MC-IP-Series

Modular Communication Internet Protocol Audio Intercommunication

The MC-IP-Series is a group of audio products designed to provide very high audio quality over ethernet using Internet Protocol. Audio quality is consistent and predictable due to the implementation of Streaming VOIP with our tried-and-true audio designs and industry standard interfaces. The MC-IP provides Master to Remote communication and Master to Master Communication up to 32 Operators and 512 Remotes with a simple HOST. When using MC-IP-SERVERS, 32 systems can be interconnected for a total system of 32 X 32 = 1024 Operators and 32 X 32 X 16 = 16,384 remote stations.

Using industry standard API for integration and industry standard 25-volt speakers for remote stations, the MC-IP drops into most integrated control systems using the door control and security system touch screen for seamless operator control of all security electronic systems from a single touch screen control console.

By using a dedicated IP network with dedicated switch, operator console, field device interface, and HOST, the MC-IP maintains quality audio with no IT setup. By plugging the units in they automatically assign IP addresses and propagate settings based on ID settings on each device. This allows the system programmer to program the system the way it needs to be for a specific facility without worrying about the IT settings for proper operation. Maintenance personal, without IT skills, can swap a box and just set the box ID. As soon as it is attached to a system, the Host sets the IT parameters and downloads the unique characteristic that unit was assigned during the original system programming.

System Station hardware offers a call confirmation light and privacy alert tone for those areas that require ADA and Right to Privacy Act compliance.

BENEFITS
- Audio and Control over a Single Internet Protocol Connection
- Rugged Design
- High Quality Audio
- Self-contained electronics eliminates the need for wiring separate electronics together
- Designed Specifically for Security and Corrections
- Industry Standard 25-Volt remote speakers

Associated Equipment:

MC-IP-HOST or MC-IP-SEVER	Network Administrator
MC-IP-ODC-POE	Operator Desk Console w/Power Over Ethernet
MC-IP-ODC-TS	Touch Screen Console
MC-IP-116	16-Channel Intercom Control Module
MC-IP-116-L	16-Channel Intercom Control Module w/Remote Station Light Output
MC-IP-MSI-11	Microphone/Speaker Interface
MC-IP-SW-16	16 port TCP/IP Switch
MC-IP-SW-16-POE	16 port TCP/IP Switch 8 w/POE, Rack Mount
PA-402	Paging Amplifier
PS-2437B	Power Supply 24VDC
VPSS-L	Vandal-proof Speaker Station w/ Lighted Call Button

Design Information:

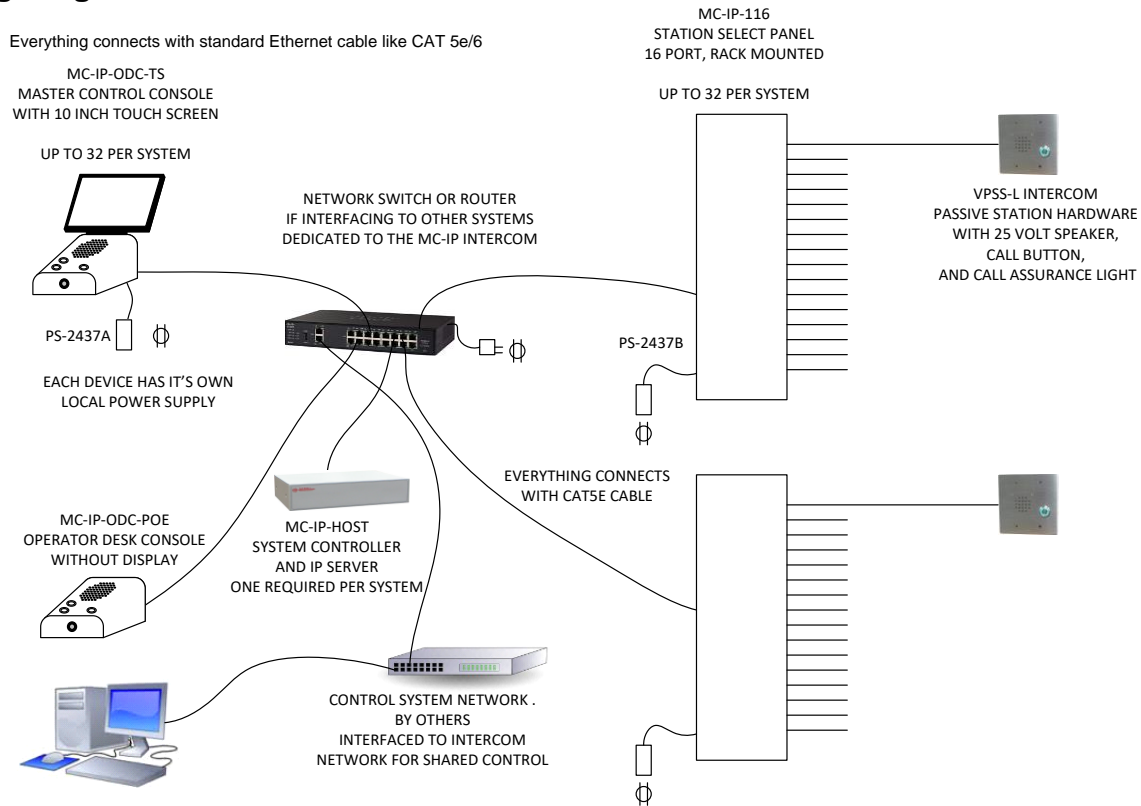|	
Power	24V DC Power Supply (Sold Separately)
Frequency Response	150Hz – 10k

Tech Works ®

"Making Specialized Communication Easy"

Wiring Diagram:

Everything connects with standard Ethernet cable like CAT 5e/6

MC-IP-ODC-TS
MASTER CONTROL CONSOLE
WITH 10 INCH TOUCH SCREEN

UP TO 32 PER SYSTEM

NETWORK SWITCH OR ROUTER
IF INTERFACING TO OTHER SYSTEMS
DEDICATED TO THE MC-IP INTERCOM

MC-IP-116
STATION SELECT PANEL
16 PORT, RACK MOUNTED

UP TO 32 PER SYSTEM

VPSS-L INTERCOM
PASSIVE STATION HARDWARE
WITH 25 VOLT SPEAKER,
CALL BUTTON,
AND CALL ASSURANCE LIGHT

PS-2437A

EACH DEVICE HAS IT'S OWN
LOCAL POWER SUPPLY

PS-2437B

MC-IP-ODC-POE
OPERATOR DESK CONSOLE
WITHOUT DISPLAY

MC-IP-HOST
SYSTEM CONTROLLER
AND IP SERVER
ONE REQUIRED PER SYSTEM

EVERYTHING CONNECTS
WITH CAT5E CABLE

CONTROL SYSTEM NETWORK .
BY OTHERS
INTERFACED TO INTERCOM
NETWORK FOR SHARED CONTROL

Architects' & Engineers' Specifications

The audio intercommunication system shall be made up of vandal resistant user interfaces with audio and control communication over Internet Protocol. The system will interface with industry standard 25-volt speakers and utilize industry standard Category cabling. The system must be capable of standing alone operation, with all of its own components for full operation, or fully integrating to PLC type control touch screen systems, by others, through a standard API. The system shall employ Automatic Level Control to provide clear audio quality, from a whisper to a shout, with the same audio output level and distortion to the operator. System Station hardware must offer a call confirmation light and privacy alert tone for those areas that require ADA and Right to Privacy Act compliance.
Any system not exclusively using Internet Protocol for both audio and audio control will not be acceptable under these specifications.

The Audio Intercom shall be Tech Works MC-IP

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