

MPA1 Audio Monitoring Range Installation and Operation Manual Version 1.3



Version History

| Issue | Date | Change Details |
|-------|----------|---|
| 1 | 01/02/18 | Preliminary Guide |
| 2 | 05/10/18 | Version 1.0 |
| 3 | 25/1/19 | Version 1.1 – Added MPA1 SOLO 8 and MPA1 MIX 8 |
| 4 | 1/10/19 | Version 1.2 – Added Analogue, AES and GPIO Pinout Information |
| 5 | 22/2/21 | Version 1.3 – Added MPA1-SOLO-IP |
| | | |
| | | |

Contents

| | |
|---|----|
| Introduction | 5 |
| MPA1-SOLO-IP Installation | 7 |
| MPA1-SOLO-IP Functional Schematic..... | 8 |
| MPA1-SOLO-SDI Installation | 9 |
| MPA1-SOLO-SDI Functional Schematic..... | 10 |
| MPA1-MIX-SDI Installation | 11 |
| MPA1-MIX-SDI Functional Schematic..... | 12 |
| MPA1-SOLO-MADI Installation | 13 |
| MPA1-SOLO-MADI Functional Schematic..... | 14 |
| MPA1-MIX-MADI Installation | 15 |
| MPA1-MIX-MADI Functional Schematic | 16 |
| MPA1-SOLO-DANTE Installation | 17 |
| MPA1-SOLO-DANTE Functional Schematic..... | 18 |
| MPA1-MIX-DANTE Installation | 19 |
| MPA1-MIX-DANTE Functional Schematic | 20 |
| MPA1-SOLO-8 Installation | 21 |
| MPA1-SOLO-8 Functional Schematic..... | 22 |
| MPA1-MIX-8 Installation..... | 23 |
| MPA1-MIX-8 Functional Schematic | 25 |
| Initial Setup | 26 |
| Accessing the Webpage of your MPA1..... | 27 |
| MPA1-SOLO-IP Webpage..... | 28 |
| MPA1-SOLO-SDI Webpage..... | 33 |
| MPA1-SOLO-MADI Web Page | 38 |
| MPA1-SOLO-DANTE Web Page | 43 |
| MPA1-SOLO-8 Web Page | 48 |
| MPA1-MIX-SDI Web Page | 53 |
| MPA1-MIX-MADI Web Page | 61 |
| MPA1-MIX-DANTE Web Page | 68 |
| MPA1-MIX-8 Web Page | 76 |
| Operation..... | 84 |
| MPA1-SOLO-IP Operation | 85 |
| MPA1-SOLO-SDI Operation..... | 86 |
| MPA1-SOLO-MADI Operation | 87 |

| | |
|---|-----|
| MPA1-SOLO-DANTE Operation | 88 |
| MPA1-SOLO-8 Operation | 89 |
| MPA1-MIX-SDI Operation | 90 |
| MPA1-MIX-MADI Operation | 92 |
| MPA1-MIX-DANTE Operation | 93 |
| MPA1-MIX-8 Operation | 94 |
| MPA1-SOLO-IP Front Panel Display | 96 |
| MPA1-SOLO-SDI Front Panel Display | 98 |
| MPA1-MIX-SDI Front Panel Display | 100 |
| MPA1-SOLO-MADI Front Panel Display | 101 |
| MPA1-MIX-MADI Front Panel Display | 103 |
| MPA1-SOLO-DANTE Front Panel Display | 104 |
| MPA1-MIX-DANTE Front Panel Display | 106 |
| MPA1-SOLO-8 Front Panel Display | 108 |
| MPA1-MIX-8 Front Panel Display | 110 |

Introduction

The MPA1 Range of Audio Monitors provide high-quality confidence monitoring in a compact 1RU design. At just 100mm deep and less than 4kg, MPA1 Audio Monitors are ideally suited for environments where space and weight is a premium, such as OB Trucks and Flyaways.

Designed for ease of use, all MPA1 Audio Monitors can be controlled directly from the front panel, or remotely over an Ethernet network using a suitable Web-Browser or control system using SNMP.

This manual covers the following Audio Monitoring Products within the MPA1 Range:

| | |
|-----------------|----------------|
| MPA1-SOLO-IP | |
| MPA1-SOLO-SDI | MPA1-MIX-SDI |
| MPA1-SOLO-MADI | MPA1-MIX-MADI |
| MPA1-SOLO-DANTE | MPA1-MIX-DANTE |
| MPA1-SOLO-8 | MPA1-MIX-8 |

The MPA1-SOLO variants provide instantaneous selection and monitoring of any incoming audio source, whilst the MPA1-MIX variants also allow for multiple monitor mixes, comprising up to 8 audio pairs, to be created, stored and recalled with ease.

Front Panel for MPA1-SOLO Variants



Front Panel Layout for MPA1-MIX-Variants

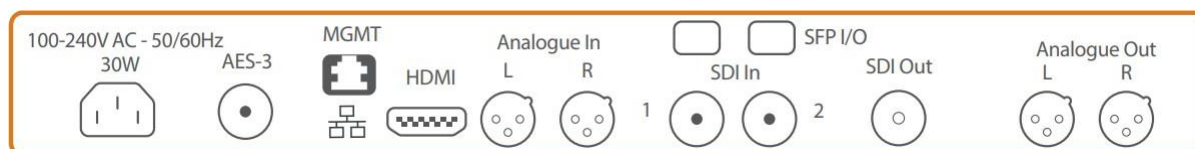


PAGE INTENTIONALLY LEFT BLANK

MPA1-SOLO-IP Installation

The MPA1 Audio Monitoring Range has been designed to be quick and easy to install, requiring minimal installation effort. Input and output connectivity for each MPA1 Model can be seen below:

MPA1-SOLO-IP



| Product | Inputs | Outputs | Other |
|--------------|--|---|---|
| MPA1-SOLO-IP | 2 x SFP Ports 2 x 3G/HD/SD-SDI 1 x AES3 (75 ohm) 2 x Analogue Inputs (Balanced) | 1 x 3G/HD/SD-SDI (reclocked) 2 x Analogue Outputs (Balanced) 1 x Headphone Output 1 x HDMI Monitoring Output | 1 x 1Gig/E Ethernet Port (Management and Control) 1 x USB Port (Software Updates and Configuration) 1 x IEC Power Inlet |

The MPA1 is equipped with 2 x SFP Ports which can be used as follows:

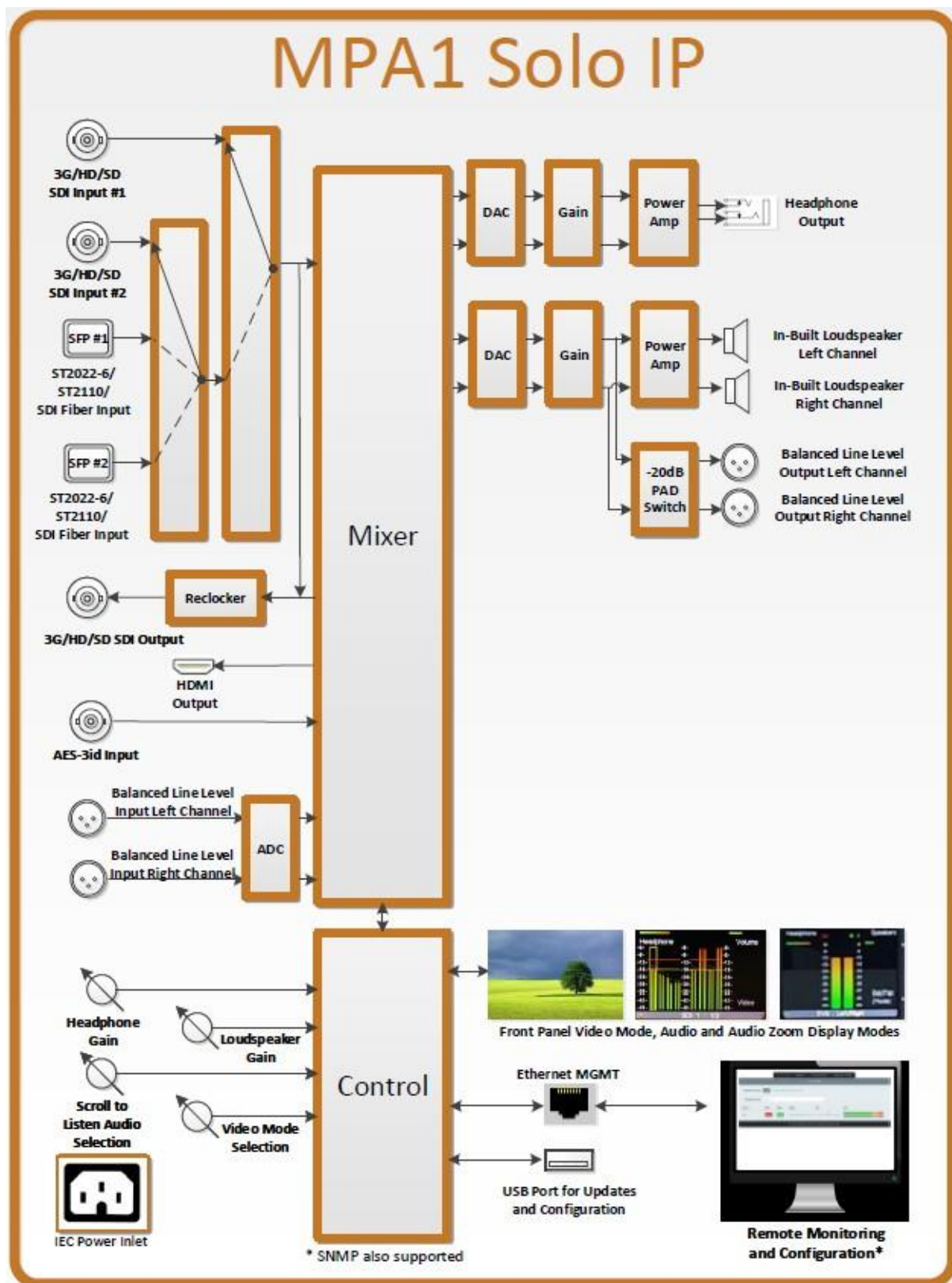
| Function | Notes |
|---|--|
| Reception of 3G/HD/SD-SDI signals using Multi-Mode Optical Fiber | Requires optional multi-mode (850nm) 3G/HD/SD-SDI SFP receiver modules |
| Reception of 3G/HD/SD-SDI signals using Single-Mode Optical Fiber | Requires optional single-mode (1310nm) 3G/HD/SD-SDI SFP receiver modules |
| Subscription to SMPTE 2022-6 flows | Requires optional multi-mode (850nm) ST2022-6 IP SFP Modules* |
| Subscription to SMPTE 2110 flows | Requires optional multi-mode (850nm) ST2110 IP SFP Modules* |

* Please note that when using the MPA1-SOLO-IP to monitor ST2022-6 or ST2110 IP flows, optional SMPTE 2022-6 and SMPTE 2110 IP modules must be purchased from TSL.

To configure the optional ST2022-6 and ST2110 modules for use with your IP network, TSL recommends the use of Riedel MNSet.

<https://www.riedel.net/>

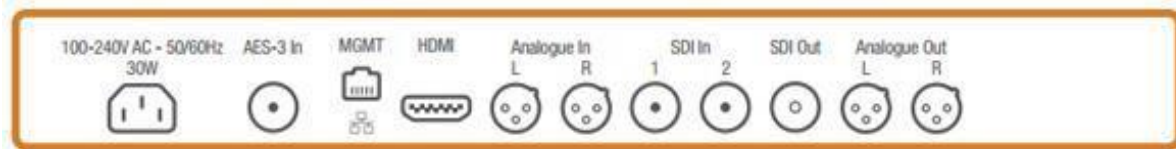
MPA1-SOLO-IP Functional Schematic



MPA1-SOLO-SDI Installation

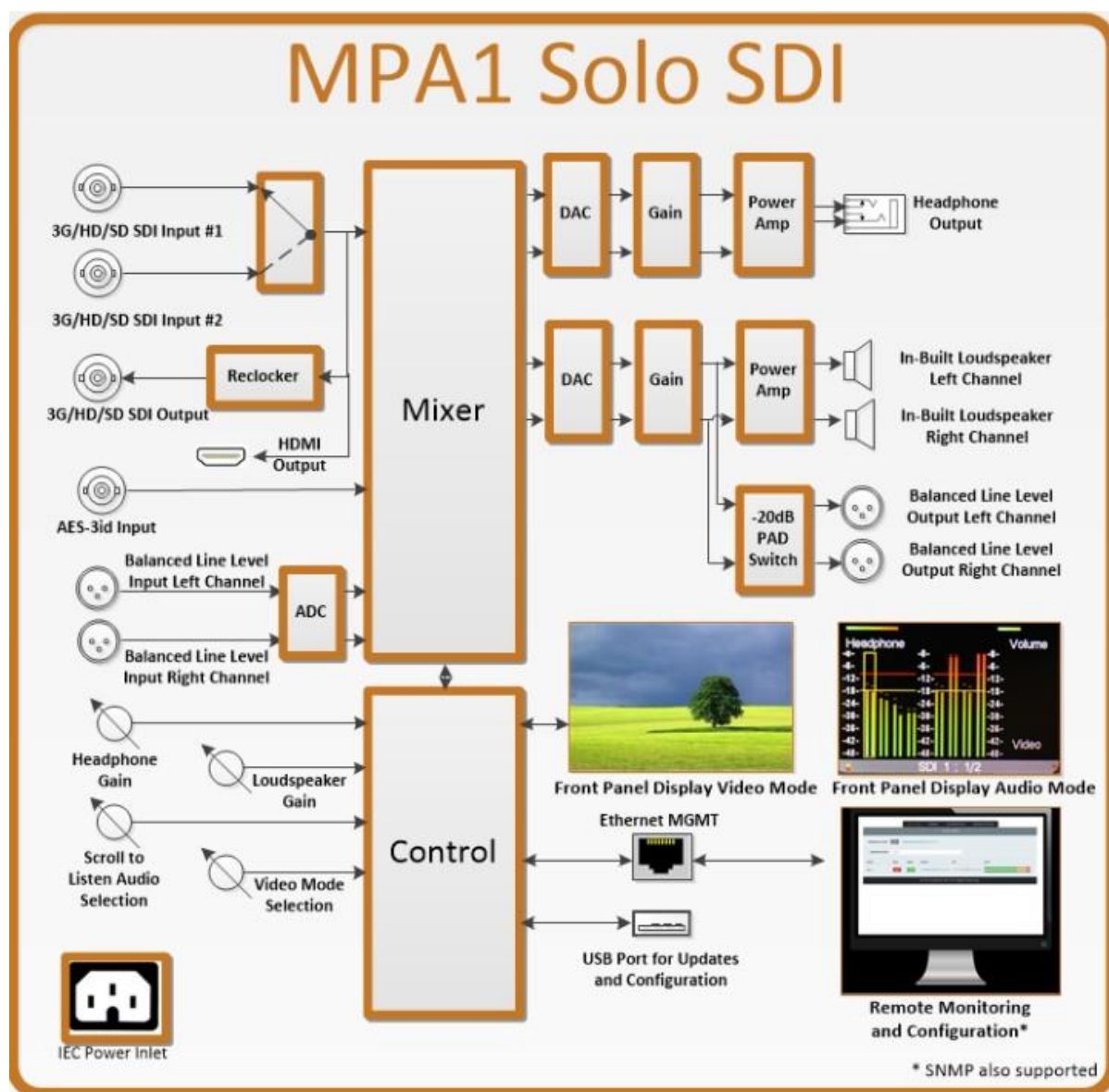
The MPA1 Audio Monitoring Range has been designed to be quick and easy to install, requiring minimal installation effort. Input and output connectivity for each MPA1 Model can be seen below:

MPA1-SOLO-SDI



| Product | Inputs | Outputs | Other |
|---------------|---|---|---|
| MPA1-SOLO-SDI | 2 x 3G/HD/SD-SDI 1 x AES3 (75 ohm) 2 x Analogue Inputs (Balanced) | 1 x 3G/HD/SD-SDI (reclocked) 2 x Analogue Outputs (Balanced) 1 x Headphone Output 1 x HDMI Monitoring Output | 1 x 1Gig/E Ethernet Port (Management and Control) 1 x USB Port (Software Updates and Configuration) 1 x IEC Power Inlet |

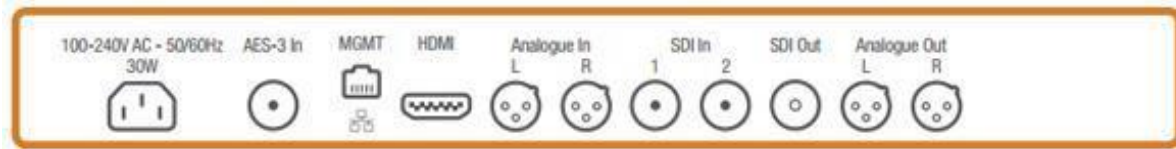
MPA1-SOLO-SDI Functional Schematic



MPA1-MIX-SDI Installation

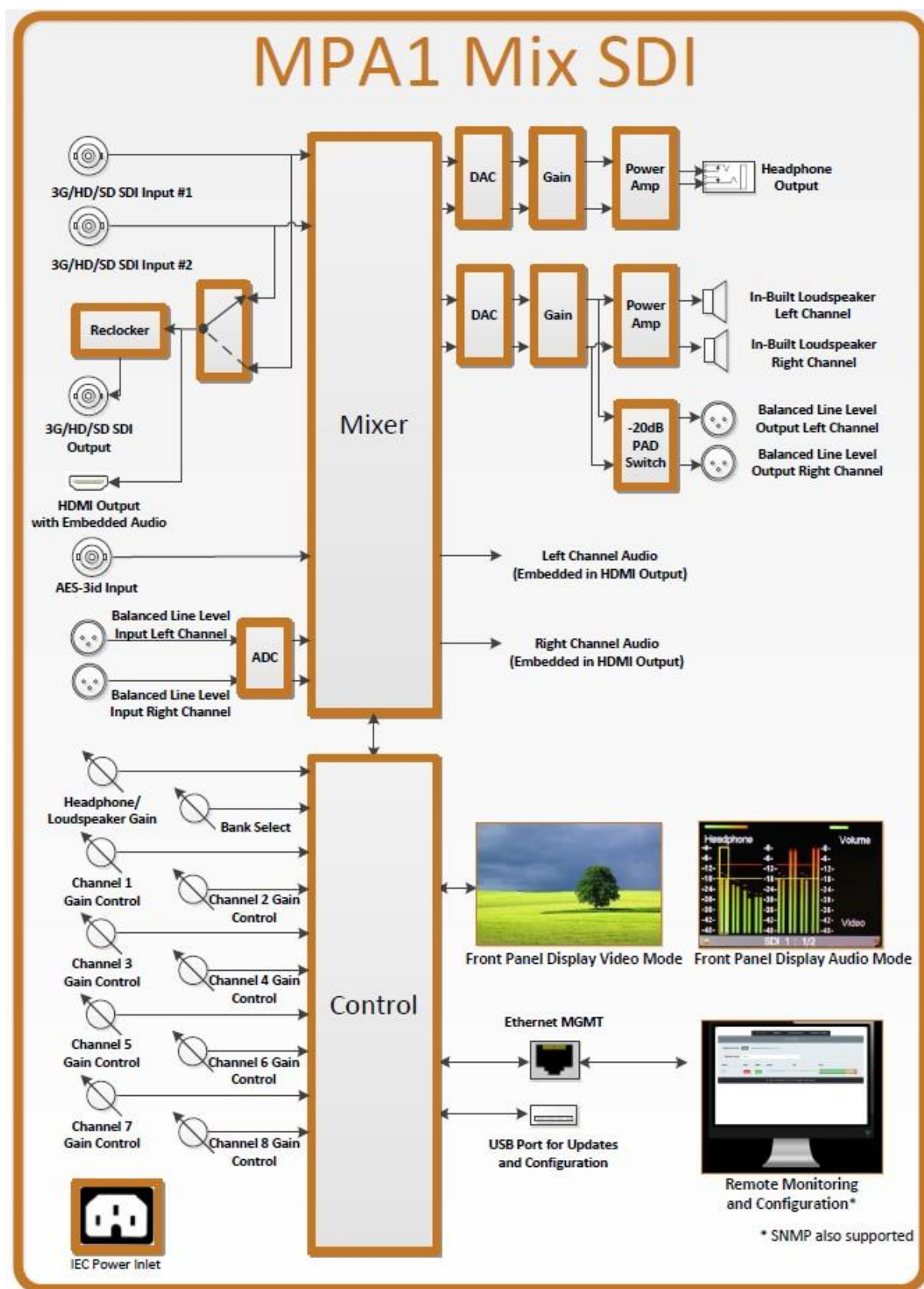
The MPA1 Audio Monitoring Range has been designed to be quick and easy to install, requiring minimal installation effort. Input and output connectivity for each MPA1 Model can be seen below:

MPA1-MIX-SDI



| Product | Inputs | Outputs | Other |
|--------------|---|---|---|
| MPA1-MIX-SDI | 2 x 3G/HD/SD-SDI 1 x AES3 (75 ohm) 2 x Analogue Inputs (Balanced) | 1 x 3G/HD/SD-SDI (reclocked) 2 x Analogue Outputs (Balanced) 1 x Headphone Output 1 x HDMI Monitoring Output | 1 x 1Gig/E Ethernet Port (Management and Control) 1 x USB Port (Software Updates and Configuration) 1 x IEC Power Inlet |

MPA1-MIX-SDI Functional Schematic



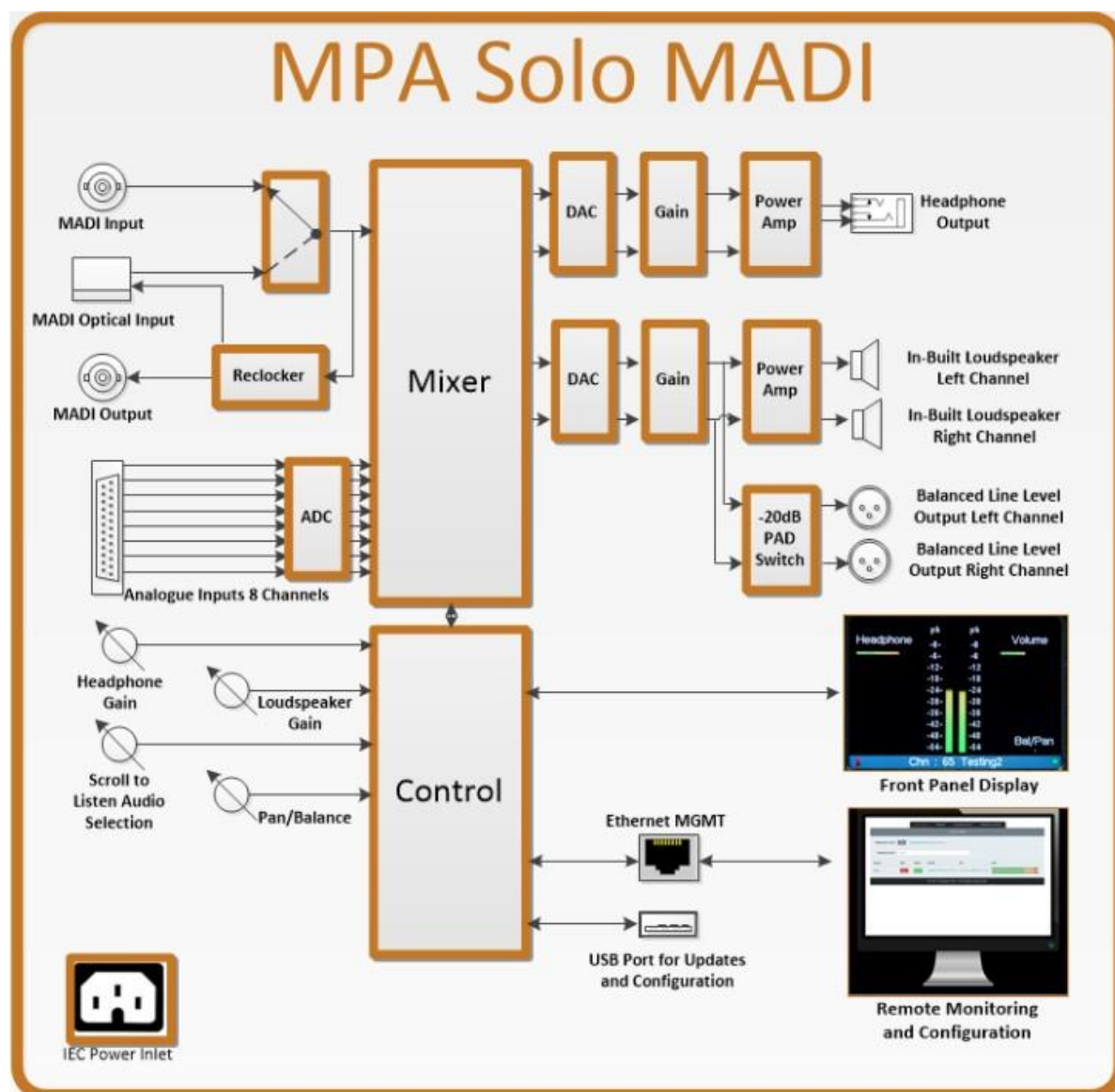
MPA1-SOLO-MADI Installation

MPA1-SOLO-MADI



| Product | Inputs | Outputs | Other |
|----------------|--|--|---|
| MPA1-SOLO-MADI | 1 x MADI (75 ohm) 1 x MADI (SFP cage for optional SFP module) 8 x Analogue Inputs (Balanced) | 1 x MADI (75 ohm) reclocked 2 x Analogue Outputs (Balanced) 1 x Headphone Output | 1 x 1Gig/E Ethernet Port (Management and Control) 1 x USB Port (Software Updates and Configuration) 1 x IEC Power Inlet |

MPA1-SOLO-MADI Functional Schematic



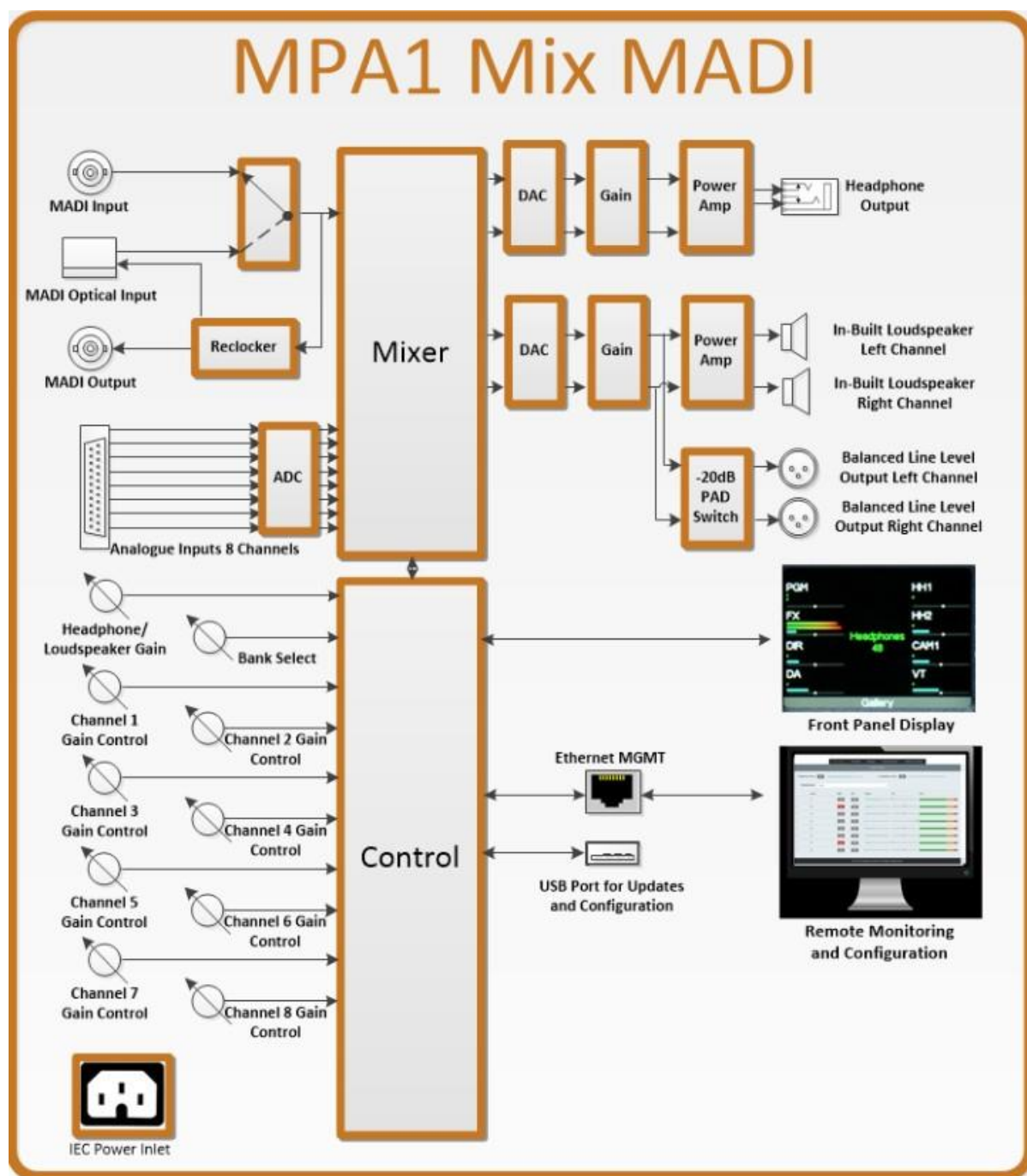
MPA1-MIX-MADI Installation

MPA1-MIX-MADI



| Product | Inputs | Outputs | Other |
|---------------|--|--|---|
| MPA1-MIX-MADI | 1 x MADI (75 ohm) 1 x MADI (SFP cage for optional SFP module) 8 x Analogue Inputs (Balanced) | 1 x MADI (75 ohm) reclocked 2 x Analogue Outputs (Balanced) 1 x Headphone Output | 1 x 1Gig/E Ethernet Port (Management and Control) 1 x USB Port (Software Updates and Configuration) 1 x IEC Power Inlet |

MPA1-MIX-MADI Functional Schematic



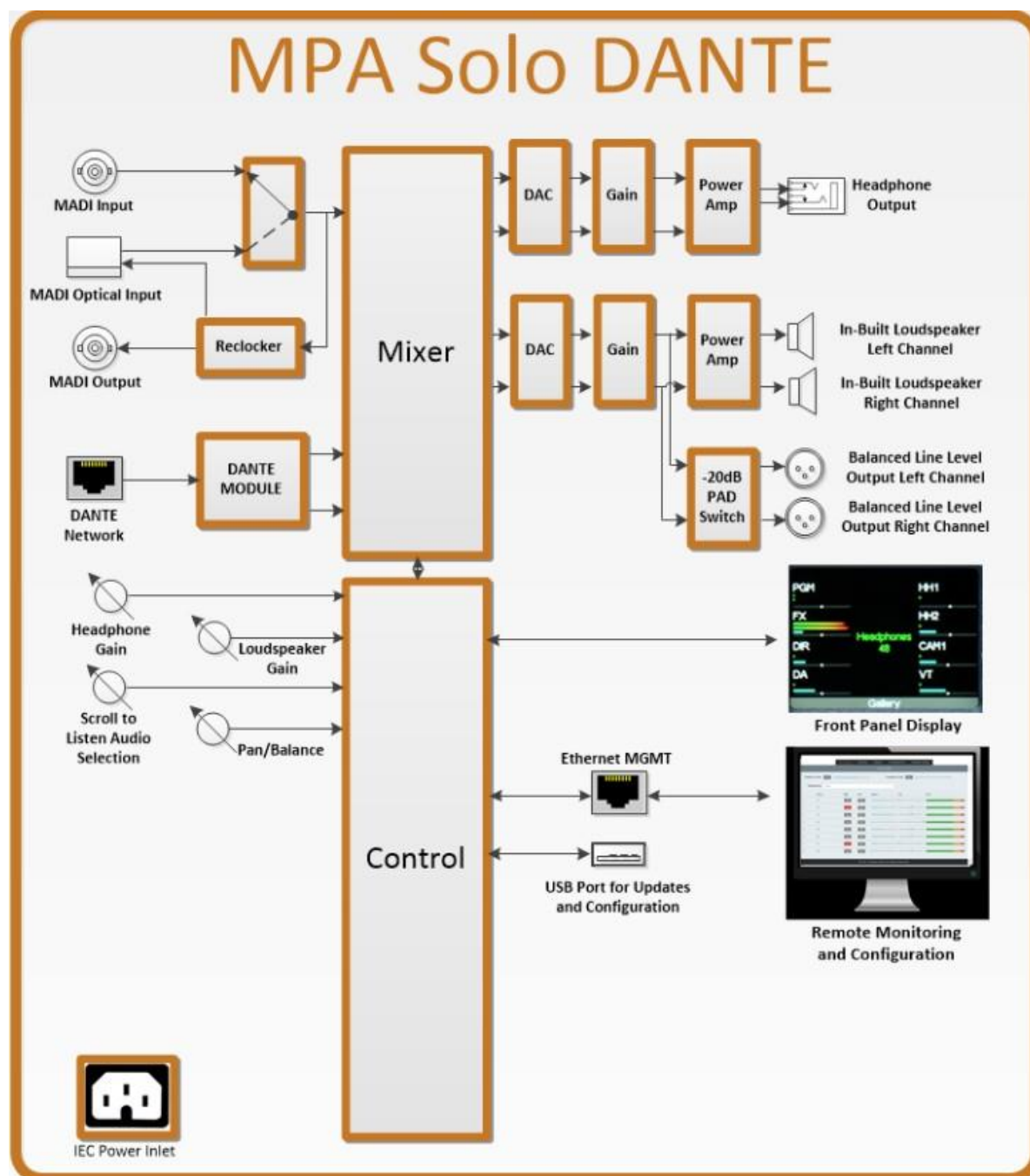
MPA1-SOLO-DANTE Installation

MPA1-SOLO-DANTE



| Product | Inputs | Outputs | Other |
|-----------------|--|--|---|
| MPA1-SOLO-DANTE | 1 x 1Gig/E Ethernet Port (Dante/AES67) 1 x MADI (75 ohm) 1 x MADI (SFP cage for optional SFP module) 8 x Analogue Inputs (Balanced) | 1 x MADI (75 ohm) reclocked 2 x Analogue Outputs (Balanced) 1 x Headphone Output | 1 x 1Gig/E Ethernet Port (Management and Control) 1 x USB Port (Software Updates and Configuration) 1 x IEC Power Inlet |

MPA1-SOLO-DANTE Functional Schematic



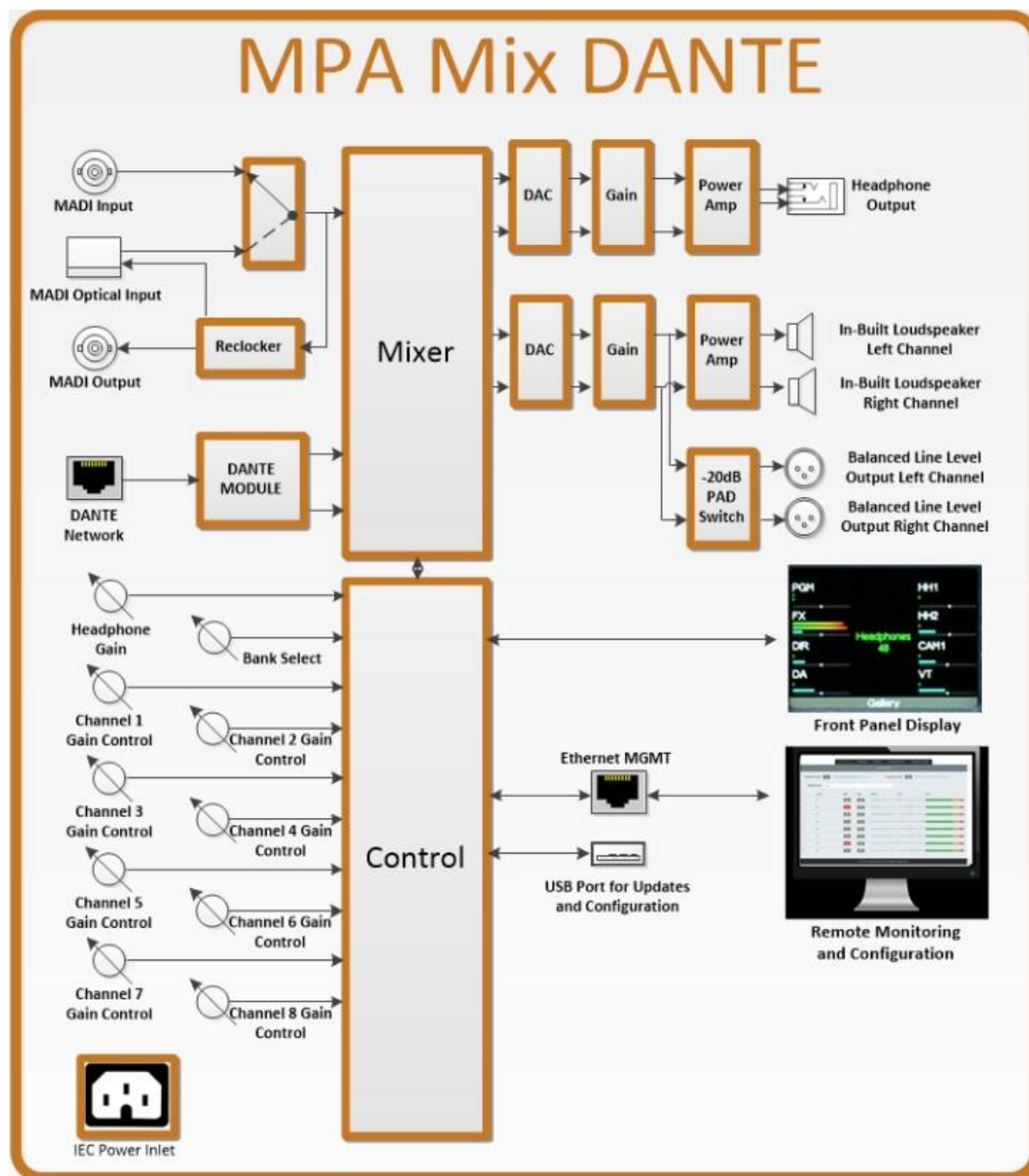
MPA1-MIX-DANTE Installation

MPA1-MIX-DANTE



| Product | Inputs | Outputs | Other |
|----------------|--|--|---|
| MPA1-MIX-DANTE | 1 x 1Gig/E Ethernet Port (Dante/AES67) 1 x MADI (75 ohm) 1 x MADI (SFP cage for optional SFP module) 8 x Analogue Inputs (Balanced) | 1 x MADI (75 ohm) reclocked 2 x Analogue Outputs (Balanced) 1 x Headphone Output | 1 x 1Gig/E Ethernet Port (Management and Control) 1 x USB Port (Software Updates and Configuration) 1 x IEC Power Inlet |

MPA1-MIX-DANTE Functional Schematic



MPA1-SOLO-8 Installation

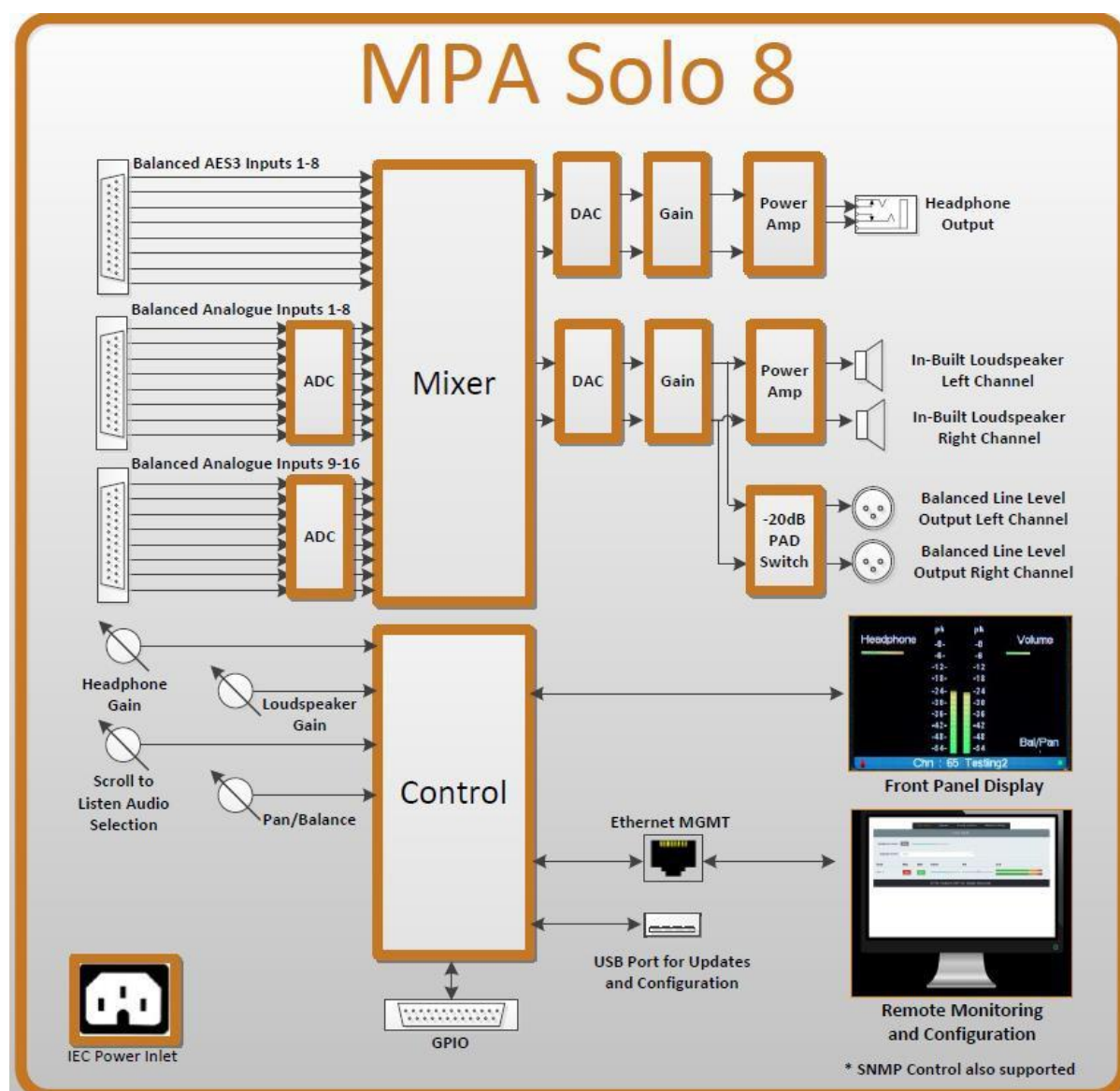
MPA1-SOLO-8



| Product | Inputs | Outputs | Other |
|-------------|---|--|---|
| MPA1-SOLO-8 | 16 x Analogue Inputs (Balanced) 8 x AES-3 Inputs (Balanced 110 ohm) 4 x GPI | 2 x Analogue Outputs (Balanced) 1 x Headphone Output 4 x GPO | 1 x 1Gig/E Ethernet Port (Management and Control) 1 x USB Port (Software Updates and Configuration) 1 x IEC Power Inlet |

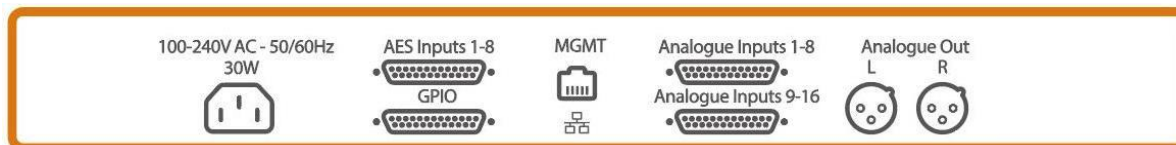
| Pin Number | Analogue Inputs 1-8 | Analogue Inputs 9-16 | AES Inputs 1-8 | GPIO |
|------------|---------------------|----------------------|--------------------|--------|
| 1 | Channel 8 Positive | Channel 16 Positive | Channel 8 Positive | GPO1 |
| 2 | Channel 8 Ground | Channel 16 Ground | Channel 8 Ground | Ground |
| 3 | Channel 7 Negative | Channel 15 Negative | Channel 7 Negative | GPO2 |
| 4 | Channel 6 Positive | Channel 14 Positive | Channel 6 Positive | Ground |
| 5 | Channel 6 Ground | Channel 14 Ground | Channel 6 Ground | GPO3 |
| 6 | Channel 5 Negative | Channel 13 Negative | Channel 5 Negative | Ground |
| 7 | Channel 4 Positive | Channel 12 Positive | Channel 4 Positive | GPO4 |
| 8 | Channel 4 Ground | Channel 12 Ground | Channel 4 Ground | Ground |
| 9 | Channel 3 Negative | Channel 11 Negative | Channel 3 Negative | Ground |
| 10 | Channel 2 Positive | Channel 10 Positive | Channel 2 Positive | Ground |
| 11 | Channel 2 Ground | Channel 10 Ground | Channel 2 Ground | Ground |
| 12 | Channel 1 Negative | Channel 9 Negative | Channel 1 Negative | Ground |
| 13 | Empty | Empty | Empty | Ground |
| 14 | Channel 8 Negative | Channel 16 Negative | Channel 8 Negative | Ground |
| 15 | Channel 7 Positive | Channel 15 Positive | Channel 7 Positive | Ground |
| 16 | Channel 7 Ground | Channel 15 Ground | Channel 7 Ground | Ground |
| 17 | Channel 6 Negative | Channel 14 Negative | Channel 6 Negative | Ground |
| 18 | Channel 5 Positive | Channel 13 Positive | Channel 5 Positive | Ground |
| 19 | Channel 5 Ground | Channel 13 Ground | Channel 5 Ground | GPI1 |
| 20 | Channel 4 Negative | Channel 12 Negative | Channel 4 Negative | Ground |
| 21 | Channel 3 Positive | Channel 11 Positive | Channel 3 Positive | GPI2 |
| 22 | Channel 3 Ground | Channel 11 Ground | Channel 3 Ground | Ground |
| 23 | Channel 2 Negative | Channel 10 Negative | Channel 2 Negative | GPI3 |
| 24 | Channel 1 Positive | Channel 9 Positive | Channel 1 Positive | Ground |
| 25 | Channel 1 Ground | Channel 9 Ground | Channel 1 Ground | GPI4 |

MPA1-SOLO-8 Functional Schematic



MPA1-MIX-8 Installation

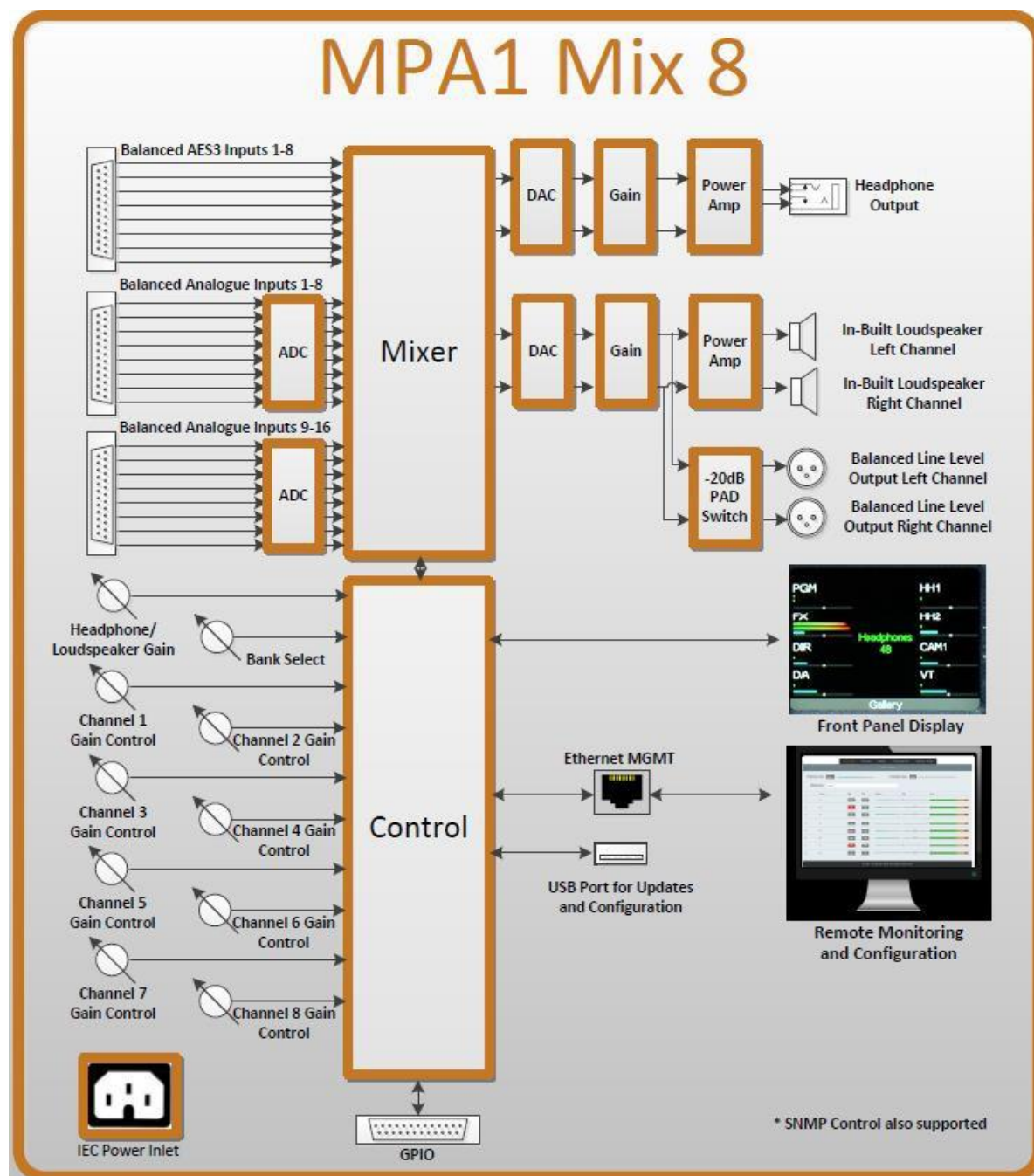
MPA1-MIX-8



| Product | Inputs | Outputs | Other |
|------------|---|--|---|
| MPA1-MIX-8 | 16 x Analogue Inputs (Balanced) 8 x AES-3 Inputs (Balanced 110 ohm) 4 x GPI | 2 x Analogue Outputs (Balanced) 1 x Headphone Output 4 x GPO | 1 x 1Gig/E Ethernet Port (Management and Control) 1 x USB Port (Software Updates and Configuration) 1 x IEC Power Inlet |

| Pin Number | Analogue Inputs 1-8 | Analogue Inputs 9-16 | AES Inputs 1-8 | GPIO |
|------------|---------------------|----------------------|--------------------|--------|
| 1 | Channel 8 Positive | Channel 16 Positive | Channel 8 Positive | GPO1 |
| 2 | Channel 8 Ground | Channel 16 Ground | Channel 8 Ground | Ground |
| 3 | Channel 7 Negative | Channel 15 Negative | Channel 7 Negative | GPO2 |
| 4 | Channel 6 Positive | Channel 14 Positive | Channel 6 Positive | Ground |
| 5 | Channel 6 Ground | Channel 14 Ground | Channel 6 Ground | GPO3 |
| 6 | Channel 5 Negative | Channel 13 Negative | Channel 5 Negative | Ground |
| 7 | Channel 4 Positive | Channel 12 Positive | Channel 4 Positive | GPO4 |
| 8 | Channel 4 Ground | Channel 12 Ground | Channel 4 Ground | Ground |
| 9 | Channel 3 Negative | Channel 11 Negative | Channel 3 Negative | Ground |
| 10 | Channel 2 Positive | Channel 10 Positive | Channel 2 Positive | Ground |
| 11 | Channel 2 Ground | Channel 10 Ground | Channel 2 Ground | Ground |
| 12 | Channel 1 Negative | Channel 9 Negative | Channel 1 Negative | Ground |
| 13 | Empty | Empty | Empty | Ground |
| 14 | Channel 8 Negative | Channel 16 Negative | Channel 8 Negative | Ground |
| 15 | Channel 7 Positive | Channel 15 Positive | Channel 7 Positive | Ground |
| 16 | Channel 7 Ground | Channel 15 Ground | Channel 7 Ground | Ground |
| 17 | Channel 6 Negative | Channel 14 Negative | Channel 6 Negative | Ground |
| 18 | Channel 5 Positive | Channel 13 Positive | Channel 5 Positive | Ground |
| 19 | Channel 5 Ground | Channel 13 Ground | Channel 5 Ground | GPI1 |
| 20 | Channel 4 Negative | Channel 12 Negative | Channel 4 Negative | Ground |
| 21 | Channel 3 Positive | Channel 11 Positive | Channel 3 Positive | GPI2 |
| 22 | Channel 3 Ground | Channel 11 Ground | Channel 3 Ground | Ground |
| 23 | Channel 2 Negative | Channel 10 Negative | Channel 2 Negative | GPI3 |
| 24 | Channel 1 Positive | Channel 9 Positive | Channel 1 Positive | Ground |
| 25 | Channel 1 Ground | Channel 9 Ground | Channel 1 Ground | GPI4 |

MPA1-MIX-8 Functional Schematic



Initial Setup

To realise the full benefits of your MPA1 Audio Monitor, TSL Products recommends connecting your MPA1 Audio Monitor to an Ethernet network during initial set-up and configuration.

Full configuration of your MPA1 Audio Monitor can be achieved by way of a suitable Client PC and Web-browser.

Setting the Control IP Address of your MPA1 Audio Monitor

All MPA1 Audio Monitors are shipped with a DHCP setting default to 'DHCP 'On'.

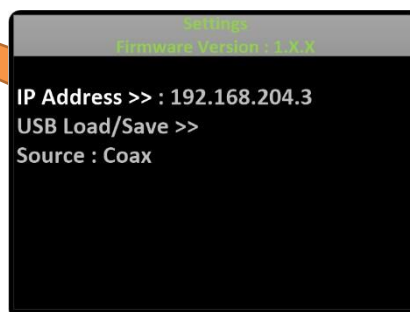
To determine the current IP address of your MPA1, push and hold the SELECT/MENU encoder for 3 seconds to access the **Settings** Menu.



The **Settings** Menu will now appear on the front panel display of your MPA1, with the current IP Address shown.

Using the SELECT/MENU encoder, you can scroll through the Settings Menu to highlight a Settings Sub-Menu of your choice.

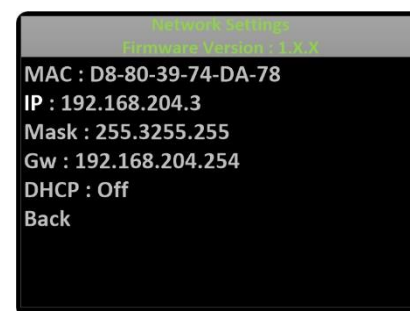
The availability of Sub-Menus is depicted by the presence of the following symbol: >>



With the IP Address Sub-Menu highlighted as shown, briefly push the SELECT/MENU encoder to access the **Network Settings** Menu (see below).

The SELECT/MENU encoder will now allow you to scroll through, select and modify the Network Settings of your MPA1 in accordance with the guidelines set by your Network Administrator.

Once complete, select BACK to return to the **Settings** Menu. You can exit the **Settings** Menu by pushing and holding the SELECT/MENU encoder for 3 seconds once more.



Accessing the Webpage of your MPA1

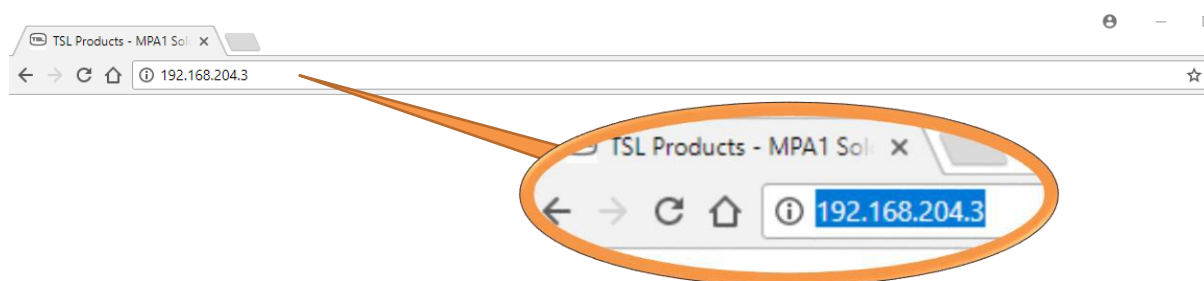
Configuring your MPA1 Audio Monitor using a Client PC and Web-Browser

With your MPA1 connected to an Ethernet network, you can remotely control and configure your MPA1 using a Client PC and Web-Browser.

The MPA1 Webpage allows you to optimise your MPA1 for your environment and the workflow you need to support.

Settings such as the brightness of the front panel display, which sources may be selected from the front panel of the unit and the behaviour of the MPA1 when used with Headphones can all be set using the MPA1 Webpage.

Enter the IP Address of your MPA1 into a Web-Browser



The MPA1 Webpage comprises multiple Tabs, providing quick navigation to specific sections of the MPA1 configuration, providing quick and easy setup.

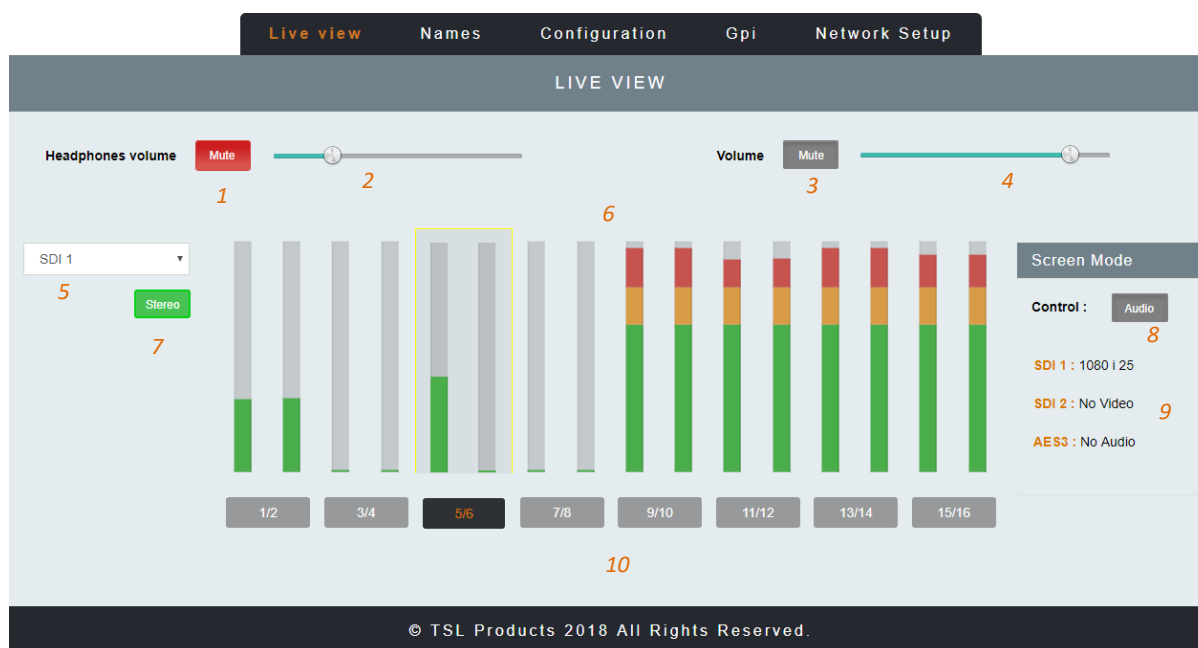
Separate Tabs for LIVE VIEW, NAMES, CONFIGURATION and NETWORK SETUP are present on the Webpage belonging to all MPA1-SOLO variants, whilst an extra ROUTING Tab can be found on all MPA1-MIX variants.



The following pages detail the contents and settings available for all MPA1 Audio Monitors

MPA1-SOLO-IP Webpage

Clicking on the LIVE VIEW Tab of the MPA1-SOLO-IP Webpage displays the following:



| Element | Function | Notes |
|---------|---------------------------------------|---|
| 1 | Switch to Mute Headphone Output | Red when Muted, Grey when Active |
| 2 | Headphone Output Level adjustment | Adjust as required |
| 3 | Switch to Mute the Loudspeaker Output | Red when Muted, Grey when Active |
| 4 | Loudspeaker Output Level adjustment | Adjust as required |
| 5 | Input Selection | Switches between SDI 1, SDI 2, SFP1, SFP2 and AES + Analogue Input Monitoring |
| 6 | Audio Level Meter Display | Displays Audio Levels in accordance with Input Selection |
| 7 | Stereo/Mono Switch | Switches Audio Monitoring Selectors between Single Audio Channel and Audio Pair mode. |
| 8 | Screen Mode Switch | Switches front panel display between Audio Metering and SDI Video Source. |
| 9 | Signal Format Display | Format display of SDI 1, SDI 2 and AES3 Inputs |
| 10 | Audio Monitor Selectors | Selects the Single Audio Channel or Audio Pair routed to the Headphone and Loudspeaker Outputs. |

Clicking on the NAMES Tab of the MPA1-SOLO-IP Webpage displays the following:

Live view Names Configuration Gpi Network Setup

GROUP NAMES

| Group | Active | Name |
|-------|---|---|
| 1 | 1 Yes | Rem 1 2 |
| 2 | No | Rem 2 |
| 3 | Yes | AES/Analog |

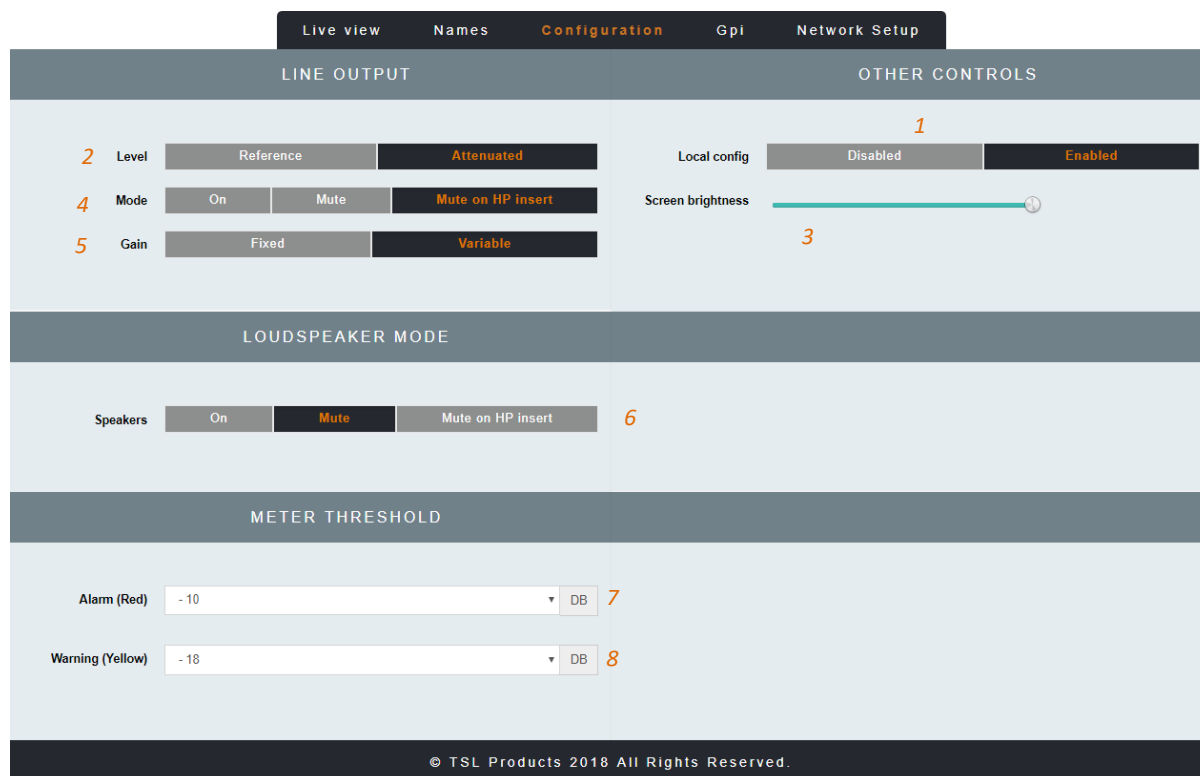
CHANNELS NAMES

SDI 1 | SDI 2 | Analog + AES

| Input | Auto | Name |
|---------|---|---|
| SDI 1:1 | No | 1 |
| SDI 1:2 | No | 2 |
| SDI 1:3 | No | 3 3 |
| SDI 1:4 | No | 4 |
| SDI 1:5 | No | 5 |

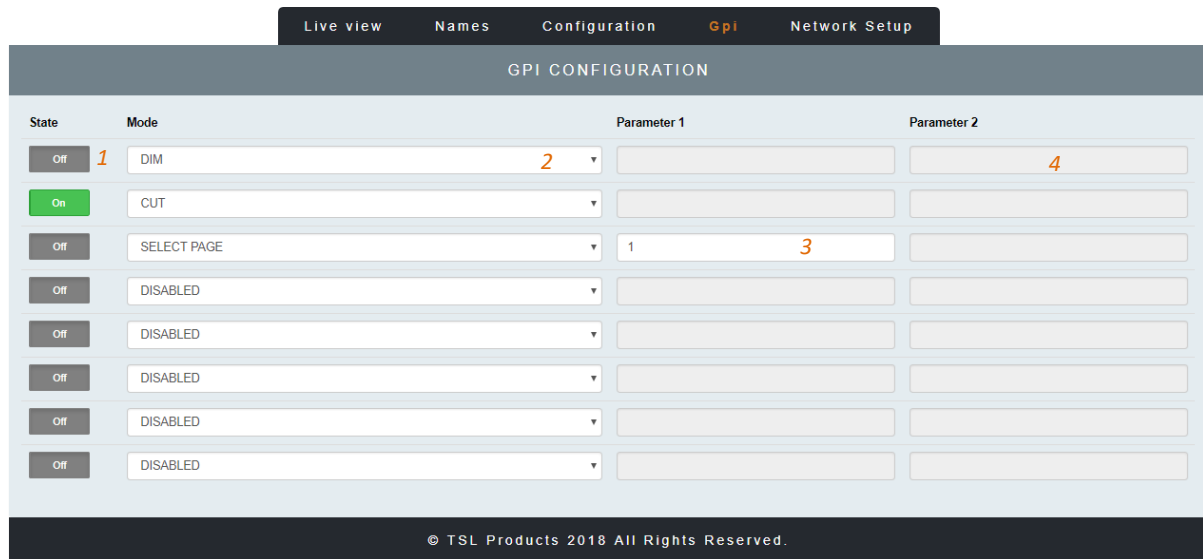
| Element | Function | Notes |
|---------|----------------------|--|
| 1 | Input Active Buttons | Allows unused inputs to be hidden from the Operator |
| 2 | Input Names | Allows friendly names to be applied to SDI 1, SDI 2, SFP1, SFP2 and AES/Analog Input Groups |
| 3 | Channel Names | Allows friendly names to be applied to all 16 Embedded Audio Channels belonging to SDI 1, SDI 2, SFP1 and SFP2 Inputs and AES and Analogue Channels. |

Clicking on the CONFIGURATION Tab of the MPA1-SOLO-IP Webpage displays the following:



| Element | Function | Notes |
|---------|-------------------------------|---|
| 1 | Local Config | Enables/Disables configuration from the front panel of the MPA1-SOLO-IP |
| 2 | Line Output Level | Sets the Output Level of the Balanced Line Level Outputs on the MPA1-SOLO-IP |
| 3 | Screen Brightness | Sets the Brightness Level of the front panel display |
| 4 | Line Output Mode | Determines behaviour of Balanced Line Level Outputs upon insertion of Headphones. |
| 5 | Fixed or Variable Line Output | Determines if Balanced Line Level Outputs provide a Fixed or Variable Output |
| 6 | Loudspeaker Mode | Determines behaviour of Internal Loudspeakers upon insertion of Headphones. |
| 7 | Meter Threshold RED | Sets audio threshold at which audio level meters begin to display RED |
| 8 | Meter Threshold YELLOW | Sets audio threshold at which audio level meters begin to display YELLOW |

Clicking on the GPI Tab of the MPA1-SOLO-IP Webpage displays the following:

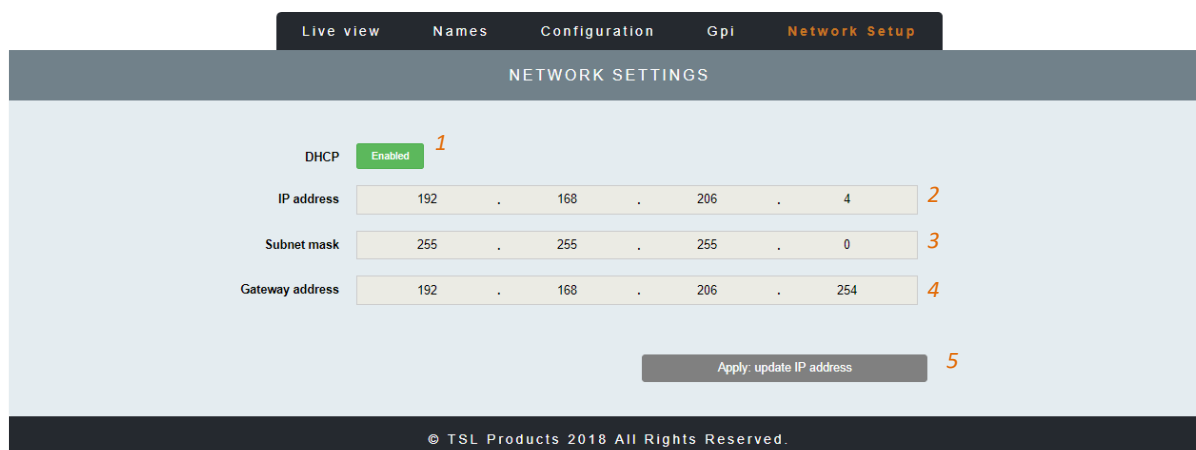


| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | Virtual GPI State button | Displays current Virtual GPI status. Also allows manual activation of Virtual GPI. |
| 2 | Virtual GPI Mode Selector | Allows GPI 'Action' to be assigned to Virtual GPI Input |
| 3 | Virtual GPI Parameter 1 | Defines first Parameter associated with selected GPI 'Action' |
| 4 | Virtual GPI Parameter 2 | Defines second Parameter associated with selected GPI 'Action' |

Please note that Virtual GPI Actions such as DIM and CUT require no further Parameters to be defined, whilst Virtual GPI Actions such as SELECT PAGE or SELECT PAGE and RETURN require entry of the desired audio channel.

All MPA1 Virtual GPI Parameters are zero based, with audio channels 1-16 represented as Parameters 0-15.

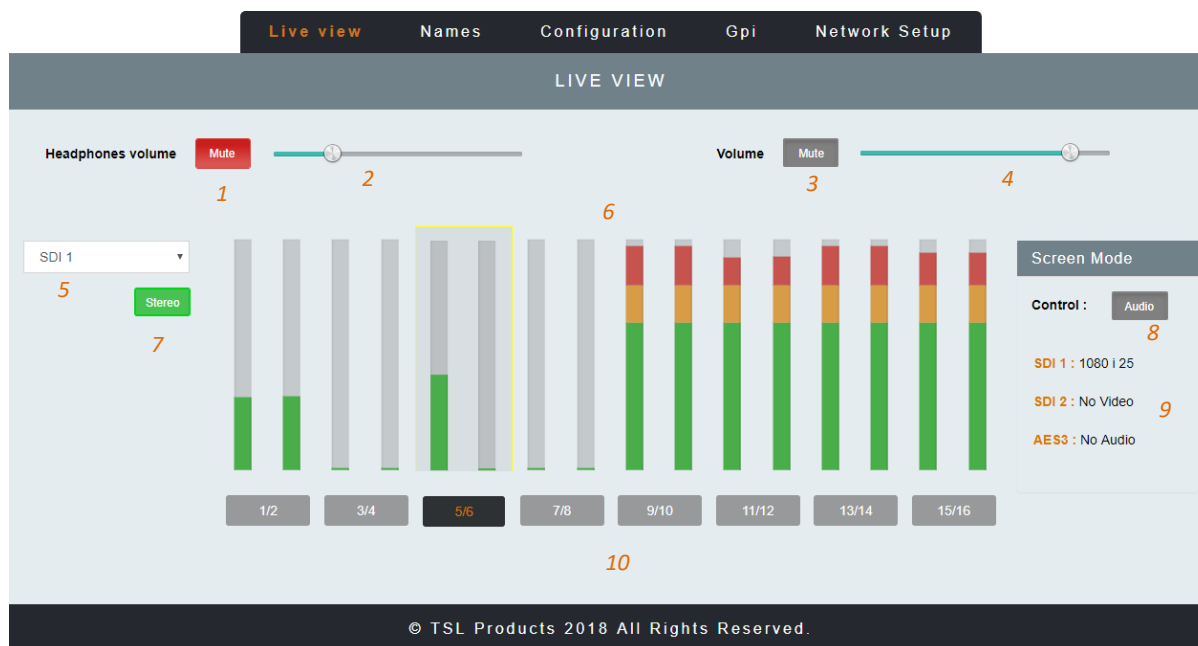
Clicking on the NETWORK SETTINGS Tab of the MPA1-SOLO-IP Webpage displays the following:



| Element | Function | Notes |
|---------|------------------|--|
| 1 | DHCP | Enables/Disables DHCP Mode |
| 2 | IP Address | Displays current IP Address and allows new IP Address to be entered. |
| 3 | Subnet Mask | Displays current Subnet Mask and allows new Subnet Mask to be entered. |
| 4 | Gateway Address | Displays current Gateway Address and allows new Gateway Address to be entered. |
| 5 | Apply IP Address | Button to apply IP, Subnet and Gateway addresses to the MPA1-SOLO-IP |

MPA1-SOLO-SDI Webpage

Clicking on the LIVE VIEW Tab of the MPA1-SOLO-SDI Webpage displays the following:



| Element | Function | Notes |
|---------|---------------------------------------|---|
| 1 | Switch to Mute Headphone Output | Red when Muted, Grey when Active |
| 2 | Headphone Output Level adjustment | Adjust as required |
| 3 | Switch to Mute the Loudspeaker Output | Red when Muted, Grey when Active |
| 4 | Loudspeaker Output Level adjustment | Adjust as required |
| 5 | Input Selection | Switches between SDI 1, SDI 2 and AES + Analogue Input Monitoring |
| 6 | Audio Level Meter Display | Displays Audio Levels in accordance with Input Selection |
| 7 | Stereo/Mono Switch | Switches Audio Monitoring Selectors between Single Audio Channel and Audio Pair mode. |
| 8 | Screen Mode Switch | Switches front panel display between Audio Metering and SDI Video Source. |
| 9 | Signal Format Display | Format display of SDI 1, SDI 2 and AES3 Inputs |
| 10 | Audio Monitor Selectors | Selects the Single Audio Channel or Audio Pair routed to the Headphone and Loudspeaker Outputs. |

Clicking on the NAMES Tab of the MPA1-SOLO-SDI Webpage displays the following:

Live view Names Configuration Gpi Network Setup

GROUP NAMES

| Group | Active | Name |
|-------|---|---|
| 1 | 1 Yes | Rem 1 2 |
| 2 | No | Rem 2 |
| 3 | Yes | AES/Analog |

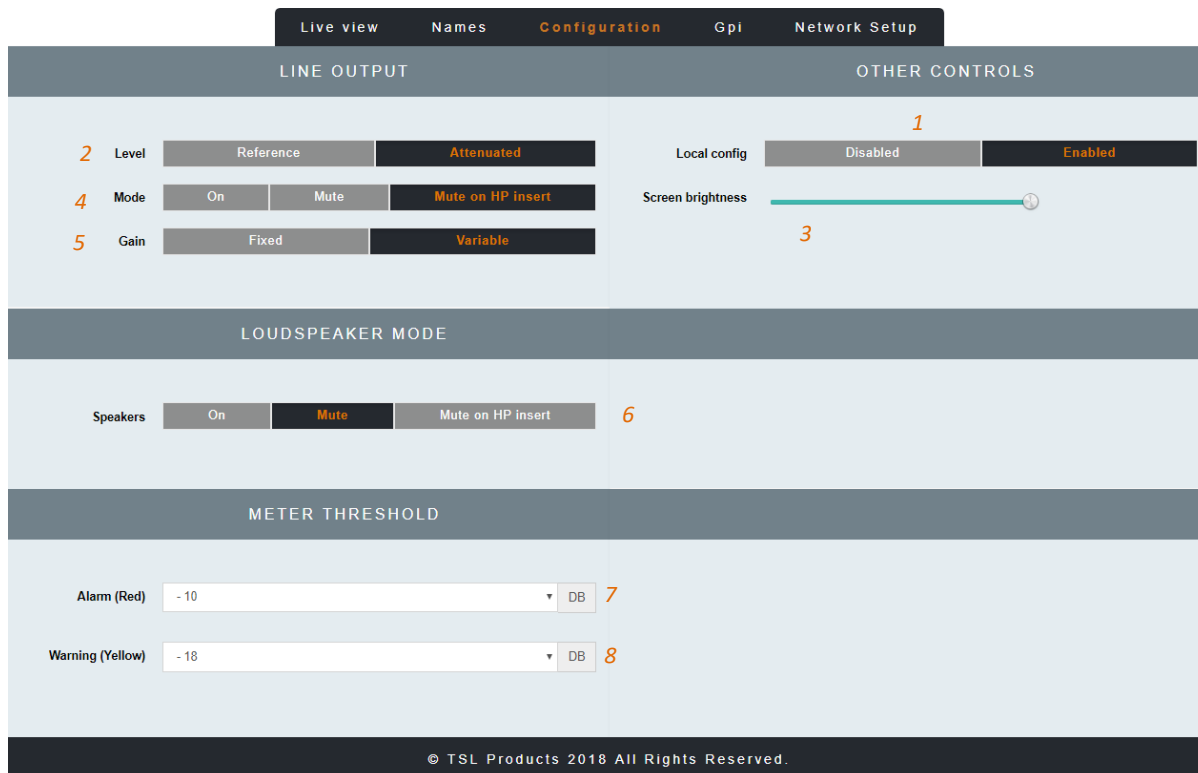
CHANNELS NAMES

SDI 1 | SDI 2 | Analog + AES

| Input | Auto | Name |
|---------|---|---|
| SDI 1:1 | No | 1 |
| SDI 1:2 | No | 2 |
| SDI 1:3 | No | 3 3 |
| SDI 1:4 | No | 4 |
| SDI 1:5 | No | 5 |

| Element | Function | Notes |
|---------|----------------------|--|
| 1 | Input Active Buttons | Allows unused inputs to be hidden from the Operator |
| 2 | Input Names | Allows friendly names to be applied to SDI 1, SDI 2 and AES/Analog Input Groups |
| 3 | Channel Names | Allows friendly names to be applied to all 16 Embedded Audio Channels belonging to SDI 1 and SDI 2 Inputs and AES and Analogue Channels. |

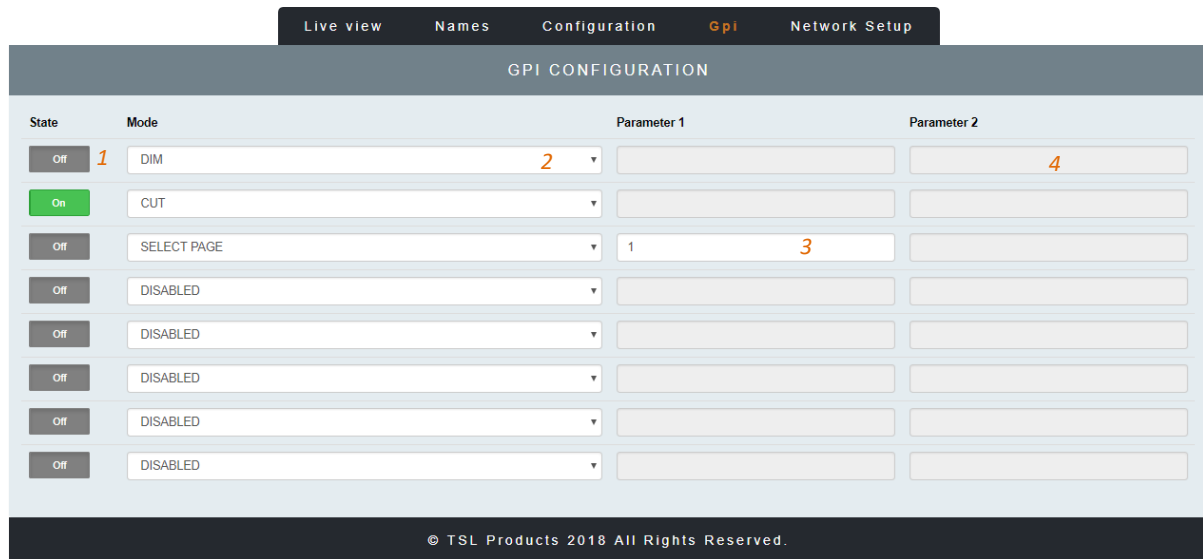
Clicking on the CONFIGURATION Tab of the MPA1-SOLO-SDI Webpage displays the following:



The screenshot shows the Configuration tab of the MPA1-SOLO-SDI web interface. It features several sections for configuring the device's output and controls. The 'LINE OUTPUT' section allows setting the output level (Reference or Attenuated), mode (On, Mute, or Mute on HP insert), and gain (Fixed or Variable). The 'OTHER CONTROLS' section includes a toggle for Local config (Disabled or Enabled) and a slider for Screen brightness. The 'LOUDSPEAKER MODE' section has a toggle for Speakers (On, Mute, or Mute on HP insert). The 'METER THRESHOLD' section sets Alarm (Red) and Warning (Yellow) thresholds in dB. Numbered callouts 1 through 8 identify specific UI elements for reference.

| Element | Function | Notes |
|---------|-------------------------------|---|
| 1 | Local Config | Enables/Disables configuration from the front panel of the MPA1-SOLO-SDI |
| 2 | Line Output Level | Sets the Output Level of the Balanced Line Level Outputs on the MPA1-SOLO-SDI |
| 3 | Screen Brightness | Sets the Brightness Level of the front panel display |
| 4 | Line Output Mode | Determines behaviour of Balanced Line Level Outputs upon insertion of Headphones. |
| 5 | Fixed or Variable Line Output | Determines if Balanced Line Level Outputs provide a Fixed or Variable Output |
| 6 | Loudspeaker Mode | Determines behaviour of Internal Loudspeakers upon insertion of Headphones. |
| 7 | Meter Threshold RED | Sets audio threshold at which audio level meters begin to display RED |
| 8 | Meter Threshold YELLOW | Sets audio threshold at which audio level meters begin to display YELLOW |

Clicking on the GPI Tab of the MPA1-SOLO-SDI Webpage displays the following:

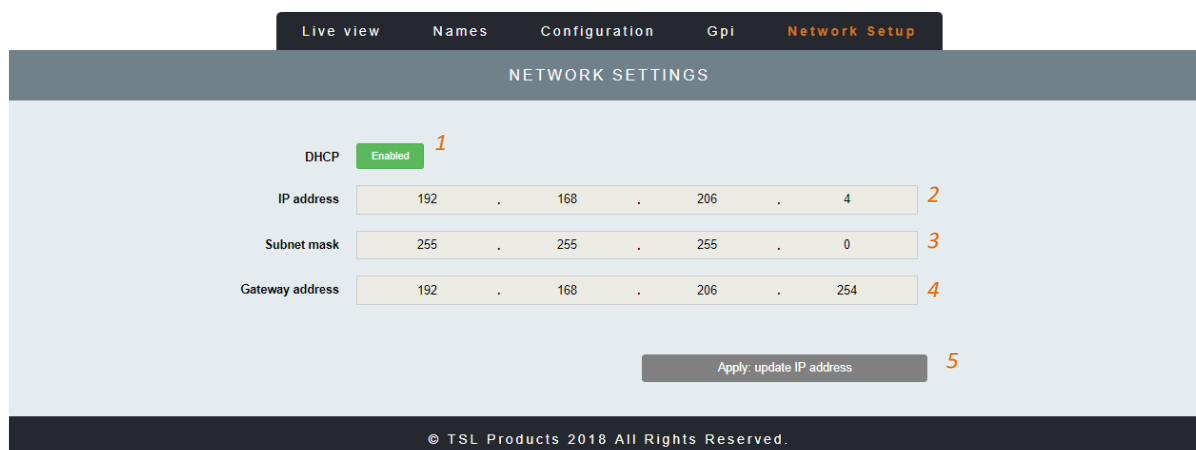


| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | Virtual GPI State button | Displays current Virtual GPI status. Also allows manual activation of Virtual GPI. |
| 2 | Virtual GPI Mode Selector | Allows GPI 'Action' to be assigned to Virtual GPI Input |
| 3 | Virtual GPI Parameter 1 | Defines first Parameter associated with selected GPI 'Action' |
| 4 | Virtual GPI Parameter 2 | Defines second Parameter associated with selected GPI 'Action' |

Please note that Virtual GPI Actions such as DIM and CUT require no further Parameters to be defined, whilst Virtual GPI Actions such as SELECT PAGE or SELECT PAGE and RETURN require entry of the desired audio channel.

All MPA1 Virtual GPI Parameters are zero based, with audio channels 1-16 represented as Parameters 0-15.

Clicking on the NETWORK SETTINGS Tab of the MPA1-SOLO-SDI Webpage displays the following:



| Element | Function | Notes |
|---------|------------------|--|
| 1 | DHCP | Enables/Disables DHCP Mode |
| 2 | IP Address | Displays current IP Address and allows new IP Address to be entered. |
| 3 | Subnet Mask | Displays current Subnet Mask and allows new Subnet Mask to be entered. |
| 4 | Gateway Address | Displays current Gateway Address and allows new Gateway Address to be entered. |
| 5 | Apply IP Address | Button to apply IP, Subnet and Gateway addresses to the MPA1-SOLO-SDI |

MPA1-SOLO-MADI Web Page

Clicking on the LIVE VIEW Tab of the MPA1-SOLO-MADI Webpage displays the following:



| Element | Function | Notes |
|---------|---------------------------------------|---|
| 1 | Switch to Mute Headphone Output | Red when Muted, Grey when Active |
| 2 | Headphone Output Level adjustment | Adjust as required |
| 3 | Switch to MUTE the Loudspeaker Output | Red when Muted, Grey when Active |
| 4 | Loudspeaker Output Level Adjustment | Adjust as required |
| 5 | Source Selection | Drop down list allowing Input selection of MADI Sources 1-64 and Analog Sources 1-8. |
| 6 | Audio Level Meter Display | Displays Audio Levels in accordance with Input Selection |
| 7 | Stereo/Mono Switch | Switches between Mono and Stereo monitoring modes. |
| 8 | Audio Monitor Selectors | Selects the Single Audio Channel or Audio Pair routed to the headphone and Loudspeaker Outputs. |

Clicking on the NAMES Tab of the MPA1-SOLO-MADI Webpage displays the following:

Live view Names Configuration Gpi Network Setup

CHANNELS NAMES

| Input | Auto | All | Name |
|--------|---------------------------------------|-----|--|
| Madi 1 | No | | Madi : 1 |
| Madi 2 | No | | Madi : 2 |
| Madi 3 | 1 | No | Madi : 3 2 |
| Madi 4 | No | | Madi : 4 |
| Madi 5 | No | | Madi : 5 |
| Madi 6 | No | | Madi : 6 |
| Madi 7 | No | | Madi : 7 |
| Madi 8 | No | | Madi : 8 |

...

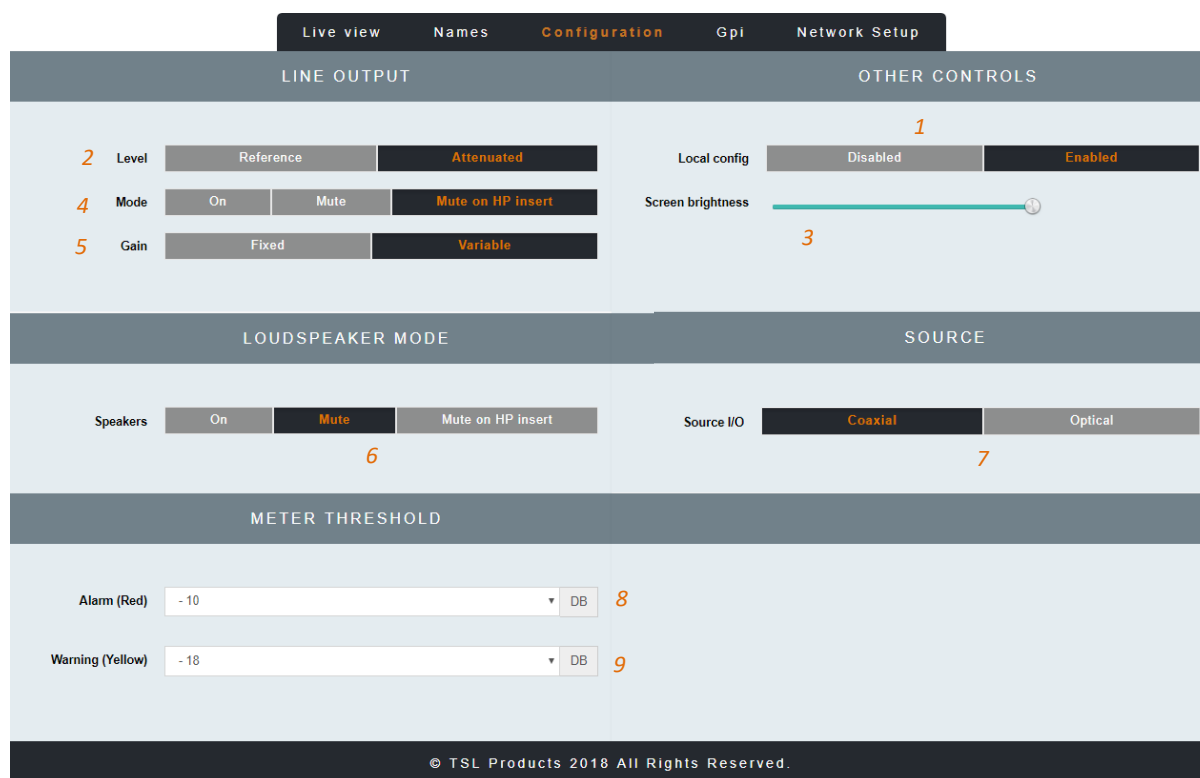
| | | |
|----------|----|-------------|
| Analog 5 | No | Analog : 69 |
| Analog 6 | No | Analog : 70 |
| Analog 7 | No | Analog : 71 |
| Analog 8 | No | Analog : 72 |

© TSL Products 2017 All Rights Reserved.

| Element | Function | Notes |
|---------|------------------------------|--|
| 1 | MADI/Analogue Channel Number | |
| 2 | Source Channel Names | Allows friendly names to be applied to MADI Channels 1-64 and Analogue Channels 1-8* |

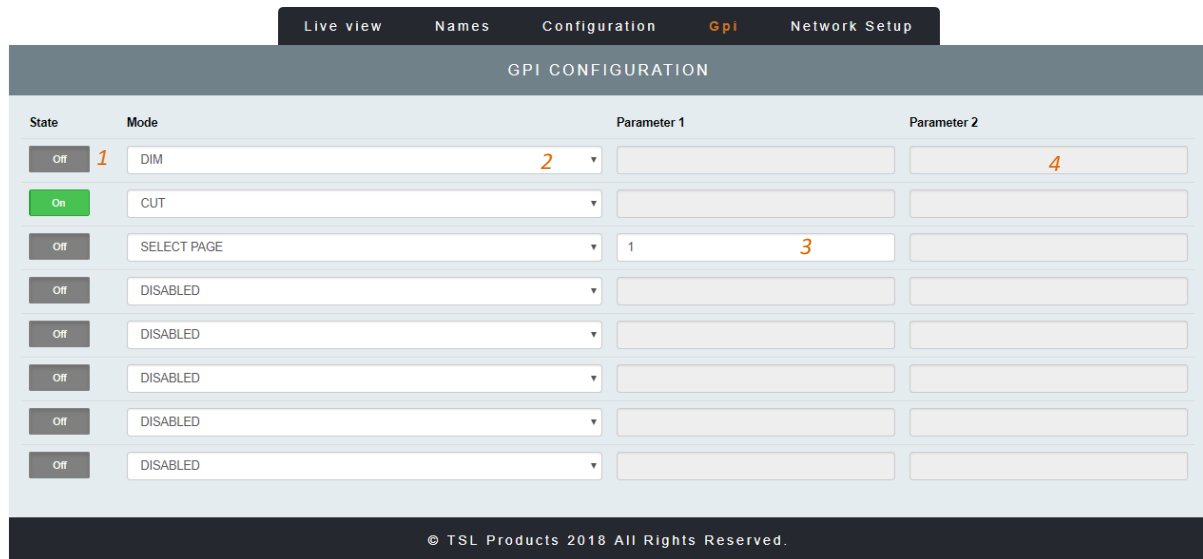
* Please note that the Auto Naming function is fixed to NO on the MP1-SOLO-MADI

Clicking on the CONFIGURATION Tab of the MPA1-SOLO-MADI Webpage displays the following:



| Element | Function | Notes |
|---------|-------------------------------|--|
| 1 | Local Config | Enables/Disables configuration from the front panel of the MPA1-SOLO-MADI |
| 2 | Line Output Level | Sets the Output Level of the Balanced Line Level Outputs on the MPA1-SOLO-MADI |
| 3 | Screen Brightness | Sets the Brightness Level of the front panel display |
| 4 | Line Output Mode | Determines behaviour of Balanced Line Level Outputs upon insertion of Headphones. |
| 5 | Fixed or Variable Line Output | Determines if Balanced Line Level Outputs provide a Fixed or Variable Output |
| 6 | Loudspeaker Mode | Determines behaviour of Internal Loudspeakers upon insertion of Headphones. |
| 7 | Source I/O | Switch to set whether the Coaxial BNC or Optical SFP input is to be used to receive MADI |
| 8 | Meter Threshold RED | Sets audio threshold at which audio level meters begin to display RED |
| 9 | Meter Threshold YELLOW | Sets audio threshold at which audio level meters begin to display YELLOW |

Clicking on the GPI Tab of the MPA1-SOLO-MADI Webpage displays the following:

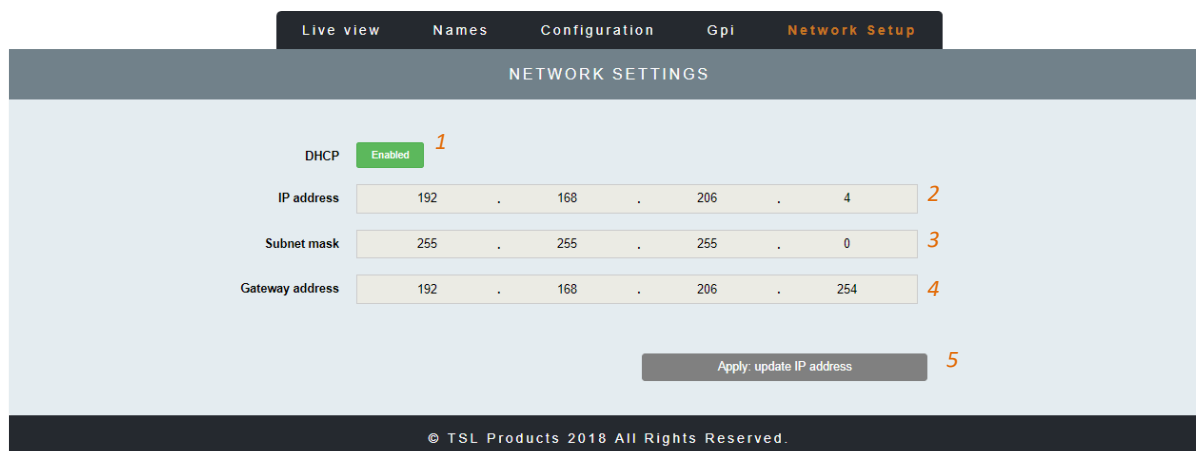


| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | Virtual GPI State button | Displays current Virtual GPI status. Also allows manual activation of Virtual GPI. |
| 2 | Virtual GPI Mode Selector | Allows GPI 'Action' to be assigned to Virtual GPI Input |
| 3 | Virtual GPI Parameter 1 | Defines first Parameter associated with selected GPI 'Action' |
| 4 | Virtual GPI Parameter 2 | Defines second Parameter associated with selected GPI 'Action' |

Please note that Virtual GPI Actions such as DIM and CUT require no further Parameters to be defined, whilst Virtual GPI Actions such as SELECT PAGE or SELECT PAGE and RETURN require entry of the desired audio channel.

All MPA1 Virtual GPI Parameters are zero based, with audio channels 1-16 represented as Parameters 0-15.

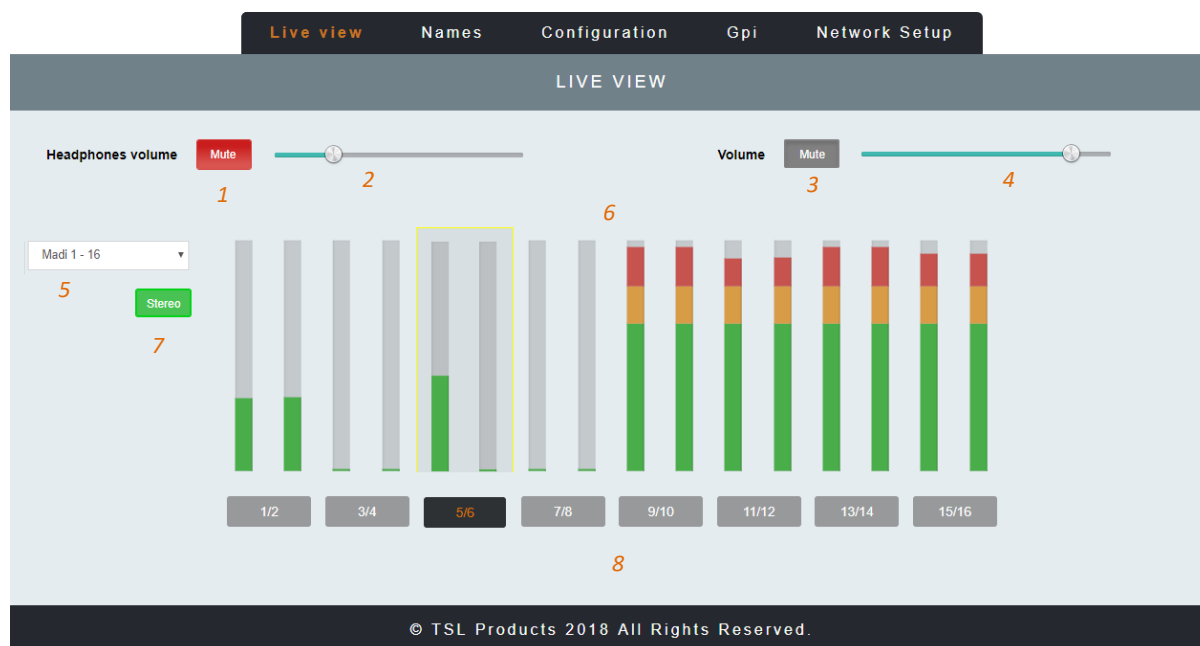
Clicking on the NETWORK SETTINGS Tab of the MPA1-SOLO-MADI Webpage displays the following:



| Element | Function | Notes |
|---------|------------------|--|
| 1 | DHCP | Enables/Disables DHCP Mode |
| 2 | IP Address | Displays current IP Address and allows new IP Address to be entered. |
| 3 | Subnet Mask | Displays current Subnet Mask and allows new Subnet Mask to be entered. |
| 4 | Gateway Address | Displays current Gateway Address and allows new Gateway Address to be entered. |
| 5 | Apply IP Address | Button to apply IP, Subnet and Gateway addresses to the MPA1-SOLO-MADI |

MPA1-SOLO-DANTE Web Page

Clicking on the LIVE VIEW Tab of the MPA1-SOLO-DANTE Webpage displays the following:



| Element | Function | Notes |
|---------|---------------------------------------|--|
| 1 | Switch to Mute Headphone Output | Red when Muted, Grey when Active |
| 2 | Headphone Output Level adjustment | Adjust as required |
| 3 | Switch to MUTE the Loudspeaker Output | Red when Muted, Grey when Active |
| 4 | Loudspeaker Output Level adjustment | Adjust as required |
| 5 | Source Selection | Drop down list allowing Input selection of MADi Sources 1-64 and Dante Sources 1-64 |
| 6 | Audio Level Meter Display | Displays Audio Levels in accordance with Input Selection |
| 7 | Stereo/Mono Switch | Switches between Mono and Stereo monitoring modes |
| 8 | Audio Monitor Selectors | Selects the Single Audio Channel or Audio Pair routed to the Headphone and Loudspeaker Outputs |

Clicking on the NAMES Tab of the MPA1-SOLO-DANTE Webpage displays the following:

Live view Names Configuration Gpi Network Setup

CHANNELS NAMES

| Input | Auto | All | Name |
|--|------|-----|--|
| Madi 1 | No | | Madi : 1 |
| Madi 2 | No | | Madi : 2 |
| Madi 3 1 | No | | Madi : 3 2 |
| Madi 4 | No | | Madi : 4 |
| Madi 5 | No | | Madi : 5 |
| Madi 6 | No | | Madi : 6 |
| Madi 7 | No | | Madi : 7 |
| Madi 8 | No | | Madi : 8 |

...

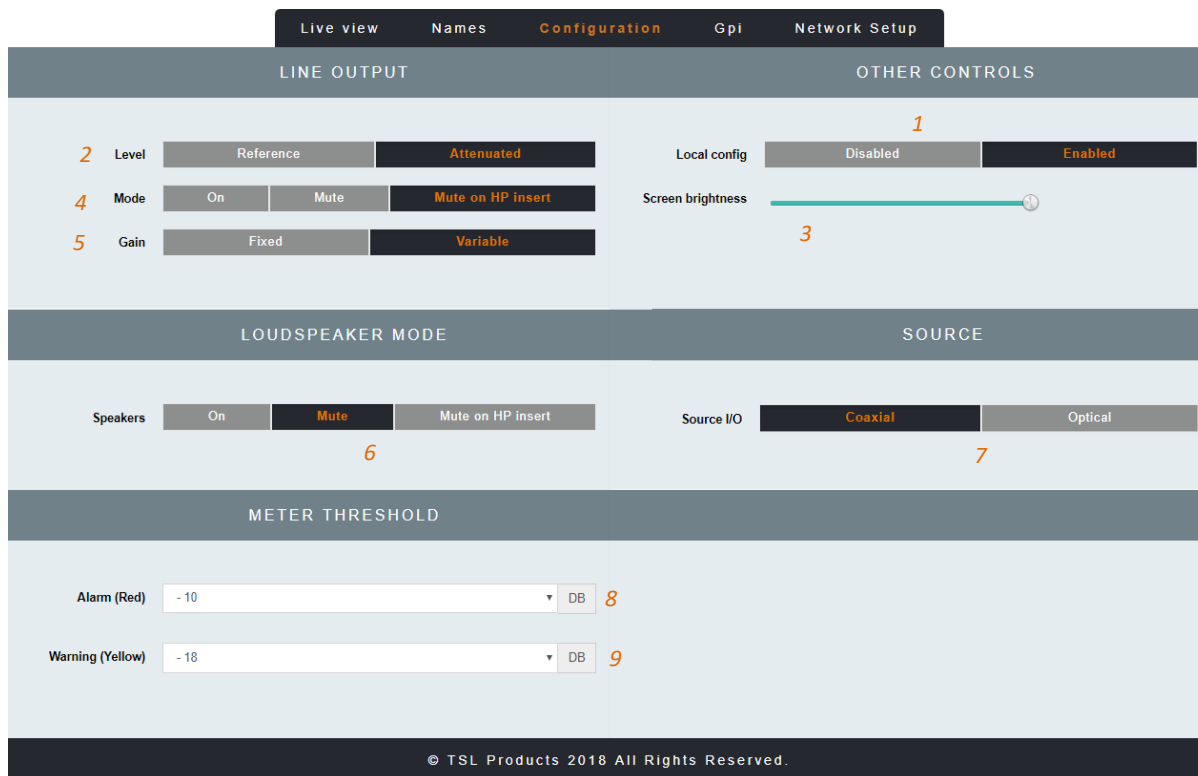
| | | |
|----------|-----|------------|
| Dante 59 | Yes | Dante : 59 |
| Dante 60 | Yes | Dante : 60 |
| Dante 61 | Yes | Dante : 61 |
| Dante 62 | Yes | Dante : 62 |
| Dante 63 | Yes | Dante : 63 |
| Dante 64 | Yes | Dante : 64 |

© TSL Products 2017 All Rights Reserved.

| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | DANTE/MADI Channel Number | |
| 2 | Source Channel Names | Allows friendly names to be applied to DANTE Channels 1-64 and MADI Channels 1-64* |

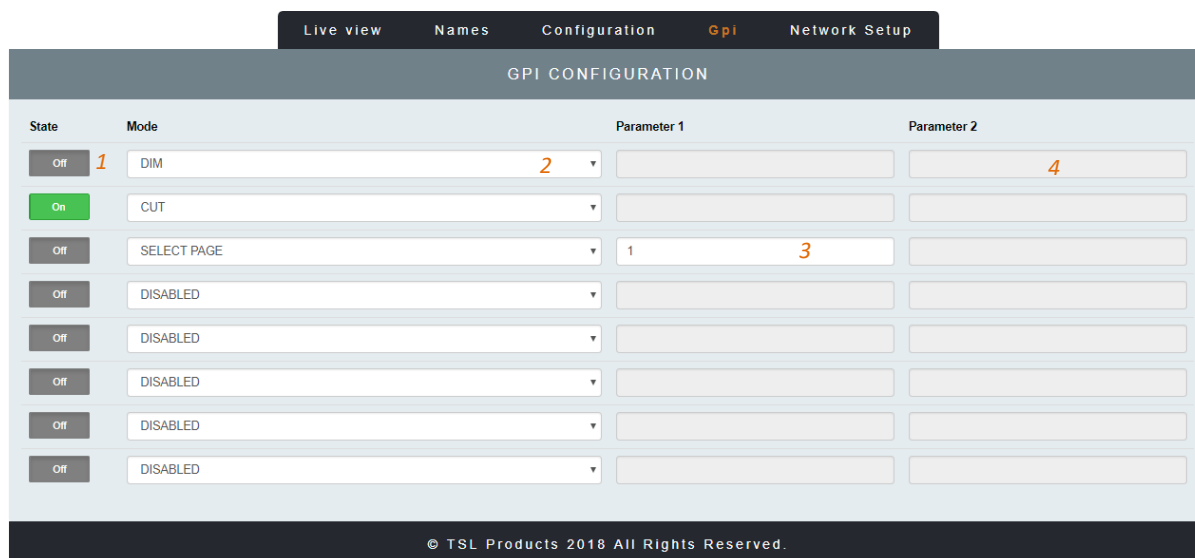
* Please note that the Auto Naming function is fixed to NO on the MP1-SOLO-MADI for MADI Sources. When Auto Naming is set to 'YES' for DANTE sources, friendly names will be ignored, with Source Names as set in DANTE Controller

Clicking on the CONFIGURATION Tab of the MPA1-SOLO-DANTE Webpage displays the following:



| Element | Function | Notes |
|---------|-------------------------------|--|
| 1 | Local Config | Enables/Disables configuration from the front panel of the MPA1-SOLO-DANTE |
| 2 | Line Output Level | Sets the Output Level of the Balanced Line Level Outputs on the MPA1-SOLO-DANTE |
| 3 | Screen Brightness | Sets the Brightness Level of the front panel display |
| 4 | Line Output Mode | Determines behaviour of Balanced Line Level Outputs upon insertion of Headphones. |
| 5 | Fixed or Variable Line Output | Determines if Balanced Line Level Outputs provide a Fixed or Variable Output |
| 6 | Loudspeaker Mode | Determines behaviour of Internal Loudspeakers upon insertion of Headphones. |
| 7 | Source I/O | Switch to set whether the Coaxial BNC or Optical SFP input is to be used to receive MADI |
| 8 | Meter Threshold RED | Sets audio threshold at which audio level meters begin to display RED |
| 9 | Meter Threshold YELLOW | Sets audio threshold at which audio level meters begin to display YELLOW |

Clicking on the GPI Tab of the MPA1-SOLO-DANTE Webpage displays the following:

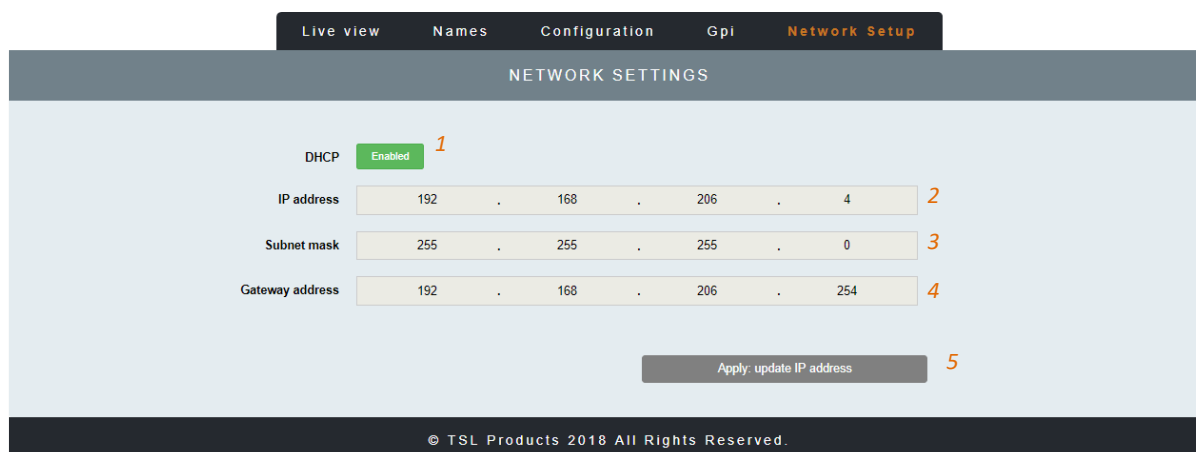


| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | Virtual GPI State button | Displays current Virtual GPI status. Also allows manual activation of Virtual GPI. |
| 2 | Virtual GPI Mode Selector | Allows GPI 'Action' to be assigned to Virtual GPI Input |
| 3 | Virtual GPI Parameter 1 | Defines first Parameter associated with selected GPI 'Action' |
| 4 | Virtual GPI Parameter 2 | Defines second Parameter associated with selected GPI 'Action' |

Please note that Virtual GPI Actions such as DIM and CUT require no further Parameters to be defined, whilst Virtual GPI Actions such as SELECT PAGE or SELECT PAGE and RETURN require entry of the desired audio channel.

All MPA1 Virtual GPI Parameters are zero based, with audio channels 1-16 represented as Parameters 0-15.

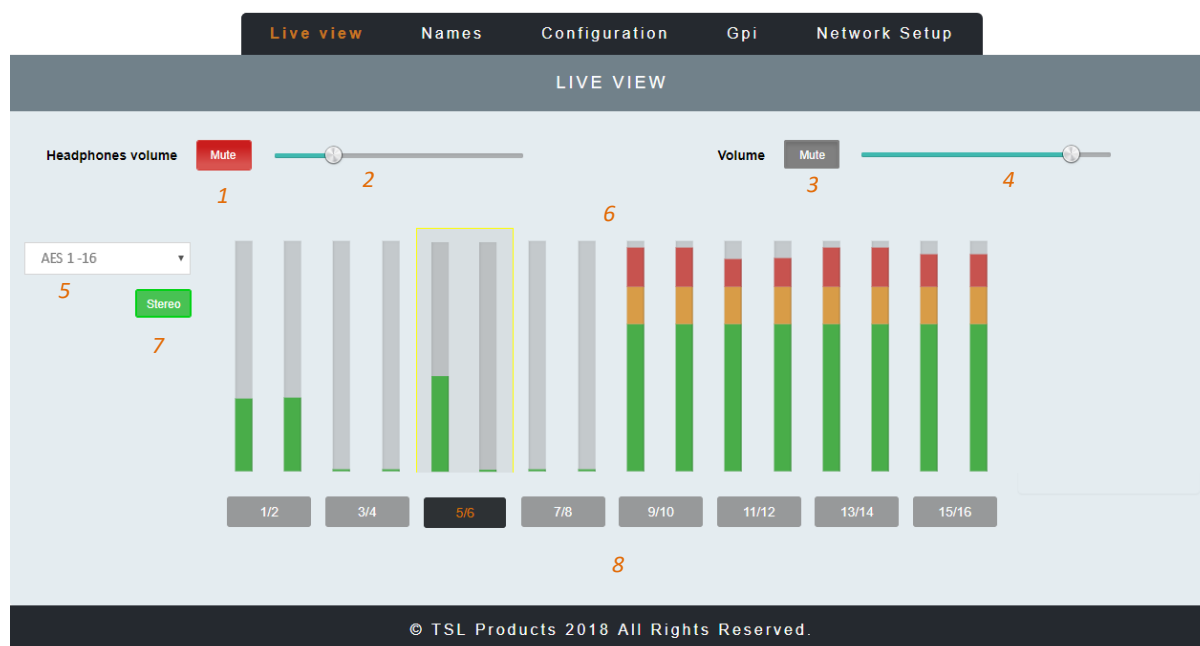
Clicking on the NETWORK SETTINGS Tab of the MPA1-SOLO-DANTE Webpage displays the following:



| Element | Function | Notes |
|---------|------------------|--|
| 1 | DHCP | Enables/Disables DHCP Mode |
| 2 | IP Address | Displays current IP Address and allows new IP Address to be entered. |
| 3 | Subnet Mask | Displays current Subnet Mask and allows new Subnet Mask to be entered. |
| 4 | Gateway Address | Displays current Gateway Address and allows new Gateway Address to be entered. |
| 5 | Apply IP Address | Button to apply IP, Subnet and Gateway addresses to the MPA1-SOLO-DANTE |

MPA1-SOLO-8 Web Page

Clicking on the LIVE VIEW Tab of the MPA1-SOLO-8 Webpage displays the following:



| Element | Function | Notes |
|---------|---------------------------------------|---|
| 1 | Switch to Mute Headphone Output | Red when Muted, Grey when Active |
| 2 | Headphone Output Level adjustment | Adjust as required |
| 3 | Switch to MUTE the Loudspeaker Output | Red when Muted, Grey when Active |
| 4 | Loudspeaker Output Level Adjustment | Adjust as required |
| 5 | Source Selection | Drop down list allowing Input selection of AES Sources 1-16 and Analog Sources 1-16. |
| 6 | Audio Level Meter Display | Displays Audio Levels in accordance with Input Selection |
| 7 | Stereo/Mono Switch | Switches between Mono and Stereo monitoring modes. |
| 8 | Audio Monitor Selectors | Selects the Single Audio Channel or Audio Pair routed to the headphone and Loudspeaker Outputs. |

Clicking on the NAMES Tab of the MPA1-SOLO-8 Webpage displays the following:

Live view Names Configuration Gpi Network Setup

CHANNELS NAMES

| Input | Auto | All | Name |
|---|------|-------------------------------------|---|
| AES 1 1 | No | <input checked="" type="checkbox"/> | AES : 1 2 |
| AES 2 | No | <input type="checkbox"/> | AES : 2 |
| AES 3 | No | <input type="checkbox"/> | AES : 3 |
| AES 4 | No | <input type="checkbox"/> | AES : 4 |
| AES 5 | No | <input type="checkbox"/> | AES : 5 |
| AES 6 | No | <input type="checkbox"/> | AES : 6 |
| AES 7 | No | <input type="checkbox"/> | AES : 7 |
| AES 8 | No | <input type="checkbox"/> | AES : 8 |

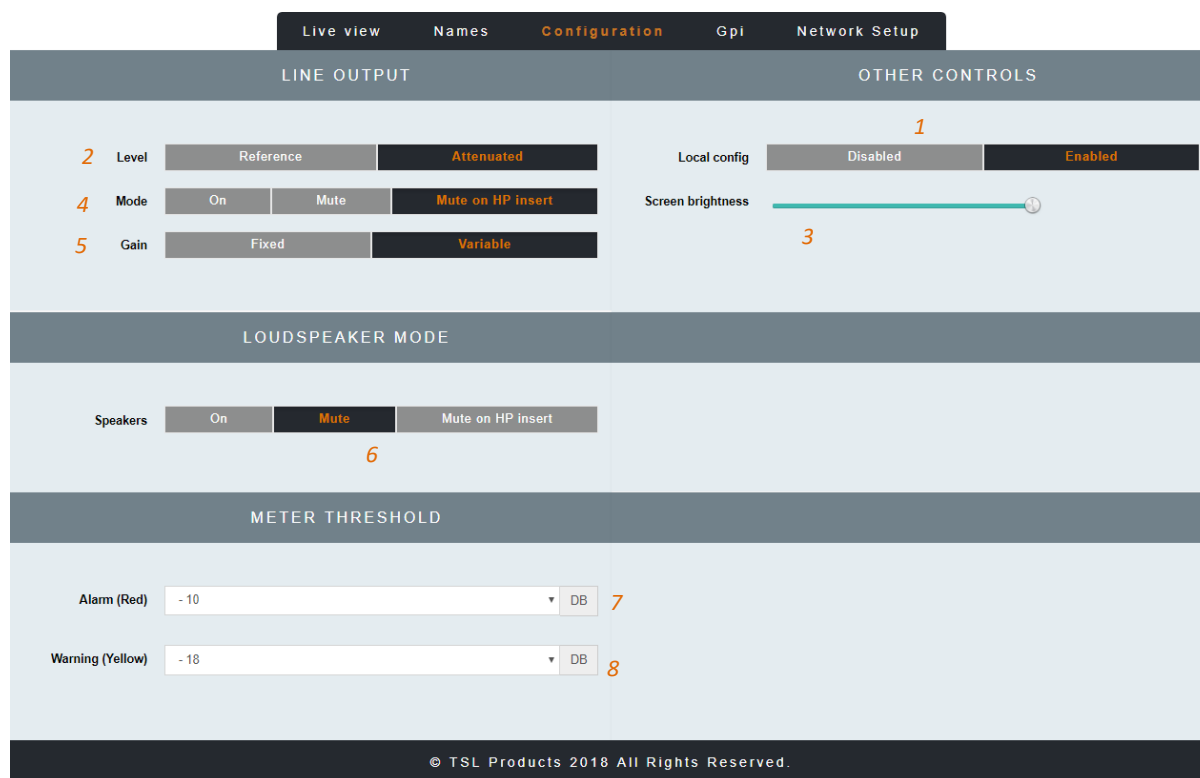
2

| | | |
|----------|----|------------|
| Analog 5 | No | Analog : 5 |
| Analog 6 | No | Analog : 6 |
| Analog 7 | No | Analog : 7 |
| Analog 8 | No | Analog : 8 |

© TSL Products 2017 All Rights Reserved.

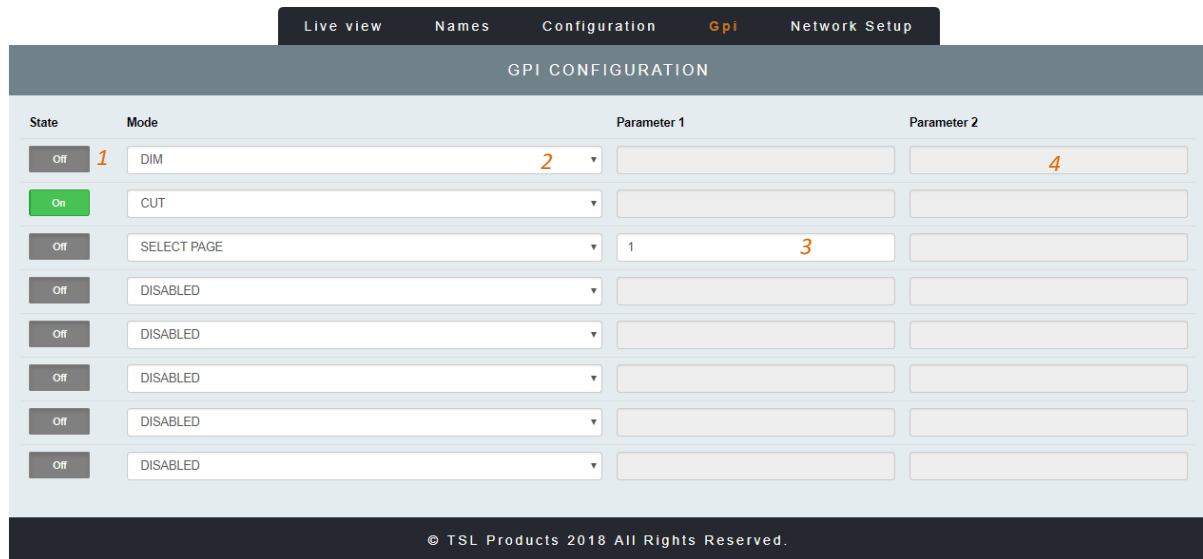
| Element | Function | Notes |
|---------|---------------------------|---|
| 1 | AES/Analog Channel Number | |
| 2 | Source Channel Names | Allows friendly names to be applied to AES Channels 1-16 and Analog Channels 1-16 |

Clicking on the CONFIGURATION Tab of the MPA1-SOLO-8 Webpage displays the following:



| Element | Function | Notes |
|---------|-------------------------------|---|
| 1 | Local Config | Enables/Disables configuration from the front panel of the MPA1-SOLO-8 |
| 2 | Line Output Level | Sets the Output Level of the Balanced Line Level Outputs on the MPA1-SOLO-8 |
| 3 | Screen Brightness | Sets the Brightness Level of the front panel display |
| 4 | Line Output Mode | Determines behaviour of Balanced Line Level Outputs upon insertion of Headphones. |
| 5 | Fixed or Variable Line Output | Determines if Balanced Line Level Outputs provide a Fixed or Variable Output |
| 6 | Loudspeaker Mode | Determines behaviour of Internal Loudspeakers upon insertion of Headphones. |
| 7 | Meter Threshold RED | Sets audio threshold at which audio level meters begin to display RED |
| 8 | Meter Threshold YELLOW | Sets audio threshold at which audio level meters begin to display YELLOW |

Clicking on the GPI Tab of the MPA1-SOLO-8 Webpage displays the following:

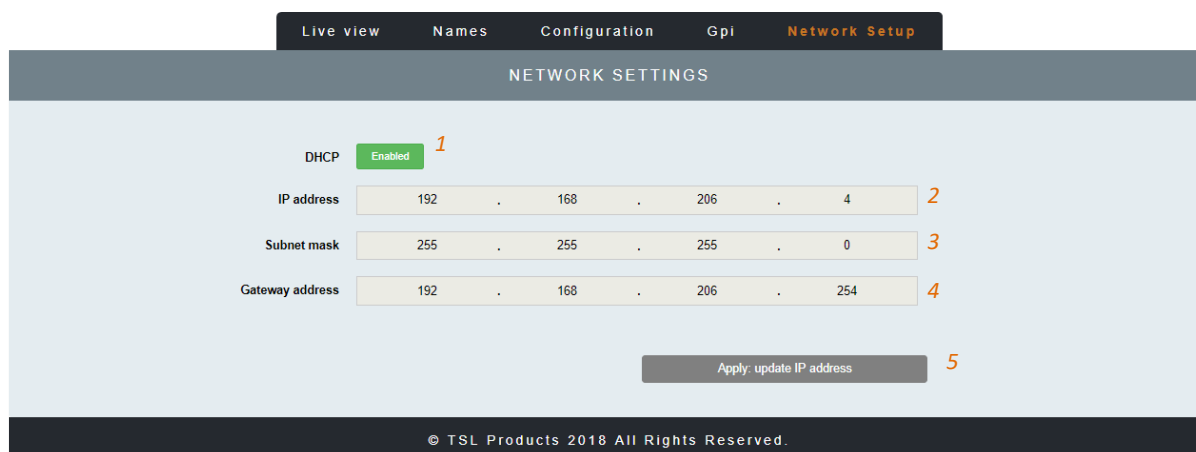


| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | Virtual GPI State button | Displays current GPI status. Also allows manual activation of Virtual GPI. |
| 2 | Virtual GPI Mode Selector | Allows GPI 'Action' to be assigned to GPI Input |
| 3 | Virtual GPI Parameter 1 | Defines first Parameter associated with selected GPI 'Action' |
| 4 | Virtual GPI Parameter 2 | Defines second Parameter associated with selected GPI 'Action' |

Please note that Virtual GPI Actions such as DIM and CUT require no further Parameters to be defined, whilst Virtual GPI Actions such as SELECT PAGE or SELECT PAGE and RETURN require entry of the desired audio channel.

All MPA1 Virtual GPI Parameters are zero based, with audio channels 1-16 represented as Parameters 0-15.

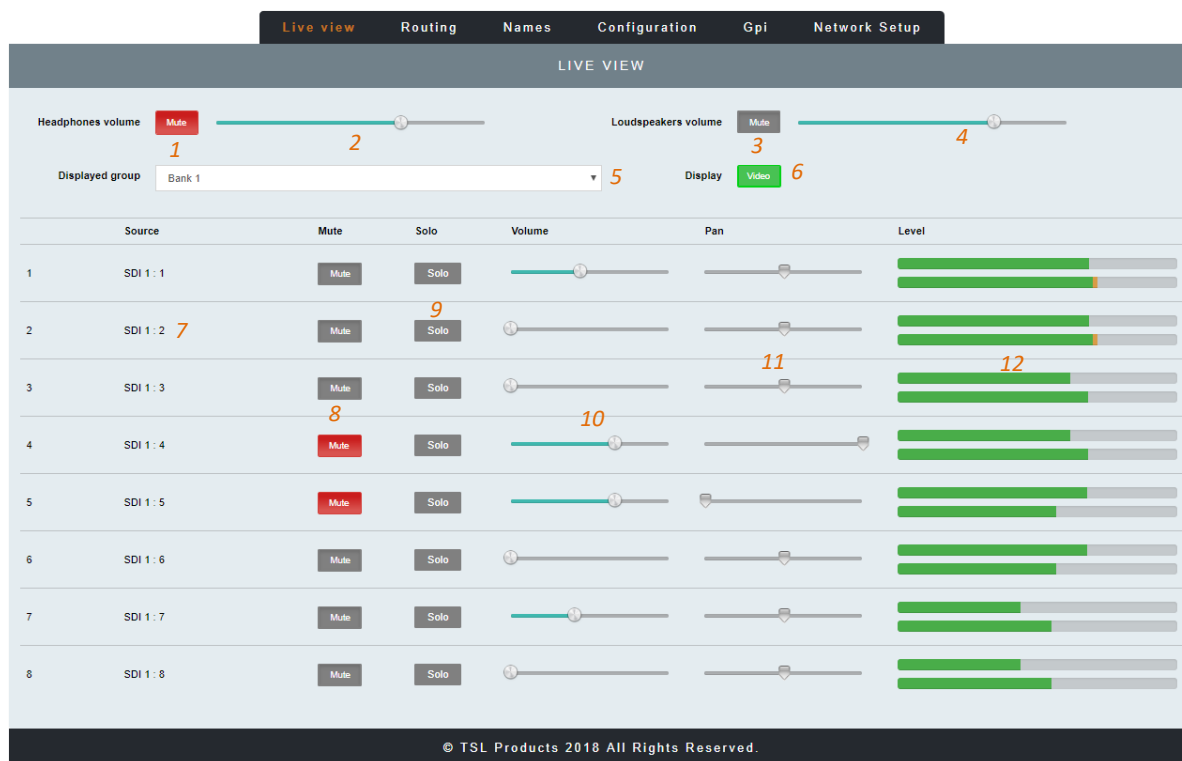
Clicking on the NETWORK SETTINGS Tab of the MPA1-SOLO-8 Webpage displays the following:



| Element | Function | Notes |
|---------|------------------|--|
| 1 | DHCP | Enables/Disables DHCP Mode |
| 2 | IP Address | Displays current IP Address and allows new IP Address to be entered. |
| 3 | Subnet Mask | Displays current Subnet Mask and allows new Subnet Mask to be entered. |
| 4 | Gateway Address | Displays current Gateway Address and allows new Gateway Address to be entered. |
| 5 | Apply IP Address | Button to apply IP, Subnet and Gateway addresses to the MPA1-SOLO-8 |

MPA1-MIX-SDI Web Page

Clicking on the LIVE VIEW Tab of the MPA1-MIX-SDI Webpage displays the following:



| Element | Function | Notes |
|---------|---------------------------------------|--|
| 1 | Switch to Mute Headphone Output | Red when Muted, Grey when Active |
| 2 | Headphone Output Level adjustment | Adjust as required |
| 3 | Switch to Mute the Loudspeaker Output | Red when Muted, Grey when Active |
| 4 | Loudspeaker Output Level adjustment | Adjust as required |
| 5 | Mix Bank Selection | Drop down list allowing recall of one of 16 Audio Mix Banks (A-P) |
| 6 | Display | Switches Front Panel Display of MPA1-MIX-SDI between Audio Meters and SDI Video Source |
| 7 | Source Name | Displays Source and Friendly Name* |
| 8 | Channel Mute | Mutes Selected Channel |
| 9 | Channel Solo | Places Selected Channel in Solo Mode (Click and Hold) |
| 10 | Channel Volume | Adjusts channel Volume within overall Mix |
| 11 | Channel Pan | Adjusts channel Pan within overall Mix |
| 12 | Audio Level Meters | Audio Level Display |

* Friendly Names can be set in the NAMES Tab

Clicking on the ROUTING Tab of the MPA1-MIX-SDI Webpage displays the following:

GROUP ROUTING TABLE

| Control | Gain | Stereo | Source |
|----------|------|--------|----------------------------|
| A | | | |
| 1 | 0 dB | Stereo | SDI 1 1: SDI 1 : 1 |
| 2 | 0 dB | Stereo | SDI 1 3: SDI 1 : 3 |
| 3 | 0 dB | Stereo | SDI 1 5: SDI 1 : 5 |
| 4 | 0 dB | Stereo | SDI 1 7: SDI 1 : 7 |
| 5 | 0 dB | Stereo | SDI 2 1: SDI 2 : 17 |
| 6 | 0 dB | Stereo | SDI 2 3: SDI 2 : 19 |
| 7 | 0 dB | Stereo | SDI 2 5: SDI 2 : 21 |
| 8 | 0 dB | Stereo | SDI 2 7: SDI 2 : 23 |
| B | | | |
| 1 | 0 dB | Stereo | Analog/AES 1: Analog + AES |
| 2 | 0 dB | Stereo | SDI 1 3: SDI 1 : 3 |

...

| | | | |
|---|------|------|--|
| 5 | 0 dB | Mono | |
| 6 | 0 dB | Mono | |
| 7 | 0 dB | Mono | |
| 8 | 0 dB | Mono | |

© TSL Products 2017 All Rights Reserved.

| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | Mix Bank Identifier | Identifies one of the 16 Mix Banks (A-P) |
| 2 | Channel Number | Channel number of source contributing to Mix Bank (1-8) |
| 3 | Audio Channel Gain Preset | Allows +20dB, +10db, 0dB, -10dB or -20dB to be applied to Audio Channel Input |
| 4 | Stereo/Mono Switch | Switches Input Channel between Audio Channel and Audio Pair Mode |
| 5 | Audio Channel Selector | Selects Audio Channels contributing to chosen Mix Bank. Audio Channels Embedded in SDI 1, SDI 2 and AES and Analogue Inputs can be selected. |

Clicking on the NAMES Tab of the MPA1-MIX-SDI Webpage displays the following:

| GROUP NAMES | | | |
|-------------|-------------------------------------|---|------|
| Group | Active | Video | Name |
| 1 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> SDI 1 | A |
| 2 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> SDI 2 | B |
| 3 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> SDI 1 | C |
| 4 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> SDI 2 | D |
| 5 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> SDI 1 | E |

...

| | | | |
|----|--------------------------|---|---|
| 15 | <input type="checkbox"/> | <input checked="" type="checkbox"/> SDI 1 | O |
| 16 | <input type="checkbox"/> | <input checked="" type="checkbox"/> SDI 2 | P |

...

| CHANNELS NAMES | | | |
|----------------|-------------------------------------|-------------------------------------|-----------|
| Input | Auto | All | Name |
| SDI 1 1 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | SDI 1 : 1 |
| SDI 1 2 | <input type="checkbox"/> | <input type="checkbox"/> | SDI 1 : 2 |
| SDI 1 3 | <input type="checkbox"/> | <input type="checkbox"/> | SDI 1 : 3 |
| SDI 1 4 | <input type="checkbox"/> | <input type="checkbox"/> | SDI 1 : 4 |

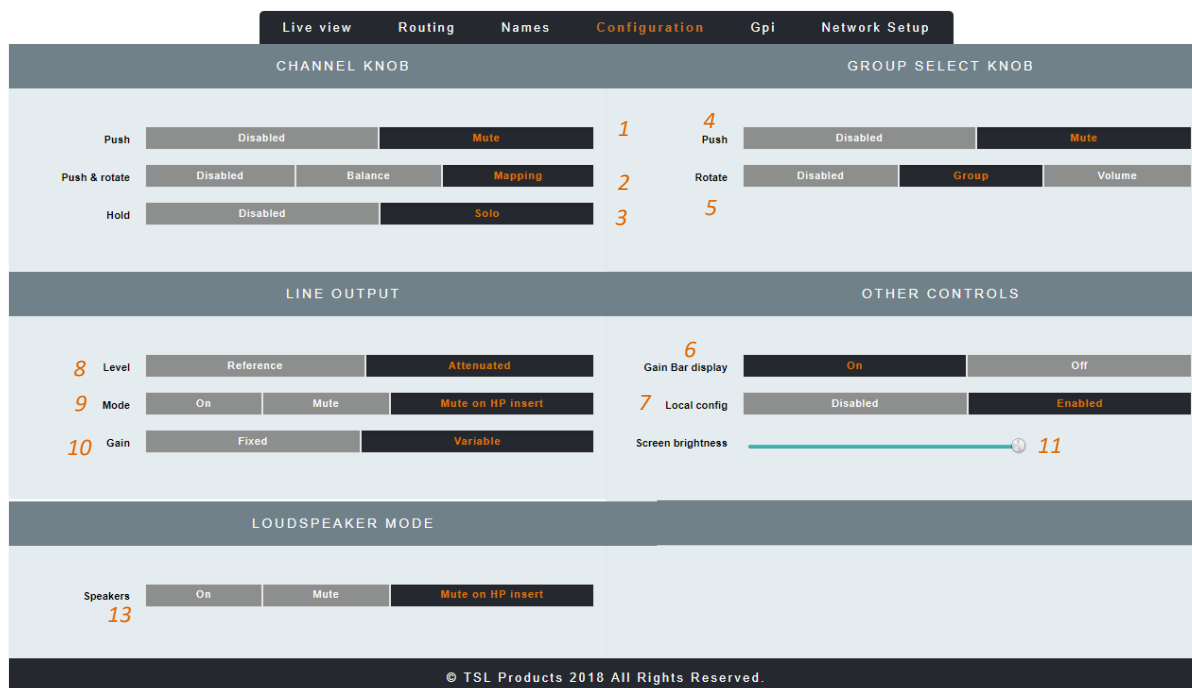
...

| | | |
|------------|--------------------------|--------------|
| Analog/AES | <input type="checkbox"/> | Analog + AES |
| 1 | | |
| Analog/AES | <input type="checkbox"/> | Analog + AES |
| 2 | | |
| Analog/AES | <input type="checkbox"/> | Analog + AES |
| 3 | | |
| Analog/AES | <input type="checkbox"/> | Analog + AES |
| 4 | | |

© TSL Products 2017 All Rights Reserved.

| Element | Function | Notes |
|---------|---------------------------|---|
| 1 | Mix Bank Identifier | Identifies one of the 16 Mix Banks (A-P) |
| 2 | Active Switch | Determines which MIX Banks are available for selection on the front panel of the MPA1-MIX-SDI. |
| 3 | Video Switch | Determines which SDI Video Source is displayed on the front panel, reclocked SDI Output and HDMI Output for each MIX Bank |
| 4 | Mix Bank Name | Friendly Name of MIX Bank* |
| 5 | Physical Input Identifier | Physical Input and Channel Number |
| 6 | Auto Naming Function | Not Supported |
| 7 | Friendly Name | Allows friendly names to be applied to SDI Embedded Audio, AES and Analogue Audio Channels |

Clicking on the CONFIGURATION Tab of the MPA1-MIX-SDI Webpage displays the following:



The screenshot shows the 'Configuration' tab of the MPA1-MIX-SDI webpage. The interface is divided into several sections:

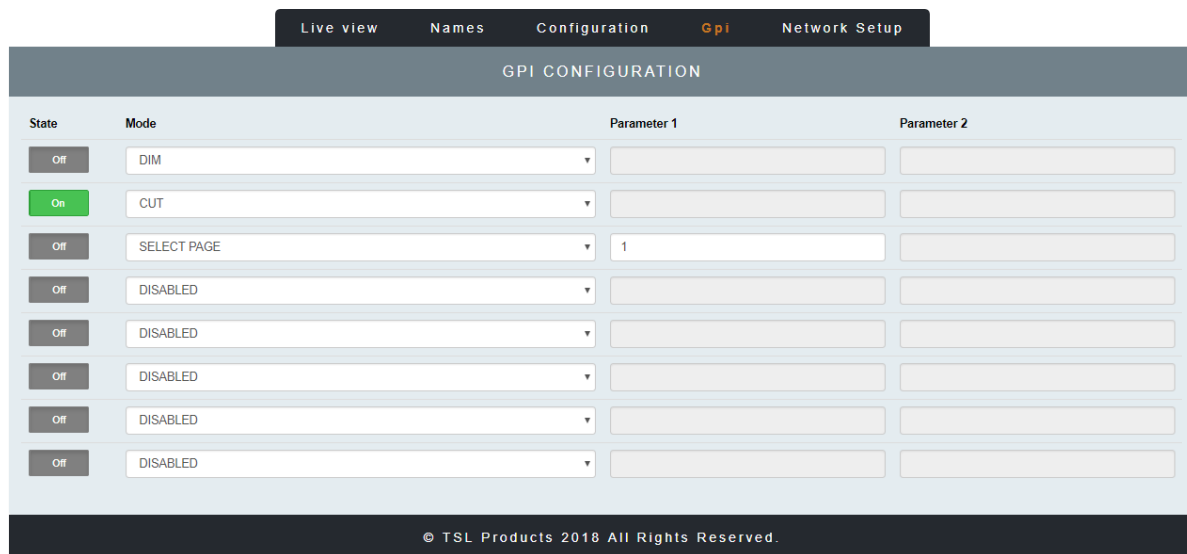
- Top Navigation:** Live view, Routing, Names, **Configuration**, Gpi, Network Setup.
- CHANNEL KNOB:**
 - Push: Disabled, **Mute** (1)
 - Push & rotate: Disabled, Balance, **Mapping** (2)
 - Hold: Disabled, **Solo** (3)
- GROUP SELECT KNOB:**
 - Push: Disabled, **Mute** (4)
 - Rotate: Disabled, **Group**, Volume (5)
- LINE OUTPUT:**
 - 8 Level: Reference, **Attenuated**
 - 9 Mode: On, Mute, **Mute on HP Insert**
 - 10 Gain: Fixed, **Variable**
- OTHER CONTROLS:**
 - 6 Gain Bar display: **On**, Off
 - 7 Local config: Disabled, **Enabled**
 - Screen brightness: Slider (11)
- LOUDSPEAKER MODE:**
 - 13 Speakers: On, Mute, **Mute on HP Insert**

© TSL Products 2018 All Rights Reserved.

| Element | Function | Notes |
|---------|------------------------------|---|
| 1 | Channel Knob Push | Enables/Disables 'Push to Mute' function of Channel Rotary Encoders on front panel of MPA1-MIX-MADI |
| 2 | Channel Knob Push and Rotate | Determines 'Push and Rotate' behaviour of Channel Rotary Encoders on the front panel of the MPA1-MIX-MADI. When set to Balance, the Audio Balance of the selected Audio Channel can be adjusted. When set to Mapping, the Physical Audio Channel assigned to the Mix Channel can be selected. |
| 3 | Channel Knob Push and Hold | Enables/Disables 'Push and Hold to Solo' function of Channel Rotary Encoders on front panel of MPA1-MIX-MADI |
| 4 | Group Select Knob Push | Enables/Disables Push to MUTE function of Headphone, Internal Loudspeakers and Balanced Line Outputs using Group Select Knob |
| 5 | Group Select Knob Rotate | Determines whether Group Select Knob is Enabled/Disabled. Selecting Group allows Mix Groups to be selected from the front panel of the MPA-MIX-MADI, whilst selecting Volume allows level adjustment on the Internal Loudspeakers and Balanced Line Level Outputs. |
| 6 | Gain Bar Display | Enables/Disables the Gain Bar Display from the front panel of the MPA1-MIX-MADI |

| | | |
|----|-------------------------------|---|
| 7 | Local Config | Enables/Disables configuration from the front panel of the MPA1-MIX-SDI |
| 8 | Line Output Level | Sets the Output Level of the Balanced Line Level Outputs on the MPA1-MIX-SDI |
| 9 | Line Output Mode | Determines behaviour of Balanced Line Level Outputs upon insertion of Headphones. |
| 10 | Fixed or Variable Line Output | Determines if Balanced Line Level Outputs provide a Fixed or Variable Output |
| 11 | Screen Brightness | Sets the Brightness Level of the front panel display |
| 12 | MADI Source | Determines if MADI Sources are derived from Coaxial BNC or Optical SFP Input. |
| 13 | Loudspeaker Mode | Determines the behaviour of Internal Loudspeakers upon insertion of Headphones |

Clicking on the GPI Tab of the MPA1-MIX-SDI Webpage displays the following:

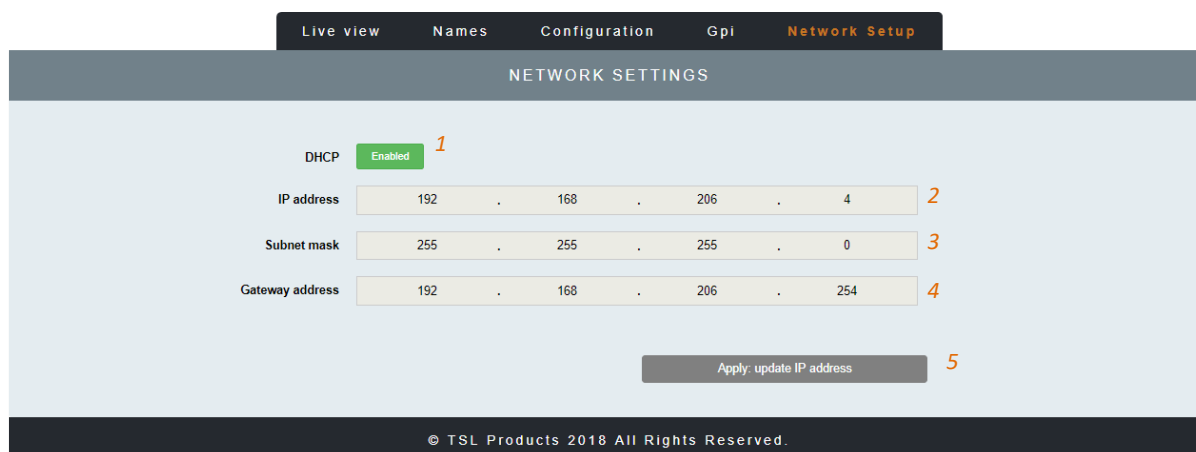


| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | Virtual GPI State button | Displays current GPI status. Also allows manual activation of Virtual GPI. |
| 2 | Virtual GPI Mode Selector | Allows GPI 'Action' to be assigned to GPI Input |
| 3 | Virtual GPI Parameter 1 | Defines first Parameter associated with selected GPI 'Action' |
| 4 | Virtual GPI Parameter 2 | Defines second Parameter associated with selected GPI 'Action' |

Please note that Virtual GPI Actions such as DIM and CUT require no further Parameters to be defined, whilst Virtual GPI Actions such as SELECT PAGE or SELECT PAGE and RETURN require entry of the desired audio channel.

All MPA1 Virtual GPI Parameters are zero based, with audio channels 1-16 represented as Parameters 0-15.

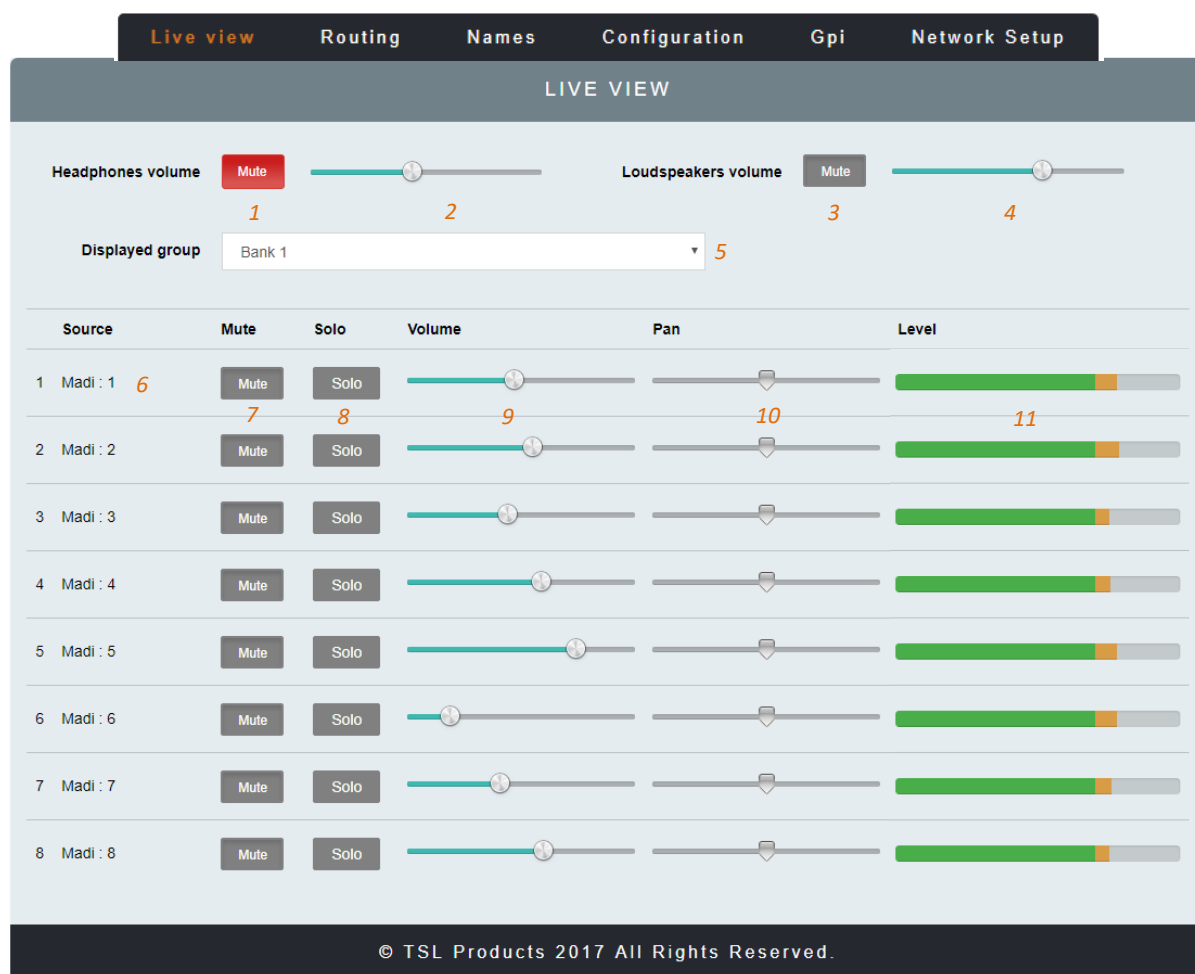
Clicking on the NETWORK SETTINGS Tab of the MPA1-MIX-SDI Webpage displays the following:



| Element | Function | Notes |
|---------|------------------|--|
| 1 | DHCP | Enables/Disables DHCP Mode |
| 2 | IP Address | Displays current IP Address and allows new IP Address to be entered. |
| 3 | Subnet Mask | Displays current Subnet Mask and allows new Subnet Mask to be entered. |
| 4 | Gateway Address | Displays current Gateway Address and allows new Gateway Address to be entered. |
| 5 | Apply IP Address | Button to apply IP, Subnet and Gateway addresses to the MPA1-MIX-SDI |

MPA1-MIX-MADI Web Page

Clicking on the LIVE VIEW Tab of the MPA1-MIX-MADI Webpage displays the following:



| Element | Function | Notes |
|---------|---------------------------------------|---|
| 1 | Switch to Mute Headphone Output | Red when Muted, Grey when Active |
| 2 | Headphone Output Level adjustment | Adjust as required |
| 3 | Switch to Mute the Loudspeaker Output | Red when Muted, Grey when Active |
| 4 | Loudspeaker Output Level adjustment | Adjust as required |
| 5 | Mix Bank Selection | Drop down list allowing recall of one of 16 Audio Mix Banks (A-P) |
| 6 | Source Name | Displays Source and Friendly Name* |
| 7 | Channel Mute | Mutes Selected Channel |
| 8 | Channel Solo | Places Selected Channel in Solo Mode (Click and Hold) |
| 9 | Channel Volume | Adjusts channel Volume within overall Mix |
| 10 | Channel Pan | Adjusts channel Pan within overall Mix |
| 11 | Audio Level Meters | Audio Level Display |

* Friendly Names can be set in the NAMES Tab

Clicking on the ROUTING Tab of the MPA1-MIX-MADI Webpage displays the following:

Live view
Routing
Names
Configuration
Gpi
Network Setup

GROUP ROUTING TABLE

| Control | Gain | Stereo | Source |
|---------|--------|--------|--------------------|
| 1 A | | | |
| 1 2 | 0 dB 3 | Mono | Madi 1: Madi : 1 |
| 2 | 0 dB | 4 Mono | Madi 2: Madi : 2 5 |
| 3 | 0 dB | Mono | Madi 3: Madi : 3 |
| 4 | 0 dB | Mono | Madi 4: Madi : 4 |
| 5 | 0 dB | Mono | Madi 5: Madi : 5 |
| 6 | 0 dB | Mono | Madi 6: Madi : 6 |
| 7 | 0 dB | Mono | Madi 7: Madi : 7 |
| 8 | 0 dB | Mono | Madi 8: Madi : 8 |
| B | | | |
| 1 | 0 dB | Mono | Madi 9: Madi : 9 |

...

| | | | |
|---|------|------|--|
| 7 | 0 dB | Mono | |
| 8 | 0 dB | Mono | |

© TSL Products 2017 All Rights Reserved.

| Element | Function | Notes |
|---------|---------------------------|---|
| 1 | Mix Bank Identifier | Identifies one of the 16 Mix Banks (A-P) |
| 2 | Channel Number | Channel number of source contributing to Mix Bank (1-8) |
| 3 | Audio Channel Gain Preset | Allows +20dB, +10db, 0dB, -10dB or -20dB to be applied to Audio Channel Input |
| 4 | Stereo/Mono Switch | Switches Input Channel between Audio Channel and Audio Pair Mode |
| 5 | Audio Channel Selector | Selects Audio Channels contributing to chosen Mix Bank. MADI Channels 1-64 can be selected. |

Clicking on the NAMES Tab of the MPA1-MIX-MADI Webpage displays the following:

Live view
Routing
Names
Configuration
Gpi
Network Setup

GROUP NAMES

| Group | Active | Name |
|-------|--------|------|
| 1 | Yes | A |
| 2 | Yes | B |
| 3 | Yes | C |
| 4 | Yes | D |
| 5 | Yes | E |
| ... | | |
| 15 | No | O |
| 16 | No | P |

CHANNELS NAMES

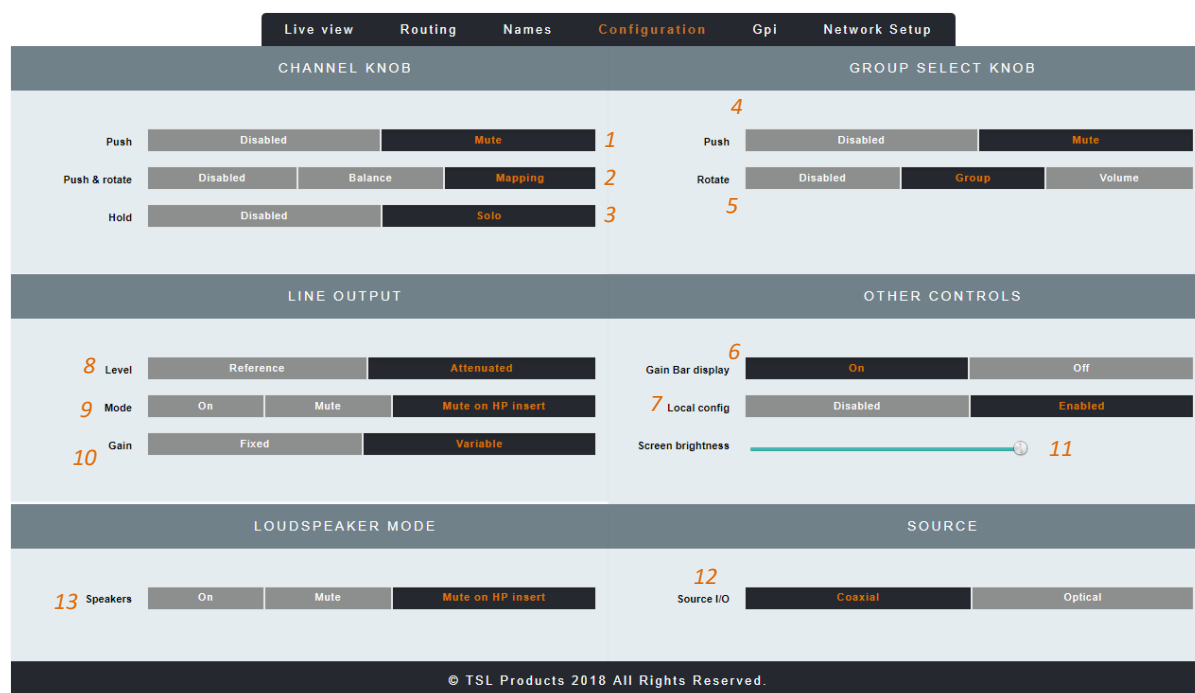
| Input | Auto | Name |
|--------|------|----------|
| Madi 1 | No | Madi : 1 |
| Madi 2 | No | Madi : 2 |
| Madi 3 | No | Madi : 3 |
| Madi 4 | No | Madi : 4 |

| | | |
|----------|----|-------------|
| Analog 6 | No | Analog : 70 |
| Analog 7 | No | Analog : 71 |
| Analog 8 | No | Analog : 72 |

© TSL Products 2017 All Rights Reserved.

| Element | Function | Notes |
|---------|---------------------------|---|
| 1 | Mix Bank Identifier | Identifies one of the 16 Mix Banks (A-P) |
| 2 | Active Switch | Determines which MIX Banks are available for selection on the front panel of the MPA1-MIX-MADI. |
| 3 | Mix Bank Name | Friendly Name of MIX Bank* |
| 4 | Physical Input Identifier | Physical Input and Channel Number |
| 5 | Auto Naming Function | Not Supported |
| 6 | Friendly Name | Allows friendly names to be applied to MADI Channels (1-64) and Analogue Audio Channels |

Clicking on the CONFIGURATION Tab of the MPA1-MIX-MADI Webpage displays the following:



The screenshot shows the 'Configuration' tab selected in the top navigation bar. The interface is divided into several sections:

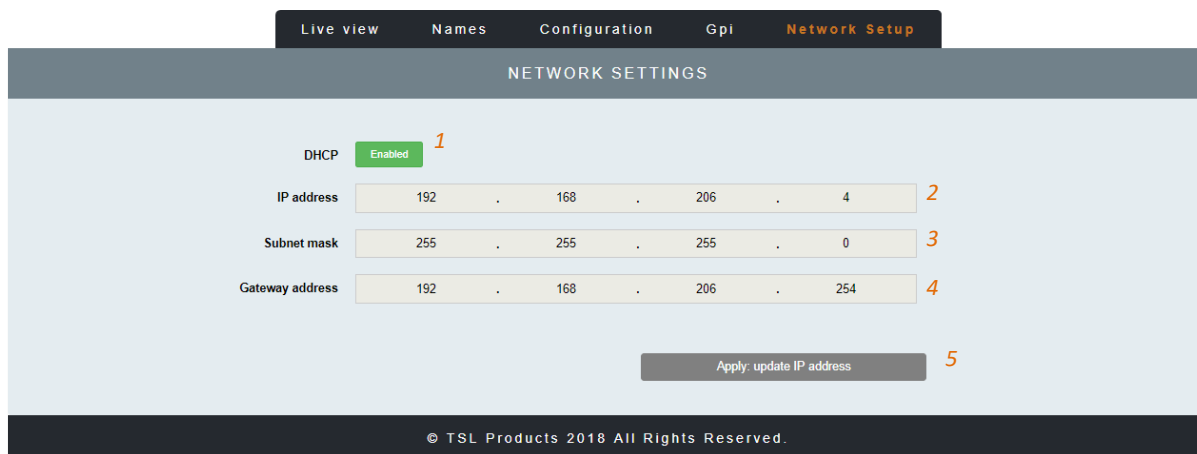
- CHANNEL KNOB**: Contains three rows of controls. Row 1: 'Push' with 'Disabled' and 'Mute' (highlighted in orange) buttons, labeled with a red '1'. Row 2: 'Push & rotate' with 'Disabled', 'Balance', and 'Mapping' (highlighted in orange) buttons, labeled with a red '2'. Row 3: 'Hold' with 'Disabled' and 'Solo' (highlighted in orange) buttons, labeled with a red '3'.
- GROUP SELECT KNOB**: Contains two rows. Row 1: 'Push' with 'Disabled' and 'Mute' (highlighted in orange) buttons, labeled with a red '4'. Row 2: 'Rotate' with 'Disabled', 'Group' (highlighted in orange), and 'Volume' buttons, labeled with a red '5'.
- LINE OUTPUT**: Contains three rows. Row 1: 'Level' with 'Reference' and 'Attenuated' (highlighted in orange) buttons, labeled with a red '8'. Row 2: 'Mode' with 'On', 'Mute', and 'Mute on HP Insert' (highlighted in orange) buttons, labeled with a red '9'. Row 3: 'Gain' with 'Fixed' and 'Variable' (highlighted in orange) buttons, labeled with a red '10'.
- OTHER CONTROLS**: Contains two rows. Row 1: 'Gain Bar display' with 'On' (highlighted in orange) and 'Off' buttons, labeled with a red '6'. Row 2: 'Local config' with 'Disabled' and 'Enabled' (highlighted in orange) buttons, labeled with a red '7'. Below this is a 'Screen brightness' slider with a red '11' label.
- LOUDSPEAKER MODE**: Contains one row. 'Speakers' with 'On', 'Mute', and 'Mute on HP Insert' (highlighted in orange) buttons, labeled with a red '13'.
- SOURCE**: Contains one row. 'Source I/O' with 'Coaxial' (highlighted in orange) and 'Optical' buttons, labeled with a red '12'.

At the bottom of the page, there is a copyright notice: '© TSL Products 2018 All Rights Reserved.'

| Element | Function | Notes |
|---------|------------------------------|---|
| 1 | Channel Knob Push | Enables/Disables 'Push to Mute' function of Channel Rotary Encoders on front panel of MPA1-MIX-MADI |
| 2 | Channel Knob Push and Rotate | Determines 'Push and Rotate' behaviour of Channel Rotary Encoders on the front panel of the MPA1-MIX-MADI. When set to Balance, the Audio Balance of the selected Audio Channel can be adjusted. When set to Mapping, the Physical Audio Channel assigned to the Mix Channel can be selected. |
| 3 | Channel Knob Push and Hold | Enables/Disables 'Push and Hold to Solo' function of Channel Rotary Encoders on front panel of MPA1-MIX-MADI |
| 4 | Group Select Knob Push | Enables/Disables Push to MUTE function of Headphone, Internal Loudspeakers and Balanced Line Outputs using Group Select Knob |
| 5 | Group Select Knob Rotate | Determines whether Group Select Knob is Enabled/Disabled. Selecting Group allows Mix Groups to be selected from the front panel of the MPA-MIX-MADI, whilst selecting Volume allows level adjustment on the Internal Loudspeakers and Balanced Line Level Outputs. |
| 6 | Gain Bar Display | Enables/Disables the Gain Bar Display from the front panel of the MPA1-MIX-MADI |
| 7 | Local Config | Enables/Disables configuration from the front panel of the MPA1-MIX-MADI |

| | | |
|----|-------------------------------|---|
| 8 | Line Output Level | Sets the Output Level of the Balanced Line Level Outputs on the MPA1-MIX-SDI |
| 9 | Line Output Mode | Determines behaviour of Balanced Line Level Outputs upon insertion of Headphones. |
| 10 | Fixed or Variable Line Output | Determines if Balanced Line Level Outputs provide a Fixed or Variable Output |
| 11 | Screen Brightness | Sets the Brightness Level of the front panel display |
| 12 | MADI Source | Determines if MADI Sources are derived from Coaxial BNC or Optical SFP Input. |
| 13 | Loudspeaker Mode | Determines the behaviour of Internal Loudspeakers upon insertion of Headphones |

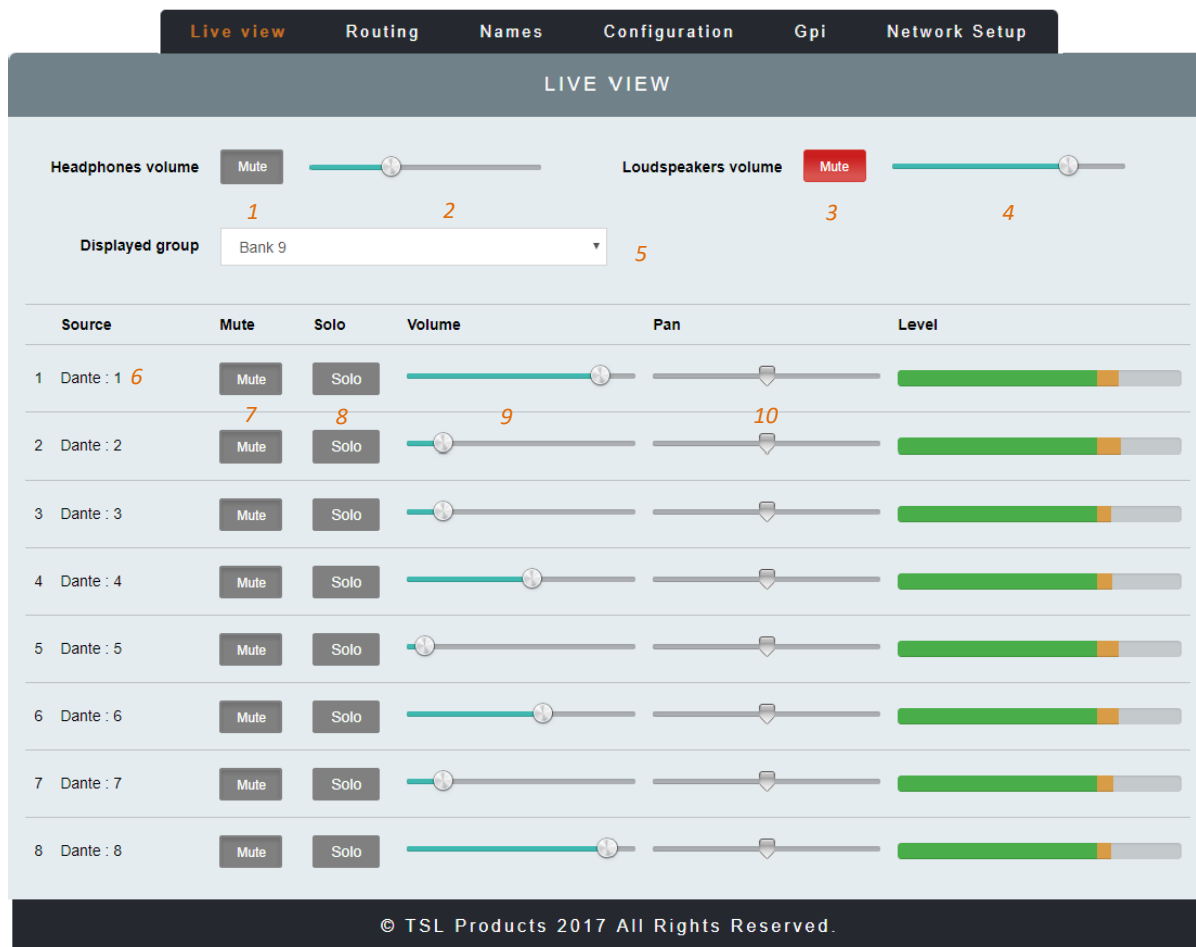
Clicking on the NETWORK SETUP Tab of the MPA1-MIX-MADI Webpage displays the following:



| Element | Function | Notes |
|---------|------------------|--|
| 1 | DHCP | Enables/Disables DHCP Mode |
| 2 | IP Address | Displays current IP Address and allows new IP Address to be entered. |
| 3 | Subnet Mask | Displays current Subnet Mask and allows new Subnet Mask to be entered. |
| 4 | Gateway Address | Displays current Gateway Address and allows new Gateway Address to be entered. |
| 5 | Apply IP Address | Button to apply IP, Subnet and Gateway addresses to the MPA1-MIX-MADI |

MPA1-MIX-DANTE Web Page

Clicking on the LIVE VIEW Tab of the MPA1-MIX-DANTE Webpage displays the following:



| Element | Function | Notes |
|---------|---------------------------------------|---|
| 1 | Switch to Mute Headphone Output | Red when Muted, Grey when Active |
| 2 | Headphone Output Level adjustment | Adjust as required |
| 3 | Switch to Mute the Loudspeaker Output | Red when Muted, Grey when Active |
| 4 | Loudspeaker Output Level adjustment | Adjust as required |
| 5 | Mix Bank Selection | Drop down list allowing recall of one of 16 Audio Mix Banks (A-P) |
| 6 | Source Name | Displays Source and Friendly Name* |
| 7 | Channel Mute | Mutes Selected Channel |
| 8 | Channel Solo | Places Selected Channel in Solo Mode (Click and Hold) |
| 9 | Channel Volume | Adjusts channel Volume within overall Mix |
| 10 | Channel Pan | Adjusts channel Pan within overall Mix |
| 11 | Audio Level Meters | Audio Level Display |

Clicking on the ROUTING Tab of the MPA1-MIX-DANTE Webpage displays the following:

Live view
Routing
Names
Configuration
Gpi
Network Setup

GROUP ROUTING TABLE

| Control | Gain | Stereo | Source |
|---------|--------|--------|-----------------------|
| 1 A | | | |
| 1 2 | 0 dB 3 | Mono | Madi 1: Madi : 1 |
| 2 | 0 dB | 4 Mono | Madi 2: Madi : 2 5 |
| 3 | 0 dB | Mono | Madi 3: Madi : 3 |
| 4 | 0 dB | Mono | Madi 4: Madi : 4 |
| 5 | 0 dB | Mono | Madi 5: Madi : 5 |
| 6 | 0 dB | Mono | Madi 6: Madi : 6 |
| 7 | 0 dB | Mono | Madi 7: Madi : 7 |
| 8 | 0 dB | Mono | Madi 8: Madi : 8 |
| B | | | |
| 1 | 0 dB | Mono | Madi 9: Madi : 9 |
| ... | | | |
| 7 | 0 dB | Mono | Dante 63: The Flether |
| 8 | 0 dB | Mono | Dante 64: When The Ti |

© TSL Products 2017 All Rights Reserved.

| Element | Function | Notes |
|---------|---------------------------|---|
| 1 | Mix Bank Identifier | Identifies one of the 16 Mix Banks (A-P) |
| 2 | Channel Number | Channel number of source contributing to Mix Bank (1-8) |
| 3 | Audio Channel Gain Preset | Allows +20dB, +10db, 0dB, -10dB or -20dB to be applied to Audio Channel Input |
| 4 | Stereo/Mono Switch | Switches Input Channel between Audio Channel and Audio Pair Mode |
| 5 | Audio Channel Selector | Selects Audio Channels contributing to chosen Mix Bank. MADI Channels 1-64 can be selected. |

Clicking on the NAMES Tab of the MPA1-MIX-DANTE Webpage displays the following:

Live view
Routing
NAMES
Configuration
Network Setup

GROUP NAMES

| Group | Active | Name |
|----------------|-------------------------------|----------------|
| 1 ¹ | ² Yes ³ | A ⁴ |
| 2 | Yes | B |
| 3 | Yes | C |
| 4 | Yes | D |
| 5 | Yes | E |
| ... | | |
| 15 | No | O |
| 16 | No | P |
| ... | | |

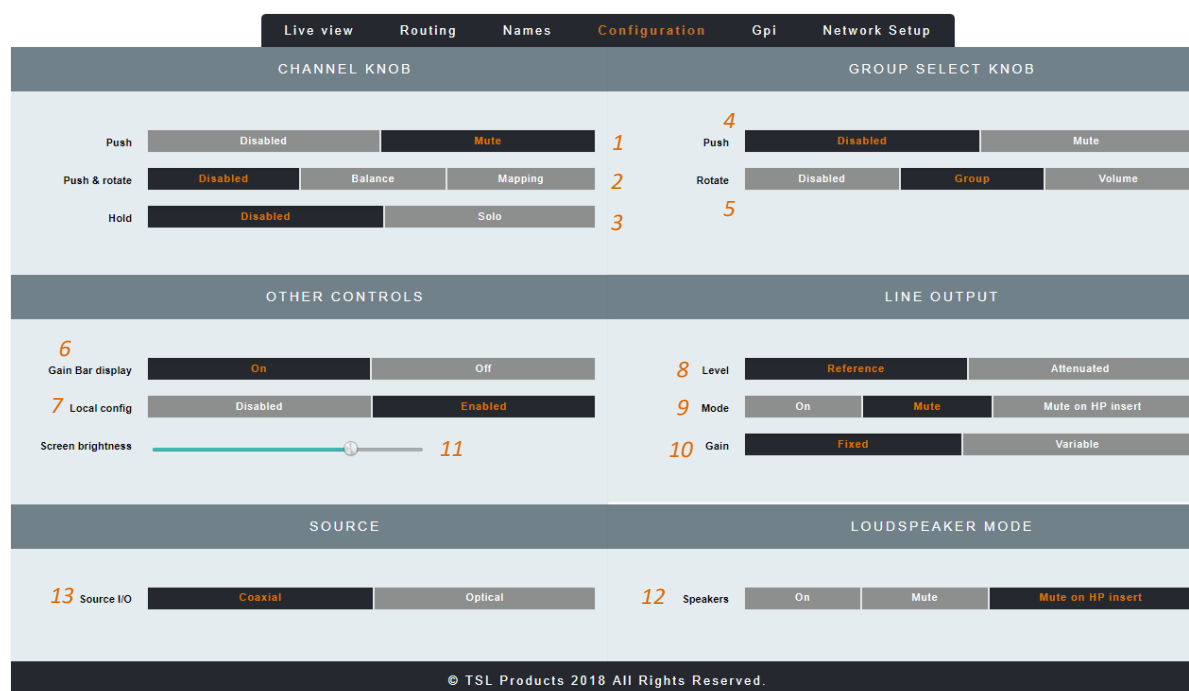
CHANNELS NAMES

| ⁵ Input | Auto ⁶ All | Name |
|--------------------|-----------------------|-----------------------|
| Madi 1 | No | Madi : 1 ⁷ |
| Madi 2 | No | Madi : 2 |
| Madi 3 | No | Madi : 3 |
| Madi 4 | No | Madi : 4 |
| ... | | |
| Dante 62 | Yes | Replay 1 |
| Dante 63 | Yes | Replay 2 |
| Dante 64 | Yes | Director |

© TSL Products 2017 All Rights Reserved.

| Element | Function | Notes |
|---------|---------------------------|---|
| 1 | Mix Bank Identifier | Identifies one of the 16 Mix Banks (A-P) |
| 2 | Active Switch | Determines which MIX Banks are available for selection on the front panel of the MPA1-MIX-SDI. |
| 3 | Video Switch | Determines which SDI Video Source is displayed on the front panel, reclocked SDI Output and HDMI Output for each MIX Bank |
| 4 | Mix Bank Name | Friendly Name of MIX Bank* |
| 5 | Physical Input Identifier | Physical Input and Channel Number |
| 6 | Auto Naming Function | Not Supported |
| 7 | Friendly Name | Allows friendly names to be applied to MADI Channels (1-64) and Analogue Audio Channels |

Clicking on the CONFIGURATION Tab of the MPA1-MIX-DANTE Webpage displays the following:



The screenshot shows the 'Configuration' tab of the MPA1-MIX-DANTE web interface. It features several sections with numbered callouts (1-13) pointing to specific controls:

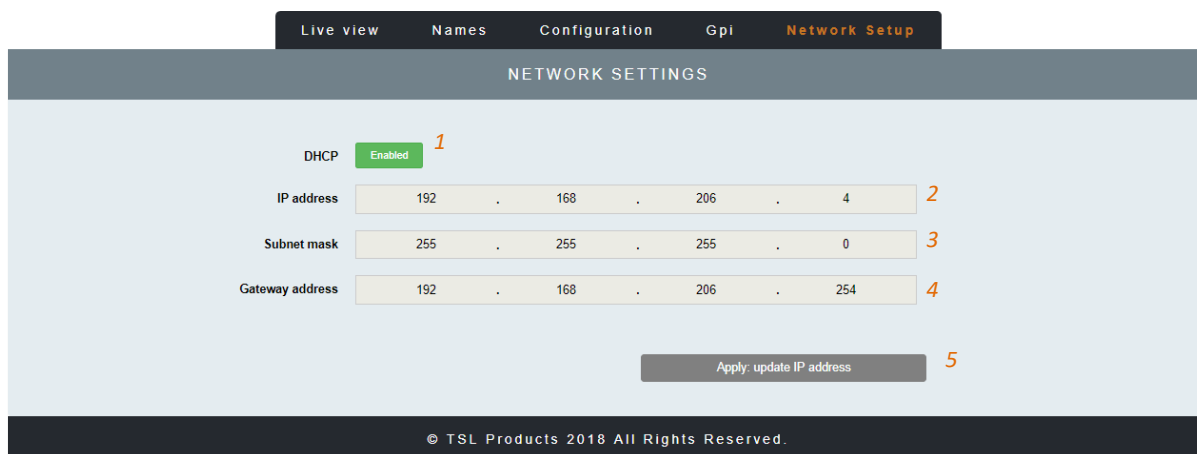
- CHANNEL KNOB**: Includes 'Push' (Disabled/Mute), 'Push & rotate' (Disabled/Balance/Mapping), and 'Hold' (Disabled/Solo) buttons.
- GROUP SELECT KNOB**: Includes 'Push' (Disabled/Mute) and 'Rotate' (Disabled/Group/Volume) buttons.
- OTHER CONTROLS**: Includes 'Gain Bar display' (On/Off), 'Local config' (Disabled/Enabled), and a 'Screen brightness' slider.
- LINE OUTPUT**: Includes 'Level' (Reference/Attenuated), 'Mode' (On/Mute/Mute on HP insert), and 'Gain' (Fixed/Variable) buttons.
- SOURCE**: Includes 'Source I/O' (Coaxial/Optical) buttons.
- LOUDSPEAKER MODE**: Includes 'Speakers' (On/Mute/Mute on HP insert) buttons.

At the bottom, a copyright notice reads: © TSL Products 2018 All Rights Reserved.

| Element | Function | Notes |
|---------|------------------------------|--|
| 1 | Channel Knob Push | Enables/Disables 'Push to Mute' function of Channel Rotary Encoders on front panel of MPA1-MIX-DANTE |
| 2 | Channel Knob Push and Rotate | Determines 'Push and Rotate' behaviour of Channel Rotary Encoders on the front panel of the MPA1-MIX-DANTE. When set to Balance, the Audio Balance of the selected Audio Channel can be adjusted. When set to Mapping, the Physical Audio Channel assigned to the Mix Channel can be selected. |
| 3 | Channel Knob Push and Hold | Enables/Disables 'Push and Hold to Solo' function of Channel Rotary Encoders on front panel of MPA1-MIX-DANTE |
| 4 | Group Select Knob Push | Enables/Disables Push to MUTE function of Headphone, Internal Loudspeakers and Balanced Line Outputs using Group Select Knob |
| 5 | Group Select Knob Rotate | Determines whether Group Select Knob is Enabled/Disabled. Selecting Group allows Mix Groups to be selected from the front panel of the MPA1-MIX-DANTE, whilst selecting Volume allows level adjustment on the Internal Loudspeakers and Balanced Line Level Outputs. |
| 6 | Gain Bar Display | Enables/Disables the Gain Bar Display from the front panel of the MPA1-MIX-DANTE |
| 7 | Local Config | Enables/Disables configuration from the front panel of the MPA1-MIX-DANTE |

| | | |
|----|-------------------|---|
| 8 | Line Output Level | Sets the Output Level of the Balanced Line Level Outputs on the MPA1-MIX-DANTE |
| 9 | Line Output Mode | Determines behaviour of Balanced Line Level Outputs upon insertion of Headphones. |
| 10 | Screen Brightness | Sets the Brightness Level of the front panel display |
| 11 | MADI Source | Determines if MADI Sources are derived from Coaxial BNC or Optical SFP Input. |
| 12 | Loudspeaker Mode | Determines the behaviour of Internal Loudspeakers upon insertion of Headphones |

Clicking on the NETWORK SETUP Tab of the MPA1-MIX-DANTE Webpage displays the following:



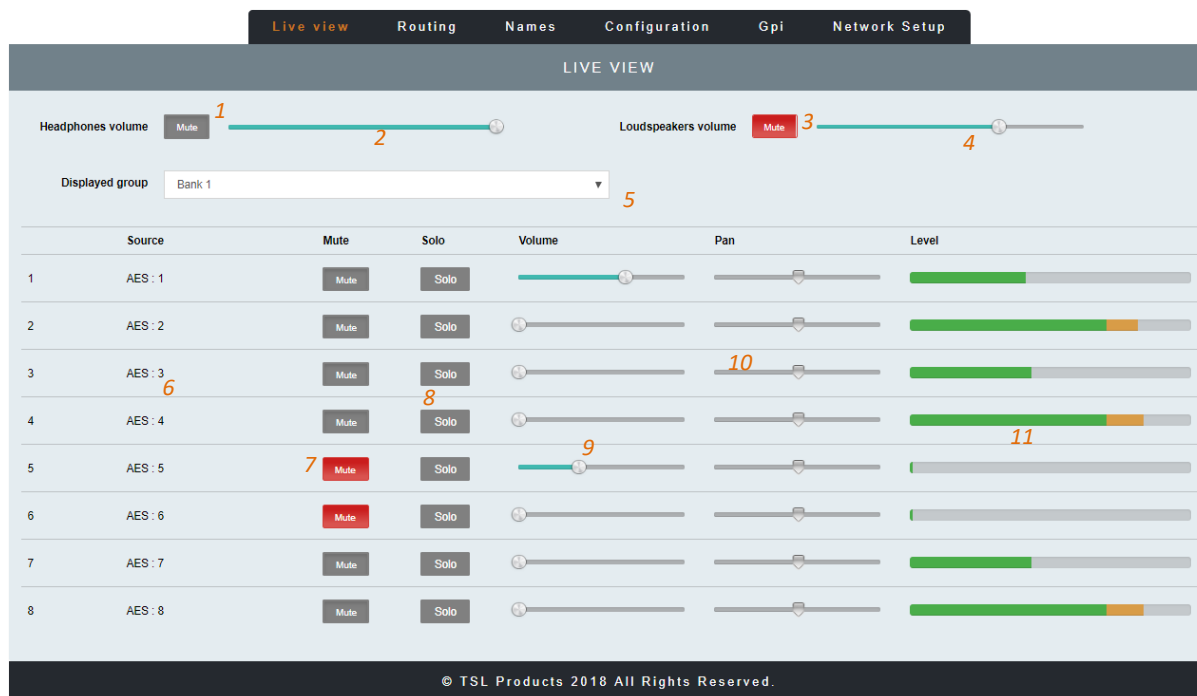
The screenshot shows the 'NETWORK SETTINGS' page with the following elements:

- Navigation Tabs:** Live view, Names, Configuration, Gpi, **Network Setup** (highlighted).
- Section Header:** NETWORK SETTINGS
- DHCP Status:** A green button labeled 'Enabled' with a red '1' next to it.
- IP address:** A text input field containing '192 . 168 . 206 . 4' with a red '2' next to it.
- Subnet mask:** A text input field containing '255 . 255 . 255 . 0' with a red '3' next to it.
- Gateway address:** A text input field containing '192 . 168 . 206 . 254' with a red '4' next to it.
- Apply Button:** A button labeled 'Apply: update IP address' with a red '5' next to it.
- Footer:** © TSL Products 2018 All Rights Reserved.

| Element | Function | Notes |
|---------|------------------|--|
| 1 | DHCP | Enables/Disables DHCP Mode |
| 2 | IP Address | Displays current IP Address and allows new IP Address to be entered. |
| 3 | Subnet Mask | Displays current Subnet Mask and allows new Subnet Mask to be entered. |
| 4 | Gateway Address | Displays current Gateway Address and allows new Gateway Address to be entered. |
| 5 | Apply IP Address | Button to apply IP, Subnet and Gateway addresses to the MPA1-MIX-SDI |

MPA1-MIX-8 Web Page

Clicking on the LIVE VIEW Tab of the MPA1-MIX-8 Webpage displays the following:



| Element | Function | Notes |
|---------|---------------------------------------|---|
| 1 | Switch to Mute Headphone Output | Red when Muted, Grey when Active |
| 2 | Headphone Output Level adjustment | Adjust as required |
| 3 | Switch to Mute the Loudspeaker Output | Red when Muted, Grey when Active |
| 4 | Loudspeaker Output Level adjustment | Adjust as required |
| 5 | Mix Bank Selection | Drop down list allowing recall of one of 16 Audio Mix Banks (A-P) |
| 6 | Source Name | Displays Source and Friendly Name* |
| 7 | Channel Mute | Mutes Selected Channel |
| 8 | Channel Solo | Places Selected Channel in Solo Mode (Click and Hold) |
| 9 | Channel Volume | Adjusts channel Volume within overall Mix |
| 10 | Channel Pan | Adjusts channel Pan within overall Mix |
| 11 | Audio Level Meters | Audio Level Display |

* Friendly Names can be set in the NAMES Tab

Clicking on the ROUTING Tab of the MPA1-MIX-8 Webpage displays the following:

Live view Routing Names Configuration Gpi Network Setup

GROUP ROUTING TABLE

| Control | Gain | Stereo | Source |
|---------|----------|--------|--------------------|
| A 1 | | | |
| 1 2 | 0 dB ▼ 3 | Mono 4 | AES 1: AES : 1 5 ▼ |
| 2 | 0 dB ▼ | Mono | AES 2: AES : 2 ▼ |
| 3 | 0 dB ▼ | Mono | AES 3: AES : 3 ▼ |
| 4 | 0 dB ▼ | Mono | AES 4: AES : 4 ▼ |
| 5 | 0 dB ▼ | Mono | AES 5: AES : 5 ▼ |
| 6 | 0 dB ▼ | Mono | AES 6: AES : 6 ▼ |
| 7 | 0 dB ▼ | Mono | AES 7: AES : 7 ▼ |
| 8 | 0 dB ▼ | Mono | AES 8: AES : 8 ▼ |
| B | | | |
| 1 | 0 dB ▼ | Mono | AES 9: AES : 9 ▼ |
| 2 | 0 dB ▼ | Mono | AES 10: AES : 10 ▼ |
| 3 | 0 dB ▼ | Mono | AES 11: AES : 11 ▼ |
| ... | | | |
| 5 | 0 dB ▼ | Mono | ▼ |
| 6 | 0 dB ▼ | Mono | ▼ |
| 7 | 0 dB ▼ | Mono | ▼ |
| 8 | 0 dB ▼ | Mono | ▼ |

© TSL Products 2018 All Rights Reserved.

| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | Mix Bank Identifier | Identifies one of the 16 Mix Banks (A-P) |
| 2 | Channel Number | Channel number of source contributing to Mix Bank (1-8) |
| 3 | Audio Channel Gain Preset | Allows +20dB, +10db, 0dB, -10dB or -20dB to be applied to Audio Channel Input |
| 4 | Stereo/Mono Switch | Switches Input Channel between Audio Channel and Audio Pair Mode |
| 5 | Audio Channel Selector | Selects Audio Channels contributing to chosen Mix Bank. AES and Analogue Inputs can be selected. |

Clicking on the NAMES Tab of the MPA1-MIX-8 Webpage displays the following:

Live view Routing Names Configuration Gpi Network Setup

GROUP NAMES

| Group | Active | Name |
|--|---|--|
| 1 | Yes | A |
| 2 1 | Yes | B 3 |
| 3 | Yes | C |
| 4 | Yes | D |
| 5 | Yes | E |
| 6 | No | F |
| 7 | No | G |
| ... | | |
| 15 | Yes | O |
| 16 | Yes | P |
| ... | | |


CHANNELS NAMES

| Input | Auto | Name |
|--|--|--|
| AES 1 4 | No | AES : 1 6 |
| AES 2 | No | AES : 2 |
| AES 3 | No | AES : 3 |
| AES 4 | No | AES : 4 |
| AES 5 | No | AES : 5 |
| ... | | |
| ANALOG 14 | No | ANALOG : 14 |
| ANALOG 15 | No | ANALOG : 15 |
| ANALOG 16 | No | ANALOG : 16 |

© TSL Products 2018 All Rights Reserved.

| Element | Function | Notes |
|---------|---------------------------|--|
| 1 | Mix Bank Identifier | Identifies one of the 16 Mix Banks (A-P) |
| 2 | Active Switch | Determines which MIX Banks are available for selection on the front panel of the MPA1-MIX-8. |
| 3 | Mix Bank Name | Friendly Name of MIX Bank* |
| 4 | Physical Input Identifier | Physical Input and Channel Number |
| 5 | Auto Naming Function | Not Supported |
| 6 | Friendly Name | Allows friendly names to be applied to AES and Analogue Audio Channels |

Clicking on the CONFIGURATION Tab of the MPA1-MIX-8 Webpage displays the following:



The screenshot shows the 'Configuration' tab of the MPA1-MIX-8 web interface. It features several sections with numbered callouts (1-12) pointing to specific controls:

- CHANNEL KNOB** (Left Column):
 - 1: Push button (Disabled/Mute)
 - 2: Push & rotate buttons (Disabled/Balance/Mapping)
 - 3: Hold button (Disabled/Solo)
- GROUP SELECT KNOB** (Right Column):
 - 4: Push button (Disabled/Mute)
 - 5: Rotate buttons (Disabled/Group/Volume)
- OTHER CONTROLS** (Left Column):
 - 6: Gain Bar display (On/Off)
 - 7: Local config (Disabled/Enabled)
 - 8: Screen brightness slider
- LINE OUTPUT** (Right Column):
 - 9: Level (Reference/Attenuated)
 - 10: Mode (On/Mute/Mute on HP insert)
 - 11: Gain (Fixed/Variable)
- LOUDSPEAKER MODE** (Bottom):
 - 12: Speakers (On/Mute/Mute on HP insert)

At the bottom, a copyright notice reads: © TSL Products 2018 All Rights Reserved.

| Element | Function | Notes |
|---------|------------------------------|--|
| 1 | Channel Knob Push | Enables/Disables 'Push to Mute' function of Channel Rotary Encoders on front panel of MPA1-MIX-8 |
| 2 | Channel Knob Push and Rotate | Determines 'Push and Rotate' behaviour of Channel Rotary Encoders on the front panel of the MPA1-MIX-8. When set to Balance, the Audio Balance of the selected Audio Channel can be adjusted. When set to Mapping, the Physical Audio Channel assigned to the Mix Channel can be selected. |
| 3 | Channel Knob Push and Hold | Enables/Disables 'Push and Hold to Solo' function of Channel Rotary Encoders on front panel of MPA1-MIX-8 |
| 4 | Group Select Knob Push | When set to MUTE, pushing the Group Select Knob mutes the Loudspeakers and/or Balance Line Level Outputs |
| 5 | Group Select Knob Rotate | Allows the Group Select Knob to select MIX Groups, Adjust Output Volume or to have no function. |
| 6 | Gain Bar Display | Allows Channel Gain Bars to be displayed on the front panel |
| 7 | Local Config | Enables/Disables configuration from the front panel of the MPA1-MIX-SDI |
| 8 | Screen Brightness | Sets the Brightness Level of the front panel display |

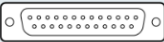
| | | |
|----|-------------------|--|
| 9 | Line Output Level | Sets the Output Level of the Balanced Line Level Outputs on the MPA1-MIX-8 |
| 10 | Line Output Mode | Determines behaviour of Balanced Line Level Outputs upon insertion of Headphones. |
| 11 | Line Output Gain | Allows the Balanced Line Level Outputs on the MPA1 MIX 8 to provide a fixed or variable Output |
| 12 | Loudspeaker Mode | Determines the behaviour of Internal Loudspeakers upon insertion of Headphones |

Clicking on the GPI Tab of the MPA1-MIX-8 Webpage displays the following:

Live view Routing Names Configuration Gpi Network Setup

GPI CONFIGURATION

| State | Mode | Parameter 1 | Parameter 2 |
|---|---|---|---------------------------------------|
| Off 1 | SELECT PAGE | 1 3 | 4 |
| Off | DIM 2 | | |
| Off | CUT | | |
| Off | DISABLED | | |
| Off | DISABLED | | |
| Off | DISABLED | | |
| Off | DISABLED | | |
| Off | DISABLED | | |

GPIO Connector :  DB-25

| Element | Function | Notes |
|---------|------------------------|---|
| 1 | GPI Status/Test Switch | Green when GPI is active, Grey when inactive. Enables GPI In MODE to be tested. |
| 2 | Mode | Drop Down Menu enabling desired GPI action to be selected |
| 3 | Parameter 1 | Allows first parameter of GPI Mode to be set where applicable. |
| 4 | Parameter 2 | Allows second parameter of GPI Mode to be set where applicable |

Clicking on the NETWORK SETTINGS Tab of the MPA1-MIX-8 Webpage displays the following:

Live view
Routing
Names
Configuration
Network Setup

NETWORK SETTINGS

DHCP

Enabled

1

IP address

192 . 168 . 206 . 231

2

Subnet mask

255 . 255 . 255 . 0

3

Gateway address

192 . 168 . 206 . 254

4

Apply: update IP address

5

© TSL Products 2017 All Rights Reserved.

| Element | Function | Notes |
|---------|------------------|--|
| 1 | DHCP | Enables/Disables DHCP Mode |
| 2 | IP Address | Displays current IP Address and allows new IP Address to be entered. |
| 3 | Subnet Mask | Displays current Subnet Mask and allows new Subnet Mask to be entered. |
| 4 | Gateway Address | Displays current Gateway Address and allows new Gateway Address to be entered. |
| 5 | Apply IP Address | Button to apply IP, Subnet and Gateway addresses to the MPA1-MIX-SDI |

Operation

The MPA1 Range has been designed to provide quick and easy selection of any desired audio source in an intuitive manner that requires little in the way of training.

One of the key benefits of the MPA1 is the ability to personalise or tailor its configuration and behaviour to suit a specific workflow, application or environment. If the behaviour or configuration of your MPA1 is not as expected or required, please check the configuration and settings made in the webpage belonging to your MPA1.

All these settings can be made via the webpage of your MPA1 (see appropriate chapter earlier in this manual).

The following chapters present an operational overview of each MPA1 variant.

MPA1-SOLO-IP Operation

The front panel of the MPA1-SOLO-IP is equipped with four rotary controllers as follows:

PROGRAM



| Encoder | Function | Notes |
|---------|------------------------------|---|
| 1 | Headphone Volume | Rotate to adjust Headphone level as required. PUSH to MUTE/UNMUTE currently selected audio source. |
| 2 | Output Volume | Rotate to adjust the Audio Level of the Internal Loudspeakers and/or Balanced Analogue Audio Outputs. PUSH to MUTE/UNMUTE Internal Loudspeakers and/or Balanced Analogue Audio Outputs. NOTE: The exact behaviour of this control can be modified using the MPA1-SOLO-IP Webpage, see Settings 2, 4 and 5 on Page 30 of this manual for further information. |
| 3 | Select/Menu | Rotate to Scroll through SDI Embedded Audio Channels and/or SFP1, SFP2, AES and Analogue Audio Channels. PUSH to switch between Stereo and Mono Audio Monitoring. NOTE: Audio Sources available for selection are determined by the settings found in section 1 of the MPA1-SOLO-SDI Webpage. See Page 26 of this manual for further information. The Select Menu Encoder is also used to access the Settings Menu of the MPA-SOLO-IP. Further information can be found in the Initial Setup chapter found on Page 26 of this manual. |
| 4 | Balance/Pan and Display Mode | Provides Balance Control of Stereo Audio Sources and Pan Control of Mono Audio Sources. Setting affects Headphone, Internal Loudspeakers and Balanced Analogue Audio Outputs. PUSH to Switch between Multiple Audio Meter, Dual Audio Meter with Phase Metering and Video Display modes. |

MPA1-SOLO-SDI Operation

The front panel of the MPA1-SOLO-SDI is equipped with four rotary controllers as follows:

PROGRAM



| Encoder | Function | Notes |
|---------|------------------------------|--|
| 1 | Headphone Volume | Rotate to adjust Headphone level as required. PUSH to MUTE/UNMUTE currently selected audio source. |
| 2 | Output Volume | Rotate to adjust the Audio Level of the Internal Loudspeakers and/or Balanced Analogue Audio Outputs. PUSH to MUTE/UNMUTE Internal Loudspeakers and/or Balanced Analogue Audio Outputs. NOTE: The exact behaviour of this control can be modified using the MPA1-SOLO-SDI Webpage, see Settings 2, 4 and 5 on Page 35 of this manual for further information. |
| 3 | Select/Menu | Rotate to Scroll through SDI Embedded Audio Channels and/or AES and Analogue Audio Channels. PUSH to switch between Stereo and Mono Audio Monitoring. NOTE: Audio Sources available for selection are determined by the settings found in section 1 of the MPA1-SOLO-SDI Webpage. See Page 26 of this manual for further information. The Select Menu Encoder is also used to access the Settings Menu of the MPA-SOLO-SDI. Further information can be found in the Initial Setup chapter found on Page 26 of this manual. |
| 4 | Balance/Pan and Display Mode | Provides Balance Control of Stereo Audio Sources and Pan Control of Mono Audio Sources. Setting affects Headphone, Internal Loudspeakers and Balanced Analogue Audio Outputs. PUSH to Switch between Multiple Audio Meter, Dual Audio Meter with Phase Metering and Video Display modes. |

MPA1-SOLO-MADI Operation

The front panel of the MPA1-SOLO-MADI is equipped with four rotary controllers as follows:



| Encoder | Function | Notes |
|---------|------------------------------|---|
| 1 | Headphone Volume | Rotate to adjust Headphone level as required. PUSH to MUTE/UNMUTE currently selected audio source. |
| 2 | Output Volume | <p>Rotate to adjust the Audio Level of the Internal Loudspeakers and/or Balanced Analogue Audio Outputs.</p> <p>PUSH to MUTE/UNMUTE Internal Loudspeakers and/or Balanced Analogue Audio Outputs.</p> <p>NOTE: The exact behaviour of this control can be modified using the MPA1-SOLO-MADI Webpage, see Settings 2,4 and 5 on Page 40 of this manual for further information.</p> |
| 3 | Select/Menu | <p>Rotate to Scroll through MADI Audio Channels and/or Analogue Audio Channels.</p> <p>PUSH to switch between Stereo and Mono Audio Monitoring.</p> <p>The Select Menu Encoder is also used to access the Settings Menu of the MPA-SOLO-MADI.</p> <p>Further information can be found in the Initial Setup chapter found on Page 26 of this manual.</p> |
| 4 | Balance/Pan and Display Mode | Provides Balance Control of Stereo Audio Sources and Pan Control of Mono Audio Sources. Setting affects Headphone, Internal Loudspeakers and Balanced Analogue Audio Outputs. PUSH to toggle between Multiple Audio Meter and Dual Audio Meter with Phase Metering modes. |

MPA1-SOLO-DANTE Operation

The front panel of the MPA1-SOLO-DANTE is equipped with four rotary controllers as follows:



| Encoder | Function | Notes |
|---------|------------------------------|---|
| 1 | Headphone Volume | Rotate to adjust Headphone level as required. PUSH to MUTE/UNMUTE currently selected audio source. |
| 2 | Output Volume | <p>Rotate to adjust the Audio Level of the Internal Loudspeakers and/or Balanced Analogue Audio Outputs.</p> <p>PUSH to MUTE/UNMUTE Internal Loudspeakers and/or Balanced Analogue Audio Outputs.</p> <p>NOTE: The exact behaviour of this control can be modified using the MPA1-SOLO-DANTE Webpage, see Settings 2,4 and 5 on Page 45 of this manual for further information.</p> |
| 3 | Select/Menu | <p>Rotate to Scroll through DANTE and/or MADI Audio Channels.</p> <p>PUSH to switch between Stereo and Mono Audio Monitoring.</p> <p>The Select Menu Encoder is also used to access the Settings Menu of the MPA-SOLO-DANTE.</p> <p>Further information can be found in the Initial Setup chapter found on Page 26 of this manual.</p> |
| 4 | Balance/Pan and Display Mode | Provides Balance Control of Stereo Audio Sources and Pan Control of Mono Audio Sources. Setting affects Headphone, Internal Loudspeakers and Balanced Analogue Audio Outputs. PUSH to toggle between Multiple Audio Meter and Dual Audio Meter with Phase Metering modes. |

MPA1-SOLO-8 Operation

The front panel of the MPA1-SOLO-8 is equipped with four rotary controllers as follows:



| Encoder | Function | Notes |
|---------|------------------------------|---|
| 1 | Headphone Volume | Rotate to adjust Headphone level as required. PUSH to MUTE/UNMUTE currently selected audio source. |
| 2 | Output Volume | <p>Rotate to adjust the Audio Level of the Internal Loudspeakers and/or Balanced Analogue Audio Outputs.</p> <p>PUSH to MUTE/UNMUTE Internal Loudspeakers and/or Balanced Analogue Audio Outputs.</p> <p>NOTE: The exact behaviour of this control can be modified using the MPA1-SOLO-8 Webpage, see Settings 2,4 and 5 on Page 50 of this manual for further information.</p> |
| 3 | Select/Menu | <p>Rotate to Scroll through AES and Analogue Audio Channels.</p> <p>PUSH to switch between Stereo and Mono Audio Monitoring.</p> <p>The Select Menu Encoder is also used to access the Settings Menu of the MPA-SOLO-8. Further information can be found in the Initial Setup chapter found on Page 26 of this manual.</p> |
| 4 | Balance/Pan and Display Mode | Provides Balance Control of Stereo Audio Sources and Pan Control of Mono Audio Sources. Setting affects Headphone, Internal Loudspeakers and Balanced Analogue Audio Outputs. PUSH to toggle between Multiple Audio Meter and Dual Audio Meter with Phase Metering modes. |

MPA1-MIX-SDI Operation

The front panel of the MPA1-MIX-SDI is equipped with ten rotary controllers as follows:



| Encoder | Function | Notes |
|---------|------------------|---|
| 1-8 | Audio Level | <p>Rotate to adjust relative contribution of Sources 1-8 to Stereo Monitoring Mix.</p> <p><i>NOTE: Sources available are determined by the currently selected Mix Bank (A-P) and the contributing audio channels for each Mix Bank as set in the Routing Tab of the MPA-MIX-SDI. See Page 54 of this manual for further information.</i></p> <p>PUSH to MUTE/UNMUTE contribution of Sources 1-8 to Stereo Mix.</p> <p><i>NOTE: PUSH to MUTE/UNMUTE functionality can be disabled by Setting 1 of the MPA-MIX-SDI Webpage, see Page 57 of the manual for further information.</i></p> <p>PUSH and ROTATE to adjust Balance of selected source <u>or</u> to map alternate audio source to encoder.</p> <p><i>NOTE: PUSH and ROTATE functionality is determined by Setting 2 on the MPA-MIX-SDI Webpage, see Page 57 of the manual for further information</i></p> <p>PUSH and HOLD to enable SOLO Monitoring of selected source.</p> <p><i>NOTE: PUSH and HOLD to enable SOLO Monitoring can be disabled using Setting 3 of the MPA-MIX-SDI Webpage, see Page 57 of the manual for further information.</i></p> |
| 9 | Headphone Volume | <p>Rotate to adjust Headphone level as required.</p> <p>PUSH to MUTE/UNMUTE entire Stereo Monitoring Mix from the Headphone Output.</p> |
| 10 | Select/Menu | <p>Rotate to Scroll through Mix Banks A-P <u>or</u> to adjust Level of Stereo Monitoring Mix.</p> <p><i>NOTE: The behaviour of the Select/Menu encoder is determined by determined by Settings 4 and 5 on the MPA-MIX-SDI Webpage, see Page 49 of the manual for further information</i></p> <p>PUSH to MUTE/UNMUTE Internal Loudspeakers and Balanced Analogue Audio Outputs.</p> |

| | | |
|--|--|---|
| | | The Select Menu Encoder is also used to access the Settings Menu of the MPA-MIX-SDI. Further information can be found in the Initial Setup chapter found on Page 26 of this manual. |
|--|--|---|

MPA1-MIX-MADI Operation

The front panel of the MPA1-MIX-MADI is equipped with ten rotary controllers as follows:



| Encoder | Function | Notes |
|---------|------------------|---|
| 1-8 | Audio Level | <p>Rotate to adjust relative contribution of Sources 1-8 to Stereo Monitoring Mix.</p> <p><i>NOTE: Sources available are determined by the currently selected Mix Bank (A-P) and the contributing audio channels for each Mix Bank as set in the Routing Tab of the MPA-MIX-MADI. See Page 62 of this manual for further information.</i></p> <p>PUSH to MUTE/UNMUTE contribution of Sources 1-8 to Stereo Mix.</p> <p><i>NOTE: PUSH to MUTE/UNMUTE functionality can be disabled by Setting 1 of the MPA-MIX-MADI Webpage, see Page 65 of the manual for further information.</i></p> <p>PUSH and ROTATE to adjust Balance of selected source <u>or</u> to map alternate audio source to encoder.</p> <p><i>NOTE: PUSH and ROTATE functionality is determined by Setting 2 on the MPA-MIX-MADI Webpage, see Page 65 of the manual for further information</i></p> <p>PUSH and HOLD to enable SOLO Monitoring of selected source.</p> <p><i>NOTE: PUSH and HOLD to enable SOLO Monitoring can be disabled using Setting 3 of the MPA-MIX-MADI Webpage, see Page 35 of the manual for further information.</i></p> |
| 9 | Headphone Volume | <p>Rotate to adjust Headphone level as required.</p> <p>PUSH to MUTE/UNMUTE entire Stereo Monitoring Mix from the Headphone Output.</p> |
| 10 | Select/Menu | <p>Rotate to Scroll through Mix Banks A-P <u>or</u> to adjust Level of Stereo Monitoring Mix.</p> <p><i>NOTE: The behaviour of the Select/Menu encoder is determined by</i></p> <p>PUSH to MUTE/UNMUTE Internal Loudspeakers and Balanced Analogue Audio Outputs.</p> <p>The Select Menu Encoder is also used to access the Settings Menu of the MPA-MIX-MADI. Further information can be found in the Initial Setup chapter found on Page 26 of this manual.</p> |

MPA1-MIX-DANTE Operation

The front panel of the MPA1-MIX-DANTE is equipped with ten rotary controllers as follows:



| Encoder | Function | Notes |
|---------|------------------|---|
| 1-8 | Audio Level | <p>Rotate to adjust relative contribution of Sources 1-8 to Stereo Monitoring Mix.</p> <p><i>NOTE: Sources available are determined by the currently selected Mix Bank (A-P) and the contributing audio channels for each Mix Bank as set in the Routing Tab of the MPA-MIX-SDI. See Page 69 of this manual for further information.</i></p> <p>PUSH to MUTE/UNMUTE contribution of Sources 1-8 to Stereo Mix.</p> <p><i>NOTE: PUSH to MUTE/UNMUTE functionality can be disabled by Setting 1 of the MPA-MIX-SDI Webpage, see Page 73 of the manual for further information.</i></p> <p>PUSH and ROTATE to adjust Balance of selected source <u>or</u> to map alternate audio source to encoder.</p> <p><i>NOTE: PUSH and ROTATE functionality is determined by Setting 2 on the MPA-MIX-SDI Webpage, see Page 73 of the manual for further information</i></p> <p>PUSH and HOLD to enable SOLO Monitoring of selected source.</p> <p><i>NOTE: PUSH and HOLD to enable SOLO Monitoring can be disabled using Setting 3 of the MPA-MIX-DANTE Webpage, see Page 65 of the manual for further information.</i></p> |
| 9 | Headphone Volume | <p>Rotate to adjust Headphone level as required.</p> <p>PUSH to MUTE/UNMUTE entire Stereo Monitoring Mix from the Headphone Output.</p> |
| 10 | Select/Menu | <p>Rotate to Scroll through Mix Banks A-P <u>or</u> to adjust Level of Stereo Monitoring Mix.</p> <p><i>NOTE: The behaviour of the Select/Menu encoder is determined by</i></p> <p>PUSH to MUTE/UNMUTE Internal Loudspeakers and Balanced Analogue Audio Outputs.</p> <p>The Select Menu Encoder is also used to access the Settings Menu of the MPA-MIX-SDI. Further information can be found in the Initial Setup chapter found on Page 26 of this manual.</p> |

MPA1-MIX-8 Operation

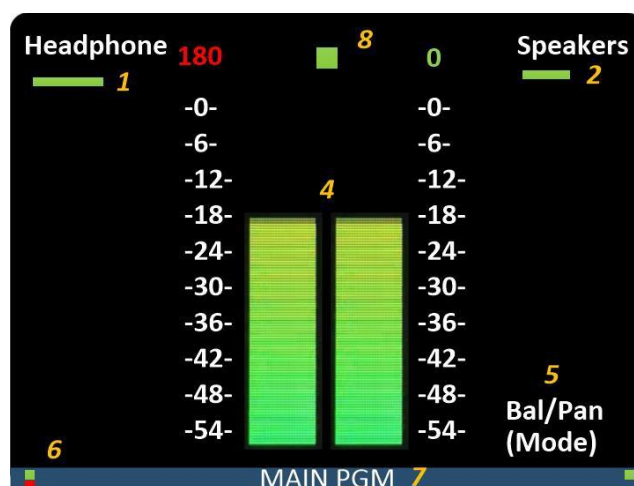
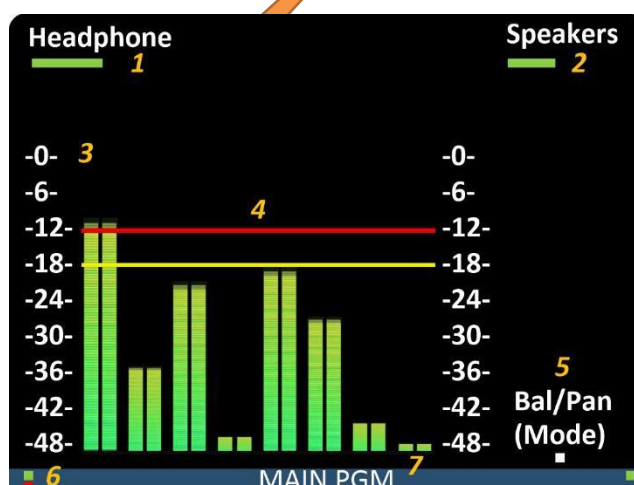
The front panel of the MPA1-MIX-MADI is equipped with ten rotary controllers as follows:



| Encoder | Function | Notes |
|---------|------------------|--|
| 1-8 | Audio Level | <p>Rotate to adjust relative contribution of Sources 1-8 to Stereo Monitoring Mix.</p> <p><i>NOTE: Sources available are determined by the currently selected Mix Bank (A-P) and the contributing audio channels for each Mix Bank as set in the Routing Tab of the MPA1-MIX-8. See Page 69 of this manual for further information.</i></p> <p>PUSH to MUTE/UNMUTE contribution of Sources 1-8 to Stereo Mix.</p> <p><i>NOTE: PUSH to MUTE/UNMUTE functionality can be disabled by Setting 1 of the MPA-MIX-8 Webpage, see Page 80 of the manual for further information.</i></p> <p>PUSH and ROTATE to adjust Balance of selected source <u>or</u> to map alternate audio source to encoder.</p> <p><i>NOTE: PUSH and ROTATE functionality is determined by Setting 2 on the MPA-MIX-8 Webpage, see Page 80 of the manual for further information</i></p> <p>PUSH and HOLD to enable SOLO Monitoring of selected source.</p> <p><i>NOTE: PUSH and HOLD to enable SOLO Monitoring can be disabled using Setting 3 of the MPA-MIX-8 Webpage, see Page 72 of the manual for further information.</i></p> |
| 9 | Headphone Volume | <p>Rotate to adjust Headphone level as required.</p> <p>PUSH to MUTE/UNMUTE entire Stereo Monitoring Mix from the Headphone Output.</p> |
| 10 | Select/Menu | <p>Rotate to Scroll through Mix Banks A-P <u>or</u> to adjust Level of Stereo Monitoring Mix.</p> <p><i>NOTE: The behaviour of the Select/Menu encoder is determined by</i></p> <p>PUSH to MUTE/UNMUTE Internal Loudspeakers and Balanced Analogue Audio Outputs.</p> |

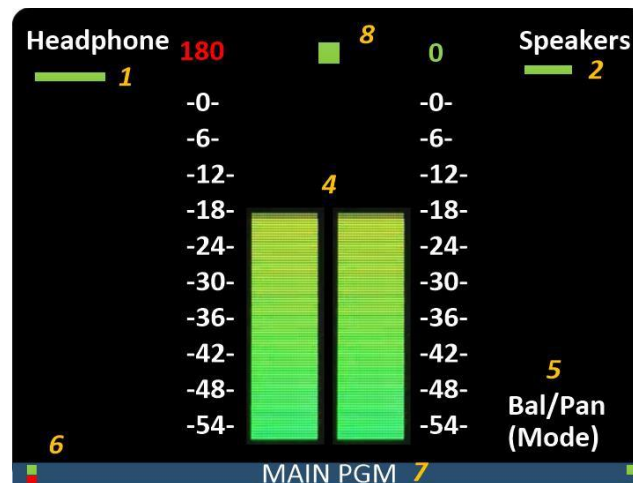
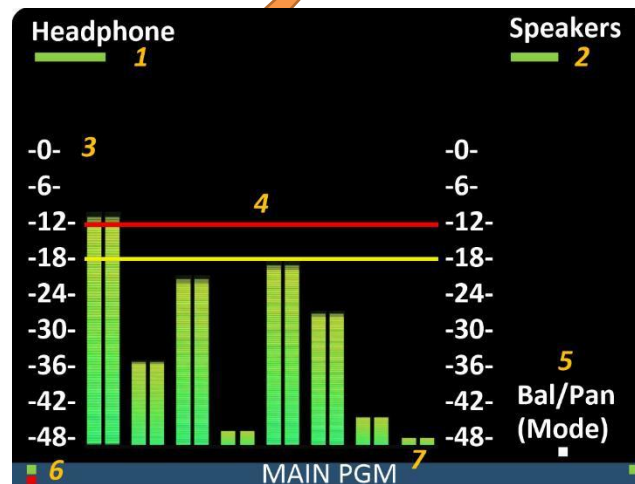
| | | |
|--|--|---|
| | | The Select Menu Encoder is also used to access the Settings Menu of the MPA-MIX-8. Further information can be found in the Initial Setup chapter found on Page 26 of this manual. |
|--|--|---|

MPA1-SOLO-IP Front Panel Display



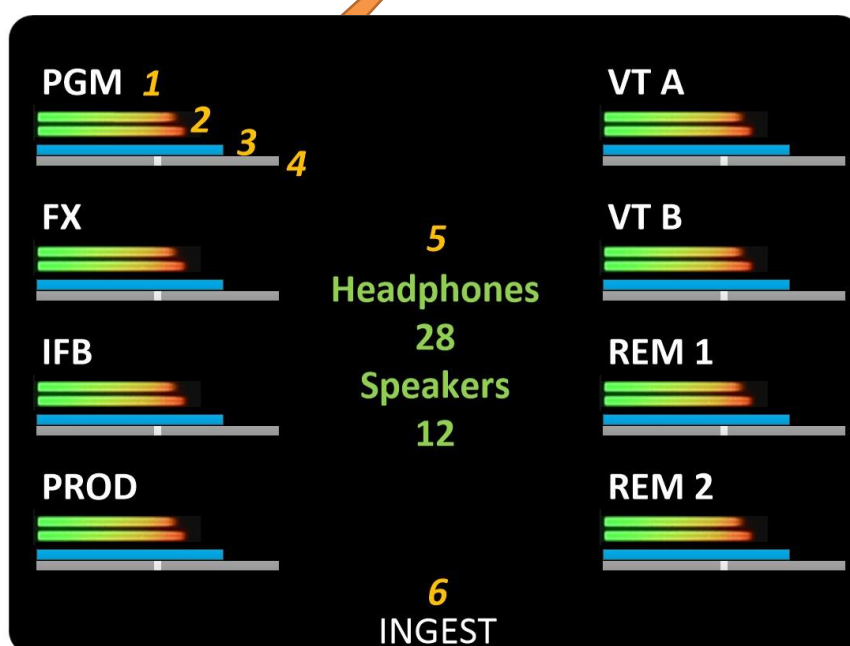
| Display | Function | Notes |
|---------|---------------------|--|
| 1 | Headphone Level | Display showing level of Headphone Output |
| 2 | Speakers | Display showing level of Internal Loudspeaker and Balanced Line Level Output output. |
| 3 | Audio Meter Scale | Audio Meter Scale in dBFS |
| 4 | Audio Level Display | <i>See settings 7 and 8 on Page 30 of this manual for further information on setting Warning and Alarm Thresholds.</i> |
| 5 | Balance/Pan Display | The relative contribution to the Left and Right channels of the Stereo Monitoring Mix is identified by the position of the Balance/Pan |
| 6 | Status Indicators | Status indicators showing presence of valid input sources |
| 7 | Channel Name | <i>See Page 29 of this manual for further information on how to set Channel Names.</i> |
| 8 | Phase Meter | Audio Phase Meter for currently selected audio pair |

MPA1-SOLO-SDI Front Panel Display



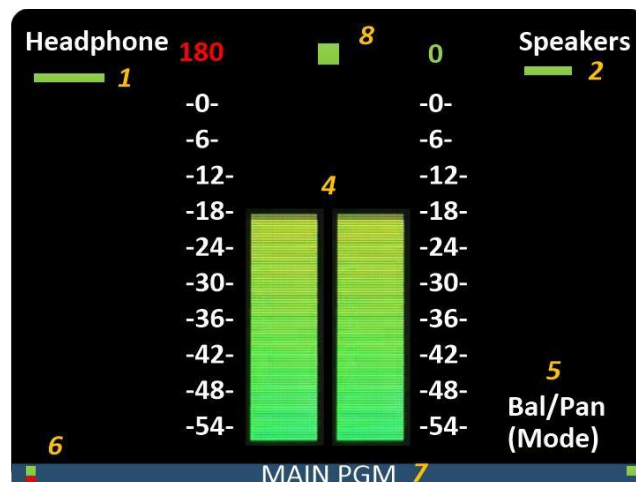
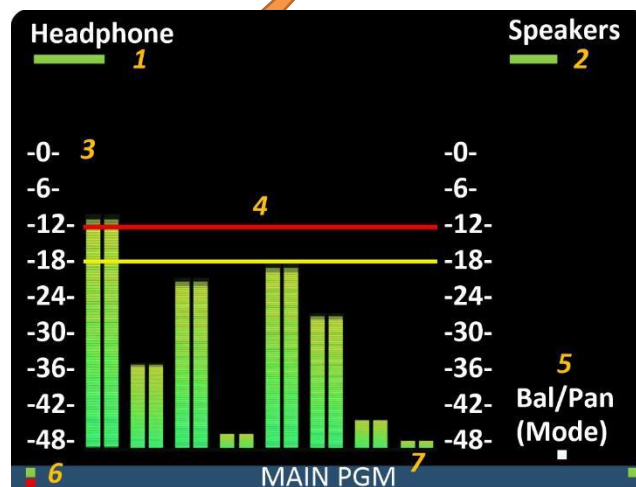
| Display | Function | Notes |
|---------|---------------------|--|
| 1 | Headphone Level | Display showing level of Headphone Output |
| 2 | Speakers | Display showing level of Internal Loudspeaker and Balanced Line Level Output. |
| 3 | Audio Meter Scale | Audio Meter Scale in dBFS |
| 4 | Audio Level Display | <i>See settings 7 and 8 on Page 35 of this manual for further information on setting Warning and Alarm Thresholds.</i> |
| 5 | Balance/Pan Display | The relative contribution to the Left and Right channels of the Stereo Monitoring Mix is identified by the position of the Balance/Pan |
| 6 | Status Indicators | Status indicators showing presence of valid input sources |
| 7 | Channel Name | <i>See Page 34 of this manual for further information on how to set Channel Names.</i> |
| 8 | Phase Meter | Audio Phase Meter for currently selected audio pair |

MPA1-MIX-SDI Front Panel Display



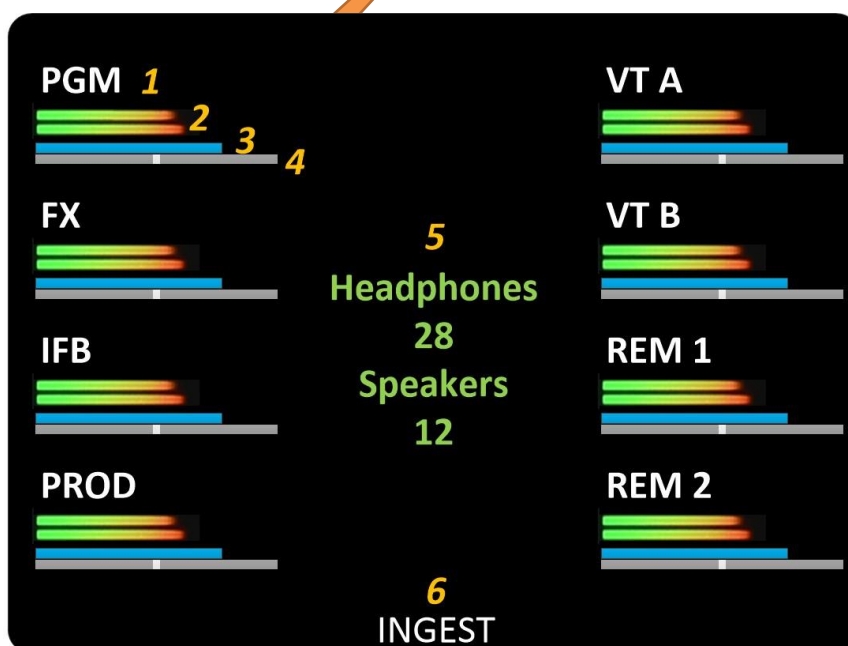
| Display | Function | Notes |
|---------|---------------------------------------|--|
| 1 | Channel Label | Label displaying Channel friendly name. <i>NOTE: Friendly names can be entered in the Channel Names section displayed within the Names Tab of the MPA1-MIX-SDI Webpage. See Page 55 of this manual for further information.</i> |
| 2 | Audio Level Meters | Displays Audio Level of associated Source Channel |
| 3 | Gain Bar Display | Level of Channel contribution to Stereo Monitoring Mix. <i>NOTE: Inclusion of the Gain Bar Display is determined by setting 6 in the Configuration Tab of the MPA1-MIX-SDI Webpage. See Page 57 of this manual for further information.</i> |
| 4 | Balance/Pan Display | The relative contribution to the Left and Right channels of the Stereo Monitoring Mix is identified by the position of the Balance/Pan |
| 5 | Headphone and Speakers Level Displays | Display of current Headphone and Loudspeaker Output Level settings (0 Min – 100 Max). |
| 6 | Mix Bank Name | Label displaying friendly name of currently selected Mix Bank. <i>NOTE: Friendly names can be entered in the Group Names section displayed within the Names Tab of the MPA1-MIX-SDI Webpage. See Page 55 of this manual for further information</i> |

MPA1-SOLO-MADI Front Panel Display



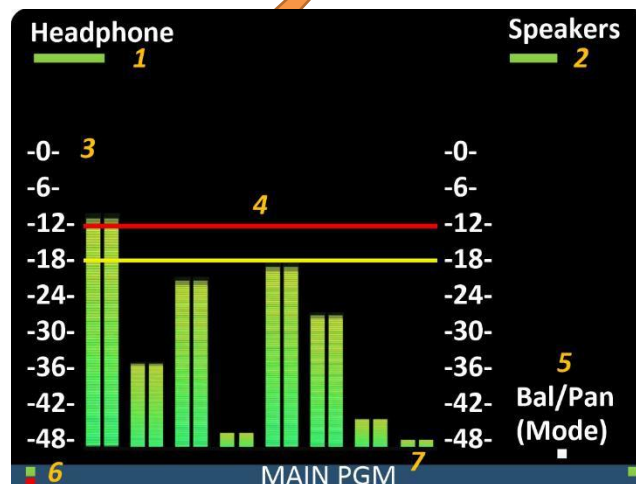
| Display | Function | Notes |
|---------|---------------------|--|
| 1 | Headphone Level | Display showing level of Headphone Output |
| 2 | Speakers | Display showing level of Internal Loudspeaker and Balanced Line Level Output . |
| 3 | Audio Meter Scale | Audio Meter Scale in dBFS |
| 4 | Audio Level Display | <i>See settings 8 and 9 on Page 40 of this manual for further information on setting Warning and Alarm Thresholds.</i> |
| 5 | Balance/Pan Display | The relative contribution to the Left and Right channels of the Stereo Monitoring Mix is identified by the position of the Balance/Pan |
| 6 | Status Indicators | Status indicators showing presence of valid input sources |
| 7 | Channel Name | <i>See Page 39 of this manual for further information on how to set Channel Names.</i> |
| 8 | Phase Meter | Audio Phase Meter for currently selected audio pair |

MPA1-MIX-MADI Front Panel Display



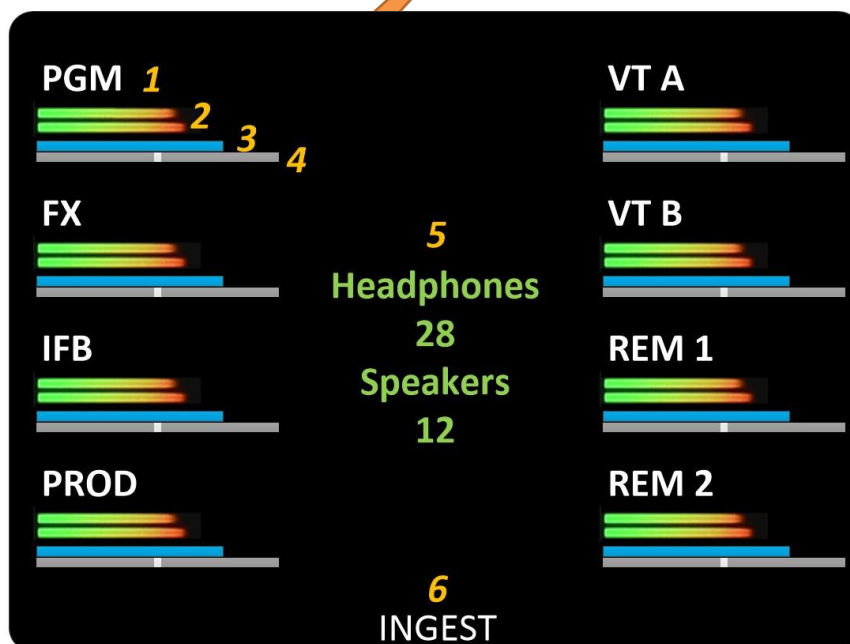
| Display | Function | Notes |
|---------|---------------------------------------|---|
| 1 | Channel Label | Label displaying Channel friendly name. <i>NOTE: Friendly names can be entered in the Channel Names section displayed within the Names Tab of the MPA1-MIX-MADI Webpage. See Page 63 of this manual for further information.</i> |
| 2 | Audio Level Meters | Displays Audio Level of associated Source Channel |
| 3 | Gain Bar Display | Level of Channel contribution to Stereo Monitoring Mix. <i>NOTE: Inclusion of the Gain Bar Display is determined by setting 6 in the Configuration Tab of the MPA1-MIX-MADI Webpage. See Page 65 of this manual for further information.</i> |
| 4 | Balance/Pan Display | The relative contribution to the Left and Right channels of the Stereo Monitoring Mix is identified by the position of the Balance/Pan |
| 5 | Headphone and Speakers Level Displays | Display of current Headphone and Loudspeaker Output Level settings (0 Min – 100 Max). |
| 6 | Mix Bank Name | Label displaying friendly name of currently selected Mix Bank. <i>NOTE: Friendly names can be entered in the Group Names section displayed within the Names Tab of the MPA1-MIX-MADI Webpage. See Page 63 of this manual for further information</i> |

MPA1-SOLO-DANTE Front Panel Display



| Display | Function | Notes |
|---------|---------------------|--|
| 1 | Headphone Level | Display showing level of Headphone Output |
| 2 | Speakers | Display showing level of Internal Loudspeaker and Balanced Line Level Output. |
| 3 | Audio Meter Scale | Audio Meter Scale in dBFS |
| 4 | Audio Level Display | <i>See settings 8 and 9 on Page 45 of this manual for further information on setting Warning and Alarm Thresholds.</i> |
| 5 | Balance/Pan Display | The relative contribution to the Left and Right channels of the Stereo Monitoring Mix is identified by the position of the Balance/Pan |
| 6 | Status Indicators | Status indicators showing presence of valid input sources |
| 7 | Channel Name | <i>See Page 44 of this manual for further information on how to set Channel Names.</i> |
| 8 | Phase Meter | Audio Phase Meter for currently selected audio pair |

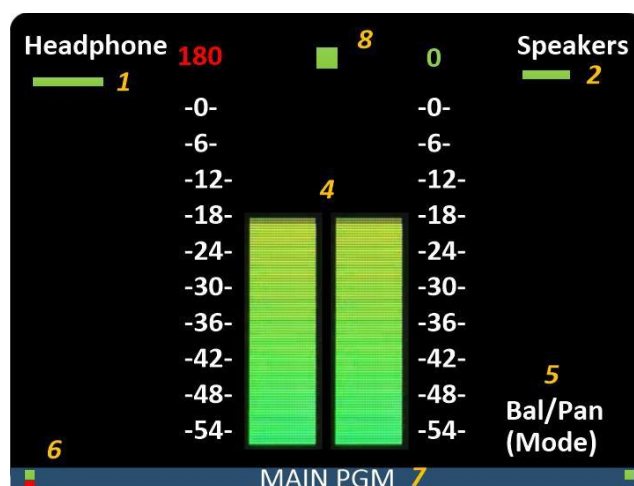
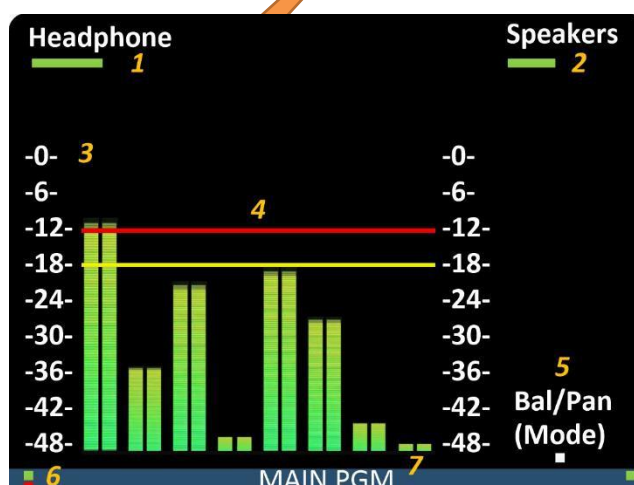
MPA1-MIX-DANTE Front Panel Display



| Display | Function | Notes |
|---------|--------------------------------------|--|
| 1 | Channel Label | Label displaying Channel friendly name. <i>NOTE: Friendly names for MADI and DANTE sources can be entered in the Channel Names section displayed within the Names Tab of the MPA1-MIX-DANTE Webpage. Friendly names for DANTE sources can also be derived from the DANTE Network when set to AUTO. See the Channels Name section of the MPA1-MIX-DANTE Webpage. See Page 71 of this manual for further information.</i> |
| 2 | Audio Level Meters | Displays Audio Level of associated Source Channel |
| 3 | Gain Bar Display | Level of Channel contribution to Stereo Monitoring Mix. <i>NOTE: Inclusion of the Gain Bar Display is determined by setting 6 in the Configuration Tab of the MPA1-MIX-DANTE Webpage. See Page 73 of this manual for further information.</i> |
| 4 | Balance/Pan Display | The relative contribution to the Left and Right channels of the Stereo Monitoring Mix is identified by the position of the Balance/Pan |
| 5 | Headphone and Speakers Level Display | Display of current Headphone and Loudspeaker Output Level settings (0 Min – 100 Max). |

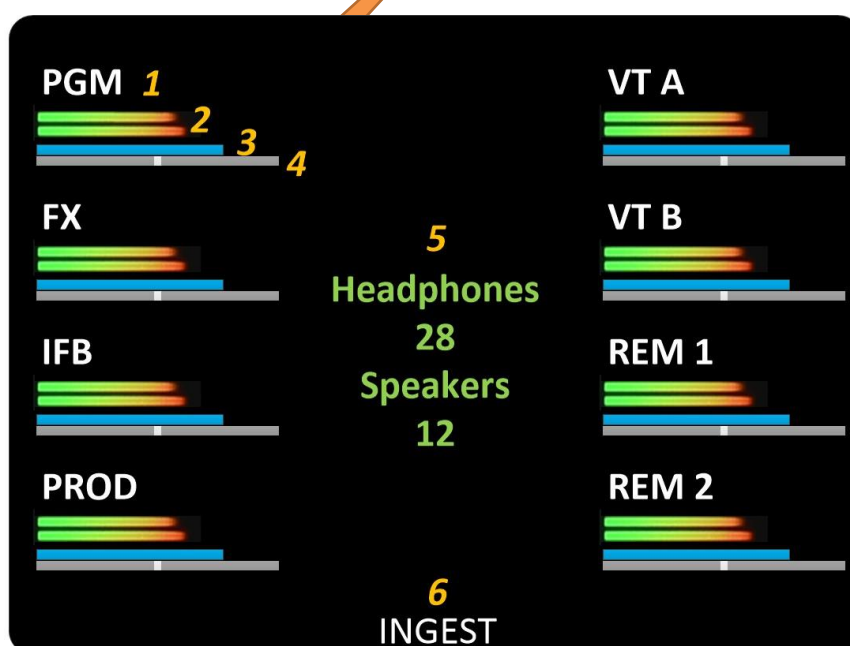
| | | |
|---|---------------|--|
| 6 | Mix Bank Name | Label displaying friendly name of currently selected Mix Bank. NOTE: <i>Friendly names can be entered in the Group Names section displayed within the Names Tab of the MPA1-MIX-DANTE Webpage.</i> <i>See Page 71 of this manual for further information</i> |
|---|---------------|--|

MPA1-SOLO-8 Front Panel Display



| Display | Function | Notes |
|---------|---------------------|--|
| 1 | Headphone Level | Display showing level of Headphone Output |
| 2 | Speakers | Display showing level of Internal Loudspeaker and Balanced Line Level Output output. |
| 3 | Audio Meter Scale | Audio Meter Scale in dBFS |
| 4 | Audio Level Display | <i>See settings 7 and 8 on Page 50 of this manual for further information on setting Warning and Alarm Thresholds.</i> |
| 5 | Balance/Pan Display | The relative contribution to the Left and Right channels of the Stereo Monitoring Mix is identified by the position of the Balance/Pan |
| 6 | Status Indicators | Status indicators showing presence of valid input sources |
| 7 | Channel Name | <i>See Page 49 of this manual for further information on how to set Channel Names.</i> |
| 8 | Phase Meter | Audio Phase Meter for currently selected audio pair |

MPA1-MIX-8 Front Panel Display



| Display | Function | Notes |
|---------|---------------------------------------|---|
| 1 | Channel Label | Label displaying Channel friendly name. <i>NOTE: Friendly names can be entered in the Channel Names section displayed within the Names Tab of the MPA1-MIX-8 Webpage. See Page 78 of this manual for further information.</i> |
| 2 | Audio Level Meters | Displays Audio Level of associated Source Channel |
| 3 | Gain Bar Display | Level of Channel contribution to Stereo Monitoring Mix. <i>NOTE: Inclusion of the Gain Bar Display is determined by setting 6 in the Configuration Tab of the MPA-MIX-8 Webpage. See Page 80 of this manual for further information.</i> |
| 4 | Balance/Pan Display | The relative contribution to the Left and Right channels of the Stereo Monitoring Mix is identified by the position of the Balance/Pan |
| 5 | Headphone and Speakers Level Displays | Display of current Headphone and Loudspeaker Output Level settings (0 Min – 100 Max). |
| 6 | Mix Bank Name | Label displaying friendly name of currently selected Mix Bank. <i>NOTE: Friendly names can be entered in the Group Names section displayed within the Names Tab of the MPA1-MIX-MADI Webpage. See Page 78 of this manual for further information</i> |

