

The Tech Works MC-IP-MSI-11 is a Modular Communication over Internet Protocol, Microphone, Speaker, audio Interface designed to take a variety of audio intercommunication products and let them talk to each other over the Tech Works MC-IP Network. MC-IP is a group of products designed to allow individual conversations with one another while the CI-Series is a Collaborative Intercom designed for a single system to allow a group of people to all "collaborate" at the same time. By combining the 2 Series in the MC-IP-MSI-11 a hybrid system with a local collaborative intercom can be accessed selectively by multiple remote MC-IP operators to participate in a collaborative conversation.

The MC-IP-MSI-11 consists of four functional modules; The local Microphone/Line Input; a 25 Volt Speaker Output, the CI-BUSS Interface, and an Ethernet port for MC-IP network connection. The Jumper Options determine how these Modules interact and function with each other. The Power Amplifier, is used for a Procedure/Clean Room Speaker, while the Microphone Input is used for a shotgun microphone, boom mounted or hanging Procedure/Clean Room Microphone. The CI-BUSS may be used with other Interfaces, such as a CI-HSI-41 or the CI-ODC.

Initial setup is accomplished with built in level indicator lights and the controls. Once completed, no further adjustments should be required. Integral ALC, Variable Notch Filters, and Speaker Ducking allow for full duplex conversations without feedback.

# MC-IP-MSI-11

## Modular Communication Internet Protocol Microphone / Speaker Interface Collaborative Intercom

### BENEFITS

- Superior Sound Quality
- Low Cost
- Total Flexibility
- Easy Set Up
- Simple Integration

### Associated Equipment

<b>MC-IP-ODC-8/16</b>	Direct Select Operator Desk Console
<b>MC-IP-ODC-TS</b>	Touch Screen Console
<b>PA-402</b>	Program & Paging Amplifier
<b>CI-HSI-41</b>	Collaborative Intercom Headset Interface
<b>CI-ODC-1</b>	Collaborative Intercom Operator Desk Console
<b>MC-IP-HOST or MC-IP-SEVER PS-2437B</b>	Network Administrator Power Supply

### Design Information

<b>Power</b>	24V DC @ 3A (Power Supply Not Included)
<b>Color</b>	Light Gray Metal Enclosure
<b>Mounting</b>	Wall / Backboard / Half Rack
<b>Dimensions</b>	8.5" W x 6" D x 1.75" H
<b>Weight</b>	2.6 lbs.

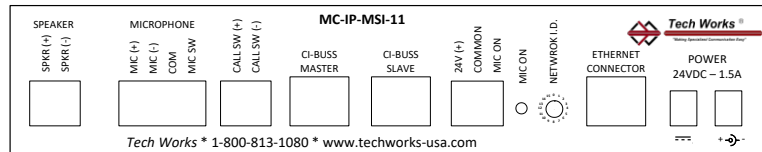


## Tech Works®

"Making Specialized Communication Easy"



## Rear View and Connections



### Speaker Output:

Two Position Euro-Style Barrier Strip:  
Speaker (+)  
Speaker (-)  
*25-Volts, 10-Watts Maximum*

### Microphone Input:

Four Position Euro-Style Barrier Strip:  
Universal Microphone/Line Input (+)  
Universal Microphone/Line Input (-)  
Shield/Switch Common  
Talk Switch (N.O.)

### Configured for a Microphone Level Input:

*2000 Ohms Balanced  
-75dBm or -60dBm (Selectable)  
Selectable Equalization - 3 settings  
optimized for voice communication  
Selectable Phantom Power (22 Volts,  
Short Circuit Protected)*

### Call Switch:

Two Position Euro-Style Barrier Strip:  
Call Switch (+), (N.O.)  
Call Switch (-)

RJ-45, CI-BUSS, "Master" Connector  
RJ-45, CI-BUSS, "Slave" Connector

### Remote Indicator Output:

Three Position Euro-Style Barrier Strip:  
Current Limited 24VDC (+)  
Common 24VDC (-)  
Mic On – pull to common control

Mic On local Indicator (someone is listening to you)

### Network I.D. – Rotary Hex Switch

Sets local unit IP address so that the MC-IP Network Host will recognize it.

Shielded RJ-45 Ethernet Connector  
to MC-IP Network

### Power Connectors: (Two)

3.5mm Barrel Connectors  
24Volts, 1.5 Amps Maximum

## Architects' and Engineers' Specifications

A Microphone, Speaker Interface must be provided for this project to have hands-free full duplex communication in the Procedure/Clean Room. The Microphone, Speaker Interface must be capable of articulate voice pickup from a professional phantom powered condenser microphone and clear listening from an industry standard 25-volt clean room speaker without feedback. The system shall include band pass filters, narrow band notch filters and adjustable ducking for tuning the system to the room acoustics while maintaining full duplex communication. The system must include Automatic Level Control and the Collaboration Intercom interface for connection to other Tech Works MC-IP Series Modular Communication over Internet Protocol products as well as CI-BUSS devices for a complete and operable system. Products that do not operate over Ethernet exclusively using Internet Protocol for both audio and audio control will not be acceptable under these specifications.

System connections must be via industry standard CAT-6 patch cords. The Microphone, Speaker Interface shall operate from a separate UL Listed 24 VDC 1 Amp power source.

The Microphone, Speaker Interface shall be Tech Works Model MC-IP-MSI-11

**For further system set up and adjustment please see the System Planning Guide by scanning the QR Code.**

