# O R I G I N

## IN-CEILING LOUDSPEAKERS

### PRICE & PERFORMANCE

Our In-Ceiling Collection goes above and beyond the competition with integrator friendly features and overall musicality. Each model is a 2-way loudspeaker with a pivoting Silk DPSD<sup>™</sup> tweeter, utilizing Origin's patented Multi-Motion Pivot<sup>™</sup> for superior aiming and dispersion.

With an integrated conduit lock, heavy-duty dog-ears, and secure euro-block connections, this series is ready for installation into even the most challenging commercial environments. Square and round, low-profile paintable grilles are also included, reducing ceiling visibility. Grille options are available in either black or white, and with or without a tile bridge.

### PRODUCT ID



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# **IN-CEILING LOUDSPEAKERS**

#### SPECIFICATIONS

### PCSUB8

Part Woofer Tweeter Power Handling (Program Power) Power Handling (Cont. Pink Noise) Frequency Response

Nominal Coverage Angle Sensitivity @1m Rated Maximum SPL Impedance Transformer Taps

Diameter Cutout Diameter Grille Diameter Mounting Depth Feature

### CJUDU

SCPSUB800 8" IMPP

-200 Watts 100 Watts (- 10dB): 39Hz-250Hz (- 3dB): 55Hz-250Hz 180 Degree Conical Coverage 91dB 110dB 6 Ohm Nominal 70V -100W, 50W, 25W, 12.5W 100W - 100W, 50W, 25W, 12.5W 100W - 100W, 50W, 25W 11 ¼" (286mm) 10 ½" (266mm) 11 5%" (296mm) 9 1½6 (247mm) Metal Can, Zinc Plated

#### PC80

#### SPC800000

8" w 1" Silk DSPD™ MMP™ 120 Watts 60 Watts (-10dB): 41Hz-20kHz (- 3dB): 60Hz-20kHz 100 Degree Conical Coverage 92dB 112dB 6 Ohm Nominal 70V - 60W, 30W, 15W, 7.5W 100V - 60W, 30W, 15W 11 1/4" (286mm) 10 ½" (266mm) 11 5/8" (296mm) 9<sup>12</sup>/<sub>16</sub> (247mm) Metal Can, Zinc Plated

#### PC60

#### SPC600000

6 1/2" IMPP 1" Silk DSPD™ MMP™ 80 Watts 40 Watts (- 10dB): 50Hz-20kHz (- 3dB): 64Hz-20kHz 115 Degree Conical Coverage 91dB 108dB 6 Ohm Nominal 70V - 60W, 30W, 15W, 7.5W 100V - 60W, 30W, 15W 9 5%" (244mm) 8<sup>13</sup>/16" (224mm) 10" (254mm) 8 1/8" (206mm) Metal Can, Zinc Plated

### SPECIFICATIONS

Part Woofer Tweeter Power Handling (Program Power) Power Handling (Cont. Pink Noise) Frequency Response

Nominal Coverage Angle Sensitivity @1m Rated Maximum SPL Impedance Transformer Taps

Diameter Cutout Diameter Grille Diameter Mounting Depth Feature

### PC60S

#### SPC60S000

6 1⁄2" IMPP 1" Silk DSPD™ MMP™ 80 Watts 40 Watts (- 10dB): 54Hz-20kHz (- 3.5 dB): 81Hz-20kHz 90 Degree Conical Coverage 87dB 106dB 6 Ohm Nominal 70V - 60W, 30W, 15W, 7.5W 100V - 60W, 30W, 15W 11 1/4" (286mm) 10 ½" (266mm) 11 5/8" (296mm) 4 23/64" (110mm) Metal Can, Zinc Plated

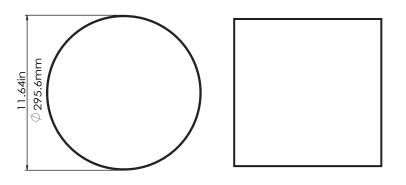
### PC50

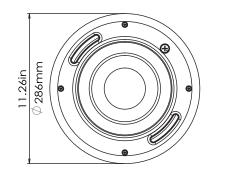
SPC500000

5 ¼" IMPP ¾" Silk DSPD™ MMP™ 60 Watts 30 Watts (-10dB): 54Hz-20kHz (- 3dB): 80Hz-20kHz 120 Degree Conical Coverage 89dB 106dB 6 Ohm Nominal 70V - 30W, 15W, 7.5W, 3.8W 100V - 30W, 15W, 7.5W 8 1/4" (210mm) 7 ½" (190mm) 8<sup>11</sup>/16" (220mm) 8 1/8" (206mm) Metal Can, Zinc Plated

#### LINE DRAWINGS

Depending on the kit purchased, the following grilles or tile bridge will be included in the box: PCSUB8B - Includes 1 x Black Round | 1 x Black Square Grille PCSUB8W - Includes 1 x White Round | 1 x White Square Grille PCSUB8B-TB - Includes 1 x Black Round | 1 x Black Square Grille & Tile Bridge PCSUB8W-TB - Includes 1 x White Round | 1 x White Square Grille & Tile Bridge



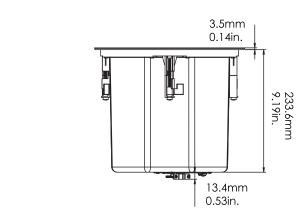


10.37in

Ø263.5mm









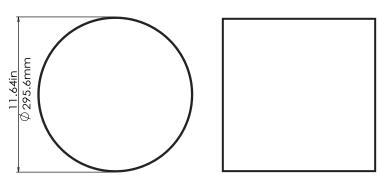
Please see www.originpro.com for most the most updated information concerning these specifications. Products may only be purchased through an authorized integration partner.

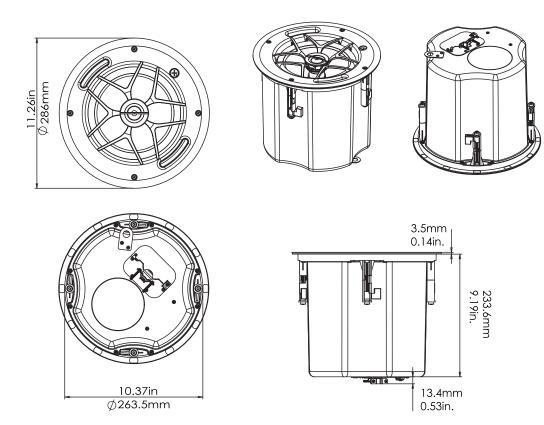
PCSUB8

## **IN-CEILING LOUDSPEAKERS**

#### LINE DRAWINGS

Depending on the kit purchased, the following grilles or tile bridge will be included in the box: PC80B - Includes 1 x Black Round | 1 x Black Square Grille PC80W - Includes 1 x White Round | 1 x White Square Grille PC80B-TB - Includes 1 x Black Round | 1 x Black Square Grille & Tile Bridge PC80W-TB - Includes 1 x White Round | 1 x White Square Grille & Tile Bridge







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PC80

## **IN-CEILING LOUDSPEAKERS**

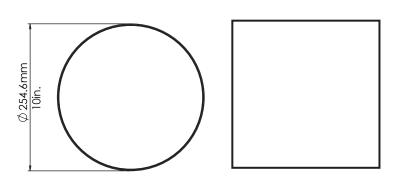
#### LINE DRAWINGS

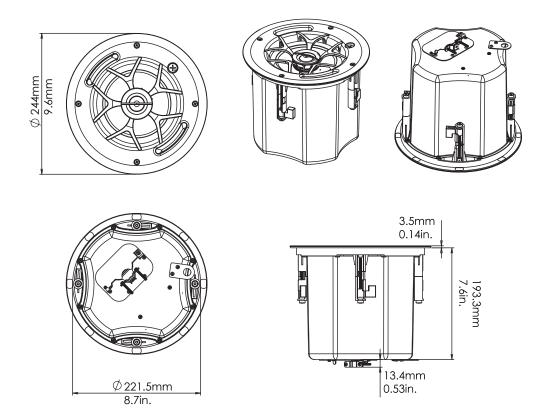
Depending on the kit purchased, the following grilles or tile bridge will be included in the box:

PC60B - Includes 1 x Black Round | 1 x Black Square Grille

PC60W - Includes 1 x White Round | 1 x White Square Grille

PC60B-TB - Includes 1 x Black Round | 1 x Black Square Grille & Tile Bridge PC60W-TB - Includes 1 x White Round | 1 x White Square Grille & Tile Bridge







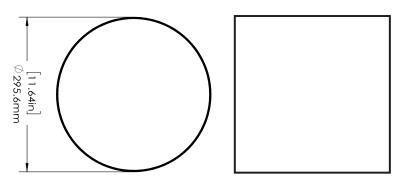
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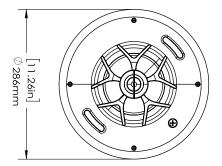
PC60

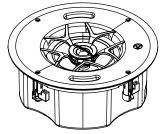
#### LINE DRAWINGS

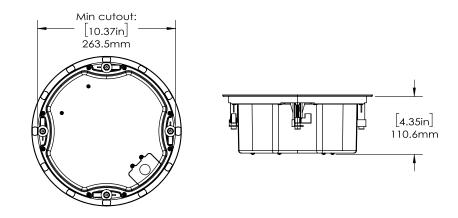
Depending on the kit purchased, the following grilles or tile bridge will be included in the box: PC60SB - Includes 1 x Black Round | 1 x Black Square Grille PC60SW - Includes 1 x White Round | 1 x White Square Grille PC60SB-TB - Includes 1 x Black Round | 1 x Black Square Grille & Tile Bridge

PC60SW-TB - Includes 1 x White Round | 1 x White Square Grille & Tile Bridge









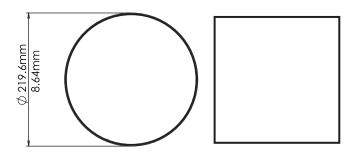


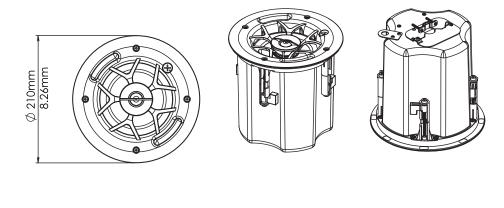
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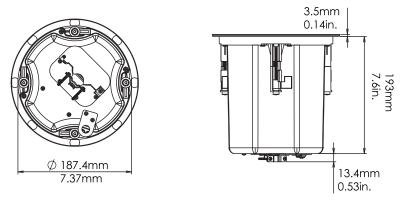
## **IN-CEILING LOUDSPEAKERS**

#### LINE DRAWINGS

Depending on the kit purchased, the following grilles or tile bridge will be included in the box: PC50B - Includes 1 x Black Round | 1 x Black Square Grille PC50W - Includes 1 x White Round | 1 x White Square Grille PC50B-TB - Includes 1 x Black Round | 1 x Black Square Grille & Tile Bridge PC50W-TB - Includes 1 x White Round | 1 x White Square Grille & Tile Bridge









Please see www.originpro.com for most the most updated information concerning these specifications. Products may only be purchased through an authorized integration partner.

PC50

#### SAFETY AGENCY COMPLIANCE

Origin PRO Professional Collection In-Ceiling speaker models PC50, PC60S, PC60, PC80, & PCSUB8 meet the following standards:

UL 1480A: Standard for Speakers for Commercial and Professional Use UL 2043: Standard for Fire Test for Heat and Visible Smoke Release for Discrete Products and their Accessories Installed in Air-Handling Spaces

NFPA 70: Standard for Electrical Safety in the Workplace®

NFPA 90A: Standard for Installation of Air Conditioning and Ventilation Systems

UL 1480A: Standard for Speakers for Commercial and Professional Use

Scope:

1.1 These requirements cover speakers for indoor and/or outdoor use in dry, damp, wet, or underwater locations and are intended for one or more of the following:

a) Commercial and professional audio systems providing non-emergency sound reinforcement and reproduction in accordance with the National Electrical Code, NFPA 70 (this includes equipment for institutional, industrial use);

b) Non-fire emergency voice-warning systems in accordance with NFPA 70; examples of non-fire emergency-warning systems include, but are not limited to:

1) Critical process monitoring (nuclear plant, oil refinery, hazardous chemical processing);

2) Distress alert systems (help for handicapped, for life safety, for rape, for robbery);

3) Crowd control in public places (sporting arena, theater, shopping mall, transportation center); and

4) Non-fire emergency voice-systems covered by the Life Safety Code, NFPA 101.

c) Underwater speakers in accordance with Article 680 of NFPA 70. An underwater speaker is not to be used in a fire alarm system or as an emergency (non-fire) voice-warning system.

1.2 These requirements do not cover the following:

a) Speakers intended for use in hazardous locations as defined in the National Electrical Code, NFPA 70; this includes speakers tested with the requirements in the Standard for Explosion-Proof and Dust-Ignition-Proof Electrical Equipment For Use In Hazardous (Classified) Locations, UL 1203;

b) Speakers intended for personal or private consumer use; this includes speakers for household/domestic use covered by the requirements in the Standard for Audio-Video Products and Accessories, UL 1492 and the Standard for Audio/Video and Musical Instrument Apparatus for Household, Commercial, and Similar General Use, UL 6500;

c) Speakers which are intended for commercial or professional audio applications and which employ integral active electronics; these products are covered in the Standard for Commercial Audio Equipment, UL 813; the Standard for Professional Video and Audio Equipment, UL 1419; and the commercial audio amplifier applications covered in UL 6500; and

d) Speakers intended for security applications; these products are covered in the Standard for Local Burglar Alarm Units and Systems, UL 609; and the Standard for Household Burglar-Alarm System Units, UL 1023.

1.3 Speakers intended for use with fire alarm systems are covered by Standard for Speakers for Fire Alarm and Signaling Systems, Including

#### SAFETY AGENCY COMPLIANCE

Accessories, UL 1480. Speakers with integral amplifiers must comply with the requirements in UL 1480 and the Standard for Amplifiers for Fire Protective Signaling Systems, UL 1711.

1.4 Speakers intended for use with emergency and non-emergency systems and having integral amplifiers must comply with this standard in addition to the requirements in the Standard for General-Purpose Signaling Devices and Systems, UL 2017.

1.5 Speakers intended for use in air-handling spaces in accordance with Installation of Air Conditioning and Ventilating Systems, NFPA 90A, shall comply with the requirements in this standard and the requirements in the Standard for Fire Test for Heat and Visible Smoke Release for Discrete Products and Their Accessories Installed in Air-Handling Spaces, UL 2043.

**UL 2043:** Standard for Fire Test for Heat and Visible Smoke Release for Discrete Products and their Accessories Installed in Air-Handling Spaces Scope:

1.1 This is a fire test method for determining the fire performance response of discrete products (including, but not limited to electrical, mechanical, and plumbing equipment) intended to be installed in air handling spaces, such as above suspended ceilings or below floors. These products are subjected to an open flame ignition source and evaluated using a product calorimeter.

1.2 This test may be used to determine fire performance and smoke characteristics of discrete, non-continuous building materials where the Test for Surface Burning Characteristics of Building Materials, UL 723, is not applicable.

1.3 The purpose of this test is to determine the rate of heat release and the rate of smoke release of the burning product samples as they relate to the requirements for fire-resistant and low-smoke-producing characteristics in accordance with the provisions of the following codes: National Electric Code, NFPA 70; International Mechanical Code, NFPA 5000; Standard for the Installation of Air Conditioning and Ventilating Systems, NFPA 90A.

1.4 This test method does not provide information on the performance of products in other fire or test conditions. This test does not investigate the toxicity of the products of combustion.

1.5 This test does not cover the constructional, electrical, or other performance requirements of the product.

1.6 The Codes noted in 1.3 reference the use of UL 2043 for electrical equipment with combustible outer enclosures. Specifically, the "National Electrical Code" and the "International Mechanical Code" expressly state that electrical equipment with metal enclosures shall be permitted. Consequently, UL 2043 is not intended to apply to electrical equipment with metal outer enclosures unless otherwise specified by end-prod-uct-standard requirements.

NFPA 70: Standard for Electrical Safety in the Workplace®

#### Scope:

This standard addresses electrical safety-related work practices, safety-related maintenance requirements, and other administrative controls for employee workplaces that are necessary for the practical safeguarding of employees relative to the hazards associated with electrical energy during activities such as the installation, inspection, operation, maintenance, and demolition of electric conductors, electric equipment, signaling and communications conductors and equipment, and raceways. This standard also includes safe work practices for employees performing other work activities that can expose them to electrical hazards as well as safe work practices for the following:

(1) Installation of conductors and equipment that connect to the supply of electricity

(2) Installations used by the electric utility, such as office buildings, warehouses, garages, machine shops, and recreational buildings that are not an integral part of a generating plant, substation, or control center.

# O R I G I N

#### SAFETY AGENCY COMPLIANCE

#### Informational Note:

This standard addresses safety of workers whose job responsibilities entail interaction with electrical equipment and systems with potential exposure to energized electrical equipment and circuit parts. Concepts in this standard are often adapted to other workers whose exposure to electrical hazards is unintentional or not recognized as part of their job responsibilities. The highest risk for injury from electrical hazards for other workers involve unintentional contact with overhead power lines and electric shock from machines, tools, and appliances.

NFPA 90A: Standard for Installation of Air Conditioning and Ventilation Systems

#### Scope:

1.1 Scope. This standard shall cover construction, installation, operation, and maintenance of systems for air conditioning and ventilating, including filters, ducts, and related equipment, to protect life and property from fire, smoke, and gases resulting from fire or from conditions having manifestations similar to fire. A.1.1 An air duct system has the potential to convey smoke, hot gases, and flame from area to area and to supply air to aid combustion in the fire area. For these reasons, fire protection of an air duct system is essential to safety to life and the protection of property. However, an air duct system's fire integrity also enables it to be used as part of a building's fire protection system. Guidance for the design of smoke-control systems is provided in NFPA 92, Standard for Smoke Control Systems. Pertinent information on maintenance is provided in Annex B. Maintenance of fire dampers, ceiling dampers, smoke dampers, and combination fire/smoke dampers requirements can be found in NFPA 80, Standard for Fire Doors and Other Opening Protectives, and NFPA 105, Standard for Smoke Door Assemblies and Other Opening Protectives.

