EAGLE
WORLDWIDE FLEET MANAGEMENT

GENERATION II
DIGITAL AUDIO SYSTEMS

The Pioneers of Digital Audio Control System Technology

The EAGLE Generation II Digital Audio System is the Smallest, Lightest and Most Capable Digital Audio System available today. Eagle Audio (Formerly Geneva Aviation) has been in the business of designing and manufacturing digital audio control systems for over 18 years and was the first to introduce an FAA Certified Digital Audio Control System in 1998. The Generation II System is the result of input we received from Completion Centers, Technicians, Operators, and TFOs in the Law Enforcement, Air Medical Transport, and TV News fields.

Standard Features without any other devices to Buy or Install

- Lightest installed weight.
- Shortest time to install.
- All required connectors and mounts included at no additional charge.
- Dual Input Power Supply.
- NO external audio matching units required for any audio source.
- Internal Emergency Com 1 and Com 2 Isolation Relays with ICS between Pilot and Co-Pilot while in emergency mode.
- Audio Router has Multi-Axis Mounting points for any application.
- Full 48KHz sampling for DVD Quality Audio.
- Compatible with all Type 2 and Type 3 Helmets, Headsets and Ear Buds using EAGLE Copters' Auto Track function which determines which type of device is connected.
- Robust RS-485 communications between Control Panels and Router via a 4 wire shielded wire to a single DB-9 standard density connector.
- Supports up to 20 Transceivers, Receivers or other audio sources in any combination with a single router.
- Supports up to 12 full RX/TX Headsets with VOX using a single router and no external devices.

- Supports up to 32 Control Panels.
- 8 Full Programmable Alert Tones with priority.
- CVR and DVR outputs are both supported.
- Unlimited ICS Zones with Isolate, Call and Private ICS functions in a single router.
- Multicast for any connected Transceivers.
- Bi-Directional Radio Relay with no additional parts.
- External relay controlled mission equipment can be actuated using audio panel controls.
- Custom functionality programming at no additional charge.
- NVG Compatible at no additional charge.
- Custom Engraved Control Panels at no additional charge.
- Built-in configuration software on a removable MMC Card allows programming of audio levels for all Headsets and Radios as well to provide Mic Bias, Sidetone and set Duplex modes as required. Dimmer Tracking adjustment allows for Panel Lighting Equalisation to match any cockpit lighting. The system is capable of supporting two independent dimming zones.

G13115: 16 Transceiver Control Panel

- Smallest Most User Friendly Controller Available in its class.
- Controls up to 16 Transceivers or Receivers in any combination.
- NVG Compatible Standard.
- Full Multicast and Radio Relay Capability.
- Custom Engraved Buttons Standard.
- Unused Buttons may be used to control or trigger other Mission Equipment.
- Less Wiring than any other Control Panel Available.
- Installation Connectors Included.
- Smallest Size for Function: H 2.85" x D 3.5" x W 5.75".

G13000: Digital Audio Router

- Full 48 KHz Digital Audio Processing (DVD Quality)
- Up to 20 Transceivers or Receivers in any combination.
- 12 Full Capability Headset Ports Standard.
- 8 Programmable Alert Tone Generators with Priority Assignment.
- Extra Keylines for Special Functions or Operation of other Mission Equipment.
- Custom Configuration for Your Mission Requirements at No Additional Charge.
- No external matching units required for Any Audio Source.
- Installation Connectors Included.
- Lowest Weight: 4.3 Lbs. Dimensions: H 8.4" x D 10" x W 2.6".
- 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).

G13116: 8 Transceiver Control Panel

- Smallest Most User Friendly Controller Available in its class.
- Controls up to 8 Transceivers or Receivers in any combination.
- 6 Additional Switched Receive Channels for other Mission Equipment.
- NVG Compatible Standard.
- Full Multicast and Radio Relay Capability .
- Custom Engraved Buttons Standard.
- Unused Buttons may be used to control or trigger other Mission Equipment.
- Less Wiring than any other Control Panel Available.
- Installation Connectors Included.
- Smallest Size for Function: H 2.21" x D 3.5" x W 5.75".

Environmental Qualifications

DO-160F ENVIRONMENTAL CAT. D1C4XXBAAU2(F)(F1)XXXXXXZBXXBBZCTTMA3D3XXXXXXAX

DO-160F ENV. CAT.	SECTION	CATEGORY	DESCRIPTION
Temp/Alt	4.0	D1C4	Equipment tested to Category D1 (50,000ft , non-pressurised, controlled temperature) and C4 (35,000ft, non-pressurised, non-controlled temperature)
Low Temperature	4.0	D1C4	Operating Temp: -20°C. Short-Time Operating: -40°C. Ground Survival: -55°C
High Temperature	4.0	D1C4	Operating Temp: +55°C. Short-Time Operating: +70°C. Ground Survival: +85°C
Loss of Cooling	4.5.4	Z	No Cooling Required
Temp. Variation	5.0	B	5°C minimum per minute
Humidity	6.0	A	Equipment tested to Category A
Shock	7.0	A	6G in any direction
Vibration	8.0	U2	Equipment tested to Category U2 (Robust Vibration Test)
Mag Effect	15.0	Z	Less than 0.3m
Power Input	16.0	B	Equipment tested to Category B
Voltage Spike	17.0	B	Equipment tested to Category B
Conducted Audio	18.0	B	Equipment tested to Category B
Induced Signal Susceptibility	19.0	ZC	Equipment tested to Category ZC
RF Susceptibility	20.0	TT	Equipment tested to Category TT
RF Emissions	21.0	M	Equipment tested to Category M
Lightning Induced	22.0	A3D3	Equipment tested to Category A3D3
ESD	25.0	A	Equipment tested to Category A

System Specifications

ELECTRICAL CHARACTERISTICS			
Max. Input Voltage 60 V DC		60	VDC
Min. Input Voltage		12	VDC
Max. Input Current		2.5	A
Min. Input Current		1	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	ΩV DC
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	12	EACH

CERTIFICATION	
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

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