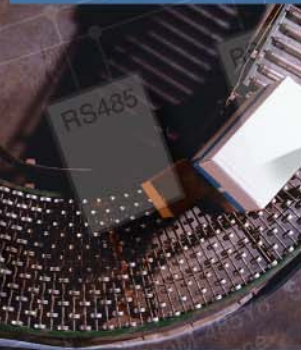




A reliable signal for every application,
flexible control from any location.



Signal Responsibly™
with Edwards.



Signal control and communications management like you've never seen before.



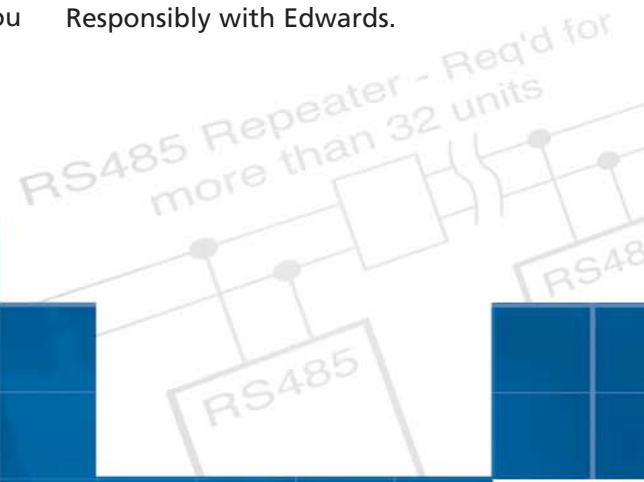
The effective, versatile signaling you've wished for is finally here. And easy.

Since 1872, Edwards has been finding better ways to alert, warn, and communicate with reliable, high-performance signaling devices. And each year brings more innovations, making industrial, commercial, and institutional locations safer places.

Today our innovation has taken a quantum leap forward. Now, for the first time in the history of signaling, you can get complete control of all your signaling in whatever way makes most sense for the way you do business. So not only do we offer you a signal for every signal need, now

we also give you a new level of hands-on control and management for every signal need. You design an application and we'll help you configure the ideal signaling and control solution.

The promise of technology to revolutionize signaling is finally here, and only available from Edwards. Complete control and management flexibility is yours. See how we can improve your signaling, your business, and your safety. When you Signal Responsibly with Edwards.



Signal Solutions for all your challenges:

Signaling powered by know-how.

There's a lot more to an Edwards solution than signaling control. You can tap into the industry's leading authorities for help and advice for any signaling challenge. Just ask. And if we don't already have a solution, we'll find one.

As you read through this overview, you may very well find the ideal configuration for yourself. If not, visit us at www.edwards-signals.com or call us at 203.699.3300. And put our proven experience to work for you.



1

Signal Management and Control

2

Signaling Devices

3

Signaling Applications

4

SYSTEM PLANNING

Conventional Speaker/
Amplifier Applications

5

SYSTEM PLANNING

RS485 Applications

6

SYSTEM PLANNING

Fire Applications

7

Ordering Information

1

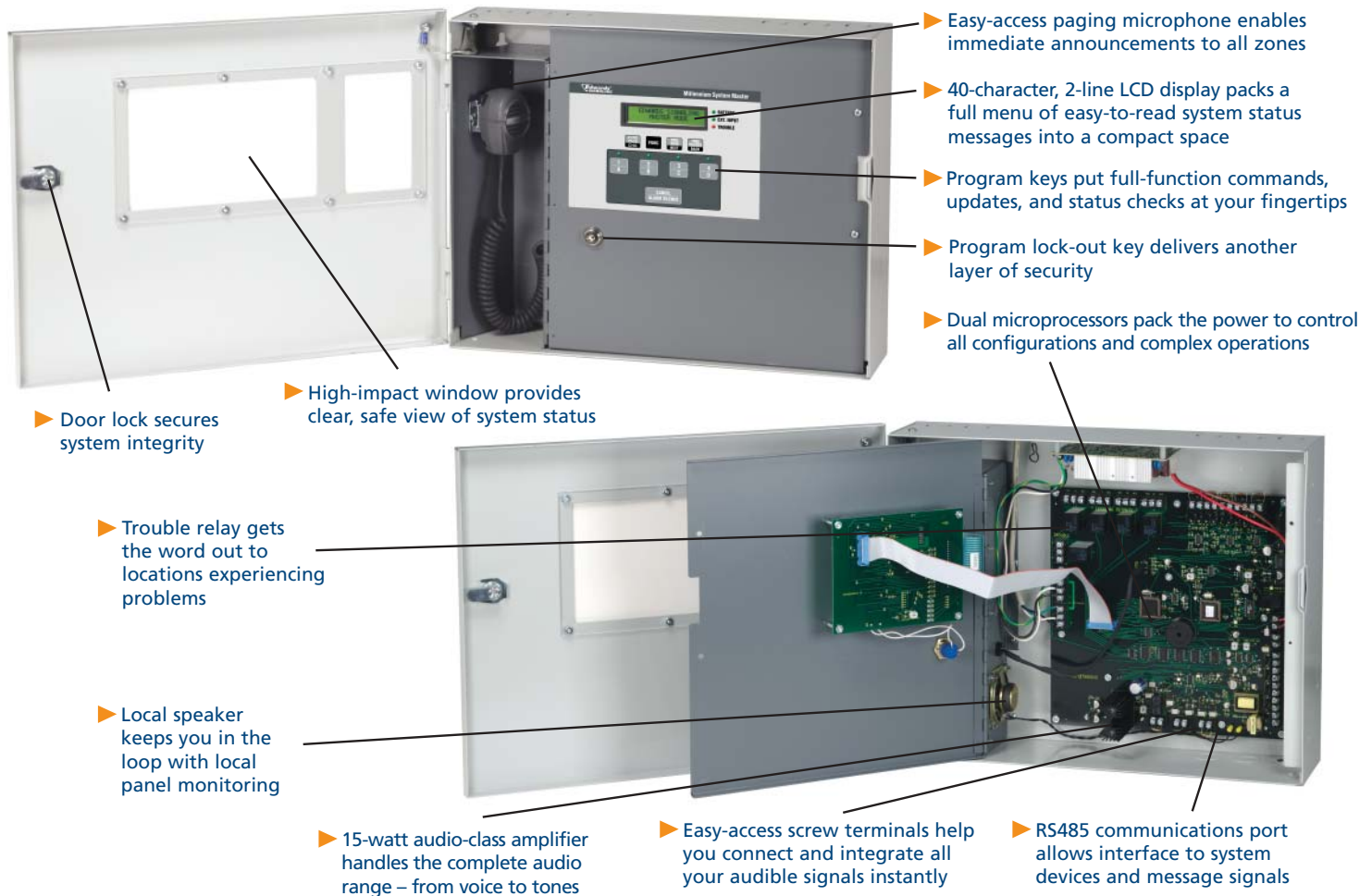
Signal management and control – you're in the driver's seat and handling is a snap.

From the plant floor, the control room, your desktop or laptop – you can control your routine and emergency signaling from just about anywhere.

The Edwards family of signaling control innovations has a solution that fits the way you do business. For audible, visual, and voice signaling, you are in complete control. And that makes you a better communicator.

Millennium System Master®:

You're in complete control from the plant floor.



Get multi-function power and true flexibility for both emergency and routine signaling. With a single Millennium System Master you take complete control of all your emergency, evacuation, and routine signaling. And you do it with functionality and features that can turn plant-floor signaling into a powerful business tool.

The System Master control panel is your new signaling communications center. Its simple touch-programming keys and easy-to-read, 40-character, 2-line LCD display make set up, operations, and modifications a snap. Thanks to System Master's Dynamic Zone Control™ (DZC) and its programmable zone reconfiguration, you can leverage the signaling investments you've already made without the need for expensive rewiring.

You get all these functions built-in:

- 67 tones
- Audio, voice, and power supervision
- Microphone and external input supervision
- Up to four five-second, field-recordable voice messages
- Hand-held microphone paging
- Phone paging from your PBX phone system
- Standby power feature for all functions
- Up to 64 satellite units addressable through the RS485 Network
- Output and trouble relays designed for fail-safe operation
- Top, side, and bottom knockouts for easy wire entry
- LED alarm and status indicators
- Easy-to-adjust output audio volume

Plus, Millennium System Master meets all OSHA self-monitoring, prioritization, and standby power requirements, as well as UL standards for emergency evacuation signaling.

You're in complete control integrating System Master's voice notification with your fire system.

There is a tremendous need for integrated and supervised emergency evacuation and fire systems. Oversight agencies realize this and have either made or are making code changes. In fact, the Occupational Safety and Health Administration (OSHA) has drafted a regulation specifically to address a facility's emergency action plan and to allow safe escape of employees from the workplace (OSHA Regulation 1910.165).

Edwards products – Adaptatone® System Signals, Millennium System Master®, Genesis® – are designed for both emergency evacuation and general signaling. They can be used by themselves for plant alarm and employee emergency notification, or integrated into your existing fire alarm system. When used in conjunction with your installed fire alarm system, Edwards signals can augment or replace existing bells, horns, or electronic notification appliances that sound when an alarm is initiated. Use the Millennium System Master in this application to sound tones or pre-recorded voice messages. Personnel can use the panel's onboard microphone or external microphones for real-time, live-voice announcements and directions.

You can integrate Edwards signals into your fire system wherever it is – oil rig, food processing plant, warehouse, petrochemical plant. When your employees and your plant's safety count, count on Edwards. See Application drawings in Section 6.



OSHA 1910.165

OSHA 1910.165 was developed to reduce the severity of workplace accidents and injuries by ensuring that alarm systems operate properly and procedures are in place to alert employees to workplace emergencies. It applies to all employers that use an alarm system to satisfy any OSHA standard that requires employers to provide an early warning for emergency action, or reaction time for employees to safely escape the workplace, the immediate work area, or both.

General Requirements

1910.165(b)(1)

The employee alarm system shall provide warning for necessary emergency action as called for in the emergency action plan, or for reaction time for safe escape of employees from the workplace or the immediate work area, or both.

1910.165(b)(2)

The employee alarm shall be capable of being perceived above ambient noise or light levels by all employees in the affected portions of the workplace. Tactile devices may be used to alert those employees who would not otherwise be able to recognize the audible or visual alarm.

1910.165(b)(3)

The employee alarm shall be distinctive and recognizable as a signal to evacuate the work area or to perform actions designated under the emergency action plan.

1910.165(b)(4)

The employer shall explain to each employee the preferred means of reporting emergencies, such as manual pull box alarms, public address systems, radio or telephones. The employer shall post emergency telephone numbers near telephones or employee notice boards, and other conspicuous locations when telephones serve as a means of reporting emergencies. Where a communication system also serves as the employee alarm system, all emergency messages shall have priority over all non-emergency messages.

1910.165(b)(5)

The employer shall establish procedures for sounding emergency alarms in the workplace. For those employers with 10 or fewer employees in a particular workplace, direct voice communication is an acceptable procedure for sounding the alarm provided all employees can hear the alarm. Such workplaces need not have a back-up system.

MEDI™:

You're in complete control from your desktop or laptop.

You control so much of your job from your computer – why not your signaling too? It's easy with the Millennium Event Driver Interface (MEDI™). Schedule signals for events as mundane as lunch, or deliver critical voice messages – all without leaving your desk.

The windows-based MEDI software package provides command and control of remote signaling devices throughout your facility. With a few simple clicks, you can program MEDI to automatically signal work start and stop times, break times, or any other timed event. You can also manually command MEDI to initiate tones, wav files, or real-time voice. Any time. It integrates with either conventional or RS485 signaling components.

MEDI installs fast and easy. From the very first moment, MEDI's intuitive design will have you improving your signaling for tasks like automatically or manually sounding break times, shift start and stop times, special events, or real-time voice.



MEDI Applications

Automatically or manually signal events or real-time voice in:

- Industrial Work Cells
- Commercial Buildings and Work Areas
- Schools
- Places of Worship
- Outdoor Work Areas
- Warehouses
- Auditoriums and Theatres
- Correctional and Rehabilitation Institutions
- Security Areas
- Amusement Parks
- Retirement Villages and Club Houses

System Requirements:

- Windows 98, NT, XP, or 2000.
- 160 MB min. hard drive space with additional space for user-added wav files.
- 333 MHz processor required, greater than 500 MHz recommended.
- Sound card with mic/line input and speaker outputs.
- Display with 800x600 minimum resolution. 256 colors recommended.

For RS485 Operation:

- PC must contain at least one Serial COM port or USB port.
- USB port can be configured using a USB/Serial Adapter with associated software.
- RS232 to RS485 Converter (Edwards Part Number MCN485CB2EOLT or equivalent).

2

Every signal you need to signal responsibly.

The only thing better than Edwards versatile signaling control is Edwards versatile, reliable, and proven signals.

With the industry's broadest line, there isn't much we can't do.

Constructed of the finest materials, continually tested and improved, an Edwards signal communicates for a lifetime. Following are many of the signals that are commonly controlled by Edwards signal management systems.

Versatile, plant-wide and proven – Adaptatone Millennium.



Adaptatone Millennium multiple-tone electronic signals offer the widest selection of tones in the industry. With short code blasts or sustained warning signals, they meet virtually every application requirement – from emergency evacuation to routine communications. The Adaptatone signaling system provides for integrated plant-wide communications with microprocessor reliability. Choose from voice, telephone paging, or field-programmable voice units that command notice and allow instant multilingual recognition of your factory's operational status.

Get your message heard

27 unique tones that get your message across – soft tones and melodies for your office areas. Alarming tones that cut through the din of your noisiest production areas. Tones are easily selected by setting internal miniature switches. Plus, Millennium also features field-recordable voice messages and system-wide voice and telephone paging to distinctly and accurately reach every ear in your facility.

Rugged and smart construction

Durable – cast construction with corrosion-resistant heat-flowed epoxy finish to stand up to your harshest environment.

Smart – captive components that won't get dropped and lost during installation. Easy pipe or surface mounting using the integral, external mounting flange.

No special tools required – field wiring terminals can be operated with standard electrician screwdrivers.

Hassle-free installation – large internal wiring compartment that gives you room to work.

Versatile and expandable

As your needs grow, so can your Adaptatone Millennium system. By using a central tone generator and simply connecting speaker amplifiers, you can construct a complete system for plant-wide warning and evacuation. Millennium models are available in a wide voltage range for non-hazardous and Division 2 hazardous locations. Connections are provided for external battery backup. Choose from standard 15-watt and high-volume 30-watt units. Division 1 models are also available.



The smaller alternative with full-size performance – Mini-Mi.™



When you need reduced size without reduced performance, Adaptatone® Millennium Mini-Mi is the answer.

Low profile and low cost, Mini-Mi's modular design delivers the perfect solution for any application: speaker/amplifier, stand-alone tone generation, or field-recorded voice operation. Weatherproof and available with RS485 connectivity, Mini-Mi delivers a lot of signaling in a small 6"x5" footprint.

The 5560M Mini-Mi is ideal for sounding stand-alone or system tones and voice in factory hallway, office, and personnel areas where the use of a larger device is not desirable. The Mini-Mi may also be used for fire/emergency applications, where audio or voice is required for plant or area-wide tone or voice notification.

This compact tone, voice generator, and speaker/amplifier can be configured with or without a 115 candela strobe.

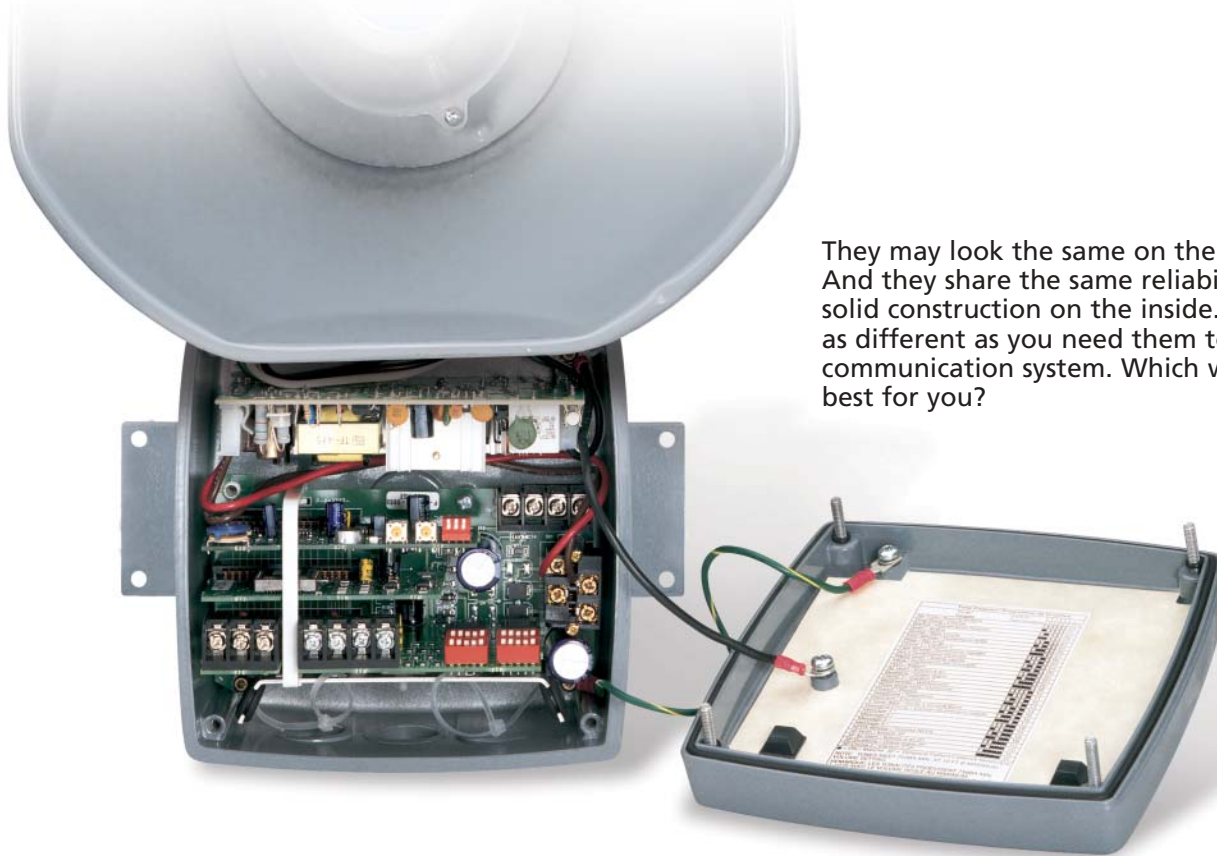
One of five optional modules may be installed in the base unit:

- 556T-M Tone Module Board, where one tone may be dipswitch-selected from a field of 55 tones and will be played whenever power is applied to the unit.
- 556T-M485 Tone Module Board, where any of the available 55 tones can be activated over an RS485 network.
- 556V-M Voice Module Board is capable of stand-alone voice operation. When power is applied to the unit, it will play up to 20 seconds of one pre-recorded, field-programmed voice message.
- 556A-M Audio Coupler Board allows the Mini-Mi to be operated as a system speaker/amplifier over any system that outputs 10, 25, or 70.7V RMS.
- 556A-M485 Audio Coupler Board allows the Mini-Mi to be operated as a system speaker/amplifier over an RS485 network.

Diode polarized fire alarm models are available with and without the 115 candela strobe. The fire alarm models operate from 16 to 33VDC and are available in standard white or red Lexan housings.

- Internal volume control
- NEMA Type 3R
- UL 464, 1604, and UL 1971 (FJ Model) listed
- CSFM
- MEA
- 90dBA @ 10 feet
- 24VAC/24VDC, 120VAC, 16-33VDC Models
- Mounts on a standard 4" (120mm) backbox

Out-of-the-box signaling with complete signaling components ready to go. Just “plug and play.”



They may look the same on the outside. And they share the same reliability and solid construction on the inside. But they're as different as you need them to be for your communication system. Which would work best for you?

5530M Series **Single Input, Single Output**

Stand-alone 27 tones including four three-pulse temporal tones. 15-watt output. Battery backup terminals. Weatherproof and suitable for Division 2 locations. Diode polarized and high-volume 30-watt output models. Available with serial inputs for use on RS485 networks. UL, cUL Listed, and CE Marked.

5531M Series **Four Input, Four Output**

All the features of the 5530M Series, but with four inputs and four outputs with cascading-type priority tone operation. The tone programmed in each higher-priority location overrides the tones programmed in lower locations. Weatherproof and suitable for Division 2 locations. UL, cUL Listed, and CE Marked.

5531MV Series **Voice Capability – Four Input, Four Output**

Four input, four output cascading-type priority tone and voice operation. Features 20 seconds of field-recordable voice messages in 5-second parts. Messages and tones are selected by setting miniature dip switches within the unit. Weatherproof and suitable for Division 2 locations. UL, cUL Listed, and CE Marked.

5530M/5530MV Series **Multiple-Tone Signal, Single Output RS485 Activation**

Heavy-duty industrial, tone-selectable signaling device capable of producing volume-controlled, high-decibel tones. It uses a microprocessor circuit to create 27 distinctive tones selected by setting a dip switch within the unit. Additionally, the unit has a field-recorded voice feature that allows activation over the RS485 network. UL and cUL. Weatherproof and suitable for Division 2 locations.

5530MD-24AW **Multiple-Tone Signal Diode**

Polarized for Fire Alarm Communication, Single output heavy-duty industrial, tone-selectable signaling device intended primarily for use in fire alarm systems and other applications requiring electrical supervision of signaling circuit field wiring. Weatherproof and suitable for Division 2 locations. UL, cUL Listed, and CE Marked.

5530MHV Series **High Volume Multiple-Tone Signal, 30-Watt, Single Output, RS485 Activation**

Heavy-duty, high volume, 30-watt, industrial signaling device capable of producing volume-controlled, high-decibel tones. Activated from field-wired, normally open contacts, or from a 24VDC or 120VAC external voltage source such as an output of a PLC. Weatherproof and suitable for Division 2 locations. UL, cUL Listed, and CE Marked.

Components to create custom signaling systems for any application – small to supersized.

Wired? Wireless? Whatever you need. There's an easy, efficient way to integrate the perfect signaling solution with Edwards components. We've got enough proven choices to create the right system for your communications, in your locations, at your convenience. Here's a sampling of the more common components that can help you Signal Responsibly™.



5545M Hazardous Location Remote Speaker/Amplifier
For system use with central tone generator in Division 1 locations.



5510 Remote Audio Signal Converter
Converts 25V or 70V RMS input to 10V RMS output.



5533M Hazardous Location Signal
Two input, two output signal for Division 1 locations.



5547-15W Re-entrant Speaker
70V input voltage, high sound output. Four power taps – 15, 8, 4, and 2 watts. Moisture-resistant.



5535 Remote Amplifier
Used when remote speakers are required. Amplifier output is a 70V line with a maximum of 15 watts.



5538-4 Series Remote Signal Actuator
Remote activation of up to four tones or messages. 5538-4R allows system to be interfaced to local/system units for priority override.



5551B-2W Cone Speaker
4" cone speaker for indoor ceiling or wall mounting. 70V input voltage. Four power taps – .25, .50, 1, and 2 watts. Moisture-proof.



MR-201/C Relay
Used to enable the audio output from the Millennium Adaptatone components to override output from other sources to the same speaker/amplifier products in the system.



EG4 Series Genesis Speakers and Speaker Strobes
Attractive 25V or 70V wall-mount units. 4" cone. Multi-watt taps 1/4, 1/2, 1, and 2 watts. Multi-candela strobe options. Field-selectable 15/30/75/110 candela output. 90dBA output speaker. Available in red or white. Optional mounting box.

Millennium Retrofit Kits

Designed for use in Adaptatone Millennium units to add the following:

- Audio-10-M: Adds 10V RMS System Audio
- Audio-25-M: Adds 25V RMS System Audio
- Audio-70-M: Adds 70V RMS System Audio
- RS485-M: Adds RS485 Networking
- Voice-M: Adds Field-programmable Voice
- Page-M: Adds paging capability to the 5531M



EGC Series Genesis Ceiling Speakers, Strobes, and Speaker/Strobes
Attractive 25V or 70V ceiling-mount units. 4" cone. Multi-watt taps 1/4, 1/2, 1, and 2 watts. Multi-candela strobe options. Field-selectable 15/30/75/110 candela output. 90dBA output speaker. Available in red or white. Optional mounting box.



5536M Series Local/System Signal

Accepts three electrical inputs and delivers three tones from the available 27. One of the inputs is designated as a top-priority signal. The 5536M works in the Adaptatone system, either sounding the centrally produced tone or voice signal, or its own tone signal. The Adaptatone system has priority over the locally initiated tones. Weatherproof and suitable for Division 2 locations. 30-watt high-volume models available. UL, cUL Listed, and CE Marked.



5540M Series Central Tone Generator

Designed for centralized generation of all 27 tones and simultaneous synchronous signaling throughout the Adaptatone system. Four cascading-type priority operating tones may be programmed into the unit. Battery backup terminals. Weatherproof and suitable for Division 2 locations. Available with serial inputs for use on RS485 networks. UL, cUL Listed, and CE Marked.



5532M Series Speaker/Amplifier

Remote speaker/amplifier designed for operation with the 5540M Central Tone Generator. Operates directly from local power sources, making it possible to connect these units to available voltage sources from 24V to 250V. Battery backup terminals. Weatherproof and suitable for Division 2 locations. High-volume 30-watt output models. Available with serial inputs for use on RS485 networks. UL, cUL Listed, and CE Marked.



5540MV Series Central Tone Generator with Voice Capability

All the features of the 5540M but with four input, four output pyramid-type priority tone and voice operation. Features 20 seconds of field-recorded voice messages in 5-second parts. Messages and tones are selected by setting miniature dip switches within the unit. Available with serial inputs for use on RS485 networks. UL, cUL Listed, and CE Marked.



5540MP Series Central Tone Generator with Microphone Paging

All the features of the 5540M, but with the ability to provide simultaneous voice and telephone paging throughout the Adaptatone system. Requires the 5542RPU Remote Paging Unit to operate. Ordered separately. UL and cUL Listed.



5542RPU Remote Paging Unit

Remote Paging Unit sends audio to the 5540MP. Input is received from the microphone input (optional), 1V audio source, or telephone system audio converted using a Bogen Telephone Access Module or equivalent. Powered by the 5540MP Series Central Tone Generator. Mounts in a doublegang box. UL and cUL Listed.



5542RPU-M Remote Paging Unit with Mic

Identical to the 5542RPU, but supplied complete with the 5542MIC-H hand-held microphone. (Shown with weatherproof mounting kit.)



5531MHV Series Adaptatone Millennium Multiple-Tone Industrial Signal

Four outputs, high volume, 30-watt heavy-duty industrial signaling device capable of producing volume-controlled, high-decibel tones. Four tones can be activated from field-wired, normally open contacts, or from a 24VDC or 120VAC external voltage source such as the output of a PLC.



XT and XR Transmitters and Receivers

These RF transmitters are designed for use in wireless remote control applications. When activated with an external dry contact, the transmitter sends a 10-watt, 27.225 MHz digitally encoded FSK (Frequency Shift Keying) signal to a companion receiver. The receivers detect the signal, verify the code and trigger the remote device. These devices have full supervision capability. If this option is selected, the transmitter sends hourly status signals to its receiver. If these signals stop, the receiver indicates trouble by activating its status output.

The Millennium Industrial Intercom:

When you need an intercom that's up for just about anything.



Industrial and hazardous locations are no match for the 5570 Intercom and speaker. This heavy-duty, two-way communications device is available in 120/240VAC 50/60Hz and 24VAC/DC, so it can fit into just about any communications infrastructure. Voltage input for the 120/240VAC model is internally switch selectable for easy configuration. The AC line has a 1/2 amp 250-volt type GMC fuse.

The speakers are rated for 30 Watts, 16 Ohms. Their frequency response of 150Hz to 12kHz covers the full range of voice communication.

For even more flexibility, you can also select a balanced or unbalanced line operation and Master or Satellite mode configuration. The unit has transformer isolated audio inputs and a choice of four alert tones. There is also an optional hand-held, noise-cancelling microphone to combat high ambient noise.

With NEMA Type 4X and marine listed enclosures, they are ideal for indoor or outdoor use. They are also listed for Class I Div. 2, Class II Div. 2, and Class III hazardous location areas.

Features

- Division 2 Rated
- NEMA 3R and 4X
- Marine Rated
- 4 Dipswitch-Selectable Call Tones
- 120VAC/240VAC and 24VAC/24VDC Models
- Auxiliary Signal Activation

Applications

- Petrochemical plants
- Offshore oil platforms
- Textile mills
- Airports
- Bottling facilities
- Food processing
- Pulp and paper mills
- Waste water treatment facilities

Public address components that make it easy to get the word out. Anywhere.

The human voice is one of the most challenging sounds to transmit in busy work areas or acoustically reflective rooms. Edwards Public Address components are designed for voice reproduction regardless of the ambient acoustics. Standalone or integrated, they speak volumes about our dedication to workplace safety, and communications clarity.



6000-RS-25/70 Series

Available in 15- or 30-Watt continuous output models. All models have a screwdriver-adjustable switch that can be externally adjusted. Indoor and outdoor with a built-in 25-volt and 70-volt transformer with selector switch.



6000-DM Touch-to-Talk Desk Microphone and Stand

Ideal for paging and communications in applications such as restaurants, schools, and dispatching operations. The microphone has an on/off switch operated via a fingertip control bar that provides momentary or locking switch operation.



6000-MP Series Mixer Preamplifier

The Edwards Mixer Preamplifier

Catalog 6000-MPAMP accepts up to eight programmed inputs, while maintaining low distortion (THD) and high signal-to-noise ratio.



6000-MTG Multi-tone Generator

A solid-state tone generator capable of operating from either 12VDC or 24VDC. The unit can produce seven separate and distinct signals: wail, warble, hi-lo, alarm, repeating chimes, single chime, and tone. The unit is equipped with a pitch control that affects the chimes and the tone functions. The volume control affects all functions.



6000-AM/FMCAS-PA AM/FM Tuner/Cassette Player with Preamp

This AM/FM Cassette Player with preamplifier is a rack-mount unit designed for use with the Edwards 6000 Series amplifiers. It provides a single channel output from one or all five inputs.



6000-AM/FMCAS AM/FM Tuner/Cassette Player

This rack-mount AM/FM Cassette Player is designed for use with the Edwards 6000-MPAMP Mixer Preamplifier.



6000-AMP Series

Edwards power amplifiers are rated at either 60, 125, or 250 watts. All Edwards amplifiers are UL 813 Listed and can be used in sound reinforcement, general paging, and commercial and industrial communication applications.



6000-S-8-25/70 Series 25/70-Volt Baffled Speaker Assemblies

High quality units that feature a tastefully constructed steel baffle that blends well with modern interiors. The speaker assembly includes a dual voltage 70 and 25-volt matching transformer. The transformer has taps of 1/2, 1, 2, and 4 watts at 70 volts and 1/2, 1, and 2 watts at 25 volts. The 15-Watt 6000-15S-8-25/70 has an additional apex whizzer cone for extended high frequency response.

Come up with an application...

3

What do you need to do?

It doesn't matter what your signaling needs are. Because there is a proven Edwards solution already doing precisely whatever you need to do.

Put us to the test and we'll give you the right signaling answer for any application.

That's why there are more Edwards signals communicating in more applications throughout the world than anyone else's.

Our specialty is meeting every signaling challenge. We wouldn't be satisfied with anything less. And neither should you.

Industrial Applications



Process Control Applications



Institutional Applications



Commercial Applications



we already have a solution.



There's just about no place noisier than industrial locations. And there is no place Edwards industrial audible electronic signals can't perform. As your one-stop solution with the industry's broadest line, we can do it all. Cranes, conveyors, crushers, loading machinery, mines, lumber operations, paper mills – you name it and we can equip it with the ideal industrial signaling solution.



Edwards delivers the most cost effective, convenient way to drive audible signals with your PLC. Simply check your PLC specifications against the Edwards PLC compatibility table in our catalog or on our website. Verify compatibility, make the connections, and you're done – without buying and installing relays, loading resistors, or snubbing circuits. And you don't need PLC programming – signals activate using standard constant voltage from the PLC. With Edwards, you save all around.

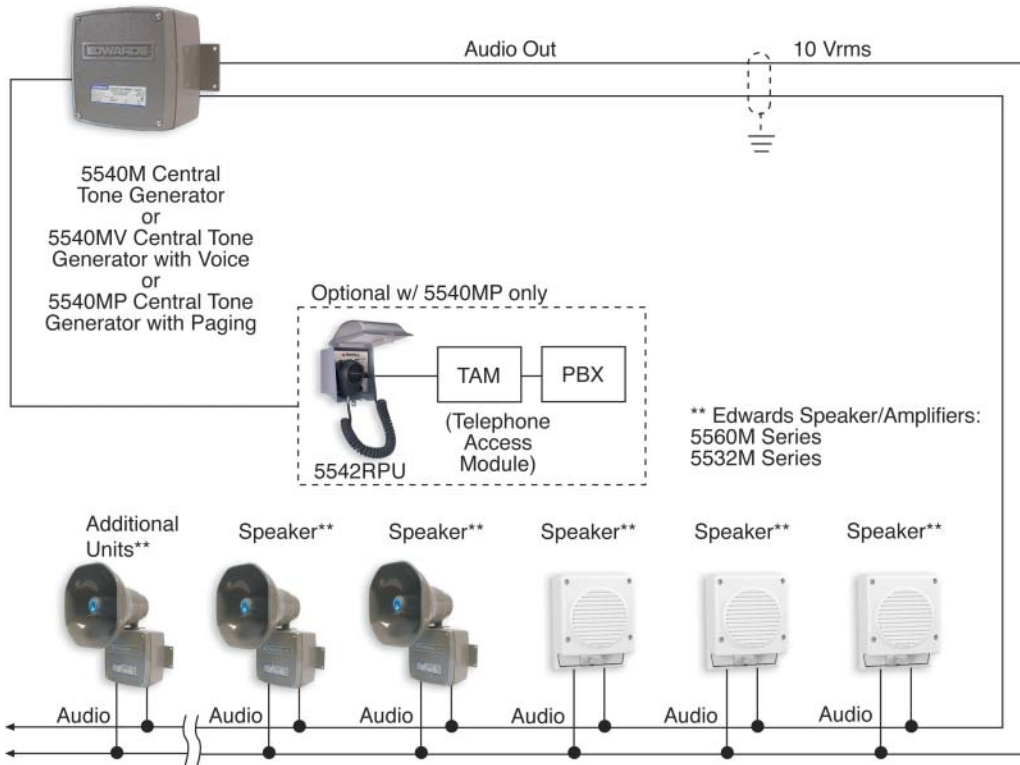


Hospitals, nursing homes, healthcare facilities, universities, government buildings – all applications where you may need to communicate facility-wide or on a targeted basis. And, in all of these applications, Edwards has a signal solution, from a call for help to routine class announcements. Everyone can signal better when they Signal Responsibly.™



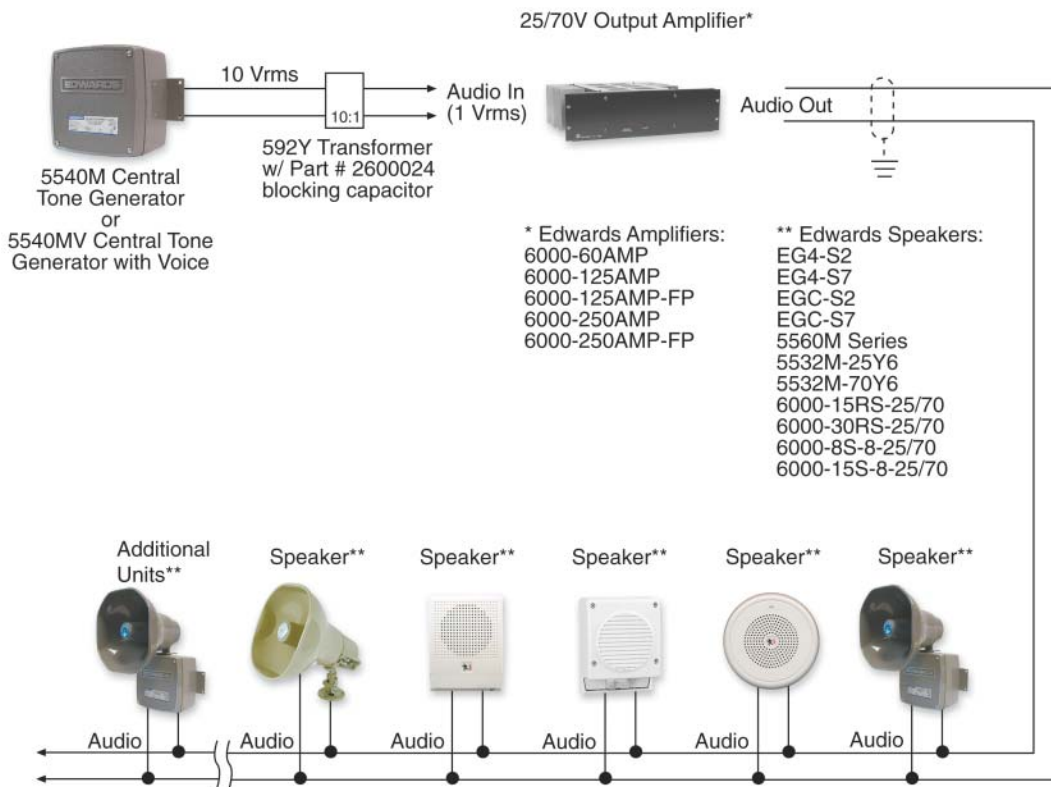
Commercial locations are filled with activity and a need to communicate that is sometimes overlooked. Assembly, warehousing, and other commercial applications need to overcome distractions and noise without overwhelming the people. Edwards has solutions that strike that balance. And communicate better.





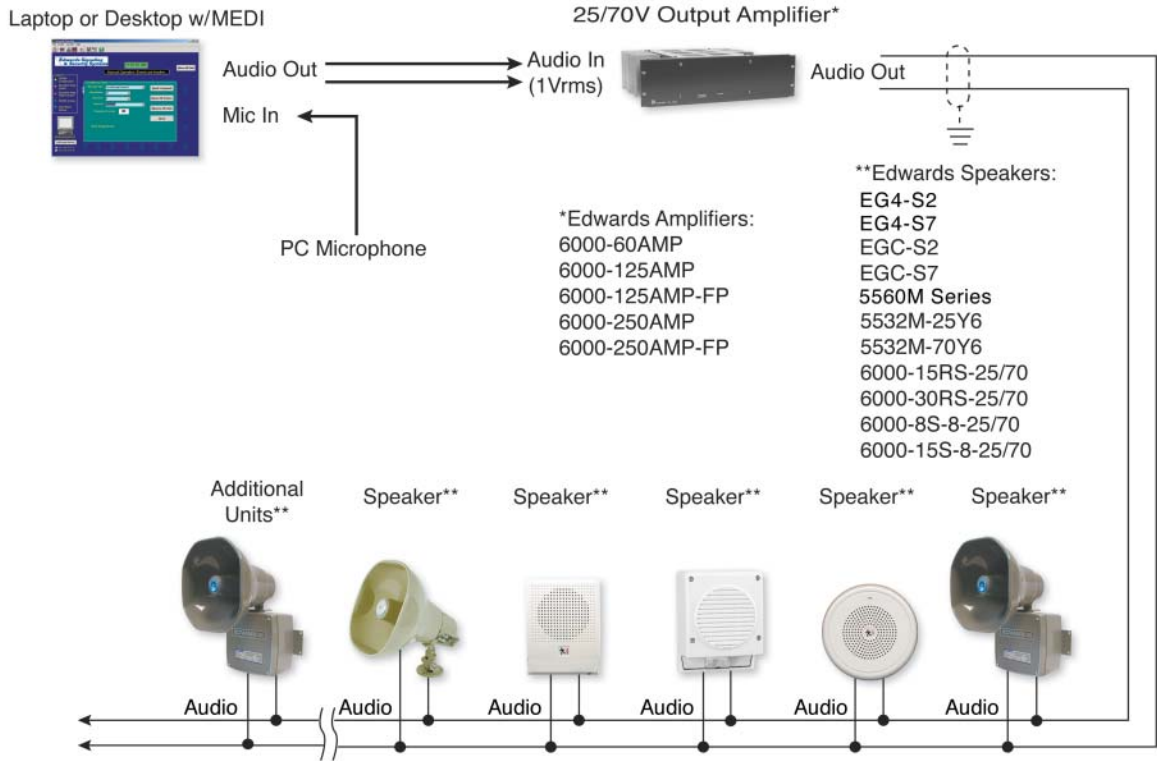
◀ **Conventional Non-zoned System**

Use the 5540M Central Tone Generator or the 5540MV Central Tone Generator with field-recorded voice to send tones or voice over conventional speakers/amplifiers. As an option, use the 5540MP Central Tone Generator with paging and a 5542RPU Remote Paging Unit to now send real-time voice throughout the factory from a microphone or your telephone system. Devices require local power.



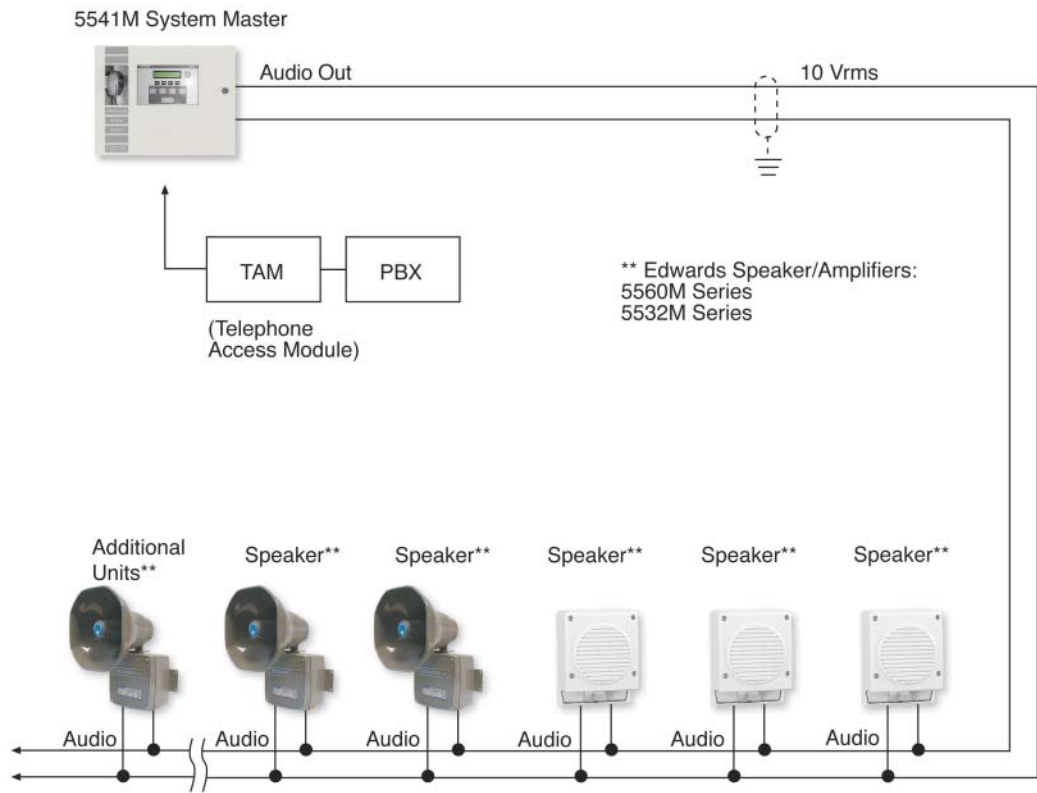
◀ **Conventional Non-zoned System Using External 25/70V Amplifiers**

Use the 5540M Central Tone Generator or the 5540MV Central Tone Generator with field-recorded voice to send tones or voice over conventional speakers. Use external 25/70V amplifiers to boost the signal. Devices require local power.



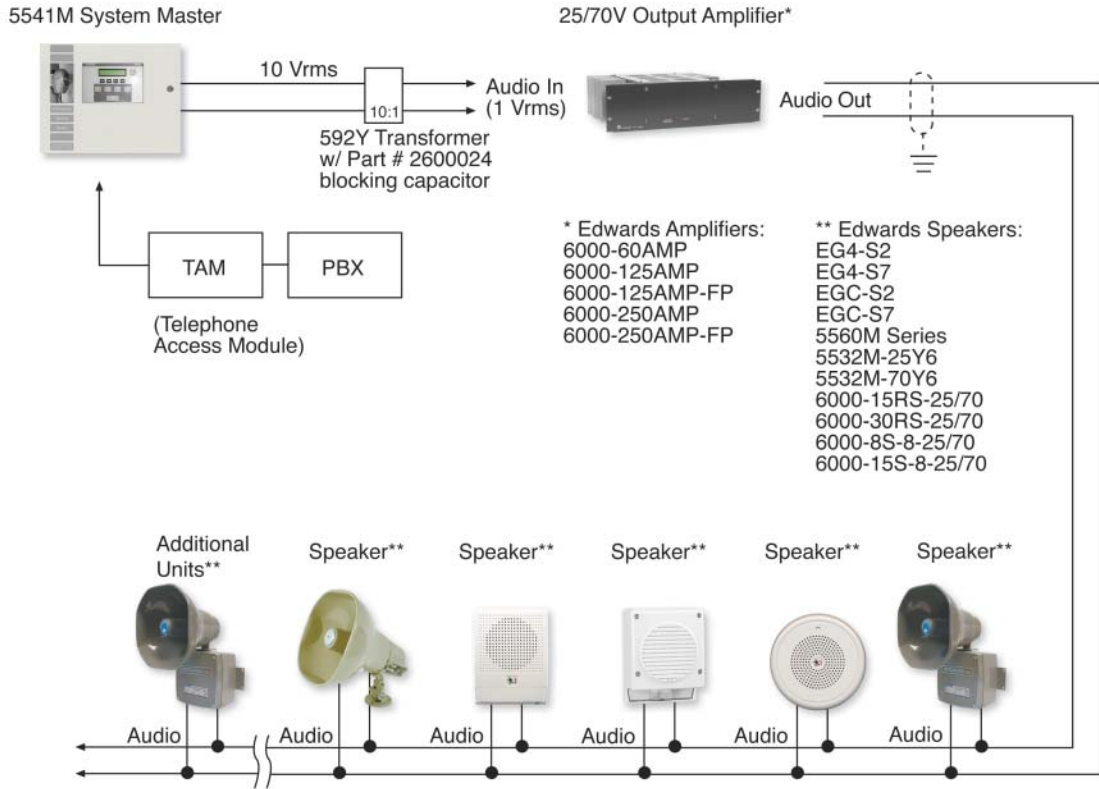
◀ **Conventional Speaker Application Using the PC's Sound Card**

Use the MEDI and your PC's sound card as an audio source to sound Adaptatone® system wav files, custom wav files, or real-time voice (using the PC microphone) over conventional 25 or 70V speakers or speaker/amplifiers. A cost-effective way to sound scheduled events. Some devices may require local power.



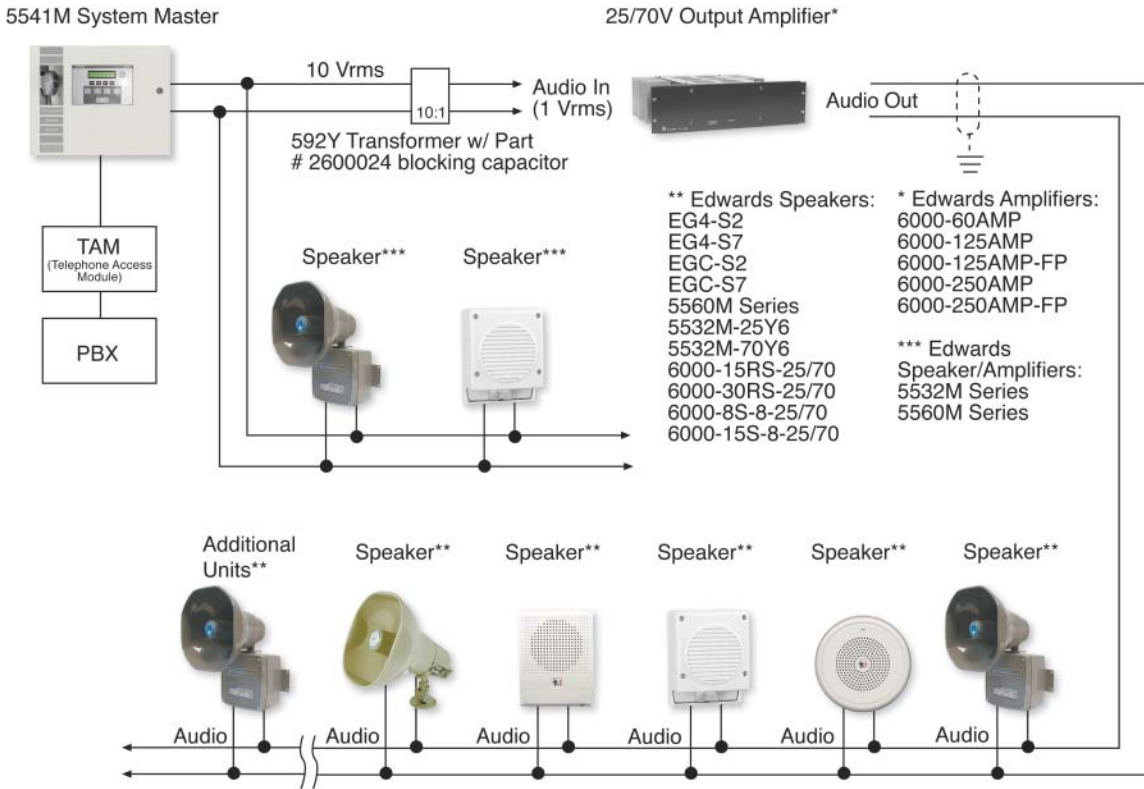
◀ **Conventional Non-zoned, Non-supervised System**

Use the System Master to send tones or real-time voice from a telephone or the panel's included microphone over speaker amplifiers. Devices require local power.



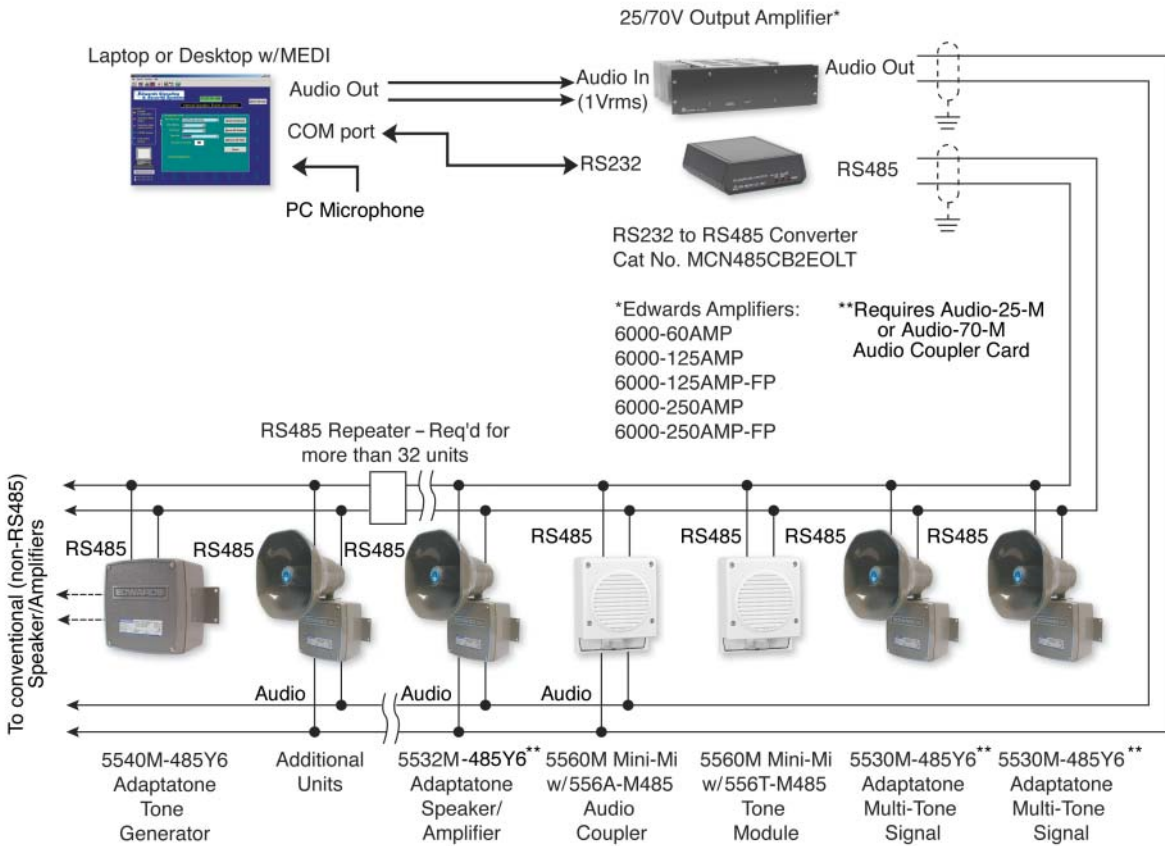
◀ **Conventional Non-zoned, Non-supervised System using External 25/70V Amplifiers**

Use the System Master and external 25/70V amplifiers to send tones or real-time voice from a telephone or the panel's included microphone. Some devices may require local power.



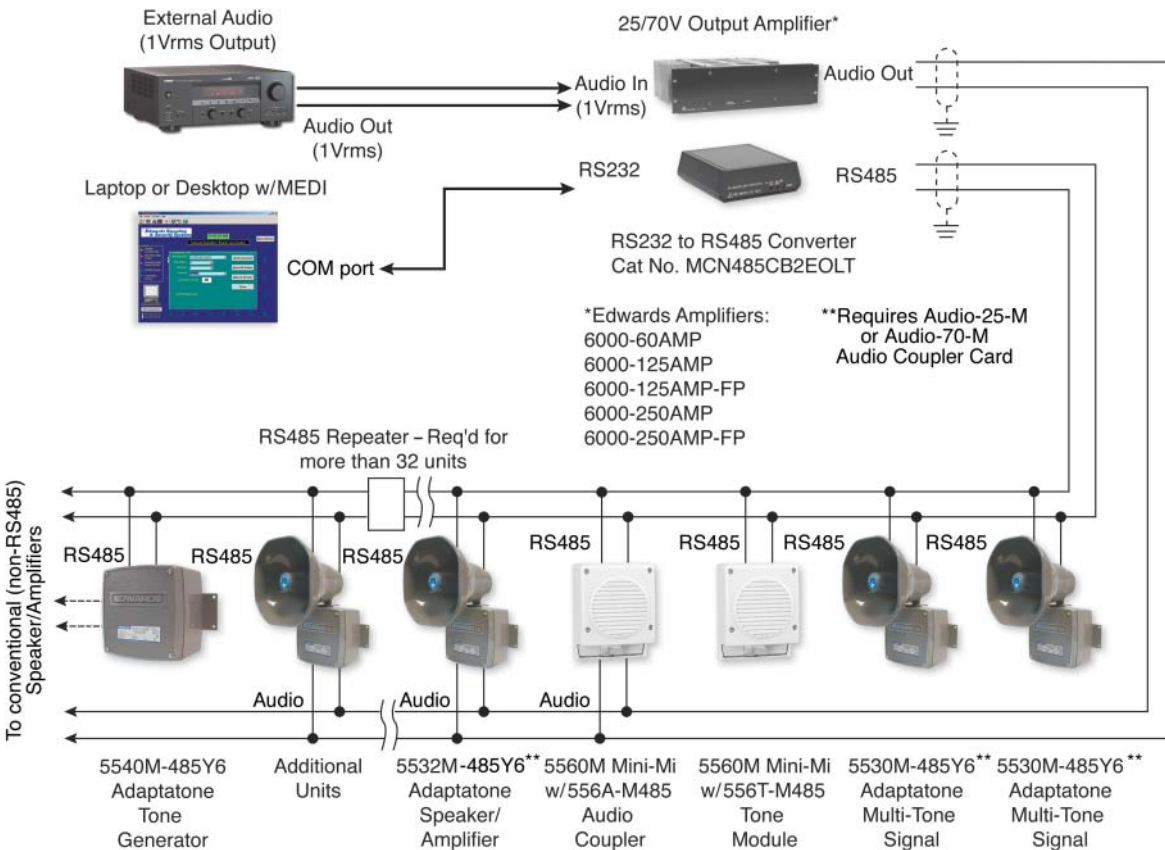
◀ **Combination Speaker/Amplifier and Banked Amplification Non-zoned, Non-supervised System**

Use the System Master to send tones or real-time voice from a telephone or the panel's included microphone. The 10V audio loop is used to communicate to conventional speaker/amplifiers or centralized banked amplification. The 25/70V audio loop is used to communicate to conventional speakers. Some devices may require local power.



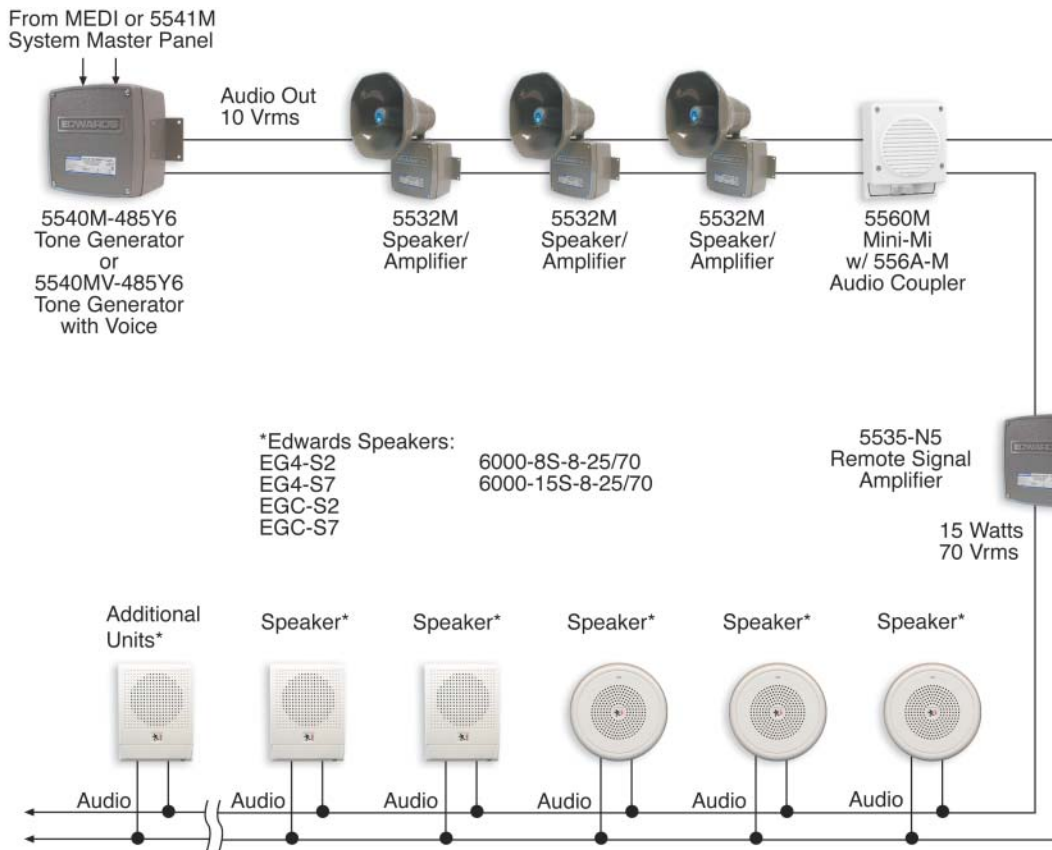
Addressable RS485 Speaker Application Using the PC's Sound Card

Use the MEDI and your PC's sound card as an audio source on an installed RS485 network. Use to locally sound Adaptatone® tones on RS485 compatible tone generators and multi-tone signals, or use the network to broadcast PC tone wav files, custom wav files, or real-time voice over RS485 compatible speaker/amplifiers. Devices require local power.



Addressable RS485 Speaker Application Using an External Audio Source

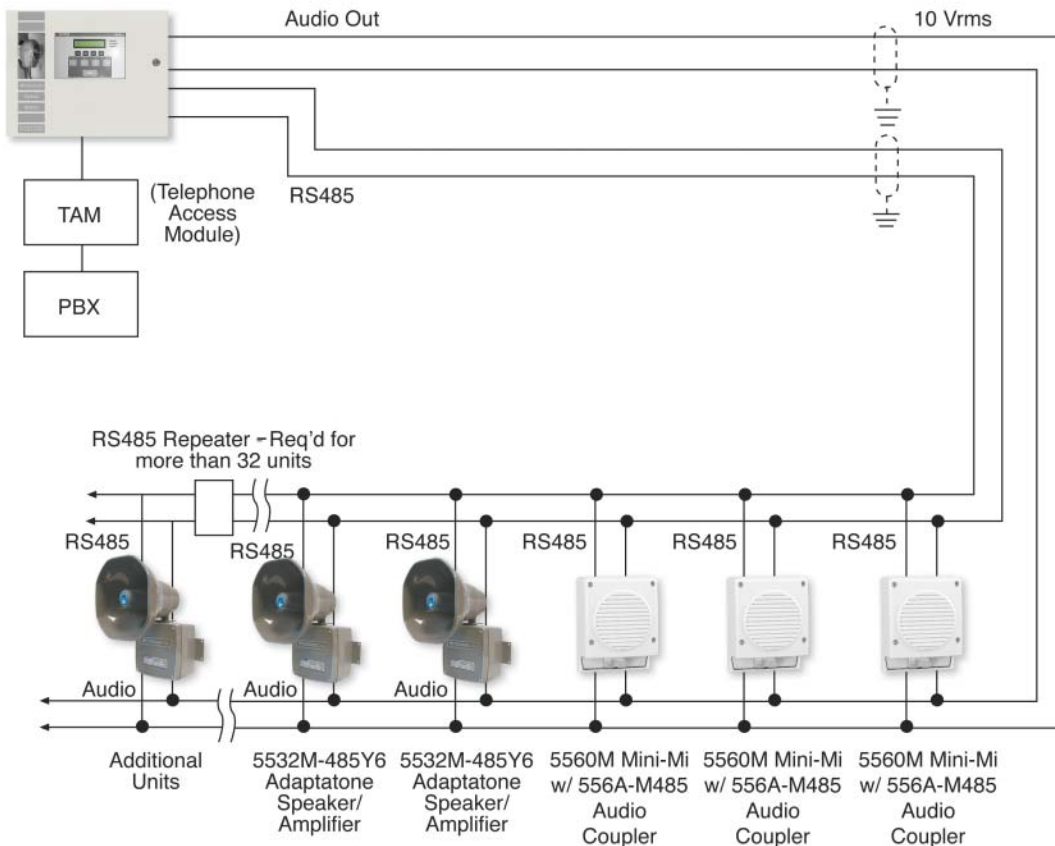
Use the MEDI, an external audio source, and an installed RS485 network to locally sound Adaptatone tones on RS485 compatible tone generators and multi-tone signals. Or, turn on RS485 compatible speaker/amplifiers and broadcast audio from an external source. Devices require local power.



◀ **Addressable RS485 System w/Tone Generator**

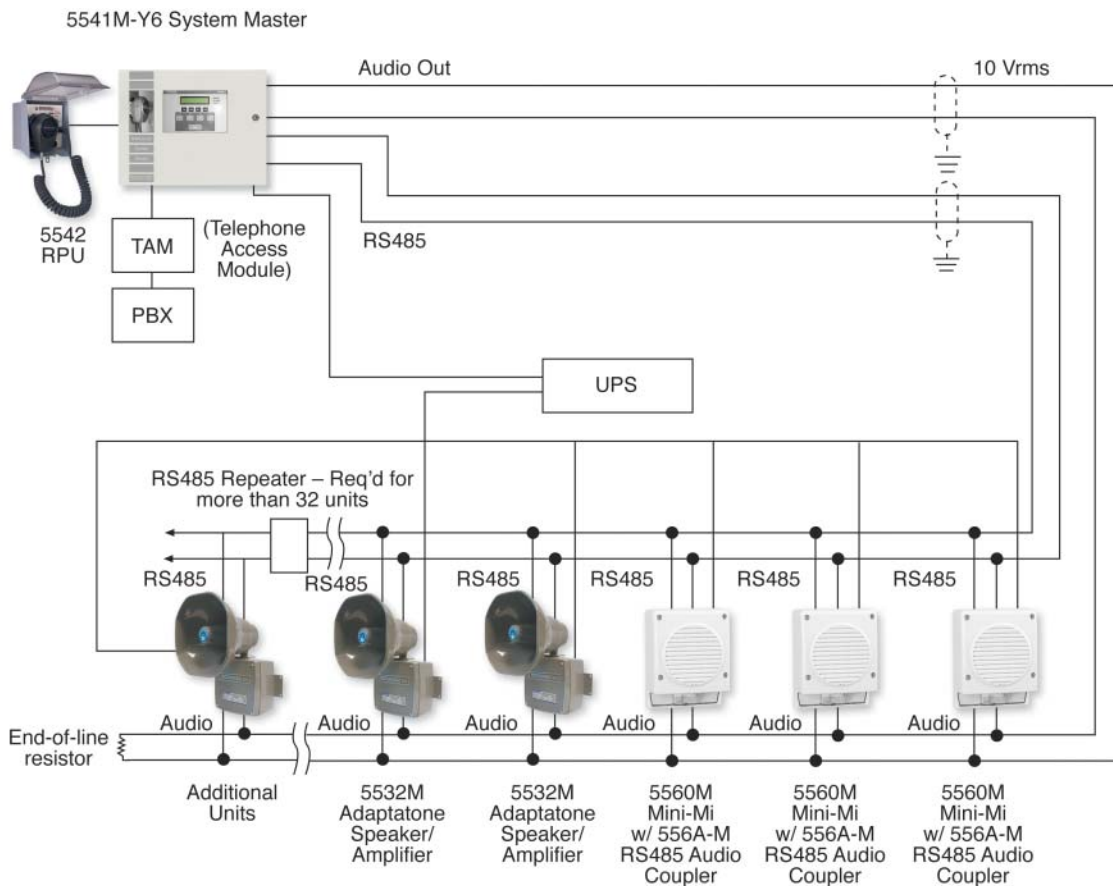
Use an RS485 Tone Generator to send tones to conventional speaker/amplifiers. Use a remote signal amplifier to boost the signal and drive 70V conventional speakers. Some devices may require local power.

5541M-Y6 System Master



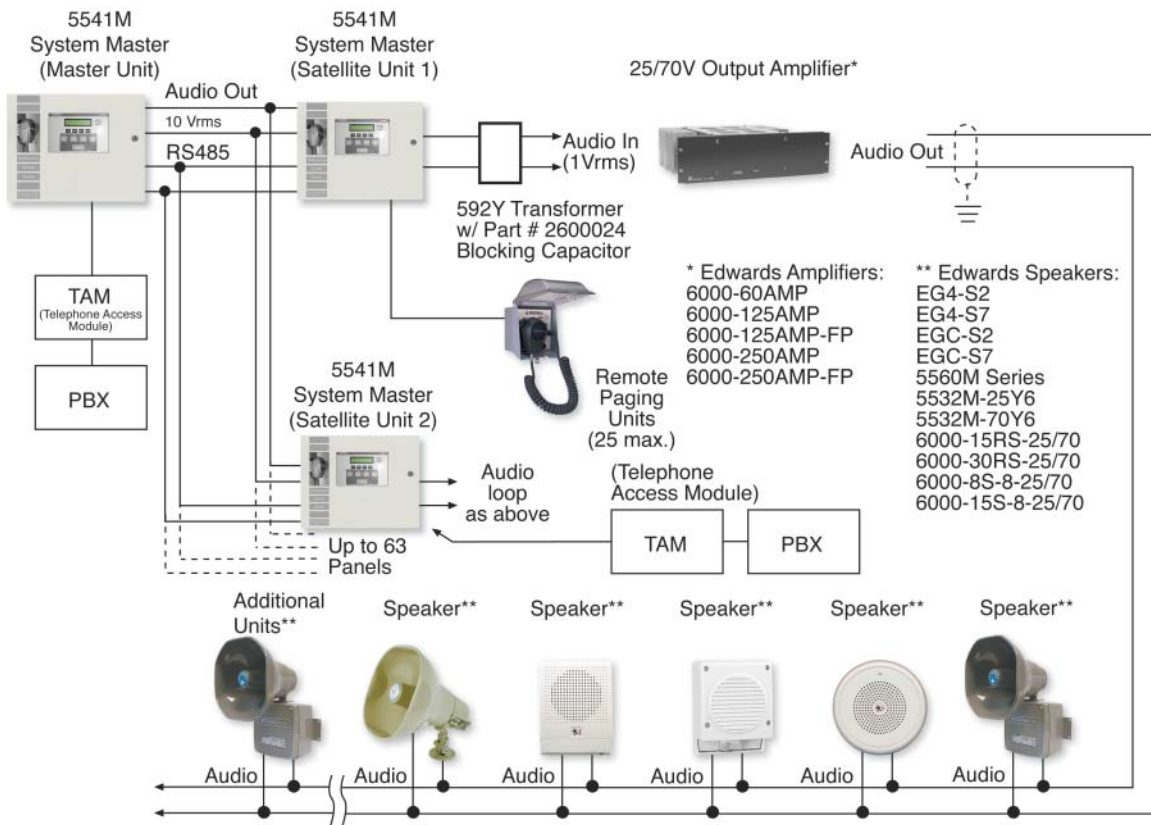
◀ **Addressable RS485 System w/System Master and Zoned Speakers**

Use the System Master Panel to send tones or real-time voice from a telephone or the panel's included microphone over an RS485 network. Units on the network can be assigned to one of four zones. Devices require local power.



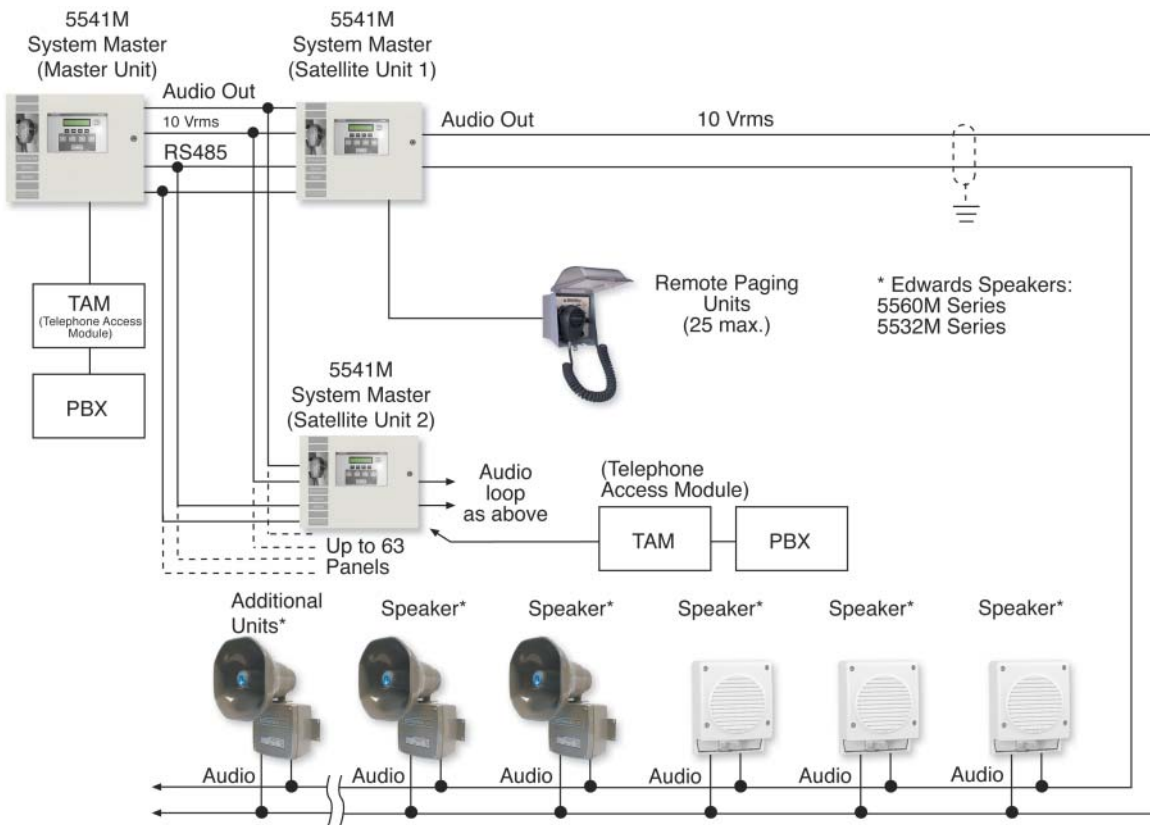
◀ **Addressable RS485 Supervised System w/ System Master, Zoned Speakers, and Battery Backup**

Use the System Master Panel to send tones or real-time voice from a telephone, the panel's included microphone, or a 5542RPU Remote Paging Unit over an RS485 network. System also utilizes a UPS (supplied by others) for system backup. Units can be assigned to one of four zones. Devices require local power.



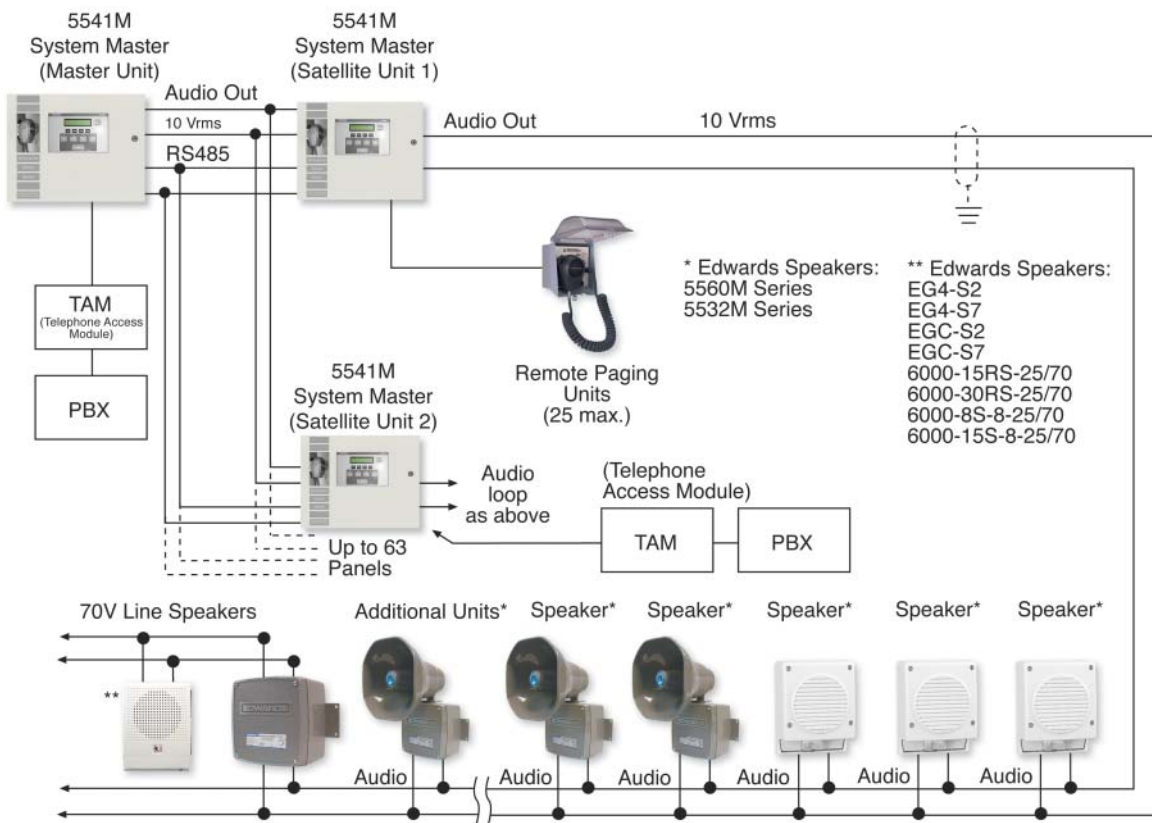
◀ **Addressable RS485 Master Satellite System using External 25/70V Amplifiers**

Use the System Master Panel to communicate with up to 63 satellite panels. The satellite panels are used to drive conventional speakers through external 25/70V amplifiers. This system is used where outlying buildings require a network that is locally controlled by the satellite panels. However, the master panel is able to override the satellite panels if necessary. Some devices may require local power.



◀ Addressable RS485 Master Satellite System, Non-supervised

Use the System Master Panel to communicate with up to 63 satellite panels or RS485 devices in up to four zones. The satellite panels are used to drive conventional speakers. This system is used where outlying buildings require a network that is locally controlled by the satellite panels. However, the master panel is able to override the satellite panels if necessary. Some devices may require local power.



◀ Addressable RS485 Master Satellite System w/ Remote Amplifier

Use the System Master Panel to communicate with up to 63 satellite panels. The satellite panels are used to drive conventional speakers. A 5535 remote amplifier is used to drive conventional low wattage 70V line speakers. This system is used where outlying buildings require a network that is locally controlled by the satellite panels. However, the master panel is able to override the satellite panels if necessary. Some devices may require local power.

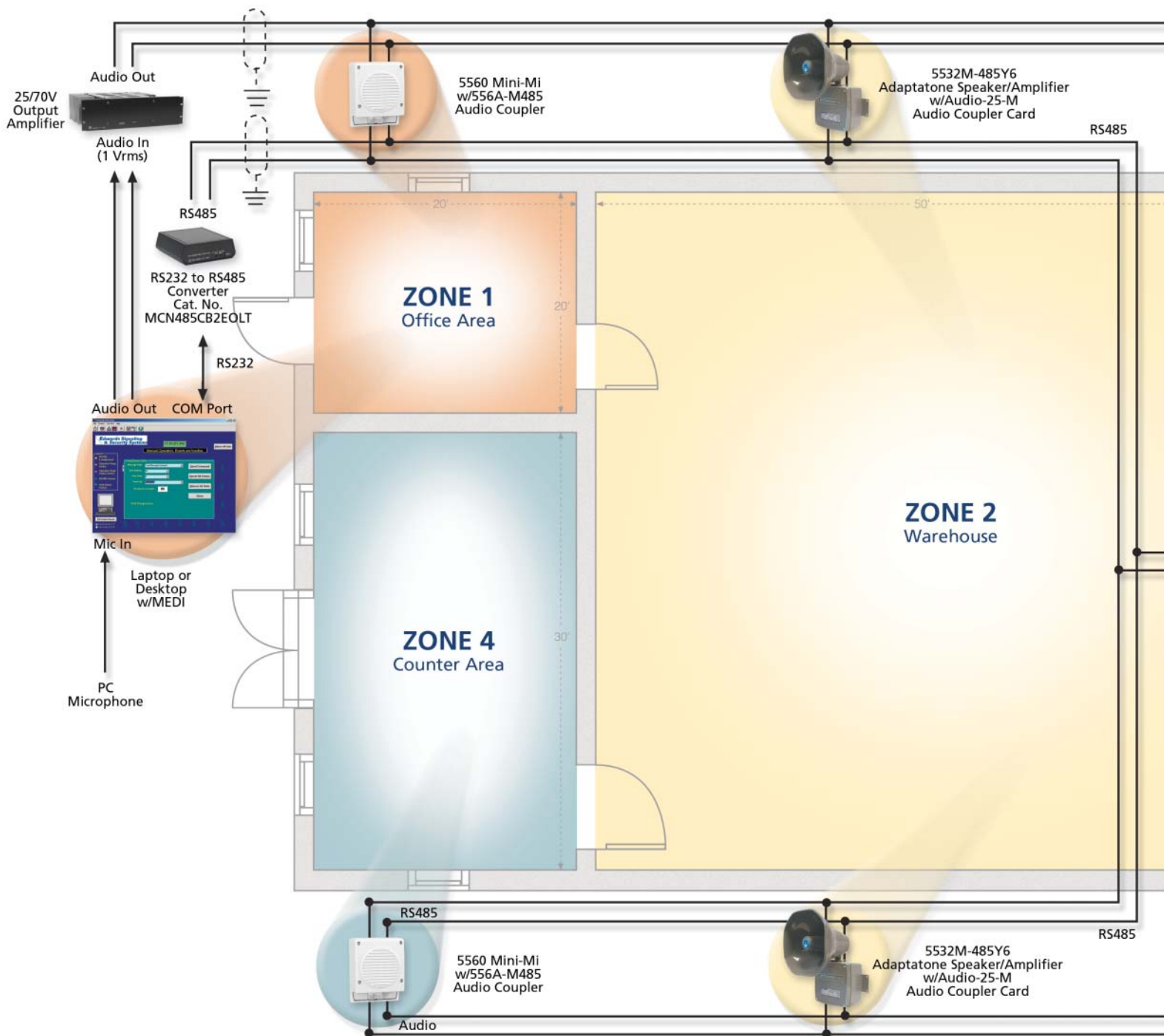
Putting it all together with MEDI.™

Small 4-Zone RS485 Application

Use the MEDI and your RS485 network to broadcast PC wav files or send real-time voice throughout your facility. You may broadcast to all or to any selected zone.

In this application we are installing the MEDI and an RS485 network in a small distribution business.

We have segmented the building into four zones and we are running a 25V audio system. A 70V audio system may also be configured. In this case, we would use 70V audio coupler cards inside the 5532M speaker/amplifiers in lieu of 25V coupler cards.



Zone 1

The first zone is an office area that measures 20 feet by 20 feet and has an ambient noise level of about 60dB. In this zone we installed one RS485-capable Mini-Mi™ Speaker/Amplifier with its volume turned down so that we measure about 10dB above background at the furthest extreme. The Mini-Mi will most likely be used for paging in this area.

Zone 2

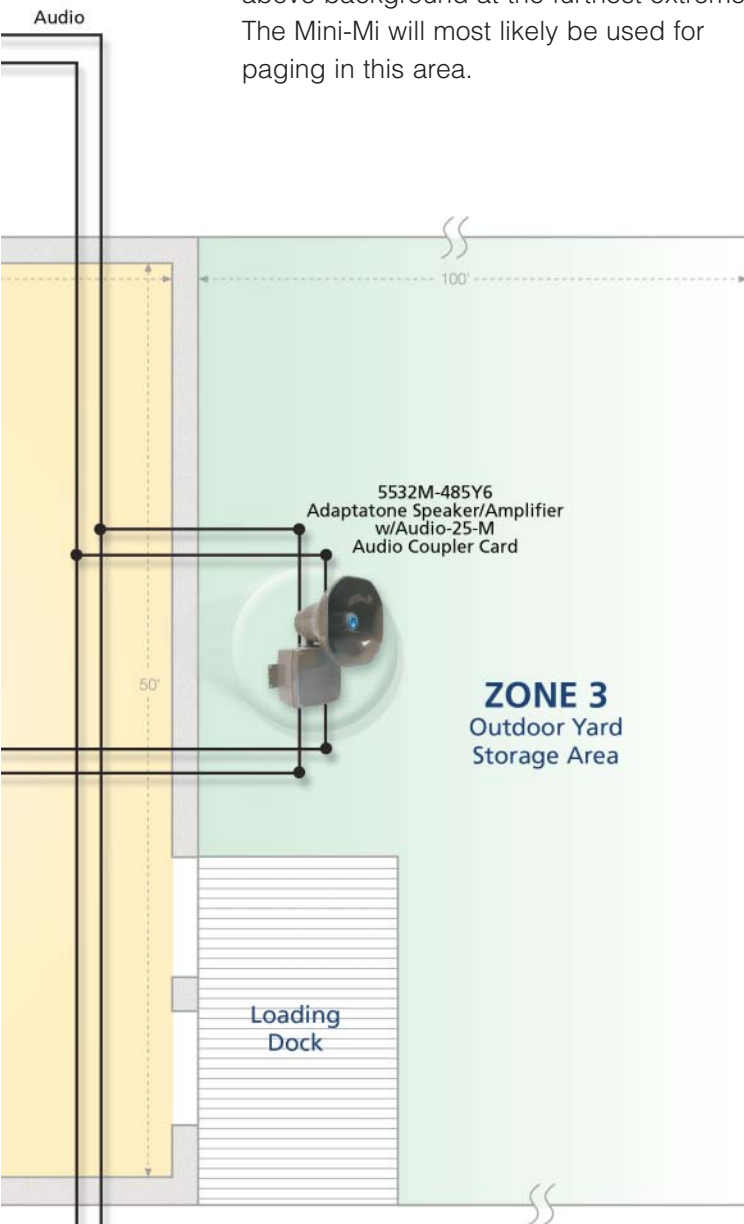
The second zone is the warehouse. This area measures 50 feet by 50 feet and has an ambient noise level of about 75dB. Here we have installed two RS485 capable Adaptatone 5532M Speaker/Amplifiers at either end of the building's width. These Adaptatones have their volume adjusted so that we read 10dB above background in the middle of the warehouse. In this area the Adaptatones will most likely be used to sound routine paging, shift changes, and break times.

Zone 3

The third zone is the outdoor yard and loading dock area that measures 50 feet by 100 feet. Here we installed one RS485-capable Adaptatone 5532M Speaker/Amplifier in the middle of the building. Ambient noise varies widely in this area, so we set the Adaptatone at maximum volume. In this area the Adaptatone will most likely be used for paging.

Zone 4

The fourth zone is the counter and display area. Here we installed one RS485-capable Mini-Mi Speaker/Amplifier with its volume turned down so that we measure about 10dB above background at the furthest extreme. The background ambient in this area is about 65dB. In the counter and display area the Mini-Mi is used for routine paging and to sound timed events such as custom wav files that are used to advertise product specials.

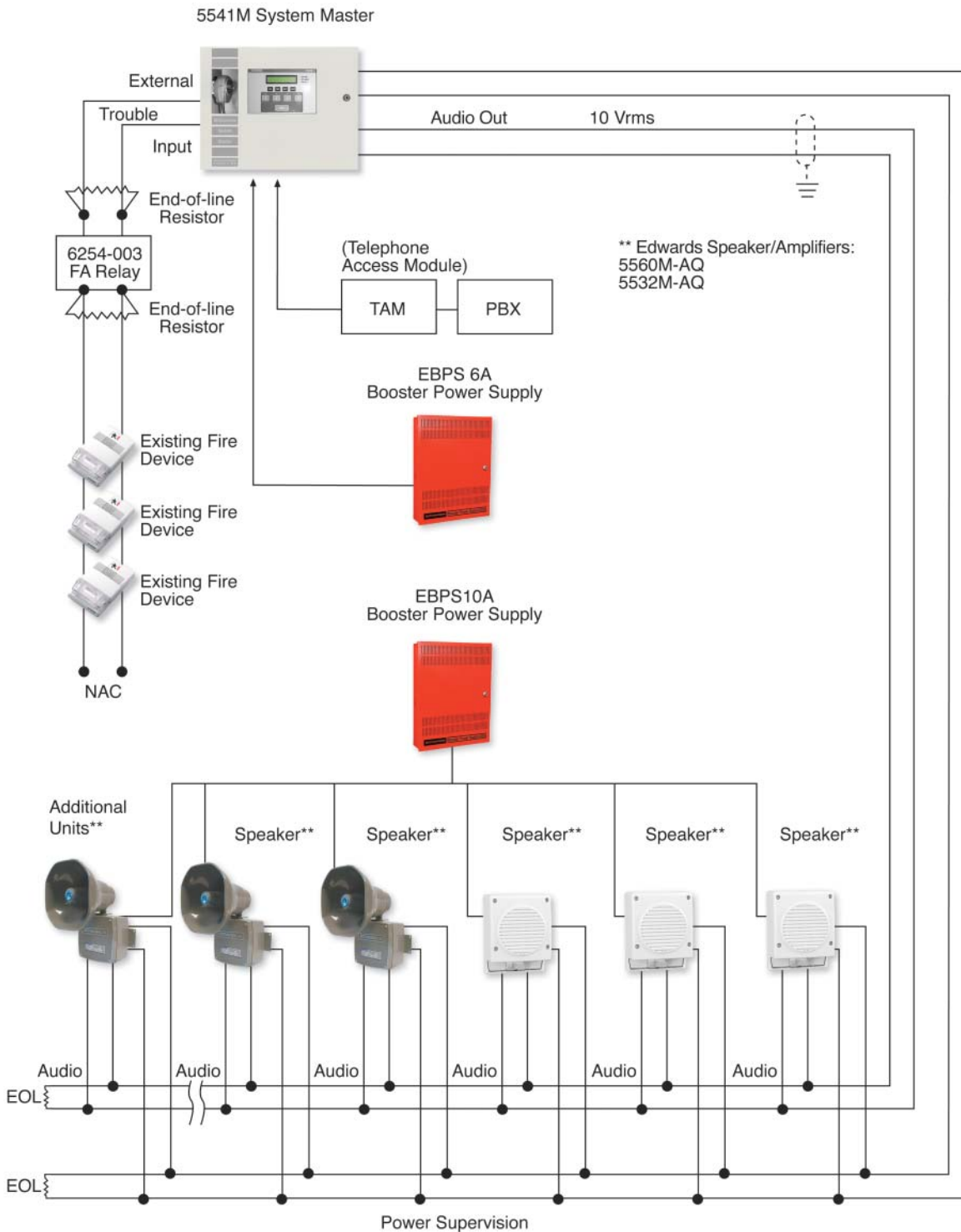


Bill of Material

Qty	Part Number	Description
(1)	MEDI-v2	MEDI Software
(2)	5560M-N5	120V Mini-Mi Signal
(2)	556A-M485	RS485 Audio Coupler Board
(3)	5532M-485Y6	RS485 Adaptatone Millennium Speaker/Amplifier 120-240VAC
(3)	Audio-25-M*	25V Audio Coupler Card
(1)	MCN485CB2EOLT	RS232 to RS485 Converter Box
(1)	6000-60AMP	60-Watt Commercial Amplifier
(2)	MCN485-100	RS485 Wire, Shielded/2 Wire, 22AWG (100 Feet)

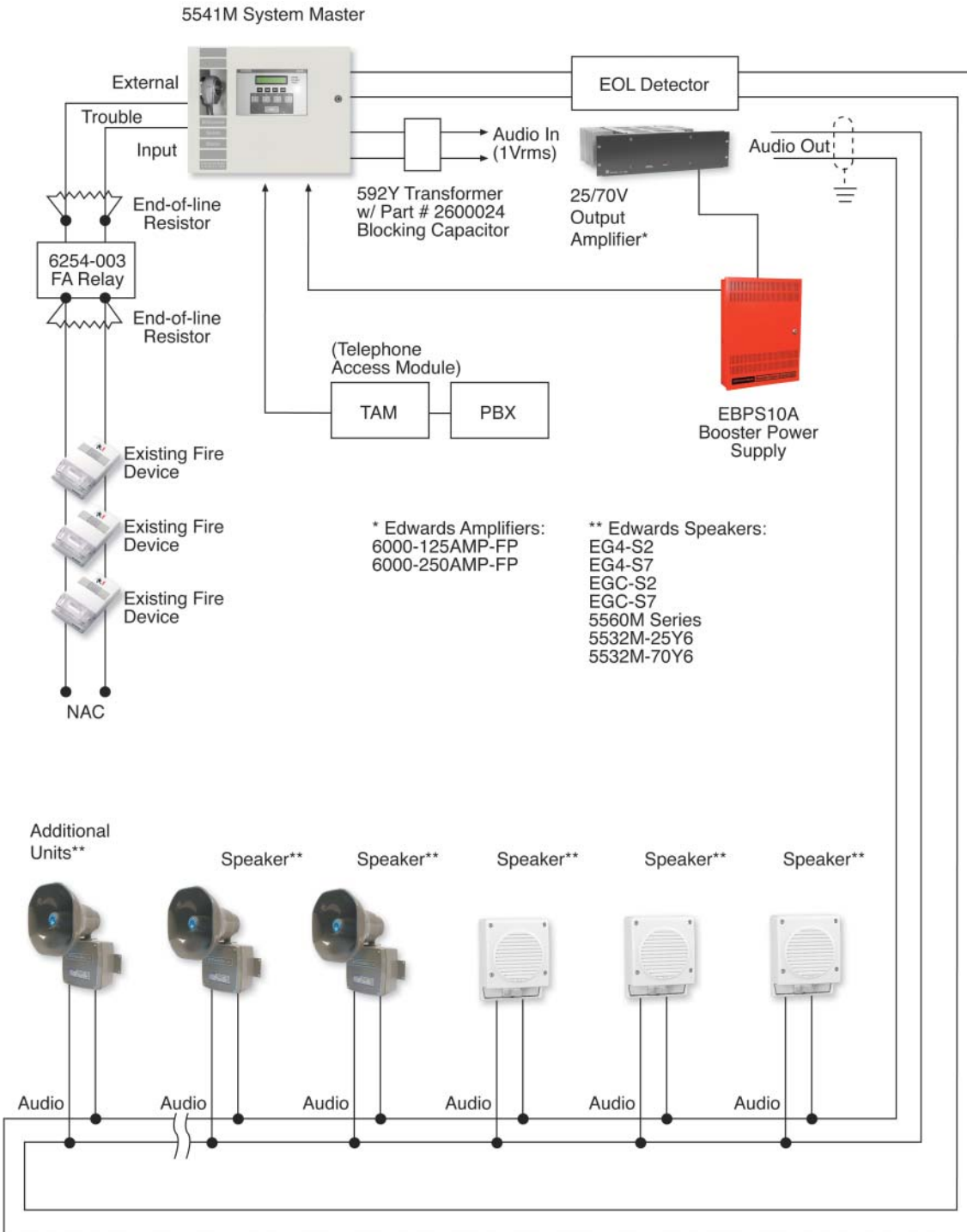
Note: Audio Wire is also required. Use shielded/twisted pair audio cable. Contact application engineering for wire size.

*Audio-70-M is used with the 70V system.



◀ Use an existing Fire Control Panel to activate the System Master Panel

for voice evacuation in conjunction with fire alarm activation. When the fire panel goes into alarm it activates a fire alarm relay on its NAC output. The relay then activates the System Master Panel. The panel then outputs to speakers and speaker/ amplifiers on its supervised audio loop. Devices require local power.



◀ **Use an existing Fire Control Panel to activate the System Master Panel** for voice evacuation in conjunction with fire alarm activation. When the fire panel goes into alarm it activates a fire alarm relay on its NAC output. The relay then activates the System Master Panel. The panel then outputs to banked amplification, speakers, and speaker/amplifiers on its supervised audio loop. Some devices may require local power.

- * Edwards Amplifiers:
6000-125AMP-FP
6000-250AMP-FP
- ** Edwards Speakers:
EG4-S2
EG4-S7
EGC-S2
EGC-S7
5560M Series
5532M-25Y6
5532M-70Y6

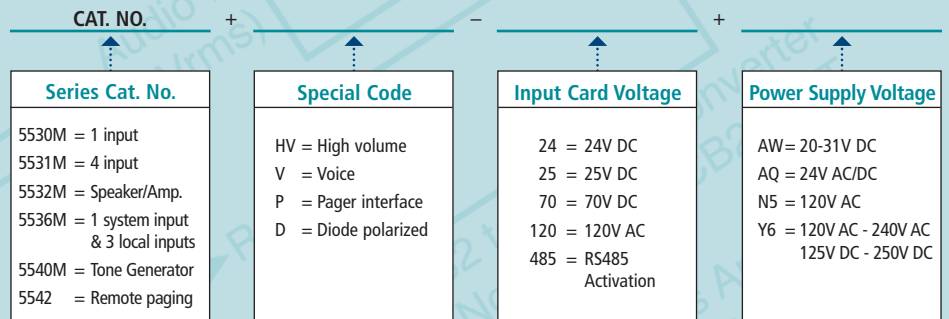
Cat. No.	Volts	Input Card Activation Voltage
Adaptatone Multi-Tone Signal – 1 Input/1 Output		
5530M-24AQ	24V DC 24V AC 50/60 Hz	24V DC
5530M-24N5	120V AC 50/60 Hz	24V DC
5530M-120N5	120V AC 50/60 Hz	120V AC
5530M-24Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC
5530M-120Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	120V AC
Adaptatone Multi-Tone Signal – 1 Input/1 Output - High Volume		
5530MHV-24AQ	24V DC 24V AC 50/60 Hz	24V DC
5530MHV-24Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC
5530MHV-120Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	120V AC
Adaptatone Multi-Tone Signal – 4 Input/4 Output		
5531M-24AQ	24V DC 24V AC 50/60 Hz	24V DC
5531M-24N5	120V AC 50/60 Hz	24V DC
5531M-120N5	120V AC 50/60 Hz	120V AC
5531M-24Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC
5531M-120Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	120V AC
Adaptatone Multi-Tone Signal – 4 Input/4 Output - High Volume		
5531MHV-24AQ	24V DC 24V AC 50/60 Hz	24V DC
5531MHV-24Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC
5531MHV-120Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	120V AC
Adaptatone Multi-Tone Signal w/Voice Capability – 4 Input/4 Output		
5531MV-24N5	120V AC 50/60 Hz	24V DC
5531MV-120N5	120V AC 50/60 Hz	120V AC
5531MV-24Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC

Cat. No.	Volts	Input Card Activation Voltage
Adaptatone Multi-Tone Signal – Division 1 - 2 Input/2 Output		
5533M-AQ	24V DC 36V DC 24V AC 50/60 Hz	24V DC
5533M-Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC
Adaptatone Multi-Tone Signal – Division 1 - 2 Input/2 Output – Diode Polarized		
5533MD-AW	20 - 31V DC	24V DC
Remote Amplifier		
5535-N5	120V AC 50/60 Hz	
5535-R5	240V AC 50/60 Hz	
Local/System Signal		
5536M-24AQ	24V DC 24V AC 50/60 Hz	24V DC
5536M-24N5	120V AC 50/60 Hz	24V DC
5536M-24Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC
Local/System Signal – High Volume		
5536MHV-24AQ	24V DC 24V AC 50/60 Hz	24V DC
5536MHV-24Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC

Cat. No.	Volts	Input Card Activation Voltage
Central Tone Generator		
5540M-24AQ	24V DC 24V AC 50/60 Hz	24V DC
5540M-24N5	120V AC 50/60 Hz	24V DC
5540M-120N5	120V AC 50/60 Hz	120V AC
5540M-24Y6	24V DC 24V AC 50/60 Hz	24V DC
5540M-120Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC
Central Tone Generator w/Voice Messaging		
5540MV-24N5	120V AC 50/60 Hz	24V DC
5540MV-24Y6	24V DC 24V AC 50/60 Hz	24V DC
Central Tone Generator w/Microphone Paging		
5540MP-24Y6	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC	24V DC
System Master Panel		
5541M-Y6	120-240V AC 50/60 Hz	
Millennium Event Driver Interface		
MEDI-2004		
MEDI-v2		
Mini-Mi Signal		
5560M-AQ		24V DC 24V AC 50/60 Hz
5560M-N5		120V AC 50/60 Hz

HOW TO ORDER ADAPTATONE MILLENNIUM

Cat. no. + special code – input card voltage + power supply voltage
 Example: 5531MV-24N5



Cat. No.	Description	Volts
Mini-Mi Signal with Strobe		
5560MS-AQ		24V DC 24V AC 50/60 Hz
5560MS-N5		120V AC 50/60 Hz
Mini-Mi Signal – Diode Polarized		
5560MD-FJ		16 - 33V DC
5560MDR-FJ	(Red)	16 - 33V DC
Mini-Mi Signal with Strobe – Diode Polarized		
5560MDS-FJ		16 - 33V DC
5560MDSR-FJ	(Red)	16 - 33V DC
Mini-Mi Modules		
556T-M485	Tone Module Board with RS485 Connectivity	
556T-M	Tone Module Board	
556V-M	Voice Module Board	
556A-M	Audio Coupler Module Board	
556A-M485	Audio Coupler Module Board with RS485 Connectivity	
Speaker/Amplifier		
5532M-AQ		24V DC 24V AC 50/60 Hz
5532M-N5		120V AC 50/60 Hz
5532M-Y6		120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC
Speaker/Amplifier – High Volume		
5532MHV-AQ		24V DC 24V AC 50/60 Hz
5532MHV-N5		120V AC 50/60 Hz
5532MHV-Y6		120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC
Speaker/Amplifier – Diode Polarized		
5532MD-10AW	10V RMS Audio Coupler Board	20 - 24V DC
5532MD-25AW	25V RMS Audio Coupler Board	20 - 24V DC
5532MD-70AW	70V RMS Audio Coupler Board	20 - 24V DC
Speaker/Amplifier w/Audio Coupler Board		
5532M-25Y6	25V RMS Audio Coupler Board	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC
5532M-70Y6	70V RMS Audio Coupler Board	120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC

Cat. No.	Description	Volts
Remote Speaker/Amplifier – Division 1		
5545M-AQ		24V DC 24V AC 50/60 Hz
5545M-Y6		120V AC 50/60 Hz 240V AC 50/60 Hz 125V DC 250V DC
Adaptatone System Reentrant Wall Speaker		
5547-15W	15, 8, 4 and 2 watt taps	
5548	Backbox for weatherproof mounting	
5549	Backbox for surface mounting	
Adaptatone System Cone Ceiling Speaker		
5551B-2W	1/4, 1/2, 1, 2 watt taps	
Adaptatone Millennium Remote Paging Unit		
5542RPU	Remote Paging Unit (no microphone)	
5542RPU-M	Remote Paging Unit with hand held microphone	
5542MIC-H	Hand-held microphone	
5542MIC-D	Desktop microphone	
5542WPK	Weatherproof Mounting Kit for 5542RPU	
Pre-Amplifier Devices		
6000-MPAMP	Mixer Pre-amplifier	
6000-MP-DMIC	Dual Microphone/Aux Input Module	
6000-MP-DSUM	Dual Stereo Summing Input Module	
6000-MP-TELE	Telephone/Aux Input Module	
Amplifiers		
6000-60AMP	60 Watt Commercial Amplifier	
6000-125AMP	125 Watt Commercial Amplifier	
6000-125AMP-FP	125 Watt Industrial Amplifier (Continuous Duty)	
6000-250AMP	250 Watt Commercial Amplifier	
6000-250AMP-FP	250 Watt Industrial Amplifier (Continuous Duty)	

Cat. No.	Description	Volts
Input Devices		
6000-DM	Desk Microphone	
6000-MTG	Multi-Tone Generator	
6000-AMFMCAS	AM/FM Tuner Cassette Player	
6000-AMFMCAS-PA	AM/FM Tuner Cassette Player with Preamp	
6000-CD-RS	Optional Rack Mount Shelf	
Speakers		
6000-15RS-25/70	15W 25/70 Re-entrant Horn Speaker	
6000-30RS-25/70	30W 25/70 Re-entrant Horn Speaker	
6000-8S-8-25/70	8W 25/70V 8" Speaker Assembly – White Steel Baffle	
6000-15S-8-25/70	15W 25/70V 8" Speaker Assembly – White Steel Baffle	
6000-8-BB	Steel 9" round backbox for 8" speaker – anti-resonance pad	
6000-8-SB	Backbox support bridge – Reduces tile sag	
Mounting Racks		
6000-MR-42	Wall Cabinet 42"	
6000-MR-21	Wall Cabinet 21"	
Industrial Intercom		
5570M-AQ		24V DC 24V AC 50/60 Hz
5570M-NR5		120V AC 50/60 Hz 240V AC 50/60 Hz
Wireless Transmitters		
XT-1	1-Channel Transmitter	
XT-4	4-Channel Transmitter	
Wireless Receivers		
XR-1	1-Channel Receiver	
XR-4	4-Channel Receiver	
Wireless Accessories		
T-1224DC	Transmitter Power Supply	
T-124.8DC	Receiver Power Supply	
ANT-2	Quarter Wave Antenna	
CON-90	Right Angle Adapter	
CON-180	Straight Adapter	

Laptop or Desktop w/

From emergency voice activation to routine signaling, maximize plant communication control and flexibility with Edwards Millennium signaling products. Up to 67 tones and system paging, field programmability, and now complete integration of your plant-wide signaling needs with the System Master supervised control panel.

Edwards has been a pioneer in the design, manufacture, and installation of leading-edge plant-wide communication, emergency evacuation systems, and general signaling equipment for over 130 years. Serving Fortune 500 and other leading worldwide companies, our products work seamlessly together to ensure workplace safety and signaling reliability.

Represented by:



90 Fieldstone Court
Cheshire, CT 06410-1212
Phone: (203) 699-3300
Fax: (203) 699-3108
email: lit.request@edwards-signals.com