Operation Manual

Network Receiver

IPA-R10



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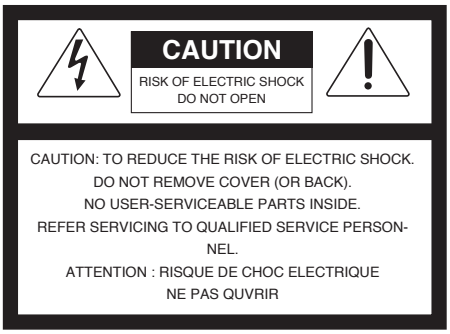
Welcome

A personal welcome to you from the management and employees of Inter-M

All of the co-workers here at Inter-M are dedicated to providing excellent products with inherently good value, and we are delighted you have purchased one of our products.

We sincerely trust this product will provide years of satisfactory service, but if anything is not to your complete satisfaction, we will endeavor to make things right.

Welcome to Inter-M, and thank you for becoming part of our worldwide extended family!





This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Attentions: Pour prévenir les chocs électriques ne pas utiliser cette fiche polarisée avec un prolongateur, une prise de courant on une autre sortie de courant, sauf si les lames peuvent étre insérées à fond sans en laisser aucune partie à découvert.
Pour deconnecter completement l’appareil du reseau d’alimentation. deconnecter le cordon d’alimentation de la prise murale.
La prise du reseau d’alimentation doit demeurer aisement accessible.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

*WARNING FOR YOUR PROTECTION PLEASE READ THE FOLLOWING-WATER AND MOISTURE: Unit should not be used near water(e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so than objects do not fall and liquids are not spilled into the enclosure through openings.
*Do not install this equipment in a confined space such as a book case or similar unit.
*Warning : To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture and objects filled with liquids, such as vases,
should not be placed on this apparatus.
*This apparatus shall be connected to a mains socket outlet with a protective earthing connection.
*To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
*The mains plug of the power supply cord shall remain readily accessible.

CAUTION
*These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

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

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Unpacking

Although your IPA-R10 is neither complicated nor difficult to operate, we recommend you take a few minutes to read this brief manual and familiarize yourself with the important information regarding product features, setup and operation.

As with most electronic devices, we strongly recommend you retain the original packaging. In the unlikely event the product must be returned for servicing, the original packaging (or reasonable equivalent) is required.

Installation

Environment
Never place this product in an environment which could alter its performance or reduce its service life. Such environments usually include high levels of heat, dust, moisture, and vibration.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. 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.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. 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.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. 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.


S3125A

Features

- PC integrated control
Equipment control and monitoring function through NETWORK in conjunction with IPA system

- 3-wire speaker line control
Channels for general broadcasting and emergency broadcasting are configured for 3-wire broadcasting.

- Real-time short detection function
You can set the real-time short check level for each channel, and when an overcurrent occurs, it detects it in real time and blocks the corresponding channel immediately.

- Various line status display
- The speaker line status is displayed as NORMAL, EM, and LINE FAULT through the front STATE LED.
- NORMAL (Green LED on) : Broadcast is output through the HOT speaker terminal.
- EM (red LED on) : Broadcast is output through the HOT/EM speaker terminal.
- LINE FAULT (Orange LED lights up): Short circuit occurs in the speaker line
- LED off : Broadcast is not output.

- Sound source function
It can output audio received over the network.

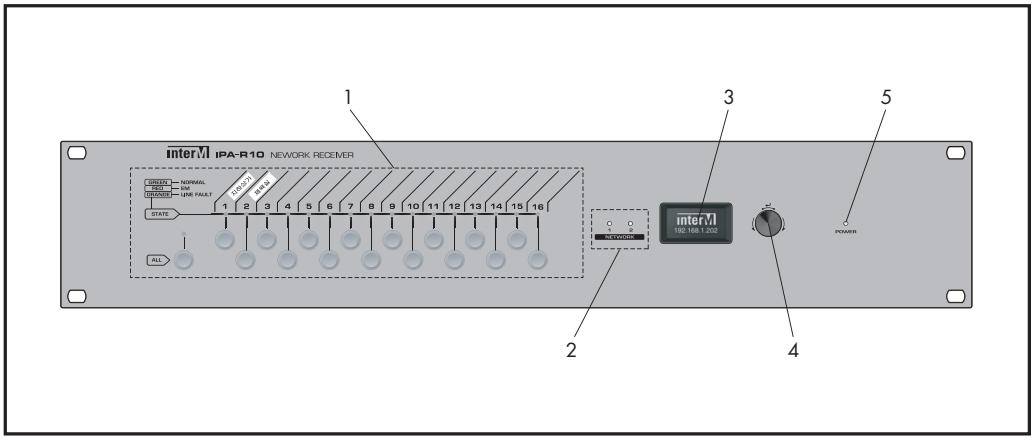
- Buzzer action
When a line abnormality is detected, the buzzer operates, so you can easily detect the condition of the line. You can decide whether to use the buzzer through ON/OFF in the PC integrated control.

- Low voltage detection
When the power supply voltage (DC 24V) decreases below a certain voltage (DC 18V +5%), a low-voltage notification is generated with a buzzer sound.

Contents and Accessories

1. User Manual x 1EA
2. Rack Mounting Screws x 4EA
3. 4P terminal block (5.08MM) x 9EA
4. 3P terminal block (5.08MM) x 16EA
5. 3P terminal block (3.5MM) x 1EA
6. 10P terminal block (3.81MM) x 2EA
7. SHORT BAR 8P X 8EA

Front Panel



1. LINE STATUS LED AND CHANNEL ON/OFF SWITCH

It is an LED that displays the broadcasting status (NORMAL/EM) and the short circuit status of the speaker line and a switch that controls ON/OFF of each channel.

- Green LED on (NORMAL) : Broadcast is output to the channel selected by the HOT speaker terminal.
- Red LED on (EM) : Broadcast is output to the channel selected by the HOT/EM speaker terminal.
- Orange LED on (LINE FAULT) : A short circuit has occurred in the speaker line.
- LED off : Broadcast output is not selected.

2. NETWORK STATUS LED

This LED indicates the status of network 1 and 2, and when the network is connected normally, the LED blinks.

3. STATUS DISPLAY OLED

Network status information (IP Address, Subnet mask, DNS Server, Mac Address information) is displayed through the OLED Display.

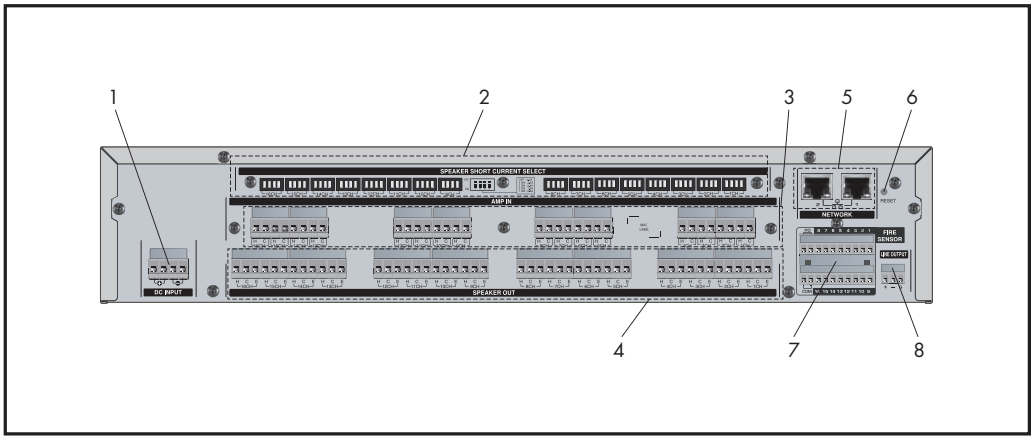
4. OLED DISPLAY CONTROL SWITCH

By turning the control switch, the user can check the desired information.

5. POWER LED

This LED indicates the power ON/OFF status.

Rear Panel

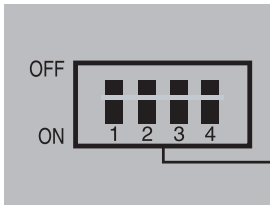


1. POWER INPUT TERMINAL

This is the terminal to connect the power (DC 24V). Be careful not to change the polarity when connecting.

2. REAL-TIME SHORT CHECK CAPACITY SELECTION SWITCH OF SPEAKER OUTPUT

You can select the real-time SHORT check capacity of the channel by using the corresponding switch.



Switch	Real-time short check capacity
1 ON	0.8A
2 ON	1.6A
3 ON	2.4A
4 ON	3.2A
OFF	4.0A

※ Please pay attention to the following as malfunction may occur.
- Be careful not to turn on more than two switches.
- Please select the switch when the power is off.

3. AMPLIFIER OUTPUT LINE CONNECTION TERMINAL (AMP IN)

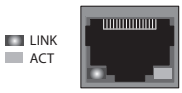
This is the terminal to connect the 16-channel amplifier output.

4. SPEAKER LINE CONNECTOR (SPEAKER OUT)

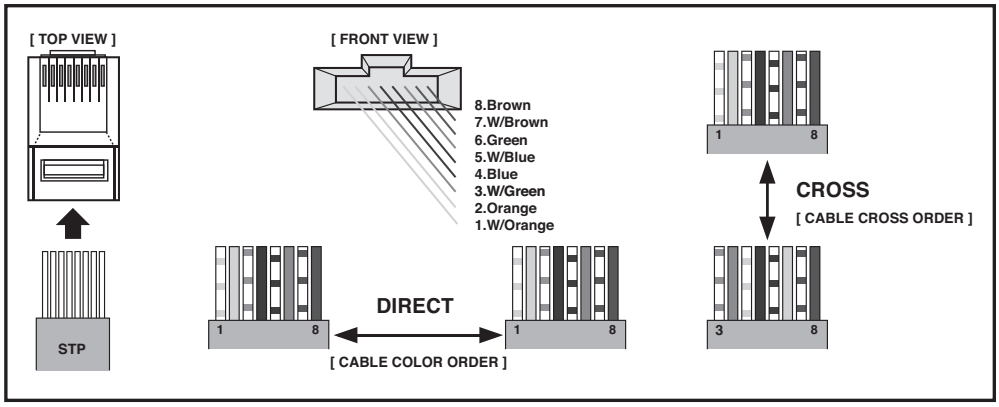
This is a terminal for connecting a 16-channel 3-wire speaker.

5. NETWORK CONNECTION TERMINAL

This is the terminal that connects the device to the network.



	<100 Base-T>		<1G Base-T>
PIN NO	Function	PIN NO	Function
1	TXP	1	MX(0)+
2	TXN	2	MX(0)-
3	RXP	3	MX(1)+
4	NA	4	MX(2)+
5	NA	5	MX(2)-
6	RXN	6	MX(1)-
7	NA	7	MX(3)+
8	NA	8	MX(3)-



※ It is recommended to use the STP cable for the network cable of this product.

6. RESET SWITCH

If the switch is pressed for more than 10 seconds, the device settings are reset to factory defaults.

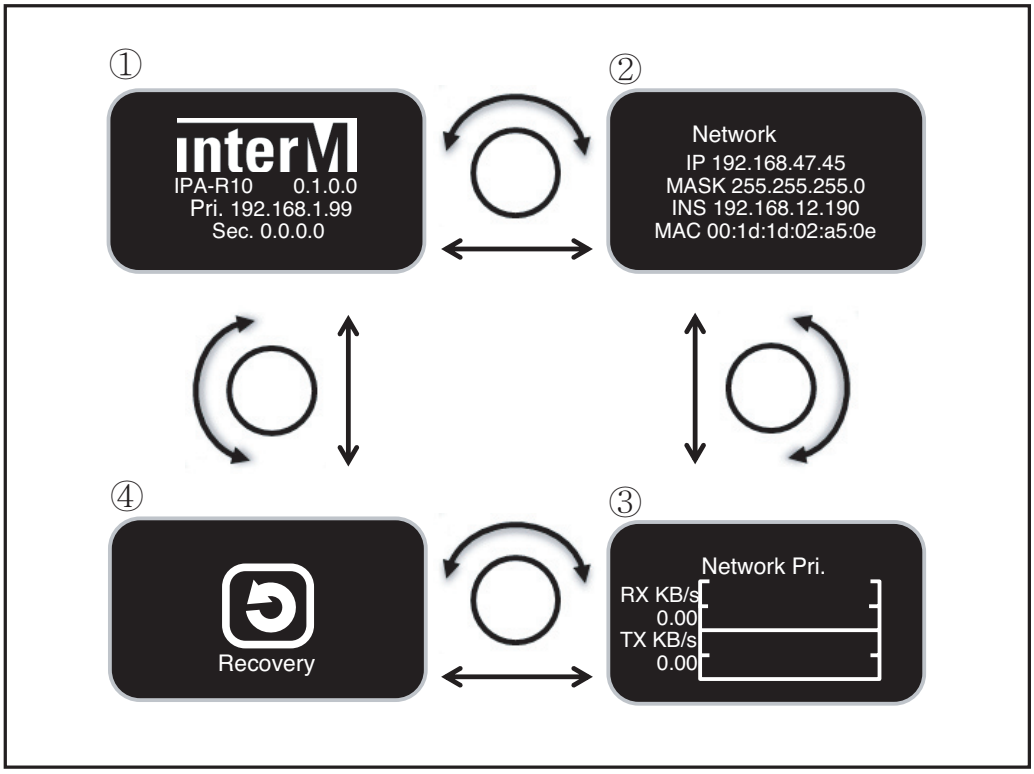
7. FIRE RECEPTION AND PD OUT TERMINAL

It is a P-type fire contact receiving terminal and PD OUT contact output terminal.

8. LINE OUTPUT TERMINAL LINE OUTPUT TERMINAL

This is the output terminal of the audio source received over the network.

Operation



① This is the standby screen of the device. The model name and network information are displayed.

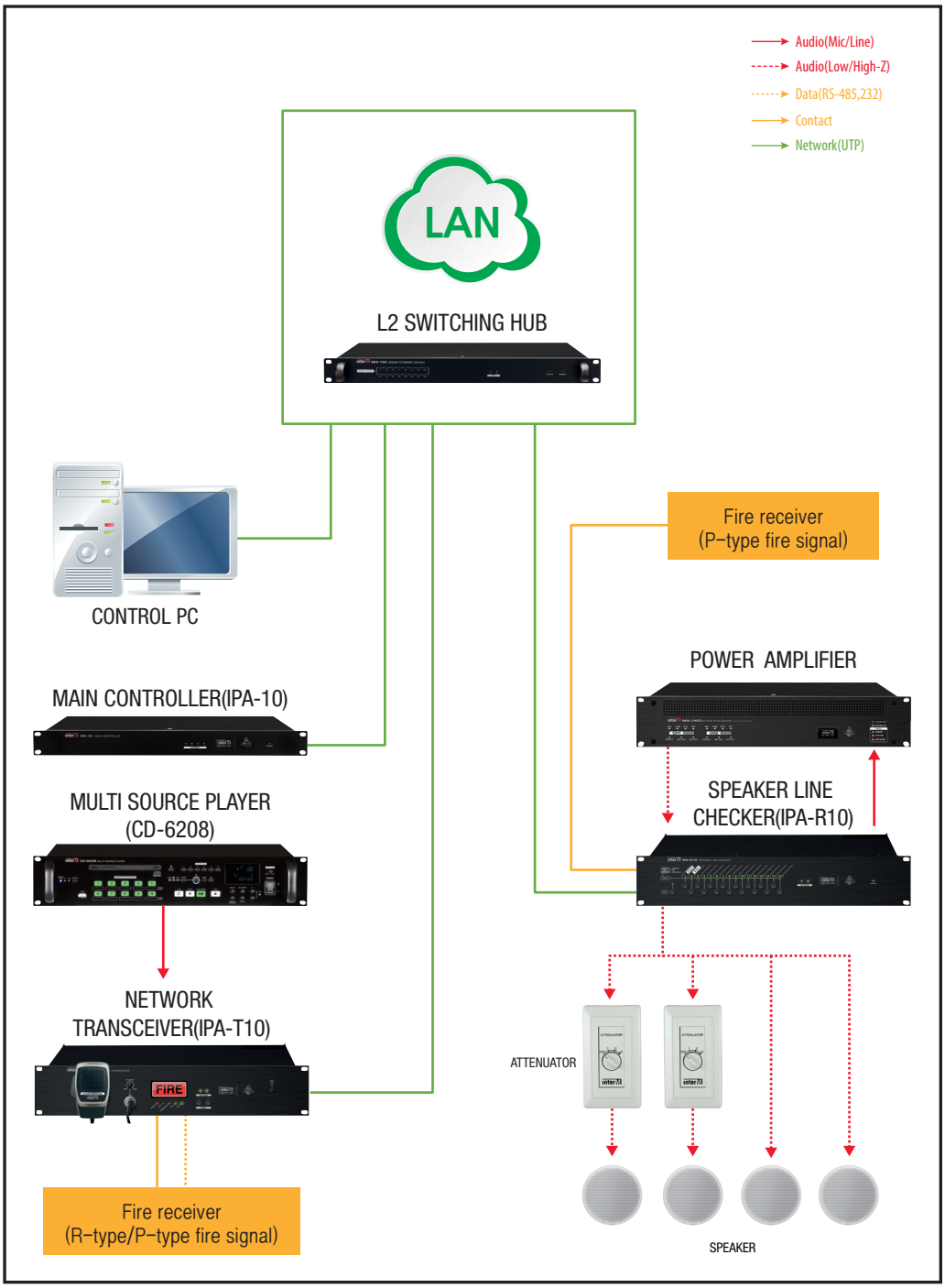
② In the standby screen, by turning the front panel control switch to the right, network related details (IP Address, Subnet mask, DNS Server, Mac Address) is displayed.
If you turn the front panel control switch to the left on the network-related detailed information screen, the standby screen (model name, network information) is displayed.

③ If you turn the display control switch to the right on the Network related detail screen, the Network status (RX/TX data rate) is displayed.
When you turn the display control switch to the left on the Network status display screen, Network related details (IP ddress, Subnet mask, DNS Server, Mac Address) are displayed.

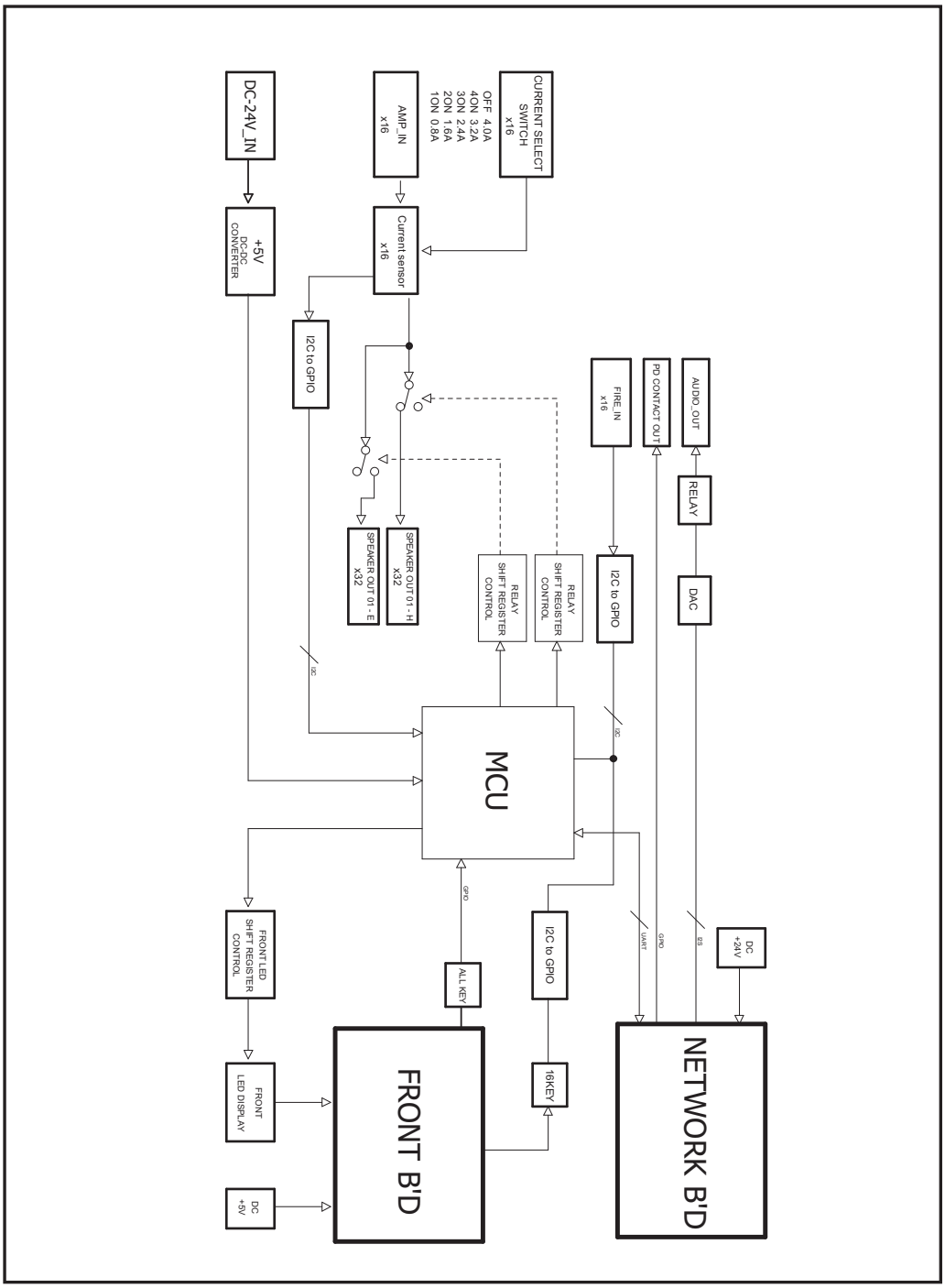
④ If you turn the display control switch to the right on the Network status display screen, the RECOVERY screen is displayed. If you press the display control switch, you can recover the blocked channel.

Turning the display control switch to the left on the RECOVERY screen displays the Network status display screen.

Applications



Block Diagram

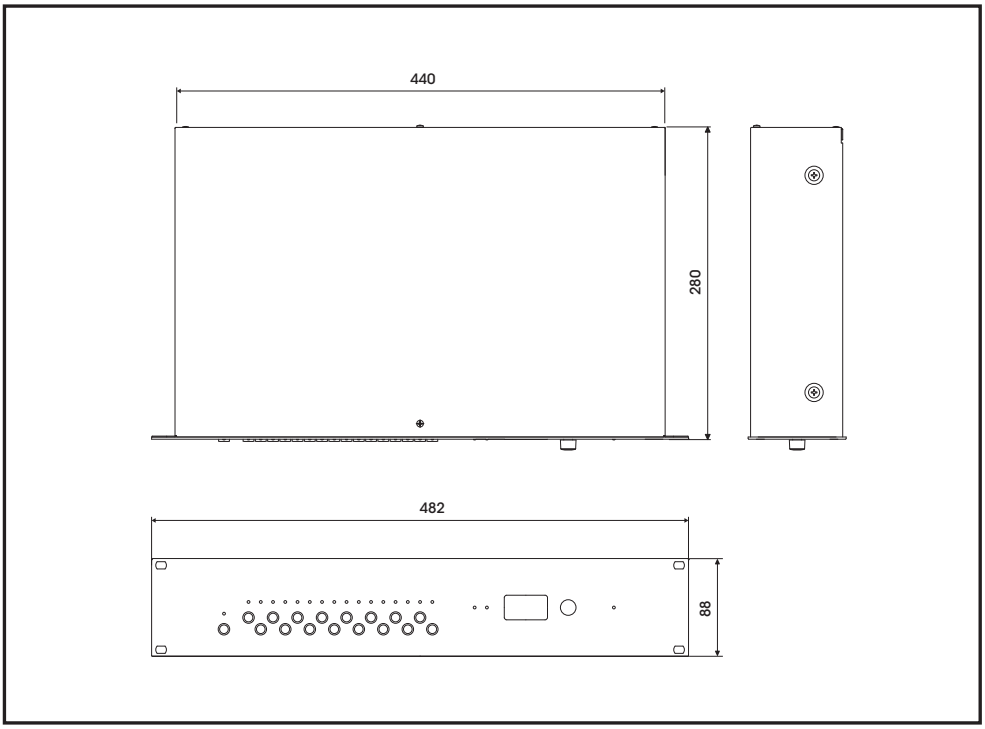


Specifications

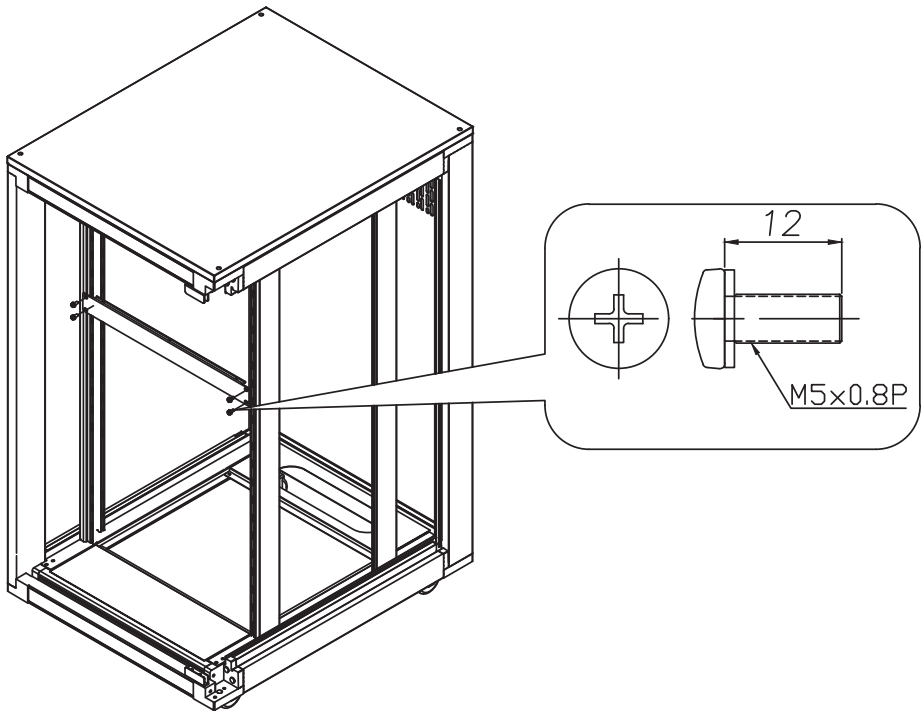
		IPA-R10				
Real-time short check capacity (variable)		0.8A	1.6A	2.4A	3.2A	4.0A
Recommended Amplifier Capacity		120W or more	200W or more	300W or more	360W or more	400W or more
amplifier input channel		16CH				
speaker output channel		16CH/3 wire				
LINE OUTPUT	output level	0dBV(1Vrms), BALANCE				
	frequency characteristics	20Hz ~ 20KHz				
	S/N	75dB				
fire reception method		P-type contact method				
power used		DC 24V, 750mA				
operating temperature		-10℃ ~ +40℃				
Weight (set)		4.7kg/10.3lb				
Dimension (set)		482(W) x 88(H) x 280(D)mm / 19(W) x 3.5(H) x 11(D)in				

* Design and specification are subject to be changed for the improvement of product quality without pre notice.

※ DIMENSIONS



Instructions for use of screws



This product can be used on a table or fixed to a rack.
However, be sure to observe the installation precautions below when using it in a rack.

1. Place the product in an empty area of the rack.
2. Using the included mounting screws, tighten the 4 mounting holes so that there are no voids and fix them.
3. Please proceed with the wiring for the operation of the product, and apply the power last.
4. Disassemble in the reverse order of the above procedure.
5. In case of fixing by not using the included screws or screws of the same size, or using insufficient number of screws the manufacturer is not responsible for any safety accidents caused by this.

Accessories included for fixing the product
- Specification: SCREW M5x0.8P, L=12
- Quantity: 4pcs

Service

Procedures
Take steps to insure the problem is not related to operator error or other products within the system. Information provided in the troubleshooting portion of this manual may help with this process. Once it is certain that the problem is related to the product contact your warranty provider as described in the warranty section of this manual.

Schematic
A Schematic is available by contacting your warranty provider.

Parts List
A Parts List is available by contacting your warranty provider.

Variations and Options

Variations
Products supplied through legitimate sources are compatible with local AC power requirements.

Options
No optional items are available for this product.

Warranty

Warranty terms and conditions vary by country and may not be the same for all products. Terms and conditions of warranty for a given product may be determined first by locating the appropriate country which the product was purchased in, then by locating the product type.

To obtain specific warranty information and available service locations contact Inter-M directly or the authorized Inter-M Distributor for your specific country or region.

Inter-M, Ltd. (Korea) began operations in 1983.

Since then, Inter-M has grown to become one of the largest manufacturers
of professional audio and commercial sound electronics equipment in the world.

Inter-M has gained worldwide recognition for its own branded products,
as well as private label manufacturing of electronics sold under other names (OEM).

The company is no longer just a Korean company, but rather a global company
that is truly international in scope, with factories and offices in Korea and China,
and sales and marketing operations located in Japan, Europe, and the U.S.A.

With more than 850 employees around the globe,
Inter-M is well-poised for further growth and expansion.

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