

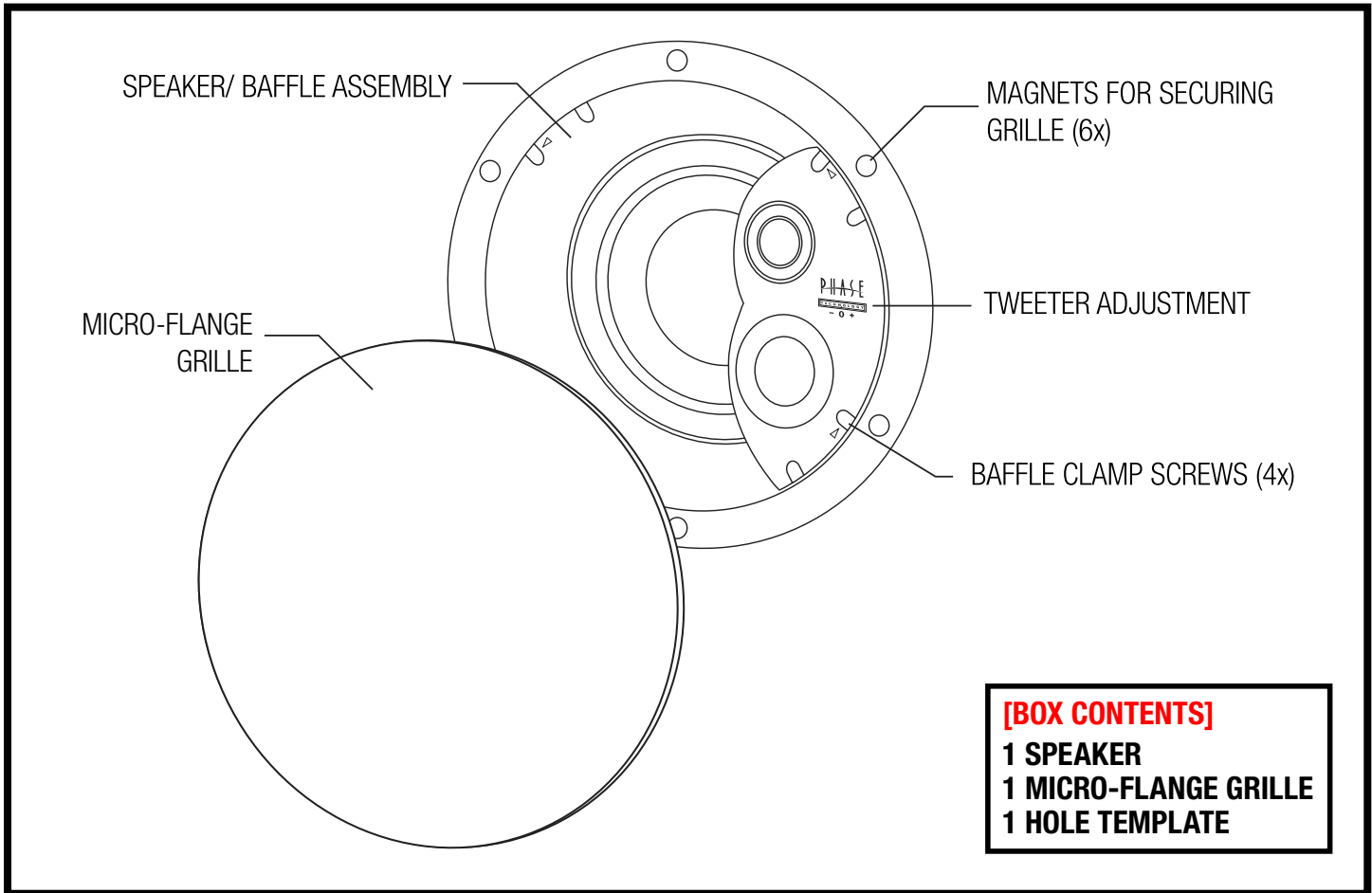


# [CI X SERIES]

CI6.1 X • CI6.2 X • CI7.3 X

## OWNER'S MANUAL & INSTALL GUIDE

**CI6.1 X • CI6.2 X • CI7.3 X**



Thank you for purchasing Phase Technology® CI custom installation speakers. This tenth generation of high performance ceiling mounted speakers features the same superb sonic performance as our acclaimed PC Series cabinet speakers in addition to great flexibility and easy installation. The most striking change to the Series X is a new look with the off-axis tweeter design. This feature maximizes the speaker's clarity and imaging by creating an asymmetrical loading or diffraction pattern, reducing the amount of diffraction normally caused by a flange-to-ceiling junction. The net result is the best sonic realism you can buy in an in-ceiling speaker.

All CI Series speakers include self-resetting solid-state PTC protection circuits. This unique system is able to detect when the speaker is being over-driven and lowers the speaker volume until the problem is corrected. The PTC device then resets itself for normal operation. Other features include our new low profile Micro-Flange grille with magnetic retainers, liquid-cooled tweeters for greater power handling, moisture-resistant materials in all of the critical speaker components, galvanized steel speaker grilles and corrosion resistance hardware.

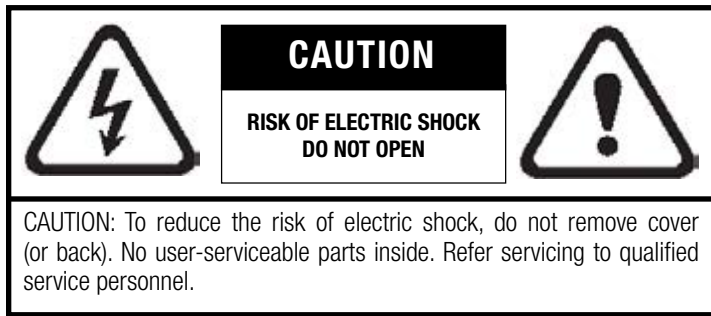
Regardless of application, serious audiophile listening or home theater, we recommend that you take the time to read this manual thoroughly

before connecting speakers to your amplifier or receiver. In the highly unlikely event that you should experience a problem with set-up or operation, please contact one of our authorized dealers for assistance, or contact us directly.

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## [SAFETY INSTRUCTIONS]



### Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**1. Read Instructions** - All the safety and operating instructions should be read before the appliance is operated.

**2. Retain Instructions** - The safety and operating instructions should be retained for future reference.

**3. Heed Warnings** - All warnings on the appliance and in the operating instructions should be adhered to.

**4. Follow Instructions** - All operating and other instructions should be followed.

**5. Water and Moisture** - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

**6. Carts and Stands** - The appliance should be used only with a cart or stand that is recommended by the manufacturer.

### PORTABLE CART WARNING



**7. Wall or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.

**8. Ventilation** - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet

that may impede the flow of air through the ventilation openings.

**9. Heat** - The appliance should be situated away from heat sources such as radiators, stoves, or other appliances that produce heat.

**10. Power Source** - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

**11. Power Cord Protection** - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed up or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

**12. Cleaning** - The appliance should be cleaned only as recommended by the manufacturer.

**13. Nonuse Periods** - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

**14. Object and Liquid Entry** - Care should be taken so that neither objects fall nor liquids spill into the inside of the appliance.

**15. Damage Requiring Service** - The application should be serviced by qualified service personnel when:

- the power supply cord or the plug has been damaged,
- objects have fallen onto or liquid has been spilled into the appliance,
- the appliance has been exposed to rain,
- the appliance does not appear to operate normally or exhibits a marked change in performance, or
- the appliance has been dropped or the cabinet damaged.

**16. Servicing** - The user should not attempt to service the appliance beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.

**17. Grounding or Polarization** - Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

### APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR USAGE

**CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, INSERT FULLY.

**ATTENTION:** POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRESE ET POUSSER JUSQU'AU FOND.

## [SPEAKER INSTALLATION IN A SHEETROCK CEILING]

For proper connection and therefore full enjoyment of your new Phase Technology speakers, we encourage you to read this owners' manual thoroughly, even if you are very familiar with installing speakers. Speaker placement is very subjective. Placement follows the guidelines for the developers of in-ceiling speakers, yet is also guided by personal preferences. The proper spacing, location and adjustment of in-ceiling speakers are critical for complete enjoyment of your new speakers. This manual covers these topics thoroughly.

**STEP 1:** Choose the appropriate mounting location for each speaker.

**NOTE:** When deciding upon a location, consider the following:

- Be certain your speaker wires can be run to or are accessible from these locations.
- Make certain the wall or ceiling material is sturdy enough to support the weight and vibration of the speakers.
- It is recommended that our pre-construction rough-in brackets (part number RB-21 for CI6.1 & CI6.2, RB-22 for CI7.3) be used whenever possible in new construction.
- Be certain the area behind the speaker is free of obstacles such as wall studs, electrical wiring, pipes, etc.
- Each speaker should be positioned properly, relative to the listening area for good coverage.
- Audio performance and room-to-room isolation will be improved if there is some fiberglass insulation placed loosely behind the speaker.

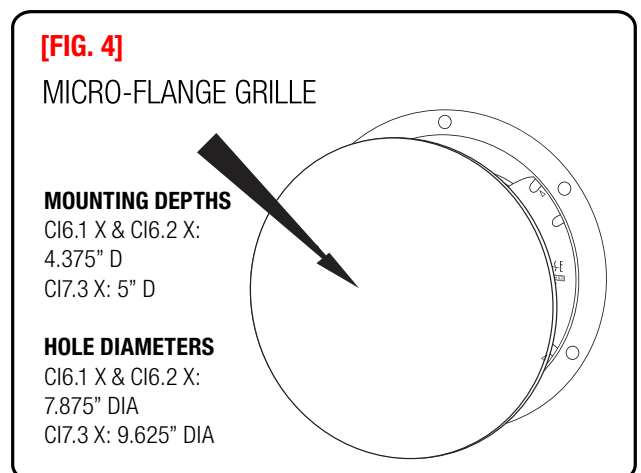
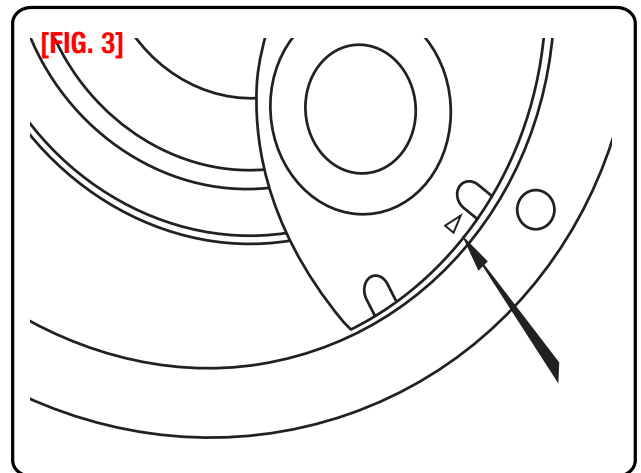
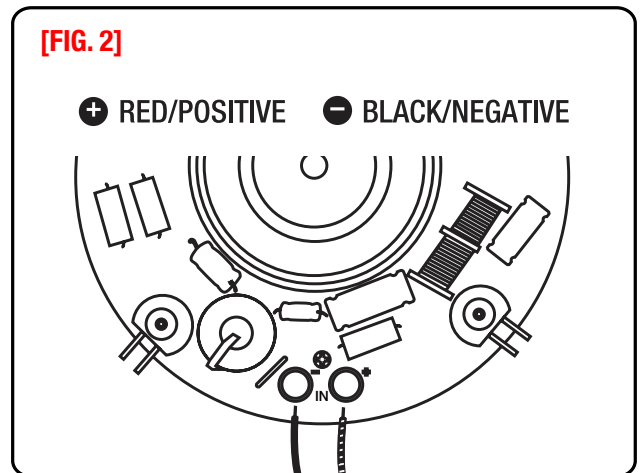
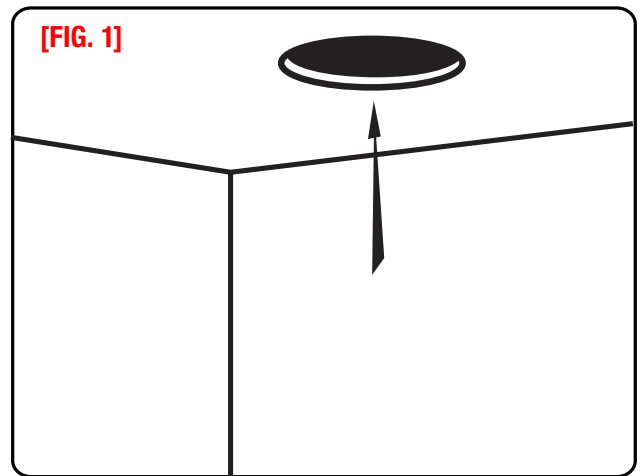
**STEP 2:** Using the supplied cutout template, carefully mark the area to be cut out. (Fig. 1) Using a drywall knife or saw, cut a hole in the drywall and prepare the speaker wires for connection to the speaker terminals.

**STEP 3:** Connect the speaker wires to the spring-loaded input terminals (Fig. 2) on the rear of the speaker, making sure no loose strands are exposed. If connecting the CI6.2 X, see "Wiring Options for the CI6.2 X".

**STEP 4:** Carefully place the speaker in the hole cut into the ceiling. Loosen the clamping screws one turn (counter clockwise) to release the clamp (Fig. 3). Next, tighten all four speaker clamp screws evenly to secure the speaker to the wall. It is best to tighten each screw with the same amount of force (torque). clamping screws are indicated by an arrow cast into the baffel. **CAUTION: DO NOT OVER-TIGHTEN.**

**STEP 5:** Using some familiar source material, listen to the tweeter's balance with the level control in each of its three positions to find your favorite tonal balance.

**STEP 6:** Carefully replace the grille by pressing it onto the speaker (Fig. 4). The grille will snap into place using magenets. Enjoy!



## [WIRING OPTIONS FOR THE C16.2 X]

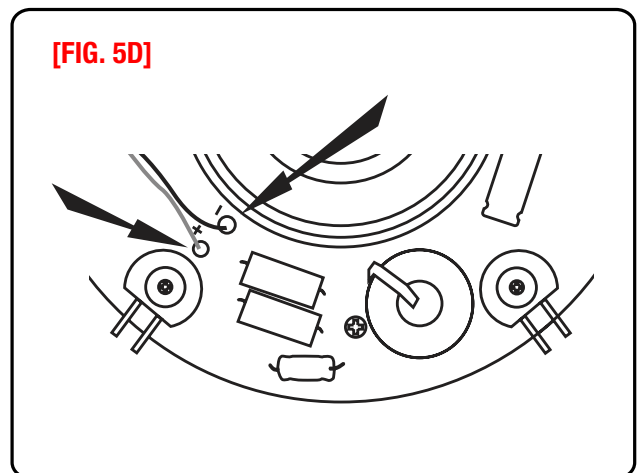
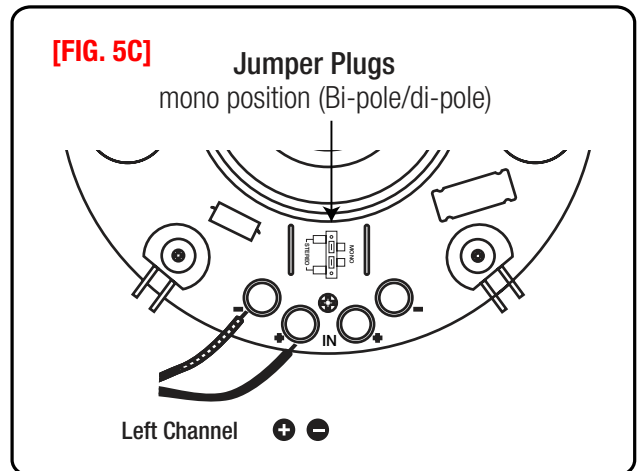
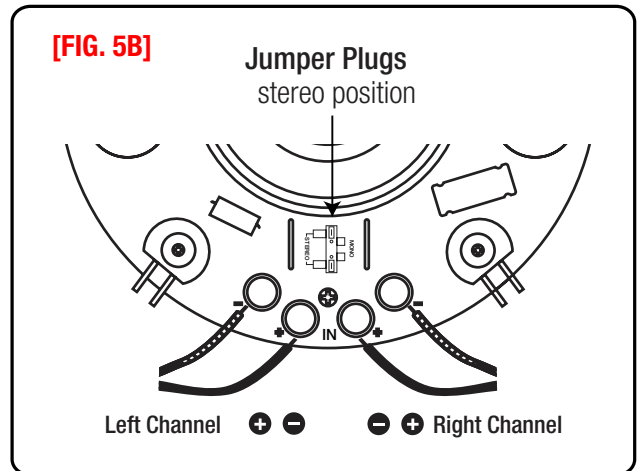
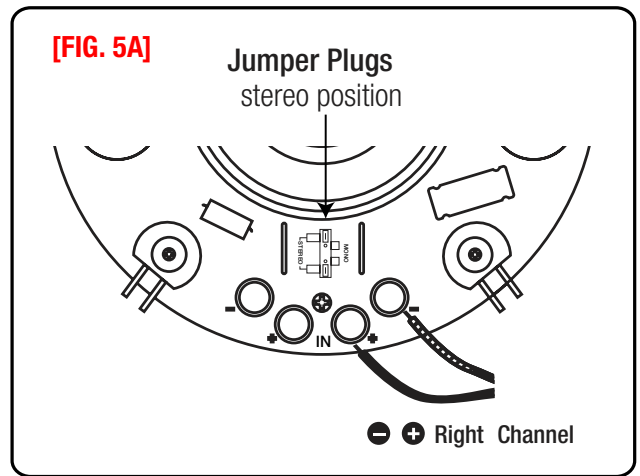
For proper connection and therefore full enjoyment of your new Phase Technology speakers, we encourage you to read this owners' manual thoroughly, even if you are very familiar with installing speakers. Speaker placement is very subjective. Placement follows the guidelines for the developers of in-ceiling speakers, yet is also guided by personal preferences. The proper spacing, location and adjustment of in-ceiling speakers are critical for complete enjoyment of your new speakers. This manual covers these topics thoroughly.

**STEREO FIG. 5A-8 ohms:** Use this configuration to drive one channel (left OR right) of a stereo pair. Set jumper plugs in the stereo position. Connect the right or left signal wire to the right set of terminals on the rear of the speaker.

**STEREO POINT SOURCE FIG. 5B-8 ohms:** Use this configuration to combine left AND right channels for full fidelity sound from a single loud-speaker stereo source. Set jumper plugs in the stereo position. Connect right and left signal wires to the spring-loaded terminals on the rear of the speaker.

**MONO/STEREO FIG. 5C-4 ohms:** Use this configuration to drive one channel (left OR right) of a stereo pair with a 4 ohm speaker load. Set jumper plugs in the mono position. Connect the right or left signal wire to the left set of posts on the rear of the speaker. Acoustic output of the speaker is increased by 3 dB in this configuration.

**BIPOLE/DIPOLE FIG. 5D-4 ohms:** Use this configuration for home theater surround applications. For **bipole** mode, connect as in the **Mono/Stereo** instructions (FIG.3): one speaker to each surround channel. For **dipole** mode, connect speaker inputs the same as **Mono/Stereo** instructions (FIG.3), but reverse the + and - connections of the red and black tweeter wires to put one of the tweeters out of phase.



## **[CARING FOR YOUR PHASE TECHNOLOGY SPEAKER]**

All Phase Technology speakers are finished with a high degree of craftsmanship in either hand polished paint or vinyl laminates. We recommend using a lint-free rag with a small amount of glass cleaner to maintain the long-lasting beauty of the finish. Avoid products containing silicones, oils, oil derivatives, or solvents. Enclosures finished in vinyl laminates may be cleaned with a damp cloth as necessary.

## **[MAINTENANCE AND SERVICE]**

Because of Phase Technology's uncompromising quality control programs, it's unlikely that your speakers will ever need service if connected and used as outlined in this Owners' Manual. In the unlikely event that a problem does occur, please contact your Phase Technology dealer. Your dealer has the necessary factory-authorized parts and trained technicians to quickly restore your speaker to its original performance specifications.

## **[TROUBLESHOOTING]**

### **NO SOUND**

1. Verify that all components are plugged in and turned on.
2. Check all speaker wires and cables for loose connections.
3. Check to see if you have selected the proper source on your amplifier.

### **VOICES DO NOT APPEAR TO COME FROM BETWEEN THE SPEAKERS / BASS RESPONSE IS WEAK**

1. Verify that all speaker connections from the amplifier to the speakers are running PLUS+ to PLUS+ and MINUS- to MINUS-.
2. Check to see if there are any furnishings or plants that may be blocking the output of a speaker.

### **SOUND, BUT NO BASS (MOST LIKELY IN SYSTEMS WITH A SUBWOOFER)**

1. Verify that the subwoofer is plugged into an AC outlet and power is turned on.
2. Check that the speaker wire / cable going from the amplifier/receiver to the subwoofer is securely fastened.
3. Check the volume control of the subwoofer.
4. Refer to your amplifier/receiver manual to make sure you have adjusted its bass output properly.

### **MUDDY OR BOOMY BASS**

1. Check the volume control for the subwoofer. Excess volume can cause speakers to sound distorted and unnatural.
2. Try adjusting the crossover control on the subwoofer or the subwoofer setup on your receiver to a slightly lower frequency (example: reduce from 120 Hz to 80 or 60 Hz).
3. If the subwoofer or full size speaker is close to a corner, side or back wall, try moving it away from the wall. This may reduce the "boomy" bass considerably.
4. Bookshelf speakers placed in a semi-enclosed space or cabinet can artificially emphasize bass output. Reduce the bass control on your amplifier or move the speakers to the front of the cabinet. Alternatively, reposition the speakers to a more open location.

### **DISTORTED SOUND FROM THE SPEAKERS**

1. This problem is usually caused by setting the volume control too high. Reduce the amplifier/receiver volume to a lower level.
2. If noise and distortion are audible at higher volume levels, your amplifier may not be powerful enough. Consider upgrading to a unit with higher power.

NOTE: Remember, even though your Phase Technology speakers can handle considerable power levels, ANY speaker if used improperly can be damaged. Consult your Phase Technology dealer for assistance in choosing a new amplifier or receiver.

**[WARRANTY]**

**LIMITED WARRANTY:** Phase Technology warrants its loudspeakers to be free from defects in material and workmanship for a period of ten (10) years for speaker product, limited lifetime for CI speakers, and three (3) years for the electronic components to the original purchaser. Purchase must be made from an authorized Phase Technology dealer.

This warranty does not cover service or parts to repair damage caused by misuse, abuse, damage while in transit, alterations, unauthorized repairs, failure to follow instructions, fire, flood or any other cause beyond the reasonable control of Phase Technology. Defects in speaker cabinets or grilles must be brought to the attention of your dealer immediately after purchase. This warranty will be void if the products' serial number has been altered or removed.

Should your Phase Technology product require service, please call the MSE Audio customer service department for a return authorization. All merchandise returned to Phase Technology without prior authorization will be refused. For your return authorization number, please call 855.663.5600 or email sales@mseaudio.com.

<b>[SPECIFICATIONS]</b>	<b>CI6.1 X</b>	<b>CI6.2 X</b>	<b>CI7.3 X</b>
<b>DESCRIPTION</b>	6.5" 2-Way In-Ceiling Speaker	6.5" Switchable In-Ceiling Surround	8" 3-Way In-Ceiling Speaker
<b>TWEETER</b>	1" Variable Axis Soft Dome	(2) .75" Pivoting Patented Soft Dome	1" Variable Axis Soft Dome
<b>WOOFER</b>	6.5" Woven Glass Fiber w/ NBR Surround	6.5" Woven Glass Fiber w/ NBR Surround	8" Woven Glass Fiber w/ NBR Surround
<b>RMS</b>	10 - 150 Watts	10 - 100 Watts	15 - 200 Watts
<b>FREQUENCY</b>	40 Hz - 22 kHz	45 Hz - 22 kHz	38 Hz - 22 kHz
<b>SENSITIVITY</b>	90 dB	91 dB	92 dB
<b>IMPEDANCE</b>	8 Ohms	8 Ohms	8 Ohms
<b>DIMENSIONS</b>	9.34" Diameter x 4.625" Depth	9.34" Diameter x 4.625" Depth	11" Diameter x 5.25" Depth
<b>CUTOUT DIMENSIONS</b>	7.875" Diameter	7.875" Diameter	9.625" Diameter
<b>MOUNTING DEPTH</b>	4.375"	4.375"	5"
<b>WEIGHT</b>	4.5 lbs.	4.5 lbs.	6 lbs.
<b>GRILLE</b>	White Powder-Coated Galvanized Steel Micro-Flange	White Powder-Coated Galvanized Steel Micro-Flange	White Powder-Coated Galvanized Steel Micro-Flange
<b>ACCESSORIES</b>	Pre-Construction Bracket (RB-21)	Pre-Construction Bracket (RB-21)	Pre-Construction Bracket (RB-22)
<b>SPEAKER IMAGES</b>	