Features

• Extremely approachable EAWmosaic™ iOS app delivers system prediction, control and monitoring from any location in the venue.

• Proven EAW acoustical design and DSP including Focusing™ and DynO™ provides a pristine impulse response at all output levels.

• Four pre-defined voicings provide a variety of tonal starting points.

• Integrated Dante™ networking (with loop-thru) on all models including Analog redundancy capability.

Applications

• House of Worship

• Theatres, Auditoria and Performing Arts Centers

• Live Music Clubs

• Corporate AV Houses

• Live Production/Regional Rental Houses

• Dry Hire

Description

Designed to streamline setup and deliver maximum results in minimum time, RADIUS couples unique and intelligent features with EAW's signature acoustical design to deliver solutions for rental firms and system integrators. The RSX126 features onboard bi-amplified electronics (500W per channel) featuring signature EAW DSP including Focusing and DynO for pristine impulse response. MK inspired constant directivity horn offers 60°x45° coverage and is rotatable for flexibility. EAWmosaic™ app provides total system optimization from anywhere in the venue, plus intuitive room design and prediction in a single, comprehensive application. With the proven sonic performance of EAW's acoustic design and DSP mastery plus full Dante integration across the line, RADIUS delivers an intelligent and flexible system to fit any budget.

2-WAY SELF-POWERED LOUDSPEAKER 60° × 45°

Configuration

Subsystem

	Transducer	Loading
LF	1 x 12 in cone, 3 in voice coil	Vented
HF	1 x 1 in exit, 1.7 in voice coil compression driver	Horn-loaded

Operating Mode

	Amplifier Channels	Signal Processing
Bi-amp	LF, HF	DSP w/EAW Focusing™ and DynO™

Acoustical Performance

Operating Range

	59 Hz to 20 kHz

Nominal Beamwidth

	Horizontal 60°	Vertical 45°

Calculated Axial Output Limit (whole space SPL)

	Average	Peak
LF/HF	132 dB	138 dB

Electrical Performance

Input

Type	Electronically balanced
Max Input Level	21dBu
Impedance	20 kOhm (balanced)
Wiring	XLRF, Pin 1 chassis, pin 2 +, pin 3 -
	Separate loop-thru XLRM (for analog signal only)

Input Selection | Analog, Dante

Amplifiers & Processing

	LF	HF
Type	Modified Class D	Modified Class D
Maximum Output	500W	500W
Driver Protection	Integral DSP limiting	Integral DSP limiting

AC Mains (nominal)

Connector	Neutrik PowerCon®	
Input	100 V to 240 V	
Frequency	50 Hz to 60 Hz	
Power Consumption	Idle	22 W
	Peak Draw	175 W

Controls/Communication

Connections	2x Neutrik® etherCON™, RJ-45
Protocols	Ethernet/Dante
Software	EAWmosaic™ (available on the App Store)
Indicators	LCD Screen on amplifier panel for UI, Logo LED (User-definable behavior)
User Controls	Push-button Rotary Encoder

Weight | 58.0 lbs/26.3 kg

Dimensions | 27x16.3x16.5 in / 683x414x419 mm

Ordering Data

Description	Part Number
EAW RSX126 BLACK	2047553-90

Optional Accessories

|	
ACCESSORY RSX12X WALL MOUNT BRACKET	2047373
EAW M10X37mm FORGED SHOULDER EYEBOLT KIT	0028272
EAW ACC WEATHER PROTECTION SHIELD VERT BLK	2047682
EAW COVER TRANSPORT RSX12X	2047360-07

Enclosure

Material Exterior-grade hardwood plywood
Finish Weather-resistant textured RoadCoat™
Grille Pre-treated, powder-coated perforated steel

NOTE: This drawing has been reduced. Do not scale.

RSX126

BACK

AMPLIFIER

23.74 [603.0]

RIGHT SIDE
DIMENSIONS APPLY TO BOTH SIDES

HANDLE

7.85 [199.3] (PI ANGLE)
7.83 [198.8] (HANDLE)

12.38 [314.5]

23.74 [603.0]
27.17 [690.0]

NOTES:
1. SYMBOL ◗ INDICATES CENTER OF BALANCE.
2. SYMBOL ◯ INDICATES MOUNTING POINT, M10 THREADED HOLE (PI ANGLE).
3. SYMBOL ◯ INDICATES RUBBER FOOT.
4. WEIGHT APPROX. 58 lb [26.3 kg].
5. SHIPPING WEIGHT APPROX. 66 lb [30 kg].

TOP

1.69 [43.0]
16.50 [419.0]
6.93 [175.9]
10.63 [270.0]
10.47 [266.0]
8.75 [222.3]
20°

FRONT
GRILLE NOT SHOWN FOR CLARITY

26.89 [683.0]
16.30 [414.0]
13.52 [343.4]
10.47 [266.0]
6.93 [175.9] (PI ANGLE)

BOTTOM
TOP HAT

13.82 [351.0]
8.58 [218.0] (TOP HAT)
1.18 [30.0]
8.65 [219.7]
1.69 [43.0]

REV	CHANGE NUMBER	DATE
A	ECOWH11312	6/30/16

THIRD ANGLE PROJECTION

www.eaw.com

TITLE: DWG CUSTOMER EAW RSX126

A

SHEET 1 OF 1

DRAWING NUMBER: 2047555-CD

SCALE: 0.075

REVISION: A

PRO ENGINEER

Eastern Acoustic Works │ One Main Street │ Whitinsville, MA 01588 USA │ tel 800 992 5013 / +1 508 234 6158 │ fax 508 234 8251 │ www.eaw.com

SYSTEM SPECIFICATIONS STANDARD

Performance Data
See *NOTES GRAPHIC DATA* for details

Frequency Response: Processed
LF = green, HF = black, Complete = blue
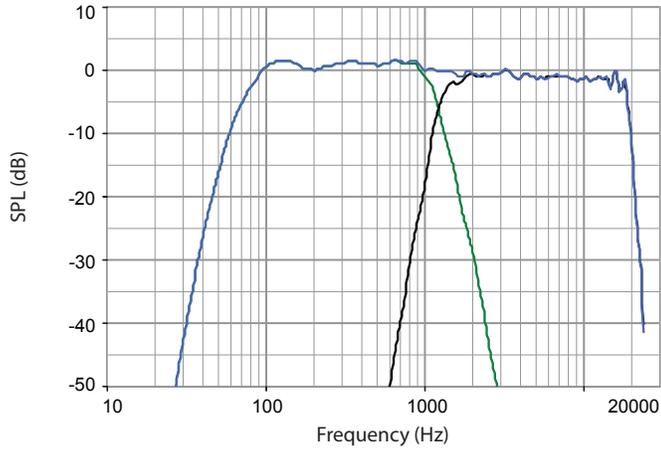
### Frequency Response: Voicings
Sapphire = green, White = orange, Grey = black, Blue = blue
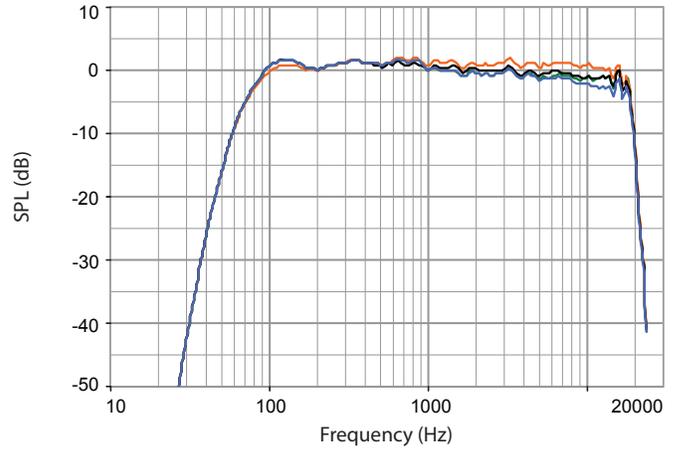

Phase Linearity
Complete = blue
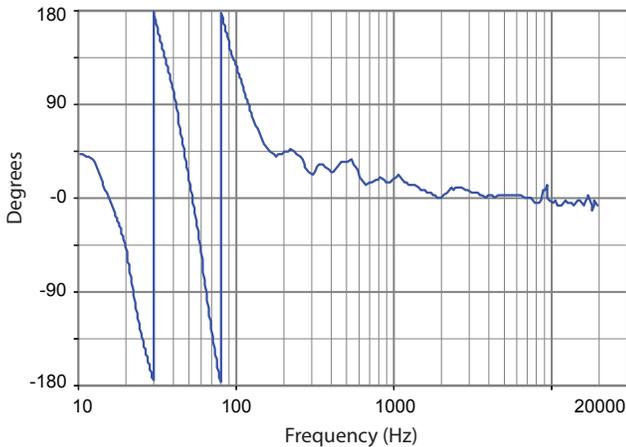
Beamwidth
Horizontal = orange   Vertical = black

SYSTEM SPECIFICATIONS STANDARD
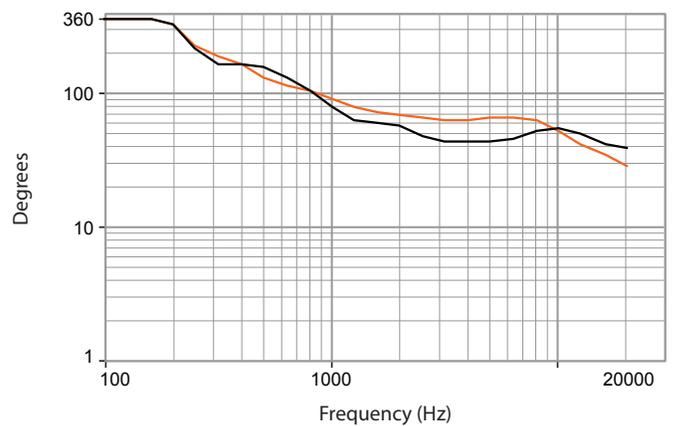
Horizontal Polar Data

See *NOTES GRAPHIC DATA* for details

Legend (top left):
- 100Hz
- 125Hz
- 160Hz
- 200Hz

Legend (top right):
- 1600Hz
- 2000Hz
- 2500Hz
- 3150Hz

Legend (middle left):
- 250Hz
- 315Hz
- 400Hz
- 500Hz

Legend (middle right):
- 4000Hz
- 5000Hz
- 6300Hz
- 8000Hz

Legend (bottom left):
- 630Hz
- 800Hz
- 1000Hz
- 1250Hz

Legend (bottom right):
- 10000Hz
- 12500Hz
- 16000Hz

S SYSTEM SPECIFICATIONS STANDARD

EAW
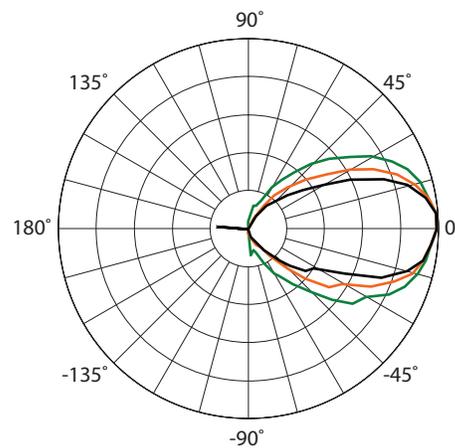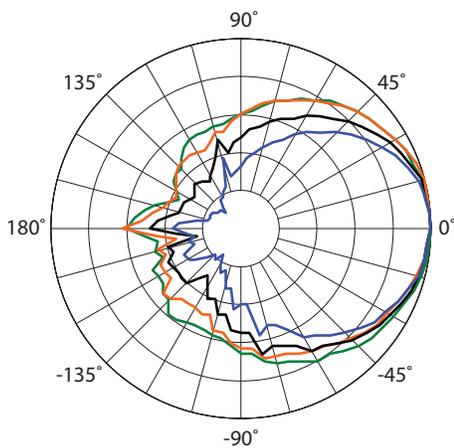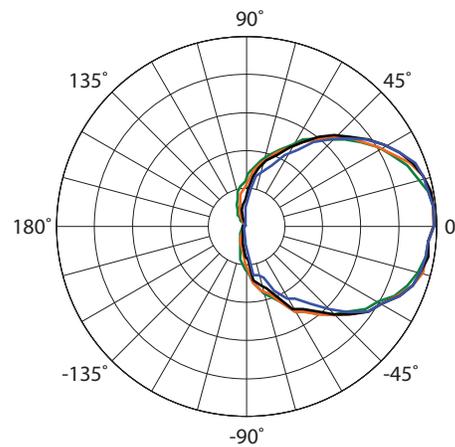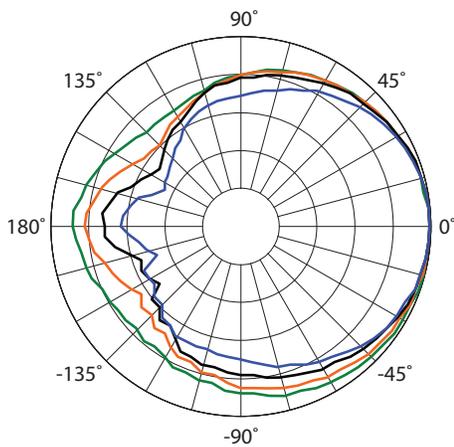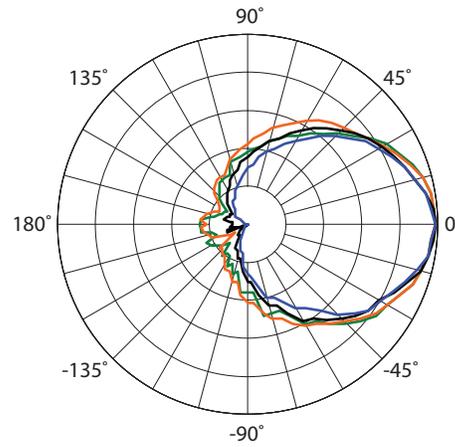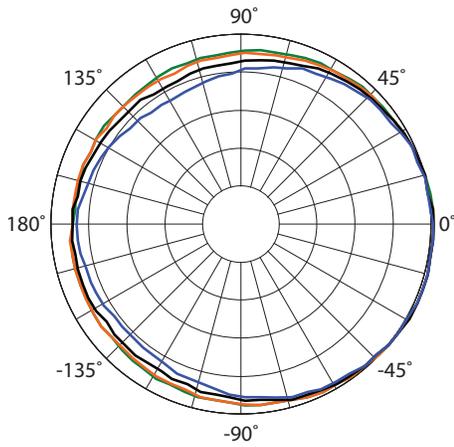
Vertical Polar Data
See *NOTES GRAPHIC DATA* for details
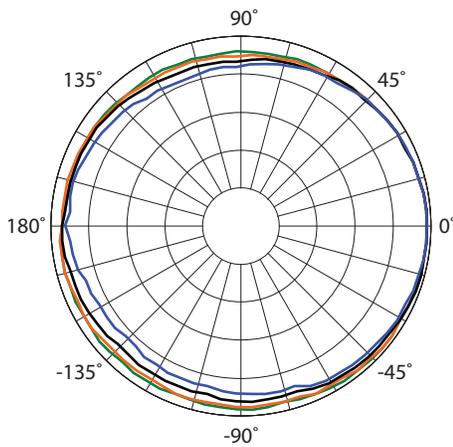
100Hz
125Hz
160Hz
200Hz
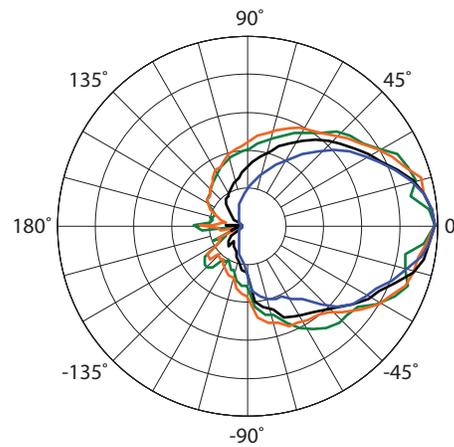
1600Hz
2000Hz
2500Hz
3150Hz
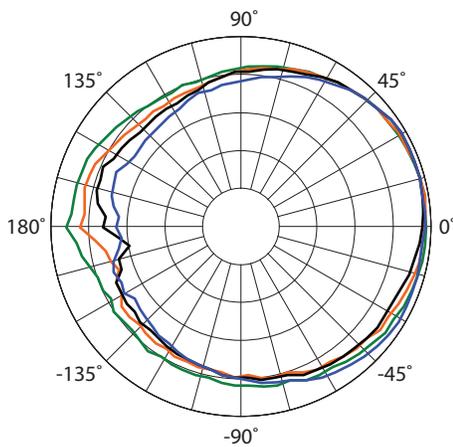
250Hz
315Hz
400Hz
500Hz
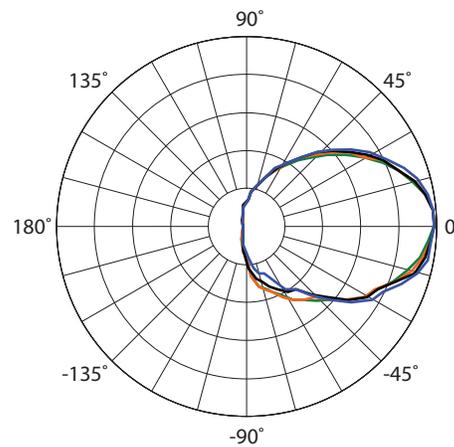
4000Hz
5000Hz
6300Hz
8000Hz
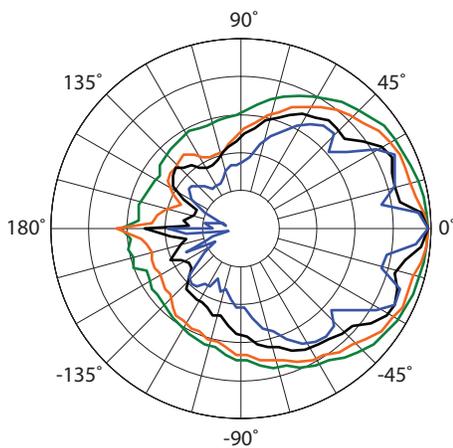
630Hz
800Hz
1000Hz
1250Hz

10000Hz
12500Hz
16000Hz

S SYSTEM SPECIFICATIONS STANDARD

ZEAW®

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EAW products are continually improved. All specifications are therefore subject to change without notice.   *Part Number: RD0967 Rev A01*   *AUG2016*
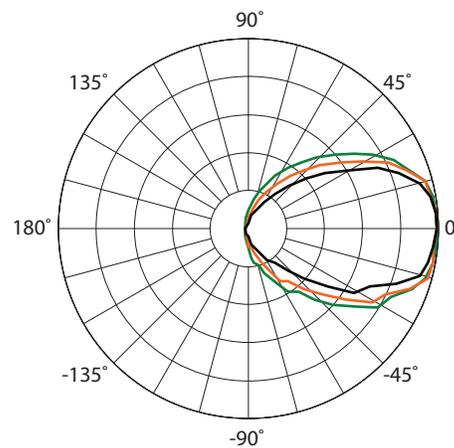
Input Panel

Signal Diagram
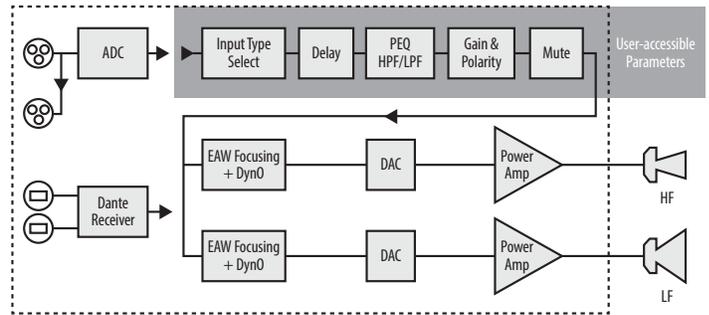
Legend

HPF	High Pass Filter for crossover –or– Recommended High Pass Filter
LPF	Low Pass Filter for crossover
LF/MF/HF	Low Frequency / Mid Frequency / High Frequency
AMP	User Supplied Power Amplifier –or– Integral Amplifier for NT products
XVR	Passive LPFs, HPFs, and EQ integral to the loudspeaker
EAW Focusing	Digital Signal Processor capable of implementing EAW Focusing
EAW DynO	Digital Signal Processor capable of implementing EAW DynO processing

Notes

TABULAR DATA

1. **Measurement/Data Processing Systems:** Primary – FChart: proprietary EAW software; Secondary – Brüel & Kjær 2012.
2. **Microphone Systems:** Earthworks M30; Brüel & Kjær 4133
3. **Measurements:** Dual channel FFT; length: 32 768 samples; sample rate: 48 kHz; logarithmic sine wave sweep.
4. **Measurement System Qualification** (includes all uncertainties)**:** SPL: accuracy +/-0.2 dB @ 1 kHz, precision +/-0.5 dB 20 Hz to 20 kHz, resolution 0.05 dB; Frequency: accuracy +/-1 %, precision +/-0.1 Hz, resolution the larger of 1.5 Hz or 1/48 octave; Time: accuracy +/-10.4 µs, precision +/-0.5 µs, resolution 10.4 µs; Angular: accuracy +/-1°, precision +/-0.5°, resolution 0.5°.
5. **Environment:** Measurements time-windowed and processed to eliminate room effects, approximating an anechoic environment. Data processed as anechoic or fractional space, as noted.
6. **Measurement Distance:** 7.46 m. Acoustic responses represent complex summation of the subsystems at 20 m. SPL is referenced to other distances using the Inverse Square Law.
7. **Enclosure Orientation:** For beamwidth and polar specifications, as shown in Mechanical Specification drawing.
8. **Volts:** Measured rms value of the test signal.
9. **Watts:** Per audio industry practice, "loudspeaker watts" are calculated as voltage squared divided by rated nominal impedance. Thus, these are not True Watt units of energy as defined by International Standard.
10. **SPL:** (Sound Pressure Level) Equivalent to the average level of a signal referenced to 0 dB SPL = 20 microPascals.
11. **Subsystem:** This lists the transducer(s) and their acoustic loading for each passband. Sub = Subwoofer, LF = Low Frequency, MF = Mid Frequency, HF = High Frequency.
12. **Operating Mode:** User selectable configurations. Between system elements, a comma (,) = separate amplifier channels; a slash (/) = single amplifier channel. DSP = Digital Signal Processor.
    IMPORTANT: To achieve the specified performance, the listed external signal processing must be used with EAW-provided settings.
13. **Operating Range:** Range where the processed Frequency Response stays within -10 dB SPL of the power averaged SPL within this range; measured on the geometric axis. Narrow band dips are excepted.
14. **Nominal Beamwidth:** Design angle for the -6 dB SPL points, referenced to 0 dB SPL as the highest level.
15. **Axial Sensitivity:** Power averaged SPL over the Operating Range with an input voltage that would produce 1 W at the nominal impedance; measured with no external processing on the geometric axis, referenced to 1 m.
16. **Nominal Impedance:** Selected 4, 8, or 16 ohm resistance such that the minimum impedance point is no more than 20% below this resistance over the Operating Range.
17. **Accelerated Life Test:** Maximum test input voltage applied with an EIA-426B defined spectrum; measured with recommended signal processing and Recommended Protection Filter.
18. **Calculated Axial Output Limit:** Highest average and peak SPLs possible during the Accelerated Life Test. The Peak SPL represents the 2:1 (6 dB) crest factor of the Life Test signal.
19. **High Pass Filter:** This helps protect the loudspeaker from excessive input signal levels at frequencies below the Operating Range.

GRAPHIC DATA

1. **Resolution:** To remove insignificant fine details, 1/12 octave cepstral smoothing was applied to acoustic frequency responses and 1/3 octave cepstral smoothing was applied to the beamwidth and impedance data. Other graphs are plotted using raw data.
2. **Frequency Responses:** Variation in acoustic output level with frequency for a constant input signal. Processed: normalized to 0 dB SPL. Unprocessed inputs: 2 V (4 ohm nominal impedance), 2.83 V (8 ohm nominal impedance), or 4 V (16 ohm nominal impedance) referenced to a distance of 1 m.
3. **Processor Response:** The variation in output level with frequency for a constant input signal of 0.775 V = 0 dB reference.
4. **Beamwidth:** Average angle for each 1/3 octave frequency band where, starting from the rear of the loudspeaker, the output first reaches -6 dB SPL referenced to 0 dB SPL as the highest level. This method means the output may drop below -6 dB SPL within the beamwidth angle.
5. **Impedance:** Variation in impedance magnitude, in ohms, with frequency without regard to voltage/current phase. This means the impedance values may not be used to calculate True Watts (see 9 above).
6. **Polar Data:** Horizontal and vertical polar responses for each 1/3 octave frequency band 100 Hz to 16 kHz or Operating Range.