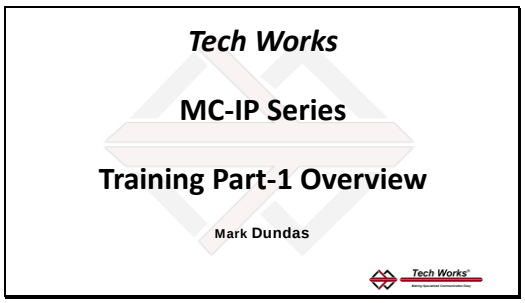
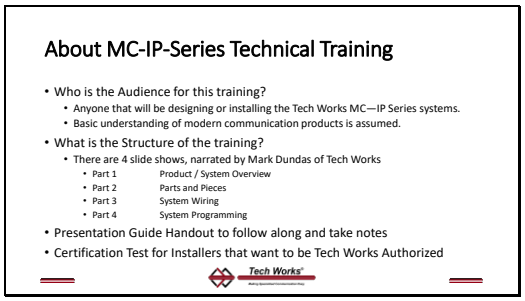
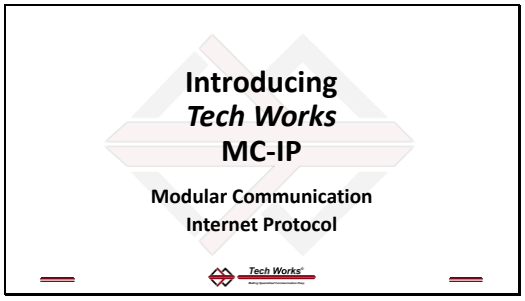
Slide 1



Slide 2



Slide 3



Slide 4

What is MC-IP?

- Network Control
  - Programmable Station Select
  - Multiple Operator
  - Call Forwarding

Operator to Operator Communication
  - Fully Programmable
  - Who can call Who
  - How they Answer
- Flexible Zones
  - Programmable by Operator
  - 16 Independent Zones
  - Any Operator
  - Any Remote
- IP Network Streaming Audio Connections
  - Quality rivalling analog systems
  - Sounds like a hardwired system
  - Flexibility and Integration of the Network of Things
- 32 systems can be interconnected
  - Basic Network
    - 32 Operators
    - 32 Station interface with 16 Ports = 512
  - Networks of 32 Networks
    - 32 X 32 = 1024 Operators
    - 32 X 32 X 16 = 16,384 remote stations
  - Independent Networks allow Redundancy

Tech Works®

Slide 5

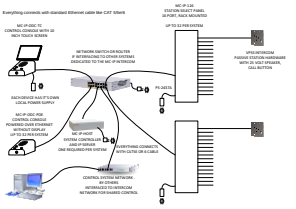
Where is MC-IP used and Why?

- Public Safety – Reliable Performance with Integration
  - Detention Cell to Guard Communication
  - Police Stations
  - Court Houses
  - Security Desks
  - Interrogation
  - Isolation Cells
- Healthcare – Hands Free Audio
  - Prison Infirmaries
  - Isolation Rooms
  - Operating Rooms
  - Observation Rooms
    - Sleep Labs
    - Behavioral Health
    - Child Development
  - Chemo Therapy Sterile Compounding Labs

Tech Works®

Slide 6

What dose it look like?



Slide 7

Why MC-IP?

- Multiple Operators
  - Call Forward
  - Call Capture
  - Advanced Ringing
  - Off premise Operators
- Flexible Remote
  - Works with standard 25 Volt Speaker Stations
  - Reuse existing Wire and Stations
- Flexible Paging
  - Any Station and/or Operator in Any Paging Zone
  - Add Power Amplifiers where needed
- Nurse Call
  - Drive Dome Lights
  - Vandal Proof Stations
  - Call Confirmation Lights
  - Key Switch Activate & Reset Options

Tech Works®

Slide 8

What Matters – Why MC-IP?

Detention/ Public Safety

Healthcare

Tech Works®

Slide 9

Detention/Public Safety – Why?

- Easy Installation
  - Works on CAT5 or CAT6 wire
  - Works on Existing field station wire
  - Standard 25 Volt Speakers
- Easy to maintain
  - No special training
  - Devices get their personality from the HOST
  - Host is backed up on an uSD Card
  - Device I.D. set by a Rotary Address Switch
  - Hot Swap devices with no on site programming required
- Runs on 24 Volts DC
  - Easy code compliance

Tech Works®

Slide 10

Healthcare – Why?

- Prison Infirmaries
  - Vandal Proof Station Hardware
  - Simple Audio Visual Communication
- Assisted Living
  - E-Call without the Dome Lights
- Behavioral Healthcare
  - 2 Color Lights Associated With Each Station
  - Staff protection
  - Anti Ligature Call Stations
- MC-IP-CI Collaborative Intercom
  - Pro Quality Hands Free Audio
  - Multiple Operators
  - Multiple Procedure/Clean Rooms

Slide 11

Fully Programmable Who can call Who

- Operator to Operator Communication
  - Auto Answer Option
  - Push to Talk Only Option
  - Privacy Tones
- Limit what Stations/Operators are available to any Operator
  - Screen Icons
  - Programmable Ringing
- Call "Relay" and Call "Forward"
  - Stations are individually assigned to Operators
  - Where does a call go:
    - Initiated?
    - Unanswered?
  - Operator Out of Service Forward All Calls
  - Does the local station still ring even while Relayed or Forwarded?
- Unique Ring Tones

Slide 12

2 versions of the MC-IP-ODC

- **Operator Desk Console**
  - **MC-IP-ODC-TS** – Touch Screen included for applications like prison infirmary and security intercom that might be a stand-alone independent intercom
  - **MC-IP-ODC-POE** - POE for those that don't want a power supply at the console location and are using their own touch screen for PLC control systems and camera control

Slide 13

2 versions of the MC-IP-116

- **1 Audio Channel X 16 Station Control Module**
  - **MC-IP-116** – Intercom station select panel for 16 audio stations with call switch, no light
  - **MC-IP-116-NC2** – 2 call points and 2 indicator outputs associated with each voice port

Slide 14

MC-IP-MSI-11 Microphone Speaker Interface

- Bi-Directional / Hands Free Audio
- One Input
  - Professional Balanced Microphone Input with Phantom Power
- One Outputs
  - 25 Volt Speaker Output at 10 Watts
- CI-BUSS Interface
  - Can connect to traditional Collaborative Intercoms
- Built in filters tune the MSI to the room for best acoustic interface
- Jumper Options determine how these Modules interact and function with each other
- Remote Output can turn on a light to tell staff when they are being listened to

Slide 15

What is a HOST?

- 544 Station System Controller
  - Up to 32 - Operator Consoles
  - Up to 32 - 116 Station Controllers for 512 Stations
  - Dedicated unmanaged Network
- Processes call requests
  - Routes Calls to designated Operators
  - Controls Operator "Ringing"
  - Cancels Ring when a call is Answered
  - Makes the IP connection to allow streaming audio communication until the call is ended
  - Then gets out of the way and waits for the End of Call Command to disconnect
- Stores all system Configurations on uSD Card
  - Each system device (except the HOST) has a rotary Identification Switch which tells the HOST who it is
  - The ID Switch assigns static IP addresses to each device
  - The HOST sends each device it's unique profile based on its address when it connects to the network
  - Configurations can be Pre-Programmed in the shop
- POE or Local 24 VDC (Never Both)

Slide 16

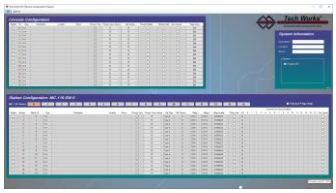
What is a SERVER?

- Does everything a HOST does
  - 544 Station System Controller
    - 32 Operators
    - 512 Remote Stations
  - Processes call requests
  - Stores all system Configurations
- Plus
  - Redundant Networks for reliable independent operation of separate buildings
  - LAN / WAN router interface
  - Separate HOST IP Interface for the Intercom Network
  - USB and HDMI Interface for direct connection of Human Interface for programming
  - 32 Network Expansion to
    - 1024 Operators
    - 16,384 Remote Stations
- Local 24VDC only

Slide 17

How do I Program MC-IP?

Tech Works MC-IP Configurator Program



Slide 18

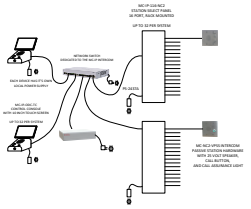
What are the Field Hardware Options?

- **VPSS –** Vandal Proof Speaker Station - Non-Lighted
- **VPSS-L –** Vandal Proof Lighted Speaker Station
- **MC-NC2-VPSS-2G (-RC) –** Vandal Proof Staff Asist 2 Button with Light
- **MC-VPBL (-RC)–** Vandal Proof Button with Light
- **VPKS-1 & -2 –** Vandal Proof Key Switches
- **MC-NC2-DL-22-RW -** 2 Color Dome Lights
- **MC-NC2-DL-44 -** 4 Color Dome Lights
- **Standard 25 Volt Ceiling Speakers and Paging Horns**

Slide 19

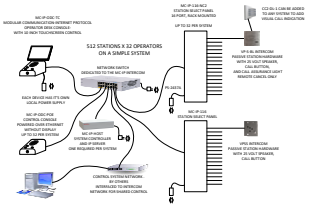
MC-IP Pieces – How they go together

- Operator Desk Console (ODC)
- Station Interface Panels (116)
- Industry Standard
  25 Volt Speaker Stations
- TCP/IP Network
- HOST / SERVER



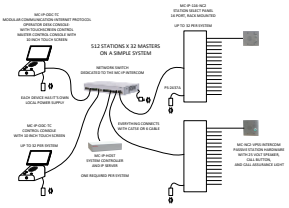
Slide 20

Basic Network



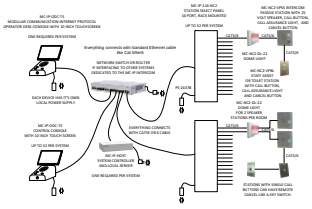
Slide 21

Stand Alone Intercoms



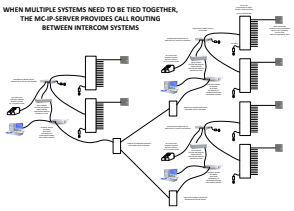
Slide 22

Nurse Call



Slide 23

Complex Expanded Networks



Slide 24

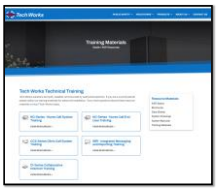
Tools to help you

- Online 24/7 X 365 www.TechWorks-USA.com
- Product Brochures
- Specifications for Architects & Engineers
  - Available on the website (specs and data sheets)
  - Custom specs written by request
- Design/Quoting assistance
  - Questionnaires to support the process
  - Design review
  - Quote development on solutions
  - Margin
- Technical Assistance
  - Training and Installation Manuals
  - Tech Support – Engineering and Field

Slide 25

Training and Certification On Line

- Thank you for taking the time to study the product
  - Your efforts will make all of our jobs easier
  - Please take the other training courses so that you are familiar with all Tech Works products
- Help us get the rest of your staff trained
  - Sales people should take parts 1 & 2 of each product group
  - Estimators/Engineers should take all parts



Slide 26

Making Specialized Communications Easy

Up Next Part 2
Parts and Pieces