

RCC six forty

INSTALLATION GUIDE

RCC640-R Retrofit Subwoofer Module

RCC640-PC Pre-Construction Subwoofer Module

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RCC640-R:

- 1. RCC640 Retrofit Subwoofer
- 1. Grille
- 1. Cut-out Template
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If you are missing any of these parts or if you need assistance during the installation of your RCC640 Subwoofer System, please contact Artison's Customer Service Department during normal business hours, Pacific Time at (775) 783-4770.

Thank you for choosing Artison's RCC640 Subwoofers. We are pleased that you have selected our high-performance audio products.

INTRODUCTION

The following information will guide you through the installation and setup of your Artison RCC640 Retrofit Subwoofer or RCC640 Pre-Construction Subwoofer. The RCC320 and RCC640 model series are in wall subwoofers featuring second generation of Artison's Reactance Cancelling Configuration which allows vibration free operation. This innovation allows installations of subwoofers in places never before possible. In practice a vibration-free subwoofer will transmit zero energy throughout a building structure. The RCC320 and RCC640 subwoofers have fully enclosed aluminum cabinets, insuring consistent high performance in any application and simple installation. The Pre-Construction models allow a minimal grille area to be exposed into the finished space, but require being installed inside the wall cavity. The Pre-Construction subwoofers can also be alternatively installed into cabinetry, furniture, utilized as an in ceiling application or hidden under furniture. The Retrofit models are easily installed into existing drywall with simple dog clamps. The RCC620 Subwoofer Amplifier was designed to power the RCC320 and RCC640 Subwoofers. The RCC620-SA has a powerful Class D amplifier with advanced DSP software specifically programmed for Artison RCC Subwoofers.

RCC640 RETROFIT SUBWOOFER [RCC640-R]

The RCC640-R was designed be installed into a 2 x 4 stud wall with a minimum of 16" on center spacing. The retrofit subwoofer is not impacted by cabinet orientation but needs to be used vertically to fit into standard 16" on center stud spacing. The classical rule for subwoofer placement is that the subwoofer should be placed on the same wall the front channels are located, positioned at one-third of the total distance of the wall. When using multiple subwoofers, consult with your dealer or custom installer for best placement options.

INSTALLATION OF RETROFIT

- 1. Use the provided Cut-out Template to mark the desired wall location. The cut out dimensions are 645 mm [25.4"] H x 363 mm [14.3"] W.
- 2. The minimum mounting depth for the RCC640-R is 97.5 mm [3.8"], i.e. a 2x4 stud is 3.5" deep, plus 1 layer of 12 mm [0.5"] or 15 mm [0.625"] thick drywall. The maximum thickness the RCC640-R can dog clamps can accept is 41 mm [1.6"].
- 3. Use a stud finder to check the location and make a small exploratory hole first to be sure that no piping, wall studs, or electrical wires will interfere with the placement of the speaker.
- **4.** Using 2 conductor speaker wire, run between the subwoofer amplifier and the subwoofer. Use 16 gauge stranded speaker wire for run lengths under 15 m [50'] and 14 gauge for runs over 15 m [50'].
- 5. Once the hole is cut and test fitted with the. Connect the bare speaker wire ends to the spring-loaded binding posts. Be sure to orient the terminal cup towards the direction the speaker wire comes, as there may not be room to manage the speaker wire behind the module.
- 6. Install the RCC640-R into the cut-out made in the wall and carefully tighten the four dog leg clamps on the RCC640-R using a #2 Philips. If using an electric screwdriver, be sure to use a low torque setting.
- 7. The grille for the RCC640-R is held in place by magnets. Simply position the grille over the front of the cabinet.

PAINTING THE GRILLE & TRIM RING

- 1. The Grille / Trim Ring assembly can be painted separate from the rest of the subwoofer.
- 2. Grille Scrim Cloth Carefully remove the thin fabric scrim cloth from the interior of the grille before painting. The scrim is not to be painted. Replace scrim cloth after the paint is completely dry. If the scrim does not adhere to the grille again use a spray adhesive to reattach.

- 3. Paint the Grille / Trim Ring with a spray method or a low nap roller. Be sure to not clog the perforations in the grille mesh. Use compressed air to blow excess paint out before it dries.
- DO NOT get paint on the speaker baffle or speaker cones. Paint can damage these components which would VOID your Warranty.

RCC640 PRE-CONSTRUCTION SUBWOOFER [RCC640-PC]

The RCC640-PC was designed be installed into a 2 x 4 stud wall with a minimum of 16" on center spacing before the drywall is applied to the stud wall. The subwoofer is not impacted by cabinet orientation and can be used either vertically or horizontally. The classical rule for subwoofer placement is that the subwoofer should be placed near the same wall the front channels are located, at one-third of the total distance of the wall. When using multiple subwoofers, consult with your dealer or custom installer for best placement options.

INSTALLATION OF PRE-CONSTRUCTION SUBWOOFER INTO A STUD WALL CAVITY

- 1. The subwoofer comes with the Paint/Debris Shield in place. **DO NOT REMOVE** this shield until after the room painting is completed and the environment is free of dust.
- 2. The subwoofer can be installed with the slot oriented horizontal or vertical. When installing the subwoofer be sure to align the front and back of the cabinet with the front and back edge of the stud.
 - a. **For horizontal slot installations**, attach the 4 L-Shaped Mounting Brackets using the 8 Mounting Screws to the tapped holes in the **aluminum sides** of the cabinet. Adjust the brackets to span the width of the stud bay's inner distance. Mount into the stud bay using galvanized screw hardware.
 - i. **NOTE:** To have the horizontal slot opening as close as possible to the finished floor height. Install lower mounting brackets into the plastic end cap inserts and rotate forward attaching both screws to the cabinet using one slot in the bracket. The studs should be notched out the 3 mm [1/8"] thickness of the bracket to sit flush with the stud face.
 - b. For vertical slot installations, use the 8 Mounting Screws to attach the 4 L-Shaped Mounting Brackets to the threaded inserts in the plastic ends of the cabinet. Adjust the brackets to span the width of the stud bay's inner distance. Mount into the stud bay using galvanized screw hardware.
 - c. If retrofitting the Pre-Construction Subwoofer into Existing Construction. The cutout dimension required to install is 836 mm [32.9"] H x 365 mm [14.4"] W. The wallboard in this case would

need to be replaced over the cabinet. Bracing would be required on the top and bottom of the rough opening to reattach new wallboard. Uncovering the adjacent stud faces is also helpful to provide a large surface area to reattach drywall. Using fiberglass tape and joint compound join the new section with the surrounding wallboard and sand once dry.

- 3. Using 2 conductor speaker wire, run between the subwoofer amplifier and the subwoofer. Use 16 gauge stranded speaker wire for run lengths under 15 m [50'] and 14 gauge for runs over 15 m [50'].
- **4.** After the wallboard has been installed and finished, un-cover the slot opening by removing the screws that retain the Paint Shield and discard.
- 5. The RCC640-PC can be used with wallboard thicknesses of 12.5 mm 25.4mm [0.5" 1.0"] thick. The module comes configured for 12.5 mm [0.5"] wall thickness. The magnet strip should sit 3 mm [1/8"] above the surface of the finished wallboard.
- 6. If the room has a thicker wallboard, or multiple layers, utilize the included plastic Grille Spacers. Remove the magnet strips by unscrewing the 16 x #2 Philips Head screws and add the required spacers underneath. When using 3 or 4 spacers use the included Long Grille Spacer Screws to accommodate the greater thickness. NOTE: If your combined wallboard thickness is larger than 1.0", then please contact Artison for additional Grille Spacers.

PAINTING THE GRILLE & TRIM RING

- 1. The Grille / Trim Ring assembly can be painted separate from the rest of the subwoofer module.
- 2. Grille Scrim Cloth Carefully remove the thin fabric scrim cloth from the interior of the grille before painting. The scrim is not to be painted. Replace scrim cloth after the paint is completely dry. If the scrim does not adhere to the grille again use a spray adhesive to reattach.
- 3. Paint the Grille / Trim Ring with a spray method or a low nap roller. Be sure to not clog the perforations in the grille mesh. Use compressed air to blow excess paint out before it dries.
- 4. DO NOT get paint on the speaker baffle or speaker cones. Paint can damage these components which would VOID your Warranty.

INSTALLATION OF PRE-CONSTRUCTION MODULE INTO CABINETRY

- The unit comes with the Pre-Construction Paint/Debris Shield in place. DO NOT REMOVE this shield until after the room painting is completed.
- 2. The subwoofer can be concealed inside of any piece of furniture or built-in cabinetry. The subwoofer's energy is all directed out the slot opening. This can be directed down through the bottom of a cabinet; directly into the room or out through venting in the cabinet's baseboard.
- 3. Dimensions for the thru hole cut-out are 727 x 78 mm (28.6" x 3.1"). Please note the thickness of

- the cabinet wall must at least be 12.5 mm [0.5"] if the grille is going to be used.
- **4.** When venting the output of the subwoofer through a built-in cabinet's baseboard, please reference the points below:
 - a. Please allow for a minimum of 640 cm² [100 in²] of total open area in the baseboard. If less open area is provided the subwoofer will be restricted and may cause noise through the vent.
 - b. Rounded corners will minimize air noise.
 - c. The subwoofer is not affected by variations in shape or number of vents, as long as the minimum total open area is maintained.

INSTALLATION OF PRE-CONSTRUCTION SUBWOOFER UNDERNEATH OR BEHIND FURNITURE

1. Due to the thin form factor, the unit can also be hidden underneath or behind furniture. Minimum thickness [height] suggested is 127 mm [5.0"].

INSTALLATION OF PRE-CONSTRUCTION SUBWOOFER IN-CEILING

- 1. The subwoofer can also be installed in ceiling/floor joist bays. Minimum distance between joists to accommodate the module dimensions are 727 mm [28.6"] x 354 mm [13.9"] depending upon orientation.
- 2. Dimensions for the thru hole cut-out are 727 x 78 mm [28.6" x 3.1"]. Please note the thickness of the cabinet wall must at least be 12.5 mm [0.5"] if the grille is going to be used. Using 2 conductor speaker wire, run between the subwoofer amplifier and the subwoofer. Use 16 gauge stranded speaker wire for run lengths under 15 m [50'] and 14 gauge for runs over 15 m [50'].
- 3. After the wallboard has been installed and finished, un-cover the slot opening by removing the four screws that retain the Paint Shield.
- **4.** The RCC640-PC can be used with wallboard thicknesses of 12.5 mm 25.4mm [0.5" 1.0"] thick. The module comes configured for 12.5 mm (0.5") wall thickness. The magnet strip should be 3 mm [1/8"] above the surface of the finished wall.
- 5. If the room has a thicker wallboard, or multiple layers, utilize the included plastic Grille Spacers. Remove the magnet strips by removing the 8 mounting screws and add the required spacing underneath. When using 3 or 4 spacers use the included longer length screws to accommodate the greater thickness. NOTE: If your combined wallboard thickness is larger than 1.0", then please contact Artison for additional Grille Spacers.

SPECIFICATIONS & DIMENSIONS:

RCC 640 Retrofit Subwoofer

RCC640-R

Cut Out Dimensions: H 25.4" [645 mm] x W 14.3" [363 mm]

Mounting Depth: 3.8" [97.5 mm]

Grille: H 26.9" [683 mm] x W 16.0" [405 mm] x D 0.16" [4 mm]

Driver Complement: 8 ea. 4" x 6" RCC Woofers, Proprietary Design,

Long Throw, Polypropylene Cone

Cabinet / Finish: 6061 Extruded Aluminum, Black Powdercoating

Driver Configuration: Reactance Canceling Configuration, Slot-Load

Frequency Response: 20 Hz - 160 Hz ± 3 dB

Sensitivity: 94 dB @ 2.83 V / 1 M

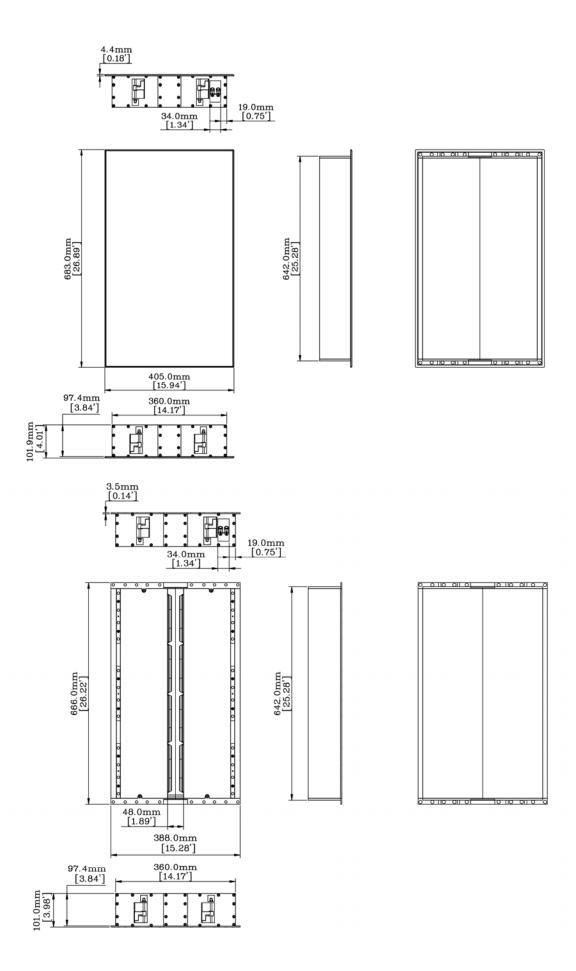
Nominal Impedance: 6.4Ω

Enclosure Type: Acoustic Suspension with Adsorptive Damping

Grilles: White, Paintable, Micro Perforated Steel with Trim

Ingress Protection (IP) Rating: IP 65

System Weight: 52 lbs. [23.5 kg.]



RCC 640 Pre-Construction Subwoofer

RCC640-PC

Cabinet: H 28.6" [727 mm] x W 14.0" [354 mm] x D 3.5" [89 mm]

Grille: H 29.3" [745 mm] x W 3.7" [95 mm] x D 0.16" [4 mm]

Grille Cut Out: H 28.6" [727 mm] x W 3.0" [78 mm]

Driver Complement: 8 ea. 4" x 6" RCC Woofers, Proprietary Design,

Long Throw, Polypropylene Cone

Cabinet / Finish: 6061 Extruded Aluminum, Black Powdercoating

Driver Configuration: Reactance Canceling Configuration, Slot-Load

Frequency Response: 20 Hz - 160 Hz ± 3 dB

Sensitivity: 94 dB @ 2.83 V / 1 M

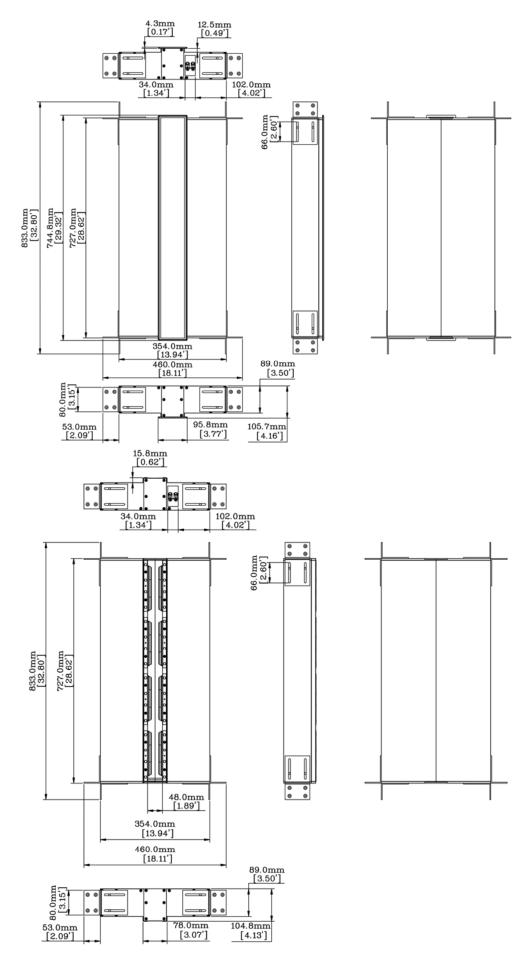
Nominal Impedance: 6.4Ω

Enclosure Type: Acoustic Suspension with Adsorptive Damping

Grilles: White, Paintable, Micro Perforated Steel with Trim

Ingress Protection (IP) Rating: IP 65

System Weight: 50 lbs. [22.7 kg.]



LIMITED WARRANTY

This warranty remains in effect for five years from the date of purchase for speaker products and one year for electronic products.

THIS WARRANTY PROTECTS THE ORIGINAL OWNER PROVIDING THAT THE PRODUCT HAS BEEN PURCHASED FROM AN AUTHORIZED ARTISON DEALER IN THE UNITED STATES. THE ORIGINAL BILL OF SALE MUST BE PRESENTED WHENEVER WARRANTY SERVICE IS REQUIRED. FOR WARRANTY SERVICE OUTSIDE THE UNITED STATES, CONTACT THE AUTHORIZED ARTISON DISTRIBUTOR IN THE COUNTRY WHERE THE PRODUCT WAS PURCHASED.

Except as specified below, this warranty covers all defects in material and workmanship. The following are not covered: Damage caused by accident, misuse, abuse, product modification or neglect, damage occurring during shipment, damage from failure to follow instructions contained in the Owners Manual, damage resulting from the performance of repairs by someone not authorized by Artison, or any claims based on misrepresentations by the seller. This warranty does not cover incidental or consequential damages. It does not cover the cost of removing or reinstalling the unit. THIS WARRANTY IS VOID IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED, OR IS PURCHASED FROM AN UNAUTHORIZED DEALER ON THE INTERNET (WORLD WIDE WEB), MAIL ORDER, 800, 888, 877 TELEPHONE NUMBERS OR THROUGH A CATALOG.

This warranty gives you specific legal rights. You may also have other rights, which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above may not apply to you.

Please make note of the following information and retain for your record.	
Product Name	Model Number
Store Name	Purchase Price

HOW TO OBTAIN SERVICE

Please call us at (775) 783-4770, or write to: ARTISON (Attention: Customer Service Department), 2231 Meridian Blvd., Suite #1, Minden, NV 89423.

We will promptly advise you of what action to take. We may direct you to an authorized Artison Service Center or ask you to send your speaker to the factory for repair. You will need to present the original bill of sale to establish the date of purchase. PLEASE DO NOT SHIP YOUR ARTISON PRODUCT TO THE FACTORY FOR REPAIR WITHOUT PRIOR AUTHORIZATION. PLEASE DO NOT RETURN PRODUCT TO THE ABOVE ADDRESS, IT IS NOT A SERVICE LOCATION. You are responsible for transporting your product for repair and for payment of any initial shipping charges. However, we will pay the return shipping charges if the repairs are covered under warranty.