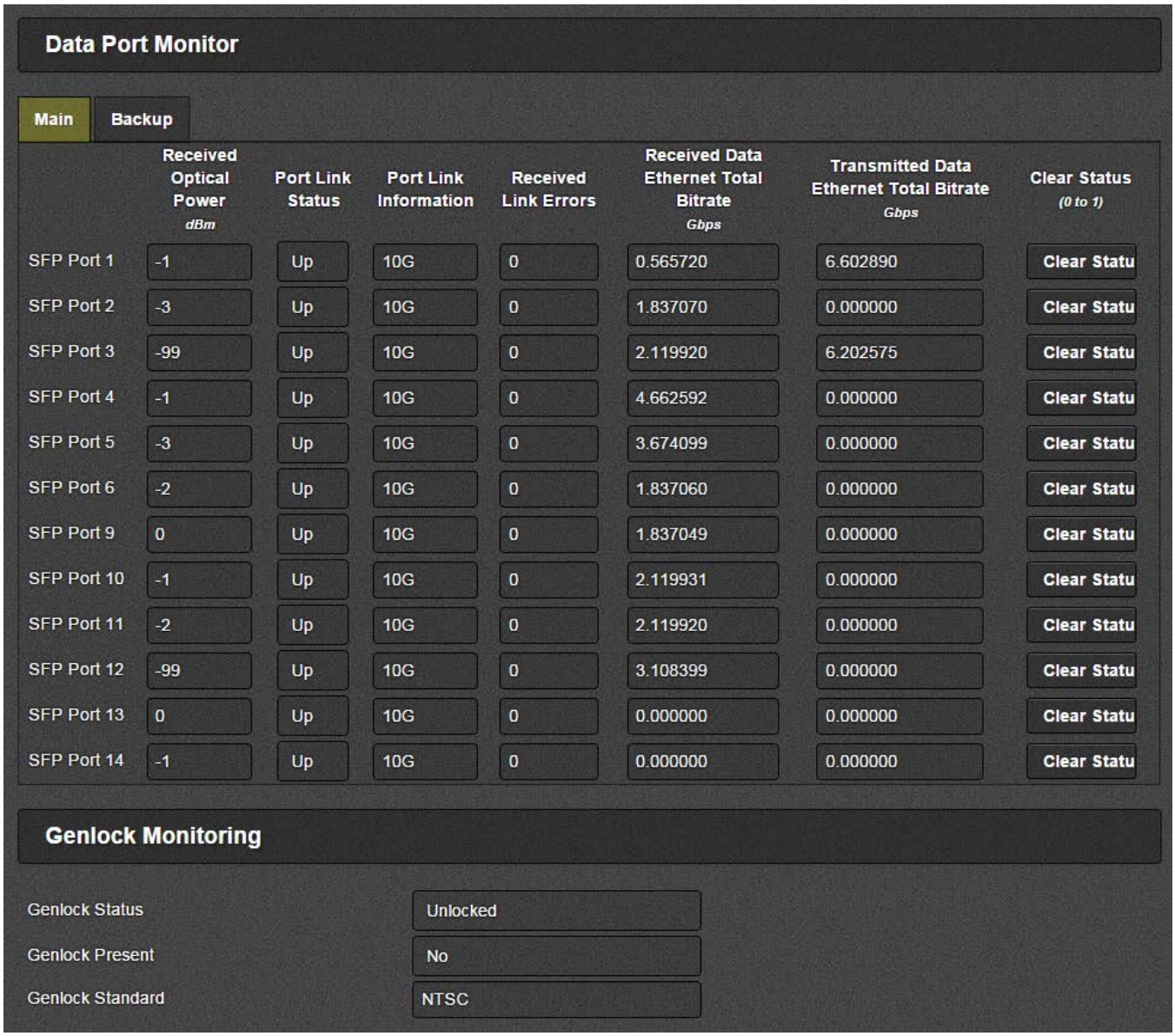


Figure 4-3: WebEASY® - System Tab Part 2

Data Port Monitor
For the monitoring on the 12 Data Ports on main and backup.

Received Optical Power: This parameter indicates the received optical power status on the SFP-Rx and is measured in 1dBm units.

Port Link Status: This parameter will indicate the status of the port link as either 'Up' or 'Down'.

Port Link Information: This parameter displays link speed on the ports.

Received Link Errors: This parameter displays the number of errors received on the ports.

Received Data Ethernet Total Bitrate (Gbps): This parameter indicates the bit rate received on Ethernet ports in Gbps.

Transmitted Data Ethernet Total Bitrate (Gbps): This parameter indicates the bit rate transmitted on the Ethernet Port in Gbps.

Clear Stats: This parameter allows the user to reset the Ethernet monitored statistics.

Genlock Monitoring

Genlock Status: This monitor displays whether the module is locked or unlocked

Genlock Present: This monitor displays whether a genlock signal is present**.**

Genlock Standard: This monitor displays the standard detected for the genlock.

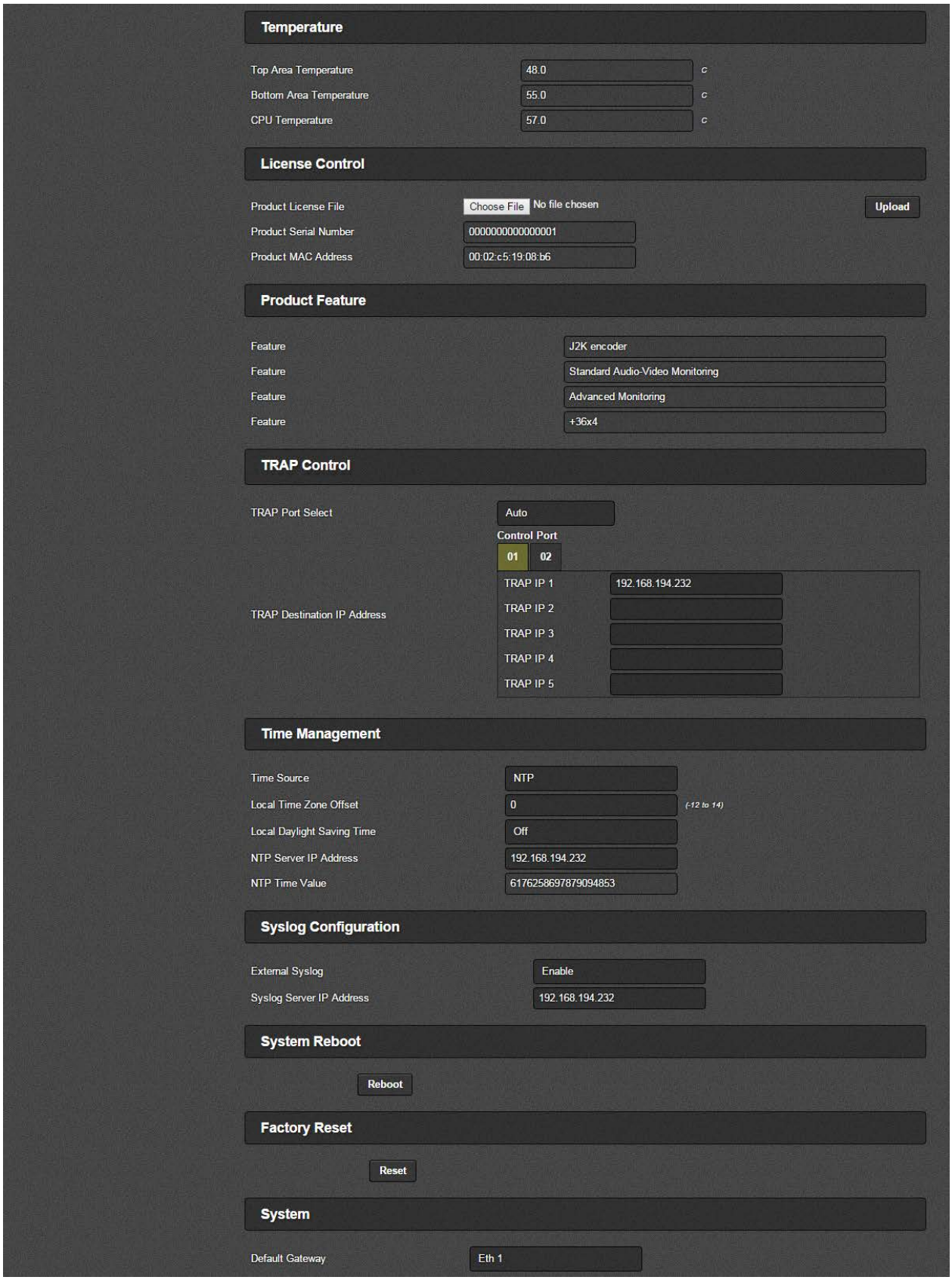


Figure 4-4: WebEASY® - System Tab - Part 2

Temperature

Top Area Temperature: This parameter allows the user to verify the top of the FPGA module temperature. This value is represented in degrees Celsius.

Bottom Area Temperature: This parameter allows the user to verify the bottom of the FPGA module temperature. This value is represented in degrees Celsius.

CPU Temperature: This temperature allows the user to verify the current temperature of the CPU. This value is represented in degrees Celsius.

License Control

Product License File: This control is used to select the Product License File or Key that enables different features on the 3067VIP10G. Once selected, click on "Upload" to download file.

Product Serial Number: This monitor is used to display the Product Serial Number**.**

Product MAC Address: This monitor is used to display the MAC address of the card.

Product Features

This monitor will display the different features enabled on module. These features can be purchased either separately or with the initial purchase of the 3067VIP10G card.

Trap Control

Trap configurations for control port 1 and control port 2.

Trap Port Select: This control selects the port to be used for sending out traps. Selections are Port 1, Port 2 or Port 1 and 2

Trap Destination IP Address: This control is used to configure five trap destinations for each control port.

Time Management

Time Source: This control allows the user to select between Local or NTP for the time source. NTP should be used. Local time source is for debug purposes and disables all other options.

Local Time Zone Offset: This control is used to set the local time zone offset for the NTP time source.

Local Daylight Saving Time: This control is used to enable or disable the local daylight saving time for the NTP time source.

NTP Server IP Address: This control is used to configure the IP address of the NTP server.

NTP Time Value: This monitor returns a decimal value for the 64 bit binary time stamp.

Syslog Configuration

External Syslog: This control is used to enable or disable the external syslog.

Syslog Server IP Address: This control is used to configure the IP address of the syslog server.

System Reboot: This click button control is used to reboot the system. When making changes to system configurations, a reboot will be necessary.

Factory Reset: This click button control is used to reset all configurations back to factory settings.

System

Default Gateway: This control is used to select the default gateway. Options are Ethernet 1 or Ethernet 2.

4.2. INPUT CONTROL TAB

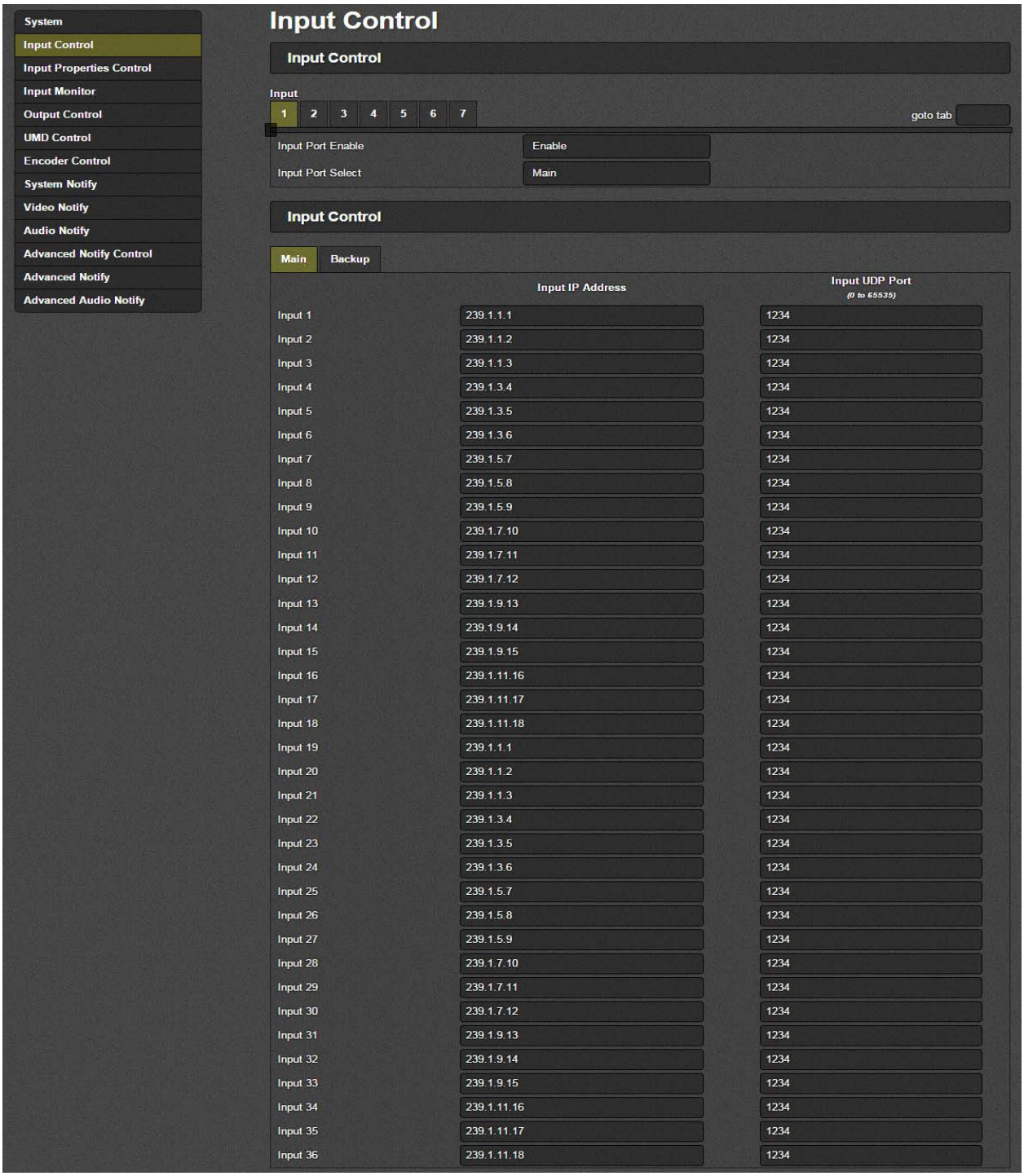


Figure 4-5: WebEASY® - Input Control Tab - Part 1

Input Control
Input selection for the 36 input streams

Input Port Enable: This control is used to enable or disable the input streams.

Input Port Select: This control is used to select which port, Main or Backup, will be used on the output stream.

Input Control
For Main and Backup, there are 36 streams in total that can be configured.

Input IP Address: This control is used to filter which multicast address on the stream to be received.

Input UDP Port: This control is used to filter which UDP port number on the stream to be received.

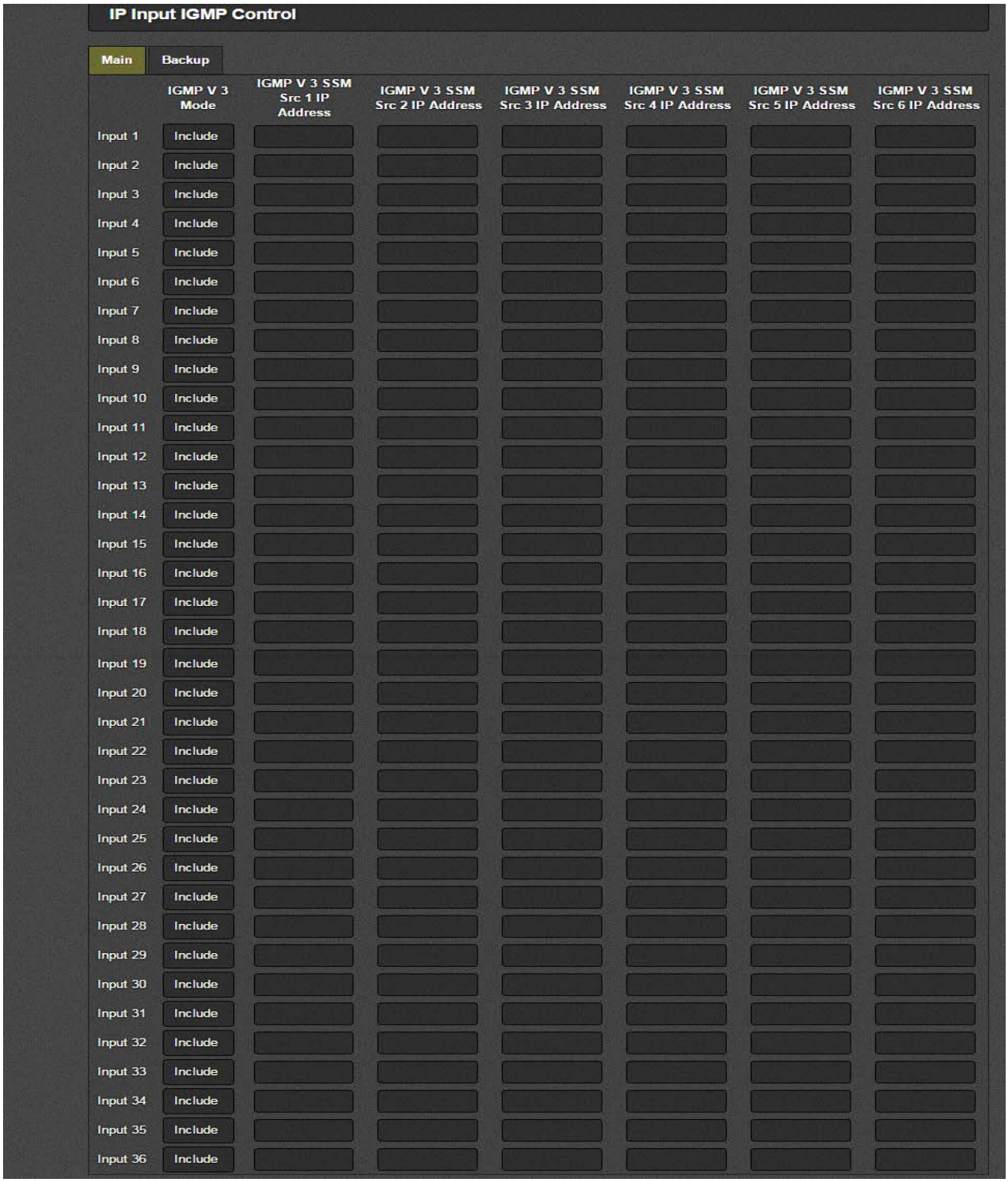


Figure 4-6: WebEASY® - Input Control Tab - Part 2

IP Input IGMP Control

On the 36 streams for Main and Back up, the user can assign IGMP V3 settings for the streams. The user can *Include* or *Exclude* six source IP addresses.

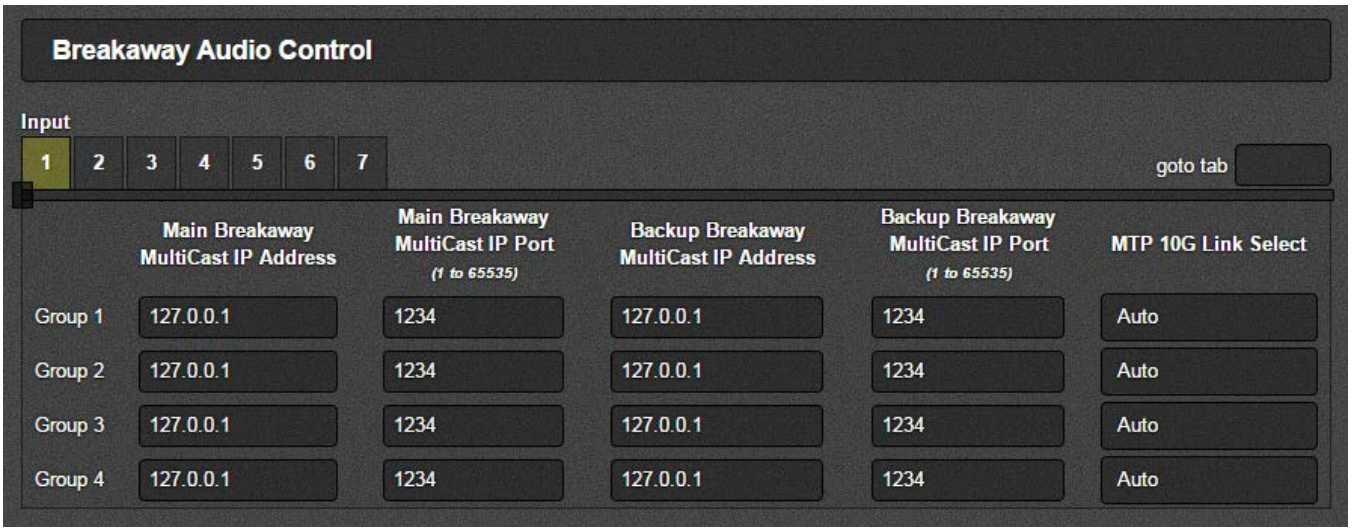


Figure 4-7: WebEASY® - Input Control Tab - Part 3

This section has been reserved for future implementation.

4.3. INPUT PROPERTIES CONTROL TAB

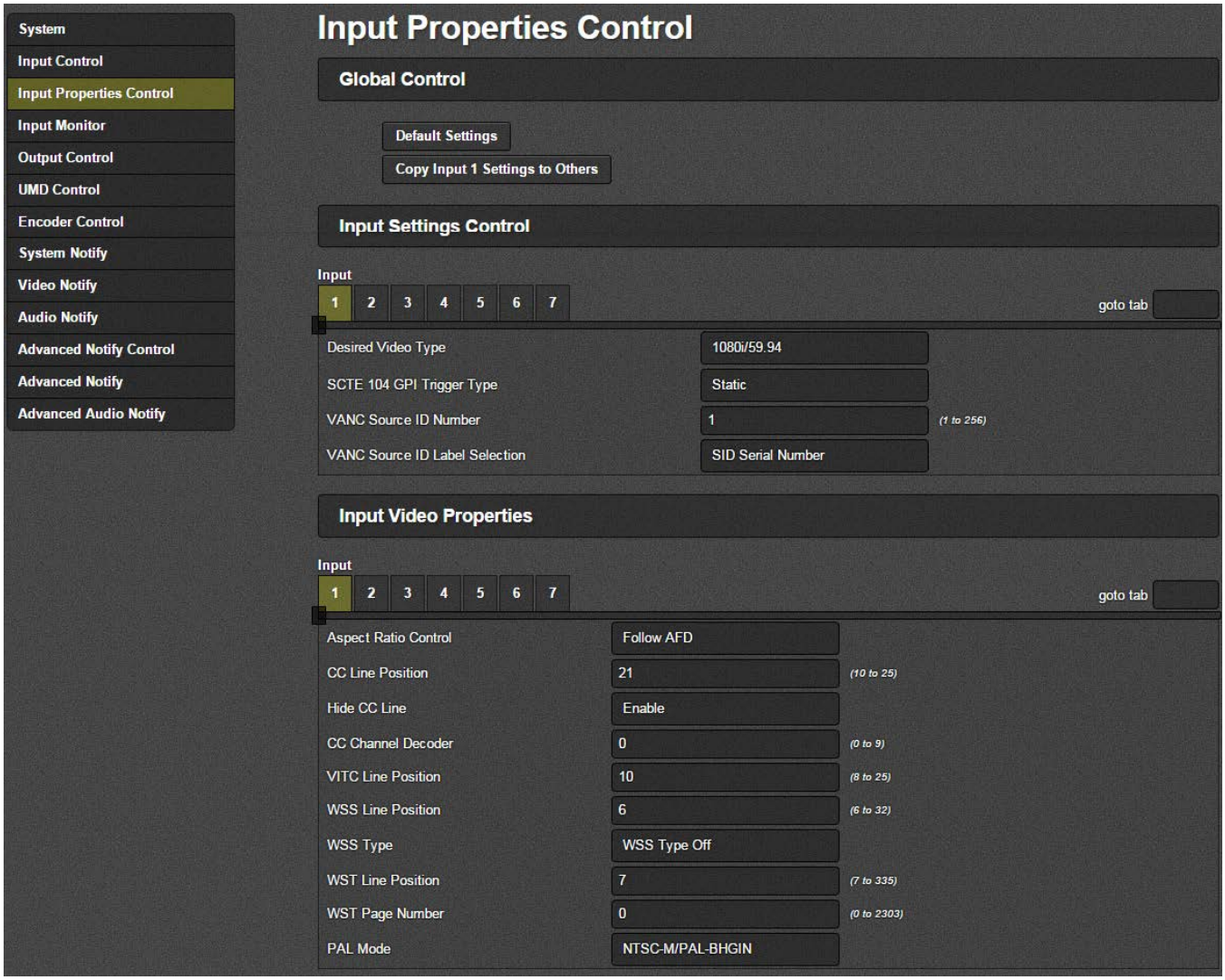


Figure 4-8: WebEASY® - Input Properties Control Tab

Global Control

Default Settings and **Copy Input 1 Settings to Others** are reserved for future implementation

Input Settings Control

For the 36 input streams

Desired Video Type: This control is used to select the expected video type on input stream.

SCTE 104 GPI Trigger Type: This control selects the type of GPI trigger to use. Static option triggers all 6 GPI when a SCTE 104 GPI trigger is detected. All other options, trigger only one GPI corresponding to the value set. Range is limited from 1 to 6. Options are:

- **Static**
- **Trigger As Index**
- **Trigger DPI PID Index**
- **Trigger Unique Product ID**
- **Trigger Available Number**

- **Trigger Available Expected**
- **Trigger Time Type**
- **Trigger Splice Inc Type**

VANC Source ID Number and **VANC Source ID Label Selection** are reserved for future implementation.

Input Video Properties

This section is reserved for future implementation.

4.4. INPUT MONITOR TAB

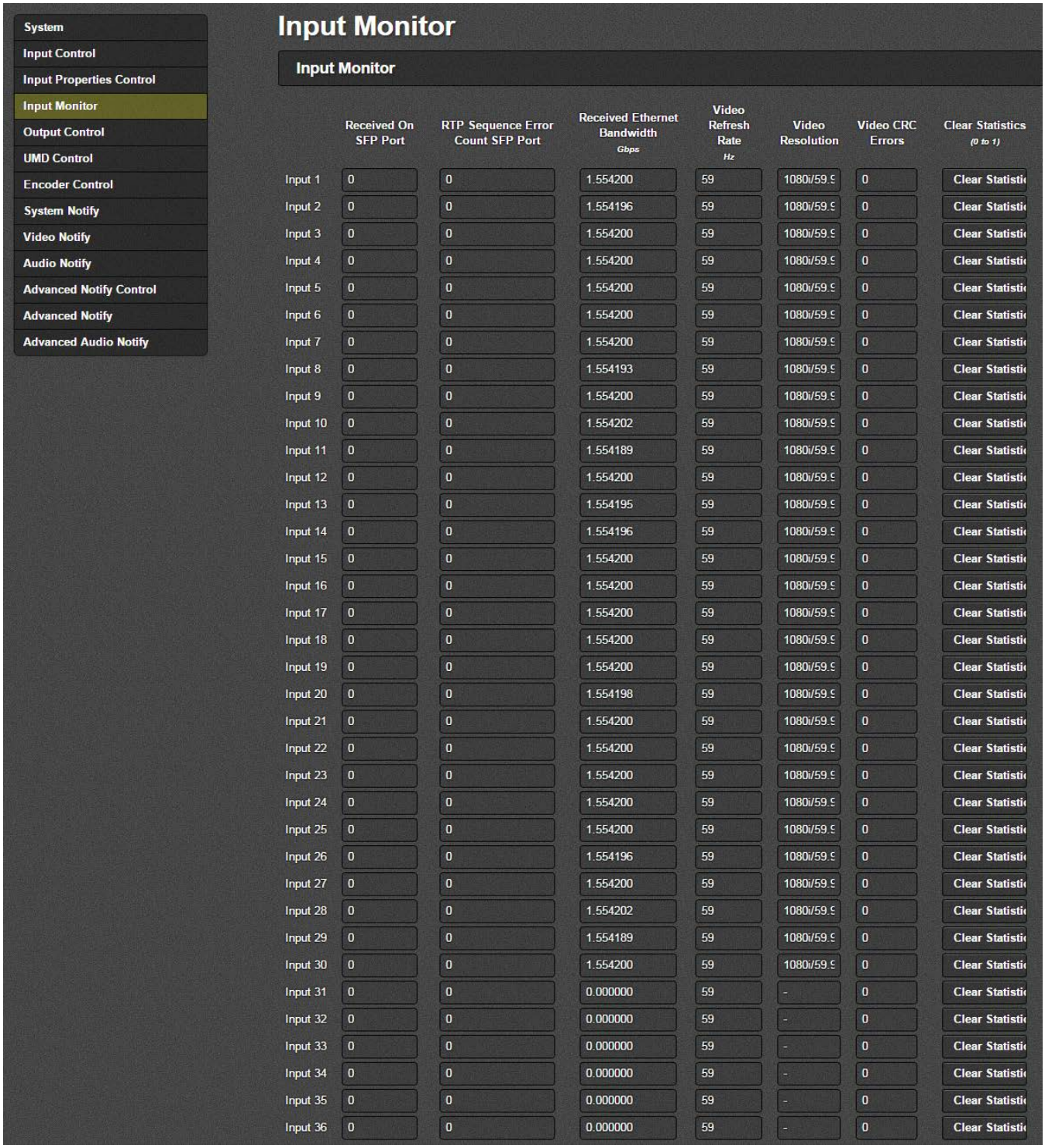


Figure 4-9: WebEASY® - Input Monitor - Part 1

Input Monitor

Received on SFP Port: For future implementation.

RTP Sequence Error Count: This monitor is used to display the number of RTP sequence error counts..

Received Ethernet Bandwidth (Gbps): This monitor is used to display the amount of bandwidth received by the input stream.

Video Refresh Rate (Hz): This monitor is used to display the detected refresh rate on the input stream.

Video Resolution: This monitor is used to display the detected video resolution on the input stream.

Video CRC Errors: This monitor is used to display the number CRC errors on the input stream.

Clear Statistics: This click button is used to clear all the error counts on the input stream selected.

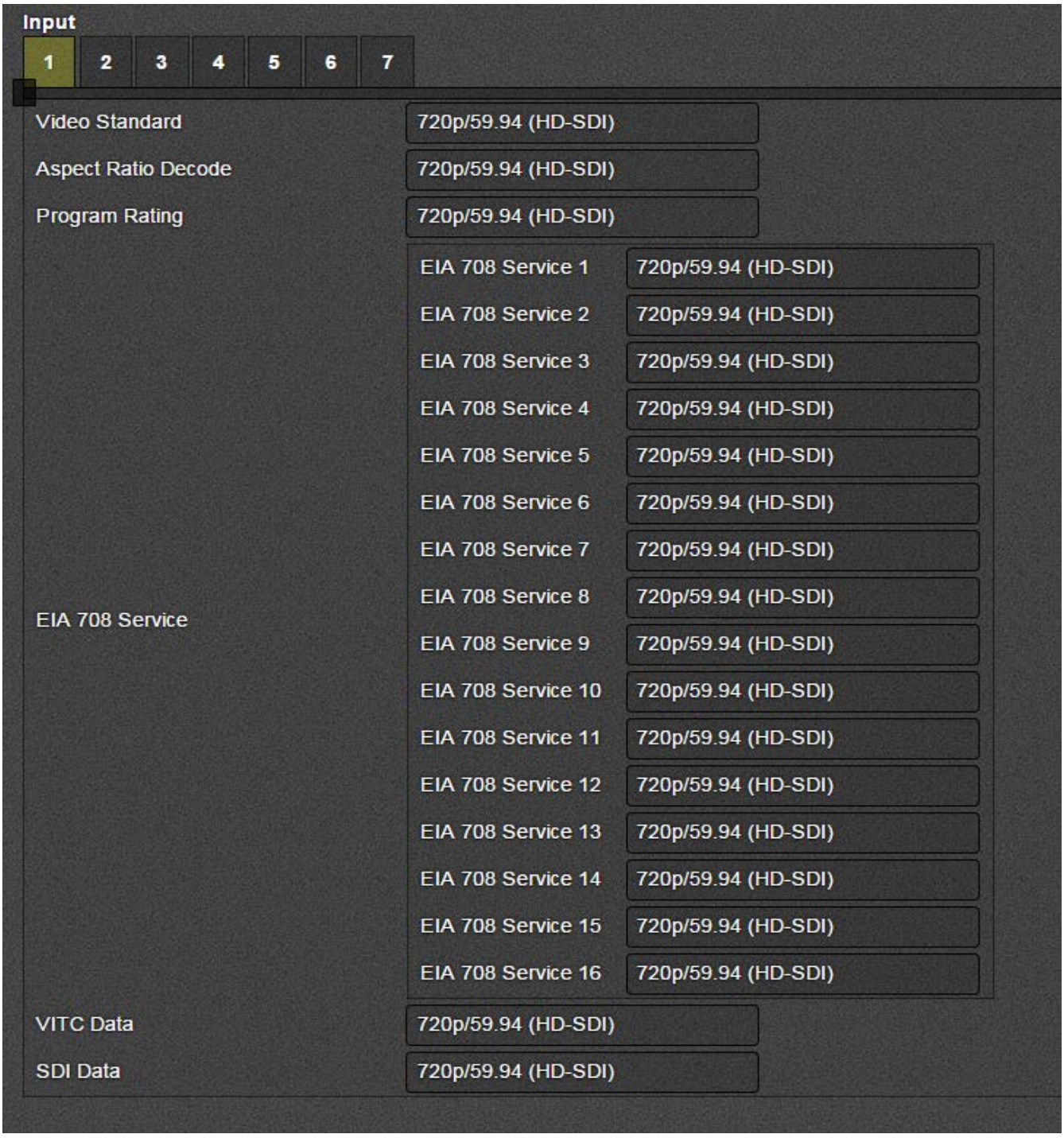


Figure 4-10: WebEASY® - Input Properties Control Tab – Part 2

This section is reserved for future implementation.

4.5. OUTPUT CONTROL TAB

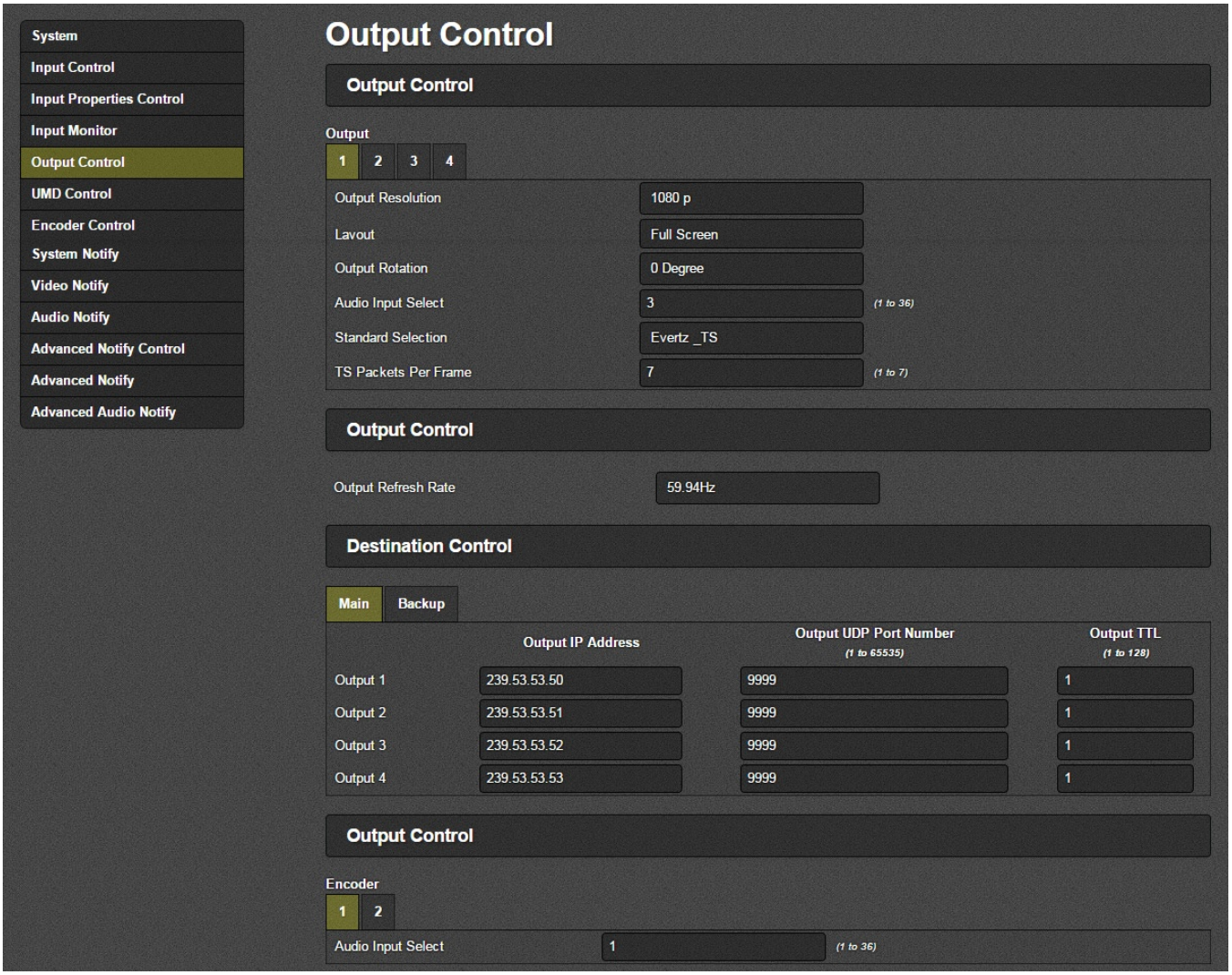


Figure 4-11: WebEASY® - Output Control Tab

Output Control

Output Resolution: This control allows the user to select the output resolution. Options are 1080p or 720p.

Layout: Selects different screen layouts for the output display.

- Full Screen
- 2X2
- 3x3
- 4x4
- Advanced

Output Rotation: This control allows the video output to be rotated. Options include:

- 0 Degree
- 90 Degrees
- 270 Degrees

Audio Input Select (1 to 36): Reserved for future implementation.

Standard Selection: This control is used to select the output standard used for transporting the video over IP. Options include:

- Evertz_TS
- SMPTE-2022 - *for future implementation*

TS Packets Per Frame (1 to 7): This control is used to select the number of the transmission packets used when forming the IP datagram.

Output Control

Output Refresh Rate: This control is used to select the output refresh rate on the video. Options include:

- **59.94Hz**
- **50Hz**
- **60Hz**

Destination Control

For Main and Backup on Output 1 to Output 4

Output IP Address: This control is used to configure the multicast IP address for the output.

Output UDP Port Number: This control is used to configure the port number associated with the multicast address.

Output TTL (1 to 128): This control is used to set the Time-to-Live (TTL) for the IP datagrams.

Output Control

For Encoder 1 and Encoder 2

Audio Input Select: *Reserved for future implementation.*

4.6. UMD CONTROL TAB

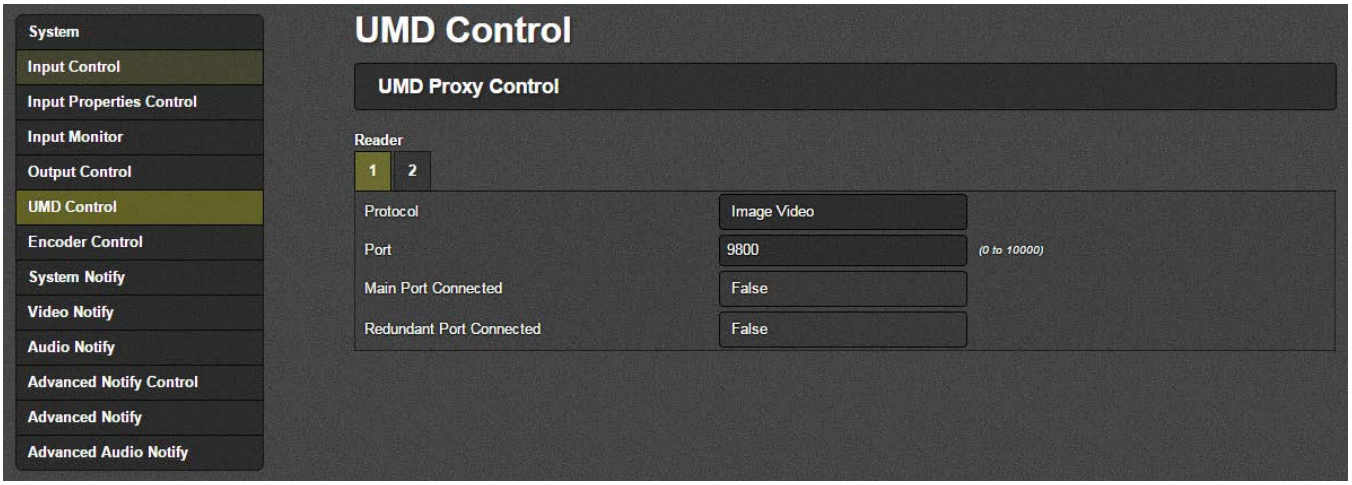


Figure 4-12: WebEASY® - UMD Proxy Control Tab

UMD Control
For Readers 1 and 2

Protocol: This control is used to select the UMD protocol to use. Options include:

- **Image Video**
- **Philips ASCII**
- **XY Integrator**
- **TSL 3.1**
- **Echo**
- **TSL 4.0**
- **Harris Image Video**

Port (0 to 10000): This control is used to configure the port for the UMD protocol.

Main Port Connected: Displays *True* is this port is being used to communicate with the defined port number.

Redundant Port Connected: Displays *True* is this port is being used to communicate with the defined port number.

4.7. ENCODER CONTROL TAB

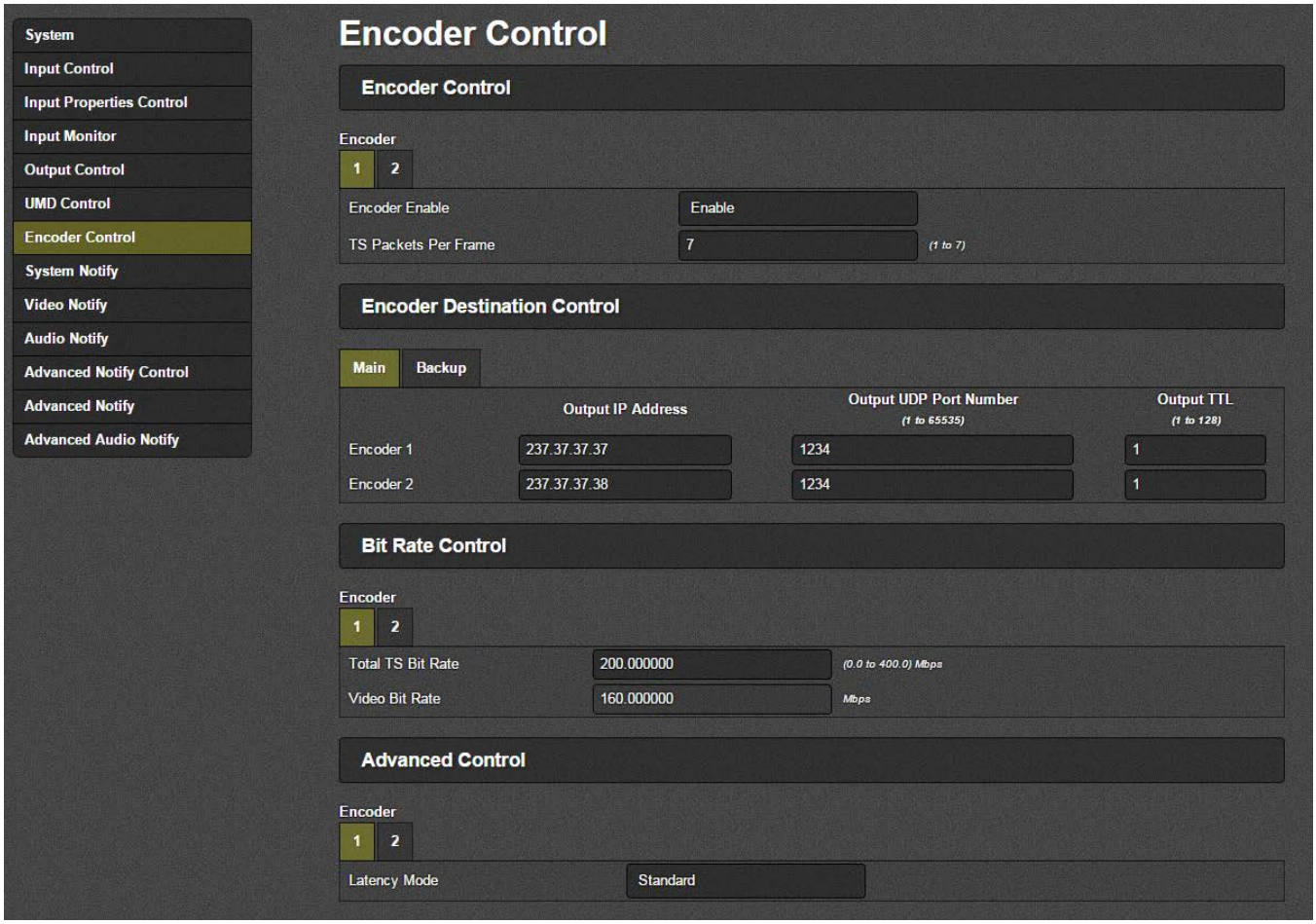


Figure 4-13: WebEASY® - Encoder Control Tab

Encoder Control

For Encoder 1 and 2

Encoder Enable: This control is used to enable or disable the encoder.

TS Packets Per Frame: This control is used to select the number of the transmission packets used when forming the IP datagram.

Encoder Destination Control

For Main and Backup Encoder

Note that physical Port 1A=Main and 1B=Backup on the 3067VIP10G.

Output IP Address: This control is used to configure the output IP address on the encoder.

Output UDP Port Number: This control is used to configure the port number associated with the multicast address.

Output TTL: This control is used to set the Time-to-Live (TTL) for the IP datagrams.

Bit Rate Control

Total TS Bit Rate: This control is used to set the total bit rate on the transport stream.

Video Bit Rate: This monitor is used to display the video bit rate on the transport stream.

Advanced Control
For Encoder 1 and Encoder 2

Latency Mode: This control is used to select the latency mode for the encoders. Options are:

- Standard
- Medium
- Low
- Ultra Low

4.8. SYSTEM NOTIFY

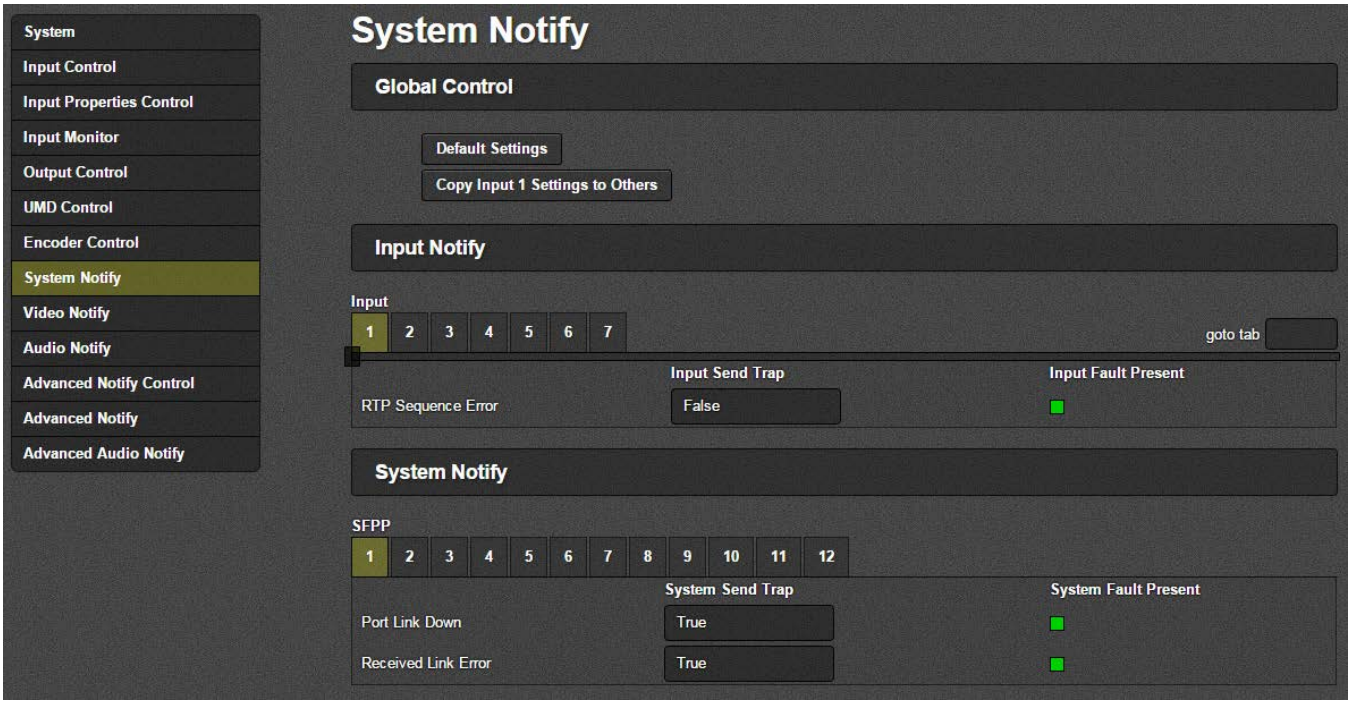


Figure 4-14: WebEASY® - System Notify Tab

Global Control
Default Settings and **Copy Input 1 Settings to Others** are reserved for future implementation

Input Notify
For the 36 input streams

RTP Sequence Error: This control is used to send a trap, when set to True, if there is a RTP Sequence. Input Fault Present indicates the state of error condition. Green indicates no fault while red indicates a fault.

System Notify
For the 12 SFPP Ports

Port Link Down: This control is used to send a trap, when set to True, if the port link goes down. System Fault Present indicates the state of error condition. Green indicates no fault while red indicates a fault.

Received Link Error: This control is used to send a trap, when set to True, if there is a receiving link error. System Fault Present indicates the state of error condition. Green indicates no fault while red indicates a fault.

4.9. VIDEO NOTIFY TAB

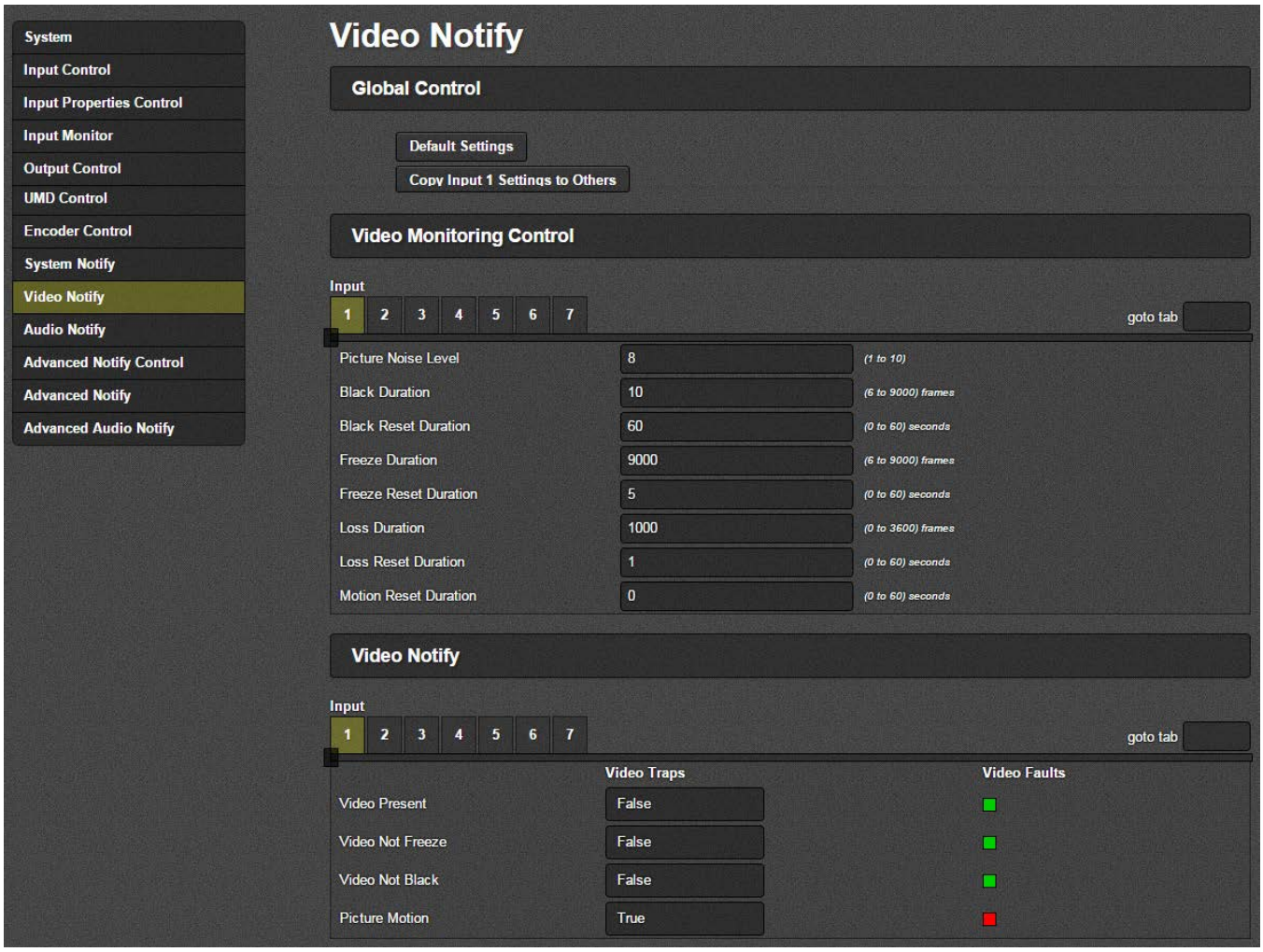


Figure 4-15: WebEASY® - Video Notify Tab

Global Control

Default Settings and **Copy Input 1 Settings to Others** are reserved for future implementation

Video Monitoring Control

For the 36 input streams, video configuration thresholds used for setting traps and fault monitoring in the Video Notify section.

Picture Noise Level (1 to 10): This control sets the amount for noise level acceptable on the incoming video before triggering a fault. This value should be set to the correct ambient noise level.

Black Duration (6 to 9000 frames): This control is used to set the number of black frames to signal a fault.

Black Reset Duration (0 to 60 seconds): This control sets the amount of time after the non-black video becomes present for the fault to go away.

Freeze Duration (6 to 9000 frames): This control sets the number of frames for a freeze motion fault to appear.

Freeze Reset (0 to 60 seconds): This control sets the amount of time after the freeze motion becomes present for the fault to go away.

Loss Duration (0 to 3600 frames): This control sets the number of frames for a video loss duration fault to appear.

Loss Reset Duration (0 to 60 seconds): This control sets the amount of time after video becomes present for the fault to go away.

Motion Reset Duration (0 to 60 seconds): This control sets the amount of time after the video becomes frozen for the fault to go away.

Video Notify

Video Notify allows for fault monitoring and traps to be send on video faults, previously configured in the sections above on the 36 input streams.

Video Traps: When Enabled, a fault condition will send out a trap message to the trap addresses configured in the Trap Control section of the System tab.

Video Faults: This monitor will display green when there is no fault on the audio and red for a fault indication.

4.10. AUDIO NOTIFY TAB

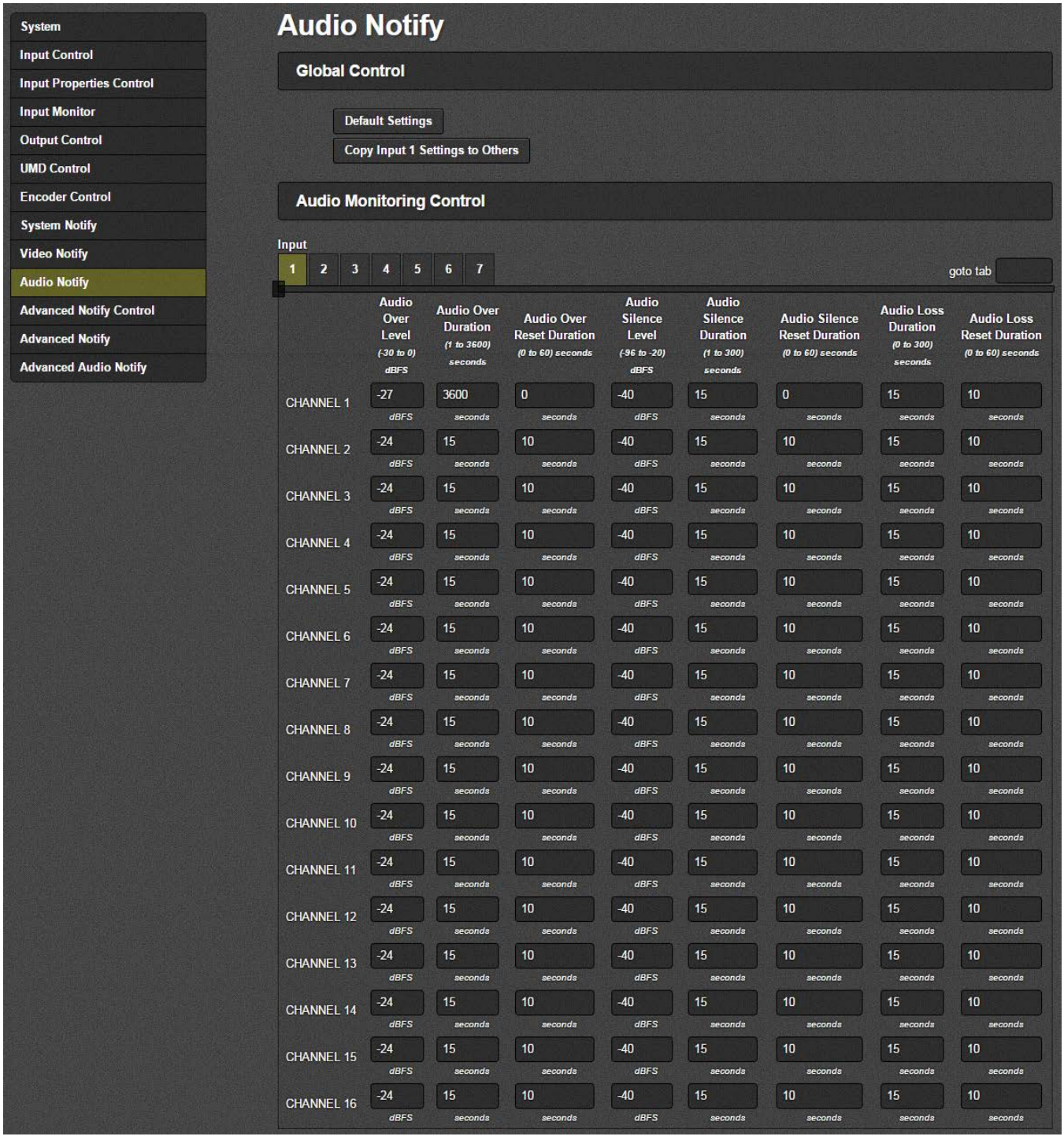


Figure 4-16: WebEASY® - Audio Notify Tab – Part 1

Global Control

Default Settings and **Copy Input 1 Settings to Others** are *reserved for future implementation.*

Audio Monitoring Control

For the 36 input streams and 16 channels of audio per input stream

Audio Over Level (-30 to 0 dBFS): The control sets the threshold limit for the audio Over level (relative loudness).

Audio Over Duration (1 to 3600 seconds): This control sets the duration for the audio over level to trigger a fault condition.

Audio Over Reset Duration (0 to 60 seconds): This control sets the amount of time after audio level is below threshold for the fault to go away.

Audio Silence Level (-96 to -20 dBFS): This control sets the threshold limit for the audio silence level.

Audio Silence Duration (1 to 300 seconds): This control sets the duration for the audio silence level to trigger a fault.

Audio Silence Reset Duration (0 to 60 seconds): This control sets the amount of time after audio silence level is above threshold for the fault to go away.

Audio Loss Duration (0 to 60 seconds): This control sets the audio loss duration to trigger a fault.

Audio Loss Reset Duration (0 to 60 seconds): This control sets the amount of time after the return from an audio loss for a fault to go away.

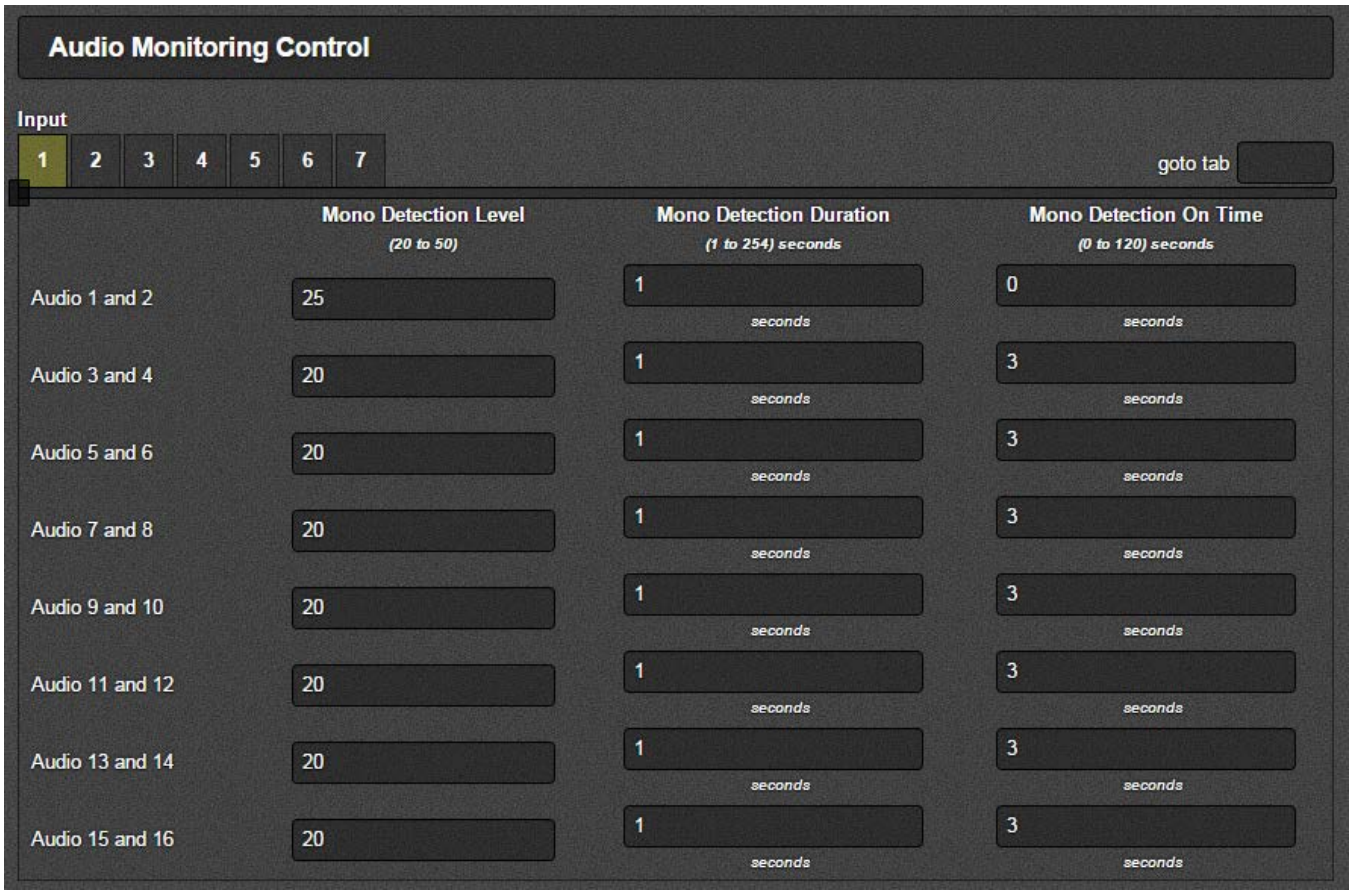


Figure 4-17: WebEASY® - Audio Notify Tab – Part 2

Audio Monitoring Control
For the 36 input streams and 8 groups of audio per input stream

Mono Detection Level (20 to 50): This control is used to detect the mono phase on the audio pair. A value of 20 is a strict condition and difficult to detect. A value of 50 is easier to detect.

Mono Detection Duration (1 to 254 seconds): This control sets the amount of time for a mono detection level error to trigger a fault.

Mono Detection On Time (0 to 120 seconds): This control sets the amount of time after the mono detection level is not in a fault condition for the fault to go away.

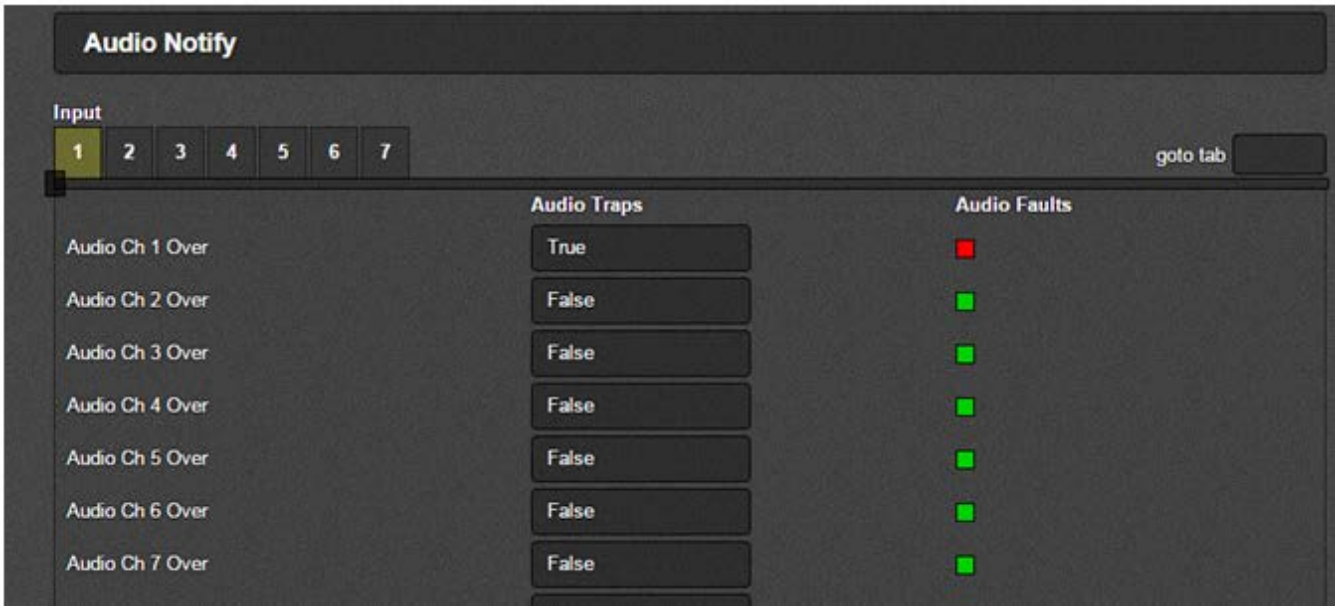


Figure 4-18: WebEASY® - Audio Notify Tab – Part 3

Note: Screen capture, in Figure 4-18, is only a portion of the Audio Notify section.

Audio Notify allows for fault monitoring and traps to be send on audio faults, previously configured in the sections above on the 36 input streams.

Audio Traps: When Enabled, a fault condition will send out a trap message to the trap addresses configured in the Trap Control section of the System tab.

Audio Faults: This monitor will display green when there is no fault on the audio and red for a fault indication.

4.11. ADVANCED NOTIFY CONTROL

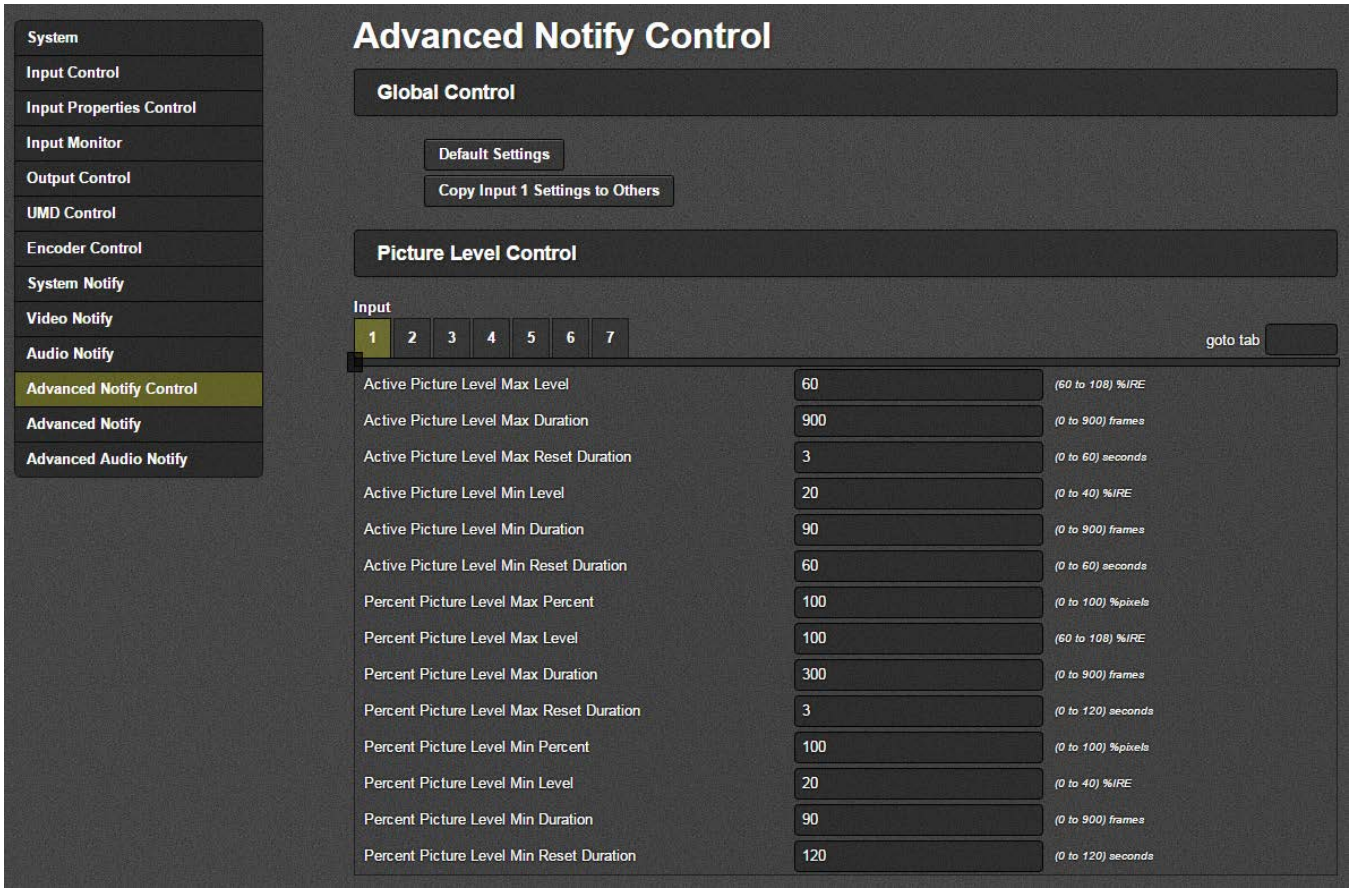


Figure 4-19: WebEASY® - Advanced Notify Control Tab – Part 1

Global Control
Default Settings and **Copy Input 1 Settings to Others** are reserved for future implementation

Picture Level Control
For the 36 input streams

Active Picture Level Max Level (60 to 108) %IRE: This control sets the upper threshold for maximum active picture level for a fault condition.

Active Picture Level Max Duration (0 to 900) frames: This control sets the number of frames for above the set threshold for max APL level for a fault to trigger.

Active Picture Level Reset Duration (0 to 60) seconds: This control sets the amount of time for the APL level to be below the upper threshold limit for the fault to go away

Active Picture Level Min Level (0 to 40) %IRE: This control sets the lower threshold for a minimum active picture level for a fault condition.

Active Picture Level Min Duration (0 to 900) frames : This control sets the number of frames for below the set threshold for minimum APL level for a fault condition.

Active Picture Level Min Reset Duration (0 to 60) seconds: This control sets the amount of time for the APL level to be above the lower threshold limit for the fault to go away.

Percent Picture Level Max Percent (0 to 100) %: Defines the percentage of the total picture used to calculate the max luminance based on the IRE threshold**.**

Percent Picture Level Max Level (60 to 108) %IRE: Defines the upper IRE threshold for percent picture level Max fault.

Percent Picture Level Max Duration (0 to 900) frames: : This control sets the number of frames for above the set threshold for the Percent Picture level for a fault to trigger.

Percent Picture Level Max Reset Duration (0 to 120) half seconds: This control sets the amount of time for the Percent Picture level to be below the upper threshold limit for the fault to go away.

Percent Picture Level Min Percent (0 to 100) %: Defines the percentage of the total picture that calculates the min luminance based on the IRE threshold.

Percent Picture Level Min Level (0 to 40) %IRE: Defines the lower IRE threshold for percent picture level Min fault.

Percent Picture Level Min Duration (0 to 900) frames: : This control sets the number of frames for below the set threshold for the Percent Picture level for a fault to trigger.

Percent Picture Level Min Reset Duration (0 to 120) half seconds: This control sets the amount of time for the Percent Picture level to be above the lower threshold limit for the fault to go away.

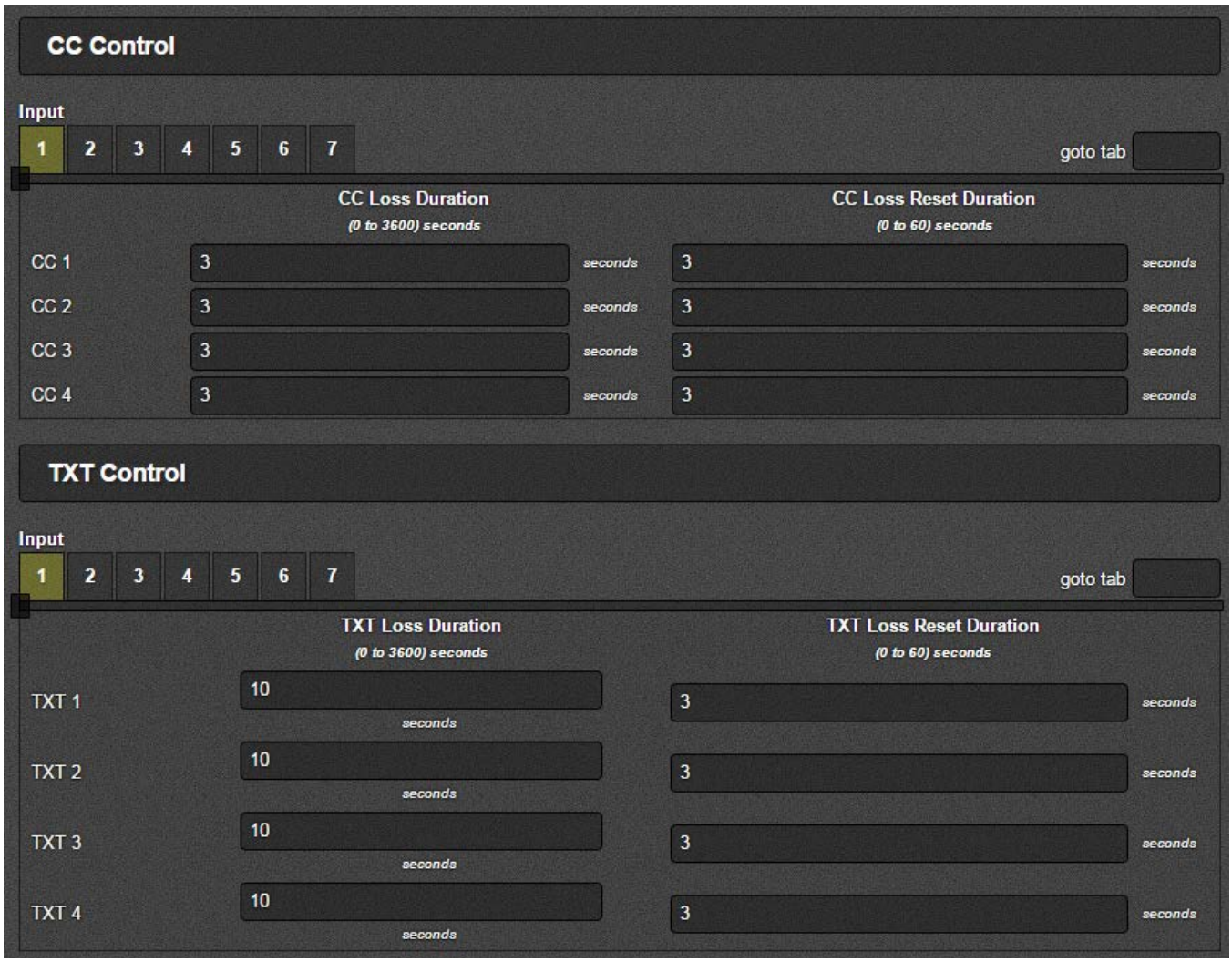


Figure 4-20: WebEASY® - Advanced Notify Control Tab – Part 2

CC Control
For the 36 input streams on CC1 to CC 4

CC Loss Duration (0 to 3600) seconds: This control is used to set the amount of time for the loss of the CC before triggering a fault condition.

CC Loss Reset Duration (0 to 60) seconds: This control is used to set the amount of time after the return of CC for the fault to go away.

TXT Control
For the 36 input streams on TXT 1 to TXT 4

TXT Loss Duration (0 to 3600) seconds: This control is used to set the amount of time for the loss of the TXT before triggering a fault condition.

TXT Loss Reset Duration (0 to 60) seconds: This control is used to set the amount of time after the return of TXT for the fault to go away.

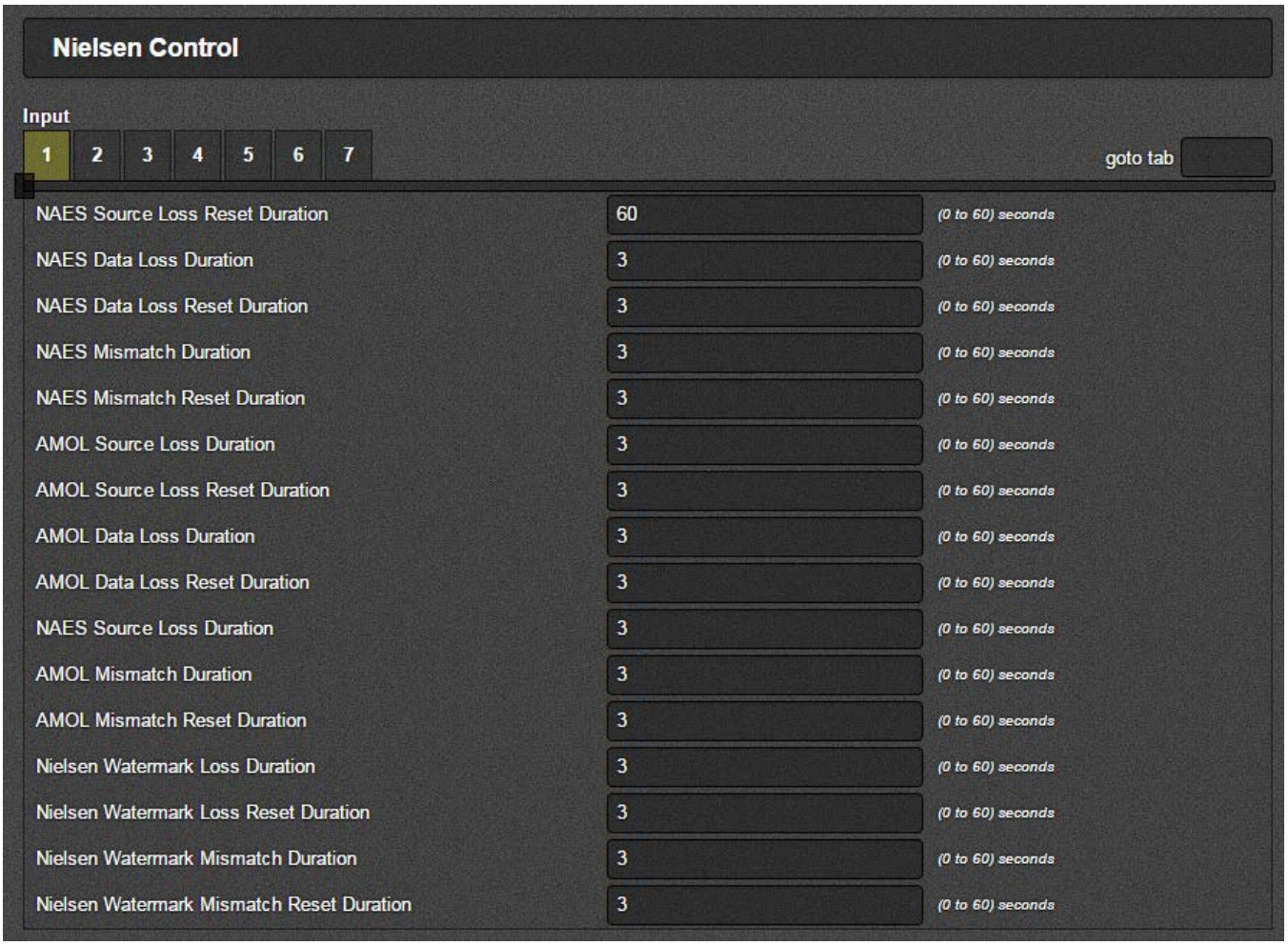


Figure 4-21: WebEASY® - Advanced Control Notify Tab - Part 3

Nielsen Control

For the 36 input streams

NAES Source Loss Reset Duration: This control is used to set the amount of time after the return of the NAES Source Loss for the fault to go away.

NAES Data Loss Duration: This control is used to set the amount of time for the loss of the NAES Data Loss before triggering a fault condition.

NAES Data Loss Reset Duration: This control is used to set the amount of time after the return of the NAES Data for the fault to go away.

NAES Mismatch Duration: This control is used to the amount of time for the NAES Mismatch before triggering a fault condition.

NAES Mismatch Reset Duration: This control is used to set the amount of time after the return of correct NAES for the fault to go away.

AMOL Source Loss Duration: This control is used to set the amount of time for the loss of the AMOL Source before triggering a fault condition.

AMOL Source Loss Reset Duration: This control is used to set the amount of time after the return of the AMOL source for the fault to go away.

AMOL Data Loss Duration: This control is used to set the amount of time for the loss of the AMOL Data before triggering a fault condition.

AMOL Data Loss Reset Duration: This control is used to set the amount of time after the return of the AMOL Data for the fault to go away.

NAES Source Loss Duration: This control is used to set the amount of time for the loss of the NAES source before triggering a fault condition.

AMOL Mismatch Duration: This control is used to set the amount of time for an AMOL mismatch before triggering a fault condition.

AMOL Mismatch Reset Duration: This control is used to set the amount of time after the return of the correct AMOL for the fault to go away.

Nielsen Watermark Loss Duration: This control is used to set the amount of time for the loss of the Nielsen watermark before triggering a fault condition.

Nielsen Watermark Loss Reset Duration: This control is used to set the amount of time after the return of the Nielsen watermark for the fault to go away.

Nielsen Watermark Mismatch Duration: This control is used to set the amount of time for a Nielsen watermark mismatch before triggering a fault condition.

Nielsen Watermark Mismatch Reset Duration: This control is used to set the amount of time after the return of the correct Nielsen watermark for the fault to go away.

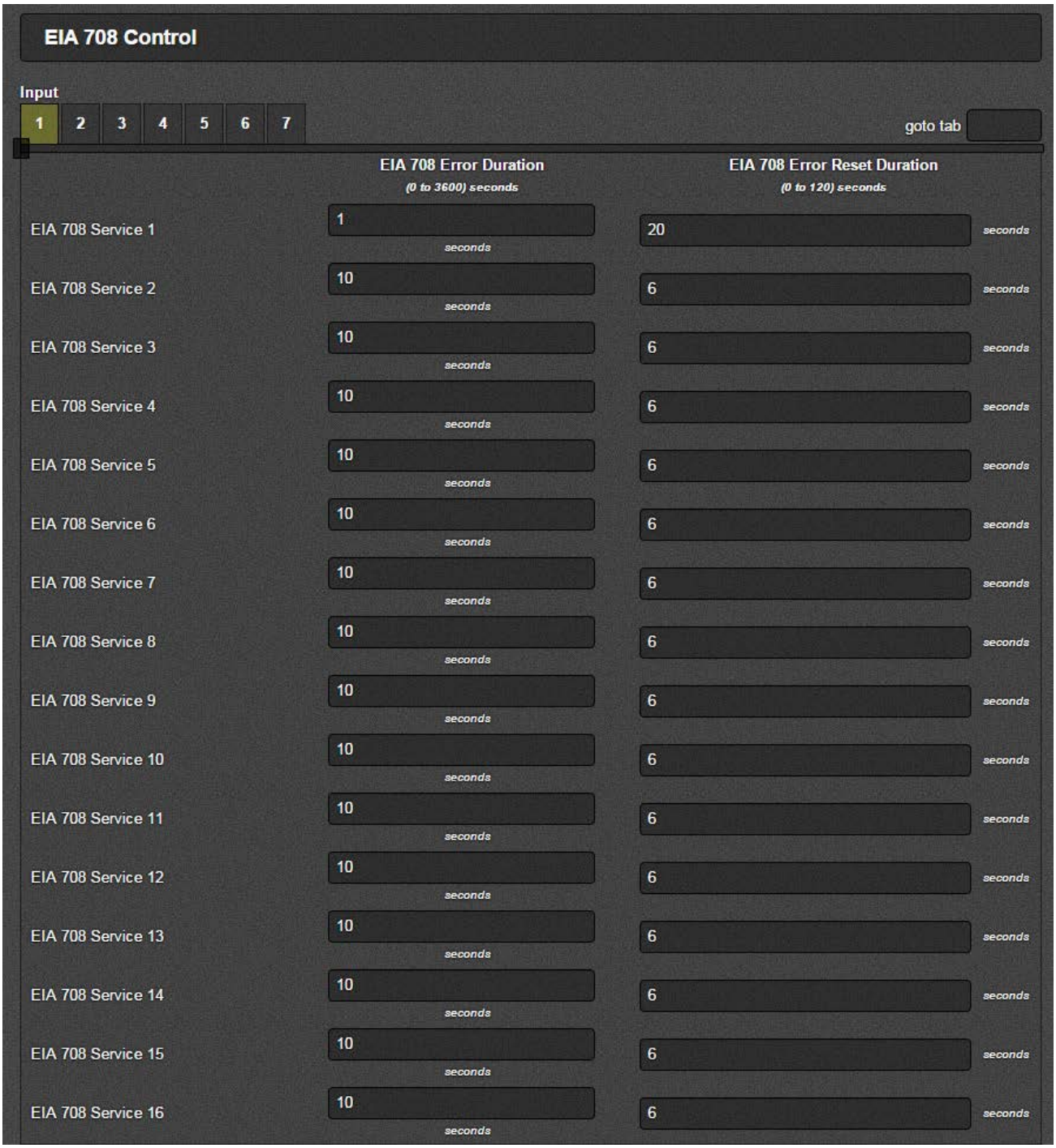


Figure 4-22: WebEASY® - Advanced Control Notify Tab – Part 4

EIA 708 Control

For the 36 input streams and EIA Service 1 to EIA Service 16

EIA 708 Error Duration (0 to 3600 seconds): This control is used to set the amount of time for the loss of the Services before triggering a fault condition.

EIA 708 Error Reset Duration (0 to 120 seconds): This control is used to set the amount of time after the return of the Service for the fault to go away.

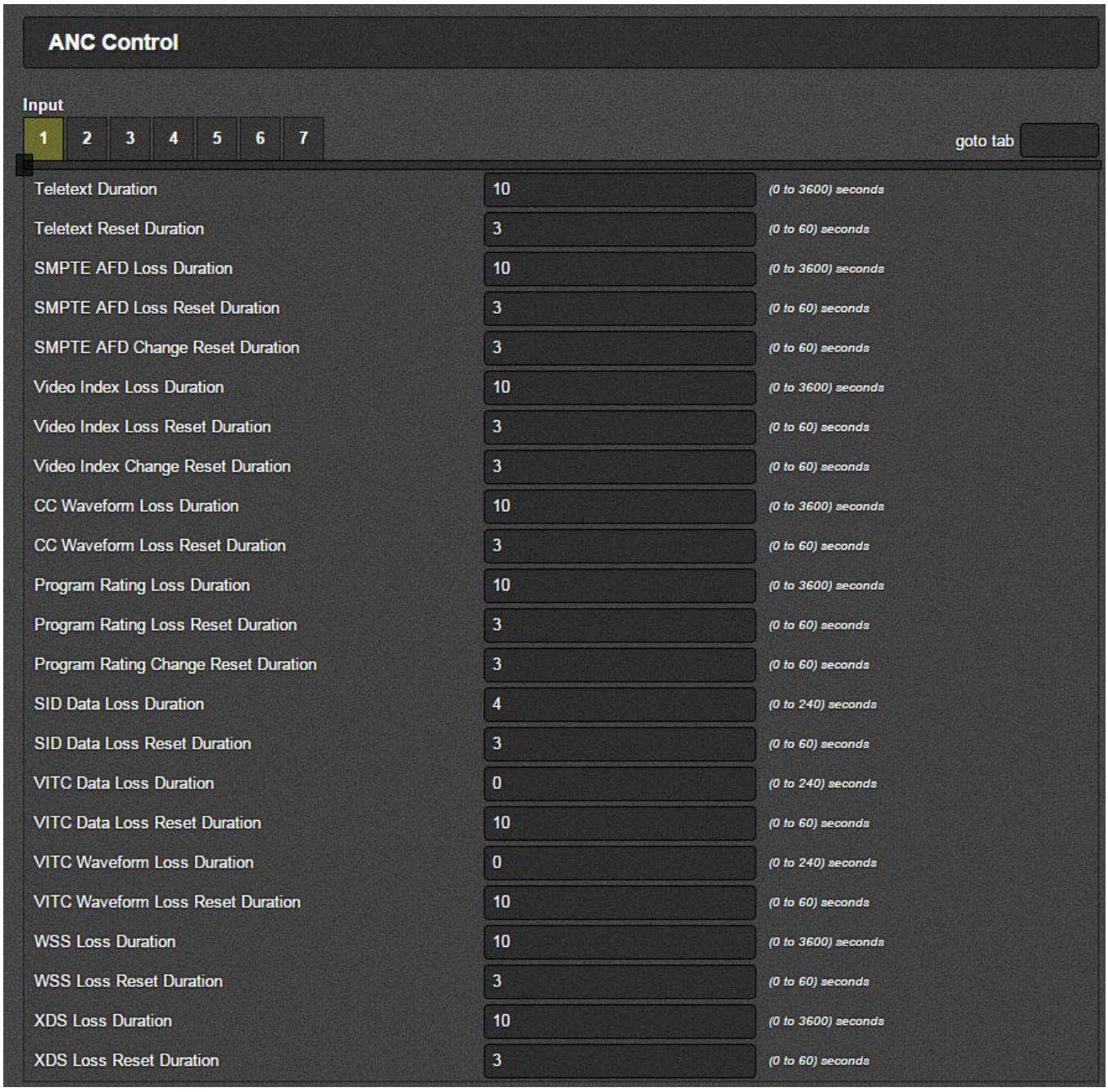


Figure 4-23: WebEASY® - Advanced Control Notify Tab – Part 5

ANC Control
For the 36 input streams

Teletext Duration (0 to 3600 seconds): This control is used to set the amount of time for the loss of the Teletext before triggering a fault condition.

Teletext Reset Duration (0 to 60 seconds): This control is used to set the amount of time after the return of the Teletext for the fault to go away.

SMPTE AFD Loss Duration (0 to 3600 seconds): This control is used to set the amount of time for the loss of the SMPTE AFD before triggering a fault condition.

SMPTE AFD Loss Reset Duration (0 to 60 seconds): This control is used to set the amount of time after the return of the SMPTE AFD for the fault to go away.

SMPTE AFD Change Reset Duration (0 to 60 seconds): This control is used to set the amount of time after a change in the SMPTE AFD for the fault to go away.

Video Index Loss Duration (0 to 3600 seconds): This control is used to set the amount of time for the loss of the video index before triggering a fault condition.

Video Index Loss Reset Duration (0 to 60 seconds): This control is used to set the amount of time after the return of the video index for the fault to go away.

Video Index Change Reset Duration (0 to 60 seconds): This control is used to set the amount of time after a change in the video index for the fault to go away.

CC Waveform Loss Duration (0 to 3600 seconds): This control is used to set the amount of time for the loss of the CC waveform before triggering a fault condition.

CC Waveform Loss Reset Duration (0 to 60 seconds): This control is used to set the amount of time after the return of the CC waveform for the fault to go away.

Program Rating Loss Duration (0 to 3600 seconds): This control is used to set the amount of time for the loss of the Services before triggering a fault condition.

Program Rating Loss Reset Duration (0 to 60 seconds): This control is used to set the amount of time for the loss of the program rating before triggering a fault condition.

Program Rating Change Reset Duration (0 to 60 seconds): This control is used to set the amount for the program rating changed fault to go away.

SID Data Loss Duration (0 to 240 seconds): This control is used to set the amount of time for the loss of the SID Data before triggering a fault condition.

SID Data Loss Reset Duration (0 to 60 seconds): This control is used to set the amount of time after the return of the SID Data for the fault to go away.

VITC Data Loss Duration (0 to 240 seconds): This control is used to set the amount of time for the loss of the VITC Data before triggering a fault condition.

VITC Data Loss Reset Duration (0 to 60 seconds): This control is used to set the amount of time after the return of the VITC Data for the fault to go away.

VITC Waveform Loss Duration (0 to 240 seconds): This control is used to set the amount of time for the loss of the VITC Waveform before triggering a fault condition.

VITC Waveform Loss Reset Duration (0 to 60 seconds): This control is used to set the amount of time after the return of the VITC waveform loss for the fault to go away.

WSS Loss Duration (0 to 3600 seconds): This control is used to set the amount of time for the loss of the WSS before triggering a fault condition.

WSS Loss Reset Duration (0 to 60 seconds): This control is used to set the amount of time after the return of the WSS for the fault to go away.

XDS Loss Duration (0 to 3600 seconds): This control is used to set the amount of time for the loss of the XDS before triggering a fault condition.

XDS Loss Reset Duration (0 to 60 seconds): This control is used to set the amount of time after the return of the XDS for the fault to go away.

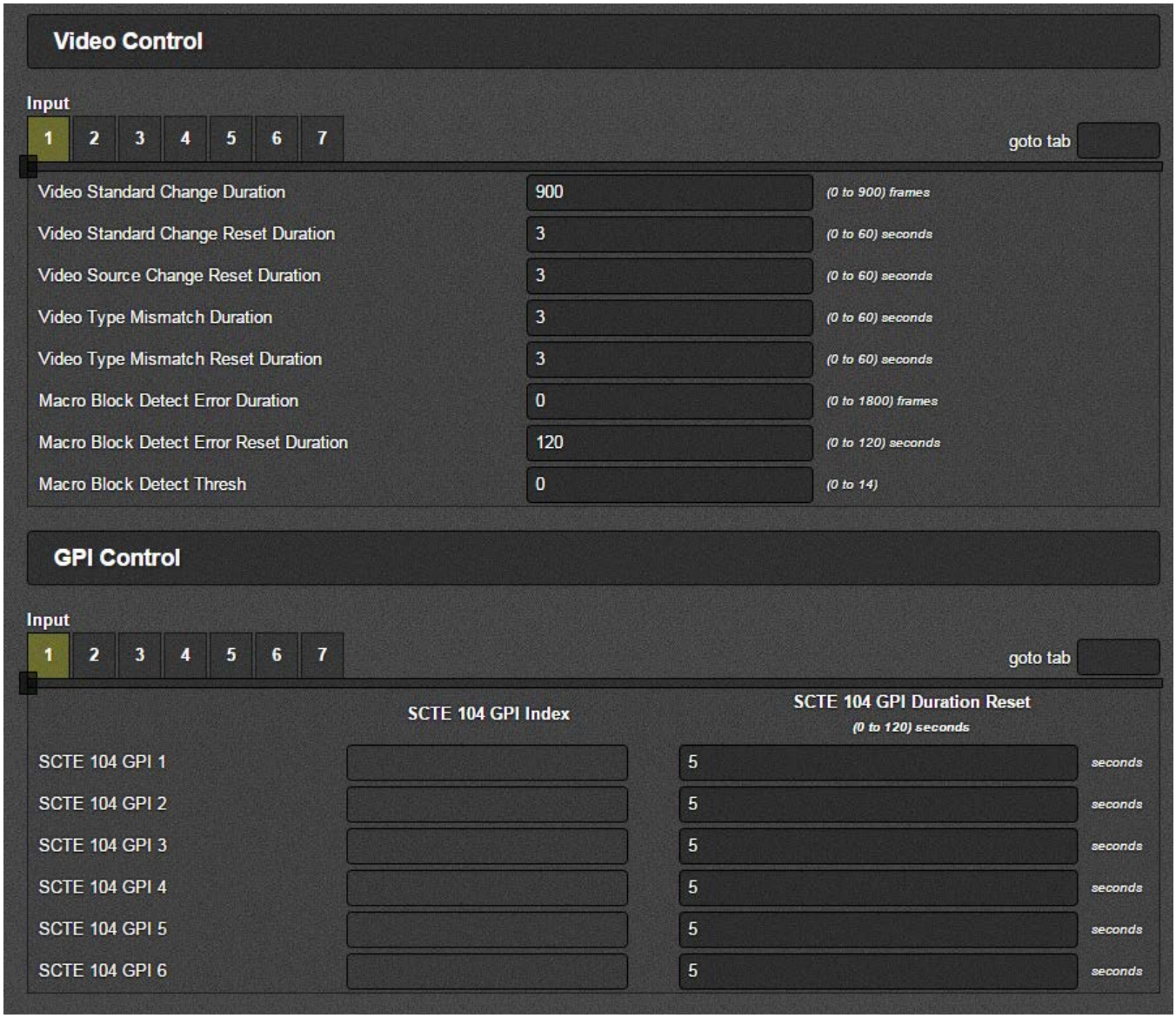


Figure 4-24: WebEASY® - Advanced Control Notify Tab – Part 6

Video Control

For the 36 input streams

Video Standard Change Duration (0 to 900) frames: This control is used to set the number of frames for the change in video standard before triggering a fault condition.

Video Standard Change Reset Duration (0 to 60) seconds: This control is used to set the amount of time for the video standard changed for the fault to go away.

Video Source Change Reset Duration (0 to 60) seconds: This control is used to set the amount of time after the change for the video source for the fault to go away.

Video Type Mismatch Duration (0 to 60) seconds: This control is used to set the amount of time for the mismatch in the video type before triggering a fault condition.

Video Type Mismatch Reset Duration (0 to 60) seconds: This control is used to set the amount of time after the return of the video type for the fault to go away.

Macro Block Detect Error Duration (0 to 1800) frames: This control is used to set the number of frames for an error in the macro block detection before triggering a fault condition.

Macro Block Detect Error Reset Duration (0 to 120) seconds: This control is used to set the amount of time after the Macro Block is not detecting errors for the fault to go away.

Macro Block Detect Thresh (0 to 14): This control is used to set the threshold for the Macro Block detection.

GPI Control

For the 36 input streams and SCTE 104 GPI 1 to SCTE 104 GPI 6

SCTE 104 GPI Index and **SCTE 104 GPI Duration Reset** are reserved for future implementation.

4.12. ADVANCED NOTIFY

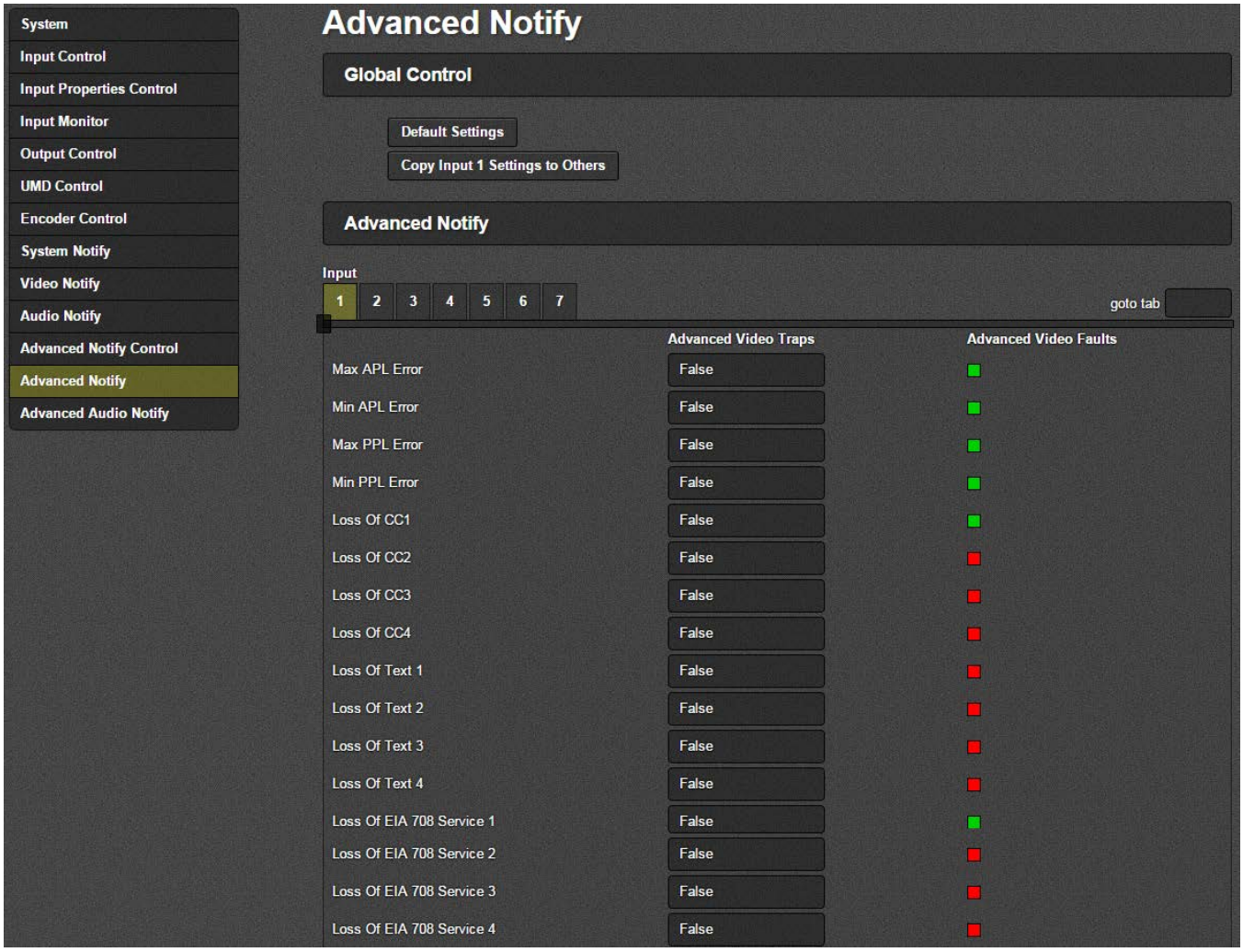


Figure 4-25: WebEASY® - Advanced Notify Tab – Part 1

Global Control
Default Settings and **Copy Input 1 Settings to Others** are reserved for future implementation

Advanced Notify
Advanced Notify allows for fault monitoring and traps to be send on video faults, previously configured in the Advanced Notify Control tab, on the 36 input streams.

Advanced Video Traps: When Enabled, a fault condition will send out a trap message to the trap addresses configured in the Trap Control section of the System tab.

Advanced Video Faults: This monitor will display green when there is no fault on the video and red for a fault indication.

4.13. ADVANCED AUDIO NOTIFY

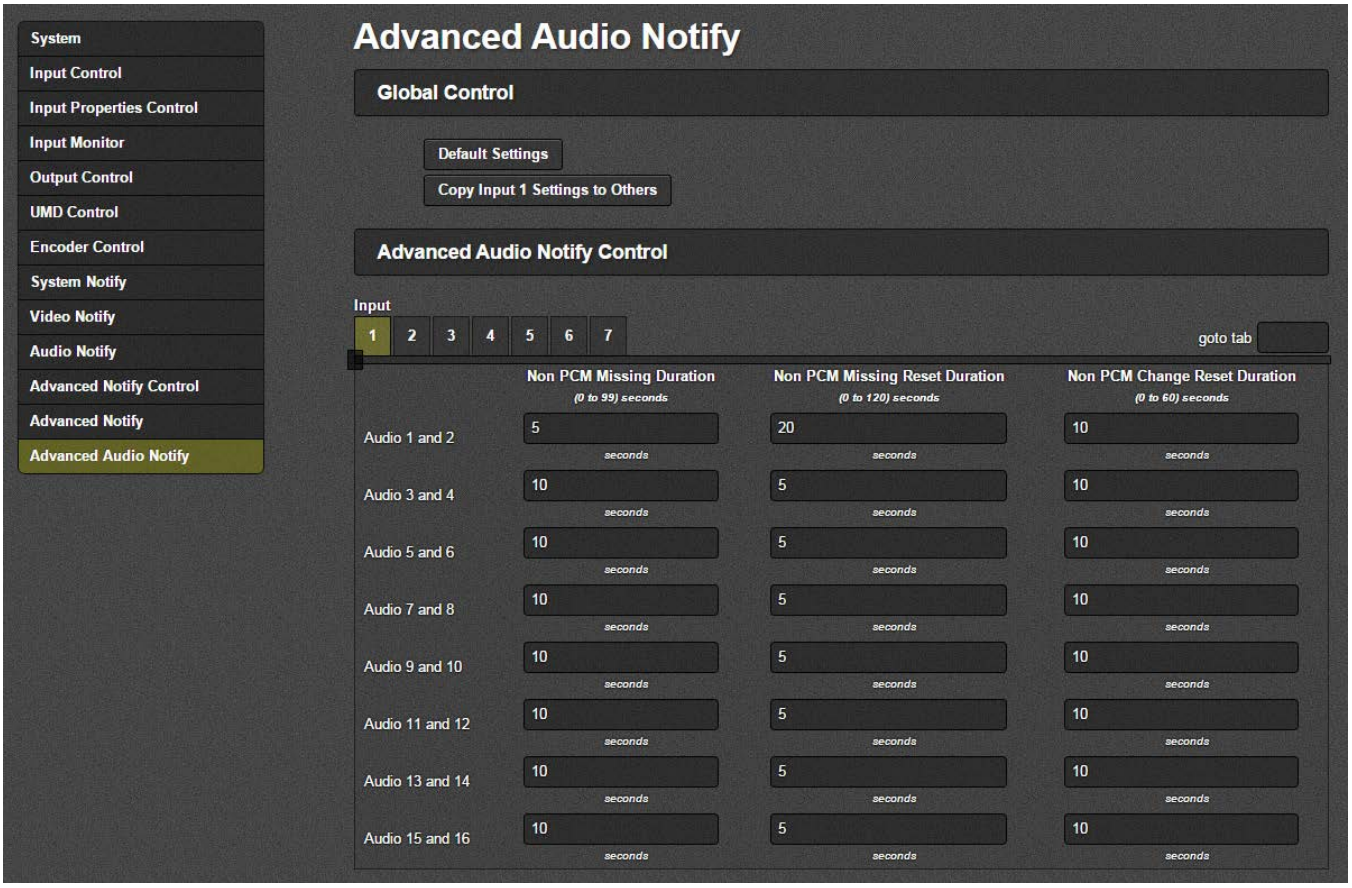


Figure 4-26: WebEASY® - Advanced Audio Notify Tab – Part 1

Global Control
Default Settings and **Copy Input 1 Settings to Others** are reserved for future implementation

Advanced Audio Notify Control
For the 36 input streams and 8 audio groups

Non PCM Missing Duration (0 to 99 seconds): This control is used to set the amount of time for the loss of the Non PCM audio before triggering a fault condition.

Non PCM Missing Reset Duration (0 to 120 seconds): This control is used to set the amount of time after the return on the Non PCM audio for the fault to go away.

Non PCM Change Reset Duration (0 to 60 seconds): This control is used to set the amount of time for the Non PCM audio for a fault to go away**.**

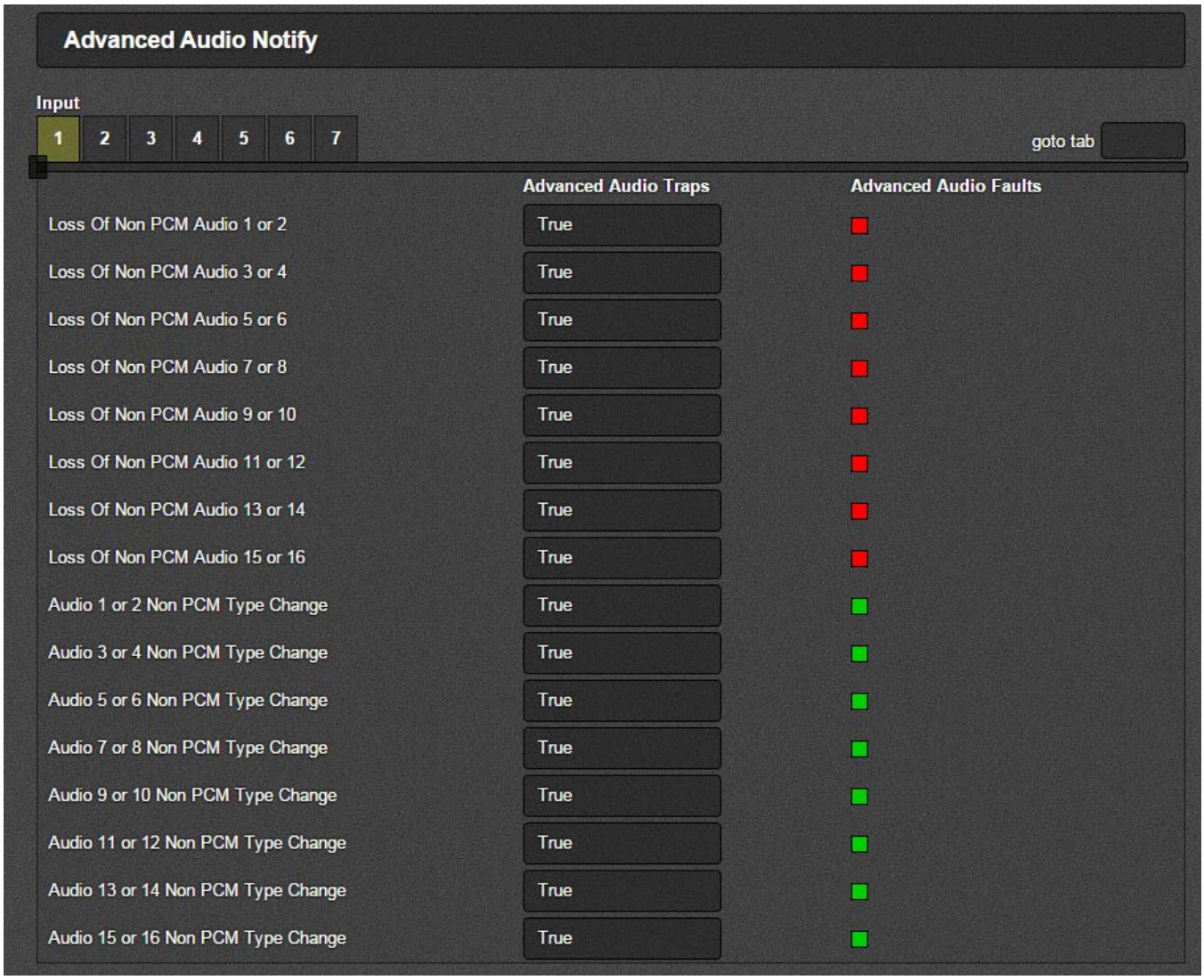


Figure 4-27: WebEASY® - Advanced Audio Notify Tab – Part 2

Advanced Audio Notify

Advanced audio Notify allows for fault monitoring and traps to be send on audio faults, previously configured in sections above, on the 36 input streams.

Advanced Audio Traps: When Enabled, a fault condition will send out a trap message to the trap addresses configured in the Trap Control section of the System tab.

Advanced Audio Faults: This monitor will display green when there is no fault on the audio and red for a fault indication.

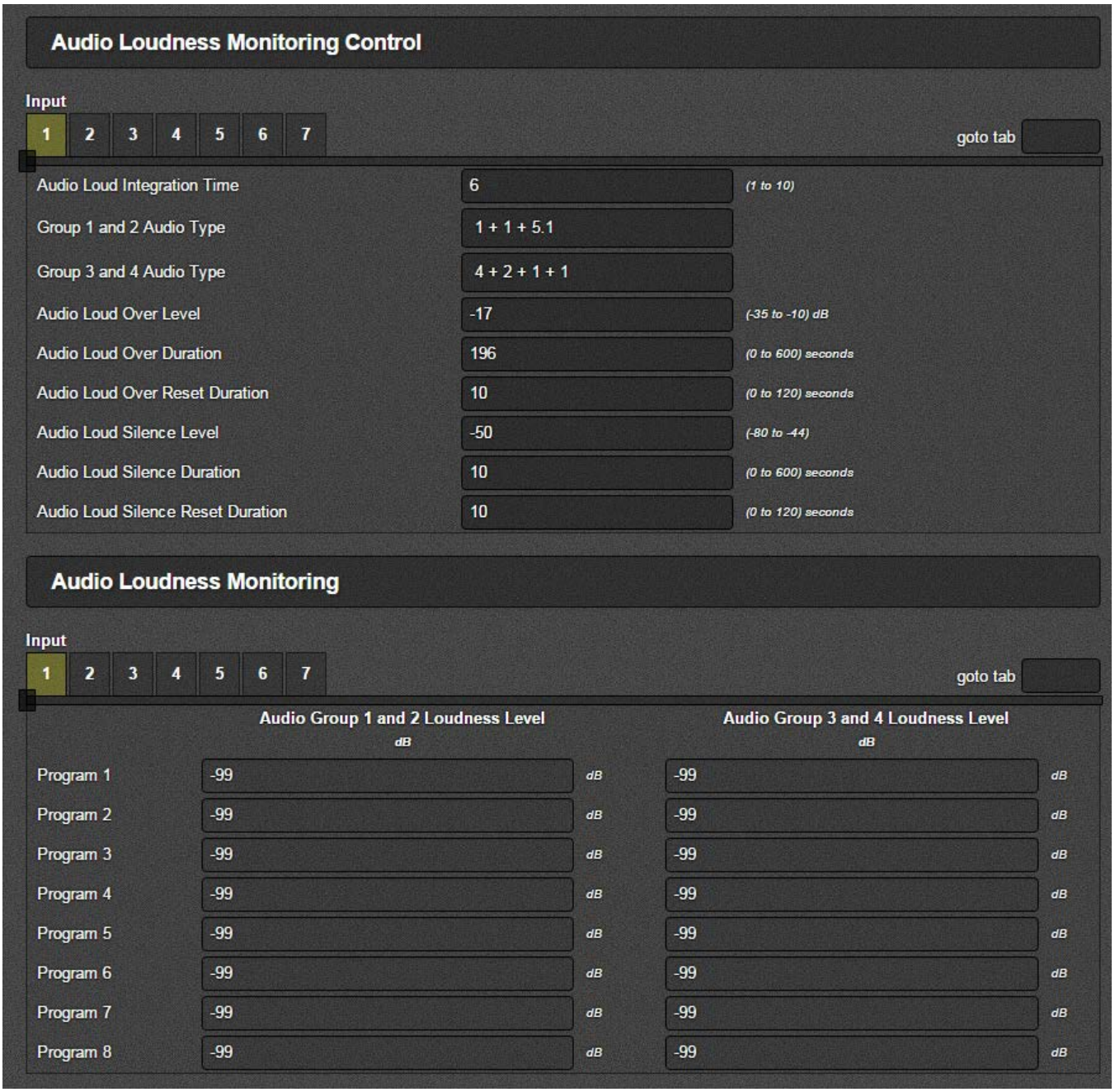


Figure 4-28: WebEASY® - Advanced Audio Notify Tab – Part 3

Audio Loudness Monitoring Control
For the 36 input streams

Audio Loud Integration Time (1 to10): Defines the Audio Loudness integration time for the status in seconds.

Group 1 and 2 Audio Type: Selects audio program types for group 1 and 2 audio.

Group 3 and 4 Audio Type: Selects audio program types for group 3 and 4 audio.

Audio Loud Over Level (-35 to 10) dB: Threshold for audio loudness over.

Audio Loud Over Duration (0 to 600) sec: This control is used to set the amount of time for Audio Loud Over before triggering a fault condition.

Audio Loud Over Reset Duration (0 to 120) seconds: This control is used to set the amount of time after the Audio Loud Over is below threshold for the fault to go away.

Audio Loud Silence Level (-80 to -44)dB: Threshold for audio loudness silence.

Audio Loud Silence Duration (0 to 600) seconds: This control is used to set the amount of time for the Audio Loud Silence before triggering a fault condition.

Audio Loud Silence Reset Duration (0 to 120) seconds: This control is used to set the amount of time after the Audio Loud Silence is above threshold the fault to go away.

Audio Loudness Monitoring

For the 36 input streams and Program 1 to Program 8

Audio Group 1 and 2 Loudness Level dB: This monitor displays the LKFS (Loudness K-weighted Full Scale) values corresponding to the program defined.

Audio Group 3 and 4 Loudness Level dB: This monitor displays the LKFS (Loudness K-weighted Full Scale) values corresponding to the program defined.

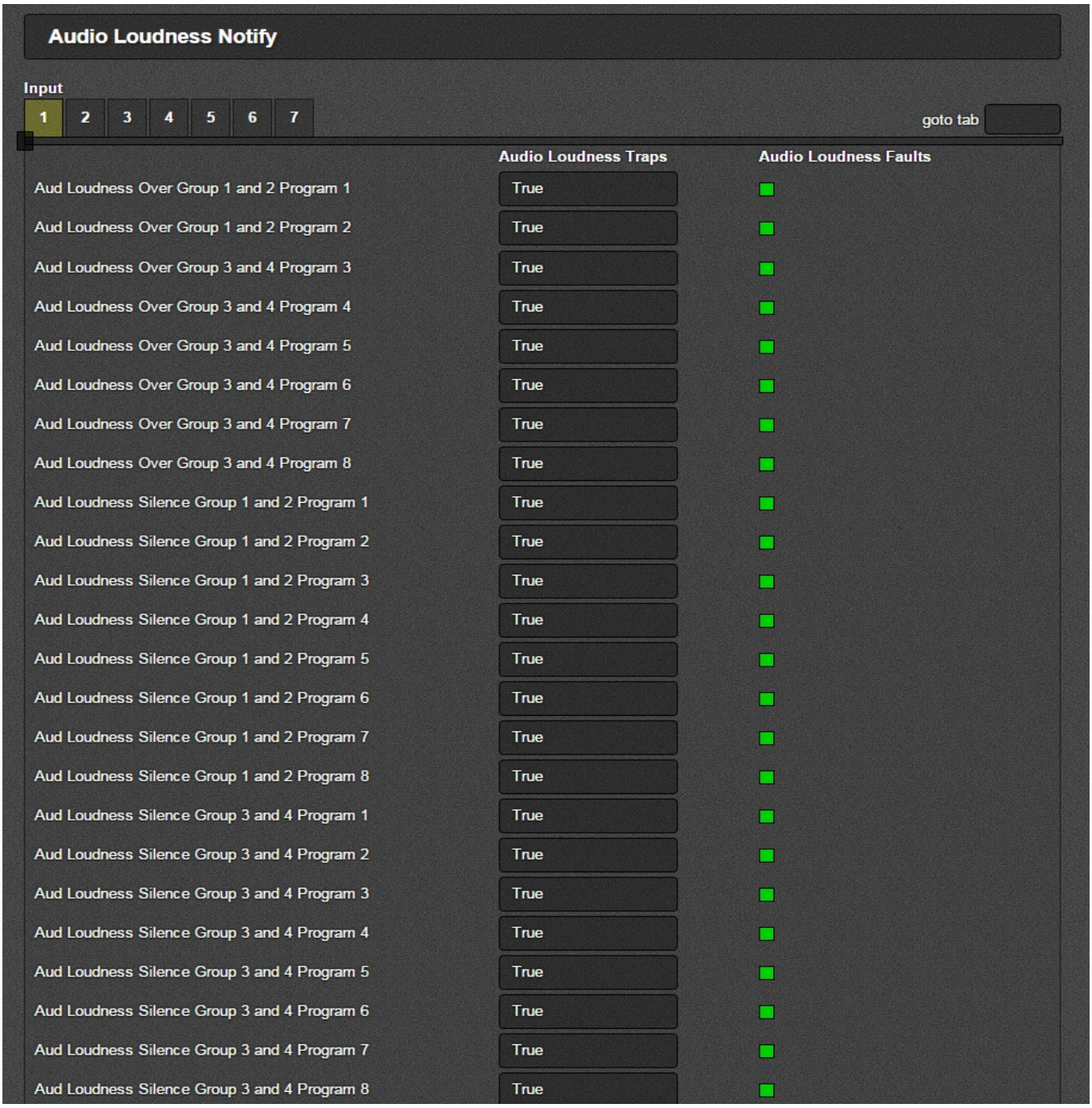


Figure 4-29: WebEASY® - Advanced Audio Notify Tab – Part 4

Audio Loudness Notify

Audio Loudness Notify allows for fault monitoring and traps to be send on audio faults, previously configured in sections above, on the 36 input streams.

Audio Loudness Traps: When Enabled, a fault condition will send out a trap message to the trap addresses configured in the Trap Control section of the System tab.

Audio Loudness Faults: This monitor will display green when there is no fault on the audio and red for a fault indication.

5. FIRMWARE UPGRADE

Using the WebEASY® on a web interface is the fasted and recommended procedure to load the firmware onto the 3067VIP10G-3G.

5.1. FIRMWARE UPGRADE USING WEBEASY®

When first visiting the 3067VIP10G-3G web interface, the user will be asked to enter a Login and Password. Enter "***customer***" for Login and "***customer***" for Password.

On the top of the web page for the 3067VIP10G-3G, there is a tab labeled **Upgrade**. The **Upgrade** tab is used to check current firmware version and upload the latest firmware.

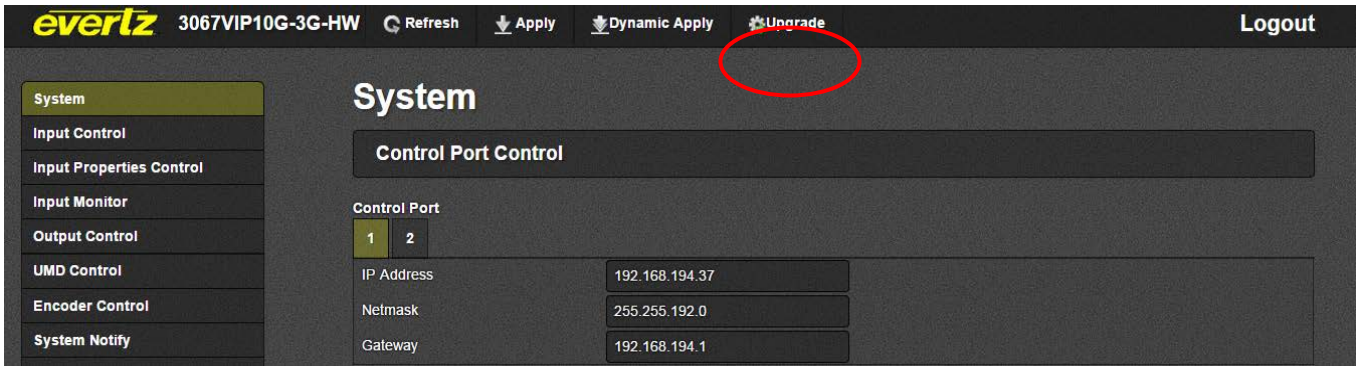


Figure 5-1: WebEASY® - Upgrade Button on Top Menu Bar

Selecting the *Upgrade* tab, will take you to Figure 5-2 where the current firmware version is shown. Should the firmware version be outdated, you will need to download the firmware image file.

NOTE: Contact Evertz get the latest firmware file.

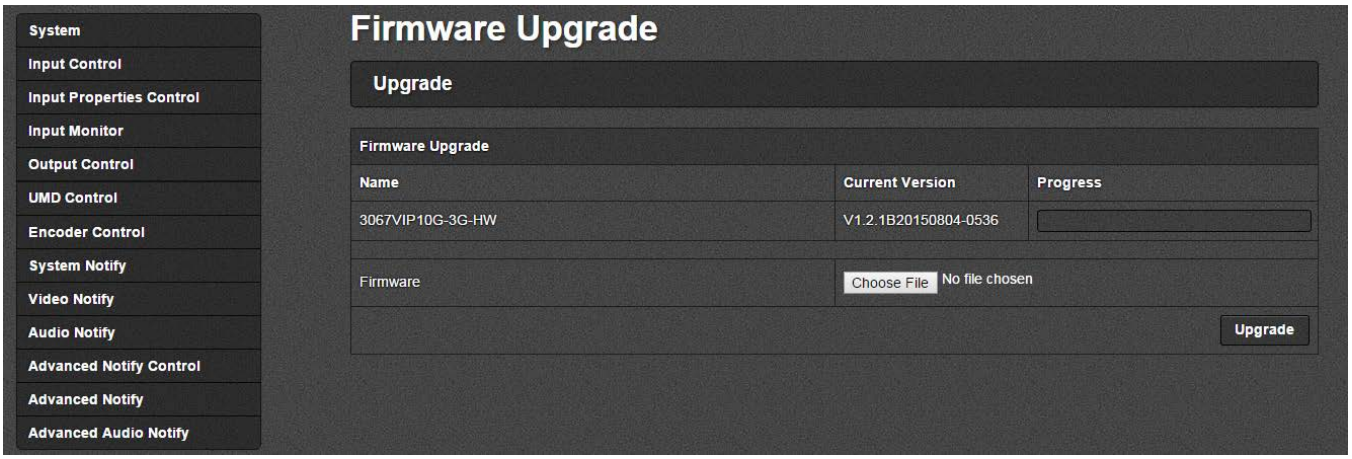


Figure 5-2: WebEASY® - Firmware Upgrade Menu

Click ***Choose File*** and browse to locate image file. Once selected, click ***Open*** (Step 1) to advance to next step. Click ***Upgrade*** (Step 2) and watch progress bar for status. Once completed, the device will automatically restart.

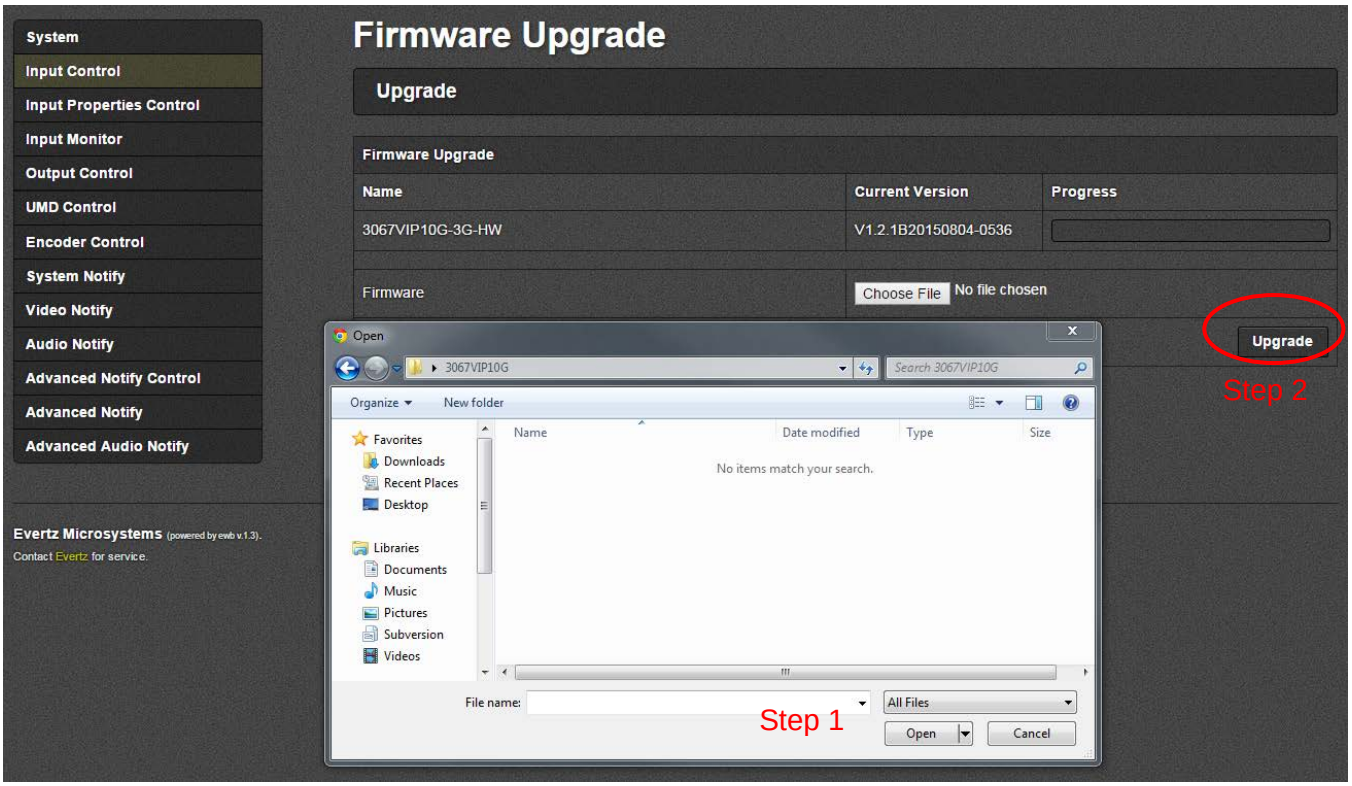


Figure 5-3: WebEASY® - Firmware Upgrade Menu