

Technical Manual



EVOi324/WH

SPECIFICATIONS

- Frequency Range (-10 dB): 40 Hz – 18 kHz
- Frequency Response (-3 dB): 48 Hz – 16 kHz
- Horizontal Coverage (-6 dB): 80° (Averaged 500 Hz – 16 kHz)
- Vertical Coverage (-6 dB): 80° (Averaged 500 Hz – 16 kHz)
- Directivity Factor (Q): 11.4 (Averaged 500 Hz – 16 kHz)
- Directivity Index (DI): 10.6 dB (Averaged 500 Hz – 16kHz)
- Sensitivity: 101 dB (-15 dBu @ 1 Meter)*
- Low Frequency Driver: 14" NDD, Carbon Fiber Cone, Dual 2" Voice Coils, Integral Thermomaster
- DC Resistance: 5.7 ohm
- Low Frequency/Mid Driver: 14" NDD, Carbon Fiber Cone, Dual 2" Voice Coils, Integral Thermomaster
- DC Resistance: 5.7 ohm
- High Frequency Driver: 2430, Large Format, 1.5" Exit Compression Driver with a Neodymium Motor, 100 Watt 3" Encapsulated Voice Coil, Aluminum Diaphragm
- DC Resistance: 4.4 ohm ±10%
- Waveguide: Aluminum Thermally Coupled to 2430 via "silpad" Gasket
- Amplifier Power Low Frequency: 440 Hz Load Ref = 6 ohms, Input = 1.4 Vrms/5.14 dBu, Output = 300 Wrms, THD < 0.3%
- Max Continuous Output: 330 Wrms (with Limiters)
- Burst Output: 600 Wrms
- Signal-to-Noise Ratio > 90 dB A Weighted
- Amplifier Power LF/Mid: 440 Hz Load Ref = 6 ohms, Input = 1.4 Vrms/5.14 dBu, Output = 300 Wrms, THD < 0.3%
- Max Continuous Output: 330 Wrms (with Limiters)
- Burst Output: 600 Wrms
- Signal-to-Noise Ratio > 90 dB A Weighted
- Amplifier Power HF: 3 kHz Load Ref = 8 ohms, Input = 3.2 Vrms/12.3 dBu, Output = 35 Wrms, THD < 0.2%
- Max Continuous Output: 50 Wrms (with Limiters)
- Burst Output: 100 Wrms
- Signal-to-Noise Ratio > 90 dB A Weighted
- Audio Connectors: Balanced XLR
- LF Crossover Frequency: 250 kHz
- LF/Mid Crossover Frequency: 1.25 kHz
- HF Crossover Frequency: 1.25 kHz
- Limiting: Dynamic Amplifier Clip Prevention
- Transducer EQ Type: Parametric

Specifications Continued Next Page

AUTO-EQ

- Auto-EQ Sample Rate: 6 kHz
- MLS Sequence Length: 4095
- Number of Averaged Sequences: 8
- Maximum Impulse Response Length: 682 ms
- FFT Length: 4096
- FFT Window Type: Raised Cosine Bell
- Log-Frequency Domain Resolution: 1/50th Octave
- Number of EQ Filters: 6

ANTI FEEDBACK CONTROL

- Number of Fixed Filters: 6 Parametric
- Number of Live Filters: 6 Parametric
- Maximum Cut: 15 dB
- Width: 0.05 – 0.4 Octave
- Self-Diagnostics: 18 Status Reporting Conditions

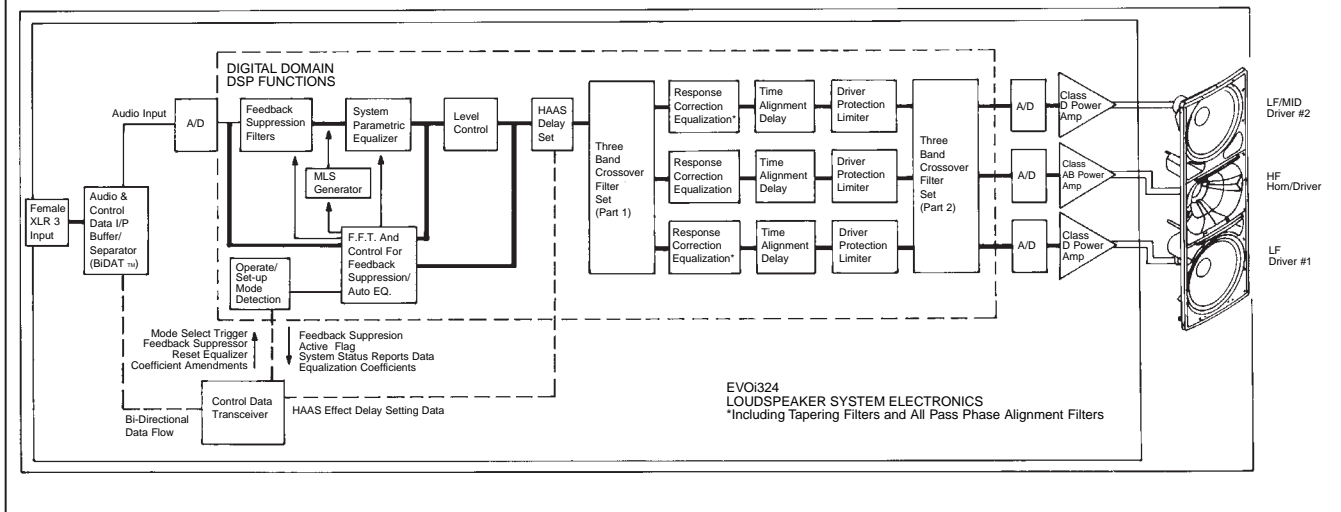
*EVOi324 Sensitivity Chart

Electrical Input		Acoustic Output Measured SPL (dB re: 20uPa)
dBu	Volts (AC RMS)	
-25	0.04	91
-20	0.08	96
-15	0.14	101
-10	0.25	106
-5	0.44	110
0	0.78	116
5	1.38	118
8	1.95	120
10	2.45	122

101 dB = Equivalent 1w/1m Specification

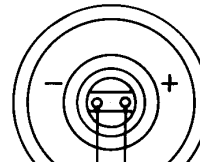
EVOi324/WH

SCHEMATIC



WIRING DIAGRAM

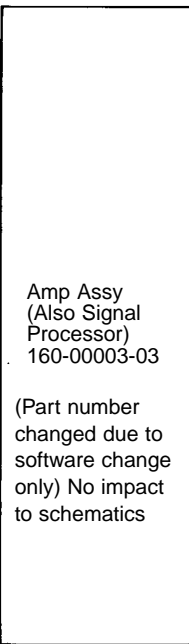
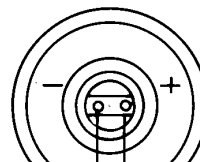
Driver, Low Freq
No.2
EVO-LF8
Cone Repl
C8REVO



Driver, High Freq
2430H
(125-30000-00X)
(Diaph Repl)
D8R2430



Driver, Low Freq
No.1
EVO-LF8
Cone Repl
C8REVO



SPECIFICATIONS (Cont'd)

AURAL SWEEP TEST SPECIFICATIONS:

- A. System Aural Sweep Test: 0.3V Input, 20 Hz to 20 kHz
- B. L.F. Aural Sweep Test: 7.0V Input, 20 Hz to 3 kHz
- C. H.F. Aural Sweep Test: 2.83V Input, 550 Hz to 20 kHz

PHYSICAL SPECIFICATIONS:

- Enclosure Dimensions: 1067mm x 353mm x 386.2mm D
(42.0 x 13.9 x 15.2 in.D.)
- Shipping Weight: 87 lbs. (39.4 kg.)

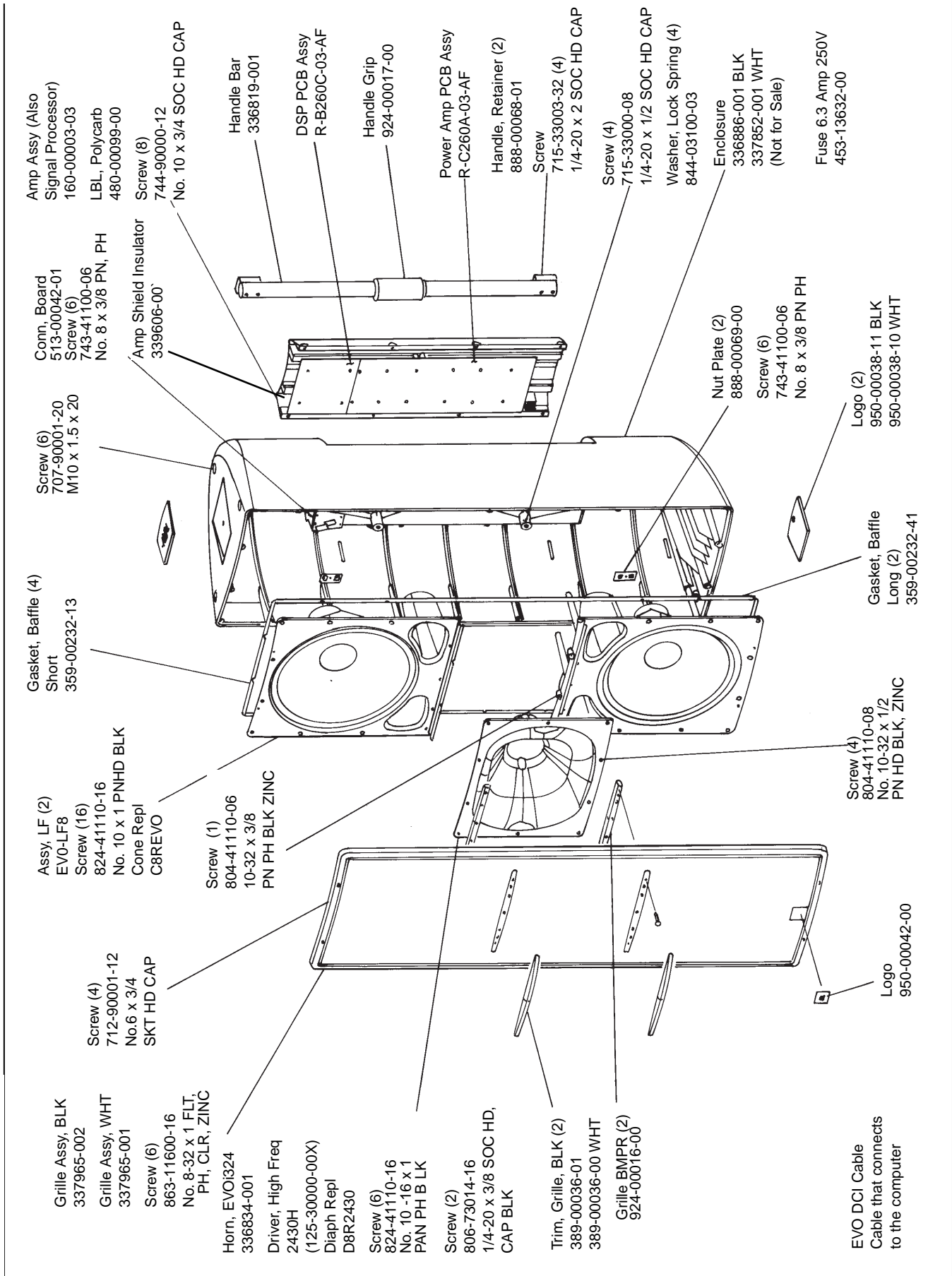
WARRANTY INFORMATION:

- Refer to Warranty Statement packed with each product.

EVOi324/WH

COMPONENT EXPLODED VIEW

EVOi324/WH



- Grille Assy, BLK
337965-002
- Grille Assy, WHT
337965-001
- Screw (6)
863-11600-16
No. 8-32 x 1 FLT,
PH, CLR, ZINC
- Horn, EVOi324
336834-001
- Driver, High Freq
2430H
(125-30000-00X)
- Diaph Repl
D8R2430
- Screw (6)
824-41110-16
No. 10 -16 x 1
PAN PH B LK
- Screw (2)
806-73014-16
1/4-20 x 3/8 SOC HD,
CAP BLK
- Trim, Grille, BLK (2)
389-00036-01
- 389-00036-00 WHT
- Grille Bmpr (2)
924-00016-00
- EVO DCI Cable
Cable that connects
to the computer
- Grille Ass'y (Also
Signal Processor)
160-00003-03
- LBL, Polycarb
480-00099-00
- Screw (8)
744-90000-12
No. 10 x 3/4 SOC HD CAP
- Handle Bar
336819-001
- DSP PCB Assy
R-B260C-03-AF
- Handle Grip
924-00017-00
- Power Amp PCB Assy
R-C260A-03-AF
- Handle, Retainer (2)
888-00068-01
- Screw
715-33003-32 (4)
1/4-20 x 2 SOC HD CAP
- Screw (4)
715-33000-08
1/4-20 x 1/2 SOC HD CAP
- Washer, Lock Spring (4)
844-03100-03
- Enclosure
336886-001 BLK
337852-001 WHT
(Not for Sale)
- Fuse 6.3 Amp 250V
453-13632-00
- Conn. Board
513-00042-01
- Screw (6)
743-41100-06
No. 8 x 3/8 PN, PH
- Amp Shield Insulator
339606-00
- Screw (6)
707-90001-20
M10 x 1.5 x 20
- Gasket, Baffle (4)
Short
359-00232-13
- Assy, LF (2)
EVO-LF8
- Screw (16)
824-41110-16
No. 10 x 1 PNHD BLK
- Cone Repl
C8REVO
- Screw (1)
804-41110-06
10-32 x 3/8
PN PH BLK ZINC
- Nut Plate (2)
888-00069-00
- Screw (6)
743-41100-06
No. 8 x 3/8 PN PH
- Logo (2)
950-00038-11 BLK
950-00038-10 WHT
- Gasket, Baffle
Long (2)
359-00232-41
- Screw (4)
804-41110-08
No. 10-32 x 1/2
PN HD BLK, ZINC
- Logo
950-00042-00

EVOi324/WH

PACKAGE

Warranty 59660
Owners Manual
981-00057-00
Tech Note Sheet
980-00036-00

Hardware Kit
336820-001
(includes:
1 ea. 980-0003-00 Instruction sheet
3 ea. 846-73315-03 Washer
3 ea 888-00049-01 Eyebolt nickle Pltd

Cord, AC, Line, 120V
425-00000-00

Foot, Small EVOi324 (2)
924-00020-00

Foot, Large, EVOi324
924-00021-00

Washer, M10
846-73315-03

Bag, Ziplock
315953-001

Filler, Front (2)
991-00248-00

Filler, Sides (2)
991-00247-00

Filler, Top
and Bottom (2)
991-00246-00

Bag (2)
322591-001

Filler, Top
and Bottom (2)
991-00245-00

Carton
990-00227-00

EVOi324/WH

