



PRODUCT CATALOGUE

SPECIAL MISSION COMMUNICATION SYSTEMS

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DIGITAL AUDIO SYSTEM

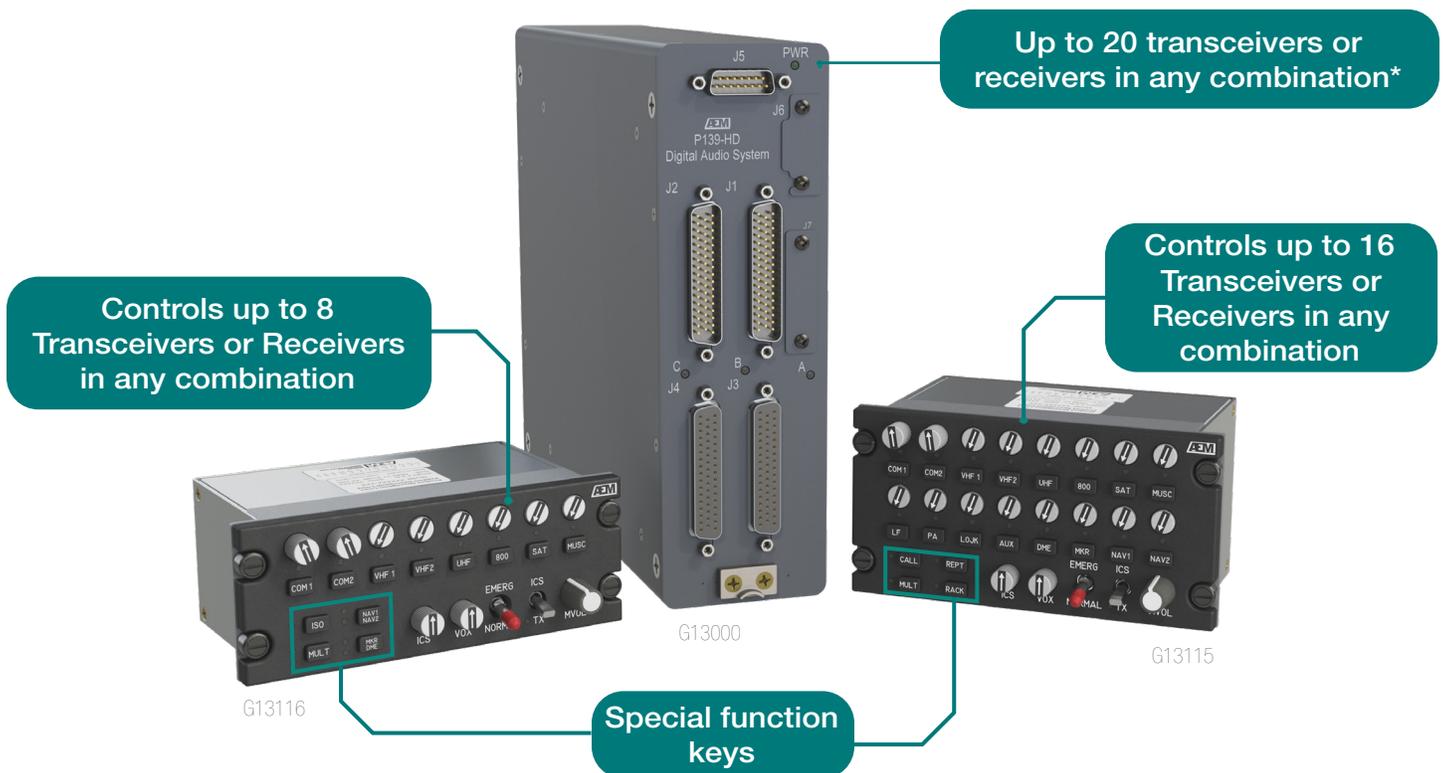
The AEM Digital Audio System is the smallest, lightest and most capable Digital Audio System available today.

P139-HD Digital Audio System

The P139-HD was designed in consultation with Completion Centers, Technicians, Operators, and TFOs in the Law Enforcement and Air Medical Transport sectors.

Highlights

- Supports 10, 20 or 30 transceivers, receivers or other audio sources in any combination with a single router
- Supports 6, 12 or 18 headsets with ICS VOX, ICS and transmit PTT using a single router
- Supports up to 36 control panels
- Multicast/Simulcast for any connected transceivers
- Bi-Directional radio relay with no additional components
- No special software or cables for programming of levels, priorities, or alert tones. Uses a standard laptop network cable and your Internet browser (no web access required)



*Applicable to the G13000 Digital Audio Router. Up to 30 transceivers or receivers in any combination using the G13160 Digital Audio Router

G13115 — 16 Transceiver Control Panel

- Controls up to 16 Transceivers or Receivers in any combination
- Standard NVIS-compliant lighting
- Full multicast and radio relay capability
- Standard custom engraved buttons
- Unused buttons may be used to control or trigger other mission equipment
- Installation connectors included



MECHANICAL SPECS

Height	2.99"	Length	3.36"
Width	5.77"	Weight	1.5 LB

G13116 — 8 Transceiver Control Panel

- Controls up to 8 transceivers or receivers in any combination
- 6 additional switched receive channels for other mission equipment
- Standard NVIS-compliant lighting
- Full multicast and radio relay capability
- Standard custom engraved buttons
- Unused buttons may be used to control or trigger other mission equipment
- Installation connectors included



MECHANICAL SPECS

Height	2.26"	Length	3.36"
Width	5.77"	Weight	1.25 LB

G13000 Digital Audio Router

- 48 KHz Digital Audio Processing
- Up to 20 transceivers or receivers in any combination
- 12 full capability headset ports standard
- 8 programmable alert tone generators with priority
- Extra keylines for special functions or operation of other equipment



MECHANICAL SPECS

Height	2.26"	Length	3.36"
Width	5.77"	Weight	1.25 LB

G13160 Digital Audio Router

- 48 KHz Digital Audio Processing
- Up to 30 transceivers or receivers in any combination
- 18 full capability headset ports standard
- 8 programmable alert tone generators with priority
- Extra keylines for special functions or operation of other equipment



MECHANICAL SPECS

Height	2.26"	Length	3.36"
Width	5.77"	Weight	1.25 LB

Certification

CERTIFICATION	AIRFRAMES(S)
FAA STC SR00521SE	AS350 B, BA, B1, B2, B3, C, D, D1 AS355 E, F, F1, F2, N Bell 206 A, A1, B, L, L1, L3, L4, 407 EC 135, P1, T1, P2, T2, P2+, T2+
TCCA STC SH09-17	EC135 P1, T1, P2, T2, P2+, T2+ AS350 B, BA, B1, B2, B3, D AS355 E, F, F1, F2, N Bell 206 A, A1, B, L, L1, L3, L4, 407
EASA STC 10036806	AS350 B, BA, B1, B2, B3, D AS355 E, F, F1, F2 EC135 P1, T1, P2, T2, P2+, T2+ Bell 206 A, B, L, L1, L3, L4, 407
ANAC STC 2007506-30	AS350 B, BA, B1, B2, B3 AS355 F, F1, F2, N Bell 206 A, B, L1, L3, L4, 407 EC135 P1, T1, P2, T2, P2+, T2+
FAA STC SR02270SE	MBB BK 117 A-1, A-3, A-4, B-1, B-2, C-1, C-2, D-2 Bell 204 B, 205 A, 205 A-1, 205 B, 212, 412, 412 EP, 412 CF Bell 214 B, B1, ST
TCCA STC SH14-33	MBB BK 117 A-1, A-3, A-4, B-1, B-2, C-1, C-2 Bell 204 B, 205 A, 205 A-1, 205 B, 212, 412, 412 EP, 412 CF Bell 214 B, B1, ST
EASA STC 10056456	MBB BK 117 A-1, A-3, A-4, B-1, C-1, C-2 Bell 204 B, 205 A-1, 212, 412, 412 SP, 214 ST
ANAC STC 2014511-01	MBB BK 117 A-3, A-4, B-1, B-2, C-1, C-2 Bell 212, 412, 412 EP, 204 B, 205 A, 205 A-1, 214 B, 214 B-1
JCAB STC STC-460-TYO	Bell 412EP

System Specifications

ELECTRICAL CHARACTERISTICS

Max. Input Voltage		32 VDC
Min. Input Voltage		14 VDC
Max. Input Current		4 A
Min. Input Current		1.2 A
Gnet Voltage	Supplied by G13000	24 VDC
Max. Gnet Current	Per Gnet bus	0.5 A
Max. Dimmer voltage	DC, AC or PWM input	28 V
Dimmer Buses (Independent)		2 EACH

AUDIO CHARACTERISTICS

Max. Microphone Input	MIC GAIN set to minimum	4.5 dBV
Microphone Input Impedance		500 Ω
Max. Earphone Output	EAR GAIN at maximum	13.5 dBV
Expected Earphone Impedance		150 or 600 Ω
Max. Receive Input	RX GAIN set to minimum	14.0 dBV
Receive Input Impedance		600 Ω
Max. Transmit Output	TX GAIN at maximum	6.0 dBV
Expected Transmit Impedance		150 Ω

KEYLINE CHARACTERISTICS

Headset PTT Key Voltage	Keyline must be pulled below this value to key	0.5 V
Max. Radio Keyline Voltage	Pull-up voltage provided by radio	28 V
Max. Radio Keyline Current		1 A
Max. Separate ICS Zones	No separate router required	9 EACH

RADIO

MTR138-000GNW Mission Transceiver Remote

The MTR-138-000GNW is the radio of choice for special-role and multi-mission platforms alike. Developed in consultation with emergency response agencies and aircraft manufactures to produce a versatile and reliable special-mission radio.

Highlights

- Remote-mount VHF radio for special-role and multi-mission platforms
- Suitable replacement for legacy VHF remote-mount radios
- Ability to integrate with glass cockpit applications



- A narrowband/wideband remote-mount transceiver
- Synthesized guard receiver
- High (10W) & Low (1W) output power
- Scanning modes (List, Priority, and List+Priority)
- Transceiver control handled through an RS-422 interface bus and discrete signals

- Provides sub-audible signaling, (CTCSS/CDCSS) capability, with standard and extended tone encoding and decoding
- Tested to TIA-603-E
- DO-160G qualified

MECHANICAL SPECS

Height	4.8"	Length	10.35"
Width	2.30"	Weight	4.30 LB (MAX)

MTP136D Panel-Mount Forest Service Radio

The MTP136D is a modern panel-mount radio for special-role and multi-mission platforms. Designed with the U.S. Forest Service and aerial firefighting operators in mind, the MTP136D is a Project 25 Phase 1 compliant VHF FM solution.

Highlights

- A panel-mount transceiver with intuitive menu control and front-panel programming
- Provides sub-audible signaling, (CTCSS/CDCSS) capability, with standard and extended tone encoding and decoding
- Covers available digital and analog channels from 136MHz to 174MHz within the VHF/FM band



- Agile P25 capable guard receiver
- High (10W) & Low (1W) output power
- User adjustable receive sensitivity, for adoption into complex RF signal spaces
- Main and guard are multiplexed onto a single BNC antenna connection, requiring only one antenna

- 12.5kHz channel bandwidths with 25kHz bandwidth capable
- Customizable CTCSS/CDCSS Lists per Zone
- Tested to TIA-603-E, TIA-102
- DO-160G qualified

MECHANICAL SPECS

Height	3.0" (MAX)	Length	7.51" (MAX)
Width	5.75" (MAX)	Weight	3.3 LB (MAX)

FREQUENCIES

VHF: 136-174MHz

Supports P25 Phase 1 Conventional and 12.5kHz with 25kHz capable analog modes of operation

AS350/H125 AVIONICS CONSOLES

AEM's Avionics Consoles are a lightweight, yet rugged cockpit upgrade for Airborne Law Enforcement and Utility Operators for the Airbus AS350 aircraft.

- Improved electrical system reliability
- Ergonomic design for busy cockpits
- Optional NVIS-compatible lighting
- Lightweight aluminum structure with powder-coated finish
- Internal dimmer for independent console dimming
- Mating cannon plugs simplify installation
- Circuit break legends are customizable and easy to change
- Compatible with aircraft's existing electrical system including the latest Multibloc (B3e variant)
- Gold plated contacts for reliable operation
- Optional custom layout and wiring available

P122 Switch Console

The preferred console and electrical system upgrade for utility operators

24 Mil-Spec sealed toggle switches



Hinged panel for easy maintenance access

Up to 62 Mil-Spec circuit breakers replace fuses

MECHANICAL SPECS				ELECTRICAL CHARACTERISTICS	
Height	13.25"	Length	10.41"	Switches	Up to 24
Width	8.05"	Weight	12.5 LB	Circuit Breakers	Up to 62
				Console Lighting	Internal with CTRL

Highlights

- Most comprehensive AS350 & H125 console modification for special-mission operators
- Limit particulate damage with robust Mil-Spec sealed switches for the harshest mission environments
- Gain valuable unused space over factory console for critical avionics and equipment requirements
- Save time, frustration and money and eliminate unreliable fuse replacements in the field
- Maximize installation and future modification efficiencies with easy-to-install mating cannon plugs

P132 Avionics Console

The preferred console and electrical system upgrade for law enforcement and special-mission operators



20 Mil-Spec sealed toggle switches (26 switches optional)

Adds 10.45" of space for radios and other avionics equipment

Up to 62 Mil-Spec circuit breakers replace fuses

MECHANICAL SPECS				ELECTRICAL CHARACTERISTICS	
Height	16.47"	Weight	18 LB*	Switches	Up to 26
Width	9.01"	Avionics Bay (LxW)	10.45" x 6.35"	Circuit Breakers	Up to 62
Length	12.61"			Console Lighting	Internal with CTRL

LOUDSPEAKER SYSTEMS

AEM's next-generation loudspeaker systems are a family of redesigned Loudspeakers, Loudspeaker Amplifiers, and Loudspeaker Controllers delivering fantastic sound quality and power output in a lighter, smaller and less expensive package than comparable systems.

Highlights

- Clear, effective communication for demanding environments and missions
- Meets the sound quality, reliability and functionality needs of special-role aircraft
- Makes intelligible air-to-ground communication possible



LSS220 Compact *Compact Loudspeaker System*

Includes: LSC22-001N, LSA150-001, TS150

MECHANICAL SPECS

Equipment Weight 10.5 LB

Peak Power 220 Watts

DO-160G Qualified



LSC22



LSA150



TS150

LSS440 Compact *Compact Loudspeaker System*

Includes: LSC22-001N, LSA300-001, TS300

MECHANICAL SPECS

Equipment Weight 14.4 LB

Peak Power 220 Watts

DO-160G Qualified



LSC22



LSA300



TS300

LSS440

Includes: LSC22-001N, LSA400-001, LS300-200

MECHANICAL SPECS

Equipment Weight	19.9 LB
Peak Power	440 Watts
DO-160G Qualified	



LSC22



LSA400



LS300

LSS880

Includes: LSC22-001N, LSA400-001, LS600-200

MECHANICAL SPECS

Equipment Weight	32.9 LB
Peak Power	880 Watts
DO-160G Qualified	



LSC22



LSA400



LS600

LSS1320

Includes: LSC22-001N, LSA800-001, LS600-200, LS300-200

MECHANICAL SPECS

Equipment Weight	50.5 LB
Peak Power	1,320 Watts
DO-160G Qualified	



LSC22



LS800



LS600



LS300

LSS1760

Includes: LSC22-001N, LSA800-001, LS600-200 (x2)

MECHANICAL SPECS

Equipment Weight	63.5 LB
Peak Power	1,760 Watts
DO-160G Qualified	



LSC22



LS800



LS600



SPECIALTY AUDIO

Backed by decades of aviation and design experience, AEM uses leading technology to provide specialized audio solutions for today's avionics market. Versatile and functional, our audio products satisfy the considerable demands of special-role aircraft.

Audio Warning Generator *AWG08*

- Industry-leading with eight 90-second slots
- Priority warning management
- Field-programmable via USB input and intuitive programming application
- Qualified to DO-160G and DO-214A, CAN-TSO-C139a



MECHANICAL SPECS

Height	1.51"	Length	4.01"
Width	3.51"	Weight	0.7 LB

Bluetooth® Audio Accessory *BAA01*

The BAA01 Bluetooth® Audio Accessory is a panel-mount unit designed to add Bluetooth connectivity to existing avionics, audio, PA, or loudspeaker systems. The BAA01 can support discrete call and music audio using the built-in Bluetooth audio profiles.



- 2x Bluetooth connections
- 2x front-panel Type-C USB out
- Rear-pin dedicated USB out
- Shared 7-Amp USB current
- Qualified to DO-160G and DO-214A

MECHANICAL SPECS

Height	0.75"	Length	6.34"
Width	4.84"	Weight	1.0 LB MAX

Cabin PA Amplifier *LSA100-100*

- Easy to configure and install - designed for new and retro-fit applications
- Integrates with cockpit audio system, cabin briefer, in-flight entertainment
- Low-noise and high-efficiency Class D outputs
- Qualified to DO-160G, DO-214A, CAN-TSO-C139a



MECHANICAL SPECS

Height	5.46"	Length	9.8"
Width	2.05" (at base)	Weight	2.00 LB

Cabin Speaker *LS150*

- 150W+ power handling capacity
- DO-160G and MIL-STD qualified
- Water resistant cone
- In/out wiring interface for easy system configuration



MECHANICAL SPECS

Height	3.5"	Length	9.00" (includes mounting flange)
Width	7.00"	Weight	2.00 LB

Fail Safe Audio Mixer *P178*

- 8-input mixer providing 3 composite outputs
- Removes the need for external relays
- Channel 1 and Channel 2 outputs are failsafe relays protected for master caution or essential tones



CERTIFICATION

AIRFRAME(S)

FAA/ PMA STC SR02445SE	AS350B, BA, B1, B2, C, D, D1. AS355E, F, F1, F2, N, NP. EC130B4, T2. EC-135P1, P2, P2+, T1, T2, T2+. Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407.
FAA/ PMA STC SR02444SE	MBB-117 (EC145) A-1, A-3, A-4, B-1, B-2, C-1, C-2, D-2. Bell 212, 412, 412EP, 412CF, 204B, 205A-1, B, 214B, B-1, 214ST.
Canada STC SH-09-17	AS350B, BA, B1, B2, C, D, D1. AS355E, F, F1, F2, N. EC-135P1, P2, P2+, T1, T2, T2+. Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407.
Canada STC SH-14-33	MBB-117 (EC145) A-1, A-3, A-4, B-1, B-2, C-1, C-2. Bell 212, 412, 412EP, 412CF, 204B, 205A-1, B, 214B, B-1, 214ST.
EASA STC 10036806	AS350B, BA, B1, B2, B3, C, D, D1. AS355E, F, F1, F2. Bell 407.
Brazil CHST 2007S06-30	AS350B, BA, B1, B2, C, D, D1. AS355E, F, F1, F2. EC130B4, T2. EC-135P1, P2, P2+, T1, T2, T2+. BO-105A, C, LS A-1, LS A-3, S. Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407. MBB-117 (EC145) A-1, A-3, A-4, B-1, B-2, C-1, C-2, D-2. Bell 212, 412, 412EP, 412CF, 204B, 205A-1, B, 214B, B-1, 214ST.

MECHANICAL SPECS

Height	0.75"
Width	5.75"
Length	4.56"
Weight	0.8 Lbs

Remote Transmit Selector *RTS01*

- Snap-in legends
- NVIS lighting option
- Supports up to seven transmitters
- Hands-free operation
- DO-160 qualified



MECHANICAL SPECS

Height	0.75"	Length	4.56"
Width	5.75"	Weight	0.8 LB

ACCESSORIES

Connector Hoods *ME Series*

- Made from lightweight aluminum
- Slide lock feature
- Available with or without connector and contacts
- 8 internal grounding locations



Dimmer Power Supply *P176*

- Direct replacement for OEM P/N 704A46814049
- Short-circuit and thermal protected
- Gold-plated contacts for the vertical header and edge connector
- Conformal coated to prevent corrosion of the PCB



CERTIFICATION	AIRFRAME(S)
FAA/PMA STC SH4747NM	AS350 B, BA, B1, B2, B3, C, D, D1
Brazil CHST 2007S06-09	AS350 B, BA, B1, B2, B3, C, D, D1
Canada STC SH93-83	AS350 B, BA, B1, B2, B3, C, D, D1
EASA.IM.R.01343	AS350 B, BA, B1, B2, B3, C, D, D1

28 to 12 Vdc Power Converter *P174*

- 100 millisecond turn on rise time
- Externally mounted output voltage adjustment
- Extremely low radiated noise floor
- Installation cannon plug included with kit
- 27 Amps DC Current



CERTIFICATION	AIRFRAME(S)	
FAA / PMA STC SR02301SE	AS350B, BA, B1, B2, C, D, D1. AS355E, F, F1, F2. EC130B4, T2. EC-135P1, P2, P2+, T1, T2, T2+.	BO-105A, C, LS A-1, LS A-3, S. Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407.
FAA / PMA STC SR02407SE	MBB-117 (EC145) A-1, A-3, A-4, B-1, B-2, C-1, C-2, D-2.	Bell 212, 412, 412EP, 412CF, 204B, 205A-1, B, 214B, B-1, 214ST.
Canada STC SH-14-37	AS350B, BA, B1, B2, C, D, D1. AS355E, F, F1, F2. BO-105A, C, LS A-1, LS A-3, S.	Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407.
EASA STC 10052094 EASA STC 10052138 EASA STC 10052139 EASA STC 10052140 EASA STC 10052141	EC-135P1, P2, P2+, T1, T2, T2+. BO-105A, C, S. Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407.	AS350B, BA, B1, B2, C, D, D1. EC130B4, T2. AS355E, F, F1, F2, N, NP.
Brazil CHST 2014S08-02	AS350B, BA, B1, B2, C, D, D1. AS355E, F, F1, F2. EC130B4, T2. EC-135P1, P2, P2+, T1, T2, T2+.	BO-105A, C, LS A-1, LS A-3, S. Bell 206A, A-1, B, L, L-1, L-3, L-4. Bell 407.

CUSTOMIZE YOUR MISSION



CONFIGURED TO YOUR UNIQUE MISSION REQUIREMENTS

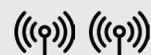
Building on decades of *design, development, and manufacturing* experience the P139-HD Digital Audio System means you have access to the industry's ***smallest, lightest, and most capable digital audio system.***



Supports 10, 20 or
30 Transceivers



Supports 6, 12
or 18 Headsets



Multicast and
Repeater

Manufactured and supported by a global leader of specialty aviation solutions.



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