

# RCC one thousand

### **INSTALLATION GUIDE**

RCC1000-SA

**Subwoofer Amplifier** 

#### **CARTON CONTENTS:**

- 1. RCC 1000 Subwoofer Amplifier
- 1. IR Remote
- 2. Rack-Mount Ears
- 8. Philips Head Rack-Mount Ear Screws
- 1. Detachable IEC Power Cord
- 1. Installation Guide

If you are missing any of these parts or if you need assistance during the installation of your RCC 1000 Subwoofer Amplifier, please contact Artison's Customer Service Department during normal business hours, Pacific Time at (775) 783-4770.

#### **IMPORTANT SAFETY INFORMATION:**

- READ THESE INSTRUCTIONS
- KEEP THESE INSTRUCTIONS
- HEED ALL WARNINGS
- DO NOT USE THIS APPARATUS NEAR WATER
- CLEAN ONLY WITH DRY CLOTH
- DO NOT BLOCK ANY VENTALATION OPENINGS. INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S INSTUCTIONS
- DO NOT INSTALL NEAR ANY HEAT SOURCES SUCH AS RADIATORS, HEAT REGISTERS, STOVES, OR OTHER APPARATUS (INCLUDING AMPLIFIER) THAT PRODUCE HEAT.
- DO NOT DEFEAT THE SAFETY PURPOSE OF THE POLARIZED OR GROUNDING-TYPE PLUG. A
  POLARIZED PLUG HAS TWO BLADES WITH ONE WIDER THAN THE OTHER, A GROUNDING TYPE
  PLUG HAS TWO BLADES AND A THIRD GROUNDING PRONG. THE WIDE BLADE OR THE THRID
  PRONG ARE PROVIDED FOR YOUR SAFETY. IF THE PROVIDED PLUG DOES NOT FIT INTO YOUR
  OUTLET, CONSULT AN ELECTRICIAN FOR REPLACEMENT OF THE OBSOLETE OUTLET.
- PROTECT THE POWER CORD FROM BEING WALKED ON OR PINCHED PARTICULARLY AT PLUGS,
   CONVENIENCE RECEPTACLE, AND THE POINT WHERE THEY EXIT FROM THE APPARATUS
- ONLY USE ATTACHMENTS/ ACCESSORIES SPECIFIED BY THE MANUFACTUER.
- USE ONLY THE CART, STAND, TRIPOD, BRACKET, OR TABLE SPECIFIED BY THE MANUFACTURER, OR SOLD WITH THE APPARATUS. WHEN A CART IS USED, USE CAUTION WHEN MOVING THE CART/APPARATUS COMBINATION TO AVOID INJURY FROM TIP-OVER.
- UNPLUG THIS APPARTUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME
- REFER ALL SERVICING TO QUALIFIED SURVICE PERSONNEL.
   SERVICING IS REQUIRED WHEN THE APPARATUS HAS BEEN DAMAGED IN ANY WAY, SUCH AS 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

## <u>WARNING</u>

## TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

THE APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

AN APPLIANCE COUPLER IS USED AS A DISCONNECT DEVICE, THE DISCONNECT DEVICE SHALL REMAIN READILY OPERABLE.

This 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 risk of fire and electric shock.



This symbol is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying this product.



THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

CET APPAREIL EST CONFORME À LA SECTION 15 DES RÉGLEMENTATIONS DE LA FCC. LE FONCTIONNEMENT DE L'APPAREIL EST SUJETAUX DEUX CONDITIONS SUIVANTES :

- (1) CET APPAREIL NE DOIT PAS PROVOQUER D'INTERFÉRENCES NÉFASTES, ET
- (2) CET APPAREIL DOIT TOLÉRER LES INTERFÉRENCES REÇUES, Y COMPRIS CELLES QUI RISQUENT DE PROVOQUER UN FONCTIONNEMENT INDÉSIRABLE.

NOTE: THIS PRODUCT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS B DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE IN A RESIDENTIAL INSTALLATION. THIS PRODUCT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. HOWEVER, THERE IS NO GUARANTEE THAT INTERFERENCE WILL NOT OCCUR IN A PARTICULAR INSTALLATION. IF THIS PRODUCT DOES CAUSE HARMFUL INTERFERENCE TO RADIO OR TELEVISION RECEPTION, WHICH CAN BE DETERMINED BY TURNING THE EQUIPMENT OFF AND ON, THE USER IS ENCOURAGED TO TRY TO CORRECT THE INTERFERENCE BY ONE OR MORE OF THE FOLLOWING MEASURES:

- —REORIENT OR RELOCATE THE RECEIVING ANTENNA.
- —INCREASE THE SEPARATION BETWEEN THE EQUIPMENT AND RECEIVER.
- —CONNECT THE EQUIPMENT INTO AN OUTLET ON A CIRCUIT DIFFERENT FROM THAT TO WHICH THE RECEIVER IS CONNECTED.
- —CONSULT THE DEALER OR AN EXPERIENCED RADIO/TV TECHNICIAN FOR HELP.

PLEASE TAKE ATTENTION THAT CHANGES OR MODIFICATION NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS DEVICE COMPLIES WITH INDUSTRY CANADA LICENCE-EXEMPT RSS STANDARD(S). OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- (1) THIS DEVICE MAY NOT CAUSE INTERFERENCE, AND
- (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION OF THE DEVICE.

LE PRÉSENT APPAREIL EST CONFORME AUX CNR D'INDUSTRIE CANADA APPLICABLES AUX APPAREILS RADIOEXEMPTS DE LICENCE. L'EXPLOITATION EST AUTORISÉE AUX DEUX CONDITIONS SUIVANTES :

- (1) L'APPAREIL NE DOIT PAS PRODUIRE DE BROUILLAGE, ET
- (2) L'UTILISATEUR DE L'APPAREIL DOIT ACCEPTER TOUT BROUILLAGE RADIOÉLECTRIQUE SUBI, MÊME SI LE BROUILLAGE EST SUSCEPTIBLE D'EN COMPROMETTRE LE FONCTIONNEMENT.

- 1. CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE.
- 2. A WARNING THAT BATTERIES (BATTERY PACK OR BATTERIES INSTALLED) SHALL NOT BE EXPOSED TO EXCESSIVE HEAT SUCH AS SUNSHINE, FIRE OR THE LIKE.
- 3. THE REMOTE CONTROL SUPPLIED WITH A COIN/BUTTON CELL BATTERY. IF THE COIN/BUTTON CELL BATTERY IS SWALLOWED, IT CAN CAUSE SEVERE INTERNAL BURNS IN JUST 2 HOURS AND CAN LEAD TO DEATH.

  KEEP NEW AND USED BATTERIES AWAY FROM CHILDREN. IF THE BATTERY COMPARTMENT DOES NOT CLOSE SECURELY, STOP USING THE PRODUCT AND KEEP IT AWAY FROM CHILDREN. IF YOU THINK BATTERIES MIGHT HAVE BEEN SWALLOWED OR PLACED INSIDE ANY PART OF THE BODY, SEEK IMMEDIATE MEDICAL ATTENTION.

4. WARNING. DO NOT INGEST BATTERY, CHEMICAL BURN HAZARD

Thank you for choosing Artison's RCC 1000 Subwoofer Amplifier. We are pleased that you have selected our high-performance audio products.

#### INTRODUCTION

The RCC 1000 Subwoofer Amplifier was designed to **ONLY** be used with the RCC In-Wall Subwoofers, RCC320 and RCC640 Modules. The RCC1000-SA is a powerful monoblock Class D amplifier with advanced DSP software. The compact one rack height chassis can be installed into either cabinetry, on an equipment shelf, or it can be rack-mounted into a standard 19" Equipment Rack. **In any installation be sure to provide adequate ventilation above and below the amplifier.** 

#### **RACK-MOUNT INSTALLATION OF THE RCC1000-SA**

- 1. Remove the amplifier's four feet from the bottom of the chassis.
- 2. Attach the included rack-mount ears to the front sides of the RCC1000-SA. NOTE: Be sure to use the included hardware. There are 4 forward mounting screws per rack ear.
- 3. Mount into the 19" equipment rack, the amplifier will occupy 1 RU.

#### RCC1000-SA FRONT PANEL CONTROLS



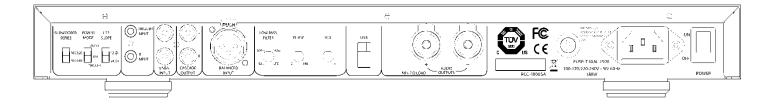
- 1. STANDBY This button will toggle between Standby Mode (Red LED) and ON (Blue LED).
- 2. LED The LED in the GAIN control will indicate the following:

#### **RED - STANDBY**

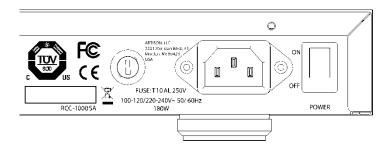
**BLUE - ON & MUSIC EQ.** The MUSIC EQ setting provides a full range of deep musical bass to enhance the listening experience. Subsonic Filter is 20 Hz.

**RED & BLUE – ON & MOVIE EQ.** The MOVIE EQ setting adds more volume and upper bass to help recreate the true movie theater experience. Subsonic Filter is 35 Hz.

#### **RCC1000-SA REAR PANEL**

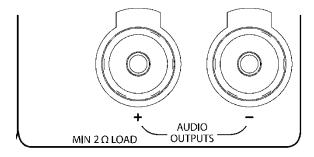


#### **AC POWER**



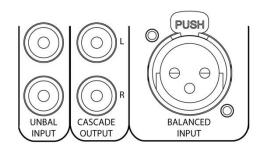
- 1. The Power Switch is the hard ON/OFF power switch for the amplifier.
- 2. Connect the detachable IEC Power Cord.

#### **AUDIO OUTPUTS**



- 1. Connect the speaker wires to the Binding Posts. NOTE: Red is Positive and Black is Negative.
- 2. Use either Bare Speaker Wire or Banana Plugs to terminate the speaker wire.

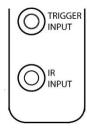
#### **AUDIO INPUT / OUTPUT**



- 1. Connect to either the Balanced Female XLR or Unbalanced Female RCA Inputs. **NOTE: For best** performance, use a Y-Adapter when using the Unbalanced RCA.
- 2. Connect to the Unbalanced Female RCA Cascade Outputs to connect to another amplifier.

  This signal will output at full bandwidth.

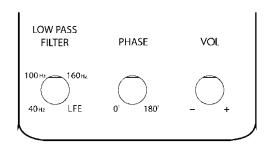
#### 12 VOLT TRIGGER / IR INPUT



- 1. +12V Trigger Input Connect a 1/8" MINIJACK to utilize the 12 volt trigger wire from your other equipment, the polarity on the connector can be either way.
- 2. IR INPUT Connect a 1/8" MINIJACK to control the RCC620-SA via an IR control system.
- 3. IR REMOTE FUNCTIONS:

i.	POWER ON	10110000011101 10010000011101
ii.	STANDBY POWER	1011000000000 10010000000000
iii.	GAIN UP	10110000011111 10010000011111
iv.	GAIN DOWN	10110000100000 10010000100000
٧.	MUSIC EQ MODE	10110000100001 10010000100001
vi.	MOVIE EQ MODE	10110000111111 10010000111111

#### LOW PASS FILTER / PHASE CONTROL

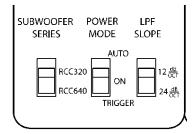


- LOW PASS FILTER (LPF) This is the crossover frequency setting of the Low Pass Filter. The unit
  comes from the factory with the 80Hz setting that is recommended for use with Artison Front
  Channels. If used in conjunction with any other speakers consult with the manufacturer for the
  correct setting.
- 2. PHASE CONTROL The phase of the subwoofer can be adjusted to fine tune the signal coincidence of the subwoofer and the lower frequencies of your LCR Speakers. The unit

comes from the factory set at 0°. Adjust the phase, listening for an increase in mid bass in the crossover region. A pink-noise generator or an RTA (Real-time Analyzer) can further analyze your installation.

3. **VOLUME –** The position of this knob controls the overall gain (volume) of the subwoofer.

#### **SETUP**



1. **SUBWOOFER SERIES-** Select the appropriate setting based on which subwoofer module you have:

**RCC320 –** Use this mode for the RCC320-R or RCC320-PC. Up to 2 Modules, connect 2 modules in parallel either at amplifier or externally.

RCC640 - Use this mode for the RCC640-R or RCC640-PC. Up to 1 Module.

2. POWER MODE - Select either:

**AUTO –** On with Signal Sense, without signal it will stay on for ≈15 minutes. NOTE: The front panel button will not be operable in this mode.

**ON -** Always On. NOTE: The front panel button is operates Standby function.

**TRIGGER** – On with a 12 Volt Trigger. NOTE: The front panel button will not be operable in this mode.

3. LPF SLOPE - Select either:

12 dB/Octave - Acoustic Suspension (Sealed) Artison Front Channels

24 dB/Octave - Bass Reflex (Ported) Artison Front Channels

#### **SPECIFICATIONS & DIMENSIONS:**

#### **RCC 1000 SUBWOOFER AMPLIFIER**

(RCC1000-SA)

Dimensions: 1.75" x 19.0" x 13.0", HWD Overall with Rack Ears

Amplifier Power Output: Class D, 1000 W RMS

LPF Crossover: 40 – 160 Hz, LFE

Cabinet / Finish: Extruded Aluminum / Brushed Anodized

Frequency Response:  $20 \text{ Hz} - 200 \text{ Hz} \pm 3 \text{ dB}$ 

Voltage: 110 – 230 AC Volts, Auto-Sensing Supply

BTU Output at idle: 132 BTU/HR @ 110 V, 90 BTU/HR @ 230 V

BTU Output at 1/8 rated power: 495 BTU/HR @ 110 V, 437 BTU/HR @ 230 V

BTU Output at rated power: 2914 BTU/HR @ 110 V, 2809 BTU/HR @ 230 V

Power Consumption at Idle: 38.8W @ 110 V, 26.5 W @ 230 V

Power Consumption at 1/8 rated power: 145W @ 110 V, 128 W @ 230 V

Power Consumption at rated power: 854W @ 110 V, 823W @ 230 V

System Weight: 14.5 lbs. (6.6 kg.)

#### LIMITED WARRANTY

This warranty remains in effect from the date of purchase for; five (5) years for speaker, crossover and cabinet components and two (2) years for powered electronic components. Products with a combination of the aforementioned components, the warranty will be applied separately based on the terms above.

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.