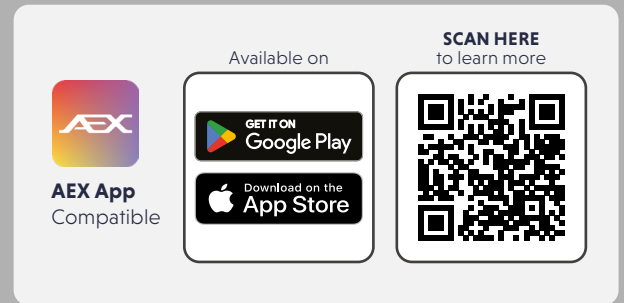




The Mplus Series was developed with a clear objective; a Public Address System that was reliable and easy to use. A single box solution suitable for virtually any small-to-large scale Public Address system application.



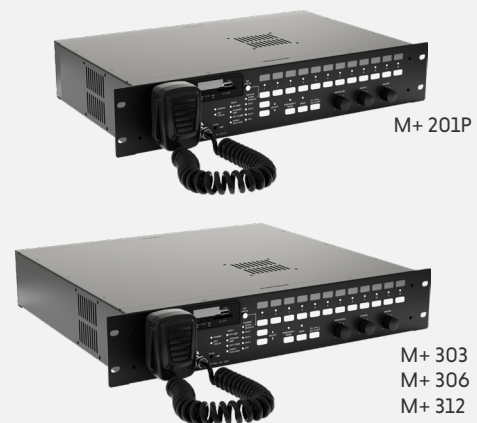
Below we have a few key points why everything build into a single unit saves time and money.

1. Complexity: Having multiple products requires multiple connections, which result in a complex setup and multiple points of failure due to human errors.
2. Increased Cost: Buying multiple products is more expensive than purchasing a single all-in-one solution.
3. Compatibility Issues: The products chosen for the system may not work seamlessly together, leading to compatibility issues that result in a system that does not work.

In the Mplus everything is integrated into a single unit, eliminating all the above problems, resulting in a more streamlined, efficient, and user-friendly solution.

The Mplus is also extremely light and compact. Technology has allowed AEX System to keep the Mplus extremely compact through advancements in miniaturization, integration of multiple components, and development of software with greater functionality replacing a lot of bulky hardware. This has lead to a smaller product with more capabilities.

The Mplus is based on AEX System’s inhouse Class D Power amplifier which are efficient and have a lower operating cost and carbon footprint. There are number of advantage from AEX System Class D amplifier. Learn more →





High Efficiency: Class D amplifiers operate by rapidly switching the power supply voltage on and off, which reduces the amount of energy lost as heat. AEX System's Class D power amplifier has an efficiency above 92%. All this translates to a lower operating costs and a reduced carbon footprint.

Low Standby Power Consumption: The Class D amplifier technology employed in the Mplus has an extremely low standby power consumption. This helps reduce energy waste and saves money on electricity bills. It also helps to extend the lifespan of the amplifier as the components are not 'stressed' in standby mode.

Smaller Size: The high efficiency of Class D amplifiers allows for a smaller size, which can reduce the materials and resources used in manufacturing, reducing the overall equipment cost and space requirement.

The Mplus Series consist of the main Integrated PA system unit with a built in power amplifier making it an extremely easy to deploy PA Systems. The Integrated PA system unit also provides up to 12-zones coverage. The main unit can be expanded with an external LS 12M+ Zone Expander and digital power amplifiers to increase the overall scale of the project up to 96 zones.

The Mplus Series can be complimented with an MEI 96M+ Automatic Evacuation Interface, providing fully automated 'sandwich' (N+1, N, N-1) evacuation with built in evacuation message.

The Mplus Main unit also comes with a built in amplifier monitoring and automatic changeover circuit to switch over the internal Digital power amplifier to an external standby amplifier upon failure. Coupled with a built-in siren and handheld emergency microphone the Mplus Series satisfies the various Fire Regulations and Code of practice.

M+ 303 / M+ 306 / M+ 312

- All-in-One PA system compliant to most countries fire code of practice.
- Built in Digital Power Amplifier 360W (M+ 303M), 600W (M+ 306M) and 1200W (M+ 312).
- Internal amplifier monitoring and standby amplifier changeover.
- Internal amplifier overload protection.
- 12 Zones speaker line outputs (Can be extended to 96 zones)
- Digital Source Media Player with Bluetooth and USB capabilities
- In-built features configured via AEX APP
 - Time Scheduled messages
 - Wireless App Paging
 - Remote Message triggering
 - Time Scheduled Music
- Supports up to 8 MRM 06-S remote microphone.
- Built-in ascending and descending chimes for remote microphone paging.
- Time scheduler and weekly timer for automated messages and reminders
- Built-in fire trigger interface with on board Warning and Evacuation message
- Built in siren tone
- Attenuator override trigger output.
- Ultra low power and high energy efficiency design

M+ 201P

The M+ 201P Integrated PA System is a versatile public address controller unit based on the key features of the M+ 300 series. The M+ 201P Integrated PA System is packed with features! Comes with a built-in 12 zone line selector and is scalable with the LS 12M+ Zone Expander for a maximum of 96 zones. The M+ 201P is designed to be used with external power amplifiers making it a highly scalable solution suitable for any medium to large scale projects. The M+ 200P can be supplemented by a host of AEX System products such as automatic amplifier changeover unit, MEI 96M+ Fire Alarm Interface and remote microphones.

- 12 Zones speaker line outputs (Can be extended to 96 zones)
- Digital Source Media Player with Bluetooth and USB capabilities
- In-built features configured via AEX APP
 - Time Scheduled messages
 - Wireless App Paging
 - Remote Message triggering
 - Time Scheduled Music
- Supports up to 8 MRM 06-S remote microphone.
- Built-in ascending and descending chimes for remote microphone paging.
- Time scheduler and weekly timer for automated messages and reminders
- Built-in fire trigger interface with on board Warning and Evacuation message
- Built in siren tone
- Attenuator override trigger output.
- Ultra low power and high energy efficiency design

Technical Specification

	M+ 201P
Power Requirement	24Vdc, 0.6A
Operating Temperature	5 °C to +45 °C
Weight	7.2
Dimension	483 x 86 x 250 mm (WxHxD)
M+ 200-DM Digital Media Player	
Audio Sources	USB Player (MP3 format) TF Card (MP3 format) Digital AM/FM Tuner AEX Bluetooth Function with: - Timer Scheduled messages - Wireless App Paging - Remote Message triggering - Timer Scheduled Music
AUX Audio Inputs (c/w Selector switch)	AUX 1: 0dB Stereo AUX 2: 0dB Stereo AUX 3: 0dB Stereo
M+ 202-FA Fire Alarm Interface Module	
Fire Alarm Interface Inputs	2 nos Dry Contact: • Warning Message (MP3 format) • Evacuation Message (MP3 format)
M+ 100-PT Time Schedule Message Player	
Configuration method	USB port with GUI Engineering Tool
Time Schedule Slots	100 time schedule slots. Repeatable and one-time event
Time Schedule Data Storage	High speed non-volatile EEPROM
Schedule Message Player	Internal MP3 Player
MP3 Message storage	Onboard 16GB SD card
Audio Output	0dB Balanced Audio
M+ 208-RM Remote Microphone Receiver Module	
Remote Mic Comm Port	RS 485 Serial Communication
Remote Mic Audio Input	0dB Balanced Audio
External Zone Control	RS 485 Communication
M+ 01-EP Emergency Paging Microphone Panel	
Microphone	Dynamic Microphone (Unidirectional)
Frequency Response	280 Hz ~ 9 kHz
Output Impedance	600 Ω unbalanced
Output Level	-72 dB +/- 3 dB (at 1 kHz)
Mic Activation	Press to talk
Siren	8kHz Continuous On trigger
Messages	Preloaded : Warning Message (MP3), Evacuation Message (MP3)
M+ LS12 Zone Expander	
Load handling per Channel	500W 100Vline
Output Zone	12 Zones
Zone Selection	Front Mechanical Push Button R-Comm RS485 from Remote paging console

Technical Specification

	M+ 303
Power Requirement	AC Mains 115-240Vac UPS Backup : 391VA
Operating Temperature	5 °C to +45 °C
Weight	8.1
Dimension	483 x 86 x 400 mm (WxHxD)
M+ 200-DM Digital Media Player	
Audio Sources	USB Player (MP3 format) TF Card (MP3 format) Digital AM/FM Tuner AEX Bluetooth Function with: - Timer Scheduled messages - Wireless App Paging - Remote Message triggering - Timer Scheduled Music
AUX Audio Inputs (c/w Selector switch)	AUX 1: 0dB Stereo AUX 2: 0dB Stereo AUX 3: 0dB Stereo
M+ 202-FA Fire Alarm Interface Module	
Fire Alarm Interface Inputs	2 nos Dry Contact: • Warning Message (MP3 format) • Evacuation Message (MP3 format)
M+ 100-PT Time Schedule Message Player	
Configuration method	USB port with GUI Engineering Tool
Time Schedule Slots	100 time schedule slots. Repeatable and one-time event
Time Schedule Data Storage	High speed non-volatile EEPROM
Schedule Message Player	Internal MP3 Player
MP3 Message storage	Onboard 16GB SD card
Audio Output	0dB Balanced Audio
M+ 208-RM Remote Microphone Receiver Module	
Remote Mic Comm Port	RS 485 Serial Communication
Remote Mic Audio Input	0dB Balanced Audio
External Zone Control	RS 485 Communication
M+ 01-EP Emergency Paging Microphone Panel	
Microphone	Dynamic Microphone (Unidirectional)
Frequency Response	280 Hz ~ 9 kHz
Output Impedance	600 Ω unbalanced
Output Level	-72 dB +/- 3 dB (at 1 kHz)
Mic Activation	Press to talk
Siren	8kHz Continuous On trigger
Messages	Preloaded : Warning Message (MP3), Evacuation Message (MP3)
M+ 1030-PD 360W Digital Power Amplifier	
Power Amplification	360W (100V line) Class-D power amplifier
Rated Load Impedance	27.7 Ω
Frequency Response	20Hz-20kHz
Signal to Noise Ratio	>105dB
THD + Noise	< 1% (rated power output)
Power Efficiency	>92%
Standby Power Consumption	1.2W
M+ AC01 Automatic Amplifier Monitoring and Changeover	
Max Power Handling Per Channel	360W
Number of Amplifier channels	2 Channels (1 Duty, 1 Standby)
Changeover Mechanism	Fast switching dry contact relay
M+ LS12 Zone Expander	
Load handling per Channel	500W 100Vline
Output Zone	12 Zones
Zone Selection	Front Mechanical Push Button R-Comm RS485 from Remote paging console

Technical Specification

	M+ 306
Power Requirement	AC Mains 115-240Vac UPS Backup : 652VA
Operating Temperature	5 °C to +45 °C
Weight	8.1
Dimension	483 x 86 x 400 mm (WxHxD)
M+ 200-DM Digital Media Player	
Audio Sources	USB Player (MP3 format) TF Card (MP3 format) Digital AM/FM Tuner AEX Bluetooth Function with: - Time Scheduled messages - Wireless App Paging - Remote Message triggering - Time Scheduled Music
AUX Audio Inputs (c/w Selector switch)	AUX 1: 0dB Stereo AUX 2: 0dB Stereo AUX 3: 0dB Stereo
M+ 202-FA Fire Alarm Interface Module	
Fire Alarm Interface Inputs	2 nos Dry Contact: • Warning Message (MP3 format) • Evacuation Message (MP3 format)
M+ 100-PT Time Schedule Message Player	
Configuration method	USB port with GUI Engineering Tool
Time Schedule Slots	100 time schedule slots. Repeatable and one-time event
Time Schedule Data Storage	High speed non-volatile EEPROM
Schedule Message Player	Internal MP3 Player
MP3 Message storage	Onboard 16GB SD card
Audio Output	0dB Balanced Audio
M+ 208-RM Remote Microphone Receiver Module	
Remote Mic Comm Port	RS 485 Serial Communication
Remote Mic Audio Input	0dB Balanced Audio
External Zone Control	RS 485 Communication
M+ 01-EP Emergency Paging Microphone Panel	
Microphone	Dynamic Microphone (Unidirectional)
Frequency Response	280 Hz ~ 9 kHz
Output Impedance	600 Ω unbalanced
Output Level	-72 dB +/- 3 dB (at 1 kHz)
Mic Activation	Press to talk
Siren	8kHz Continuous On trigger
Messages	Preloaded : Warning Message (MP3), Evacuation Message (MP3)
M+ 1060-PD 600W Digital Power Amplifier	
Power Amplification	600W (100V line) Class-D power amplifier
Rated Load Impedance	16.6 Ω
Frequency Response	20Hz-20kHz
Signal to Noise Ratio	>105dB
THD + Noise	< 1% (rated power output)
Power Efficiency	>92%
Standby Power Consumption	1.2W
M+ AC01 Automatic Amplifier Monitoring and Changeover	
Max Power Handling Per Channel	600W
Number of Amplifier channels	2 Channels (1 Duty, 1 Standby)
Changeover Mechanism	Fast switching dry contact relay
M+ LS12 Zone Expander	
Load handling per Channel	500W 100Vline
Output Zone	12 Zones
Zone Selection	Front Mechanical Push Button R-Comm RS485 from Remote paging console

Technical Specification

	M+ 312
Power Requirement	AC Mains 115-240Vac UPS Backup : 1304VA
Operating Temperature	5 °C to +45 °C
Weight	8.1
Dimension (WxHxD)	483 x 86 x 400 mm (WxHxD)
M+ 200-DM Digital Media Player	
Audio Sources	USB Player (MP3 format) TF Card (MP3 format) Digital AM/FM Tuner AEX Bluetooth Function with: - Time Scheduled messages - Wireless App Paging - Remote Message triggering - Time Scheduled Music
AUX Audio Inputs (c/w Selector switch)	AUX 1: 0dB Stereo AUX 2: 0dB Stereo AUX 3: 0dB Stereo
M+ 202-FA Fire Alarm Interface Module	
Fire Alarm Interface Inputs	2 nos Dry Contact: • Warning Message (MP3 format) • Evacuation Message (MP3 format)
M+ 100-PT Time Schedule Message Player	
Configuration method	USB port with GUI Engineering Tool
Time Schedule Slots	100 time schedule slots. Repeatable and one-time event
Time Schedule Data Storage	High speed non-volatile EEPROM
Schedule Message Player	Internal MP3 Player
MP3 Message storage	Onboard 16GB SD card
Audio Output	0dB Balanced Audio
M+ 208-RM Remote Microphone Receiver Module	
Remote Mic Comm Port	RS 485 Serial Communication
Remote Mic Audio Input	0dB Balanced Audio
External Zone Control	RS 485 Communication
M+ 01-EP Emergency Paging Microphone Panel	
Microphone	Dynamic Microphone (Unidirectional)
Frequency Response	280 Hz ~ 9 kHz
Output Impedance	600 Ω unbalanced
Output Level	-72 dB +/- 3 dB (at 1 kHz)
Mic Activation	Press to talk
Siren	8kHz Continuous On trigger
Messages	Preloaded : Warning Message (MP3), Evacuation Message (MP3)
M+ 1120-PD 1200W Digital Power Amplifier	
Power Amplification	1200W (100V line) Class-D power amplifier
Rated Load Impedance	8.3 Ω
Frequency Response	20Hz-20kHz
Signal to Noise Ratio	>105dB
THD + Noise	< 1% (rated power output)
Power Efficiency	>92%
Standby Power Consumption	1.2W
M+ AC01 Automatic Amplifier Monitoring and Changeover	
Max Power Handling Per Channel	1200W
Number of Amplifier channels	2 Channels (1 Duty, 1 Standby)
Changeover Mechanism	Fast switching dry contact relay
M+ LS12 Zone Expander	
Load handling per Channel	500W 100Vline
Output Zone	12 Zones
Zone Selection	Front Mechanical Push Button R-Comm RS485 from Remote paging console

MEI 96M+ Fire Alarm Interface Unit

The MEI 96M+ Fire Alarm Interface works with the Mplus range of products. It integrates with fire alarm panels to conduct automated evacuation. It has onboard message and can conduct sandwich or all-call evacuations. With 96 dry contact inputs, it's software-configurable for up to 96-floor control.



Technical Specification

MEI 96M+	
Connectors	Removable terminal block RJ 45 R-Comm Port
Supported Evacuation Sequence	Sandwich Evacuation; • (N+1, N, N-1) • (N+2, N, N-2) • Customizable • All Call
Communication	RS 485 Serial Communication
Audio Output	0dB Balanced Audio
Dry Contacts	96 Control Input
Dry Contact type	Photocoupler
Message Storage	Onboard 16GB SD Card
Message Format	Mp3
Power Requirement	24Vdc, 0.4A
Material & Finish	Mild Steel Casing, Epoxy Coated, Textured Black
Dimension	483 x 44 x 150mm (W x H x D)
Weight	2.2kg

LS 12M+ Zone Expander

The LS 12M+ Expander adds output zones to the Mplus PA system as per clients' needs. These can be controlled from the Mplus Main unit, with each Zone Expander providing 12 zone output. Up to 7 units can be used for 96 zones (including the Main Mplus unit).



Technical Specification

LS 12M+	
Zone Selection Control	R-Comm RS 485 Serial Communication Front Mechanical Push Button
Indicators	Power LED 12 nos. Zone status indicator (ON/OFF) LED
Output Zone	12 zone, Relay
Load Handling per zone channel	500W, 100Vline
Power Requirements	24Vdc (Regulated), 0.42A
Material & Finish	ABS, Graphite Black
Dimensions (W x H x D)	483 x 44 x 150 mm
Weight	2.3kg

MRM 06-S Remote Microphone

The MRM 06-S Remote Mic has 6 zone buttons, ALL CALL, ALL CLEAR, and a TALK button. It has LED indicators for chime in progress, ready-to-talk, and BUSY when a higher priority mic is in use. It connects to the Mplus Controller via RS 485 R-Comm up to 1 km distance. A maximum of 8 mics can be connected. It has a supervisory circuit for fault detection.



Technical Specification

MRM 06-S	
Remote Microphone Input Sensitivity	0 dBV
Frequency Response	90 Hz ~ 17 kHz
Switches	6 Individual Zone Switches
Maximum Cable Length	1000 meters (Shielded Cable)
Power Requirement	24 Vdc (Regulated), 0.1 A, 0.8 A (with MRE 12-S)
Power Consumption	2.5 W
Connectors	RJ 45
Material & Finish	ABS, Graphite Black
Dimensions	105 x 51.2 x 249.4 mm (W x H x D)
Weight	0.6 kg

MRE 12-S Remote Microphone Extension

The MRE 12-S Remote Mic Extension adds 12 zone control buttons to the MRM 06-S unit. It allows the MRM 06-S unit to be extended up to 96 zones. It connects to the MRM 06-S unit for power and communication.



Technical Specification

MRE 12-S	
Power Requirement	24 Vdc (Regulated), 0.10 A
Power Consumption	2.5 W
Connector & Cable	Clip Type Ribbon Cable
Switches	12 Individual Zone Selection Button
Material & Finish	ABS, Graphite Black
Dimensions	105 x 51.2 x 249.4 mm (W x H x D)
Weight	0.6 kg