# MICHI





# S5 M8

Stereo Power Amplifier
Amplificateur Stéréo Intégré
Stereo-Endverstärker
Etapa de Potencia Estereofónica
Stereo eindversterker
Amplificatore finale stereo
Integrerad stereoförstärkare
Интегрированный стерео усилитель

Monoblock Power Amplifier
Amplificateur de Puissance Mono
Mono-Endverstärker
Etapa de Potencia Monofónica
Monoblock eindversterker
Amplificatore finale mono
Monoblock effektförstärkare
Моноблочный усилитель мощности

Owner's Manual
Manuel de l'utilisateur
Bedienungsanleitung
Manual de Instrucciones
Manuale di istruzioni
Instruktionsbok
Инструкция пользователя

# **Important Safety Instructions**

**Notice** 

The RS232 connection should be handled by authorized persons only.

WARNING: There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

WARNING: To reduce the risk of fire or electric shock, do not expose the unit to moisture or water. Do not expose the unit to dripping or splashing. Do not place objects filled with liquids, such as vases, on the unit. Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with dry cloth.

Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Only use attachments/accessories specified by the manufacturer.

Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

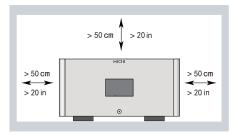
The apparatus should be used in non tropical climate.

The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

Touching uninsulated terminals or wiring may result in an unpleasant sensation.

You must allow a minimum 50 cm or 20 inches of unobstructed clearance around the unit.





WARNING: The rear panel power cord connector is the mains power disconnect device. The device must be located in an open area that allows access to the cord connector.

The unit must be connected to a power supply only of the type and voltage specified on the rear panel. (USA: 120 V/60Hz, EC: 230V/50Hz)

Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable. Do not use extension cords.

The mains plug is the disconnect of the unit. In order to completely disconnect the unit from the supply mains, remove the main plug from the unit and the AC power outlet. This is the only way to completely remove mains power from the unit.

Use Class 2 wiring for speaker connections to ensure proper installation and minimize the risk of electrical shock.

The batteries in the remote control should not be exposed to excessive temperature such as sunshine, fire or other heat sources. Batteries should be recycled or disposed as per state and local guidelines.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following to conditions: (1) This device may not cause harmful interference, and (2) this device must

accept any interference received, including interference that may cause undesired operation.

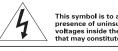
WARNING: The master power switch is located on the rear panel. The unit must allow unobstructed access to the main power switch.



# APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR THE USAGE

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT. INSERT FULLY.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU AU FOND.



This symbol is to alert the user to the presence of uninsulated dangerous voltages inside the product's enclosure that may constitute a risk of electric shock.



This symbol is to alert the user to important operating and maintenance (service) instructions in this manual and literature accompanying the product.



Michi products are designed to comply with international directives on the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment and the disposal of Waste Electrical and Electronic Equipment (WEEE). The crossed wheelie bin symbol indicates compliance and that the products must be appropriately recycled or processed in accordance with these directives.



#### **Pin Assignments**

Balanced Audio (3 pole XLR):

Pin 1: Ground / Screen
Pin 2: In phase / +ve / Hot
Pin 3: Out of phase / -ve
/ Cold



Figure 1 : Controls and Connections
Commandes et Branchements
Bedienelemente und Anschlüsse
Controles y Conexiones

Controlli e connessioni Bedieningselementen en aansluitingen Controlli e connessioni Kontroller och anslutningar Органы управления и разъемы

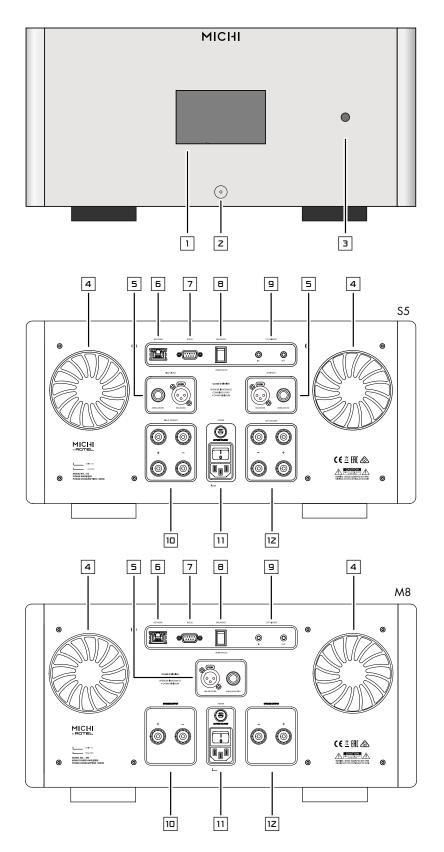


Figure 2: RR-RH6 Remote Control
Télécommande infrarouge RR-RH6
Fernbedienung RR-RH6
Mando a Distancia RR-RH6

Afstandsbediening RR-RH6 Telecomando RR-RH6 RR-RH6 fjärrkontroll Пульт ДУ RR-RH6

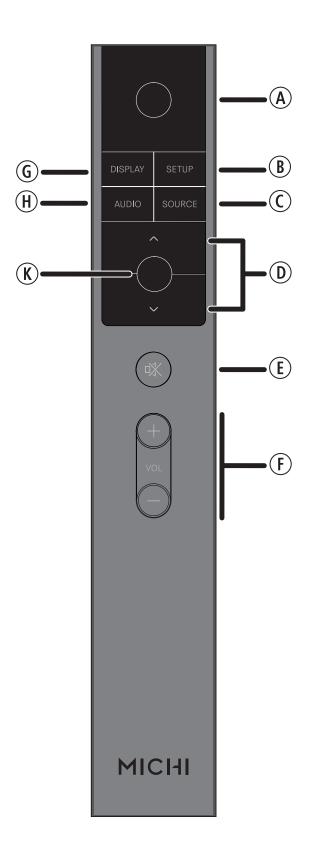


Figure 3 -1: Analog Input and Speaker Output Connections

Branchements des entrées analogiques et sorties enceintes acoustiques Anschlussdiagramm (analoge Eingangsanschlüsse, Ausgangsanschlüsse für die Lautsprecher)

Conexiones de Entrada Analógicas y de Salida a las Cajas Acústicas

Analoge ingangen en luidsprekeruitgangen

Collegamenti ingressi analogici ed uscite diffusori

Anslutningar för högtalare och analoga ingångar

Подсоединение источников сигнала на аналоговые входы и акустических систем

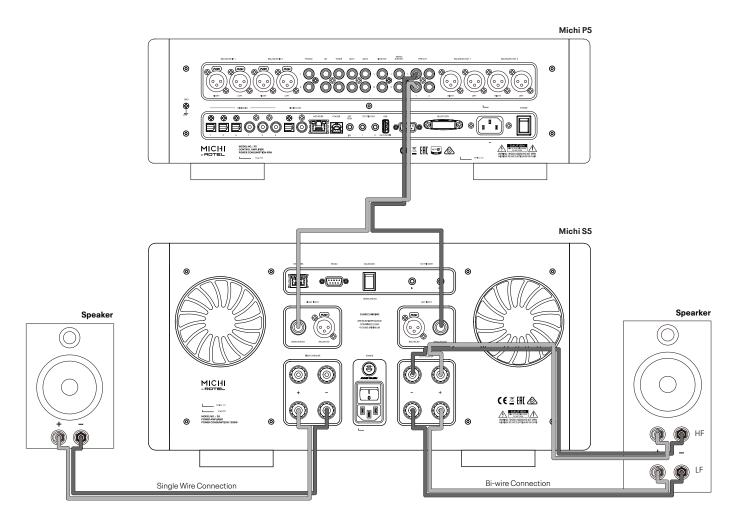


Figure 3-2: Analog Input and Speaker Output Connections

Branchements des entrées analogiques et sorties enceintes acoustiques Anschlussdiagramm (analoge Eingangsanschlüsse, Ausgangsanschlüsse für die Lautsprecher)

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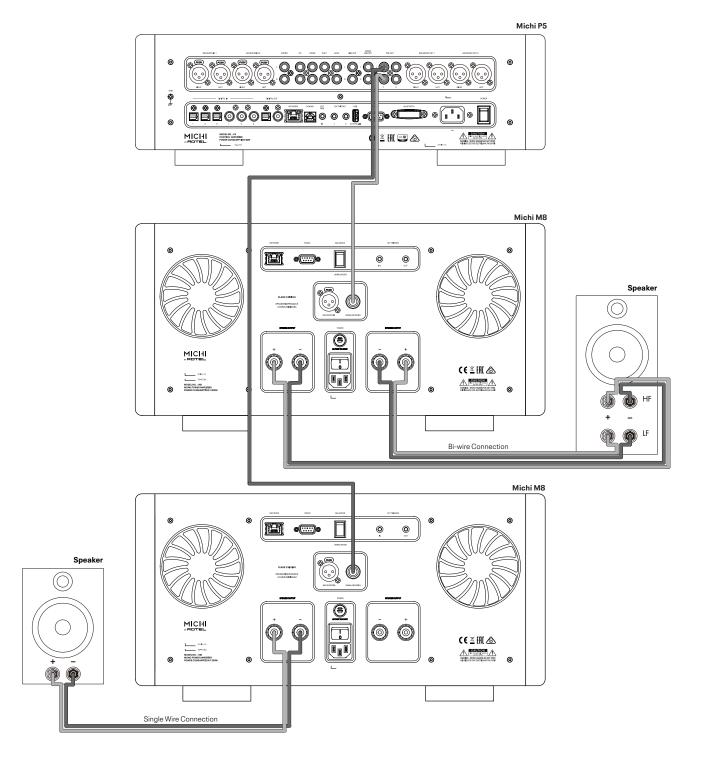


Figure 4-1: Balanced (XLR) Inputs Connection

Entrées symétriques (XLR) connexion

Anschlussdiagramm (symmetrische (XLR-) Eingänge)

Conexión de Entradas Balanceadas (XLR)

Aansluiting Gebalanceerde ingangen (XLR)

Collegamenti ingressi bilanciati (XLR)

Balanserade anslutningar (XLR)

Балансные (XLR) Входы Подключение

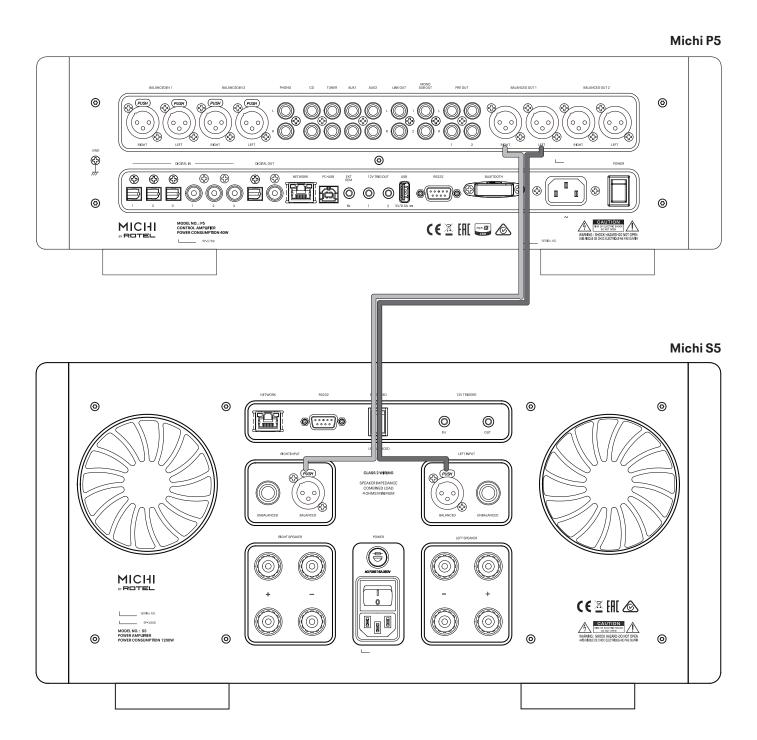


Figure 4-2: Balanced (XLR) Inputs Connection
Entrées symétriques (XLR) connexion
Anschlussdiagramm (symmetrische (XLR-) Eingänge)
Conexión de Entradas Balanceadas (XLR)
Aansluiting Gebalanceerde ingangen (XLR)
Collegamenti ingressi bilanciati (XLR)
Balanserade anslutningar (XLR)

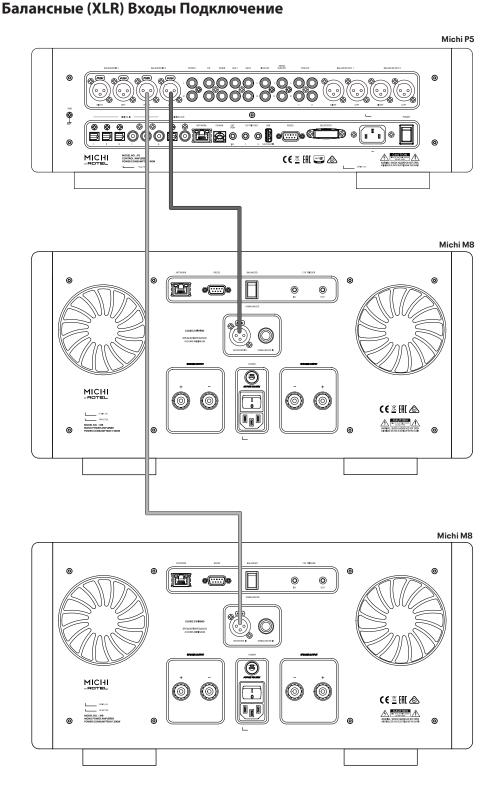


Figure 5-1: 12V Trigger Connections
Branchements trigger 12 V
12V-Trigger-Anschlüsse

De 12V trigger aansluitingen Collegamenti segnali Trigger 12 V 12 V-anslutning för styrsignal

Conexiones para Señal de Disparo de 12V Подсоединение 12-В триггерного сигнала

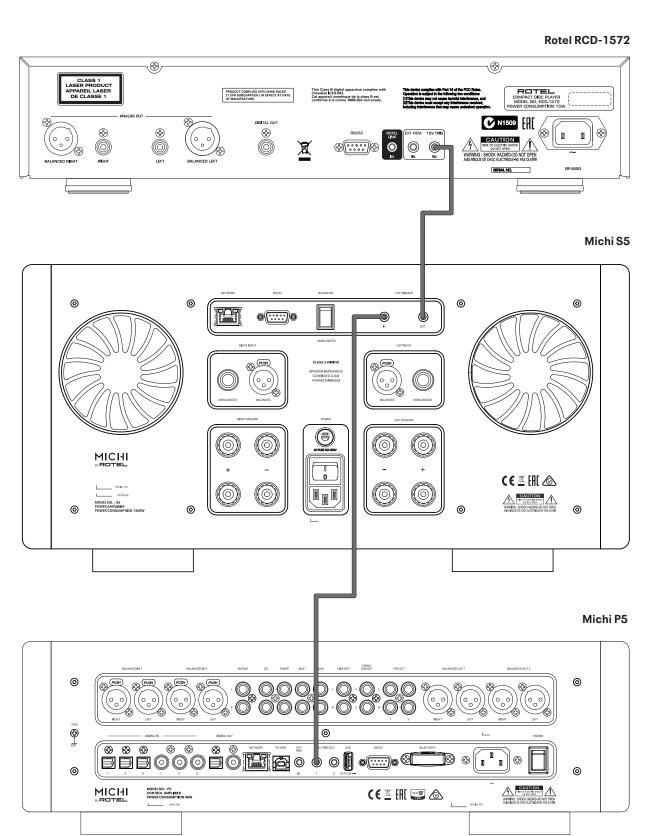
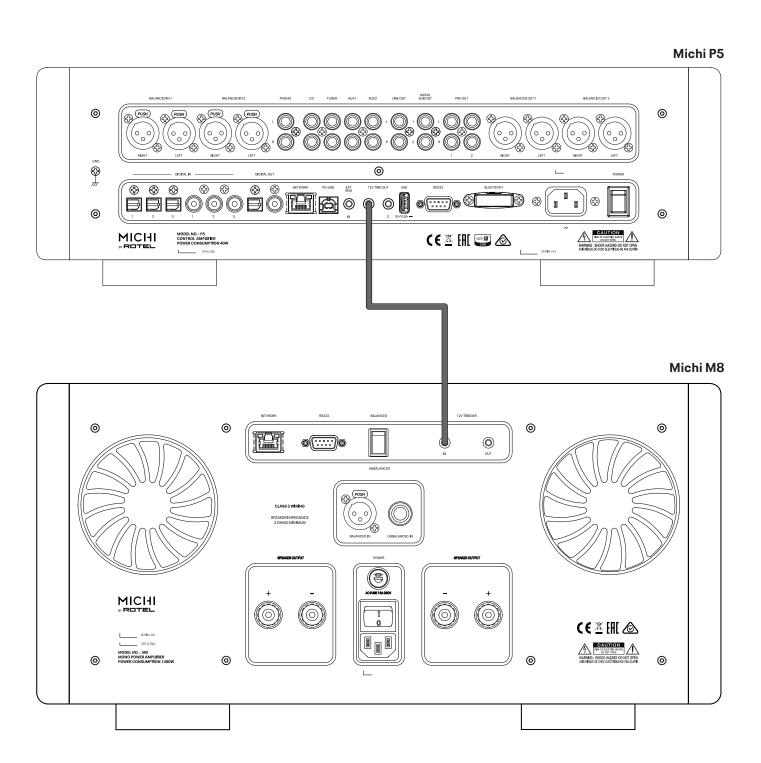


Figure 5-2: 12V Trigger Connections Branchements trigger 12 V 12V-Trigger-Anschlüsse

De 12V trigger aansluitingen Collegamenti segnali Trigger 12 V 12 V-anslutning för styrsignal Conexiones para Señal de Disparo de 12V Подсоединение 12-В триггерного сигнала



## **Important Notes**

When making connections be sure to:

- ✓ Turn off all the components in the system before hooking up any components, including loudspeakers.
- ✓ Turn off all components in the system before changing any of the connections to the system.

It is also recommended that you:

✓ Turn the volume control of the amplifier all the way down before the amplifier is turned on or off.

#### Remarques importantes

Pendant les branchements, assurez-vous que :

- ✓ Tous les maillons sont éteints avant leur branchement, quels qu'ils soient, y compris les enceintes acoustiques.
- 🗸 Éteignez tous les maillons avant de modifier quoi que ce soit au niveau de leurs branchements, quels qu'ils soient.

Il est également recommandé de :

✓ Toujours baissez le niveau sonore via le contrôle de volume, avant d'allumer ou d'éteindre l'amplificateur.

### Wichtige Hinweise

Achten Sie beim Herstellen der Verbindungen auf Folgendes:

- 🗸 Schalten Sie alle Komponenten im System ab, bevor Sie Geräte (einschließlich Lautsprecher) anschließen.
- ✓ Schalten Sie alle Komponenten im System ab, bevor Sie Anschlüsse im System verändern.

Ferner empfehlen wir, dass

✓ Sie die Lautstärke herunterdrehen, bevor Sie den Verstärker ein- oder abschalten.

## **Notas Importantes**

Cuando realice las conexiones, asegúrese de que:

- ✔ Desactiva todos los componentes del equipo, cajas acústicas incluidas, antes de conectar cualquier nuevo componente en el mismo.
- ✔ Desactiva todos los componentes del equipo antes de cambiar cualquier conexión del mismo.

También le recomendamos que:

✔ Reduzca el nivel de volumen de su amplificador a cero antes de activarlo o desactivarlo.

## Héél belangrijk

Bij het maken van de verbindingen:

- 🗸 Zorg dat niet alleen de S5 / M8, maar de gehele installatie uitstaat, als nog niet alle verbindingen gemaakt zijn.
- ✓ Zorg dat niet alleen de S5 / M8, maar de gehele installatie ook uitstaat, als u verbindingen gaat wijzigen.

Wij raden u ook aan om

🗸 de volumeregelaar van de (voor)versterker geheel dicht te draaien (volkomen linksom) wanneer u uw eindversterker aan- of uitzet.

## Note importanti

Quando effettuate i collegamenti assicuratevi di:

- ✔ Spegnere tutti i componenti del sistema prima di collegare qualsiasi componente, inclusi i diffusori.
- ✓ Spegnere tutti i componenti del sistema prima di modificare qualsiasi connessione nel sistema.

Vi raccomandiamo inoltre di:

✔ Portare il volume a zero prima di accendere o spegnere l'amplificatore.

## Viktigt

Tänk på följande när du gör anslutningar:

- ✓ Stäng av alla apparater i anläggningen innan du ansluter nya komponenter eller högtalare.
- ✓ Stäng av alla apparater i anläggningen innan du ändrar någon anslutning.

Du rekommenderas också:

✓ Vrida ner volymen på förförstärkaren helt och hållet innan förstärkaren slås på eller av.

### Важные замечания

#### Перед подсоединением:

- ✓ Выключите все компоненты, включая колонки.
- ✔ Выключите все компоненты в вашей системе, прежде чем что-то в ней менять.

#### Рекомендуется также:

Вывести громкость усилителя на минимум, перед тем как включать или выключать его.

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# **A Word About Watts**

The S5 power output is rated as 500 watts for each channel, when both channels are operating together at full power at across a full 20 Hz to 20K Hz. And the M8 power output is rated as 1080 watts in 8 ohms load when it is operating at full power. Michi has chosen to specify the power output in this way because, in our experience, it gives the most true value of the receiver or amplifier's power capability.

When comparing performance and specifications for different products, you should be aware that power output is often specified in other ways so you may not be comparing like with like. For example, the power output may be quoted with only one channel operating at a much higher distortion output or a single, ideal frequency, giving a higher maximum power output figure.

A loudspeaker's impedance rating indicates the electrical resistance or load it offers when connected to the amplifier, usually 8 ohms or 4 ohms. The lower the impedance, the more power the speaker will need. In effect, a 4 ohm speaker will require twice as much power as an 8 ohm speaker.

However, Michi amplifiers are designed to work into any speaker impedance between 8 and 4 ohms, and with all the channels working up to their full power. Because Michi designs are optimized for use with all channels operating together, Michi is able to specify the true power output for both channels. This architecture, design and performance rating is sure to please both the speakers and audience when enjoying music of any genre or listening level.

# **Getting Started**

Thank you for purchasing the Michi S5 Stereo Power Amplifier or Michi M8 Monoblock Power Amplifier. When used in a high-quality music audio system, your Michi product will provide years of musical enjoyment.

The S5 and M8 are high-power professional amplifiers, providing the highest level of audio performance. A massive power supply, premium components, and Michi's design architecture ensure superb sound quality. High current capability of this power supply allows the S5 and M8 to drive the most demanding loudspeakers.

Be aware that the S5 and M8 are capable of high power levels, in excess of 500 watts and 1080 watts respectively per channel. Make sure that your speakers can handle the power of the amplifier. If in doubt about your speakers, ask your local Michi audio dealer for advice.

This amplifier is straightforward in its installation and operation. If you have experience with other power amplifiers, you shouldn't find anything perplexing. Simply plug in the associated components and enjoy.

## **A Few Precautions**

**WARNING:** To avoid potential damage to your system, turn off ALL the components in the system when connecting or disconnecting the loudspeakers or any associated components. Do not turn the system components back on until you are sure all the connections are correct and secure. Pay particular attention to the speaker wires. There must be no loose strands that could contact the other speaker wires, or the chassis of the amplifier.

Please read this manual carefully. In addition to basic installation and operating instructions, it provides valuable information on various system configurations as well as general information that will help you get optimum performance from your system. Please contact your authorized Michi dealer for answers to any questions you might have. In addition, all of us at Michi welcome your questions and comments.

Save the shipping carton and all enclosed packing material for future use. Shipping or moving the amplifier in anything other than the original packing material may result in severe damage to your audio components.

If included in the box please complete the owner's registration card or register online. Also be sure to keep the original sales receipt. It is your best record of the date of purchase, which you will need in the event warranty service is ever required.

#### **Placement**

The S5 and M8 generate heat as part of its normal operation. The heatsinks and ventilation openings in the amplifier are designed to dissipate this heat. There should be 50 cm (20 inches) of clearance around the chassis and reasonable airflow through the installation location to prevent the amplifier from overheating.

Remember the weight of the amplifier when you select an installation location. Make sure that the shelf or cabinet can support it. We recommend installing the S5 and M8 on furniture designed to house audio components. Such furniture is designed to reduce or suppress vibration which can adversely affect sound quality. Ask your authorized Michi dealer for advice about component furniture and proper installation of audio components.

The S5 and M8 are supplied with an RR-RH6 remote control and must be placed where the infrared signal from the remote can reach the front panel Remote Sensor.

#### **Cables**

Be sure to keep the power cords, digital signal cables and analog audio signal cables in your installation away from each other. This will minimize the chance of the analog audio signal cables picking up noise or interference from the power cords or digital cables. Using only high quality, shielded cables will also help to prevent noise or interference from degrading the sound quality of your system. If you have any questions see your authorized Michi dealer for advice about the best cable to use with your system.

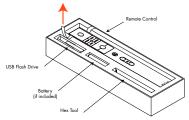
# The RR-RH6 Remote Control

Operations with the remote control are described in this manual showing the function keys with encircled letters.

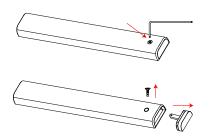
#### **Remote Control Batteries**

Two AAA size batteries must be installed before the remote control can be used. To install the batteries, follow the steps as below:

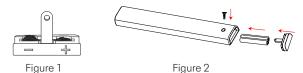
1. Lift the ribbon under the remote control and remove it out of the box.



Remove the screw on the back of the remote using the hex tool provided with the remote. Use only the hex tool supplied to avoid damaging the attaching screw.



3. Install the batteries as shown in the illustration in the battery well (Figure 2). Please note there are negative and positive marks shown on the battery cover (Figure 1). Reassemble the battery cover and tighten the screw then test the control for proper operation.



When the batteries become weak the remote control won't operate the device consistently. Installing fresh batteries should eliminate the problem.

**NOTE:** Use only the tool supplied with the unit to remove the screw to avoid damage to the hex screw.

**NOTE:** Do NOT over-tighten the screw to avoid damage to the screw or remote control.

# **AC Power and Control**

## **AC Power Input**

Your amplifier is configured at the factory for the proper AC line voltage in the country where you purchased it (either 120 volts AC or 230 volts AC with a line frequency of either 50 Hz or 60 Hz). The AC line configuration is noted on a decal on the back panel.

**NOTE:** Should you move your amplifier to another country, it is possible to reconfigure your amplifier for use on a different line voltage. Do not attempt to perform this conversion yourself. Opening the enclosure of the amplifier exposes you to dangerous voltages. Consult a qualified service person or the Michi factory service department for information.

**NOTE:** Some products are intended for sale in more than one country and as such are supplied with more than one AC cord. Please only use the one appropriate for your country/region.

Because of its relatively high power rating, the amplifier can draw considerable current. Therefore, it should be plugged directly into a polarized wall outlet using the supplied cable or other high current compatible cable as recommended by your authorized Michi dealer. Do not use an extension cord.

If you are going to be away from home for an extended period of time such as a month-long vacation, it is a sensible precaution to unplug your amplifier (as well as other audio and video components) while you are away.

### Master Power Switch 111

The large rocker switch on the rear panel is a master power switch. When it is in the OFF position, power to the unit is completely off. When it is in the ON position, the front panel Power  $\boxed{2}$  button and remote control Power A button can be used to activate the unit or put it into standby mode.

## 

See Figures 5-1/5-2

The jack labeled IN is for connecting the 3.5 mm Plug/Cable carrying a +12 volt trigger signal to turn the amplifier on and off. This input accepts any control signal (AC or DC) ranging from 3 volts to 30 volts.

The jack labeled OUT is for connecting another  $3.5 \, \text{mm}$  plug/cable to provide a 12V trigger signal to other components. The 12V output signal is available whenever a  $+12 \, \text{volt}$  trigger signal is applied to the IN connector.

# **Protection Circuitry** 2

The amplifier features thermal and over-current protection circuits that protect against potential damage in the event of extreme or faulty operating conditions. Unlike many designs, these protection circuits are independent of the audio signal and have no impact on sonic performance. Instead, the protection circuits monitors the temperature of the output devices and the current they are handling and shuts down the amplifier if operating conditions exceed safe limits.

Most likely, you will never see this protection circuitry in action. However, should a faulty condition arise, the amplifier will stop playing and the Power LED on the front panel will be red.

If this happens, turn the amplifier off, let it cool down for several minutes, and attempt to identify and correct the problem. When you turn the amplifier back on, the protection circuit will automatically reset and the Power LED should be white, indicating that the amplifier is operating normally.

In most cases, the protection circuitry activates because of a fault condition such as shorted speaker wires, or inadequate ventilation leading to an overheating condition. In very rare cases, highly reactive or extremely low impedance speaker loads could cause the protection circuit to engage.

If the protection circuitry triggers repeatedly and you are unable to isolate and correct the faulty condition, contact your authorized Michi dealer for assistance in troubleshooting.

# Input Signal Connections

See Figure 3-1/3-2

**NOTE:** To prevent loud noises that neither you nor your speakers will appreciate, make sure the system is turned off when you make any signal connections.

The S5 and M8 have conventional RCA type input connectors, the type found on nearly all audio equipment, as well as Balanced (XLR) input connectors.

Select high quality audio interconnect cables. Connect each of the outputs from the preamplifier or signal processor to the corresponding input of the amplifier.

### 

A toggle switch in the rear panel selects the type of input signal to use. Select the correct inputs to use with this switch.

**NOTE:** You should choose only one method of analog connection from a source component to the amplifier. Do not connect both the RCA and XLR outputs of a source component to the amplifier at the same time.

# **Speaker Outputs**

See Figures 3-1/3-2

### **Speaker Selection**

We recommend using loudspeakers with a nominal impedance of 4 ohms or higher with the amplifier. The dual output binding posts are ideal for bi-wire installations allowing 2 pairs of wires to drive the HF and LF speakers each with individual wires from the left or right channel of the amplifier. Speaker impedance ratings are less than precise so use care when selecting the loudspeakers to attach to the amplifier. In practice, very few loudspeakers will present any problems for the amplifier. See your authorized Michi dealer if you have any questions.

## **Speaker Wire Selection**

Use insulated two-conductor stranded wire to connect the amplifier to the speakers. The size and quality of the wire can have an audible effect on the performance of the system. Standard speaker wire will work, but can result in lower output or diminished bass response, particularly over longer distances. In general, heavier wire will improve the sound. For best performance, you may want to consider special high-quality speaker cables. Your authorized Michi dealer can help in the selection of cables for your system.

## **Polarity and Phasing**

The polarity – the positive/negative orientation of the connections – for every speaker and amplifier connection must be consistent so all the speakers will be in phase. If the polarity of one connection is reversed, bass output will be very weak and stereo imaging degraded. All wire is marked so you can identify the two conductors. There may be ribs or a stripe on the insulation of one conductor. The wire may have clear insulation with different color conductors (copper and silver). There may be polarity indications printed on the insulation. Identify the positive and negative conductors and be consistent with every speaker and amplifier connection.

## Speaker Connections 10 12

**NOTE:** The following text describes both binding post and plug-in connections. DO NOT use both connection methods in combination to connect multiple speakers.

Turn off all the components in the system before connecting the speakers. The amplifier has color-coded binding post connectors on the back panel. These connectors accept bare wire, connector lugs, or dual banana type connectors. (Except in European Community countries where their use is not permitted.)

Route the wire from the amplifier to the speakers. Give yourself enough slack so you can move the components to allow access to the speaker connectors.

If you are using dual banana plugs, connect them to the wires and then plug into the backs of the binding posts. The thumbscrews of the binding posts should be screwed in all the way (clockwise).

If you are using terminal lugs, connect them to the wires. If you are attaching bare wires directly to the binding posts, separate the wire conductors and strip the insulation from the end of each conductor. Be careful not to cut into the wire strands. Unscrew (turn counterclockwise) the binding post. Place

the connector lug or wire around the binding post shaft or threaded through the hole in the binding post. Turn the binding post clockwise to clamp the connector lug or wire firmly in place.

**NOTE:** Be sure there are no loose wire strands that could touch adjacent wires or connectors.

# Cooling Fans 4

The Michi S5 / M8 is equipped with dual cooling fans to help ventilate the internal components. It will adjust the fan speed automatically depending on the temperature of the unit.

**NOTE:** The amplifier produces significant power and associated heat even with the cooling fans in use. Appropriate installation and ventilation is required to ensure proper operation.

# RS232 7

The S5 / M8 can be controlled via RS232 for integration with automation systems. The RS232 input accepts a standard straight DB-9 Male-to-Female cable.

For additional information on the connections, software, and operating codes for RS232 control of the amplifier, contact your authorized Michi dealer.

# **Network Connection** 5

The S5/ M8 can be attached to a network using the rear panel NETWORK socket . The NETWORK configurations allow both STATIC and DHCP IP addressing. See the Network section of this manual under Setting Menu for IP address configuration information.

The NETWORK connection allows software updates to be downloaded from the Internet. The NETWORK connection also allows IP control for integration with automation systems.

For additional information on the IP control please contact your authorized Michi dealer.

# Setup Menu

The Michi S5 / M8 features a front panel display to show information and status. A more comprehensive ON-SCREEN DISPLAY (OSD) menu system is available at any time by pressing the SETUP button on the remote. These OSD menus guide you through the configuration and setup of the amplifier. The settings made in the configuration process are memorized as default settings and need not be made again for normal operation of the unit.

# **Front Panel Overview**

The following is a brief overview of the controls and features on the front panel of the unit.

### Remote Sensor 3

This remote sensor window receives IR commands from the remote control. Please do not block this sensor.

# Display 1

The front panel display shows the current amplifier status. The display provides access to the setup and configuration menu options of the amplifier.

# Overview of Buttons and Controls

This section provides a basic overview of the buttons and controls on the remote control. Detailed instructions on the use of these buttons are provided in the more complete operating instructions in the following sections.

**Navigating** D **and Enter** K **Buttons:** Use the navigation buttons  $\textcircled{\sim}/\checkmark \textcircled{D}$  and the Enter button K on the remote control to access the various menus.

**Power** 2 (a): The Power button on the front panel and on the remote control activate or deactivate the unit. There is an LED light in the middle of the Power button on the remote control, which will be illuminated when you pick up the remote control. To power on the unit, the rear panel master POWER switch must be in the ON position for the front panel Power and the remote standby function to operate.

Power On - To power on the unit press and release the power button 2 on the front panel or remote control 4.

Power Off / Standby - To power off the unit to standby push and release the power button  $\boxed{\textbf{Z}}$  on the front panel or PUSH-HOLD the the remote control power button  $\textcircled{\textbf{A}}$  for 1.5 seconds.

**NOTE:** All Michi products will respond to the same Power On and Off commands to simplify the power control when multiple products are installed. To control the power using the IR remote follow the instructions above and point the remote control at the Michi products. If a unit does not respond to a power on or off from the IR remote simply PUSH or PUSH-HOLD the power button again to resend the desired command.

**SETUP ®:** The SETUP button activates the OSD setup screen on the front display. Push the SETUP button again to move to the previous setup menu as a "back" button or exit setup menu if on the first level of setup menu.

**SOURCE** C: This function is not used on the S5 and M8.

**DISPLAY** ©: Dims the front display. To dim the display PUSH-HOLD the DISPLAY © button on the remote control <u>for 3 seconds</u>. To turn on the display to the level of brightness configured in the setup menu PUSH and release the DISPLAY © button.

**NOTE:** The DISPLAY button is common for all Michi models. To Dim or enable the display PUSH or PUSH-HOLD the button and point to the Michi products. If a unit does not respond to a DISPLAY command simply send the command again using a PUSH or PUSH-HOLD.

**AUDIO** H: This function is not used on the S5 and M8.

**Button**(E): This function is not used on the S5 and M8. However MUTE will toggle the MUTE function on the Michi P5 Preamplifier.

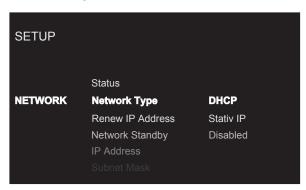
**VOLUME +/- Buttons** (f): This function is not used on the S5 and M8. This function is used on the Michi P5 to increase or decrease the volume of the Preamplifier. Push or push/hold the button to change the volume.

# Main Menu



The Setup menu provides access to OSD screens for various configuration options. Setup menu is reached by pressing the SETUP B button on the remote. To select the desired menu, move the highlight using the  $\textcircled{\ }$ / $\checkmark$   $\textcircled{\ }$ 0 arrow buttons and press the Enter  $\textcircled{\ }$ 6 button on the remote control. Press the SETUP  $\textcircled{\ }$ 8 button again to return to the previous menu or select "EXIT" on the OSD to end setup and return to normal operation.

# **Network Setup**



**Status:** If the network is properly configured and attached to the network then "Connected" will be displayed. If the network is not properly configured or not connected to a network, "Disconnected" will be displayed.

**Network Type:** In most systems, set the IP ADDRESS MODE to DHCP. This setting will allow your router to assign an IP address to the amplifier automatically. If your network uses fixed IP addresses, set the IP ADDRESS MODE to Static. To disable the IP connection set this option to DISABLED.

Options include: DHCP (Default), Static IP, Disabled.

**Renew IP Address:** Disabled if Network Type is Static or Disabled. If Network Type is DHCP then select Yes and press the Enter (£) button to renew the IP address.

**Network Standby:** When set to ENABLED the amplifier will maintain the Ethernet IP connection even in Standby Mode allowing the unit to be powered on via IP. If Disabled the unit will not power on from the IP connection and must use either the front panel, IR remote or RS232 to power on the unit.

Options Include: Disabled (Default), Enabled.

**NOTE:** When Network Standby is set to ENABLED the unit may consume more power in standby mode.

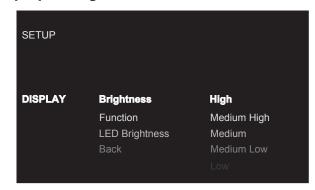
IPAddress/Subnet Mask/Gateway/DNS: Disabled if Network Type is DHCP or Disabled. If STATIC mode is selected you must configure all settings for the network including IPAddress, Subnet Mask, Gateway and DNS Server. Press the Enter ( ) button to activates the first digit in the line you want to change, then use the ( ) arrow buttons to adjust the values and press the Enter ( ) to cycle to the next digit. When the proper IP information is configured press the Enter ( ) button to move the cursor back to the previous menu and accept the settings. After entering the STATIC IP address information the network will be tested and connection status reported.

**NOTE:** For more information regarding network connection please contact your authorized Michi dealer.

**NOTE:** A network connection is not required for the amplifier to operate.

Press the SETUP (B) button on the remote control to exit the setup menu or select "Back" on the OSD to return to the main menu.

# **Display Configuration**



This Display menu in the Setup menu, provides the following options, selected by placing the highlight on the desired line using the  $^{\wedge}/_{\bigcirc}$  arrow buttons and pressing the Enter  $^{\textcircled{R}}$  button. This action displays the right side options allowing changes. Change the options using the  $^{\wedge}/_{\bigcirc}$  arrow buttons and press the Enter  $^{\textcircled{R}}$  button to confirm.

**Brightness:** This function sets the brightness of the front display. The setting is activated during normal operation by a push release of the DISPLAY button **©** on the remote control. The OSD will always activate at the most bright level regardless of the Brightness setting to ensure the unit configuration options can easily be accessed and modified.

Options includes: High (Default), Medium High, Medium, Medium Low, Low.

**NOTE:** To dim the front display PUSH-HOLD the DISPLAY **(©)** button on the remote control for 3 seconds.

**Function:** The amplifier can be configured to display the input audio source as either a dB Peak Power Meter or a Frequency Spectrum Analyzer. The display can also be configured as OFF during normal operation. Select the desired setting using the  $^{\wedge}/_{\checkmark}$  ① arrow buttons and press the Enter  $^{\textcircled{K}}$  button to comfirm.

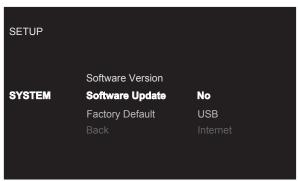
Options includes: VU Meter, Spectrum 8, Spectrum 12 (Default), Spectrum 16, OFF.

**LED Brightness:** Sets the brightness of the ON level of the front panel Power LED.

Options include: High (Default), Medium High, Medium, Medium Low, Low.

Press the SETUP (B) button on the remote control to exit the setup menu or select "Back" on the OSD to return to the main menu.

# **System Configuration**



This System menu in the Setup menu, provides the following options, selected by placing the highlight on the desired line using the ^/ $\checkmark$  D arrow buttons and pressing the Enter k button. This action displays the right side options allowing changes. Change the options using the ^/ $\checkmark$  D arrow buttons and press the Enter k button to confirm.

**Software Version:** This shows the current software version loaded into the unit.

Software Update: Select the desired update method to update the unit.

Options includes: No (Default), USB, Internet.

**Factory Default:** This option sets the unit back to the original setting as when it left the factory. All user settings will be erased.

**NOTE:** Use caution when resetting the amplifier to factory defaults as all user configured options will be erased and reset to original factory settings.

Press the SETUP (B) button on the remote control to exit the setup menu or select "Back" on the OSD to return to the main menu.

# **Troubleshooting**

Most difficulties in audio systems are the result of incorrect connections, or improper control settings. If you encounter problems, isolate the area of the difficulty, check the control settings, determine the cause of the fault and make the necessary changes. If you are unable to get sound from the amplifier, refer to the suggestions for the following conditions:

#### **Power Indicator Is Not Illuminated**

The front power indication will be illuminated anytime the unit is connected to AC power and the rear power switch is set to the ON position. The indication will be RED for standby mode and WHITE in normal operation. If the indication is not illuminated, test the power outlet with another electrical device, such as a lamp. Be sure the power outlet being used is not controlled by a switch that has been turned off. And check all AC power including the rear power switch to ensure the unit is receiving power.

### **Fuse Replacement**

If another electrical device works when plugged into the power outlet, but the Power Indicator still will not illuminated when the amplifier is plugged into the wall outlet, it indicates that the power fuse may have blown. If you believe this has happened, contact your authorized Michi dealer to get the fuse replaced.

### No Sound

If the amplifier is getting AC power, but is producing no sound, check the rear panel BALANCED / UNBALANCED switch to ensure this is set to the proper position matched with the analog source input. Also check if the speaker cables are securely attached and the unit is not displaying a PROTECTION message on the front panel TFT display.

#### **Protection Indicator**

The front panel POWER indicator is red when the amplifier protection circuits have shut off the amplifier. Typically, this occurs only when the ventilation openings are blocked, when there is faulty speaker wiring, or after a period of extreme use. Turn off the system and wait for the amp to cool. Then push the front panel power switch in and out to reset the protection devices. If the problem is not corrected or reoccurs, there is a problem with the system or the amplifier itself.

# **Specifications**

S5

Continuous Power Output 500 watts/channel (8 ohms) 800 watts/channel (4 ohms)

Total Harmonic Distortion <0.008%

Intermodulation Distortion (60 Hz: 7kHz, 4:1)

Frequency Response 20 Hz - 20k Hz (+ 0 dB, - 0.15 dB) 10Hz - 100k Hz (+ 0 dB, - 0.4 dB)

< 0.03%

350

< 0.5 watts

Damping Factor (1kHz, 8 ohms)

Input Sensitivity / Impedance

 Unbalance
 2.6 V / 12.5k ohms

 Balance
 4.2 V / 100k ohms

Gain

 Unbalance
 28 dB

 Balance
 24 dB

 Signal to Noise Ratio (IHF "A" weighted)
 120 dB

 Crosstalk / Separation
 > 65 dB

Power Requirements:

USA: 120 volts, 60 Hz
EC: 230 volts, 50 Hz

Power Consumption 1200 watts

Standby
Normal
Network Wakeup

 $\begin{array}{lll} {\sf Network\,Wakeup} & <2\,{\sf watts} \\ {\sf BTU}\,(4\,ohms,1/8th\,power) & 3450\,{\sf BTU/h} \\ {\sf Dimensions}\,(W\times H\times D) & 485\times 238\times 465\,{\sf mm} \end{array}$ 

 $\begin{array}{c} (19 \times 9\,^3/_8 \times 18\,^1/_4 \, \text{ins.}) \\ \text{Front Panel Height} \\ \text{Weight } (\textit{net}) \\ \end{array}$ 

M8

Continuous Power Output | 1080 watts/channel (8 ohms) 1800 watts/channel (4 ohms)

 $\begin{tabular}{ll} \textbf{Total Harmonic Distortion} & < 0.018\% \\ \textbf{Intermodulation Distortion} & < 0.03\% \\ \end{tabular}$ 

(60 Hz: 7kHz, 4:1)

Frequency Response  $20 \, \text{Hz} - 20 \, \text{k} \, \text{Hz} \, (+ \, 0 \, \text{dB}_{\text{r}} - 0.15 \, \text{dB})$ 

10Hz - 100k Hz (+ 0 dB, - 0.5 dB)

Damping Factor (1kHz, 8 ohms) 200

Input Sensitivity / Impedance

 Unbalance
 1.85 V / 12.5k ohms

 Balance
 3 V / 100k ohms

Gain

Unbalance 34 dB Balance 30 dB

Power Requirements:

USA: 120 volts, 60 Hz
EC: 230 volts, 50 Hz
Power Consumption 1200 watts

Standby Power Consumption

 $\begin{array}{ll} \mbox{Normal:} & < 0.5 \mbox{ watts} \\ \mbox{Network Wakeup:} & < 2 \mbox{ watts} \\ \mbox{BTU (4 ohms, 1/8th power)} & 3200 \mbox{ BTU/h} \end{array}$ 

 Dimensions ( $W \times H \times D$ )
  $485 \times 238 \times 465 \text{ mm}$ 
 $(19 \times 9^3/_8 \times 18^3/_4 \text{ ins.})$  

 Front Panel Height
  $220 \text{ mm}, 8^3/_4 \text{ ins.}$ 

Front Panel Height 220 mm,  $8\sqrt[3]{4}$  ins. Weight (net) 59.1 kg, 130.3 lbs.

All specifications are accurate at the time of printing.

Michi reserves the right to make improvements without notice.

# MICHI

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