CW-HMX High Rise Voice Evacuation System

- Works with 12VDC or 24VDC Fire Alarm Panel
- Works with Analog/Addressable and
- Microprocessor based Fire Alarm Panels.
  3 Minute Message Restart on Microphone Key
- Made in the USA.

MEA
277-96-E

6911-1446:103

UL LISTED #S5661

Description:

The Cooper Wheelock HMX High Rise Evacuation System operates in conjunction with the Fire Alarm Control Panel (FACP) in a building to provide automatic response to life safety emergencies.

The Cooper Wheelock HMX includes all necessary features to provide an effective voice evacuation system. The Cooper Wheelock HMX can be custom configured to satisfy the needs of any high rise application.

Fire department authorities can easily take command of evacuation or relocation procedures and emergencies. Building management and fire brigades can monitor and control emergency response even before the professionals arrive

The HMX system includes capacity for 6 channels of simultaneous audio. This provides for evacuation, stay-in-place, or other public address announcements and automatic messages.

Fire Fighter Phones or Warden Stations may be included as required. Area-of-Refuge stations can reassure handicapped occupants that help is on the way.
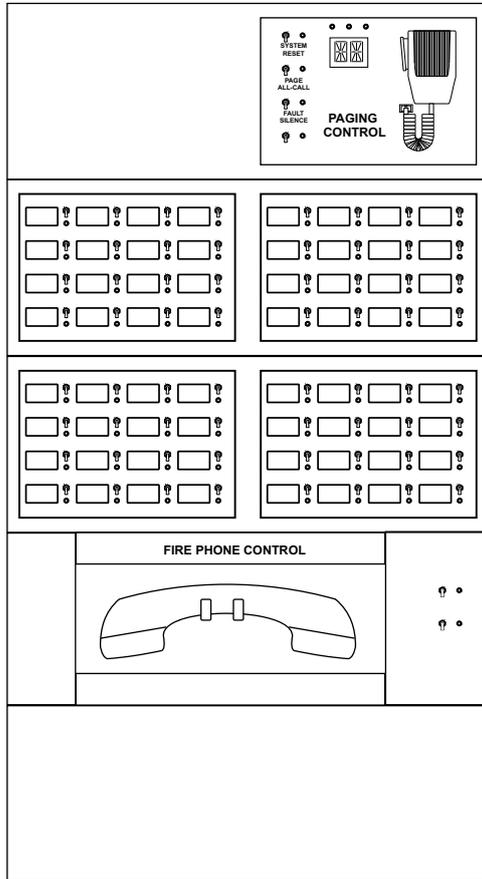
Features:

- True Multiplex 6 Channel Networked Audio
- Integrated Fire Phone and Area of Refuge capable Modular System - components added as needed
- Integrated 2 Channel Digital Message Repeater
- Live Microphone Page to any zone
- Fast RS-485 Communication Protocol
- Fully Supervised
- Easy Installation and Operation
- Natural Sound Voice Recordings
- Built in Alarm and Alert Signals
- Up to 4 Minute Message Capacity

System Configuration:

Basic System Includes:
Master Panel (HMX-MP)
  Master Mic Control
  16 switch control points
  Dual Channel DMR
  High speed communication loop

Distributed Panel (HMX-DP)
  4 Output Zones (may be configured for 8)
  Dual Channel Audio Interface
  Dual Channel Amplification

Optional
  Integrated Fire Phone
  Area-of-Refuge
  Fiber Optic Network Capable

Number of distributed panels to be
Determined by building specifications

Maximum System Configuration
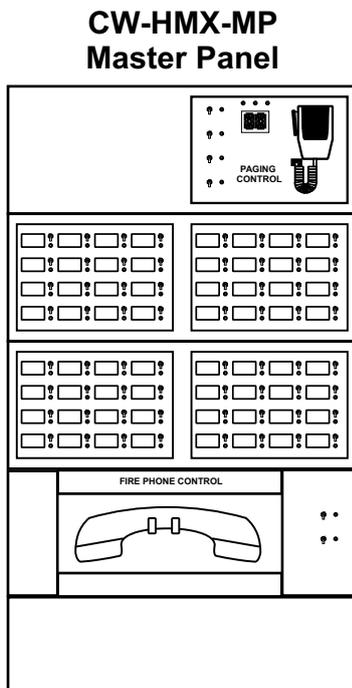 Up to 256 Distributed Panels (HMX-DP)

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CW-HMX True-Multiplex System Capabilities

CW- HMX-DP
Distributed Panel
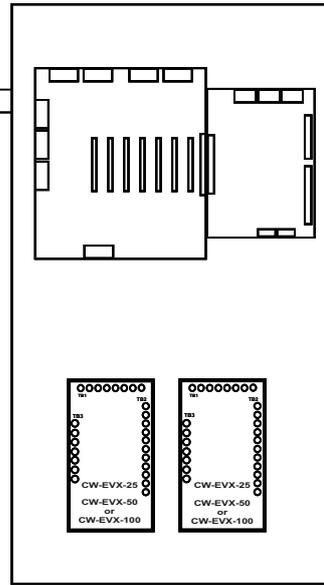
Voice Evacuation Speaker Circuits
#18 AWG

NetComm Loop:

- Unshielded Twisted Pair *(Low cap.) (18/2 min)*
- 4,000 Feet max. between panels
- Data and 6 Audio Channels Simultaneously
- High Speed RS-485 Communications
- Style "6" or Style "7" Field Selectable
- Separate communication run **not** to be installed with any other data source

#22 AWG Twisted Pair

Fire Phone

Fire Phone

Fire Phone

CW-EVX-25
CW-EVX-50
or
CW-EVX-100

HMX-DP
Distributed Panel

Voice Evacuation Speaker Circuits

Head End Control

CW-HMX-MP
Master Panel

PAGING CONTROL

FIRE PHONE CONTROL

Fire Phone

Fire Phone

Fire Phone

CW-EVX-25
CW-EVX-50
or
CW-EVX-100
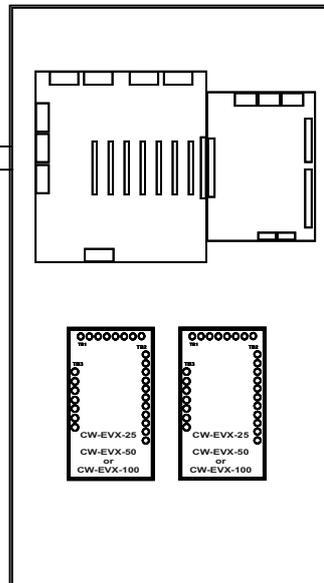
CW-HMX

High Rise Multiplex 11 Floor Typical Riser Diagram

Floor	
11th Floor	S ◁ S ◁ P AR
10th Floor	S ◁ S ◁ P AR
9th Floor	**CW HMX-DP** S ◁ S ◁ P AR
8th Floor	S ◁ S ◁ P AR
7th Floor	S ◁ S ◁ P AR
6th Floor	S ◁ S ◁ P AR
5th Floor	**CW HMX-DP** S ◁ S ◁ P AR
4th Floor	S ◁ S ◁ P AR
3rd Floor	S ◁ S ◁ P AR
2nd Floor	S ◁ S ◁ P AR
1st Floor	**CW HMX-MP** **CW HMX-DP** S ◁ S ◁ P
Basement	S ◁ S ◁ P

CW-HMX

RS 485
DATA LOOP

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- High Speed RS-485 Communications
- Style "6" or Style "7" Field Selectable
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S ◁ Speaker, Speaker/Strobe   AR Area of Refuge Station

P Fire Fighter Phone Jack

g

Engineering Specifications

CW-HMX High Rise Voice Evacuation System

The voice evacuation system shall be Eaton's CW-HMX High Rise Voice Evacuation System or approved equal.

The CW-HMX system shall include one Master Panel and one or more Distributed Panels. The system shall be microprocessor based, and shall be compatible for use with contact closures from the Fire Alarm Control Panel, (FACP).
The system shall have a high-speed communication bus and have the capacity for 6 channels of audio and data on a single pair of wires. The field wiring for the communication bus may be configured for either Style "6" or Style "7" supervision.
The system shall have the capacity for Fire Fighters Phone and Area-of-Refuge communication.

The Master Panel shall contain an integral microphone, dual channel digital message repeater, (DMR) and digital tone generator, 120 VAC power supply, and battery charger. The system shall be modular in design, and shall be expandable such that additional system control points may be configured. The system shall include integral self-diagnostic routines that shall continually monitor system status, and shall indicate the precise type of trouble conditions should they occur in the system. A trouble condition within the system shall cause a trouble indication to be transmitted to the FACP.

Note: Specifications are subject to change without notice. Specifications are provided for information only and no responsibility is assumed by Eaton for their use.

Distributed panels shall provide a minimum of 4 Class "B" speaker circuits, expandable to sixteen total. Alternately, panel may be configured for 4 Class "A" speaker circuits, up to 8 total. Panel may be configured for 1 to 8 amplifiers. Panel must provide up to 6 simultaneous audio channels, up to 16 Fire Phone circuits or Area of Refuge circuits. Amplifiers will contain their own power supplies, battery chargers and provide auxiliary power for other components. Speaker circuits shall be supervised for short and open circuit conditions, and shall be able to withstand transient or continuous short-circuit conditions without damage to the system.

System may be configured for General Alarm All Call operation, Alarm by Zone or Floor Above / Floor Below as required. Contact closures shall allow immediate broadcast of an alarm signal and evacuation message to the appropriate area. Non-Alarm areas may receive alert tones and messages as required or activated by the FACP.

The alarm signal/evacuation message shall be broadcast until the FACP is reset, or until emergency personnel interrupt the broadcast with a manual page.

To prevent unauthorized tampering, the voice evacuation system shall disable the microphone if the microphone is keyed continuously for 3 minutes or more. Systems that do not have this feature shall not be acceptable.

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