



The MC-IP-SERVER is an Internet Protocol Control Module like the MC-IP-HOST but it does a lot more. Where the HOST can support 2 "ports" for external touch screen computers from control systems, each SERVER can support 32 ports and 32 SERVERS can be interconnected. The SERVER also acts as a router for communication between multiple MC-IP systems. The MC-IP-SERVER has 2 TCP/IP connectors; one for the local Host functions connected to the local network and second to connect a local system to other systems on a second network. This allows 32 systems to seamlessly connect to each other for a total of $32 \times 32 = 1024$ Operators and $32 \times 32 \times 16 = 16,384$ remote stations.

Functions include monitoring what devices are connected to the network, who wants to talk to whom, who is talking to who, as well as programmed properties and functional programming of each system device. When a system is installed and configured the MC-IP-SERVER builds tables of all devices, commands, and functions that are required for any given system. If a device fails or is removed from the system the MC-IP-SERVER puts that device out of service until a new device with the same credential is installed. When a new device appears the MC-IP-SERVER automatically downloads all stored settings to the new device to assure that it functions just like the unit that was replaced. This makes field maintenance or repair a simple swap of the box for service. The MC-IP-SERVER uses a standard SD card to store all system programming and communication tables. This information can be copied and stored for backup and security.

When any MC-IP-ODC Operator Desk Console selects a station to have a conversation, either MC-IP-ODC (Master to Master) or MC-IP-116 (Master to Remote), the MC-IP-SERVER goes to its table and sees if that station is available. If not, the requesting station is sent a "Busy Signal". If the station is available an audio and control connection is established between the two devices and they are in full control of the conversation. If special commands for establishing communication are required by third party software a translation table is created to handle the special commands.

MC-IP-SERVER

Modular Communication Internet Protocol System Server

BENEFITS

- Internet Protocol Connectivity
- Full System Back via SD Card
- Hot Swappable Automatic Component Replication
- Flexible Command Tables

Associated Equipment:

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
PS-2437B	Power Supply 24VDC

Design Information:

Power Input	24V DC – 3A (Power Supply Sold Separately)
Color	Gray Powder Coat
Mounting	Wall / Backboard or Desk
Dimensions	7" W x 3" H x 1.25" D
Weight	3 lbs.



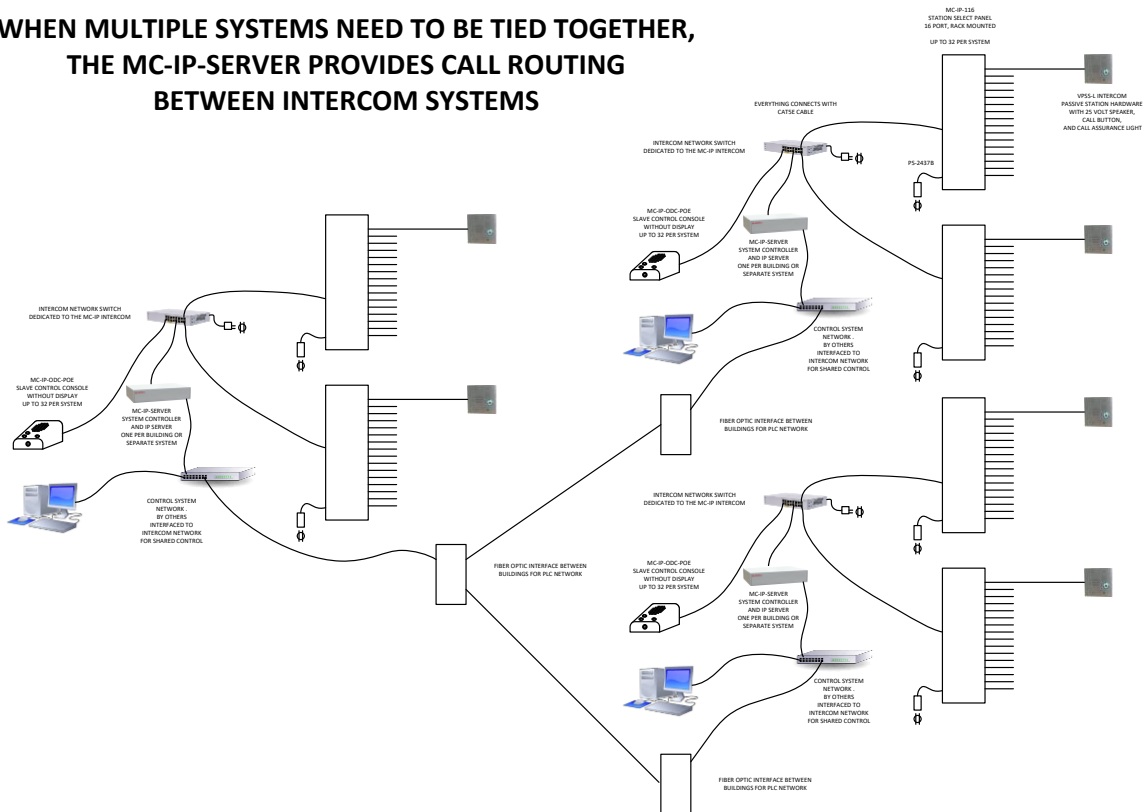
Tech Works®

"Making Specialized Communication Easy"



Wiring Diagram:

**WHEN MULTIPLE SYSTEMS NEED TO BE TIED TOGETHER,
THE MC-IP-SERVER PROVIDES CALL ROUTING
BETWEEN INTERCOM SYSTEMS**



Architects' & Engineers' Specifications

The MC-IP-SERVER shall be an Internet Protocol Control Module that connects to two networks; a local network for stand-alone local communication and a second campus network to connect with other Servers for over 17,000 stations and over 1,000 simultaneous conversations. The MC-IP-Server local Host builds tables of all local devices, commands, and functions that are required for the operation of the system. If a device fails or is removed from the system the MC-IP-SERVER shall log that device out of service until a new device with the same credential is installed. As soon as a new device appears, the MC-IP-SERVER will automatically download all stored settings to the new device to assure that it functions just like the unit that was replaced. A standard SD card shall store all system programming and communication tables. The MC-IP-SERVER shall arbitrate all connections on the system by monitoring all communication connections and upon any request to establish a new conversation, the MC-IP-SERVER shall check the system table and sees if that station is available. If not, the requesting station shall be sent a "Busy Signal". If the station is available an audio and control connection will be established between the two devices and they shall be in full control of the conversation. If special commands for establishing communication are required by third party software a translation table will be created to handle the special commands. Any system that does not allow Automatic full functional replication of any component swapped on the system will not be considered under this specification.

The power supply shall be 24 VDC 1 Amp universal AC source type.

The Internet Protocol System Controller / Host shall be Tech Works MC-IP-SERVER

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

