3067VIP-3G-36x4
Next Generation Quad Outputs, Compact Multi-Image Display Processors
User Manual

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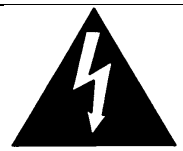
IMPORTANT SAFETY INSTRUCTIONS

	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

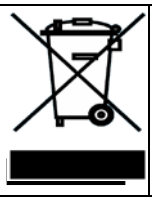
NOTE

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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REVISION HISTORY

REVISION	DESCRIPTION	DATE
1.0	First Release	Feb 2020

1. OVERVIEW

3067VIP–3G–36x4 is the most advanced high density multi–image display processor technology available. It supports SD, HD and 3G/s SDI inputs and up to quad unique display outputs. 3067VIP–3G–36x4 offers seamless UHD input (no visible quadrant) monitoring and natively drives UHD displays. Each 3067VIP–3G–36x4 input can be displayed in any size, position or aspect ratio on any display.

The 3067VIP–3G–36x4 provides the best quality input reproduction; it leverages the same video processing technology as Evertz conversion products.

The 3067VIP–3G–36x4 is a hot–swappable device, which can reside in any Evertz EMX series frame available in 1RU, 3RU and 6RU, with optional redundant power supplies. This allows high density I/O count per RU. The 3067VIP–3G–36x4 is VistaLink enabled offering remote monitoring, control and configuration capabilities via SNMP. The 3067VIP–3G–36x4 is easily configurable via the web interface. Layout can be designed in a live control environment using a VUE–WEB (web browser). Key features include automatic aspect ratio adjustment per source basis, graticule generation, VITC/HD time code decode, cc decode/burn–in and more.

Features & Benefits

- Accepts 36 inputs with embedded audio Auto sensing SD, HD and 3 Gbps inputs
- Supports quad square division UHD inputs stitching and also supports monitoring of independent 2SI quadrant
- Supports up to x8 UHD inputs simultaneously.
- Supports dual UHD (3840x2160) outputs or quad outputs up to 1920x1200 resolution
- Best image quality in industry
- Allows full screen viewing of any input on any output
- Supports for dynamic under monitoring displays (UMD) and tallies from router and switcher
- Supports advanced on screen graphics, including analog clock, transparency control of objects, raised bezels and borders, custom background, custom logo per display
- Supports TrueType fonts including non-Latin alphabets
- Built-in graticule generator, user defined per window
- Enables the decoding and display of VITC/ATC (SMPTE ST 12-1, 12M-2) time code
- Audio, video and data fault monitoring with on screen fault notification
- Vistalink capable for configuration and monitoring via SNMP
- One frame processing delay
- Real time control of display output via web based layout design tool (VUE-WEB)
- Decoding and burn-in of 608 and 708 captions as well as Teletext
- Monitoring of the full 16 channels of embedded audio per input
- Loudness monitoring per ITU 1770, ATSC A/85 and EBU R 128
- Dolby E audio monitoring with surround sound bar graph (one per input)

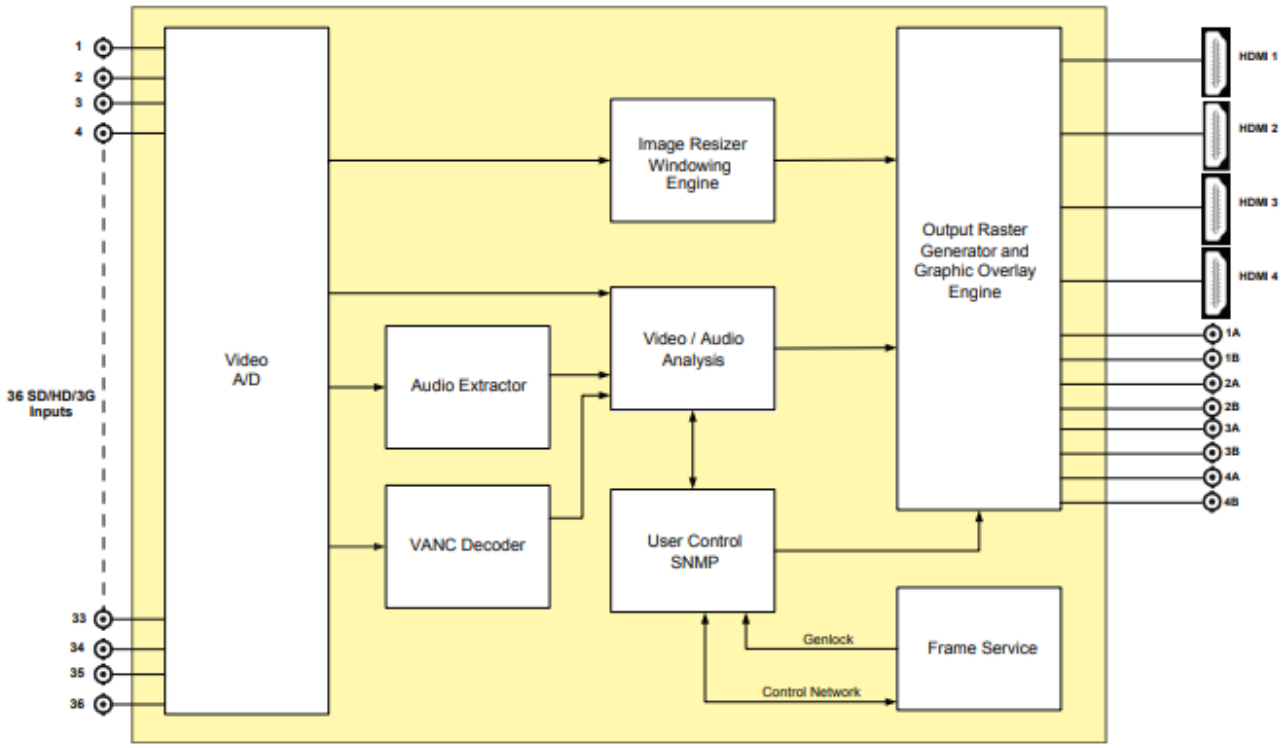

Figure 1-1: 3067VIP-3G-36x4 Block Diagram

2. TECHNICAL SPECIFICATIONS

2.1. SERIAL VIDEO INPUTS

Standards:	3Gb/s (SMPTE 424M/424M-AB) HD-SDI (SMPTE ST 292-1), and/or SD-SDI (SMPTE ST 259-C)
Number of Inputs:	36
Connector:	Mini Din 1.0/2.3 connector
Equalization:	
SD-SDI:	Automatic to 200m @ 270 Mb/s with Belden 1694A (equiv.)
HD-SDI:	Automatic to 100m @ 1.5 Gb/s with Belden 1694A (equiv.)
3G:	Automatic to >50m @ 3 Gb/s with Belden 1694A (equiv.)
Return Loss:	>15dB up to 1.5 Gb/s
Embedded Audio:	SMPTE ST 272-A, ST 299-1

2.2. DISPLAY VIDEO OUTPUT

Standard:	HDMI 2.0
Resolutions:	Up to 4 output at 1920x1200 or 2 output at UHD (3840x2160)
Number of Outputs:	Up to 4
Connector:	HDMI

2.3. SERIAL VIDEO OUTPUT

Standard:	3G/HD/SD best fit based on resolution selected (3G, 1080i, 720p, 625, 525). Support dual UHD output square division or 2SI
Number of Outputs:	8 (maximum 4 unique outputs)
Connector:	Mini Din 1.0/2.3 connector
Signal Level:	800mV nominal
DC Offset:	0V ± 0.5V

2.4. RISE AND FALL TIME

HD:	200ps nominal
SD:	740ps nominal
Overshoot:	<10% of amplitude

2.5. GENLOCK INPUT

Type:	NTSC/PAL color black
Level:	1V p-p nominal
Connector:	Uses EMX6-FR, EMX3-FR or EMX1-FR frame gunlock BNC

2.6. ETHERNET

Network Type:	Fast Ethernet 100 Base-TX IEEE 802.3U standard for 100Mbps baseband CSMA/CD local area network
Connector:	Via EMX frame controller

ELectrical

Voltage:	+12VDC
Power:	130W
EMI/RFI:	Complies with FCC Part 15, Class A EU EMC Directive

Physical (number of slots): 2

2.7. MONITORING OPTIONS

- **+SM** Standard AVM monitoring audio: low/high/loss
  Video: black/frozen/loss
- **+MCR** Dolby E audio monitoring, Loudness monitoring, CC/Teletext subtitle decode/monitoring, VANC data monitoring. Includes +SM monitoring features

3. GETTING STARTED

3.1. REAR PLATE DESCRIPTION

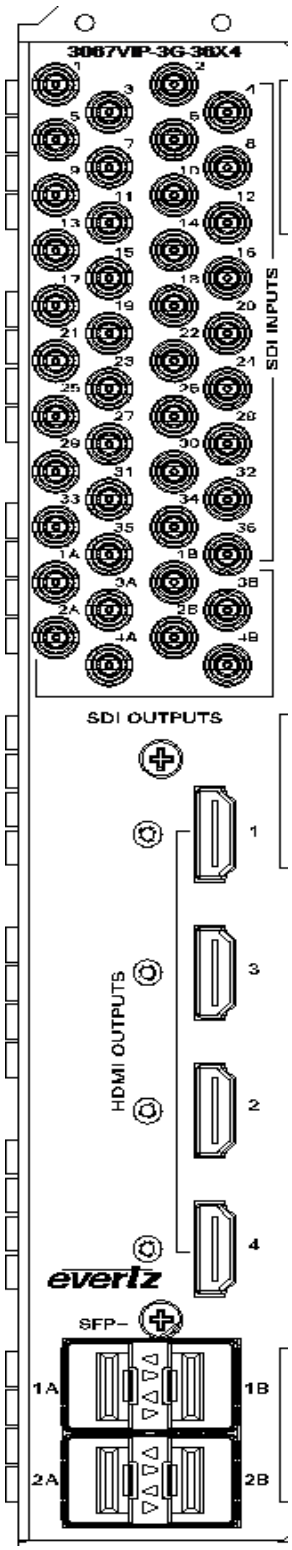

Figure 3-1: 3067VIP-3G-36x4 Rear Panel

3.2. HARDWARE INSTALLATION

NOTE: SFP's must be ordered separately

To successfully install the 3067VIP-3G-36x4 you will require the following:

1. EMX1, 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 3067VIP-3G-36x4 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 3067VIP-3G-36x4 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 3067VIP-3G-36x4 card.

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

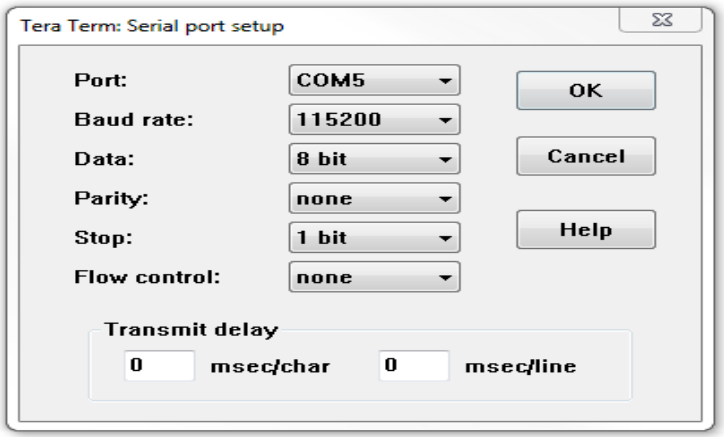

Figure 3-2: COM Port – Serial Port Settings

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

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

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

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

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

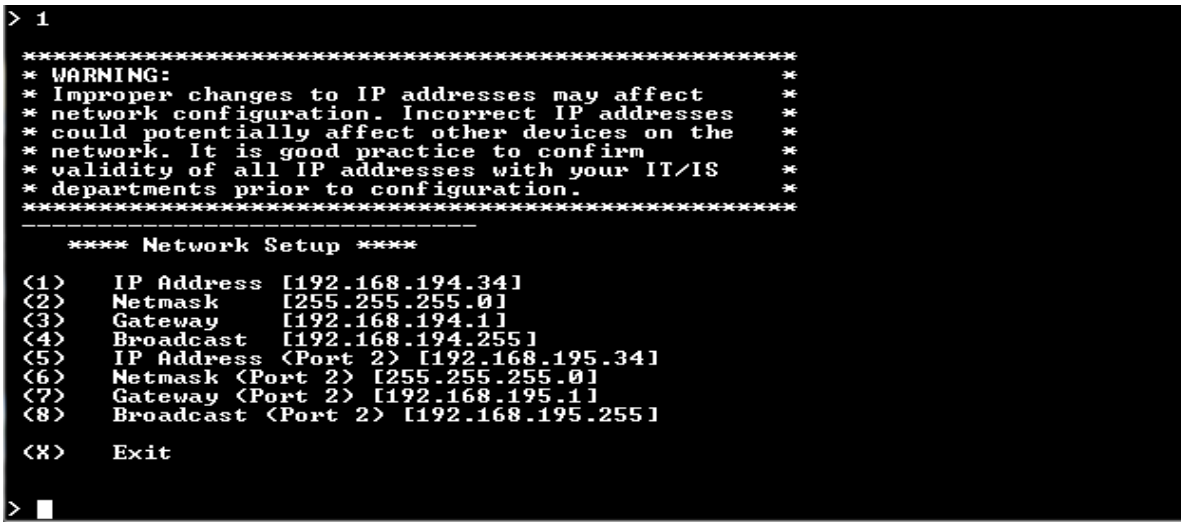

Figure 3-3: Serial Port – Network Setup Menu

   - 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.

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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 3067VIP-3G-36x4 module in the web browser.

It is assumed that the EMX1, 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 3067VIP-3G-36x4.

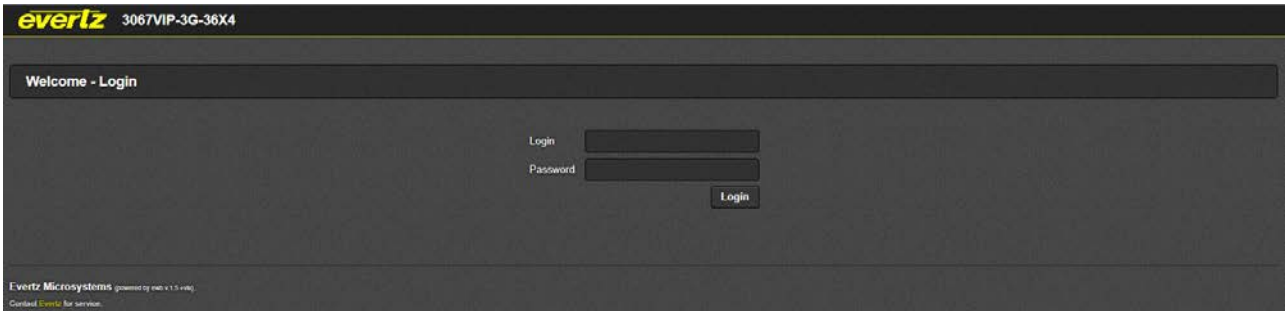

Figure 4-1: WebEASY® - Login Menu

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

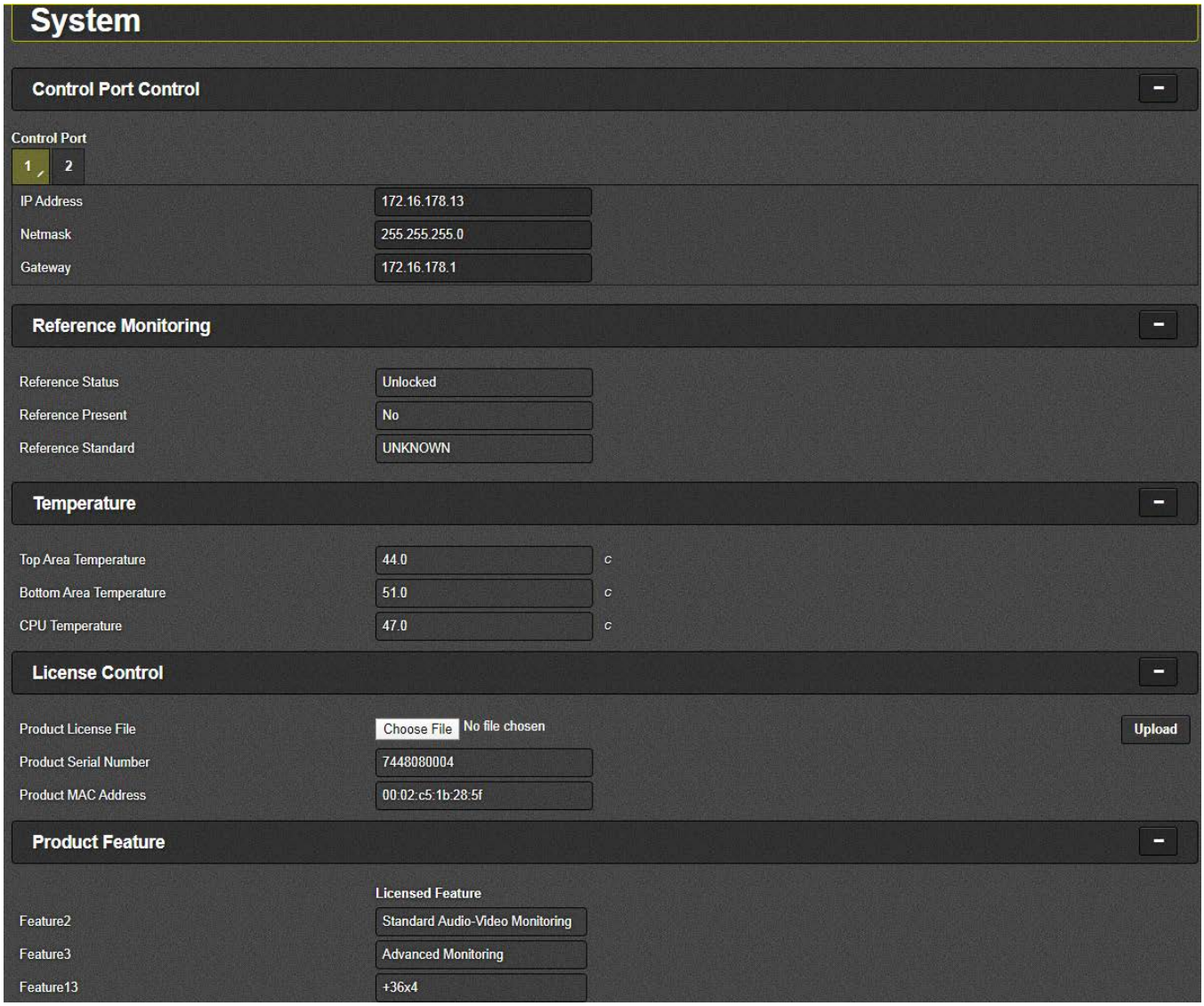

Figure 4-2: WebEASY® - System Tab - Part 1

4.1.1. Control Port Control

**must reboot in order for new settings to take effect*

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.

4.1.2. Reference Monitoring

Reference Status: This monitor displays whether the module is locked or unlocked to reference

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

Reference Standard: This monitor displays the standard detected for the gunlock reference.

4.1.3. 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.

4.1.4. 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.

4.1.5. 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 3067VIP card.

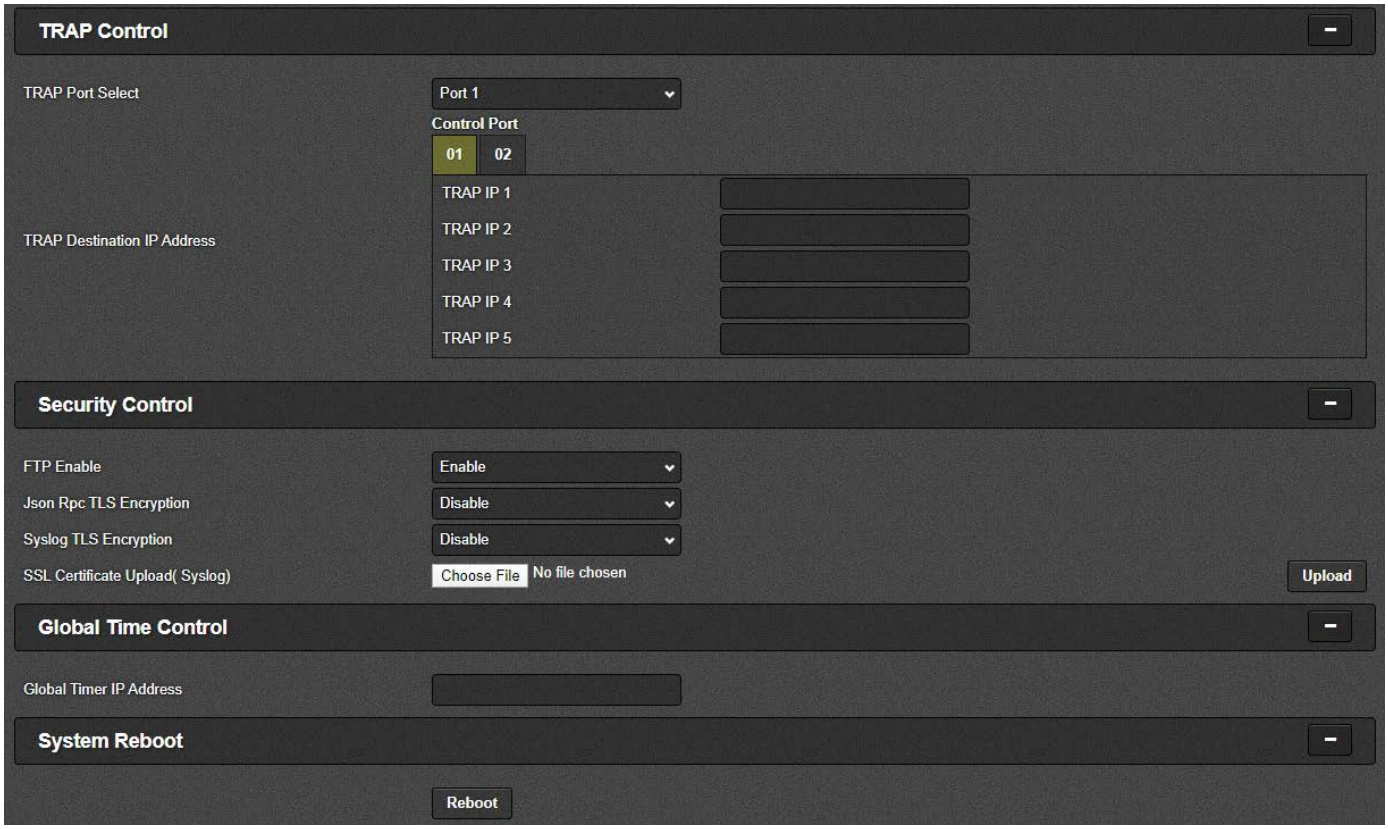

Figure 4-3: WebEASY® - System Tab - Part 2

4.1.6. 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 SNMP traps. Selections are Auto, Port 1, Port 2 or Port 1 and 2

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

4.1.7. Security Control

FTP Enable: This control allows the user to enable/disable FTP functionality.

Json Rpc TLS Encryption: This control allows the user to enable/disable TLS encryption for JSON-RPC communication.

Syslog TLS Encryption: This control allows the user to enable/disable TLS encryption for Syslog communication.

SSL Certificate Upload: To upload an SSL certificate for secure https communication, choose an SSL certificate file saved to local disk using the 'choose file' control followed by the 'upload' control.

4.1.8. Global Time Control

Global Timer IP Address: This field allows the user to add the IP address of the global timer masterclock.

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

4.2. SYSTEM TIME MANAGEMENT

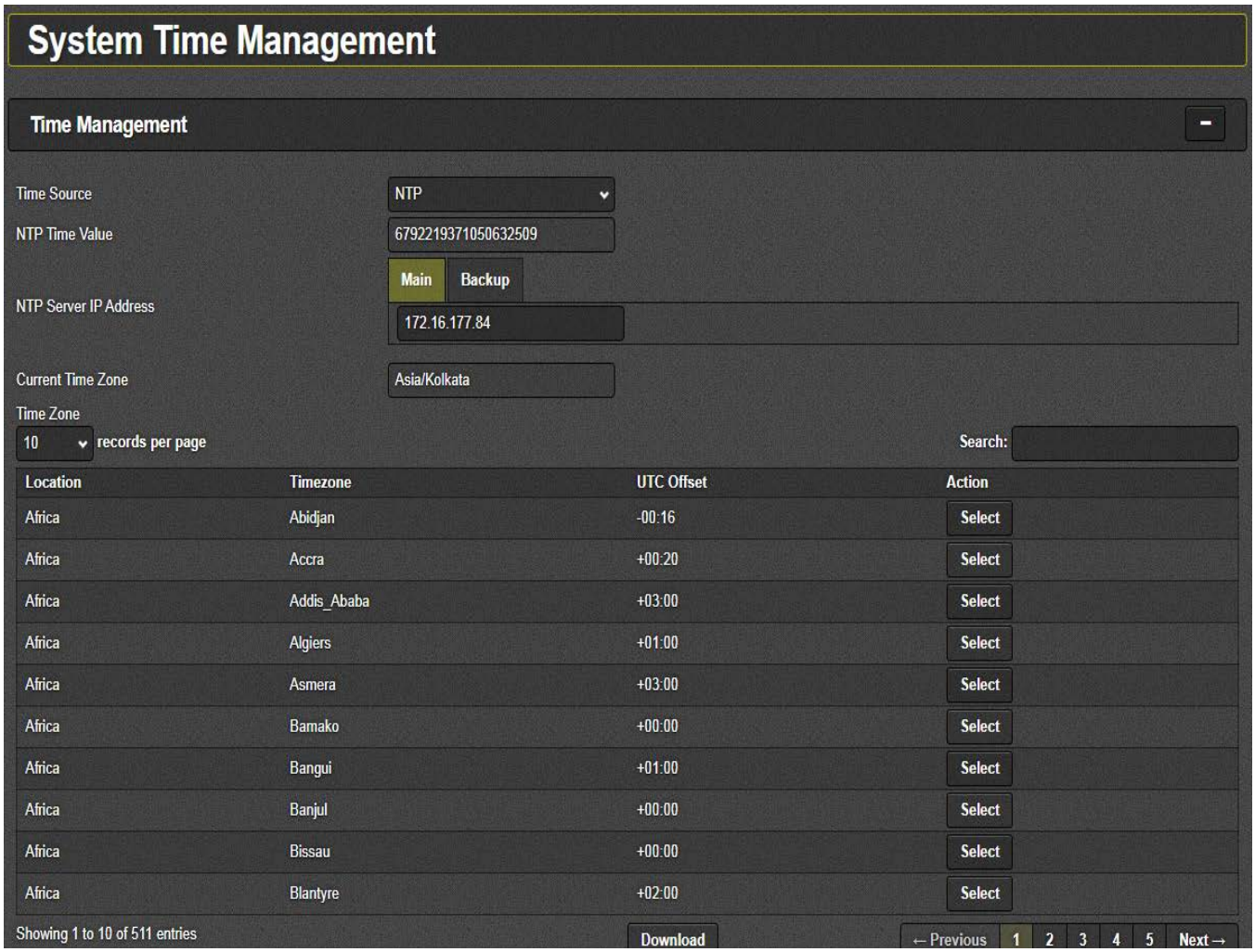

Figure 4-4: WebEASY® - System Time Management

4.2.1. 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.

NTP Time Value: This monitor returns a decimal value for the 64 bit binary time stamp when SNMP has been synchronized by the card.

NTP Server IP Address: This control is used to configure the IP address of the NTP server, use the control to select main or backup, and set the IP for the corresponding device.

Current Time Zone: This monitor displays the current time zone; the user can select the appropriate time zone from the list.

Time Zone: This section displays a list of time zones available based on a database. To choose a timezone from this menu, click **'Select'** in the corresponding row.

Records per page: This dropdown allows the user to choose how many timezone selections are displayed on the screen at one time.

Download: This allows users to download the timezone data onto local disk.

4.3. INPUT PROPERTIES CONTROL

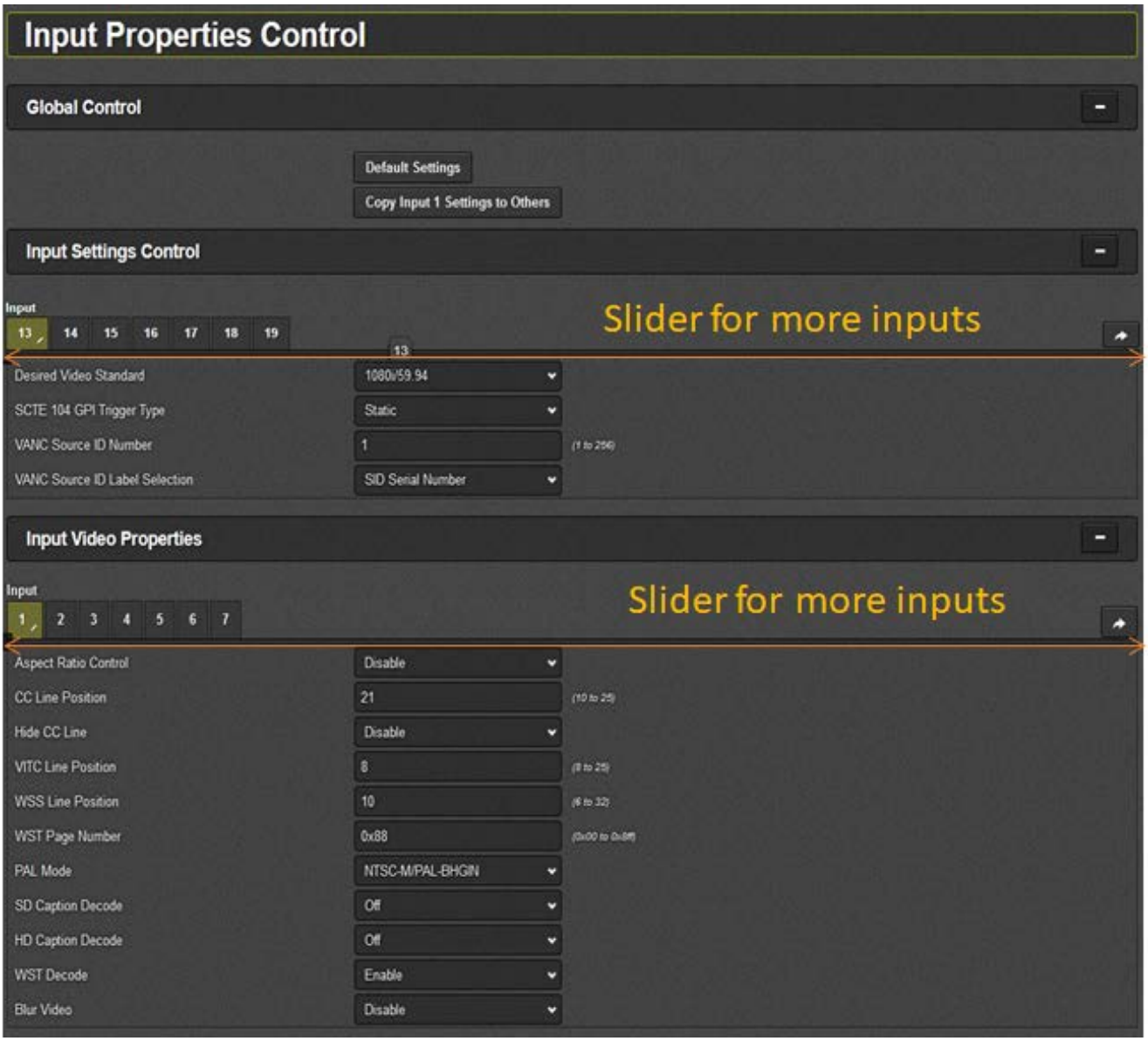

Figure 4-5: WebEASY® - Input Properties Control - Part 1

4.3.1. Global Control

Default Settings set alarm settings to factory default for all inputs.

Copy Input 1 Settings to Others copies input 1 settings to all other inputs on card for faster configuration

4.3.2. Input Settings Control

For the 36 input streams

Desired Video Type: This control is used to trigger an SNMP alarm when the desired input standard is mismatched from actual input video standard.

SCTE 104 GPI Trigger Type: This control selects the type of GPI trigger to use.

- 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: This control allows the user to set the source ID metadata from available multi-source IDs to show on screen. This control works when the card type is set to multiSD. It has a range from 1 to 256, where 256 displays the last source ID present in VANC data.

VANC Source ID Label Selection: This control allows the user to set the source ID label to show the corresponding source ID label on screen.

4.3.3. Input Video Properties

Aspect Ratio Adjust: This control allows the user to select either no adjustment (default), follow input aspect ratio, or Follow WSS/Video Index/AFD mode.

Aspect Ratio Decode: This control allows the user to set which Aspect ratio format to be used on a per input basis. Options are: None, WSS ITV, WSS ITUR, Video Index, and AFD.

CC Line Position: This control allows the user to set the closed caption line position for SD sources. It has a range from 10 to 25 lines.

Hide CC Line: This parameter will show (enable) or hide (disable) the CC content in the video.

VITC Line Position: This parameter allows the user to set the VITC line position for SD signals. It has a range from 8 to 25 lines.

WSS Line Position: This control allows the user to set the line position of the incoming WSS bit stream.

WST Line Position: This control allows the user to set the world standard teletext line position.

WST Page Number: This control allows the user to set the teletext page to listen to for caption data.

PAL Mode: This control allows the user to set the PAL mode of operation.

SD Caption Decode: This parameter will set SD caption decode with CC1, CC2, CC3, and CC4.

HD Caption Decode: This parameter will set HD caption decode with CC1, CC2, CC3, CC4 and services 1 through 16.

WST Decode: This parameter allows the user to enable or disable WST decode.

Blur Video: This parameter allows user to enable or disable caption.

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

4.3.4. Input Audio Properties

For 36 input streams

Level Bar Type: This control allows the user to set the level bar type. Options are: PPM+VU, PPM, VU.

Phase Bar Type: This control allows the user to set the phase bar type. Options are: Stereo, DIN

PPM Type: This control allows the user to set the PPM standard. Options are: AES/EBU, NORDIC, BBC

Error Region: This control allows the user to set the yellow error region threshold (DbFS) of audio level bars.

Warn Region: This control allows the user to set the red warning region threshold (DbFS) of audio level bars.

Dolby E Pair: This control allows the user to set the Dolby E Pair to use for Dolby E decode.

Dolby E Channel Override 1234: This control allows the user to set first group to be used/overridden for dolby E decode.

Dolby E Channel Override 5678: This control allows the user to set second group to be used/overridden for dolby E decode.

4.4. INPUT MONITOR

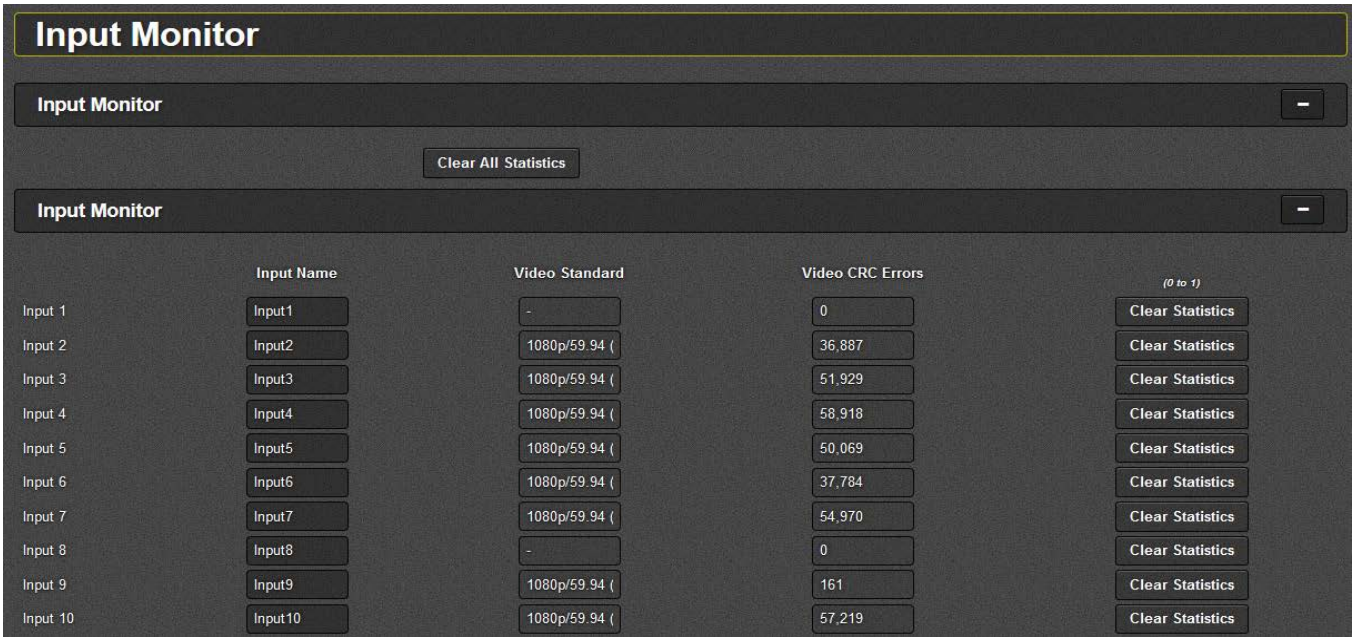

Figure 4-7: WebEASY® - Input Monitor - Part 1

4.4.1. Input Monitor

For 36 input streams

Source Name: This parameter displays the input name.

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 4-8: WebEASY® - Input Monitor - Part 2

4.4.2. Input Video Monitor

For 36 input streams

Video Standard: This parameter will return the current video standard for an input.

Aspect Ratio Decode: This parameter will return the current decoded aspect ratio string from one of the selected aspect control modes.

Program Rating: This parameter will return the current program rating for an input.

VITC Data: This parameter will return the current VITC data timestamp for an input.

SID Data: This parameter will return the current source ID data for an input.

4.5. OUTPUT CONTROL

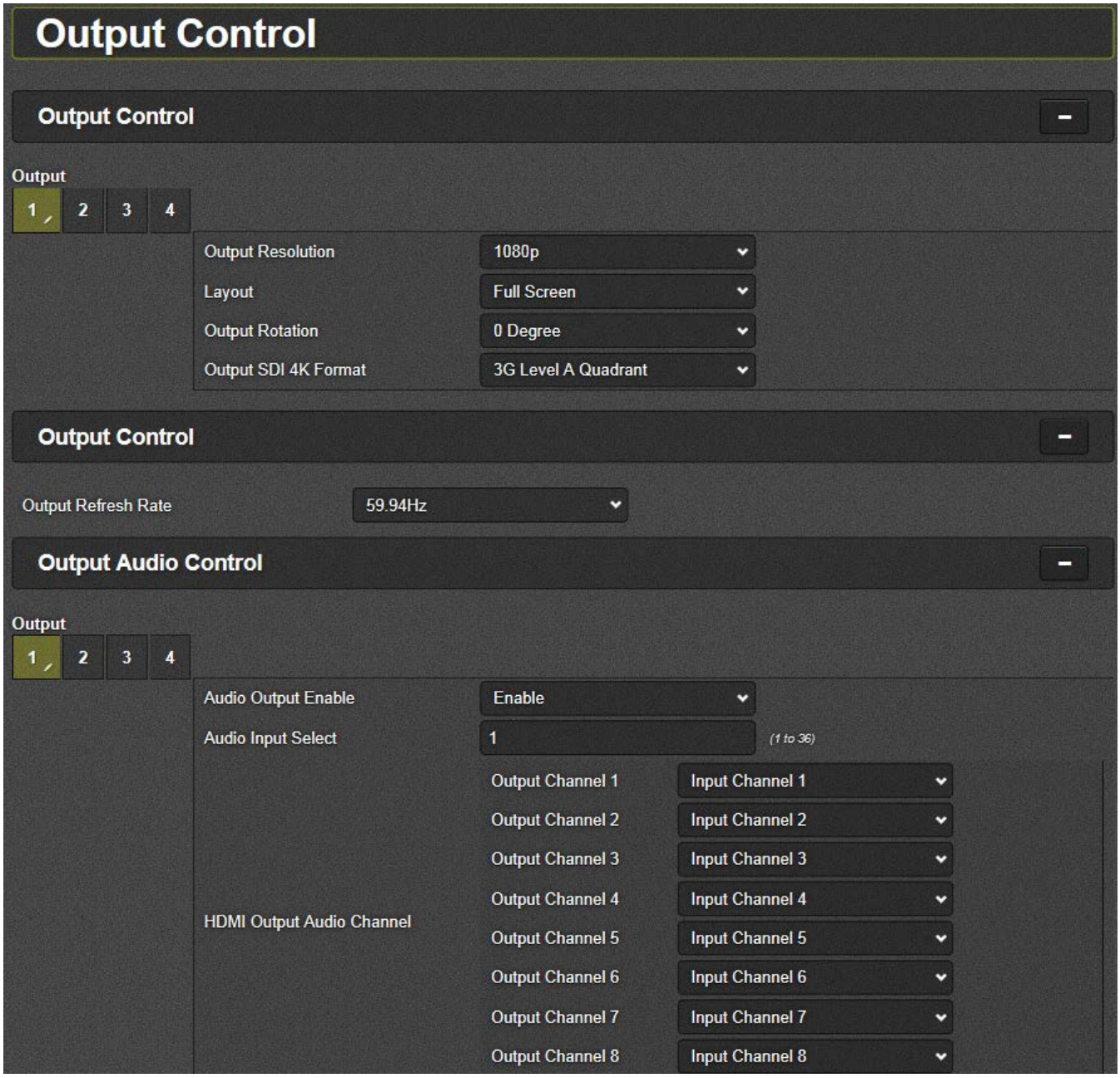

Figure 4-9: WebEASY® - Output Control

4.5.1. Output Control

For Outputs 1-4

Output Resolution: This control allows the user to select the output resolution.

Options are:

- 720p,
- 1080p
- 1080i
- 480p (720x480)
- 576p (720x576)
- XGA (1024x768)
- WXGA (1280x768)
- WXGA Alt1 (1366x768)
- WXGA Alt2 (1360x768)
- WXGA Sony (1280x768)
- Barco XGA (1024x768)
- Barco SXGA (1280x1024)
- Barco SXGA+ (1400x1050)
- SXGA (1280x1024)
- SXGA+ (1400x1050)
- WSXGA (1440x900)
- 1600x900
- WSXGA+ (1680x1050)
- UXGA (1600x1200)
- WUXGA (1920x1200)
- WQHD (2560x1440)
- WQXGA (2560x1600)
- 2160p (4K)

Layout: Selects different basic screen layouts for the output display in a standalone mode. (This is currently used for debugging purposes.) Options are:

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

Output Rotation: Allow user to set display in landscape or portrait mode. Options are:

- 0 Degree (landscape mode)
- 90 Degree (portrait mode with 90 degree rotation)
- 270 Degree (portrait mode with 270 degree rotation)

Output SDI 4K Format: Allow user to set 4 wire 4K mode: Options are:

- 3G Level A Quadrant (4K, Square division mode)
- 3G Level A 2SI (4K, 2 Sample Interleave)

4.5.2. Output Control

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

- 59.94Hz
- 50Hz
- 60Hz

4.5.3. Output Audio Control

For Outputs 1-4

Audio Output Enable: This parameter allows the user to enable or disable audio on the selected output.

4.6. UMD CONTROL

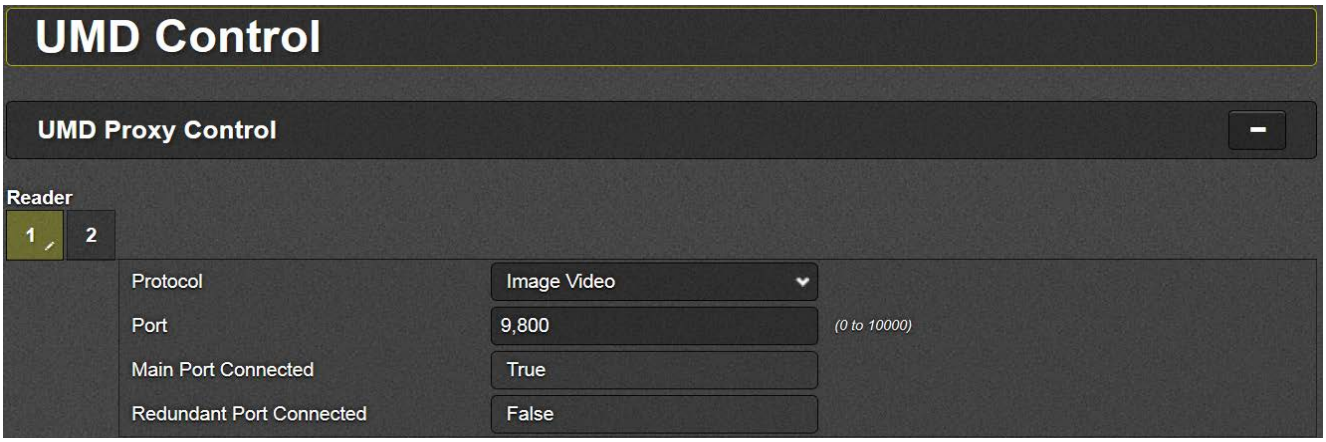

Figure 4-10: WebEASY® - UMD Control

4.6.1. UMD Proxy Control

For Readers 1 and 2

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

- Image Video
- TSL 3.1
- TSL 4.0
- TSL 5.0
- Harris Image Video

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

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

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

4.7. SYSTEM NOTIFY

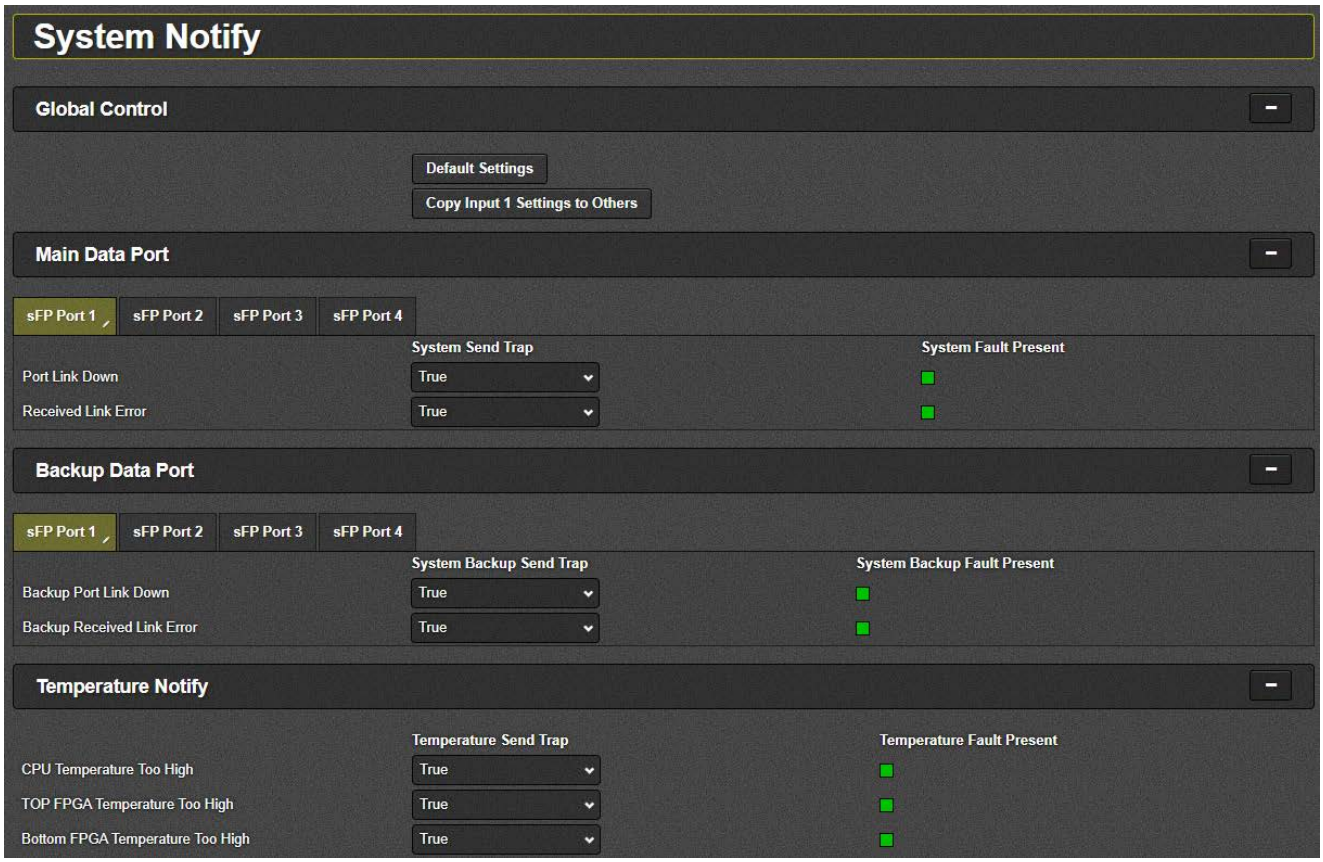

Figure 4-11: WebEASY® - System Notify

4.7.1. Global Control

Default Settings set alarm settings to factory default for all inputs.

Copy Input 1 Settings to Others copies input 1 settings to all other inputs on card for faster configuration

4.7.2. Temperature Notify

Temperature Send Trap: This control is used to turn temperature traps on and off. When set to true, the system will notify when an error is present.

Temperature Fault Present: This control checks whether a temperature fault is currently present. Green indicates no fault while red indicates a fault.

4.8. VIDEO NOTIFY

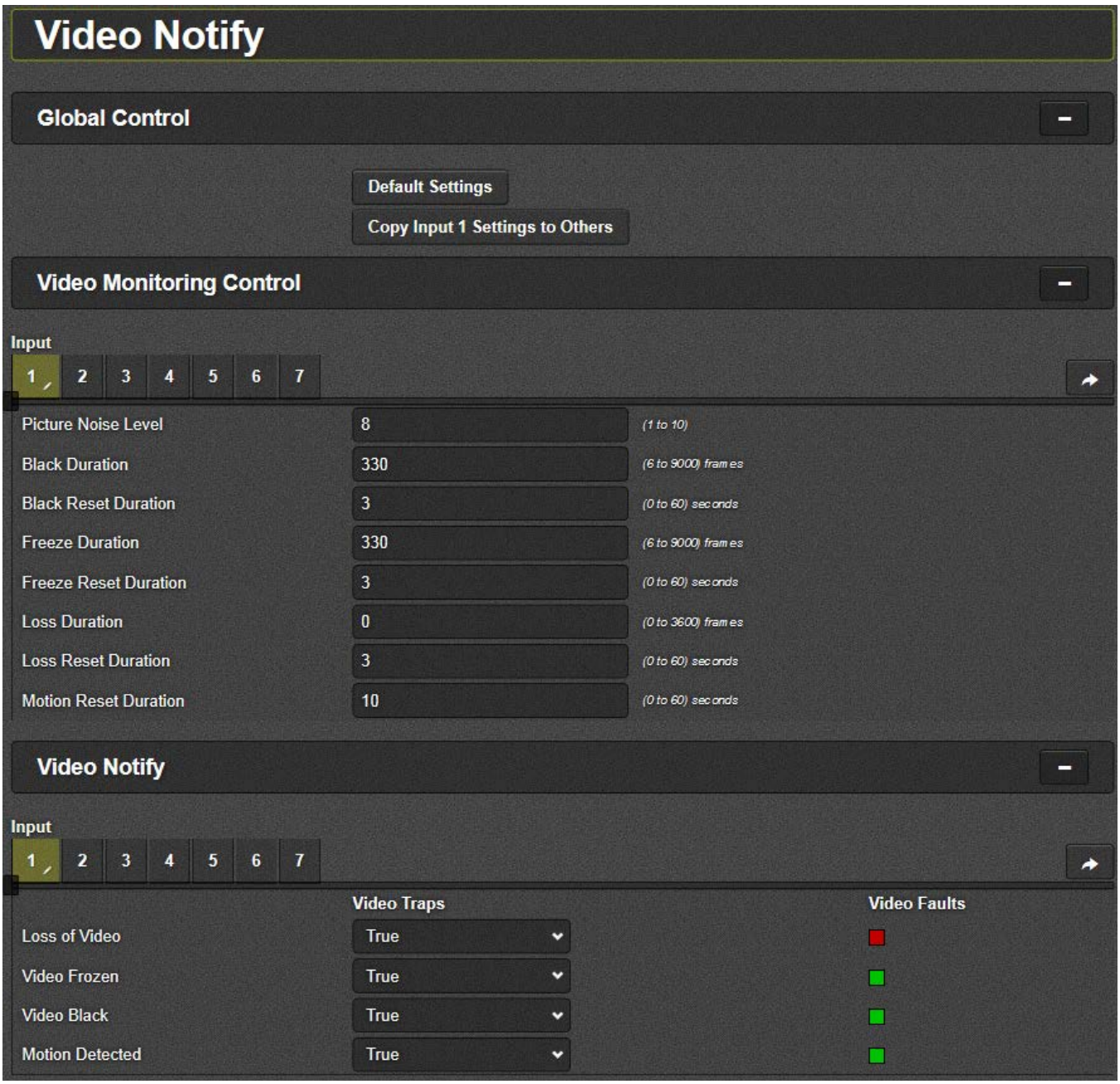

Figure 4-12: WebEASY® - Video Notify

4.8.1. Global Control

Default Settings set alarm settings to factory default for all inputs.

Copy Input 1 Settings to Others copies input 1 settings to all other inputs on card for faster configuration

Video configuration thresholds on the 32 input streams are used for setting traps and fault monitoring in the **Video Notify** section below.

Picture Noise Level (1 to 10): This control sets the amount for noise level (sensitivity) on the incoming video before triggering a frozen alarm. This value should be adjusted from default if frozen is not detecting properly. Different values may be needed between SD and HD content.

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

Black Reset Duration (0 to 60 seconds): This control sets the amount of time that must elapse of non black video presence before a Video Black fault is cleared.

Freeze Duration (6 to 9000 frames): This control sets the number of frames of frozen video to be detected before a fault is triggered.

Freeze Reset Duration (0 to 60 seconds): This control sets the amount of time that must elapse of motion video presence before frozen alarm is cleared.

Loss Duration (0 to 3600 frames): This control sets the number of frames that must be detected before a video loss fault is triggered.

Loss Reset Duration (0 to 60 seconds): This control sets the amount of time that must elapse of detected video presence before a video loss fault is cleared after signal is detected.

Motion Reset Duration (0 to 60 seconds): This control sets the amount of time that must elapse of static video content before motion detection is reset.

4.8.2. Video Notify

Video Notify allows to user to configure which faults are to send SNMP trap when in error state. Trap sending must be enabled “True” in order to receive SNMP trap notifications for each particular fault.

4.9. AUDIO NOTIFY

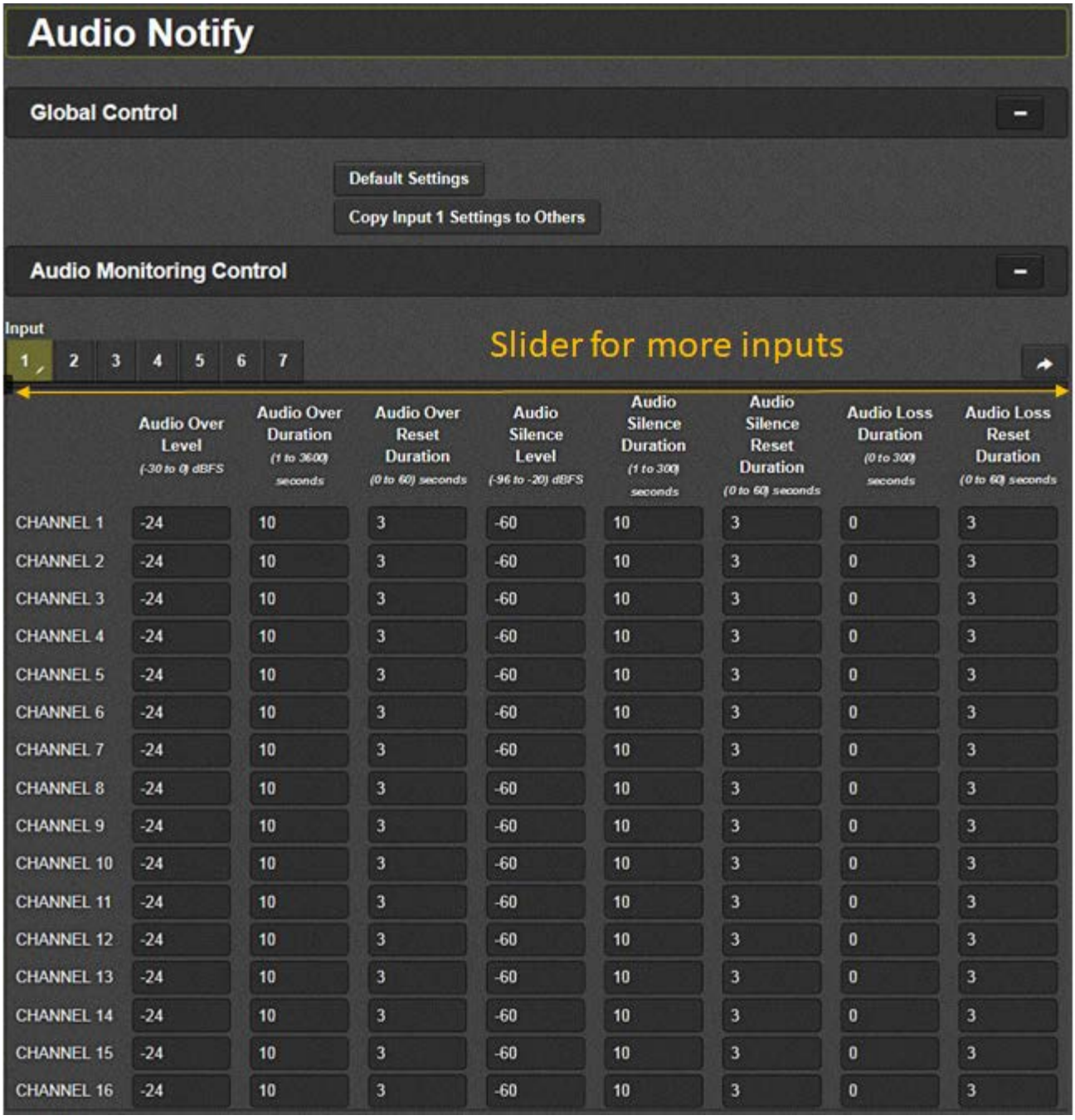

Figure 4-13: WebEASY® - Audio Notify - Part 1

4.9.1. Global Control

Default Settings: This control will reset all audio notify settings to default.

Copy Input 1 Settings to Others: This control will copy all audio notify settings on input 1 to the remaining inputs.

4.9.2. Audio Monitoring Control (1)

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

Audio Over Level (-30 to 0 dBFS): The control sets the dBFS threshold for the audio over fault.

Audio Over Duration (1 to 3600 seconds): This control sets the duration time audio must stay above the dBFS threshold before a fault is triggered.

Audio Over Reset Duration (0 to 60 seconds): This control sets the amount of time that must elapse when audio level is below dBFS threshold for the fault to clear.

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

Audio Silence Duration (1 to 300 seconds): This control sets the duration that must elapse of audio level below the dBFS threshold before a fault is triggered.

Audio Silence Reset Duration (0 to 60 seconds): This control sets the amount of time after the au is above the dBFS threshold for the fault to clear.

Audio Loss Duration (0 to 60 seconds): This control sets the time that must elapse before Audio Loss alarm triggers.

Audio Loss Reset Duration (0 to 60 seconds): This control sets the amount of time that must elapse of before an audio fault is cleared.

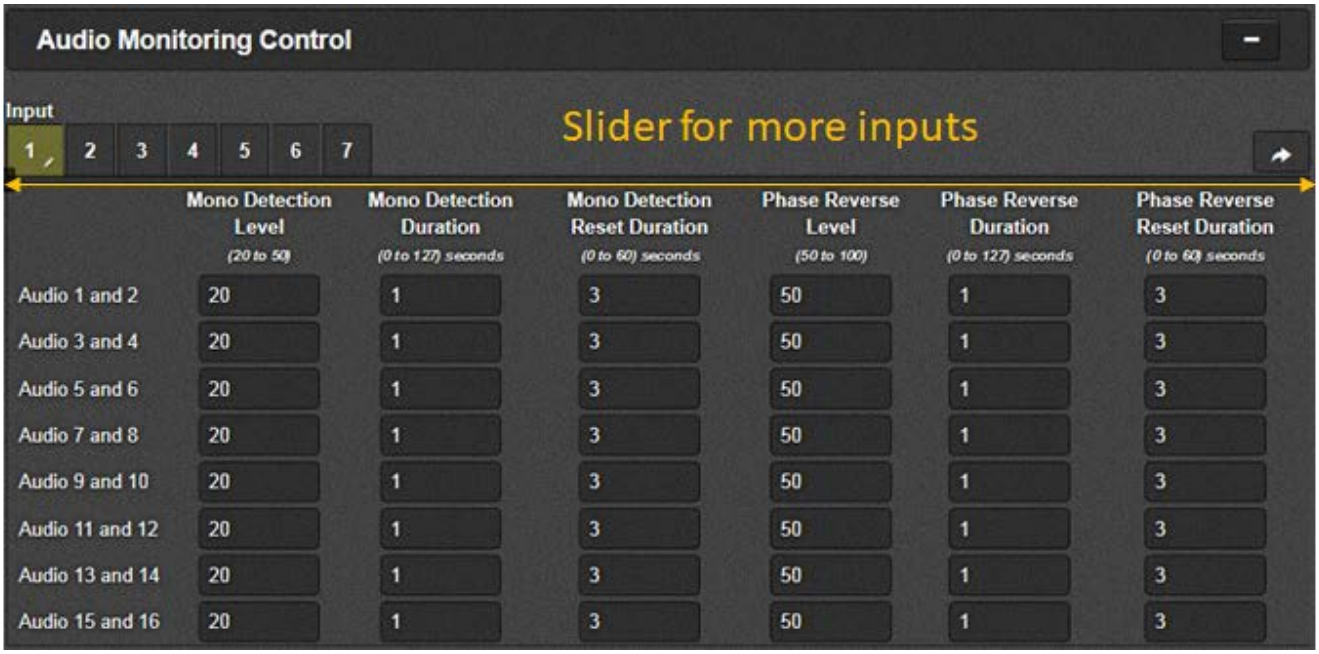

Figure 4-14: WebEASY® - Audio Notify - Part 2

4.9.3. Audio Monitoring Control (2)

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

Mono Detection Level (20 to 50): This control is used to adjust the mono phase detection 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 (0 to 127 seconds): This control sets the amount of time that must elapse before mono detection fault is triggered.

Mono Detection Reset Duration (0 to 60 seconds): This control sets the amount of time that must elapse before mono detection level is cleared.

Phase Reverse Level (50 to 100): This control allows the user to set the phase reverse level.

Phase Reverse Duration (0 to 127 seconds): This control allows the user to set the time that must elapse before phase reverse fault is detected.

Phase Reverse Reset Duration (0 to 60 seconds): This control allows the user to set the amount of time that must elapse before phase reverse fault is cleared

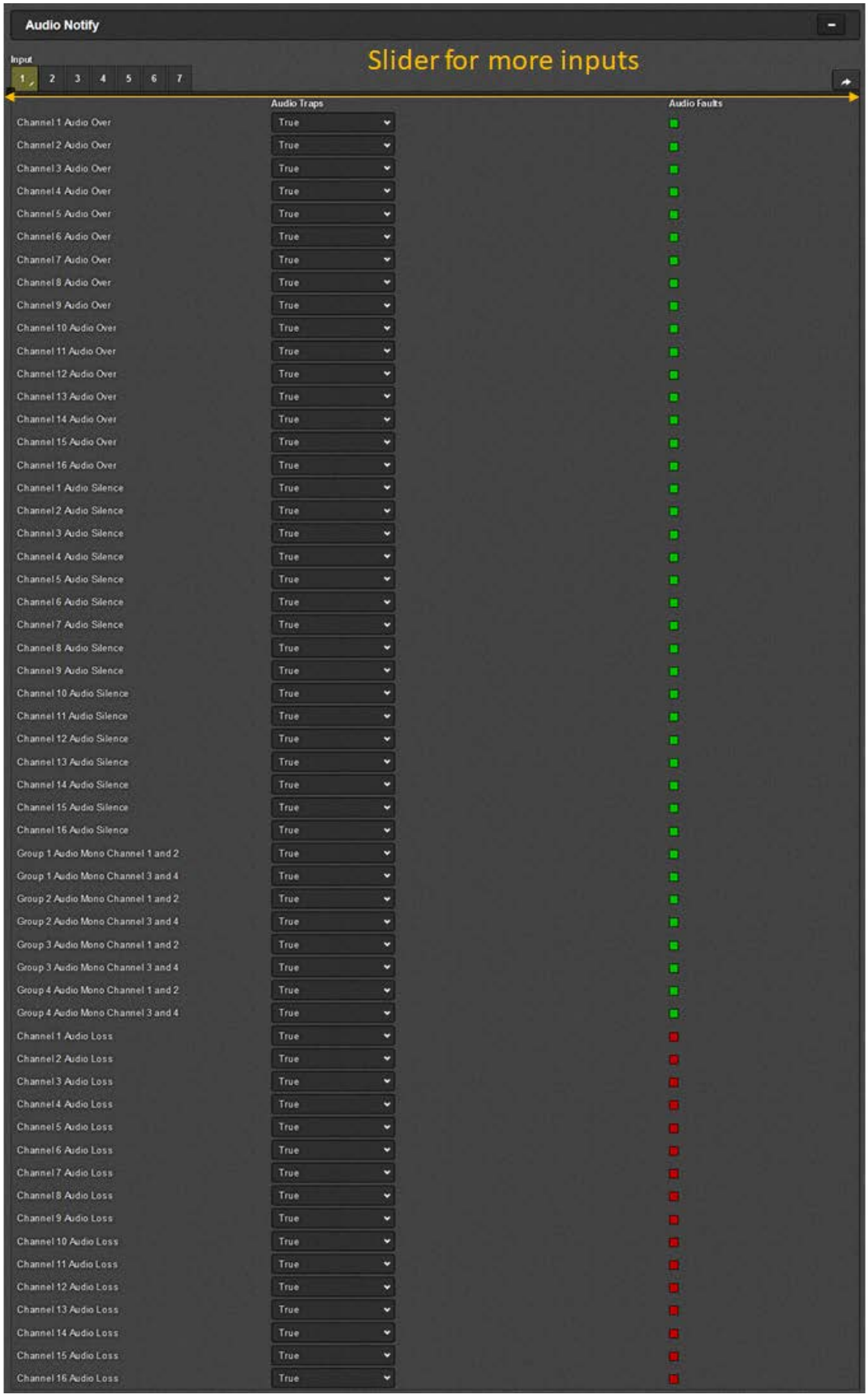

Figure 4-15 : WebEASY® - Audio Notify - Part 3

4.9.4. Audio Notify

Audio Notify allows for SNMP traps to be sent for 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.

4.10. ADVANCED NOTIFY CONTROL

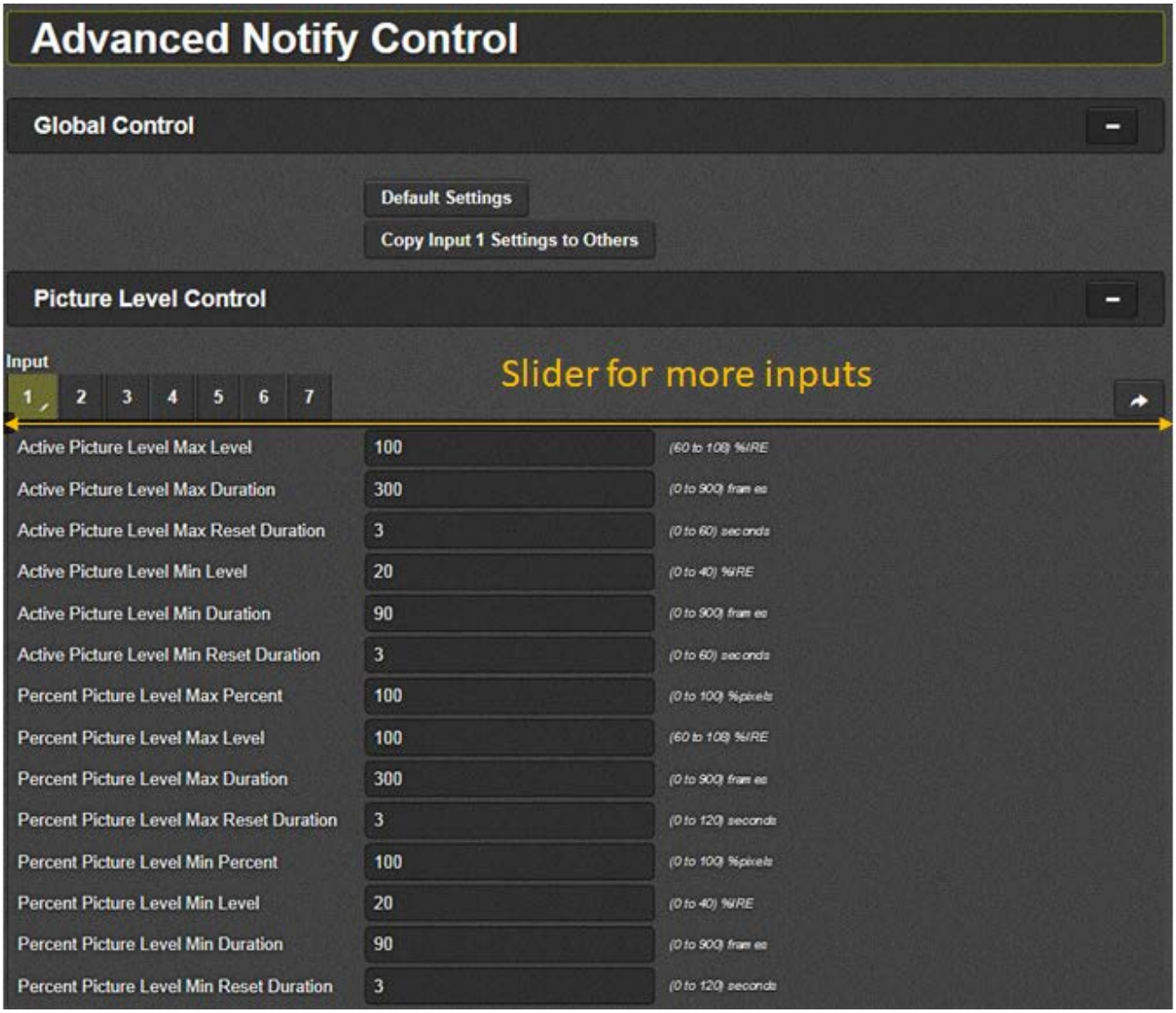

Figure 4-16: WebEASY® - Advanced Notify Control - Part 1

4.10.1. Global Control

Default Settings set alarm settings to factory default for all inputs.

Copy Input 1 Settings to Others copies input 1 settings to all other inputs on card for faster configuration

4.10.2. Picture Level Control

For the 36 input streams

Active Picture Level Max Level (60 to 108%IRE): This parameter is used to set the maximum (peak) luma threshold. If this level is exceeded a fault alert is triggered (if enabled).

Active Picture Level Max Duration (0 to 900 frames): This control sets the number of frames for which maximum luma level is exceeded before reporting a fault alert.

Active Picture Level Max Reset Duration (0 to 60 seconds): This control allows the user to set the amount of seconds the trigger will remain active after the luma has not exceeded the threshold.

Active Picture Level Min Level (0 to 40%IRE): This parameter is used to set the minimum (peak) luma threshold. If this level is exceeded, a fault alert is triggered (if enabled).

Active Picture Level Min Duration (0 to 900 frames): This control sets the number of frames for which the minimum luma level is exceeded before reporting a fault alert.

Active Picture Level Min Reset Duration (0 to 60 seconds): This control allows the user to set the amount of seconds the trigger will remain active after the luma has not exceeded the threshold.

Percent Picture Level Max Percent (0 to 100%pixels): This parameter sets the percentage threshold for maximum PPL luma pixels. If the percent of pixels set is above the maximum PPL level, a fault is triggered (if enabled).

Percent Picture Level Max Level (60 to 108%IRE): This parameter sets the IRE maximum level for maximum luma pixels. If the percent of pixels exceed this level, a fault alert is triggered (if enabled).

Percent Picture Level Max Duration (0 to 900 frames): This parameter sets the duration for which the percent of luma pixels exceeds the maximum PPL threshold before a fault is triggered.

Percent Picture Level Max Reset Duration (0 to 120 seconds): This control allows the user to set the amount of time the trigger will remain active after the maximum PPL luma pixels does not exceed the percent threshold.

Percent Picture Level Min Percent (0 to 100%pixels): This parameter sets the percentage threshold for minimum luma pixels. If the percent of pixels below the minimum PPL level exceeds this percentage threshold, a fault alert is triggered (if enabled).

Percent Picture Level Min Level (0 to 40%IRE): This parameter sets the IRE minimum level for minimum luma pixels. If the percent of pixels that lie below this level exceeds the set percentage threshold, a fault alert is triggered (if enabled).

Percent Picture Level Min Duration (0 to 900 frames): This control sets the number of frames for which the percentage of luma pixels remains under the minimum PPL threshold before a fault is triggered.

Percent Picture Level Min Reset Duration (0 to 120 seconds): This control allows the user to set the amount of time the trigger will remain active after the minimum PPL luma pixels remain above the threshold.

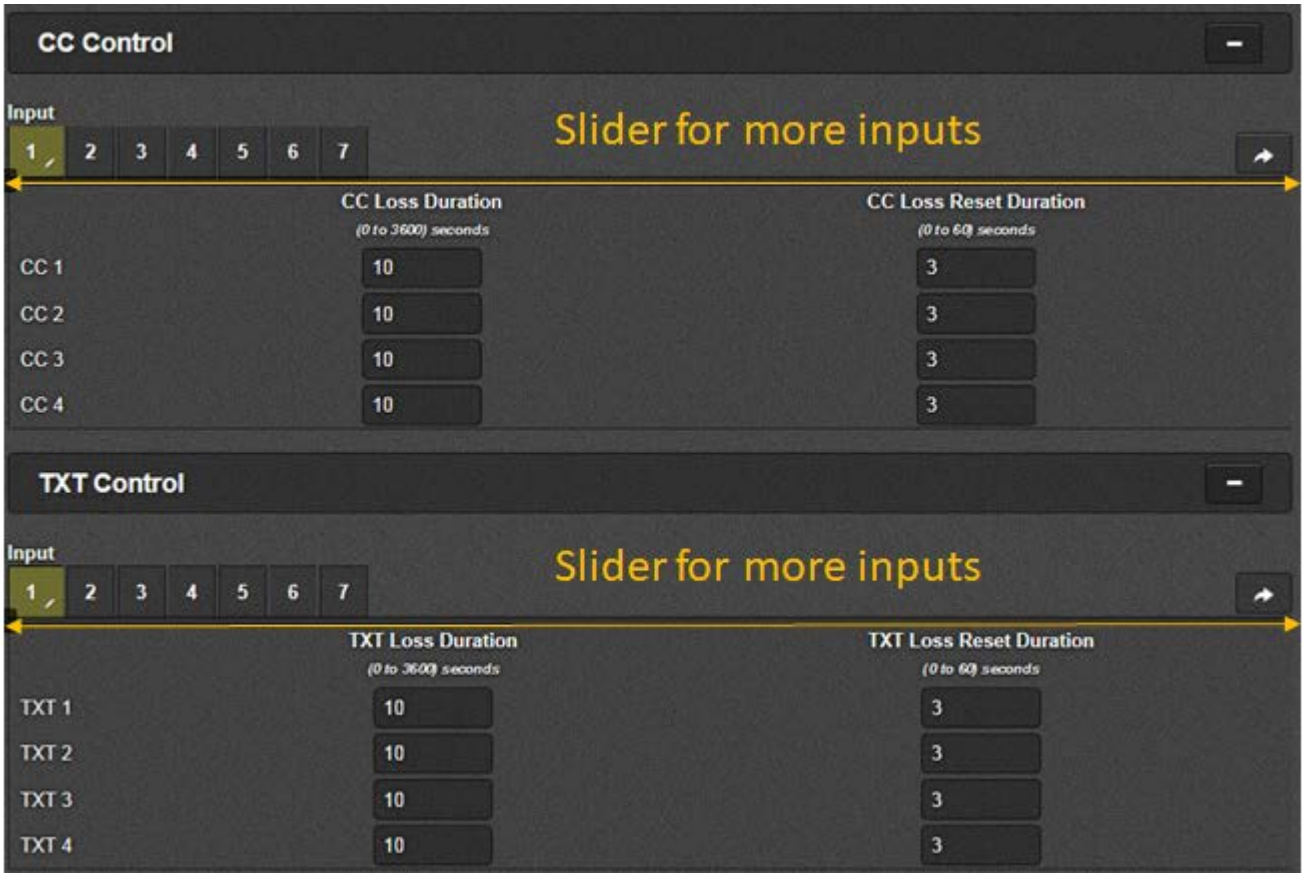

Figure 4-17: WebEASY® - Advanced Notify Control - Part 2

4.10.3. CC Control

For the 36 input streams on CC 1 to CC 4

CC Loss Duration (0 to 3600 seconds): This parameter sets the number of seconds to pass with CC data missing before a fault is triggered.

CC Loss Reset Duration (0 to 60 seconds): This parameter sets the number of seconds to pass with CC1 data corrected before a fault is cleared.

4.10.4. TXT Control

For the 36 input streams on TXT 1 to TXT 4

TXT Loss Duration (0 to 3600 seconds): This parameter sets the number of seconds to pass with TXT data missing before a fault is triggered.

TXT Loss Reset Duration (0 to 60) seconds: This parameter sets the number of seconds to pass with TXT data corrected before a fault is cleared.

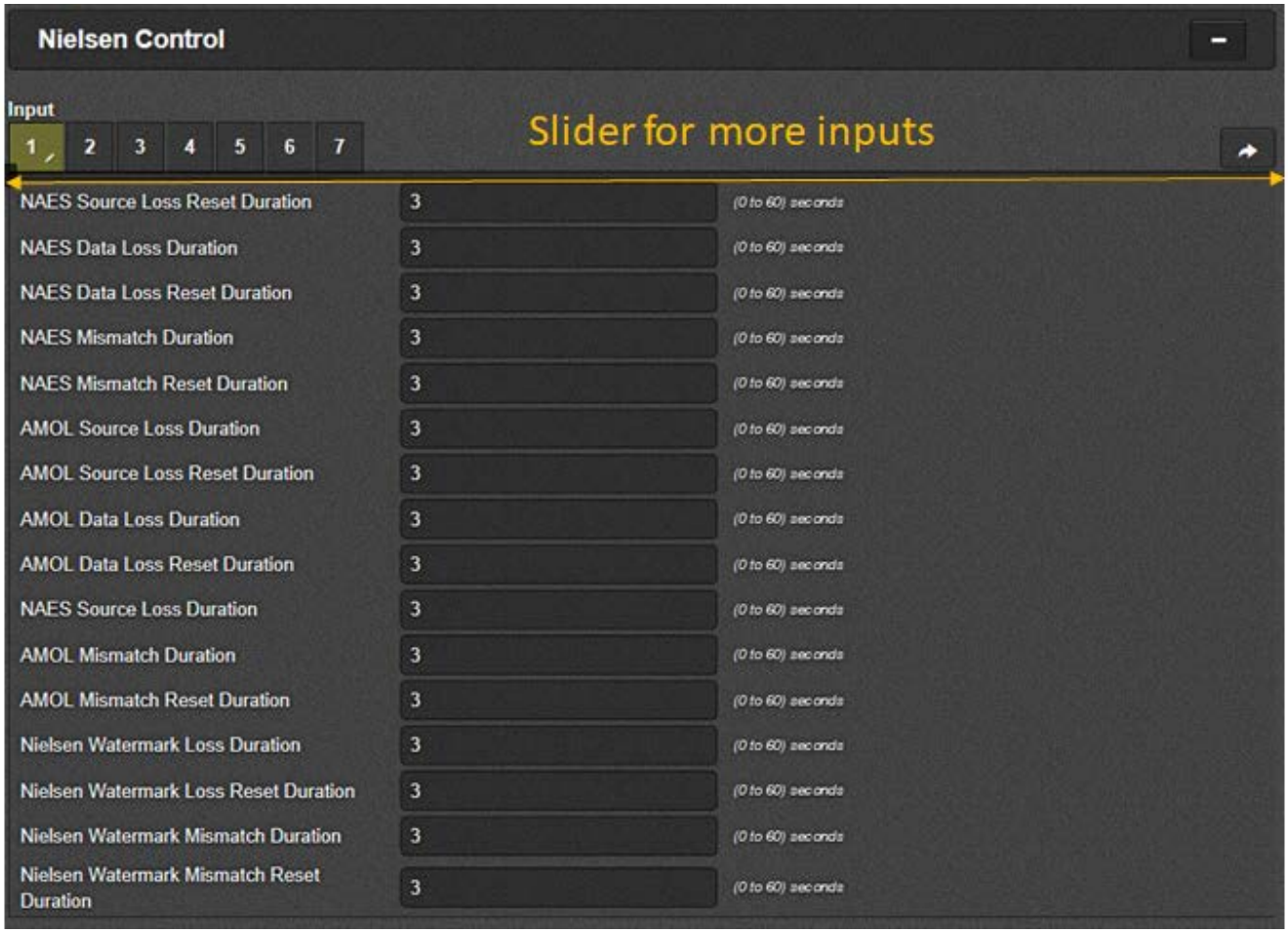

Figure 4-18: WebEASY® - Advanced Notify Control - Part 3

4.10.5. 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 clear.

NAES Data Loss Duration: This control is used to set the amount of time for the loss of the NAES Data 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 clear.

NAES Mismatch Duration: This control is used to set 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 clear.

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 clear.

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 clear.

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 clear.

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 clear.

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 clear.

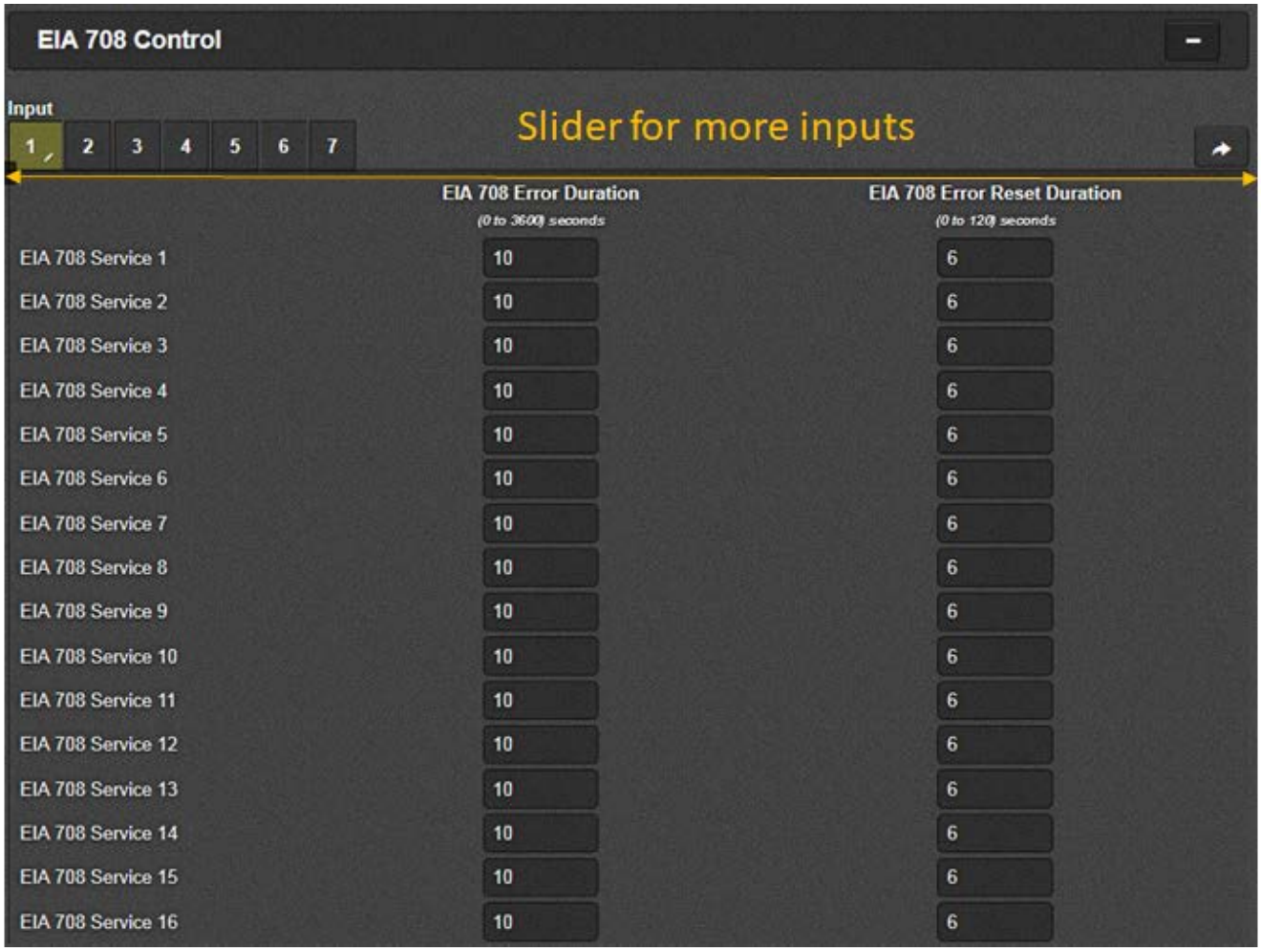

Figure 4-19: WebEASY® - Advanced Notify Control - Part 4

4.10.6. EIA 708 Control

For the 36 input streams and EIA 708 Service 1 to EIA 708 Service 16

EIA 708 Error Duration (0 to 3600 seconds): This control sets the duration of missing EIA-708 captions which is considered a fault.

EIA 708 Error Reset Duration (0 to 120 seconds): This control allows the user to set the amount of time the trigger will remain active after the EIA-708 service is not considered to have an error.

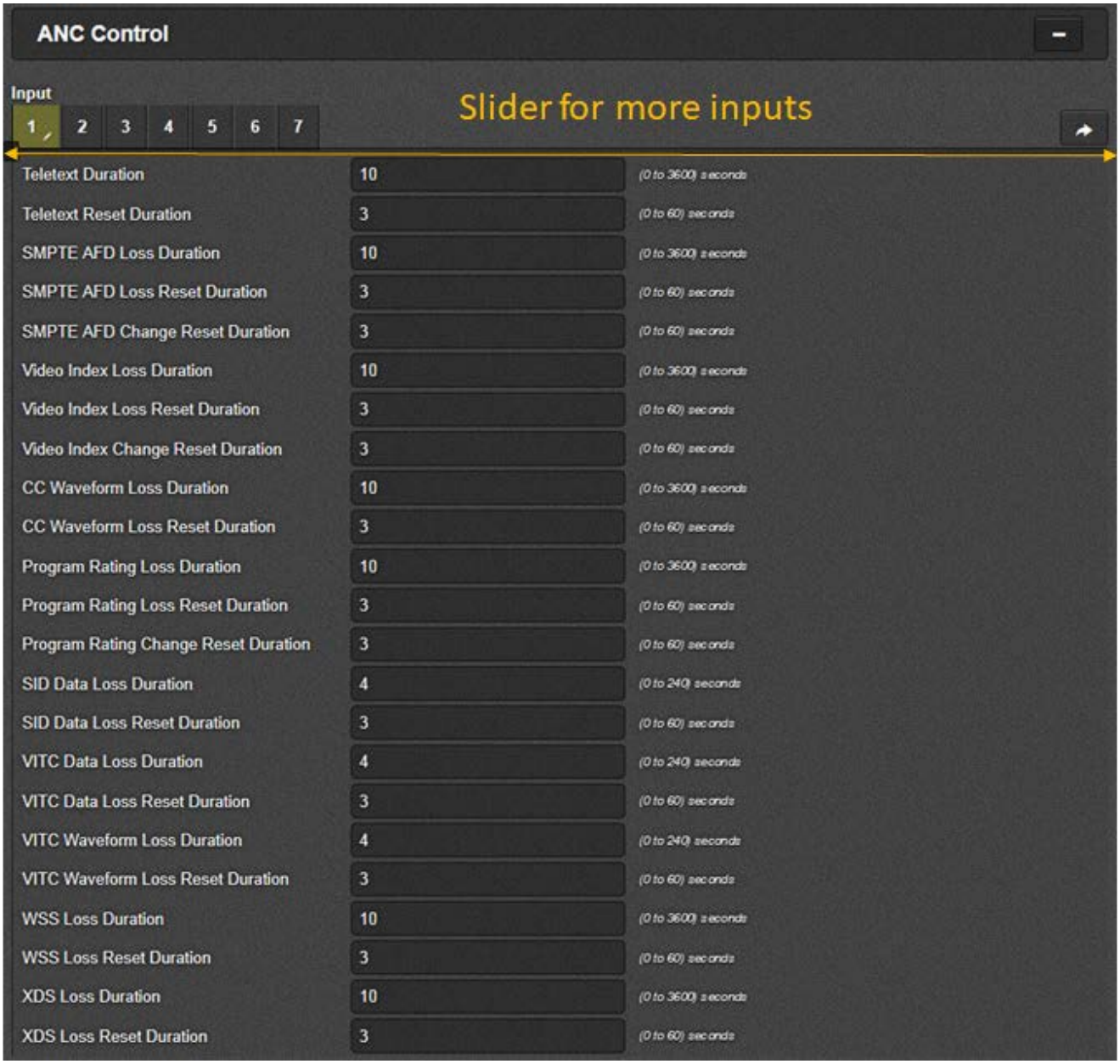

Figure 4-20: WebEASY® - Advanced Notify Control - Part 5

4.10.7. ANC Control

For the 36 input streams

Teletext Duration (0 to 3600 seconds): This parameter sets the number of seconds to pass with teletext data missing before a fault is triggered.

Teletext Reset Duration (0 to 60 seconds): This parameter sets the number of seconds to pass with teletext data corrected before a fault is cleared.

SMPTE AFD Loss Duration (0 to 3600 seconds): This parameter sets the number of seconds to pass with SMPTE AFD signal missing before a fault is triggered.

SMPTE AFD Loss Reset Duration (0 to 60 seconds): This parameter sets the number of seconds to pass with the SMPTE AFD signal corrected before a fault is cleared.

SMPTE AFD Change Reset Duration (0 to 60 seconds): This parameter sets the number of seconds to pass with SMPTE AFD Change before a fault is cleared.

Video Index Loss Duration (0 to 3600 seconds): This parameter sets the number of seconds to pass with the Video Index signal missing before a fault is triggered.

Video Index Loss Reset Duration (0 to 60 seconds): This parameter sets the number of seconds to pass with the Video Index signal corrected before a fault is cleared.

Video Index Change Reset Duration (0 to 60 seconds): This parameter is used to set the amount of time to pass with a change in the video index before a fault is cleared.

CC Waveform Loss Duration (0 to 3600 seconds): This parameter sets the number of seconds to pass with the CC waveform missing before a fault is triggered.

CC Waveform Loss Reset Duration (0 to 60 seconds): This parameter sets the number of seconds to pass with the CC waveform corrected before a fault is cleared.

Program Rating Loss Duration (0 to 3600 seconds): This parameter sets the number of seconds to pass with the program rating missing before a fault is triggered.

Program Rating Loss Reset Duration (0 to 60 seconds): This parameter sets the number of seconds to pass with the program rating corrected before a fault is cleared.

Program Rating Change Reset Duration (0 to 60 seconds): This parameter sets the number of seconds to pass with the program rating change before a fault is cleared.

SID Data Loss Duration (0 to 240 seconds): This parameter sets the number of seconds to pass with SID data missing before a fault is triggered.

SID Data Loss Reset Duration (0 to 60 seconds): This parameter sets the number of seconds to pass with SID data corrected before a fault is cleared.

VITC Data Loss Duration (0 to 240 seconds): This parameter sets the number of seconds to pass with VITC data missing before a fault is triggered.

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 clear.

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 clear.

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

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 clear.

XDS Loss Duration (0 to 3600 seconds): This control is used to set the amount of time that must elapse when XDS data is lost 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 clear.

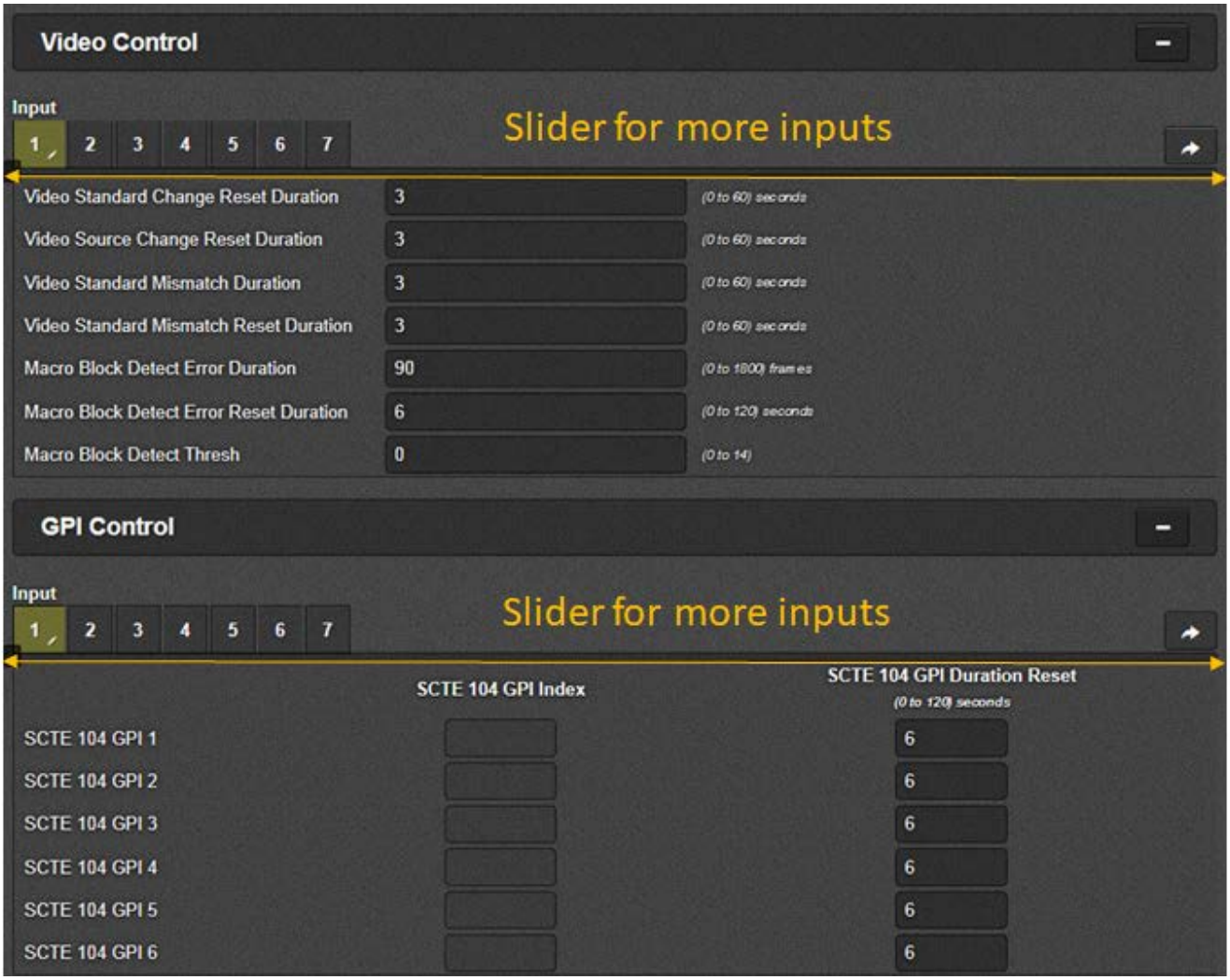

Figure 4-21: WebEASY® - Advanced Notify Control - Part 6

4.10.8. Video Control

For the 36 input streams

Video Standard Change Duration (0 to 900) frames: This control is used to set the number of consecutive frames that must elapse before video standard fault condition is triggered.

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

Video Source Change Reset Duration (0 to 60) seconds: This control is used to set the amount of time that must elapse for the video source change fault to clear.

Video Type Mismatch Duration (0 to 60) seconds: This control is used to set the amount of time that must elapse of mismatched 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 desired video type for the fault to clear.

Macro Block Detect Error Duration (0 to 1800) frames: This control is used to set the number of frames of detected macro block frames that must elapse 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 clear.

Macro Block Detect Thresh (0 to 14): This control is used to set the threshold (sensitivity) for the Macro Block detection. This may be adjusted differently for SD and HD content.

4.10.9. GPI Control

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

SCTE 104 GPI Index: This parameter indexes the SCTE 104 GPI table.

SCTE 104 GPI Duration Reset: This control allows the user to set the amount of time the trigger will remain active after the SCTE 104 GPI is not present.

4.11. ADVANCED NOTIFY

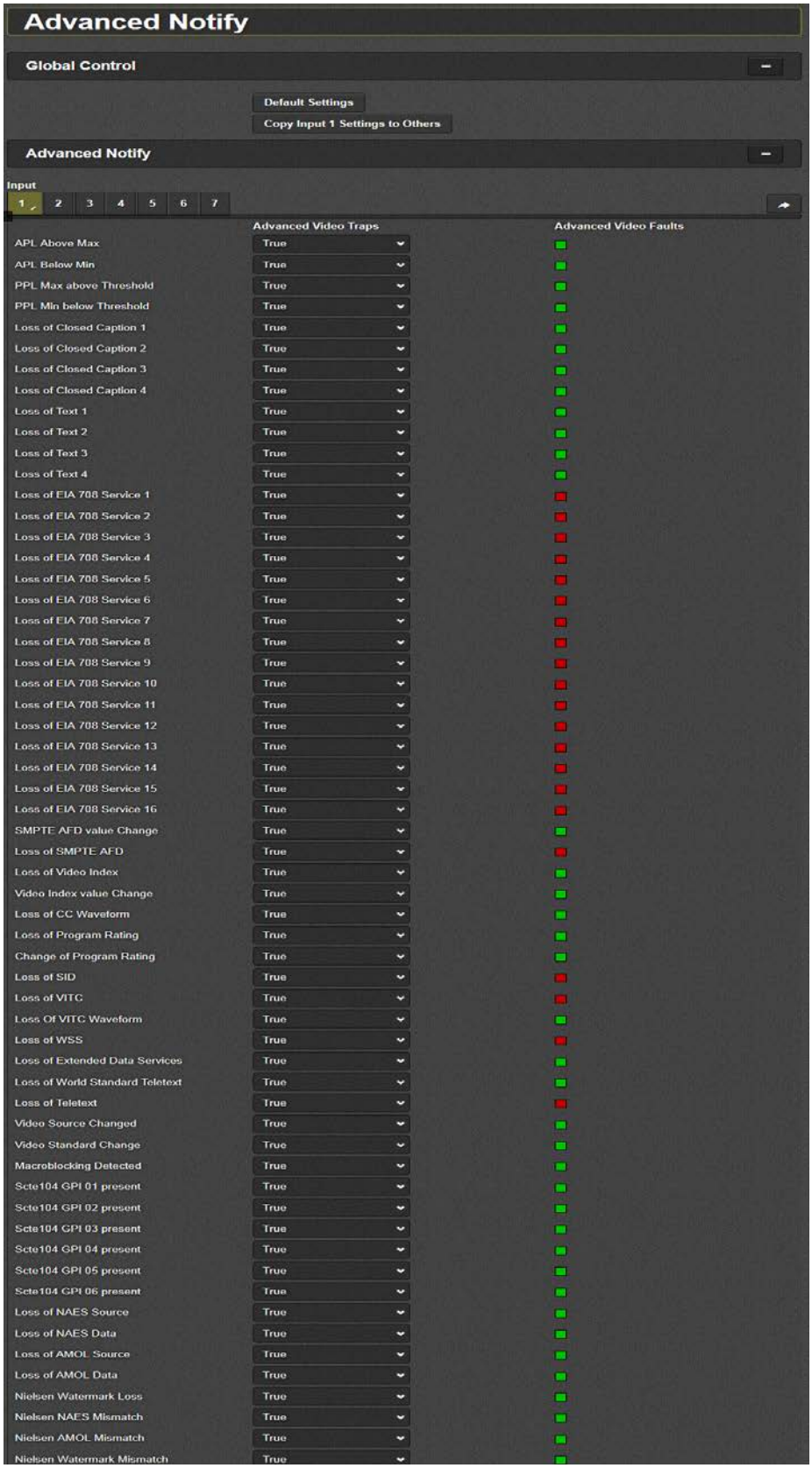

Figure 4-22: WebEASY® - Advanced Notify

4.11.1. Global Control

Default Settings set alarm settings to factory default for all inputs.

Copy Input 1 Settings to Others copies input 1 settings to all other inputs on card for faster configuration

4.11.2. Advanced Notify

Advanced Notify allows for fault monitoring and traps to be send on video faults, 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.

4.12. ADVANCED AUDIO NOTIFY

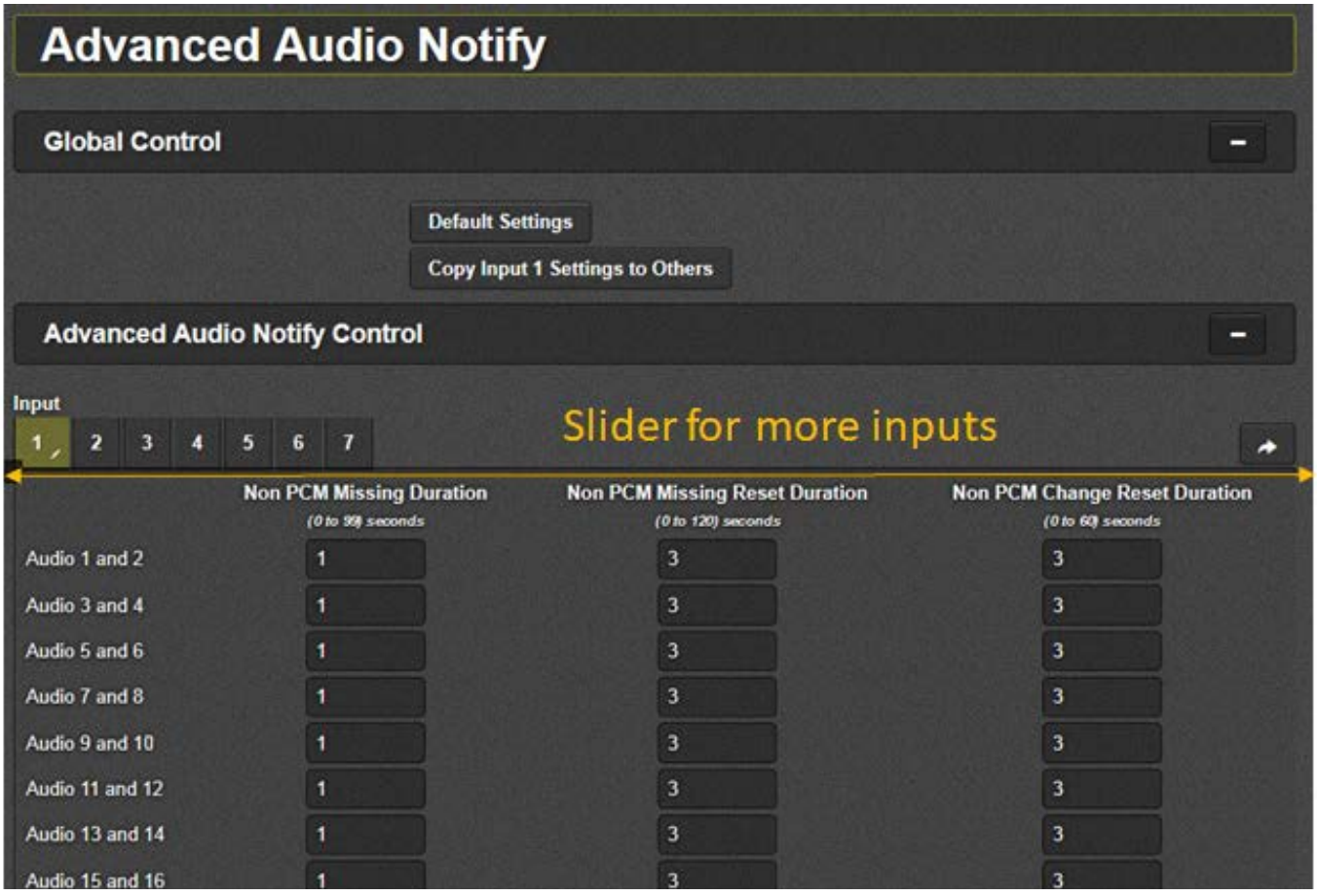

Figure 4-23: WebEASY® - Advanced Audio Notify - Part 1

4.12.1. Global Control

Default Settings set alarm settings to factory default for all inputs.

Copy Input 1 Settings to Others copies input 1 settings to all other inputs on card for faster configuration

4.12.2. Advanced Audio Notify Control

For the 36 input streams and 16 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 clear.

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 clear.

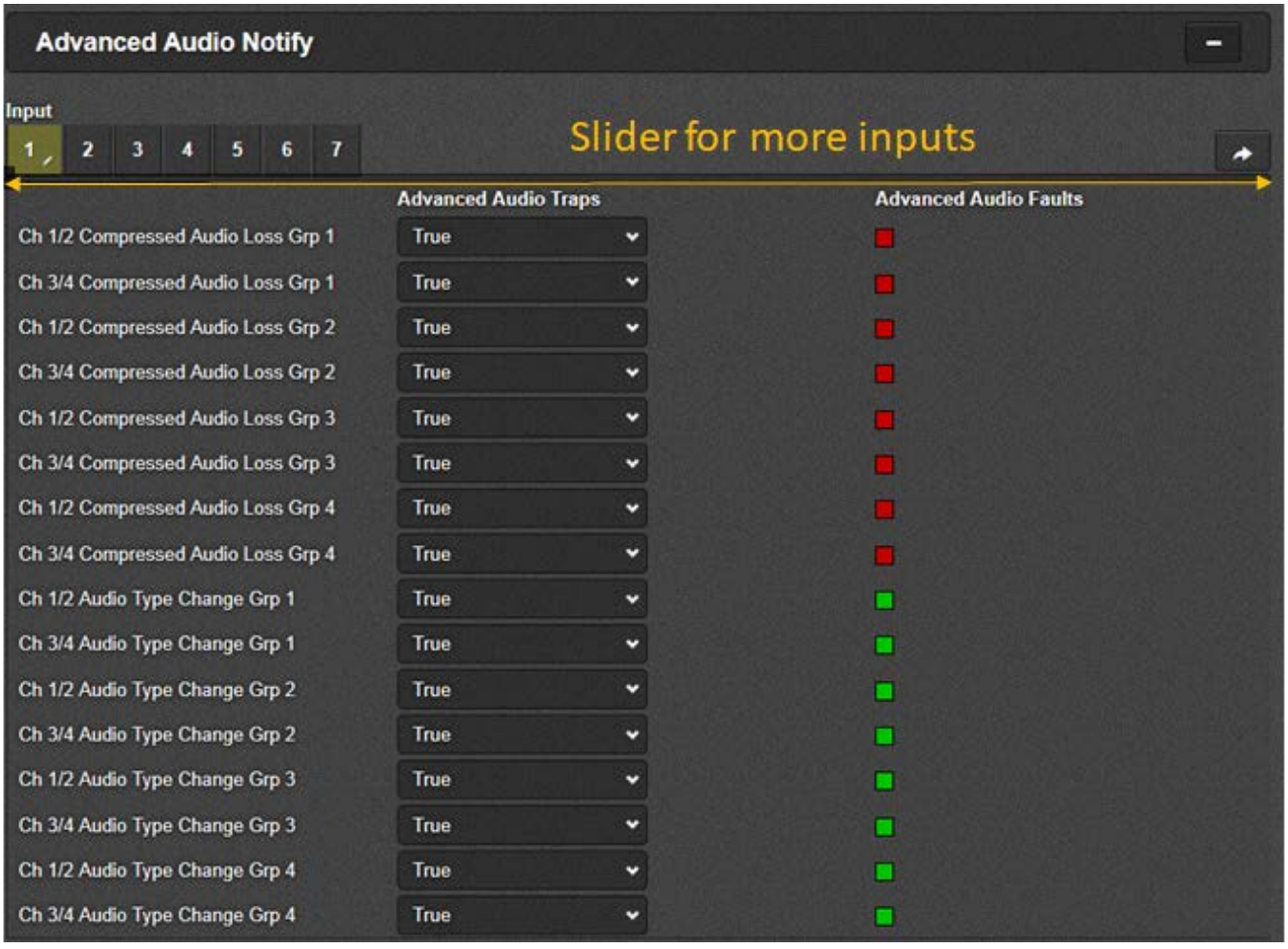

Figure 4-24: WebEASY® - Advanced Audio Notify - Part 2

Advanced Audio Notify

Advanced Audio Notify allows for fault monitoring and traps to be sent on audio faults, configured in the 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.

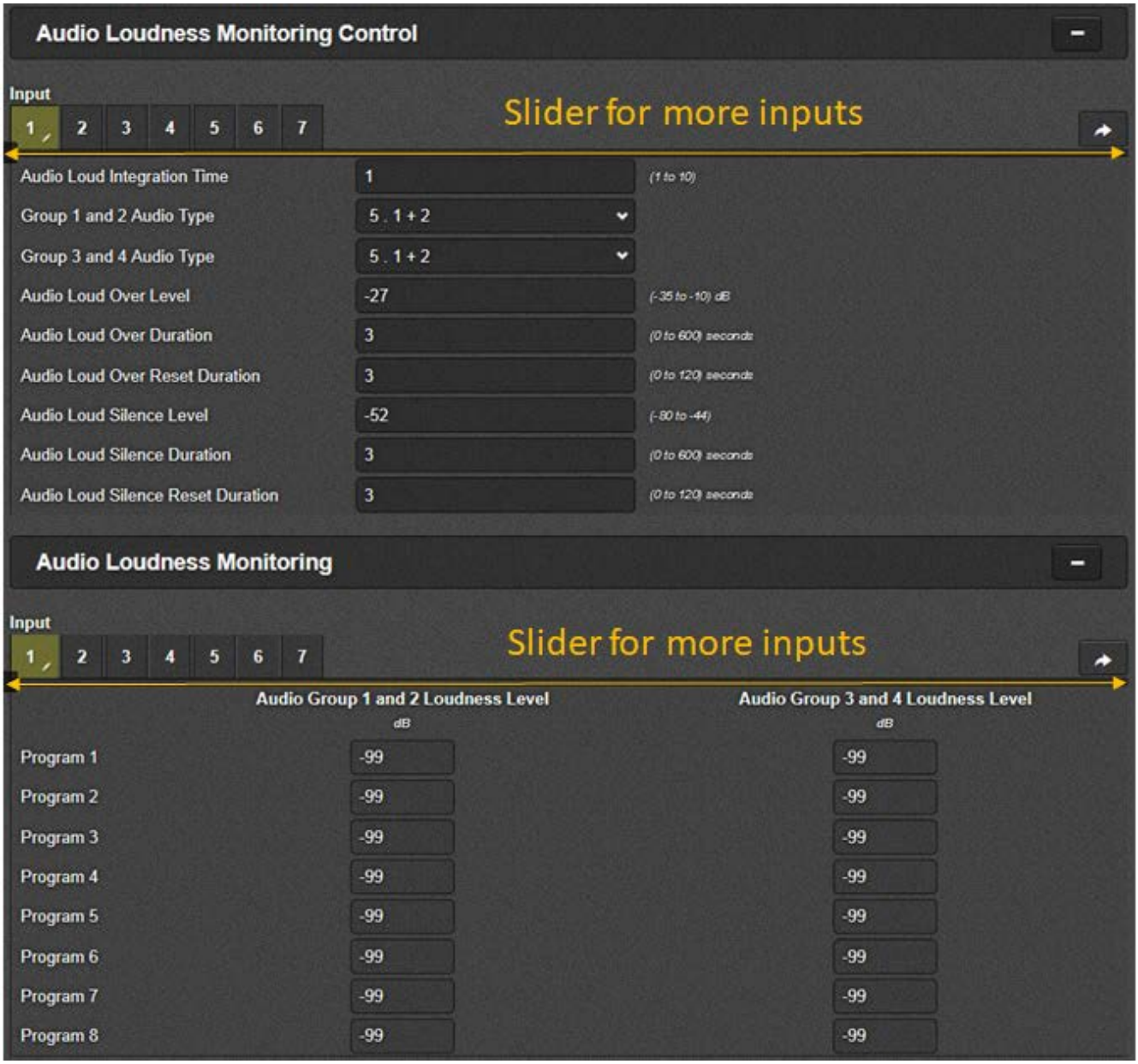

Figure 4-25: WebEASY® - Advanced Audio Notify - Part 3

4.12.3. Audio Loudness Monitoring Control

For the 36 input streams

Audio Loud Integration Time: This parameter selects the audio loudness integration time for audio loudness silence/over detection in integrating mode (I-mode). Units are in seconds.

Group 1 and 2 Audio Type: This parameter selects the audio program loudness types for group 1 and 2 audio.

Group 3 and 4 Audio Type: This control selects the audio program loudness types for group 3 and 4 audio.

Audio Loud Over Level (-35 to -10 dB): This control sets the upper threshold level for audio loudness. If the audio loudness value exceeds this level, a fault alert is triggered (if enabled). Units are in dB.

Audio Loud Over Duration (0 to 600 seconds): This control is used to set the amount of time for audio loudness 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 the trigger will remain active after the audio loud over is not considered to have an error.

Audio Loud Silence Level (-80 to -44 dB): This control sets the lower threshold level for audio loudness. If the audio loudness value is below this level, a fault alert is triggered (if enabled).

Audio Loud Silence Duration (0 to 600 seconds): This control sets the duration of the audio loud silence fault.

Audio Loud Silence Reset Duration (0 to 120 seconds): This control allows the user to set the amount of time the trigger will remain active after the audio loud silence is not considered to have an error.

4.12.4. Audio Loudness Monitoring

For the 32 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.

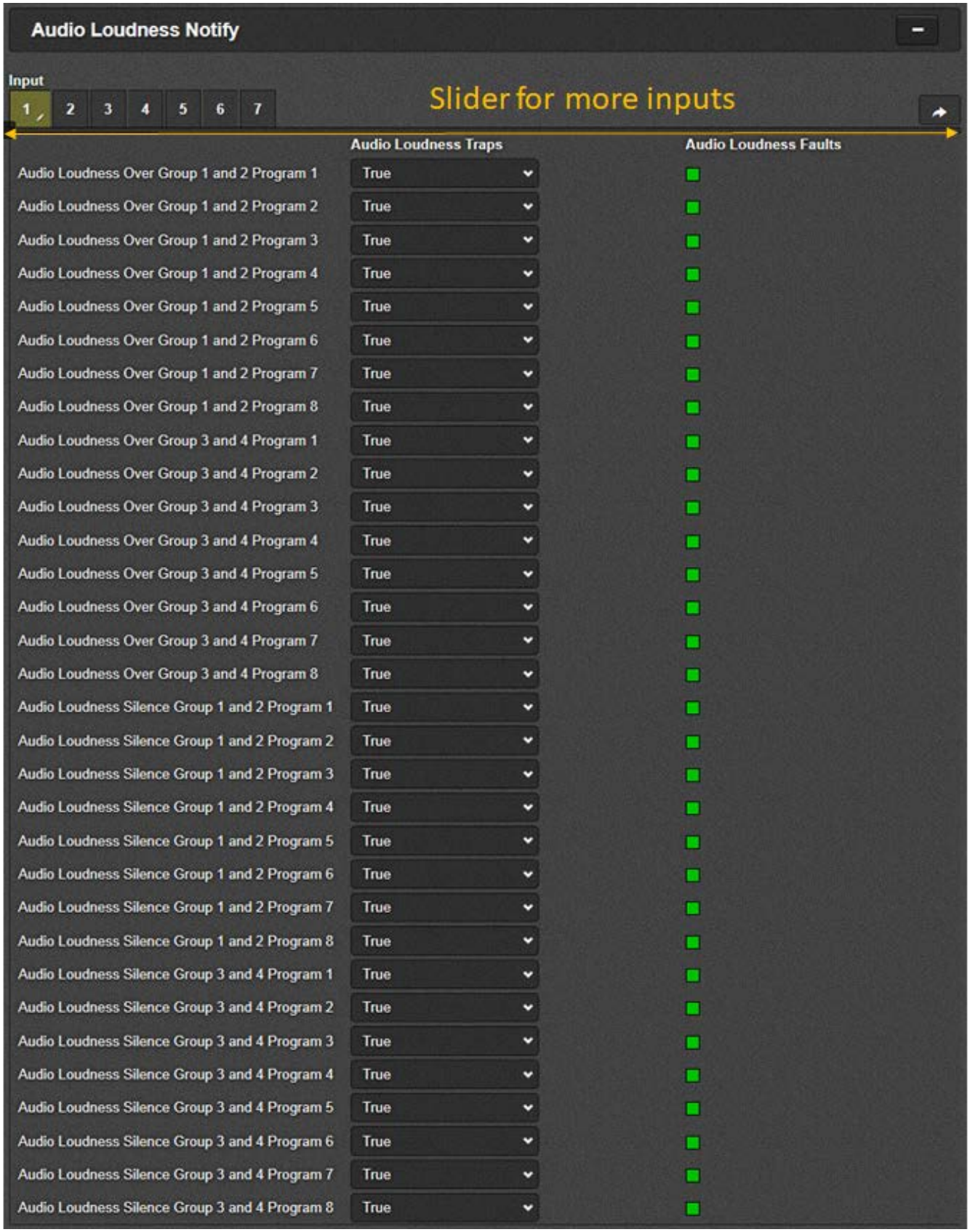

Figure 4-26: WebEASY® - Advanced Audio Notify - Part 4

4.12.5. Audio Loudness Notify

Audio Loudness Notify allows for fault monitoring and traps be sent for audio faults, configured in the 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.

4.13. THUMBNAIL CONTROL

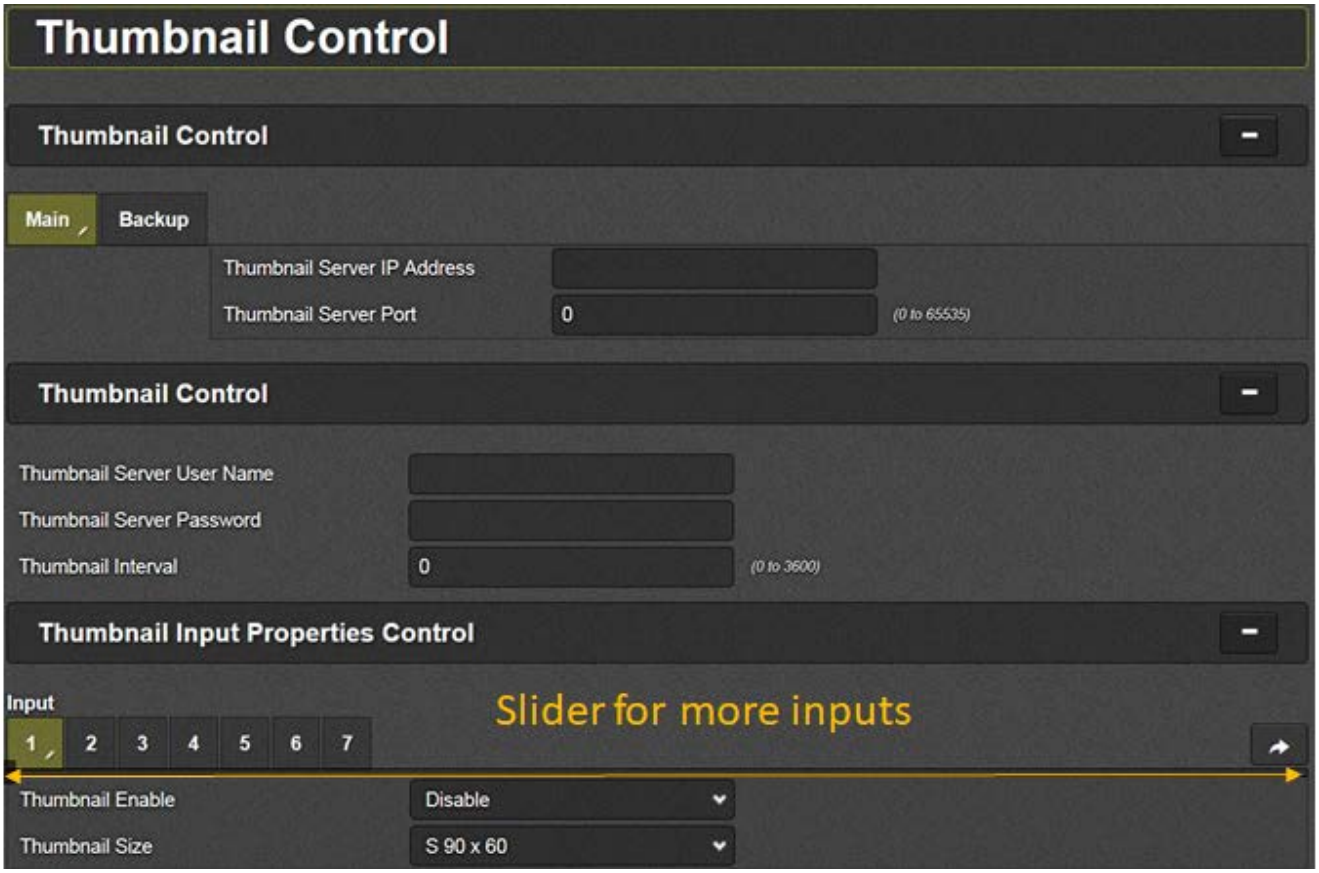

Figure 4-27: WebEASY® - Thumbnail Control

4.13.1. Thumbnail Control

Thumbnail Server IP Address: This parameter displays the IP address of the thumbnail server.

Thumbnail Server Port: This parameter allows the user to set the port number to use when sending data.

4.13.2. Thumbnail Control

Thumbnail Server User Name: This parameter displays the thumbnail server username if required for authentication.

Thumbnail Server Password: This parameter displays the thumbnail server password if required for authentication.

Thumbnail Interval: This parameter displays the number of seconds to pass between thumbnailed image data intervals.

4.13.3. Thumbnail Input Properties Control

Thumbnail Enable: This parameter allows the user to turn the thumbnail engine on or off for each input individually.

Thumbnail Size: This parameter displays the size of thumbnail images.

4.14. ADVANCED INPUT NOTIFY

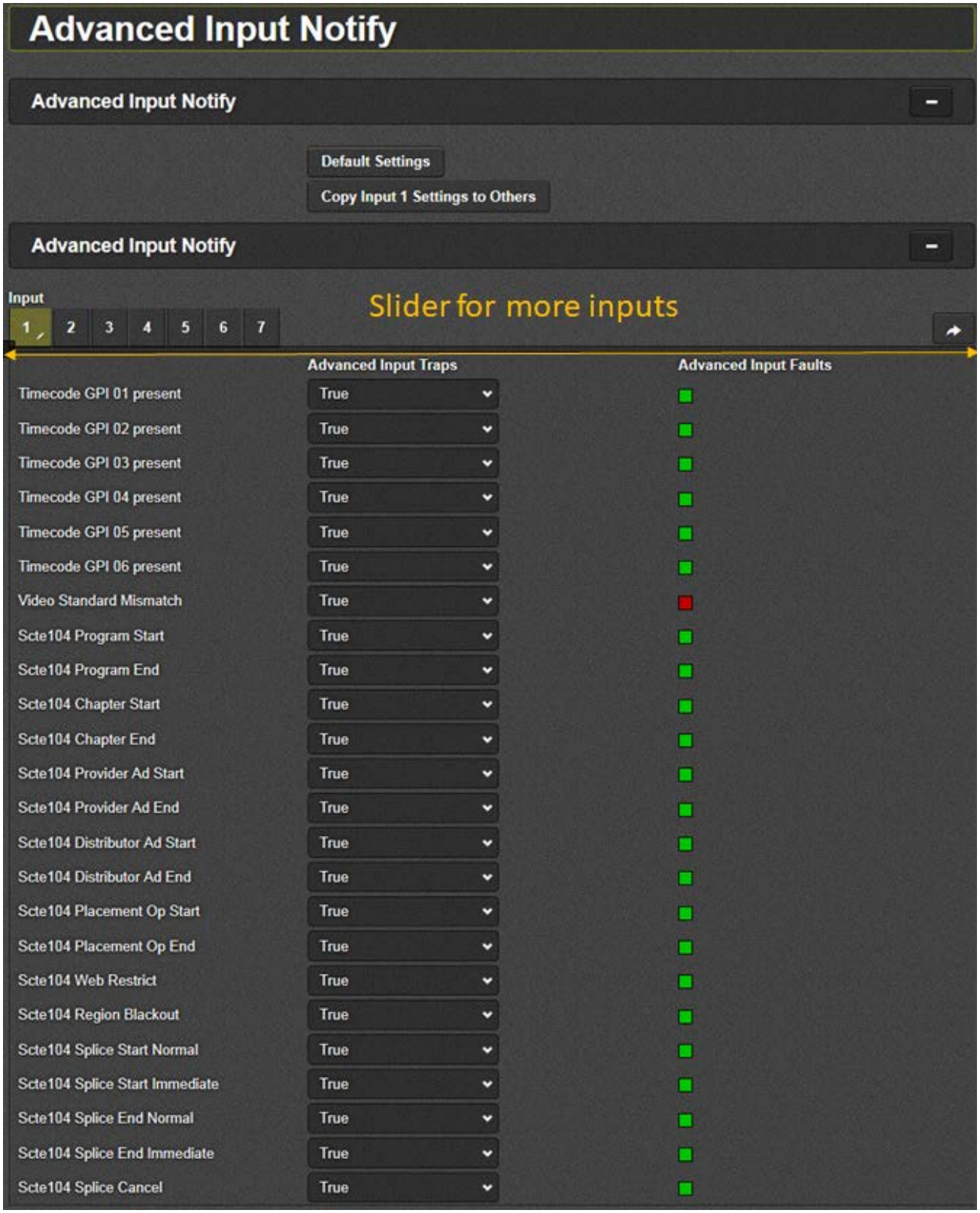

Figure 4-28 : WebEASY® - Advanced Input Notify - Part 1

4.14.1. Advanced Input Notify (1)

Default Settings set alarm settings to factory default for all inputs.

Copy Input 1 Settings to Others copies input 1 settings to all other inputs on card for faster configuration.

4.14.2. Advanced Input Notify (2)

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

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

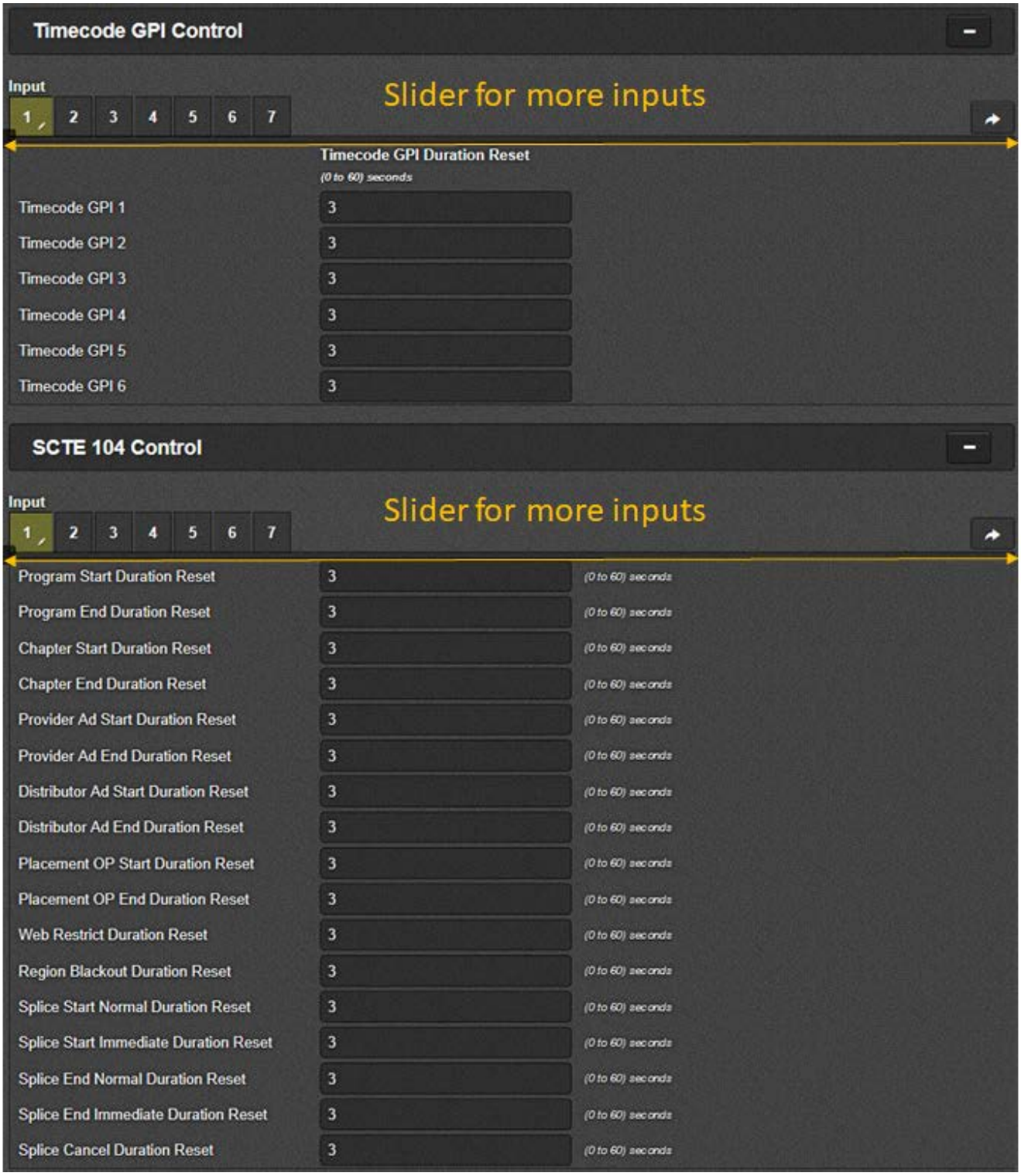

Figure 4-29 : WebEASY® - Advanced Input Notify - Part 2

4.14.3. Timecode GPI Control

For the 36 input streams and Timecode GPI 1 to Timecode GPI 6

Timecode GPI Duration Reset: This control allows the user to set the amount of time the trigger will remain active.

4.14.4. SCTE 104 Control:

For the 36 input streams

This section allows the user to set the duration reset time (in seconds) for start and end points of SCTE 104 inserts.

4.15. GPIO CONTROL

Figure 4-30 : WebEASY® -GPIO Control

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

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

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5. FIRMWARE UPGRADE

Using the WebEASY® on a web interface is the fastest and recommended procedure to load the firmware onto the 3067VIP-3G-36x4.

5.1. FIRMWARE UPGRADE USING WEBEASY®

When first visiting the 3067VIP-3G-36x4 web interface, the user will be asked to enter a login and password. Enter ***customer*** in both fields.

On the top of the web page for the 3067VIP-3G-36x4, there is a tab labeled **Upgrade**. The **Upgrade** tab is used to check current firmware version and upload the latest firmware.

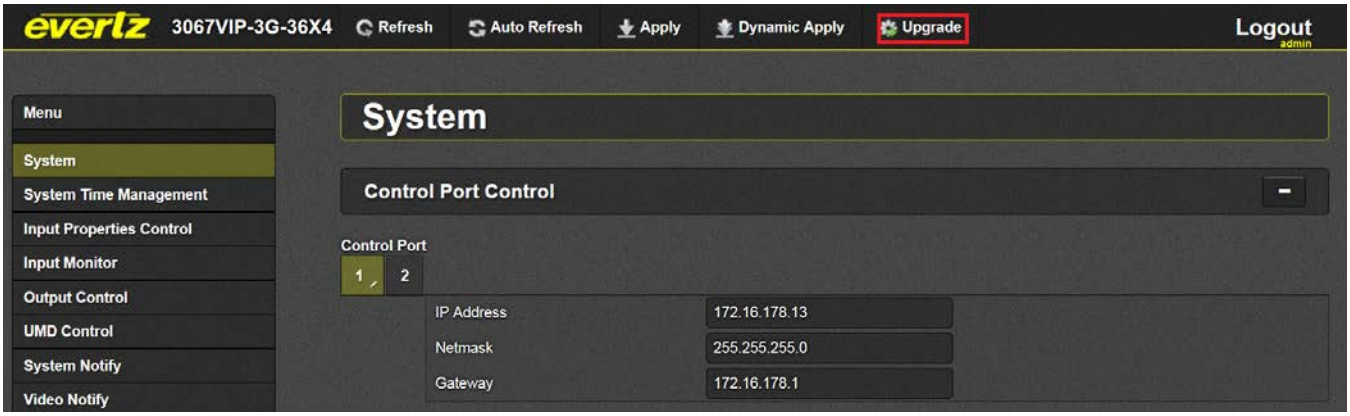

Figure 5-1: WebEASY® - Upgrade Button on Top Menu Bar

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 to get the latest firmware file.

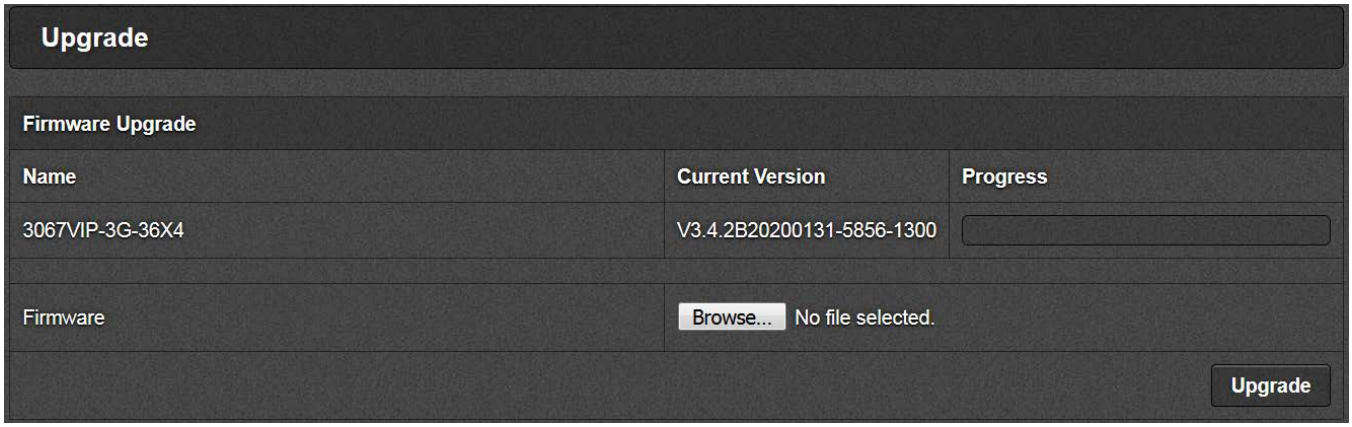

Figure 5-2: WebEASY® - Firmware Upgrade Menu

Click **Browse** to locate image file. Once selected, click **Open** (Step 1) to advance to the next step. Click **Upgrade** (Step 2). The progress bar will display the status of the upgrade. Once completed, the device will automatically restart.

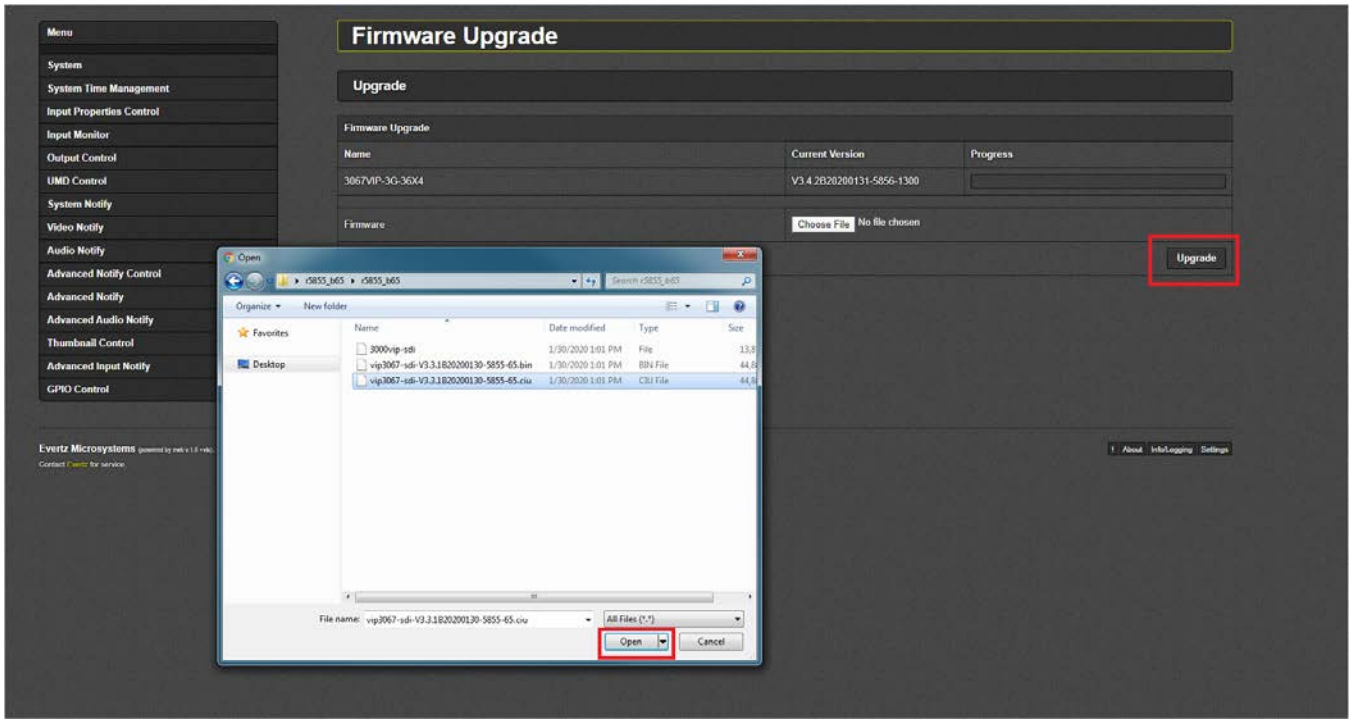

Figure 5-3: WebEASY® - Firmware Upgrade Menu