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#### A: 9300 S.W. Gemini Drive Beaverton, OR 97008 USA

### FEATURES

Zoom Certified

**Operating Mode** 

**Operating Environment** 

CEILING MOUNT LOUDSPEAKER

**TWO-WAY 4.5-INCH HIGH EFFICIENCY** 

- High intelligibility with exceptional uniform coverage
- Fast installation with SpringLock<sup>™</sup> mounting clamps
- Consistent, wide dispersion up to 16 kHz
- Attractive edgeless magnetic grille design
- · Conduit knock-outs on the input cover meet Chicago plenum air space requirements

Passive with DSP

Indoor

#### **TECHNICAL SPECIFICATIONS<sup>1</sup>**

Operating Range (-10dB) <sup>2</sup>	85 Hz to 19 kHz		
Nominal Beamwidth (H x V)	165°, conical		
Transducers	LF 1 x 4.5" (114 mm) HF 1 x 0.75" (19 mm) exit compression driver		
Sensitivity <sup>3</sup>	92 dB (2.83 V) 92 dB (1 W at rated impedance 8		
Nominal Continuous Power Handling⁴	Passive	22 V (60 W @ 8 Ω)	
Nominal Maximum SPL⁵	Passive	<b>Peak</b> 114 dB	<b>Continuous</b> 108 dB
Rated Continuous Voltage <sup>6</sup>	Passive	17.8 V (25	dBV)
Rated Maximum SPL <sup>7</sup> (Processed)	Passive	Peak 118 dB	<b>Continuous</b> 106 dB
Autoformer	<b>70 V</b> : 30 W, 15 W, 7.5 W, 3.75 W; <b>100 V</b> : 30 W, 15 W, 7.5 W		
Recommended Amplifiers	Passive	60 W - 120 W into 8 Ω, (22 V - 31 V)	
Crossover Frequency	2 kHz		
Required Accessory	70 Hz, 12 dB/oct. high pass filter		
PHYSICAL			
Input Connection	4-position Euroblock connector		
Controls	Front-face wattage / low impedance selector switch		
Mounting Provisions	2 SpringLock mounting clamps with 2.5-inch grip range		
Certifications	ETL listed to comply with UL1480A, UL2043 and CSA62368-1 Suitable for use in air handling spaces per NFPA 70 and NFPA 90		
Dimensions W x D	258 mm x 176 mm (10.16" x 6.95")		
Weight	3.12 kg (6.9 lbs)		
Finish	Refer to the Technical Drawing (page 3)		
Accessories (included)	C-Ring supporting plate, tile support bridge rails, grille, paint mask, cut-out template		
Model	DX-IC4-W - loudspeaker with White grille		
OPTIONS			
Accessories	New Construction Brackets (SPA-NC300) Trim Rings (SPA-TR300) Black Grilles (SPA-GRB200) High Humidity Grilles (SPA-GHH200)		

Biamp strives to improve its products on a continual basis. Specifications are therefore subject to change without notice.



#### .\_\_\_\_\_

**DATA SHEET** 

DX-IC4

**DESONO**<sup>TM</sup>

#### **APPLICATIONS**

Conference Rooms · Houses of Worship Theaters · Sports Facilities · Health Clubs Convention Centers · Auditoriums Malls · Airports

#### DESCRIPTION

The smallest member of the Desono's DX ceiling loudspeakers, the DX-IC4 possesses the advanced features of its larger siblings with performance that belies its small size. Suitable for paging, background music, or to augment larger systems, the DX-IC4 is a versatile performer. It installs quickly and provides exceptionally uniform coverage with excellent sonic properties.

Uniform voicing among the Desono DX product family makes for an easy match to the other models in the series, while a host of design innovations set the DX-IC4 apart from other products in its size and price range. Featuring genuine coaxial design with separate magnets for the LF and HF drivers, the DX-IC4 exhibits reduced distortion and industry-leading sensitivity permitting 3 dB to 6 dB greater output level, while requiring half the amplification power of competing products.

Patent-pending SpringLock™ clamps allow singlehanded placement to speed installation and reduce labor time. The SpringLock spring-loaded clamps support the back can on the included tile rails and snap-on C-ring, so that the installer can just tighten the clamps, securing it in the ceiling.

A magnetic grille and front-face wattage selector switch enables quick adjustment of 70 V/100 V tap levels. A variety of installation accessories are available to accommodate different ceiling materials. Typical applications include paging, background music, and to augment larger models in many venues.

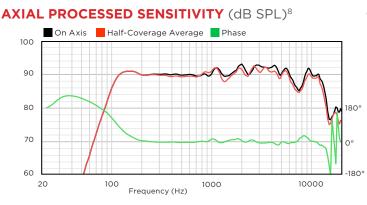
: +1 503.641.7287

48" Tile Rails (SPA-RAIL48)

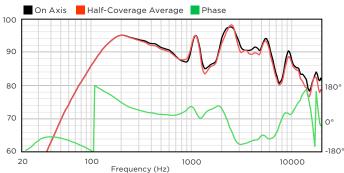


DESONO™

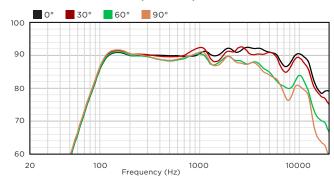
#### DX-IC4 TWO-WAY 4.5-INCH HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER



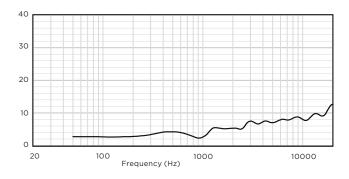
#### AXIAL SENSITIVITY (dB SPL)8



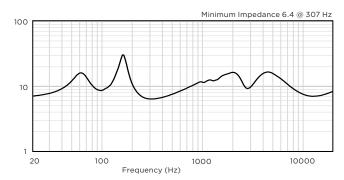
#### OFF-AXIS RESPONSE (dB SPL)9



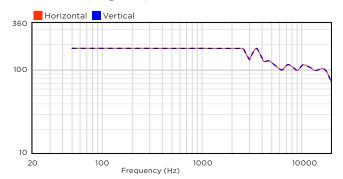
#### **DIRECTIVITY INDEX** (dB)<sup>10</sup>



#### **IMPEDANCE** $(\Omega)$



#### **BEAMWIDTH** (degrees)<sup>11</sup>



# TECHNICAL DRAWING / DIMENSIONS / FINISH

W (bezel diameter) x D 258 mm x 176 mm (10.16" x 6.95")

Cutout Diameter 222 mm (8.74")

**Unit Weight** 3.12 kg (6.9 lbs)

Shipping Weight (shipped in pairs) 10.4 kg (22.93 lbs)

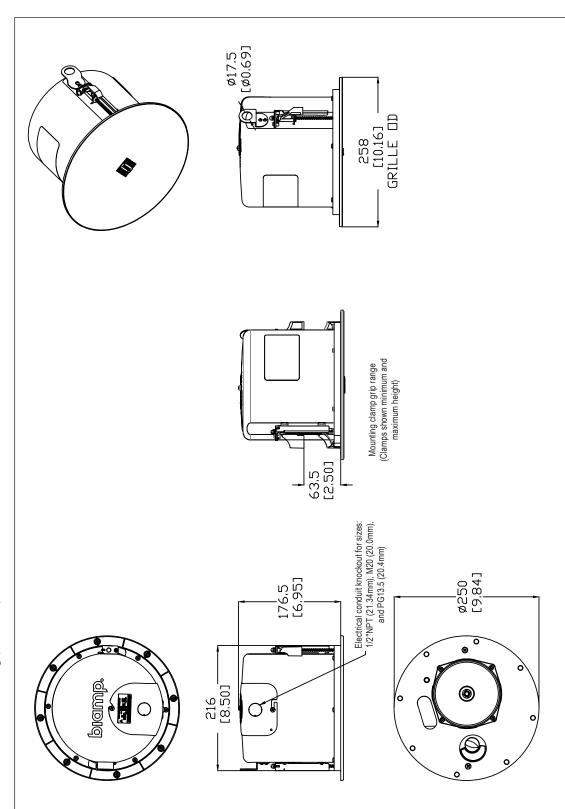
**Grille:** Powder-coated

Powder-coated perforated steel backed with colormatched woven fabric with safety line. White finish.

**DESONO**<sup>TM</sup>

DX-IC4

Enclosure / Finish Back Can: Black, Matte finish Steel Face: UL 94V-0 rated ABS plastic, paintable Black finish.

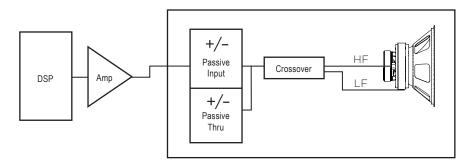


#### TWO-WAY 4.5-INCH HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER

**DESONO**<sup>TM</sup>

#### DX-IC4 TWO-WAY 4.5-INCH HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER

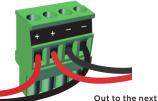
#### **CONNECTION DIAGRAMS**



Single amp



Tap Switch (on face)



In from the amplifier or previous loudspeaker, terminals 1[+] & 4[-] loudspeaker, terminals 2[+] & 3[-]

Input

#### NOTES

- 1. PERFORMANCE SPECIFICATIONS All measurements are performed using a timewindowed impulse response to eliminate reflections, approximating an anechoic environment, at a distance of at least 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP using settings provided by Biamp is required to achieve the specified performance; further performance gains can be realized using the FIR loudspeaker optimization presets available in Biamp's Community Amplified Loudspeaker Controllers (ALC SERIES).
- OPERATING RANGE The frequency range over which the on-axis equalized/processed response remains within 10 dB of the rated sensitivity, in accordance with IEC 60268-5.
- **3.** SENSITIVITY The broadband SPL of the loudspeaker when pink noise is applied (band limited to the loudspeaker's Operating Range) at an input voltage of 2.83 V, in accordance with IEC 60268-5. Also listed for a voltage that would produce 1 watt into the nominal impedance. Measured in whole space with no external processing applied, except where indicated.
- 4. NOMINAL CONTINUOUS POWER HANDLING The maximum continuous nominal input voltage at the rated impedance that the system can withstand, without damage, for a period of 2 hours using an IEC 60268-1 defined spectrum with recommended signal processing and protection filters.

- 5. NOMINAL MAXIMUM SPL The SPL produced when an IEC 60268-1 signal is applied, at the nominal input voltage, to the equalized/processed loudspeaker system. Referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6 dB) crest factor of the IEC 60268-1 test signal.
- 6. RATED CONTINUOUS VOLTAGE The maximum continuous rated input voltage for the system that results in no more than a 3 dB change in the system's response during operation.
- 7. RATED MAXIMUM SPL The SPL produced when a typical program material signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its rated continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 4:1 (12 dB) crest factor of the program signal.
- 8. AXIAL (PROCESSED) SENSITIVITY The variation in acoustic output level with frequency for a swept-sine measurement signal. The Processed measurement uses the recommended signal processing for the loudspeaker system. The other sensitivity measurements use no additional external processing. All data are referenced to 1 meter. The on-axis magnitude and phase responses, as well as the average magnitude response, calculated over one-half of the nominal coverage angles, are shown. The responses have 1/6 octave smoothing applied.

- 9. HORIZONTAL / VERTICAL OFF-AXIS RESPONSES The loudspeaker's magnitude response at various off-axis angles using the recommended signal processing in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.
- **10.** DIRECTIVITY INDEX The ratio of the on-axis SPL to the mean SPL at the same distance for all points within the measurement sphere for each given frequency; expressed in dB. The response has 1/3 octave smoothing applied.
- **11. BEAMWIDTH** The included angle between the -6 dB points in the polar response of the loudspeaker when driven in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.

Data presented on this data sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: www.biamp.com



V: www.biamp.com

# DX-IC4LP



#### **APPLICATIONS**

Conference Rooms · Houses of Worship Theaters · Sports Facilities · Health Clubs Convention Centers · Auditoriums Malls · Airports

#### DESCRIPTION

Only 3.81" (97 mm) in depth, the DX-IC4LP solves space problems that competing products cannot. Suitable for paging, background music, or to augment larger systems, the DX-IC4LP is a versatile performer. It installs quickly and provides exceptionally uniform coverage with excellent sonic properties.

Uniform voicing among the Desono DX product family makes for an easy match to the other models in the series, while a host of design innovations set the DX family of loudspeakers apart from other products in its size and price range. Featuring genuine coaxial design with separate magnets for the LF and HF drivers, the DX-IC4LP exhibits reduced distortion and industry-leading sensitivity permitting 3 dB to 6 dB greater output level, while requiring half the amplification power of competing products.

Patent-pending SpringLock™ clamps allow singlehanded placement to speed installation and reduce labor time. The SpringLock spring-loaded clamps support the back can on the included tile rails and snap-on C-ring, so that the installer can just tighten the clamps, securing it in the ceiling.

A magnetic grille and front-face wattage selector switch enables quick adjustment of 70 V/100 V tap levels. A variety of installation accessories are available to accommodate different ceiling materials. Typical applications include paging, background music, and to augment larger models in many venues.

#### TWO-WAY 4.5" LOW PROFILE HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER

#### **FEATURES**

- · High intelligibility with exceptional uniform coverage
- Fast installation with SpringLock<sup>™</sup> mounting clamps
- Consistent, wide dispersion up to 16 kHz
- Shallow depth to fit into confined ceiling spaces
- · Conduit knock-outs on the input cover meet Chicago plenum air space requirements

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#### **TECHNICAL SPECIFICATIONS<sup>1</sup>**

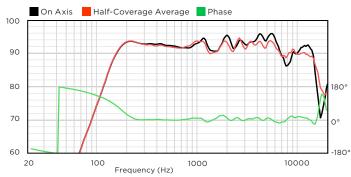
TECHNICAE SPECIFICAT					
Operating Mode	Passive with	Passive with DSP			
Operating Environment	Indoor				
Operating Range (-10dB) <sup>2</sup>	103 Hz to 19.5 kHz				
Nominal Beamwidth (H x V)	165°, conical				
Transducers	LF 1 x 4.5" (114 mm) HF 1 x 0.75" (19 mm) exit compression driver				
Sensitivity <sup>3</sup>	91 dB (2.83 V) 91 dB (1 W at rated impedance				
Nominal Continuous Power Handling⁴	Passive	22 V (60 W	'@ 8 Ω)		
Nominal Maximum SPL <sup>s</sup>	Passive	<b>Peak</b> 114 dB	<b>Continuous</b> 108 dB		
Rated Continuous Voltage <sup>6</sup>	Passive	17.8 V (25 d	IBV)		
Rated Maximum SPL <sup>7</sup> (Processed)	Passive	<b>Peak</b> 118 dB	<b>Continuous</b> 106 dB		
Autoformer	<b>70 V</b> : 30 W, 15 W, 7.5 W, 3.75 W; <b>100 V</b> : 30 W, 15 W, 7.5 W				
Recommended Amplifiers	Passive	e 60 W - 120 W into 8 Ω, (22 V - 31 V)			
Crossover Frequency	2 kHz	2 kHz			
Required Accessory	135 Hz, 12 dB/oct. high pass filter				
PHYSICAL					
Input Connection	4-position Euroblock connector				
Controls	Front-face wattage / low impedance selector switch				
Mounting Provisions	2 SpringLock mounting clamps with 1.3-inch grip range				
Certifications	ETL listed to comply with UL1480A, UL2043 and CSA62368-1 Suitable for use in air handling spaces per NFPA 70 and NFPA 90				
Dimensions W x D	258 mm x 97 mm (10.16 x 3.81")				
Weight	2.66 kg (5.8 lbs)				
Finish	Refer to the Technical Drawing (page 3)				
Accessories (included)	C-Ring supporting plate, tile support bridge rails, grille, paint mask, cut-out template				
Model	DX-IC4LP-W - loudspeaker with White grille				
OPTIONS					
Accessories	New Construction Brackets (SPA-NC300) Trim Rings (SPA-TR300) Black Grilles (SPA-GRB200) High Humidity Grilles (SPA-GHH200) 48″ Tile Rails (SPA-RAIL48)				



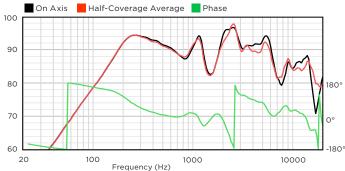
## DESONO™

# DX-IC4LP TWO-WAY 4.5" LOW PROFILE HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER

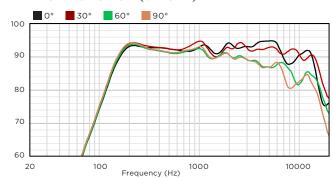
#### FREQUENCY RESPONSE WITH PROCESSING (SMOOTHED) (dB SPL)<sup>8</sup>



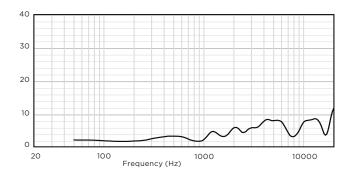
#### **SENSITIVITY (SMOOTHED)** (dB SPL)<sup>3</sup>



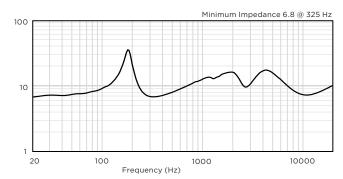
#### OFF-AXIS RESPONSE (dB SPL)9



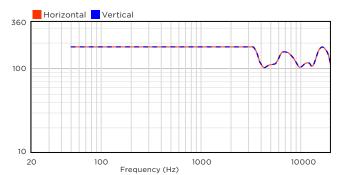
#### **DIRECTIVITY INDEX** (dB)<sup>10</sup>



#### **IMPEDANCE** $(\Omega)$



#### **BEAMWIDTH** (degrees)<sup>11</sup>



# TECHNICAL DRAWING / DIMENSIONS / FINISH

W (bezel diameter) x D 258 mm x 97 mm (10.16" x 3.81")

Cutout Diameter 222 mm (8.74")

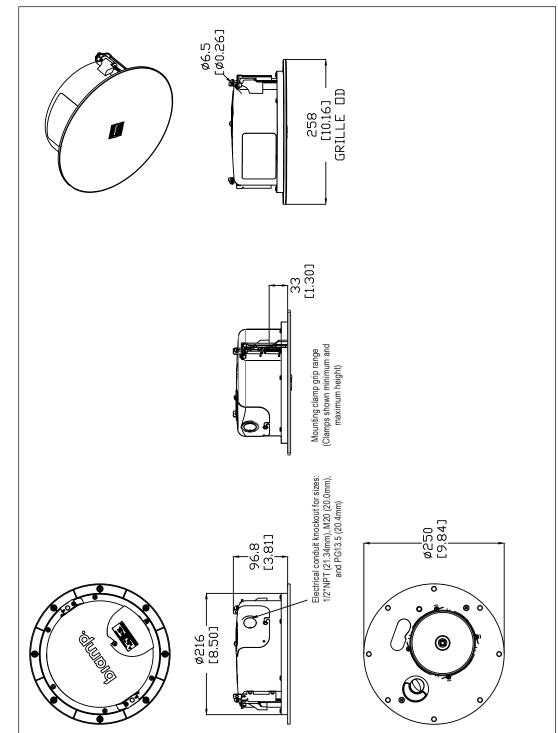
Unit Weight 2.66 kg (5.8 lbs) Shinning Weight

Shipping Weight (shipped in pairs) 9.2 kg (20.23 lbs)

**Grille:** Powder-coated

Powder-coated perforated steel backed with colormatched woven fabric with safety line. White finish.

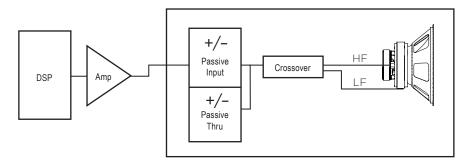
Enclosure / Finish Back Can: Black, Matte finish Steel Face: UL 94V-0 rated ABS plastic, paintable Black finish.



#### DESONO™ DX-IC4LP TWO-WAY 4.5" LOW PROFILE HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER

### DESONO™ DX-IC4LP TWO-WAY 4.5" LOW PROFILE HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER

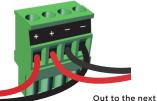
#### **CONNECTION DIAGRAMS**



Single amp



Tap Switch (on face)



In from the amplifier or previous loudspeaker, terminals 1[+] & 4[-] Out to the next loudspeaker, terminals 2[+] & 3[-]

Input

#### NOTES

- 1. PERFORMANCE SPECIFICATIONS All measurements are performed using a timewindowed impulse response to eliminate reflections, approximating an anechoic environment, at a distance of at least 6 m. All acoustic specifications are rounded to the nearest whole number. An external DSP using settings provided by Biamp is required to achieve the specified performance; further performance gains can be realized using the FIR loudspeaker optimization presets available in Biamp's Community Amplified Loudspeaker Controllers (ALC SERIES).
- 2. OPERATING RANGE The frequency range over which the on-axis equalized/processed response remains within 10 dB of the rated sensitivity, in accordance with IEC 60268-5.
- **3.** SENSITIVITY The broadband SPL of the loudspeaker when pink noise is applied (band limited to the loudspeaker's Operating Range) at an input voltage of 2.83 V, in accordance with IEC 60268-5. Also listed for a voltage that would produce 1 watt into the rated impedance. Measured in whole space with no external processing applied, except where indicated. Shown graphically as the response to a 2.83 V swept-sine input signal referenced to 1 m.
- 4. NOMINAL CONTINUOUS POWER HANDLING The maximum continuous nominal input voltage at the rated impedance that the system can withstand, without damage, for a period of 2 hours using an IEC 60268-1 defined spectrum with recommended signal processing and protection filters.

- 5. NOMINAL MAXIMUM SPL The SPL produced when an IEC 60268-1 signal is applied, at the maximum continuous nominal input voltage, to the equalized/ processed loudspeaker system. Referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6 dB) crest factor of the IEC 60268-1 test signal.
- **6.** RATED CONTINUOUS VOLTAGE The maximum continuous rated input voltage for the system that results in no more than a 3 dB change in the system's response during operation using an IEC 60268-1 defined spectrum with recommended signal processing and protection filters.
- 7. RATED MAXIMUM SPL The SPL produced when a typical program material signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its rated continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 4:1 (12 dB) crest factor of the program signal.
- 8. FREQUENCY RESPONSE WITH PROCESSING The variation in acoustic output level with frequency for a swept-sine measurement signal. The measurement uses the recommended signal processing for the loudspeaker system. All data are referenced to 1 meter. The on-axis magnitude and phase responses, as well as the average magnitude response, calculated over one-half of the nominal coverage angles, are shown. The responses have I/6 octave smoothing applied.

- 9. HORIZONTAL / VERTICAL OFF-AXIS RESPONSES The loudspeaker's magnitude response at various off-axis angles using the recommended signal processing in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.
- 10. DIRECTIVITY INDEX The ratio of the on-axis SPL to the mean SPL at the same distance for all points within the measurement sphere for each given frequency; expressed in dB. The response has 1/3 octave smoothing applied.
- **11. BEAMWIDTH** The included angle between the -6 dB points in the polar response of the loudspeaker when driven in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.

Data presented on this data sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: www.biamp.com



DX-IC6

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#### TWO-WAY 6.5-INCH HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER



#### **APPLICATIONS**

Conference Rooms · Houses of Worship Theaters · Sports Facilities · Health Clubs Convention Centers · Auditoriums Malls · Airports

#### DESCRIPTION

Available in standard white or black finish, the powerful and versatile Desono DX-IC6 provides high quality paging and musical performance suitable numerous applications where the importance of sonic quality cannot be ignored. Particularly effective when supported by the DX-IC10SUB, a DX-IC6 system is capable of meeting demanding needs at a cost usually associated with much smaller loudspeakers. It installs quickly and provides exceptionally uniform coverage with excellent sonic properties.

Uniform voicing among the Desono DX product family makes for an easy match to the other models in the series, while a host of design innovations set the DX-IC6 apart from other products in its size and price range. Featuring genuine coaxial design with separate magnets for the LF and HF drivers, the DX-IC6 exhibits reduced distortion and industry-leading sensitivity permitting 3 dB to 6 dB greater output level, while requiring half the amplification power of competing products.

Patent-pending SpringLock™ clamps allow singlehanded placement to speed installation and reduce labor time. The SpringLock spring-loaded clamps support the back can on the included tile rails and snap-on C-ring, so that the installer can just tighten the clamps, securing it in the ceiling.

A magnetic grille and front-face wattage selector switch enables quick adjustment of 70V/100V tap levels. A variety of installation accessories are available to accommodate different ceiling materials. Typical applications include paging, and background music in many venues.

#### FEATURES

- High intelligibility with exceptional uniform coverage
- Fast installation with SpringLock<sup>™</sup> mounting clamps
- Consistent, wide dispersion up to 16 kHz
- Attractive edgeless magnetic grille design
- · Conduit knock-outs on the input cover meet Chicago plenum air space requirements

#### **TECHNICAL SPECIFICATIONS<sup>1</sup>**

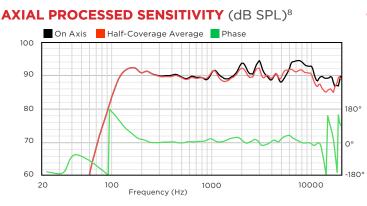
TECHNICAE SPECIFICAT				
Operating Mode	Passive with DSP			
Operating Environment	Indoor			
Operating Range (-10dB) <sup>2</sup>	90 Hz to 20 kHz			
Nominal Beamwidth (H x V)	140°, conical			
Transducers	LF 1 x 6.5" (165 mm)			
	HF 1 x 1.0" (25 mm) exit compression driver			
Sensitivity <sup>3</sup>	95 dB (2.83 )	V)	94 dB (1 W at rated impedance 6.5 $\Omega$ )	
Nominal Continuous Power Handling⁴	Passive 28 V (12		0 W @ 6.5 Ω)	
Nominal Maximum SPL⁵	Passive	<b>Peak</b> 120 dB	<b>Continuous</b> 114 dB	
Rated Continuous Voltage <sup>6</sup>	Passive	22.4 V (	27 dBV)	
Rated Maximum SPL <sup>7</sup> (Processed)	Passive	<b>Peak</b> 124 dB	<b>Continuous</b> 112 dB	
Autoformer	<b>70 V</b> : 60 W, 30 W, 15 W, 7.5 W; <b>100 V</b> : 60 W, 30 W, 15 W			
<b>Recommended Amplifiers</b>	Passive	120 W - 240 W into 8 Ω, (31 V - 44 V)		
Crossover Frequency	1.2 kHz			
Required Accessory	65 Hz, 12 dB/oct. high pass filter			
PHYSICAL				
Input Connection	4-position Euroblock connector			
Controls	Front-face wattage / low impedance selector switch			
Mounting Provisions	3 SpringLock mounting clamps with 2.5-inch grip range			
Certifications	ETL listed to comply with UL1480A, UL2043 and CSA62368-1 Suitable for use in air handling spaces per NFPA 70 and NFPA 90			
Dimensions W x D	291 mm x 171 mm (11.46" x 6.75")			
Weight	3.63 kg (8.0 lbs)			
Finish	Refer to the Technical Drawing (page 3)			
Accessories (included)	C-Ring supporting plate, tile support bridge rails, grille, paint mask, cut-out template			
Models (order by grille color)	DX-IC6-W - loudspeaker with White grille DX-IC6-B - loudspeaker with Black grille			
OPTIONS				
Accessories	New Construction Brackets (SPA-NC400) Trim Rings (SPA-TR400) High Humidity Grilles (SPA-GHH400)			

48" Tile Rails (SPA-RAIL48)

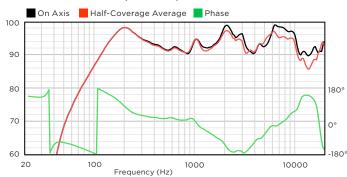


DESONO™

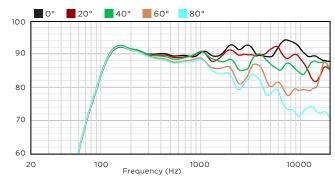
#### DX-IC6 TWO-WAY 6.5-INCH HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER



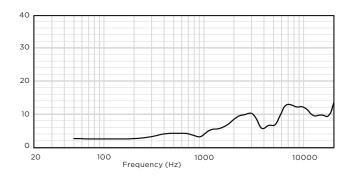
#### AXIAL SENSITIVITY (dB SPL)8



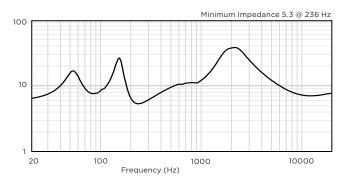
#### OFF-AXIS RESPONSE (dB SPL)9



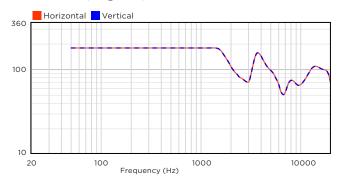
#### **DIRECTIVITY INDEX** (dB)<sup>10</sup>



#### **IMPEDANCE** $(\Omega)$



#### **BEAMWIDTH** (degrees)<sup>11</sup>



# **TECHNICAL DRAWING / DIMENSIONS / FINISH**

291 mm x 171 mm(11.46" x 6.75") W (bezel diameter) x D

260 mm (10.25") **Cutout Diameter** 

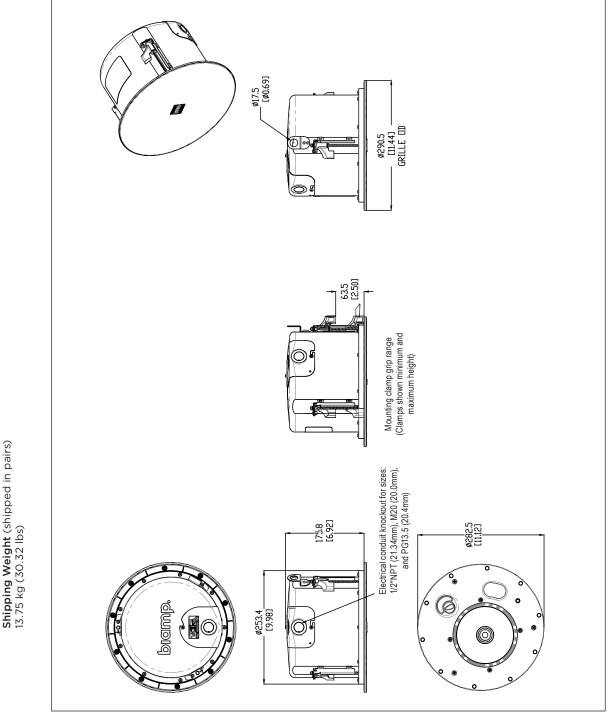
3.63 kg (8.0 lbs) Unit Weight

Grille:

Powder-coated perforated steel backed with color-matched woven fabric with safety line. White or Black finish.

Back Can: Black, Matte finish Steel Face: UL 94V-0 rated ABS plastic, paintable Black finish. Enclosure / Finish

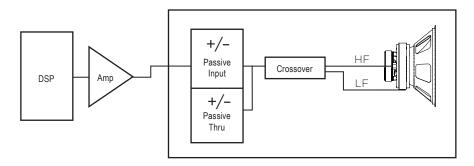




**DESONO**<sup>™</sup>

#### DX-IC6 TWO-WAY 6.5-INCH HIGH EFFICIENCY CEILING MOUNT LOUDSPEAKER

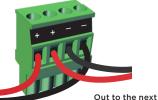
#### **CONNECTION DIAGRAMS**



Single amp



Tap Switch (on face)



In from the amplifier or previous loudspeaker, terminals 1[+] & 4[-] Out to the next loudspeaker, terminals 2[+] & 3[-]

Input

#### NOTES

- 1. PERFORMANCE SPECIFICATIONS All measurements are performed using a timewindowed impulse response to eliminate reflections, approximating an anechoic environment, at a distance of at least 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP using settings provided by Biamp is required to achieve the specified performance; further performance gains can be realized using the FIR loudspeaker optimization presets available in Biamp's Community Amplified Loudspeaker Controllers (ALC SERIES).
- OPERATING RANGE The frequency range over which the on-axis equalized/processed response remains within 10 dB of the rated sensitivity, in accordance with IEC 60268-5.
- **3.** SENSITIVITY The broadband SPL of the loudspeaker when pink noise is applied (band limited to the loudspeaker's Operating Range) at an input voltage of 2.83 V, in accordance with IEC 60268-5. Also listed for a voltage that would produce 1 watt into the nominal impedance. Measured in whole space with no external processing applied, except where indicated.
- 4. NOMINAL CONTINUOUS POWER HANDLING The maximum continuous nominal input voltage at the rated impedance that the system can withstand, without damage, for a period of 2 hours using an IEC 60268-1 defined spectrum with recommended signal processing and protection filters.

- 5. NOMINAL MAXIMUM SPL The SPL produced when an IEC 60268-1 signal is applied, at the nominal input voltage, to the equalized/processed loudspeaker system. Referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6 dB) crest factor of the IEC 60268-1 test signal.
- RATED CONTINUOUS VOLTAGE The maximum continuous rated input voltage for the system that results in no more than a 3 dB change in the system's response during operation.
- 7. RATED MAXIMUM SPL The SPL produced when a typical program material signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its rated continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 4:1 (12 dB) crest factor of the program signal.
- 8. AXIAL (PROCESSED) SENSITIVITY The variation in acoustic output level with frequency for a swept-sine measurement signal. The Processed measurement uses the recommended signal processing for the loudspeaker system. The other sensitivity measurements use no additional external processing. All data are referenced to 1 meter. The on-axis magnitude and phase responses, as well as the average magnitude response, calculated over one-half of the nominal coverage angles, are shown. The responses have 1/6 octave smoothing applied.

- 9. HORIZONTAL / VERTICAL OFF-AXIS RESPONSES The loudspeaker's magnitude response at various off-axis angles using the recommended signal processing in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.
- **10.** DIRECTIVITY INDEX The ratio of the on-axis SPL to the mean SPL at the same distance for all points within the measurement sphere for each given frequency; expressed in dB. The response has 1/3 octave smoothing applied.
- **11. BEAMWIDTH** The included angle between the -6 dB points in the polar response of the loudspeaker when driven in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.

Data presented on this data sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: www.biamp.com



DX-IC8

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#### TWO-WAY 8-INCH HIGH OUTPUT CEILING MOUNT LOUDSPEAKER



#### **APPLICATIONS**

Large Conference Rooms · Houses of Worship Theaters · Sports Facilities · Health Clubs Convention Centers · Auditoriums Malls · Airports

#### DESCRIPTION

The Desono DX-IC8 rewrites the cost-toperformance equation for high-end ceiling loudspeakers. Able to fulfill a wide variety of needs, the DX-IC8 exceeds the performance of competing "high-ceiling" models. Foreground music, high-level paging, and augmentation of large music systems as a delay or fill speaker in ancillary zones are all within the capability of this versatile performer. It is ideal for high ceiling applications.

Uniform voicing among the Desono DX product family makes for an easy match to the other models in the series, while a host of design innovations set the DX-IC8 apart from other products in its size and price range. Featuring genuine coaxial design with separate magnets for the LF and HF drivers, the DX-IC8 exhibits reduced distortion and industry-leading sensitivity permitting 3 dB to 6 dB greater output level, while requiring half the amplification power of competing products.

Patent-pending SpringLock™ clamps allow singlehanded placement to speed installation and reduce labor time. The SpringLock spring-loaded clamps support the back can on the included tile rails and snap-on C-ring, so that the installer can just tighten the clamps, securing it in the ceiling.

A magnetic grille and front-face wattage selector switch enables quick adjustment of 70 V/100 V tap levels. A variety of installation accessories are available to accommodate different ceiling materials.

#### FEATURES

- High intelligibility with exceptional uniform coverage
- Fast installation with SpringLock<sup>™</sup> mounting clamps
- Higher output than typical 'High-Ceiling' 8" ceiling speakers
- Attractive edgeless magnetic grille design
  Conduit knock-outs on the input cover meet Chicago plenum air space requirements

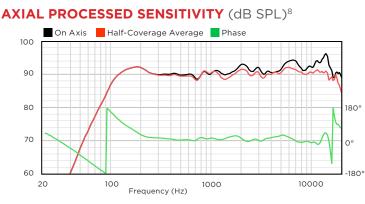
#### TECHNICAL SPECIFICATIONS<sup>1</sup>

Description Mode				
Operating Mode	Passive with	DSP		
Operating Environment	Indoor			
Operating Range (-10dB) <sup>2</sup>	75 Hz to 20 kHz			
Nominal Beamwidth (H x V)	115°, conical			
Transducers	LF1x8" (165 mm)			
	HF 1 x 1.25" (32 mm) exit compression driver			
Sensitivity <sup>3</sup>	94 dB (2.83 V) 93 dB (1W at rated impedance			
Nominal Continuous Power Handling⁴	Passive	Passive 35 V (175 W @ 7 Ω)		
Nominal Maximum SPL <sup>5</sup>	Passive	<b>Peak</b> 122 dB	<b>Continuous</b> 116 dB	
Rated Continuous Voltage <sup>6</sup>	Passive	28.2 V (29	dBV)	
Rated Maximum SPL <sup>7</sup> (Processed)	Passive	<b>Peak</b> 126 dB	<b>Continuous</b> 114 dB	
Autoformer	<b>70 V</b> : 120 W, 60 W, 30 W, 15 W; <b>100 V</b> : 120 W, 60 W, 30 W			
<b>Recommended Amplifiers</b>	Passive 175 W - 350 W into 8 Ω, (37 V - 53 V)			
Crossover Frequency	1.3 kHz			
Required Accessory	60 Hz, 12 dB/oct. high pass filter			
PHYSICAL				
Input Connection	4-position Euroblock connector			
Controls	Front-face wattage / low impedance selector switch			
Mounting Provisions	4 SpringLock mounting clamps with 2.5-inch grip range			
Certifications	ETL listed to comply with UL1480A, UL2043 and CSA62368-1 Suitable for use in air handling spaces per NFPA 70 and NFPA 90			
Dimensions W x D	341 mm x 216 mm (13.43" x 8.51")			
Weight	7.08 kg (15.6 lbs)			
Finish	Refer to the Technical Drawing (page 3)			
Accessories (included)	C-Ring supporting plate, tile support bridge rails, grille, paint mask, cut-out template			
Model	DX-IC8-W - loudspeaker with White grille			
OPTIONS				
Accessories	New Construction Brackets (SPA-NC500) Black Grilles (SPA-GRB500) High Humidity Grilles (SPA-GHH500) 48″ Tile Rails (SPA-RAIL48)			

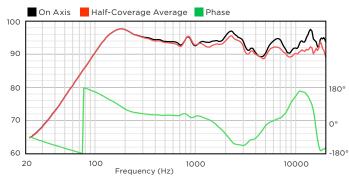


**DESONO**<sup>™</sup>

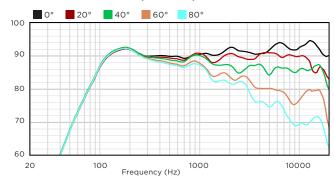
# DX-IC8 TWO-WAY 8-INCH HIGH OUTPUT CEILING MOUNT LOUDSPEAKER



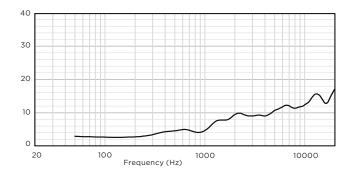
#### AXIAL SENSITIVITY (dB SPL)8



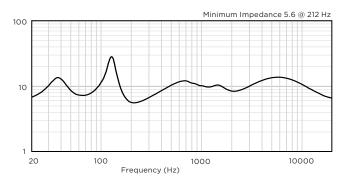
#### OFF-AXIS RESPONSE (dB SPL)9



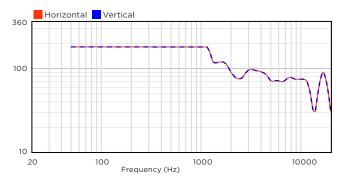
#### **DIRECTIVITY INDEX** (dB)<sup>10</sup>



#### **IMPEDANCE** $(\Omega)$



#### **BEAMWIDTH** (degrees)<sup>11</sup>



# **TECHNICAL DRAWING / DIMENSIONS / FINISH**

W (bezel diameter) x D 341 mm x 216 mm (13.43" x 8.51")

Cutout Diameter 310 mm (12.20")

Unit Weight 7.08 kg (15.6 lbs)

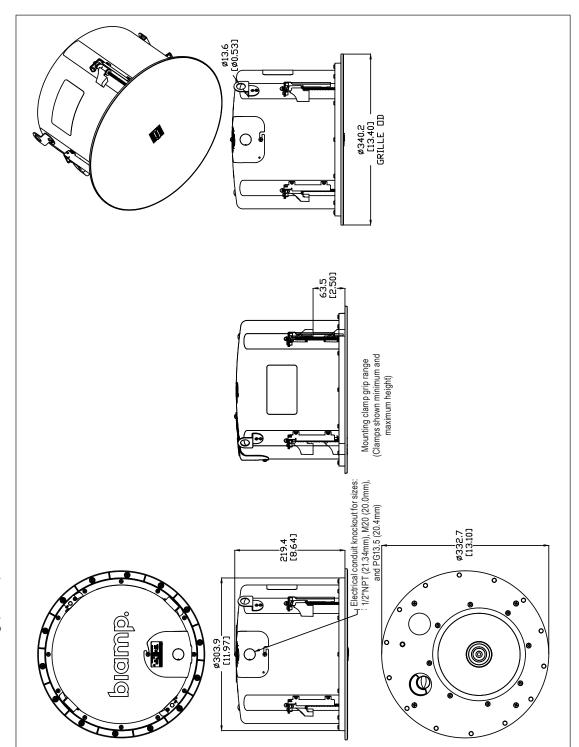
Shipping Weight (shipped in pairs) 19.1 kg (42.1 lbs)

# Grille: Dowder-coat

Powder-coated perforated steel backed with colormatched woven fabric with safety line. White finish.

**Enclosure / Finish** Back Can: Black, Matte finish Steel Face: UL 94V-0 rated ABS plastic, paintable Black finish.

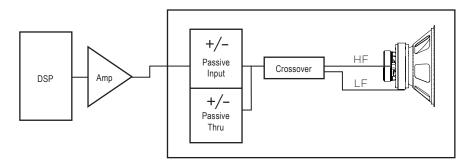




**DESONO**<sup>™</sup>

DX-IC8 TWO-WAY 8-INCH HIGH OUTPUT CEILING MOUNT LOUDSPEAKER

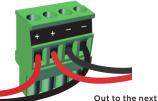
#### **CONNECTION DIAGRAMS**



Single amp



Tap Switch (on face)



In from the amplifier or previous loudspeaker, terminals 1[+] & 4[-] Out to the next loudspeaker, terminals 2[+] & 3[-]

Input

#### NOTES

- 1. PERFORMANCE SPECIFICATIONS All measurements are performed using a timewindowed impulse response to eliminate reflections, approximating an anechoic environment, at a distance of at least 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP using settings provided by Biamp is required to achieve the specified performance; further performance gains can be realized using the FIR loudspeaker optimization presets available in Biamp's Community Amplified Loudspeaker Controllers (ALC SERIES).
- OPERATING RANGE The frequency range over which the on-axis equalized/processed response remains within 10 dB of the rated sensitivity, in accordance with IEC 60268-5.
- **3.** SENSITIVITY The broadband SPL of the loudspeaker when pink noise is applied (band limited to the loudspeaker's Operating Range) at an input voltage of 2.83 V. in accordance with IEC 60268-5. Also listed for a voltage that would produce 1 watt into the nominal impedance. Measured in whole space with no external processing applied, except where indicated.
- 4. NOMINAL CONTINUOUS POWER HANDLING The maximum continuous nominal input voltage at the rated impedance that the system can withstand, without damage, for a period of 2 hours using an IEC 60268-1 defined spectrum with recommended signal processing and protection filters.

- 5. NOMINAL MAXIMUM SPL The SPL produced when an IEC 60268-1 signal is applied, at the nominal input voltage, to the equalized/processed loudspeaker system. Referenced to a distance of 1 meter. The peak SPL represents the 2.1 (6 dB) crest factor of the IEC 60268-1 test signal.
- 6. RATED CONTINUOUS VOLTAGE The maximum continuous rated input voltage for the system that results in no more than a 3 dB change in the system's response during operation.
- 7. RATED MAXIMUM SPL The SPL produced when a typical program material signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its rated continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 4:1 (12 dB) crest factor of the program signal.
- 8. AXIAL (PROCESSED) SENSITIVITY The variation in acoustic output level with frequency for a swept-sine measurement signal. The Processed measurement uses the recommended signal processing for the loudspeaker system. The other sensitivity measurements use no additional external processing. All data are referenced to 1 meter. The on-axis magnitude and phase responses, as well as the average magnitude response, calculated over one-half of the nominal coverage angles, are shown. The responses have 1/6 octave smoothing applied.

- 9. HORIZONTAL / VERTICAL OFF-AXIS RESPONSES The loudspeaker's magnitude response at various off-axis angles using the recommended signal processing in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.
- **10.** DIRECTIVITY INDEX The ratio of the on-axis SPL to the mean SPL at the same distance for all points within the measurement sphere for each given frequency; expressed in dB. The response has 1/3 octave smoothing applied.
- **11.** *BEAMWIDTH* The included angle between the -6 dB points in the polar response of the loudspeaker when driven in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.

Data presented on this data sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: www.biamp.com



DESDS-758-2208-EN-R2

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### DX-IC10 TWO-CEILII

#### TWO-WAY 10-INCH HIGH OUTPUT CEILING MOUNT LOUDSPEAKER



#### **APPLICATIONS**

Large Conference Rooms · Houses of Worship Theaters · Sports Facilities · Health Clubs Convention Centers · Auditoriums Malls · Airports

#### DESCRIPTION

The flagship model Desono DX-IC10 exceeds the performance of competing "high-ceiling" models. The DX-IC10 provides high-level foreground music, loud-and-clear paging (even in noisy environments), and readily supports large systems in sports facilities, clubs, or concert venues for delay and zone fill. Compact, affordable replacement for typical 12" competitor ceiling speakers.

DX-ICIOs can readily be combined with smaller members of the Desono DX family due to Biamp's uniform voicing technology, providing additional power and LF response in areas that require it. Featuring genuine coaxial design with separate magnets for the LF and HF drivers, the DX-ICIO exhibits reduced distortion and industry-leading sensitivity permitting 3 dB to 6 dB greater output level, while requiring half the amplification power of competing products.

Patent-pending SpringLock™ clamps allow singlehanded placement to speed installation and reduce labor time. The SpringLock spring-loaded clamps support the back can on the included tile rails and snap-on C-ring, so that the installer can just tighten the clamps, securing it in the ceiling.

A magnetic grille and front-face wattage selector switch enables quick adjustment of tap levels, while the high-power internal autoformer permits full power output with 70V or 100V lines. A variety of installation accessories are available to accommodate different ceiling materials.

#### FEATURES

- High intelligibility with exceptional uniform coverage
- Fast installation with SpringLock<sup>™</sup> mounting clamps
- High output similar to typical 12" large format ceiling speakers
- Attractive edgeless magnetic grille design
  Conduit knock-outs on the input cover meet Chicago plenum air space requirements

#### TECHNICAL SPECIFICATIONS<sup>1</sup>

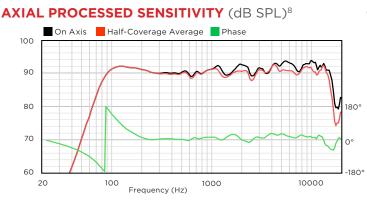
TECHNICAL SPECIFICAT	ION3			
Operating Mode	Passive with	DSP		
Operating Environment	Indoor			
Operating Range (-10dB) <sup>2</sup>	65 Hz to 20 kHz			
Nominal Beamwidth (H x V)	115°, conical			
Transducers	LF 1 x 10" (254 mm)			
	HF 1 x 1.25" (32 mm) exit compression driver			
Sensitivity <sup>3</sup>	97 dB (2.83 V) 96 dB (1 W at rated impedance 6			
Nominal Continuous Power Handling⁴	Passive	39 V (24	40 W @ 6.5 Ω)	
Nominal Maximum SPL⁵	Passive	<b>Peak</b> 125 dB	<b>Continuous</b> 119 dB	
Rated Continuous Voltage <sup>6</sup>	Passive	39.8 V (	32 dBV)	
Rated Maximum SPL <sup>7</sup> (Processed)	Passive	<b>Peak</b> 131 dB	<b>Continuous</b> 119 dB	
Autoformer	<b>70 V</b> : 200 W, 100 W, 50 W, 25 W; <b>100 V</b> : 200 W, 100 W, 50 W			
Recommended Amplifiers	Passive 240 W - 480 W into 8 Ω, (44 V - 62 V)			
Crossover Frequency	1.0 kHz	) kHz		
Required Accessory	75 Hz, 12 dB/oct. high pass filter			
PHYSICAL				
Input Connection	4-position Euroblock connector			
Controls	Front-face wattage / low impedance selector switch			
Mounting Provisions	4 SpringLock mounting clamps with 2.5-inch grip range			
Certifications	ETL listed to comply with UL1480A, UL2043 and CSA62368-1 Suitable for use in air handling spaces per NFPA 70 and NFPA 90			
Dimensions W x D	394 mm x 263 mm (15.51" x 10.37")			
Weight	10.73 kg (23.66 lbs)			
Finish	Refer to the Technical Drawing (page 3)			
Accessories (included)	C-Ring supporting plate, tile support bridge rails, grille, paint mask, cut-out template			
Model	DX-IC10-W - loudspeaker with White grille			
OPTIONS				
Accessories	New Construction Brackets (SPA-NC600) Black Grilles (SPA-GRB600) High Humidity Grilles (SPA-GHH600)			

48" Tile Rails (SPA-RAIL48)

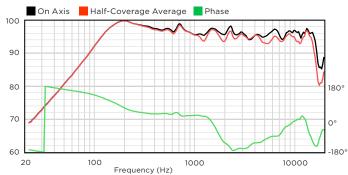


### DESONO™ DX-IC10 TWO-WAY 10 CEILING MOL

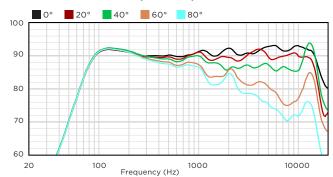
#### TWO-WAY 10-INCH HIGH OUTPUT CEILING MOUNT LOUDSPEAKER



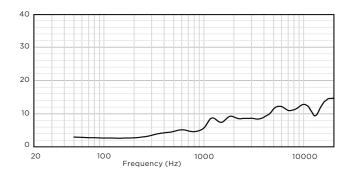
#### AXIAL SENSITIVITY (dB SPL)8



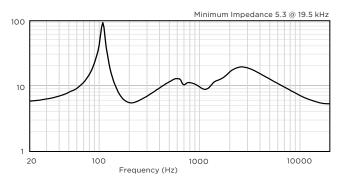
#### OFF-AXIS RESPONSE (dB SPL)9



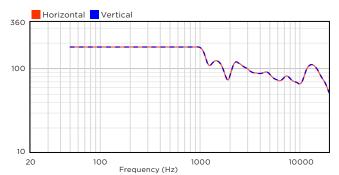
#### **DIRECTIVITY INDEX** (dB)<sup>10</sup>



#### **IMPEDANCE** $(\Omega)$



#### **BEAMWIDTH** (degrees)<sup>11</sup>



# biamp.

# **TECHNICAL DRAWING / DIMENSIONS / FINISH**

W (bezel diameter) x D 394 mm x 263 mm (15.51" x 10.37")

**Cutout Diameter** 360 mm (14.17")

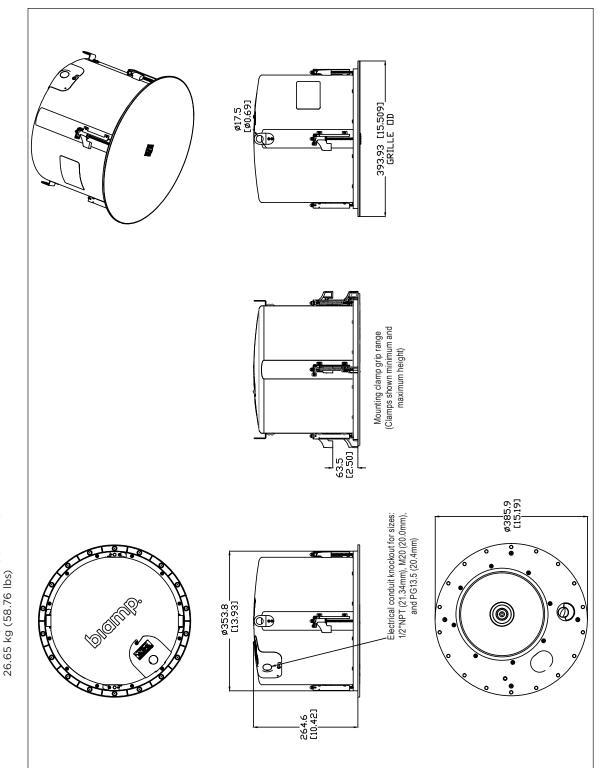
10.73 kg (23.66 lbs) Unit Weight

Shipping Weight (shipped in pairs) 26.65 kg (58.76 lbs)

# Grille:

Powder-coated perforated steel backed with colormatched woven fabric with safety line. White finish.

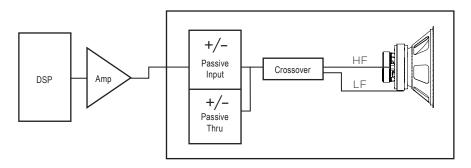
Back Can: Black, Matte finish Steel Face: UL 94V-0 rated ABS plastic, paintable Black finish. Enclosure / Finish



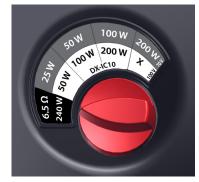
# **DESONO**<sup>TM</sup> DX-IC10

**TWO-WAY 10-INCH HIGH OUTPUT CEILING MOUNT LOUDSPEAKER** 

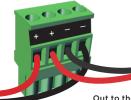
#### **CONNECTION DIAGRAMS**



Single amp



Tap Switch (on face)



In from the amplifier or previous loudspeaker, terminals 1[+] & 4[-] Out to the next loudspeaker, terminals 2[+] & 3[-]

Input

#### NOTES

- 1. PERFORMANCE SPECIFICATIONS All measurements are performed using a timewindowed impulse response to eliminate reflections, approximating an anechoic environment, at a distance of at least 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP using settings provided by Biamp is required to achieve the specified performance; further performance gains can be realized using the FIR loudspeaker optimization presets available in Biamp's Community Amplified Loudspeaker Controllers (ALC SERIES).
- 2. OPERATING RANGE The frequency range over which the on-axis equalized/processed response remains within 10 dB of the rated sensitivity, in accordance with IEC 60268-5.
- **3.** SENSITIVITY The broadband SPL of the loudspeaker when pink noise is applied (band limited to the loudspeaker's Operating Range) at an input voltage of 2.83 V. in accordance with IEC 60268-5. Also listed for a voltage that would produce 1 watt into the nominal impedance. Measured in whole space with no external processing applied, except where indicated.
- 4. NOMINAL CONTINUOUS POWER HANDLING The maximum continuous nominal input voltage at the rated impedance that the system can withstand, without damage, for a period of 2 hours using an IEC 60268-1 defined spectrum with recommended signal processing and protection filters.

- 5. NOMINAL MAXIMUM SPL The SPL produced when an IEC 60268-1 signal is applied, at the nominal input voltage, to the equalized/processed loudspeaker system. Referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6 dB) crest factor of the IEC 60268-1 test signal.
- 6. RATED CONTINUOUS VOLTAGE The maximum continuous rated input voltage for the system that results in no more than a 3 dB change in the system's response during operation.
- 7. RATED MAXIMUM SPL The SPL produced when a typical program material signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its rated continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 4:1 (12 dB) crest factor of the program signal.
- 8. AXIAL (PROCESSED) SENSITIVITY The variation in acoustic output level with frequency for a swept-sine measurement signal. The Processed measurement uses the recommended signal processing for the loudspeaker system. The other sensitivity measurements use no additional external processing. All data are referenced to 1 meter. The on-axis magnitude and phase response, as well as the average magnitude response, calculated over one-half of the nominal coverage angles, are shown. The responses have 1/6 octave smoothing applied.

- 9. HORIZONTAL / VERTICAL OFF-AXIS RESPONSES The loudspeaker's magnitude response at various off-axis angles using the recommended signal processing in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.
- **10.** DIRECTIVITY INDEX The ratio of the on-axis SPL to the mean SPL at the same distance for all points within the measurement sphere for each given frequency; expressed in dB. The response has 1/3 octave smoothing applied.
- **11.** *BEAMWIDTH* The included angle between the -6 dB points in the polar response of the loudspeaker when driven in the operating mode which utilizes the largest number of individually amplified pass bands. The responses have 1/3 octave smoothing applied.

Data presented on this data sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: www.biamp.com



# biamp.

### DX-IC10SUB 10-INCH HIGH OUTPUT CEILING MOUNT SUBWOOFER



#### **APPLICATIONS**

Large Conference Rooms · Houses of Worship Theaters · Sports Facilities · Health Clubs Convention Centers · Auditoriums Malls · Airports

#### DESCRIPTION

The Desono DX-ICIOSUB ceiling mount subwoofer provides powerful, high-impact bass response intended to augment any combination of Desono DX full-range models. By including a complement of DX-ICIOSUBs into a distributed system, musical results that equal or exceed that of much larger and more costly surface-mount systems can readily be achieved. The DX-ICIOSUB's clean, clear bass response provides a compelling attraction for shoppers in a retail environment, and a memorable experience for bar, pub and restaurant patrons.

Dependent on program content and the size of the full-range DX models, the ratio of DX-ICIOSUBs to full-range models may vary from as few as 1:6 to as many as 1:1. For example, one DX-ICIOSUB will provide strong supporting bass response for six DX-IC4s, while four DX-ICIOSUBs will better complement six of the more powerful DX-IC8s or DX-IC10s.

Patent-pending SpringLock™ clamps allow singlehanded placement to speed installation and reduce labor time. The SpringLock spring-loaded clamps support the back can on the included tile rails and snap-on C-ring, so that the installer can just tighten the clamps, securing it in the ceiling.

A magnetic grille and front-face wattage selector switch enables quick adjustment of tap levels, while the high-power internal autoformer permits full power output with 70V or 100V lines. A variety of installation accessories are available to accommodate different ceiling materials.

#### **FEATURES**

- High intelligibility with exceptional uniform coverage
- High-impact bass response
- Fast installation with SpringLock<sup>™</sup> mounting clamps
- Attractive edgeless magnetic grille design
- · Conduit knock-outs on the input cover meet Chicago plenum air space requirements

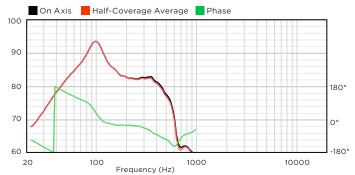
#### **TECHNICAL SPECIFICATIONS<sup>1</sup>**

TECHNICAE OF ECH TCAT				
Operating Mode	Passive with DSP			
Operating Environment	Indoor			
Operating Range (-10dB) <sup>2</sup>	39 Hz to 200 Hz			
Nominal Beamwidth (H x V)	Omni-directional			
Transducers	LF 1 x 10" (254 mm)			
Sensitivity <sup>3</sup>	88 dB (2.83 V) 88 dB (1W at rated impedance 8			
Nominal Continuous Power Handling⁴	Passive	40 V (200 )	₩@8Ω)	
Nominal Maximum SPL <sup>s</sup>	Passive	<b>Peak</b> 117 dB	<b>Continuous</b> 111 dB	
Rated Continuous Voltage <sup>6</sup>	Passive	Passive 39.8 V (32 dBV)		
Rated Maximum SPL <sup>7</sup> (Processed)	Passive	<b>Peak</b> 123 dB	<b>Continuous</b> 111 dB	
Autoformer	<b>70 V</b> : 200 W, 100 W, 50 W, 25 W; <b>100 V</b> : 200 W, 100 W, 50 W			
Recommended Amplifiers	Passive 200 W - 400 W into 8 Ω, (40 V - 57 V)			
Required Accessory	30 Hz 12 dB/oct. high pass filter			
PHYSICAL				
Input Connection	4-position Euroblock connector			
Controls	Front-face wattage / low impedance selector switch			
Mounting Provisions	4 SpringLock mounting clamps with 2.5-inch grip range			
Certifications	ETL listed to comply with UL1480A, UL2043 and CSA62368-1 Suitable for use in air handling spaces per NFPA 70 and NFPA 90			
Dimensions W x D	394 mm x 263 mm (15.51" x 10.37")			
Weight	10.0 kg (22.1 lbs)			
Finish	Refer to the Technical Drawing (page 3)			
Accessories (included)	C-Ring supporting plate, tile support bridge rails, grille, paint mask, cut-out template			
Model	DX-IC10SUB-W - loudspeaker with White grille			
OPTIONS	OPTIONS			
Accessories	New Construction Brackets (SPA-NC600) Black Grilles (SPA-GRB600) High Humidity Grilles (SPA-GHH600) 48" Tile Rails (SPA-RAIL48)			

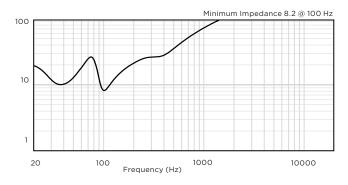


# DESONO™ DX-IC10SUB 10-INCH HIGH OUTPUT CEILING MOUNT SUBWOOFER

#### AXIAL SENSITIVITY (dB SPL)8



#### **IMPEDANCE** $(\Omega)$





# biamp.

TECHNICAL DRAWING / DIMENSIONS / FINISH W (bezel diameter) x D

394 mm x 263 mm (15.51" x 10.37") Cutout Diameter

360 mm (14.17")

**Unit Weight** 10.0 kg (22.1 lbs)

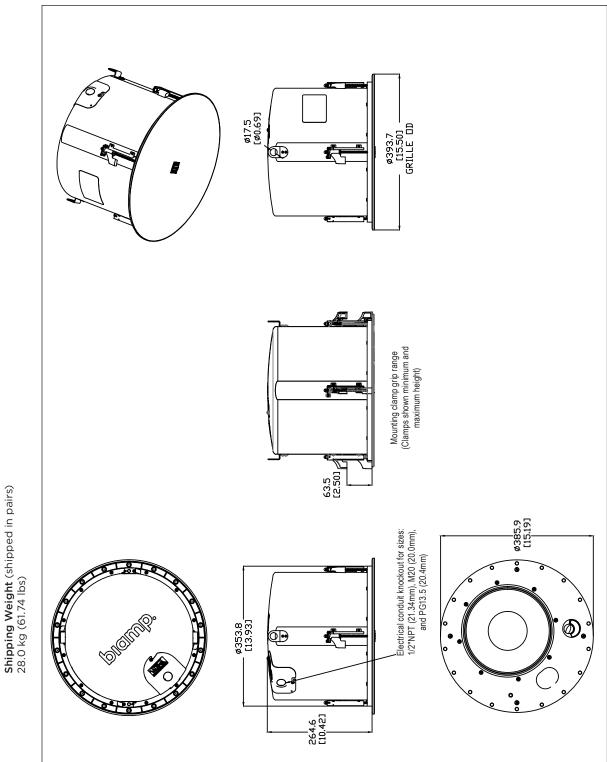
g (22.1 lbs) **ing Weight** (shipped in pairs)

Grille: Powder-coate

Powder-coated perforated steel backed with colormatched woven fabric with safety line. White finish.

Enclosure / Finish Back Can: Black, Matte finish Steel Face: UL 94V-0 rated ABS plastic, paintable Black finish.





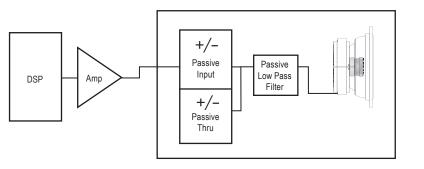
T: +1 503.641.7287

9300 S.W. Gemini Drive Beaverton, OR 97008 USA

# DESONO<sup>TM</sup> DX-IC10SUB

#### 10-INCH HIGH OUTPUT CEILING MOUNT SUBWOOFER

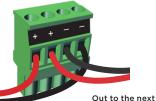
#### **CONNECTION DIAGRAMS**



Single amp



Tap Switch (on face)



In from the amplifier or previous loudspeaker, terminals 1[+] & 4[-] loudspeaker, terminals 2[+] & 3[-]

Input

#### NOTES

- 1. PERFORMANCE SPECIFICATIONS All measurements are performed using a timewindowed impulse response to eliminate reflections, approximating an anechoic environment, at a distance of at least 6.0 m. All acoustic specifications are rounded to the nearest whole number. An external DSP using settings provided by Biamp is required to achieve the specified performance; further performance gains can be realized using the FIR loudspeaker optimization presets available in Biamp's Community Amplified Loudspeaker Controllers (ALC SERIES).
- 2. OPERATING RANGE The frequency range over which the on-axis equalized/processed response remains within 10 dB of the rated sensitivity, in accordance with IEC 60268-5.
- **3.** SENSITIVITY The broadband SPL of the loudspeaker when pink noise is applied (band limited to the loudspeaker's Operating Range) at an input voltage of 2.83 V. in accordance with IEC 60268-5. Also listed for a voltage that would produce I watt into the nominal impedance. Measured in whole space with no external processing applied, except where indicated.

- 4. NOMINAL CONTINUOUS POWER HANDLING The maximum continuous nominal input voltage at the rated impedance that the system can withstand, without damage, for a period of 2 hours using an IEC 60268-1 defined spectrum with recommended signal processing and protection filters.
- 5. NOMINAL MAXIMUM SPL The SPL produced when an IEC 60268-1 signal is applied, at the nominal input voltage, to the equalized/processed loudspeaker system. Referenced to a distance of 1 meter. The peak SPL represents the 2:1 (6 dB) crest factor of the IEC 60268-1 test signal.
- RATED CONTINUOUS VOLTAGE The maximum continuous rated input voltage for the system that results in no more than a 3 dB change in the system's response during operation.
- 7. RATED MAXIMUM SPL The SPL produced when a typical program material signal is applied to the equalized/processed loudspeaker system, at a level which drives at least one subsection to its rated continuous voltage limit. Referenced to a distance of 1 meter. The peak SPL represents the 4:1 (12 dB) crest factor of the program signal.
- 8. AXIAL (PROCESSED) SENSITIVITY The variation in acoustic output level with frequency for a swept-sine measurement signal. The Processed measurement uses the recommended signal processing for the loudspeaker system. The other sensitivity measurements use no additional external processing. All data are referenced to 1 meter. The on-axis magnitude and phase responses, as well as the average magnitude response, calculated over one-half of the nominal coverage angles, are shown. The responses have 1/6 octave smoothing applied.

Data presented on this data sheet represents a selection of the basic performance specifications for the model. These specifications are intended to allow the user to perform a fair, straightforward evaluation and comparison with other loudspeaker spec sheets. For a detailed analysis of this loudspeaker's performance, please download the GLL file and/or the CLF file from our website: www.biamp.com