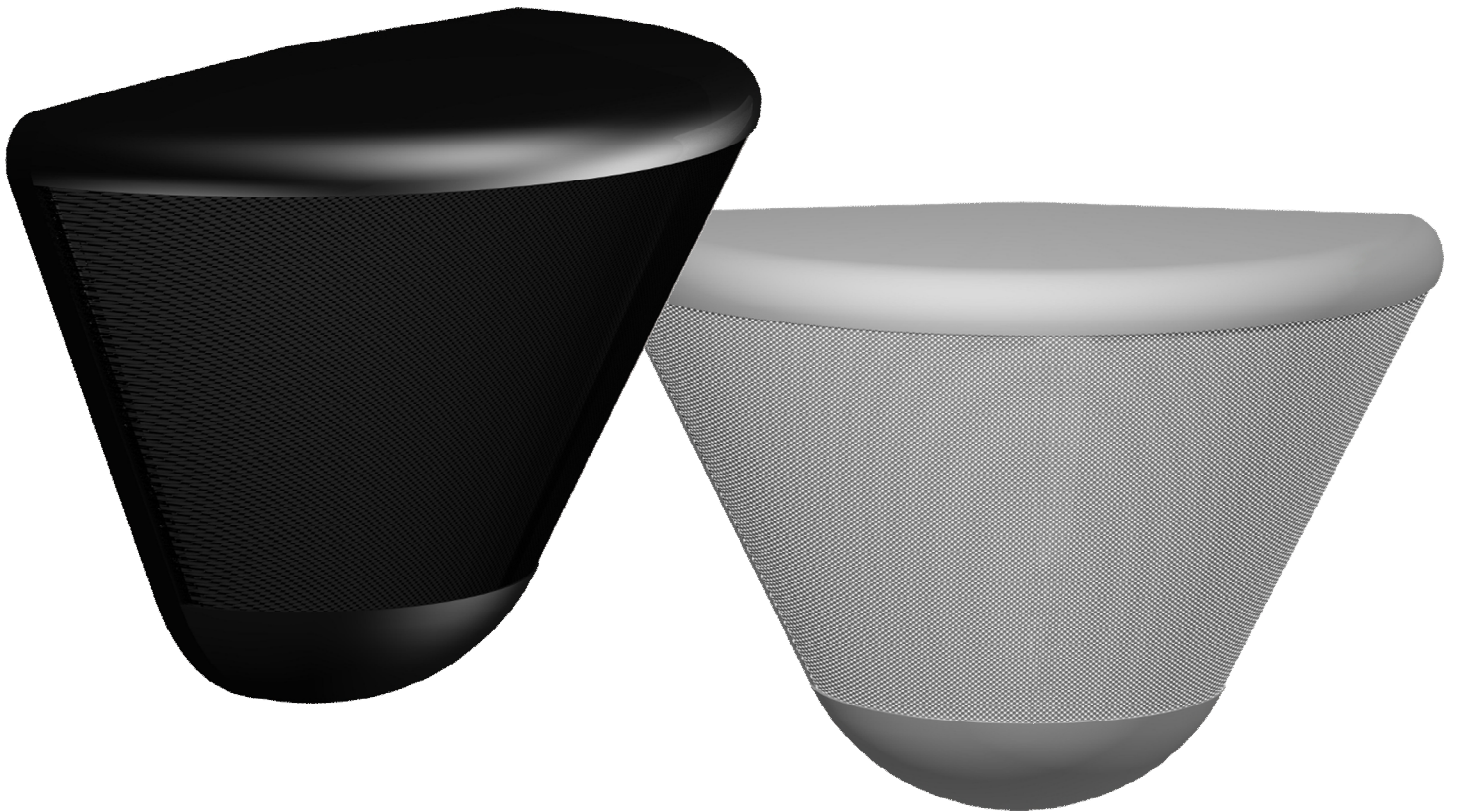




# *Distributed Design Series™*

DA6 Architectural Loudspeaker

Installation and Operation Manual



## Introduction

Available in white or black and designed to mimic a lighting sconce, Community's DA6 Architectural Surface-Mount Loudspeaker is a high-performance product which doubles as an attractive architectural element that can be painted to match a room décor.

The DA6 shares its innovative coaxial transducer and crossover with other members of Community's Distributed Design Series loudspeaker family. This means Distributed Design Series ceiling loudspeakers, surface-mount loudspeakers, pendant speakers and DA6 architectural loudspeakers can be used where needed in a restaurant, hotel lobby, conference center or other facility while maintaining consistent voicing (sound quality) throughout. This also means Distributed Design Series subwoofers, like the D10SUB (ceiling loudspeaker) or DS8SUB (surface mount loudspeaker) are excellent complements to the DA6 when additional low-frequency support is desired. The DA6 is easy to install and can be used in 8-ohm mode or in 70-volt/100-volt mode for distributed systems.

### Applications

Use one or two DA6s for music or voice in meeting rooms, party rooms, offices and other small spaces. Use multiple DA6s, in a distributed system, for restaurants and lounges, hotel lobbies and assembly rooms, classrooms and conference rooms, museums, convention centers, houses of worship, shopping malls, sports facility suites and concourses and other public spaces.

Despite its compact size, Community's DA6 is capable of relatively high SPL levels (see Specifications). Thus, in many cases, DA6s may be used in moderate to high-noise environments like sports facility concourses, shopping malls or similar public spaces.

### Using the DA6 with Other D-Series Loudspeakers

Community's D-Series includes ceiling loudspeakers, surface-mount loudspeakers, pendant loudspeakers and the DA6 architectural loudspeaker. All D-Series loudspeakers of a given size use the same innovative coaxial transducer and crossover network. That means the performance and voicing (sound quality) are uniform among all three loudspeaker styles allowing designers to freely mix styles to match room décor or layout while maintaining uniform sound quality throughout a facility.

### Where to Install the DA6

In most installations, DA6s will be distributed along a wall some distance above the listeners' heads, aiming down into the room. The following chart and guidelines will help designers determine the best location and spacing for a particular installation.

#### *General Placement Guidelines*

Each DA6 creates a cone-shaped coverage pattern approximately 100° wide that emanates from the face of the loudspeaker pointing downwards at an angle of 26° from the wall. When possible, locate the DA6s so that all listeners are within the coverage pattern of at least one DA6.

For the best voice intelligibility and in noisy or reverberant environments, overlap the coverage of adjacent DA6s by 20% to 30%. For low-level background music, it's acceptable to install the DA6s farther apart. It may also be acceptable to install the DA6s farther apart in voice systems when noise and reverberation levels are low (see chart).

In high-ceiling spaces, such as sports facility concourses or airport waiting areas, installing the DA6s near the ceiling allows a wider spacing with good coverage (see chart). However, if the room is noisy or reverberant, consider installing the DA6s at a lower height on the wall. Although this mounting height will require a larger quantity of DA6s, it will increase voice intelligibility without the need for higher SPL levels.



**CAUTION:** Installation of DA6 loudspeakers should only be performed by trained and qualified personnel. It is strongly recommended that a licensed and certified professional structural engineer approve the mounting. Severe injury and/or loss of life may occur if this product is improperly installed.

## How to Use the Spacing Chart

The *DA6 Spacing Guide* chart gives guidelines for DA6 spacing at different installation heights. The shaded areas are Community's recommended spacing for a given installation height and loudspeaker density. Follow these steps to use the chart:

- 1) Determine the audience height. For example, a restaurant audience is probably seated (3.9 ft. / 1.2 m ear height) whereas the audience in the lobby of a public building is probably standing (5.6 ft. / 1.7 m ear height).
- 2) Choose the desired DA6 installation height in the Standing Audience or the Seated Audience column. The installation height is specified as the vertical center line of the loudspeaker.
- 3) Follow the row to the Maximum Effective Distance column. For best results, this is the farthest distance any listener should be located away from the DA6s.
- 4) Choose the desired DA6 horizontal spacing in the DA6 Horizontal Spacing Density column group as follows:
  - a) Use the High Density column for noisy or reverberant spaces where voice intelligibility is critical.
  - b) Use the Medium Density column for less noisy spaces with some absorption (like carpeting and acoustic ceiling tiles) where voice intelligibility is important.
  - c) Use the Low Density column for relatively quiet spaces where the program is primarily background or foreground music with occasional, non-critical voice paging.
  - d) Use the Very Low Density column for music and occasional, non-critical voice paging when it is acceptable to hear some variation in sound level from place to place in the room.
- 5) If there is a range of possible installation heights, study the chart for different heights to determine the best combination of height and spacing for the installation. Use Community's recommended spacing (shaded area) whenever possible.

DA6 Spacing Guide (Along Wall or Boundary)													
DA6 Vertical Height				Cover Distance		DA6 Horizontal Spacing Density							
STEP 1 & 2 →				STEP 3 →		STEP 4							
Standing Audience (5.6 ft. / 1.7 m ear height)		Seated Audience (3.9 ft. / 1.2 m ear height)		Maximum Effective Distance from Wall*		High (≈±2.5dB)		Medium (≈±3dB)		Low (≈±3.5dB)		Very Low (≈±4dB)	
ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m
8.5	2.6	7.0	2.1	11.0	3.4	6.0	1.8	8.5	2.6	12.0	3.7	17.0	5.2
9.5	2.9	8.0	2.4	12.0	3.7	6.5	2.0	9.2	2.8	13.0	4.0	18.4	5.6
10.5	3.2	9.0	2.7	13.0	4.0	7.0	2.1	9.9	3.0	14.0	4.3	19.8	6.0
11.5	3.5	10.0	3.0	15.6	4.8	7.5	2.3	10.6	3.2	15.0	4.6	21.2	6.5
12.5	3.8	11.0	3.4	18.2	5.6	8.5	2.6	12.0	3.7	17.0	5.2	24.0	7.3
13.5	4.1	12.0	3.7	20.8	6.4	9.5	2.9	13.4	4.1	19.0	5.8	26.9	8.2
14.5	4.4	13.0	4.0	23.4	7.1	10.5	3.2	14.8	4.5	21.0	6.4	29.7	9.1
15.5	4.7	14.0	4.3	25.0	7.6	11.5	3.5	16.3	5.0	23.0	7.0	32.5	9.9
16.5	5.0	15.0	4.6	25.0	7.6	12.0	3.7	17.0	5.2	24.0	7.3	33.9	10.3
17.5	5.3	16.0	4.9	25.0	7.6	12.0	3.7	17.0	5.2	24.0	7.3	33.9	10.3

\* Measured perpendicular from the wall surface, not the flight distance from the loudspeaker to listener

## Safe Mounting



Select a location for the DA6 that allows it to be securely mounted to a building structural member. Do not mount the DA6 to a drywall or plaster wall unless the DA6 mounting plate is also securely fastened to a building structural member.

The DA6 mounting plate has holes that match standard 1 or 2-gang electrical outlet boxes. This is a convenient way to meet local codes and bring concealed wiring to the DA6 but, by itself, mounting to an electrical box is not usually a sufficient structural mounting system. When mounting the DA6 to an electrical box, use the additional mounting holes in the DA6 mounting plate to securely fasten the DA6 to a building structural member.

## Installing the DA6

### Wiring the Installation

Bring the speaker cable to each DA6 location before mounting the DA6 to the wall. Use 16-gauge or larger stranded speaker cable for best results. Leave approximately 6" (15 cm) of speaker cable coming out of the wall at each location for connection to the DA6. When the DA6 is mounted to the wall, this speaker cable will be pushed back into the wall or electrical box.

### Mounting and Wiring the DA6

Bring the speaker cable through the center hole in the DA6 mounting plate (Figure 1). Then, securely fasten the DA6 mounting plate to the wall and electrical box (if used). Confirm safe mounting to a building structural member.

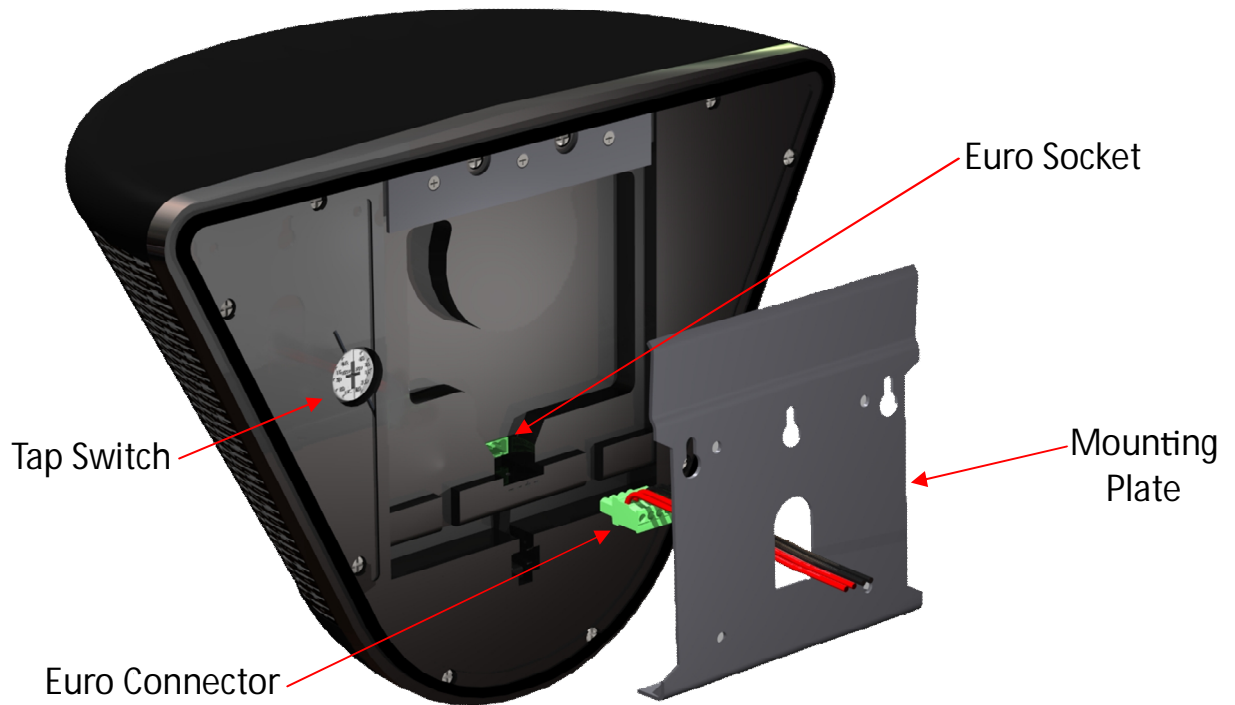
Locate and examine the Euro socket on the rear of the DA6. The inside pair of connections are for the loudspeaker. The outside pair of connections are paralleled to the inside pair and are provided for convenient daisy-chaining to the next DA6 in a distributed system. Note the left pair of connections is positive or "+" and the right pair of connections is negative or "-".

Strip about 1/4" (6 mm) from each speaker wire and attach them to the provided Euro connector. Correct polarity is critical for proper operation so confirm that the + wire is connected to position #2 and the - wire is connected to position #3 on the Euro connector. If the next loudspeaker is to be connected in daisy-chain fashion, connect its wires to position #1 (+) and position #4 (-).

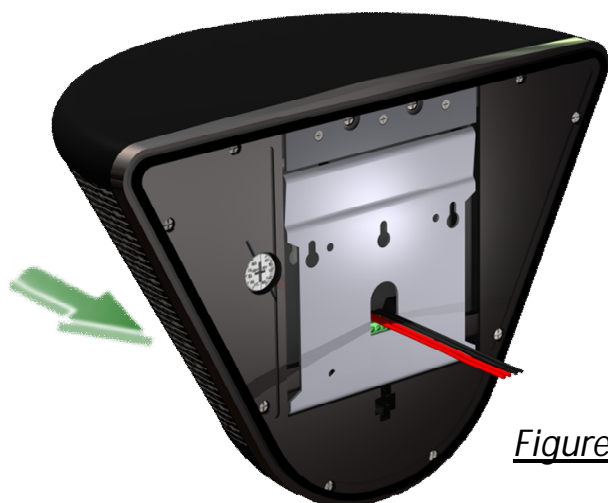
Use a straight-blade or Phillips screwdriver to set the DA6 tap switch to the position chosen by the system designer. This must be done before mounting the DA6 to the wall.

Plug the Euro connector into the Euro socket on the rear of the DA6. The connector should seat firmly in the socket.

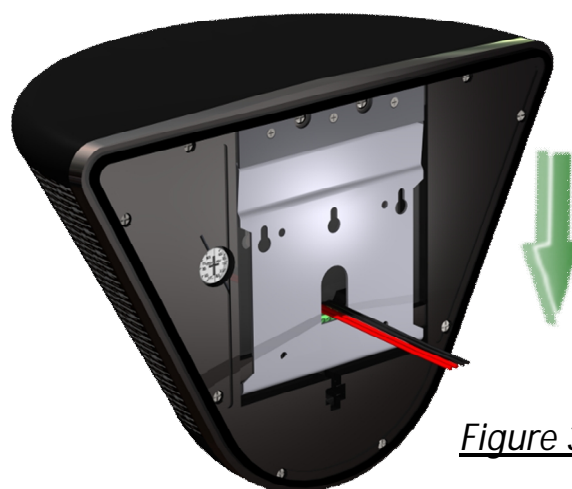
Figure 1



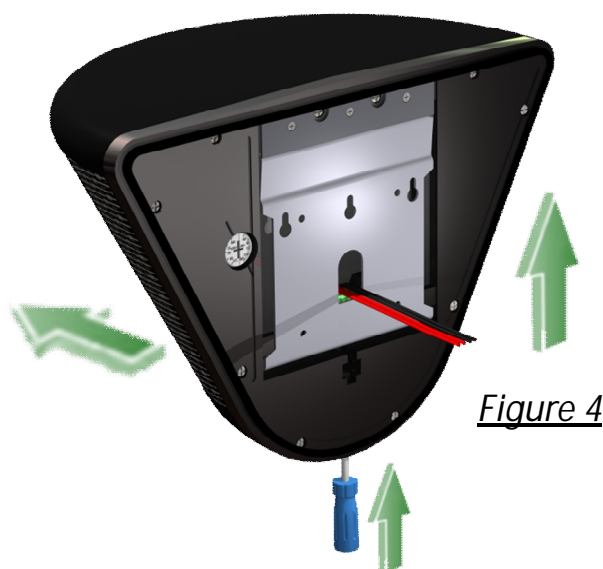
To mount the DA6 to the wall, slip it over the mounting plate and slide the DA6 downwards to snap it into place (Figure 2). This completes the mounting and wiring process.



*Figure 2*



*Figure 3*



*Figure 4*

## Uninstalling the DA6

Should it become necessary to remove the DA6 from its mounting location, the loudspeaker locking mechanism must be released via the small hole on the bottom of the DA6 (Figure 4). A specific tool is not provided for this purpose. Any simple tool, such as an Allen key or screwdriver, can be used. The tool should be at least 4" (102mm) long and no more than 0.2" (5mm) in diameter (a standard length #1 Phillips Screwdriver is usually an adequate size). Push upwards and hold to disengage the spring-loaded locking mechanism. While continuing to push upwards and holding the locking mechanism in the disengaged position, carefully lift the DA6 straight up (about 1/2" inch) and off of the mounting bracket. Once clear of the bracket, the DA6 can be removed from the wall, the Euro connector disconnected, and the removal tool may be withdrawn.

## Outdoor Usage

The Community DA6 is inherently weather-resistant and may be installed outdoors. To protect the connectors and wiring from corrosion, apply a small amount of silicon seal to the speaker wires as they enter the Euro connector after making the connections.

## Painting the DA6

### *Type of Paint*

These loudspeakers' ABS plastic cabinets accept almost any type of latex or enamel (oil based) paint. We recommend application of two coats. Note however that painting the grille requires spray painting.

### *Painting Process*

Follow this procedure to obtain the best results:

1. Remove the grille and carefully remove the grille foam from the grille (the foam cannot be painted). Discard the original grille foam, it cannot be re-used. Order replacement DA6 grille foam from Community.
2. Clean the grille assembly and the loudspeaker cabinet by rubbing them with a lightly dampened cloth. *Do not* use abrasives such as sandpaper or steel wool.



**Caution:** NEVER use abrasives, *gasoline*, *kerosene*, *acetone*, *methyl ethyl ketone (MEK)*, paint thinner, harsh detergents or other chemicals. These chemicals may permanently damage the finish. Some are also toxic and highly flammable.

3. Mask the loudspeakers so that the surrounds, cones and center areas will not receive any paint. We advise against using conventional masking tape and NEVER use duct tape in this application; these kinds of tape generally leave adhesive residue that can be difficult to remove and that may actually cause damage. Painters tape is best.
4. After cleaning, apply two or more thin coats of either latex or oil-based paints. Latex paint will adhere better if an oil-based primer is used first. Apply the paint with a roller or brush, or spray it on, except as noted below.
5. Use ONLY spray paint on the grille assembly; using a roller or brush to paint the grille is apt to cause its metal perforated holes to become clogged with paint. The grille should be painted separately, when it is *not* in place on the loudspeaker.
6. Attach the replacement grille foam to the grille using an aerosol spray adhesive. For best results it may be necessary to spray adhesive on both the grille and foam. Spray adhesive very lightly on the foam to prevent clogging the pores. The replacement foam will be oversized. It must be applied to the grille, then trimmed to size once in place.

# Warranty and Service Information

## TRANSFERABLE WARRANTY "(LIMITED)" VALID IN THE USA ONLY

The Distributed Design DA6 Loudspeaker Systems are designed and backed by Community Professional Loudspeakers. For complete warranty information within the USA please refer to the Warranty Card enclosed with the product. Please call 610-876-3400 to locate your nearest Authorized Field Service Station. For Factory Service call 610-876-3400. You must obtain a Return Authorization (R/A) number prior to the return of your product for factory service.

## WARRANTY INFORMATION AND SERVICE FOR COUNTRIES OTHER THAN THE USA

To obtain specific warranty information and available service locations for countries other than the United States of America, contact the authorized Community Distributor for your specific country or region.

## SHIPPING DAMAGE

If the product is damaged during transit you must file a damage claim directly with the freight company. Be sure to save the carton and packing materials, as damage claims can be denied if these materials are not retained. If evidence of physical damage exists upon arrival, be cautious before signing the delivery acceptance receipt. Often, the fine print will waive your right to file a claim for damage or loss after you sign it. Make sure that the number of cartons shown on the freight documents have actually been delivered.

## FIND THE LATEST ONLINE

Visit Community at <http://www.communitypro.com> for the latest version of this manual and the most recent product information.

## EC STATEMENT OF CONFORMITY

This document confirms that the range of products of Community Professional Loudspeakers bearing the CE label meets all of the requirements in the EMC directive 89/336/EEC laid down by the Member States Council for adjustment of legal requirements. Furthermore, the products comply with the rules and regulations referring to the electromagnetic compatibility of devices from 30-August-1995.

The Community Professional Loudspeaker products bearing the CE label comply with the following harmonized or national standards: DIN EN 55013:08-1991, DIN EN 55020:05-1995, DIN EN 55082-1:03-1993

The authorized declaration and compatibility certification resides with the manufacturer and can be viewed upon request. The responsible manufacturer is the company:

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Chester, PA USA  
September 2012

# Distributed Design Series™

## DA6 SPECIFICATIONS

<b>Loudspeaker Type:</b>	6.5-inch, two-way, full-range, coaxial, surface mount loudspeaker, 8 ohm or 70V/100V operation
<b>Frequency Range (Half-Space):</b>	80 Hz to 20 kHz (-3 dB) 65 Hz to 22 kHz (-10 dB)
<b>Nominal -6dB Beamwidth:</b>	115° conical (1 kHz to 6 kHz)
<b>Crossover Frequency:</b>	1.2 kHz
<b>Sensitivity (1w/1m):</b>	93 dB (125 Hz to 12.5 kHz) half space 91 dB (250 Hz to 4 kHz) half space
<b>Nominal Impedance:</b>	8 ohms
<b>Power Capacity:</b>	RMS 100W (28.3V) Program 250W (44.7V) Peak 400W (56.6V)
<b>Max SPL (1m Free Space):</b>	113 dB (119 dB Peak) 8 ohm tap
<b>Autoformer Taps--70V: 100V:</b>	60W, 30W, 15W, 7.5W and low impedance 60W, 30W, 15W and low impedance
<b>Enclosure Type:</b>	High-Strength, Impact-Resistant, Injection-Molded ABS Plastic (Paintable)
<b>Environmental:</b>	IP55 (per IEC529), designed to Mil Spec 810 Standards
<b>Colors:</b>	White or Black (Paintable)
<b>Mounting System:</b>	Included flush-mount wall bracket (fits 1 or 2-gang electrical box - not included)
<b>Dimensions—Height: Width: Depth:</b>	11.2 inches (284.2 mm) 15.3 inches (388.7 mm) 8.3 inches (211.5 mm)
<b>Loudspeaker Weight:</b>	11.9 lbs (5.4 kg)
<b>Shipping Weight:</b>	17.7 lbs (8.0 kg)

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

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