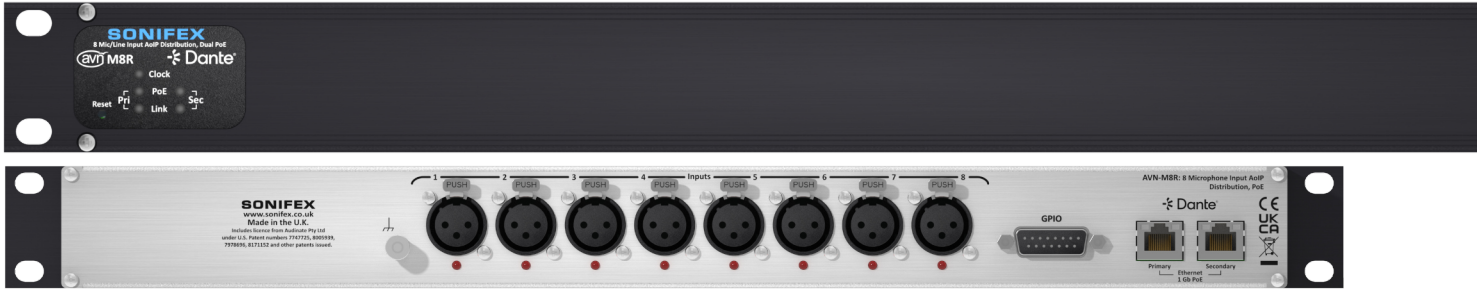
HANDBOOK

AVN-M8R

8 Mic/Line Input Dante Interface, Dual PoE



SONIFEX

Audio Solutions for
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This handbook is for use with the following product:
AVN-M8R 8 Mic/Line Input Dante Interface, Dual PoE

Revision 1.00, June 2025

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SONIFEX

Register Online for an Extended 2 Year Warranty

As standard, Sonifex products are supplied with a 1 year back to base warranty.

If you register the product online, you can increase your product warranty to 2 years and we can also keep you informed of any product design improvements or modifications.

Product: _____

Serial No: _____

To register your product, please go online to www.sonifex.co.uk/register

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Product Warranty - 2 Year Extended

As standard, Sonifex products are supplied with a 1 year back to base warranty. In order to register the date of purchase and so that we can keep you informed of any product design improvements or modifications, it is important to complete the warranty registration online. Additionally, if you register the product on the Sonifex website, you can increase your product warranty to 2 years. Go to the Sonifex website at: www.sonifex.co.uk/register to apply for your 2 year warranty.

Sonifex Warranty & Liability Terms & Conditions

1. Definitions

'the Company' means Sonifex Ltd and where relevant includes companies within the same group of companies as Sonifex Limited.

'the Goods' means the goods or any part thereof supplied by the Company and where relevant includes: work carried out by the Company on items supplied by the Purchaser; services supplied by the Company; and software supplied by the Company.

'the Purchaser' means the person or organisation who buys or has agreed to buy the Goods.

'the Price' means the Price of the Goods and any other charges incurred by the Company in the supply of the Goods.

'the Warranty Term' is the length of the product warranty which is usually 12 months from the date of despatch; except when the product has been registered at the Sonifex website when the Warranty Term is 24 months from the date of despatch.

'the Contract' means the quotation, these Conditions of Sale and any other document incorporated in a contract between the Company and the Purchaser.

This is the entire Contract between the parties relating to the subject matter hereof and may not be changed or terminated except in writing in accordance with the provisions of this Contract. A reference to the consent, acknowledgement, authority or agreement of the Company means in writing and only by a director of the Company.

2. Warranty

a. The Company agrees to repair or (at its discretion) replace Goods which are found to be defective (fair wear and tear excepted) and which are returned to the Company within the Warranty Term provided that each of the following are satisfied:

   i. notification of any defect is given to the Company immediately upon its becoming apparent to the Purchaser;

   ii. the Goods have only been operated under normal operating conditions and have only been subject to normal use (and in particular the Goods must have been correctly connected and must not have been subject to high voltage or to ionising radiation and must not have been used contrary to the Company's technical recommendations);

   iii. the Goods are returned to the Company's premises at the Purchaser's expense;

   iv. any Goods or parts of Goods replaced shall become the property of the Company;

   v. no work whatsoever (other than normal and proper maintenance) has been carried out to the Goods or any part of the Goods without the Company's prior written consent;

   vi. the defect has not arisen from a design made, furnished or specified by the Purchaser;

   vii. the Goods have been assembled or incorporated into other goods only in accordance with any instructions issued by the Company;the defect has not arisen from a design modified by the Purchaser;

viii. the defect has not arisen from an item manufactured by a person other than the Company. In respect of any item manufactured by a person other than the Company, the Purchaser shall only be entitled to the benefit of any warranty or guarantee provided by such manufacturer to the Company.

b. In respect of computer software supplied by the Company the Company does not warrant that the use of the software will be uninterrupted or error free.

c. The Company accepts liability:

(i) for death or personal injury to the extent that it results from the negligence of the Company, its employees (whilst in the course of their employment) or its agents (in the course of the agency);

(ii) for any breach by the Company of any statutory undertaking as to title, quiet possession and freedom from encumbrance.

d. Subject to conditions (a) and (c) from the time of despatch of the Goods from the Company's premises the Purchaser shall be responsible for any defect in the Goods or loss, damage, nuisance or interference whatsoever consequential economic or otherwise or wastage of material resulting from or caused by or to the Goods. In particular the Company shall not be liable for any loss of profits or other economic losses. The Company accordingly excludes all liability for the same.

e. At the request and expense of the Purchaser the Company will test the Goods to ascertain performance levels and provide a report of the results of that test. The report will be accurate at the time of the test, to the best of the belief and knowledge of the Company, and the Company accepts no liability in respect of its accuracy beyond that set out in Condition (a).

f. Subject to Condition (e) no representation, condition, warranty or other term, express or implied (by statute or otherwise) is given by the Company that the Goods are of any particular quality or standard or will enable the Purchaser to attain any particular performance or result, or will be suitable for any particular purpose or use under specific conditions or will provide any particular capacity, notwithstanding that the requirement for such performance, result or capacity or that such particular purpose or conditions may have been known (or ought to have been known) to the Company, its employees or agents.

g. (i) To the extent that the Company is held legally liable to the Purchaser for any single breach of contract, tort, representation or other act or default, the Company's liability for the same shall not exceed the price of the Goods.

(ii) The restriction of liability in Condition (g)(i) shall not apply to any liability accepted by the Seller in Condition (c).

h. Where the Goods are sold under a consumer transaction (as defined by the Consumer Transactions (Restrictions on Statements) Order 1976) the statutory rights of the Purchaser are not affected by these Conditions of Sale.

Unpacking Your Product

Each product is shipped in protective packaging and should be inspected for damage before use. If there is any transit damage take pictures of the product packaging and notify the carrier immediately with all the relevant details of the shipment. Packing materials should be kept for inspection and also for if the product needs to be returned.

Repairs & Returns

Please contact Sonifex or your supplier if you have any problems with your Sonifex product. Email technical.support@sonifex.co.uk for the repair/upgrade/returns procedure, or for support & questions regarding the product operation.

Atmosphere/Environment

This apparatus should be installed in an area that is not subject to excessive temperature variation (<0°C, >50°C), moisture, dust or vibration. This apparatus shall not be exposed to dripping or splashing, and no objects filled with water, such as vases shall be placed on the apparatus.

CE and UKCA Conformity

The products in this manual comply with the essential requirements of the relevant UK and European health, safety and environmental protection legislation. The technical justification file for this product is held at Sonifex Ltd. Relevant declarations of conformity can be found at:
https://www.sonifex.co.uk/declarations

WEEE Directive

Directive 2012/19/EU of the European Parliament and of the Council of 4th July 2012 lays down measures to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste from electrical and electronic equipment (WEEE).

The policy of Sonifex Ltd is to comply with all applicable laws of all jurisdictions having authority over Sonifex's business, including the WEEE directive. Accordingly, Sonifex has implemented a rigorous program designed to ensure compliance of its products with the WEEE directive. The latest statements can be found at:
https://www.sonifex.co.uk/company/recycling

AVN-M8R Mic/Line Input Dante Interface

Introduction

The AVN-M8R multi-channel Dante interface is a 1U rack-mount which distributes 8 balanced Mic/Line inputs to 8 channels of Dante/AES67 to the AoIP network. Each Mic/Line input can be controlled and managed remotely via a web server, with settings including mic preamp gain and switchable phantom power.

A typical application might be to distribute up-to 8 separate balanced Mic/Line feeds onto an AoIP system and routed via Dante Controller to other nodes on the network.

The front panel includes clear LED indicators for power (PoE), network status, and clock synchronisation, along with dedicated LEDs for secondary port link and PoE monitoring.

On the rear, 8 XLR balanced Neutrik connectors provide the professional Mic/Line interface with phantom power indicators, and the units is powered via PoE for installation savings, reliabilty and efficiency. Primary and secondary 1Gb ports are offered as standard to provide full power and data redundancy, ensuring an uninterrupted reliable solution in critical environments.

The GPIO and vGPIO can be used to trigger events over the network between devices, such as microphone muting and other events.

Advanced Control & Remote Management

Fully compatible with the Dante AoIP standard, the AVN-M8R allows for flexible audio routing via Dante Controller. Additionally, Ember+ can be used as a control protocol for real-time status updates and remote control.

A built-in web server enables easy configuration of each input type include:

Individual Mic-In Settings:

- Phantom Power
- Preamp Gain (16dB to 76dB) in 3dB Increments

Individual Line-In Settings:

- 5 Levels of Input Line-up (+15dBu to +24dBu = 0dBFS)

Individual Mic-In and Line-In Settings:

- High Pass Filter
- High Pass Corner Frequency
- Signal Presence Threshold (dB)
- Signal Presence Timeout
- Mute

The unit supports AES67 operation and is Dante Domain Manager compliant offering a simple and intuitive user experience.

With its robust feature set, flexible connectivity, and remote management capabilities, the AVN-M8R is the perfect solution for broadcasters, recording studios and live sound applications that require high-quality professional AoIP integration from their sources.

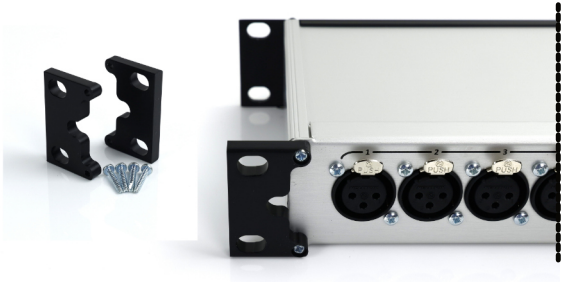
Rack-Mounted for Seamless Integration

The AVN-M8R is designed for professional installations, with a full-width 19” chassis and a compact 1U height. This standard rack-mount form factor ensures easy integration into racks rooms in any environment, providing a space-efficient solution without compromising on performance.

Accessories

- AVN-AIORK - 1U Rear Rack Kit For AVN-AIO/M Range

The AVN-AIORK is a 1U rear rack-mounting bracket designed for use with any product from the AVN-AIO/M range. It allows the unit to be mounted with its rear panel facing forward in a standard rack, providing convenient access to all rear connectivity. This alternative mounting solution is ideal for setups where frequent cable changes or monitoring connections is required.



Features

- 8 x Mic/Line Inputs using Neutrik Connectors.
- Phantom Power with Indicators for each Mic Input.
- Remote Individual Input Control such as Mic Gain and Line-up Control via the Web Server.
- 2 x RJ45 Connector (1 Gb/s Ethernet Port) for Power and Network, with Redundancy.
- PoE, Link and Clock LED Status Indicators.
- Configuration using Dante Controller.
- AES67 Operation & Dante Domain Manager Compliant.
- Powered by PoE.
- 1U 19" rack-mount form factor.

Front Panel

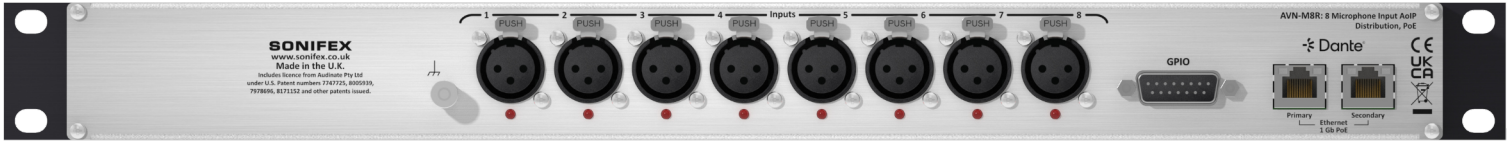
On the left-hand side of the front panel are the status LEDs and a reset button.

Clock - The clock status LED is illuminated green when the device is a PTP master or synced to a valid PTP master.

PoE - The PoE status LED is illuminated when power over Ethernet is available. Independent LEDs show PoE status on both Primary and Secondary Ethernet connections.

Link - The link status LED is illuminated when the device is connected to a valid network. Independent LEDs show link status on both Primary and Secondary Ethernet connections.

Rear Panel



Mic/Line Inputs

Eight locking XLR Mic/Line inputs, each with phantom power indication. This LED illuminates red when phantom power is enabled for that mic input.

The XLR-3 input connectors can take balanced professional levels or unbalanced by connecting the non-phase to the signal ground. The line inputs have the following pin-out.

Pin 1: Chassis Ground/Screen
Pin 2: Input Phase/Positive
Pin 3: Input Non-Phase/Negative

Ethernet Connections

Dual redundant Ethernet/PoE connections. These provide PoE and networking capability. There are two status LEDs on the connector. The left LED indicates the 1 Gbps link speed and indicates link activity.

Left LED Link Speed	Off	Green
	100Mbps	1Gbps

The LED on the right indicates traffic on the connection. When the LED is flashing orange, data is being transmitted/received.

GPIO Connector

A single female D-SUB (DA-15) connector provides 10 configurable GPIO and a voltage free switching relay contact. The connector has the following pinout:

Pin 1: GPIO Port 1
Pin 2: GPIO Port 2
Pin 3: GPIO Port 3
Pin 4: GPIO Port 4
Pin 5: GPIO Port 5
Pin 6: Relay – Normally Open Contact
Pin 7: Relay – Normally Closed Contact
Pin 8: Relay – Common
Pin 9: GPIO Port 6
Pin 10: GPIO Port 7
Pin 11: GPIO Port 8
Pin 12: GPIO Port 9
Pin 13: GPIO Port 10
Pin 14: Fused (50 mA) +12V DC Supply
Pin 15: Ground

The +12V DC supply is fused and has a maximum output current of 50 mA. GPIO ports can be set up as outputs (GPO) or inputs (GPI). GPO are open collector; this means the output pin is connected to ground when the GPO is active. GPI are active low and are triggered when pulled down to ground. GPIO configuration can be managed through the devices embedded web server.

Ground Terminal

A grounding terminal is provided to help improve the microphone signal quality. A proper ground connection can help reduce power line frequency interference reducing audible hum and buzz. It can also prevent ground loops and improve common mode rejection. If you are experiencing issues with audio quality, then try applying a ground connection via this terminal.

Web User Interface

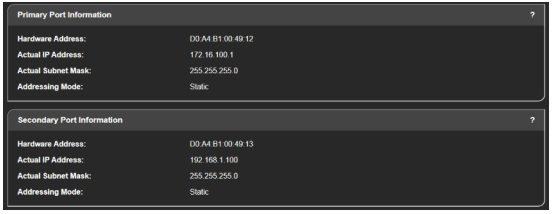
The AVN-M8R has an embedded web server which provides easy access to all the configuration options through a web browser. It also gives access to system information and allows firmware to be easily updated when new firmware releases are made available. The device has two Ethernet ports on its back panel, one is the 'Primary' Ethernet port and the other is the 'Secondary' Ethernet port. When the Interface Mode is set to 'Redundant', the web server can be accessed via the primary or Secondary port. When it is set to 'Switched', the web server can be accessed via both ports.

By default, the embedded web server is set to static address mode. The IP address of the embedded web server is 192.168.0.100 with a subnet mask of 255.255.255.0. If the network address mode for the port to be used has been set to 'Dynamic', the unit will attempt to acquire an IP address from a DHCP server. If no DHCP server is found, an automatically generated link Local IP address will be used. The active IP address for the network port can be found using a service discovery tool such as the 'Discovery Application' which can be found on the Sonifex website: (http://sonifex.co.uk/technical/software/index.shtml#sfxsrvdisc)

Once the IP address of the embedded web server is known, type this into the address bar of a web browser. The 'Device Information' page will then be displayed. This is the default page and will always be displayed first when connecting to the embedded web server. The friendly name of the device is shown underneath the Sonifex logo. This makes it easier to identify the connected device especially when configuring multiple devices at the same time. Help information can be found by clicking on the question mark in the corresponding section.

Device Information

This information shows the status of the unit as well as the software versions of the various modules running on the unit. When contacting Sonifex technical support, it is important to provide the information shown on this page.



The lower half of the page shows the configuration of the network ports. The 'Primary Port Information' and the 'Secondary Port Information' shows the configuration information of each port to the Dante audio network. The network settings of these two ports can be controlled via the 'Network' configuration web page. If the Dante interface mode setting for the unit is set to "Switched", then only the Primary Port Information will be shown here.

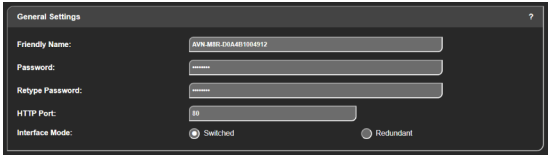
Configuration

There are four sections under the 'Configuration' tab, these are as follows.

- Network
- Device Settings
- GPIO Settings
- SNMP Settings

Network

The Network page shows the current configuration for the Primary and Secondary Network ports. Please note the secondary port will only be shown if the Dante Interface Mode is set to ‘Redundant’. The friendly name and security options can also be set here.



Friendly Name

The friendly name identifies the unit on the network. It is a good idea to assign a username or location as this is easily recognised by other users. The default friendly name is made from the device ID and the 7-digit product serial number i.e. AVN-M8R-1234567. The friendly name can only contain letters, numbers and hyphens although it cannot start or end with a hyphen.

Password

In order to prevent other users connected to the same network from modifying the configuration of the device, it is possible to protect your device with a password. The password may be between 4 and 8 characters long and may only contain numbers and letters.

Retype Password

In this field the password must be retyped. This is to ensure you didn’t accidentally enter your intended password incorrectly.

Removing Password Protection

Password protection can be removed from a device by clearing both the ‘Password’ and ‘Retype Password’ fields and clicking submit.

HTTP Port

The HTTP port number can be set to any integer from ‘1024’ up to and including ‘65535’, or to ‘80’ the default value. The value entered determines which port the web server on the device will use. When the port number is modified the unit will be restarted automatically. To view the web pages of a device with a modified port number, the port number must be specified in the address bar of the web browser after the IP address and separated by a colon.

For example, if the HTTP port of a unit is set to ‘1024’ and the IP address of the unit is ‘192.168.0.100’ then ‘http://192.168.0.100:1024’ would need to be entered into the address bar of the web browser. When the port is set to its default value of ‘80’, a port number doesn’t need to be specified when accessing the web server.

The web server on the unit is advertised as an Avahi / Bonjour service so tools like Sonifex Service Discovery or avahi-browse will be able to discover the address and port number being used by the web server on the unit.

Interface Mode

This option sets the configuration mode for the network ports. In switched mode, the primary port is the main Dante audio port and the secondary port will behave as a standard switch port allowing daisy chaining through the device. In redundant mode, the secondary port can be connected to a redundant network to provide backup in case the primary network fails.

Address Mode

The address mode determines how the port obtains its IP address. When set to dynamic, the unit will attempt to acquire an IP address automatically from either a DHCP server or via auto configuration if no DHCP server is found. The actual IP address will be shown on the device information page. When static mode is used, the IP address and subnet mask values entered will be assigned to the port.

Static IP Address

This is the IP address that will be assigned to the port when static address mode is selected. It is important to ensure that this IP address is not currently in use on the network. This value is not used when the address mode is dynamic.

Static Subnet Mask

This is the subnet mask that will be used for the port when static address mode is selected. This value is not used when the address mode is dynamic.

Static Gateway

This is the router IP address that will be used for the port when static address mode is selected.

Note: If the device is in switched mode, the secondary network port settings will not be displayed.

If any of the network configuration options are changed, the unit will automatically restart to implement the new settings. If the address mode of the control port is changed, a new connection will need to be made once the unit has restarted and the IP address assigned via DHCP is known. Otherwise, the new page will be reloaded automatically once the restart of the unit is complete.

Network Defaults

Friendly Name:	AVN-M8R-xxxxxxx
	(Where AVN-M8R-xxxxxxx is the product serial number)
Interface Mode:	Switched
Primary Network Port:	
Address Mode:	Static
Static IP Address:	192.168.0.100
Static Subnet Mask:	255.255.255.0
Static Gateway:	0.0.0.0
Secondary Network Port:	
Address Mode:	Static
Static IP Address:	192.168.1.100
Static Subnet Mask:	255.255.255.0
Static Gateway:	0.0.0.0

Device Settings

Dante Input Name

Shows the name assigned to this channel as it appears in Dante Controller.

Local Input Name

Shows the local input name assigned to this channel (right click to edit). **Note:** The local input name is not sent to Dante Controller.

Input Level

Select between a Mic or Line level input.

Input Lineup (Line only)

When the input level is set to Line levels it is possible to set the Lineup level for full-scale. This is the analogue level that equates to a full scale signal in the digital domain. The options are 15dBu, 18dBu, 20dBu, 22dBu or 24dBu.

Phantom Power (Mic only)

Turns on phantom power for Mic level inputs.

Preamp Gain (Mic only)

Configures the pre-amp gain. This can be set from 16dB through to 76dB in 3dB increments.

High Pass Filter (HPF)

Enables the high pass filter. This attenuates the audio below the corner frequency (or cutoff point).

HPF Corner Frequency

Sets the corner frequency (-3dB point) of the HPF. This can be set from 40Hz through to 3kHz in 5Hz increments.

Signal Presence Threshold (dBFS)

Configures the threshold at which a signal is regarded as present or not present. It can be set to -70dBFS through to 0dBFS in 1dBFS increments.

Signal Presence Timeout

Sets the timeout value for which a signal is determined to be not present. For example, if the signal presence threshold is set to -20dBFS and the timeout is set to 5 seconds, and the signal drops below -20dBFS for 5 seconds or more it is deemed to be no longer present. The timeout value can be set to 0 seconds through to 300 seconds.

Mute:

When checked, the audio on the Dante output channel associated with this input is muted.
Note: The input can also be muted due to an asserted GPIO so audio may still be muted even when this box in unchecked (See GPI Mute Active below).

GPI Mute Active:

Indicates whether a GPIO event is currently muting this input.

Copy Settings:

To copy the settings for the currently selected input over to other inputs:

- Click the buttons under the specific inputs where you wish to use the same settings as the currently selected input.
- Or, click 'Copy to All' to apply the settings to all other inputs.
- Click the 'Copy Settings' button to confirm.

GPIO Settings

The GPIO Settings web page shows an overview of connections between logical inputs and logical outputs. This web page allows the device to be configured to perform actions when events occur.

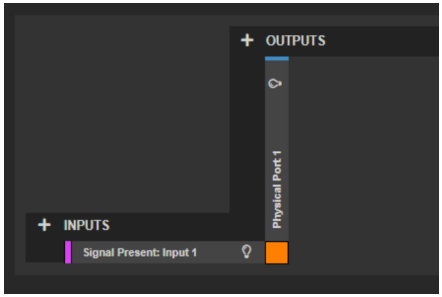
The inputs can be of type:

- **Physical GPI**
- **Virtual GPI**
- **Events**

The outputs can be of type:

- **Physical GPO**
- **Virtual GPO**
- **Events**
- **Relay**

An example scenario of when these logical connections might be useful is as follows:

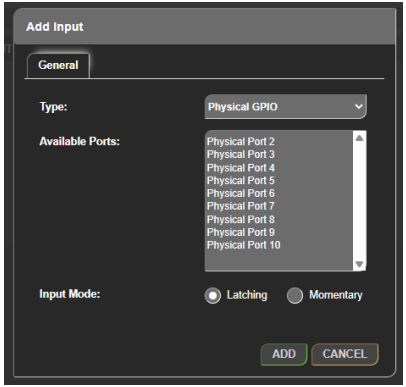


In a particular setup there is an LED sign which can be controlled using a physical GPIO connection, the user wants this LED sign to be turned on whenever a signal is present on input 1, therefore they add the event “Signal Present: 01” as an input, then add a physical GPIO as an output selecting Physical Port 1. They then click in the white square which is in line with both that input and that output which causes a connection between the two to be made. Now whenever a signal is detected on input 1 their corresponding LED sign will illuminate. In the example, the signal

presence indicated by the green lightbulb on the input signal present and the routing to Physical Port 1 becomes active indicated by the green box between them. Inputs and outputs can be added to the GPIO routing grid by clicking the + icon next to INPUTS or OUTPUTS. Once added, routings can be made between inputs and outputs. An orange square indicates an inactive routing, a green square indicates an active routing.

Add Input

To add a new input group to the GPIO grid, click the **+** button next to **INPUTS**, this will open a new window.



The type drop-down menu allows the user to configure how the input will operate, the options available are described below.

Physical GPIO

Allows a general-purpose input on the rear panel of the device to be used as a trigger for an output. When selected the following fields are also displayed:

Available Ports

This menu allows the user to select which of the available physical ports to setup. There are ten physical ports available.

Input Mode

Momentary - When the input mode is set to Momentary, the input function is enabled only whilst the input is active.

Latching - When the input mode is set to Latching, making the input active briefly will toggle whether the input function is enabled or disabled.

Virtual GPIO

Allows a virtual general-purpose input to be created using a source from the network, this can then be used as a trigger for an output.

Available Ports

This menu allows the user to select which of the available virtual ports to setup. There are ten virtual ports available.

vGPIO Source

The vGPIO Source drop-down window allows the user to select a virtual general-purpose output port from another device that is available on the network and use that to set the state of the virtual input.

Event

Allows an input event to be selected which will then cause an output to be triggered.

Available Events

This drop-down menu allows an event to be selected that can then be used as an input to drive the state of another output, the list of options are as follows:

Primary Link Down

Active when no connection is available via the primary network port on the device.

Secondary Link Down

Active when no connection is available via the secondary network port on the device.

PoE1 Power Off

Active when the status of the primary PoE port is in fault condition.

PoE2 Power Off

Active when the status of the secondary PoE port is in fault condition.

PTP Sync Lost

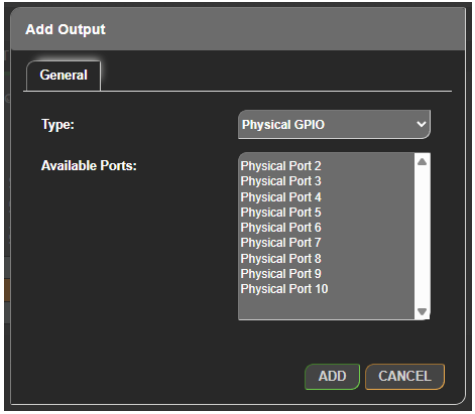
Active when the connection to the PTP master is lost.

Signal Present<input name>

Active when audio is present on the named input. To adjust the behaviour of when this event becomes active or inactive, the **Presence Threshold** and **Presence Timeout** settings can be configured in the **Device Settings** menu. The **Presence Threshold** sets the audio level required on the input before this event becomes active. The **Presence Timeout** setting for the input determines how long the audio level present at the input needs to be under the Presence Threshold level before this event becomes inactive again.The Input Name corresponds to the Input name listed in Dante Controller.

Add Output

To add a new output group to the GPIO grid, click the **+** button next to **OUTPUTS**, this will open a new window.



The type drop-down menu allows the user to configure how the output will operate.

The 4 options available are described below:

Physical GPIO

Allows a GPO on the rear panel of the device to be activated.

Available Ports

Allows the user to select which of the available physical ports to setup. There are ten physical ports available.

Virtual GPIO

Creates a virtual GPO on the network which can be activated.

Available Ports

Allows the user to select which of the available virtual ports to set up. There are ten virtual ports available.

Event

Allows an output event to be selected which can then be triggered by an input.

Available Events

Allows the user to select which of the available events to set up.

Allows the user to select which of the available events to set up. The list of options are as follows:

Mute (Inputs 1-8)

Mutes the corresponding output. The name of this event corresponds to the Input name listed in Dante Controller.

Relay

Allows the relay available on the GPIO connector to be toggled on and off.

Available Relays

Allows the user to select which of the available relays on the device is to be set as an output. There is one relay available on the AVN-M8R.

Routing Grid

Create Connection

Clicking on a square in the routing grid creates a connection.

- Orange squares indicate inactive connections.
- Green squares indicate active connections.
- Dark grey squares indicate an input and output are not allowed to be connected, for example an event cannot be routed to the same event.

When an input is active, indicated by a green lightbulb next to the input name, the connection becomes active. This in turn makes the output active which is indicated by a green lightbulb next to the output name.

Remove Connection

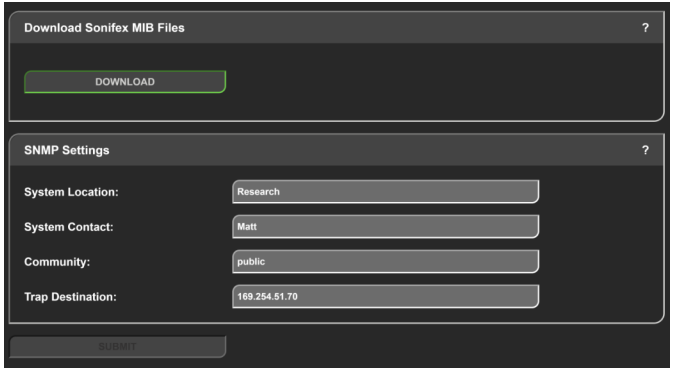
Hold the control key Ctrl and click a connection to delete it. Alternatively click on a connection and then click **Delete** in the **Configure Connection** window.

Invert Connection

A connection can be inverted by clicking the connection and then selecting **Invert Input State** in the **Configure Connection** window. Now when the connection would normally be active it is inactive, and when it would normally be inactive it is active.

SNMP Settings

The SNMP settings web page allows configuration of SNMP messages and can be used send traps to an SNMP master which can then perform tasks such as sending email.



Download Sonifex MIB Files

Click **Download** to download two files SONIFEX-GPIO-MIB and SONIFEX-MIB. These are used by the SNMP master to decode received messages.

System Location

The system location is used to specify the physical location of the unit. This may be set to any value which is between 0 and 20 characters in length. The system location can be accessed via SNMP using the OID 1.3.6.1.2.1.1.6 (sysLocation).

System Contact

The system contact is used to specify the user of the device. This may be set to any value which is between 0 and 100 characters in length. The system contact can be accessed via SNMP using the OID 1.3.6.1.2.1.1.4 (sysContact).

Community

The SNMP community string is used as a form of security. If the string is set to 'public' without quotation marks, any SNMP master on the network may query the device. If the community string is set to anything else, the SNMP master will need to send this community string along with any SNMP requests in order to acquire the requested information. Otherwise the request will be denied. This may be set to any value which is between 0 and 20 characters in length.

Trap Destination

The trap destination is the IP address of the SNMP master. This allows the device to send SNMP trap messages to the SNMP master containing information about the devices current state. For example, an SNMP trap message is sent when the state of a GPI is changed, along with information about that GPI such as the GPI number and its current state.

Disabling SNMP Trap Messages

To prevent SNMP Trap Messages from being sent, the 'Trap Destination' field can be cleared and the form submitted.

System

The system web page is used for the following:

- Updating the unit
- Saving and loading configuration files
- Retrieving the unit's system logs
- Rebooting and resetting the unit

Update Firmware

In this section, the current firmware version on the connected unit is shown. New versions of firmware will be released as new features are added, and when any bug fixes are completed. Click on the software downloads link to visit the firmware downloads webpage of the Sonifex website. If an update is available for your unit, you can download it as a zipped archive file. You will then need to extract the 'SWU' file from the archive. This can be done in Windows by right-clicking the archive and selecting extract all.

Clicking update will then show the software update page. Follow the on screen instructions to select and install a new firmware version, or select Show Advanced Options to select the existing firmware image to boot.

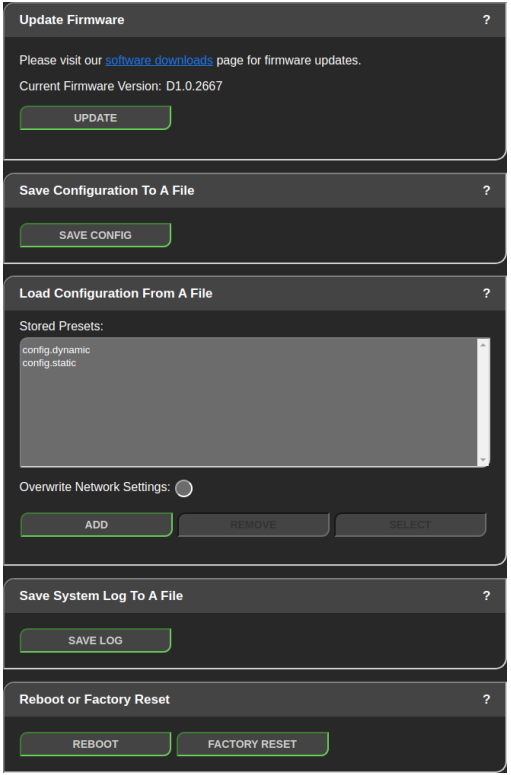
Save Configuration to a File

The currently loaded configuration of the unit can be saved to a local 'JSON' file by clicking the save config button. The filename will be the device ID followed by an underscore and the device's friendly name.

It is a good idea to save the configuration settings of all units on the network once they have been setup as this provides a quick and easy way of returning the units to a known working condition.

Load Configuration from a File

This section is used to load stored pre-set files. This is useful when the unit is being moved between locations with different setups. Configuration files store the complete setup of the unit including the units network settings, however network settings are only changed when the Overwrite Network Settings checkbox is selected.



A maximum of 8 pre-sets can be added to the unit. A pre-set is added by clicking the Add button and selecting a local configuration file. A pre-set can be removed by selecting it in the list and clicking the Remove button.

A pre-set is loaded on the unit by selecting the pre-set in the list and pressing the Select button.

If you need to *load* the network settings from the configuration file, select the Overwrite Network Settings checkbox. To keep the current network settings unchanged, leave this option unchecked - all other settings and the selected preset will still be applied

To *apply* the network settings stored in the configuration file, select the 'Overwrite Network Settings' checkbox. If you prefer to keep the current network settings, leave this option unchecked— all other settings from the selected preset will still be applied

When a pre-set is loaded, the unit will automatically reboot to load the new configuration settings. This takes approximately 25 seconds during which time a progress page will be shown. If the settings of the network port the browser is connected to have changed, a new connection will need to be made once the unit has restarted. Otherwise, the device information page will be shown automatically.

Save System Log to a File

An internal log records system events and errors. The current log can be retrieved from the device by clicking the Save Log button.

If there have been no process crashes the current log is saved and is a single text file. Otherwise multiple logs will be stored together in a 'TAR' archive file. This archive can be sent to Sonifex to help you resolve any issues with the unit.

Reboot or Factory Reset

The unit can be rebooted using the reboot button, and this can often fix minor issues with the unit. After rebooting, the webpage should automatically be reloaded. The factory reset button restores the unit to factory settings. Restoring the factory settings will also cause the unit to reboot.

The pre-set configuration files previously uploaded to the unit will still be available after a factory reset, this allows the unit to be quickly restored to a known working state.

Technical Specifications

Network and AoIP	
AoIP Standard:	Dante
Number of Channels:	8 transmit
Number of Streams:	8 transmit
Sample Rate:	44.1kHz, 48 kHz, 88.2kHz or 96kHz
Format:	Linear PCM, 16, 24 or 32 bit
AES67 Support:	Yes
Connectivity:	2 x RJ45
Speed:	1Gbps and 100Mbps
Network Modes:	Switched or redundant
Dante Domain Manager Ready:	Yes

Balanced Line Input XLR Pinout	
Pin	Function
1	Chassis Ground/Screen
2	Input Phase/Positive
3	Input Non-Phase/Negative

PoE Power	
Standard	802.3af
Class	0
PD Power Range	0.44 W to 12.94 W
Typical PSE Power Usage	10W
Max PSE Power Usage	15.4W

Equipment Type	
AVN-M8R	AVN-M8R 8 Mic/Line Input Dante Interface, Dual PoE

Mic/Line Inputs	
Input Impedance (Mic Mode):	2.5kΩ electronically balanced
Input Impedance (Line Mode):	>10kΩ electronically balanced
Preamp Gain (Mic Mode):	User selectable 16dB to 76dB in 3dB steps (Ref. +18dBu = 0dBFS)
0dBFS Line-up (Mic Mode):	-58dBu @ Max preamp gain, +2dBu @ Min preamp gain
0dBFS Line-up (Line Mode):	User selectable +15dBu / +18dBu / +20dBu / +22dBu / +24dBu = 0dBFS
Frequency Response (Mic Mode):	+0/-0.2dB 20Hz to 42kHz Ref 40dB gain @ 1kHz
Frequency Response (Line Mode):	+0/-0.2dB 20Hz to 42kHz Ref 0dBu @ 1kHz
THD+N (Mic Mode):	<-90dBFS, -52dBu, 20Hz – 20kHz, 40dB gain, 20kHz BW
THD+N (Line Mode):	<-100dBFS, -6dBu, 20Hz – 20kHz, 20kHz BW (Ref. +24dBu = 0dBFS)
Equivalent Input Noise (Mic Mode):	<-143dBFS (-125dBu) Ref. 76dB preamp gain, Rs = 200Ω
Noise (Line Mode):	<-100dBFS, 20kHz BW, Rs = 200Ω
C.M.R.R.:	>60dB @ 1kHz
Phantom Power (Mic Mode):	+48V
High Pass Filter:	12dB/octave, user selectable frequency

Phycial Specification	
Dimensions (Raw)	48cm (W) x 11cm (D) x 4.3cm (H)(1U) 19” (W) x 4.3” (D) x 1.7” (H)
Dimensions (Boxed)	59.5cm (W) x 22.5cm (D) x 7cm (H) 23.4” (W) x 8.9” (D) x 1.7” (H)
Weight	Nett: 0.9kg Gross: 1.4kg Nett: 1.9lbs Gross: 3.1lbs

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SONIFEX

Audio Solutions for
AV & Broadcast Media