SC-600 IF/IC (IN-FLOOR/IN-CEILING)

(IN-FLOOR/IN-CEILING

SUBWOOFER

SUBCONTRACTOR™ SERIES



INSTALLATION MANUAL



IMPORTANT SAFETY INSTRUCTIONS



Caution

To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.

The lightning flash with arrowhead symbol is intended to alert the user to the presence of uninsulated "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 symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the subwoofer.

- 1. Read Instructions All safety and operating instructions should be read before the product is operated.
- 2. Retain Instructions The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings All warnings on the product and in the operating instructions should be adhered to.
- 4. Follow Instructions All operating and use instructions should be followed.
- 5. Water and Moisture The product should not be used near water for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool or the like.
- 6. **Carts and Stands** The product should be used only with a cart or stand recommended by the manufacturer.
- 7. Wall or Ceiling Mounting The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation The product should be situated so that its location or position does not interfere with its proper ventilation. For example, the product 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 product should be situated away from heat sources such as radiators, heat registers, stoves, or other products that produce heat.
- 10. **Power Sources** The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
- 11. **Grounding or Polarization** This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 12. **Power-Cord Protection** Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point at which they exit from the product.
- 13. Cleaning The product should be cleaned only as recommended by the manufacturer.
- 14. Nonuse Periods The power cord of the product should be unplugged from the outlet when left unused for a long period of time.
- 15. **Object and Liquid Entry** Care should be taken so that objects do not fall and liquids are not spilled onto the enclosure.
- 16. Damage Requiring Service The product should be serviced by qualified service personnel when:
 - a. The power-supply cord or plug has been damaged.
 - b. Objects have fallen or liquid has been spilled into the product.
 - c. The product has been exposed to rain.
 - d. The product does not appear to operate normally or exhibits a marked change in performance.
 - e. The product has been dropped or damaged.
- 17. Servicing The user should not attempt to service the product beyond what is described in the operating instructions. All other servicing should be referred to qualified service personnel. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 18. Lightning For added protection for the product during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet.
- 19. **Overloading** Do not overload wall outlets, extension cords or integral convenience receptacles as this can result in a risk of fire or electric shock.
- 20. Attachments Only use attachments and accessories specified by the manufacturer.
- 21. **Voltage** Insure that the subwoofer is only connected to the rated source voltage. Do not connect the 120-volt version to 230-volts or vice-versa. This will result in damage to the subwoofer and possible injury to the user.

CAUTION: To prevent electrical shock, match wide blade of plug to wide slot, fully inserted.

TABLE OF CONTENTS

Product Overview	1
Installation — Step-By-Step	2
Velodyne Products	10

PRODUCT OVERVIEW

The SC-600 IF/IC is an affordable in-ceiling or in-floor subwoofer that offers outstanding performance and value. The SC-600 IF/IC sports a powerful 12" driver and slot-loaded, bass reflex cabinet enabling maximum performance to reproduce the most demanding home theater and music with authority, accuracy and low distortion. The SC-600 IF/IC is easy to install whether it's for new construction or retrofit – four adjustable brackets are included that can be attached anywhere on the cabinet surface. The SC-600, a rack-mountable amplifier that powers the SC-600 Series, features 400 watts dynamic / 200 watts RMS power.

The SC-600 IF/IC can be installed in a variety of locations and positions for a given installation. The SC-600 IF/IC can be used in-floor, in ceiling, or in other applications – all that is required is a sturdy stud frame to mount to and a way to mount the SC-ICG (In-Ceiling) Grille or decorative grille. The woofer cabinet is 14" wide so ideally installs with 16" joist spacing. However, spacer boards can be used to adapt the SC-600 IF/IC to other applications.

This document provides the detailed process for properly installing the SC-600 IF/IC. The user's manual for the SC-600 subwoofer amplifier provides the details on connectivity and proper configuration of the SC-600 IF/IC after installation.

IT IS STRONGLY RECOMMENDED THAT ONLY THE SC-600 AMPLIFIER BE USED WITH THE SC-600 IF/IC, DUE TO THE SPECIFIC EQ CURVES AND AMPLIFIER CUSTOMIZATION IN THE SC-600.

A Word About Grilles

The SC-600 IF/IC comes with a permanently attached protective metal grille. This is intended to protect the driver from debris falling into it in in-floor installation situations. No register or decorative grille is provided – the installer must determine the location of the subwoofer and what is to be used as a register or other decorative grille to hide the subwoofer enclosure after the installation is complete.

Velodyne does offer, as an option, a paintable, perforated metal 12" ceiling grille, the SC-ICG.

INSTALLATION - STEP-BY-STEP

Step 1 -

Determine installation location. As stated above, the SC-600 IF/IC can be mounted virtually anywhere. The only requirements are that the cabinet fit into the location, and that there be a proper opening for the sound to be passed into the listening environment.

Step 2 -

Mark installation location. It is useful to place the subwoofer cabinet in its proposed position and mark the locations of the four brackets that will be used to affix the subwoofer to the framing. Note that the brackets can be mounted ANYWHERE on the subwoofer cabinet, as long as the brackets do not interfere with the woofer's operation. Always use all four brackets in the installation. It is recommended that the cabinet be positioned flush with the face of the joists for ease of positioning and installation, but this is not required. Make sure the speaker terminals are facing the direction you intend to run the speaker wire.



Figure 1: Mark bracket locations with a pencil.

Note: The brackets can be attached anywhere on the SC-600 IF/IC cabinet.

Step 3 -

Determine and mark grille location. From the centerline of the subwoofer driver, mark off the dimensions of the grille opening to accommodate the decorative grille chosen for the end user installation.

Step 4 -

Prepare the installation location. Make whatever modifications are required to enable the subwoofer to fit in the installation location. Note that the SC-600 IF/IC is designed for joists on 16" centers. Install spacer studes as required to accommodate this dimension.

Step 5 -

Attach the PSA-sided foam strips to the subwoofer cabinet. MAKE SURE STRIPS ARE USED ANYWHERE THE CABINET WILL COME INTO CONTACT WITH THE STRUCTURE IN ANY WAY. The SC-600 IF/IC is a powerful subwoofer and will likely buzz or rattle if not isolated from the structure using the provided foam strips.



Figure 2: Affix foam strips.

Step 6 -

Install. Place the SC-600 IF/IC as determined in step two and attach the brackets loosely.

CAUTION: The SC-600 IF/IC is heavy. Either use a partner to suspend the subwoofer while you are attaching it or use a mechanical device to hold it in place during installation.



Figure 3: SC-600 IF (In-Floor) positioned into floor location.

Step 7 -

Adjust bracket position and tighten. Position the subwoofer into its final location and tighten the brackets.



Figure 4: Tighten the brackets.

Step 8 -

Secure wiring. Attach the speaker wire to the speaker terminals. Twist the wire strands tightly before inserting them in the terminals. Do <u>not</u> allow stray wires from one terminal to touch the other terminal. This will damage the amplifier. A 16 AWG or heavier wire is recommended. Be sure to secure the speaker wire so it does not rattle or buzz against the cabinet during use.







Figure 5a, 5b, and 5c: Speaker wire connection.

Step 9 -

Complete installation. Install the decorative grille and perform any other tasks needed to complete the installation based on chosen woofer positioning. It is recommended to use caulking to secure the decorative grille to prevent buzzing and rattling.



Figure 6: Finished installation with register

Step 10 -

Use aggressive bass material and check the subwoofer for buzzes and rattles. These can come from inadequate use of the foam strips, or there may be sympathetic vibration in the structure due to the powerful nature of the SC-600 IF/IC. In the latter case, track down the rattle and secure it with caulking or other similar material.

FOR YOUR RECORDS. . .

Date Purchased_____

Dealer_____

Serial #_____

*NOTE: Please complete and return your warranty card within ten (10) days or

Register. . . ON LINE . . . It's faster . . . and easier www.velodyne.com

LIMITED WARRANTY - U.S. AND CANADA ONLY

VELODYNE ACOUSTICS, Inc. ("VELODYNE") warrants all electronics for a period of three years, drivers for a period of five years, and full range speakers for a period of five years. All VELODYNE products have a warranty from the date of purchase against defects in materials and workmanship subject to the following conditions:

- 1. VELODYNE is not responsible for defects which result from the use of an amplifier or controller other than the one originally supplied with the unit (subwoofer) or defects which result from modifications or repairs made by any component of the system by anyone other than a VELODYNE factory authorized service representative.
- 2. This warranty is void if any repairs or service covered by the terms of this warranty are made to any component of the system by anyone other than a VELODYNE factory authorized service representative.
- VELODYNE is not responsible for damage caused by accidents, abuse, misuse, natural or personal disaster or unauthorized modification. The VELODYNE products are not intended for professional or commercial use and VELODYNE is not responsible for damage resulting from such use.
- 4. The VELODYNE product warranty is limited to units that are purchased from authorized VELODYNE dealers and finalized within authorized dealer locations.
- 5. This warranty is nontransferable under any condition.
- 6. Use of this product outside the U.S. and Canada voids this warranty.

TO OBTAIN SERVICE

Information regarding service may be obtained from the dealer from whom you purchased the unit, or by contacting VELODYNE customer service. Warranty service must be performed by a VELODYNE factory authorized service representative within the warranty period set forth above. If VELODYNE determines the unit is defective, VELODYNE will, at VELODYNE's option, repair or replace the product at no charge if the product is forwarded prepaid to a factory authorized service representative. Products forwarded to the factory authorized service representative should be shipped securely and properly packaged, insured and freight prepaid.

WARRANTY OUTSIDE THE UNITED STATES AND CANADA

The Warranty of this product if it is sold to a consumer outside of the United States or Canada shall comply with applicable law and shall be the sole responsibility of the distributor that supplied this product. To obtain any applicable warranty service, please contact the dealer from which you purchased this product, or the distributor that supplied this product.

VELODYNE PRODUCTS

<u> 120V</u>

DD[®] Series DD-10 DD-12 DD-15 DD-18 Digital Drive 1812 Signature Edition

DEQ-R Series

DEQ-8R DEQ-10R DEQ-12R DEQ-15R

DLS™-R Series

DLS-3500R DLS-3750R DLS-4000R DLS-5000R

Impact Series

Impact-Mini Impact-10 Impact-12 MicroVee™

MiniVee[®] MiniVee[®] 10

SMS[™]-1

<u>SPL-R[®] Series</u>

SPL-800R SPL-1000R SPL-1200R SPL-1500R

SubContractor[™]

<u>Series</u> SC-1250 SC-10 SC-12 SC-15 SC-15 SC-IV SC-IF/IC SC-600 Amp SC-600 IV SC-600 IF/IC

VX Series

<u>230V</u>

DD[®] Series DD-10

DD-12 DD-15 DD-18 Digital Drive 1812 Signature Edition

CHT-Q Series

CHT-8Q CHT-10Q CHT-12Q CHT-15Q

Impact Series

Impact-Mini Impact-10 Impact-12

MicroVee™

SMS™-1

SPL: Series SPL-800i SPL-1000i

SPL-R® Series

SPL-800R SPL-1000R SPL-1200R SPL-1500R

SubContractor™ <u>Series</u>

SC-1250 SC-10 SC-12 SC-15 SC-IV SC-IF/IC SC-600 Amp SC-600 IV SC-600 IF/IC

VX-10 Series II

Velodyne Acoustics, Inc.

345 Digital Drive Morgan Hill, CA 95037

408.465.2800 voice 408.779.9227 fax 408.779.9208 service fax

www.velodyne.com Service E-mail: service@velodyne.com Product E-mail: help@velodyne.com Technical E-mail: techhelp@velodyne.com



63-SC600IFC Rev A JUL08