# Operation Manual

# IP-1015CS NETWORK CEILING SPEAKER





# Warning



### WARNING

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



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

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.

\*Do not install this equipment in a confined space such as a book case or similar unit.

- \*The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such vases, shall be placed on the apparatus.
- \*Worded: "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."
- \*The wired LAN hub providing power over the Ethernet (PoE) in accordance with IEEE 802.3.af and IEEE 802.3.at shall be a UL Listed device with the output evaluated as a Limited Power Source as defined in UL60950-1 or PS2 as defined in UL62368-1.
- 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.

\* It can be heated up if you use this product in closed box or ill-ventilated place.

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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!

# Unpacking

Please take a few minutes to read this manual to familiarize yourself with important information regarding installation, product features, and operation.

As with most electronic devices, ORIGINAL PACKAG-ING (OR EQUAL) IS REQUIRED in the unlikely event that the product needs to be returned for servicing.

# 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

- Read these instructions
- Keep these instructions.
- 3. Heed all warnings.
- 4 Follow all instructions
- 5. Do not use this apparatus near water.
- Clean only with dry cloth.
- 7. 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.
- 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.
- This product is intended to be supplied by a Listed Power Supply Unit marked "Class 2" or "LPS" or "PS2" and rated from PoE (44-57 Vdc), 12.95 W or PoE+ (50-57 Vdc), 25.5 W.
- To prevent injury, this apparatus must be securely attached to the Wall/ceiling in accordance with the installation instructions.
- AVOID EXCESSIVE HEAT, HUMIDITY, DUST AND VIBRATION Keep the unit away from locations where it is likely to be exposed to high temperatures or humidity-such as near radiators, stoves, etc. Also avoid locations which are subject to excessive dust accumulation, or to vibration that could cause mechanical damage.
- AVOID PHYSICAL SHOCKS Strong physical shocks to the unit may cause damage. Handle the unit with care.
- DO NOT OPEN THE CASE OR ATTEMPT REPAIRS OR MODIFICATIONS YOURSELF This product contains no user-serviceable parts. Refer all maintenance to qualified Inter-M service personnel. Opening the case and/or tampering with internal circuitry voids the warranty.
- ALWAYS POWER OFF BEFORE MAKING CONNECTIONS Always turn the AC mains OFF before connecting or disconnecting cables. This is important to prevent damage to the unit itself as well as other connected equipment.
- HANDLE CABLES CAREFULLY Always plug and unplug cables (including the AC mains power cord) by gripping the connector, not the cord.
- CLEAN WITH A SOFT DRY CLOTH Never use solvents such as benzine or paint thinner to clean the unit. Wipe clean with a soft, dry cloth.

# **Features**

- All-in-one speaker system
- 2 Way 8" UNIT
- Embedded Class-D Amplifier
- Supports PoE+ (IEEE 802.3at Type2 class4)
- WAV,MP3 file playback
- Audio Line Output
- Contact Input/Output
- 10/100 Base-T ethernet (Default IP : 192.168.1.99)
- Micro SD card slot
- VoIP, BGM, Scheduler, TTS
- Internal User Memory 1GB

# **Contents and Accessories**

- 1. IP-1015CS : 1EA
- 2. Operation Manual: 1EA
- 3. 3.5mm 3P Euro Block : 1EA
- 4. 3.5mm 4P Euro Block : 1EA

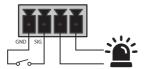
# Part Names and Function

### 1. STATUS LED

In normal operation, the green LED flashes every 0.5 seconds.

### 2. Contact closure I/O terminal

CONTACT IN: Input for contact closure (Dry contact) CONTACT OUT: Output for contact closure (N.O : Normally Open, Dry contact)



### 3. Factory reset switch

This switch initializes the device settings.

When pressed for more than 20 seconds, the STATUS LED blinks quickly.

\* Do not remove the power until normal operation (blinks 0.5 seconds).

### Ethernet port (RJ-45, PoE)

Connect a PoE (Power over Ethernet) switch

- \* Default IP address: 192.168.1.99 (Static)
- \* The recommended Lan cable is 0.15Ω/m cable within 100m when PoE is used and  $0.1\Omega/m$  cable within 100m when PoE+ is used. The total DC resistance of the Lan cable is 150 or less when PoE is used and 100 or less when PoE+ is used

### Micro SD card slot

Insert a Micro SD card to this slot

### 6. Ground terminal

This is the terminal used to ground the equipment.

\* It is highly recommended to make the ground connection as short as possible.

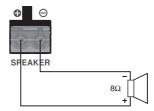
### Line Output terminal (3p Euro Block)

Balanced audio output

### SPEAKER (8Ω) terminal

Connect a speaker to this terminal. Refer to the diagram below for the connection

\* The rated speaker impedance is 8Ω. The speaker which has less than  $8\Omega$  impedance may cause malfunction or damage.





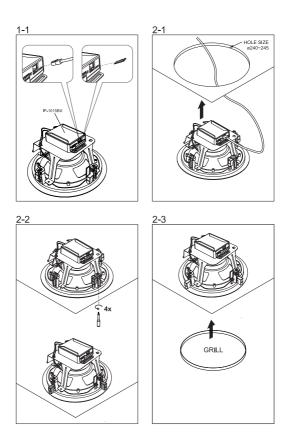
# Specification

	IP-1015CS		)15CS	
TYPE		2Way 8" Network Ceiling Speaker		
Driver	LF	8", V/C : 25.4mm / 8Ω		
	HF	2", V/C : 13.28mm / 8Ω		
Maximum SPL [Cont]		96dB (PoE 802.3af)	100dB (PoE+ 802.3at)	
Frequency Range		120Hz~20kHz		
Nominal Dispersion (HxV)	1kHz	90°		
	4kHz	60°		
Enclosure		Material : ABS		
Amplifier				
Rated output power (8Ω,1kHz sine wave)		3.7W (PoE 802.3af)	10W (PoE+ 802.3at)	
Mic				
Embedded mic		50Hz ~ 16kHz		
Line output				
Maximum audio output		+6dBV ± 3dB		
Frequency response		20Hz - 20kHz (+1/-3dB)		
THD+N (20Hz HPF, AES17 LPF)		Less than 0.1%		
S/N(20Hz HPF, AES17 LPF, A-WTD)		Better than 91dB		

		IP-1015CS		
Contact I/O				
Contact Input (1CH)		Dry contact		
Contact Output (1CH)		Dry contact (N.O : Normally Open)		
Storage	Micro SD	Max 32GB		
Network				
Ethernet		10/100 BASE-TX PoE		
General				
Power		PoE (IEEE 802.3af, IEEE 802.3at)		
Connectors		Ethernet Jack (RJ-45)		
Operating temperature		-20°C ~ +50°C		
Power consumption		PoE (IEEE 802.3af) : 44~57 VDC, Max 12.95W PoE+ (IEEE 802.3at): 50~57 VDC, Max 25.5W		
Weight (Set)		1.8kg/3.97lb		
Dimensions (Set)		Φ264(W) x 144(H)mm 10.4(W) x 5.7(H)in		

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

# Installation Guide



# Service

### Procedures

Ensure the problem is not related to operator error, or external system devices, 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.

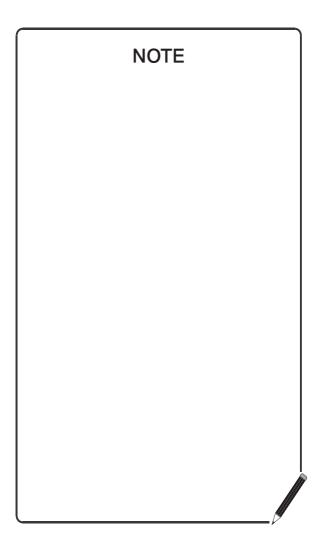
### Parts List

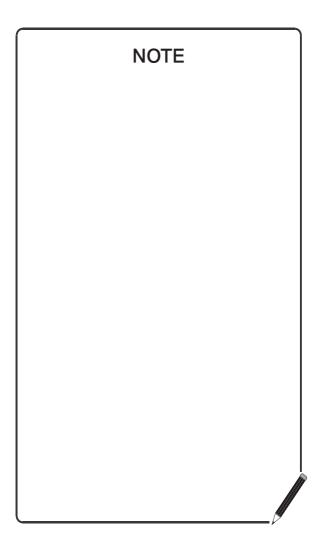
A Parts List is available by contacting your warranty provider.

# 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.





# InterM

## EAC

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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