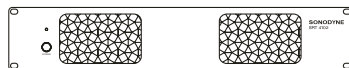
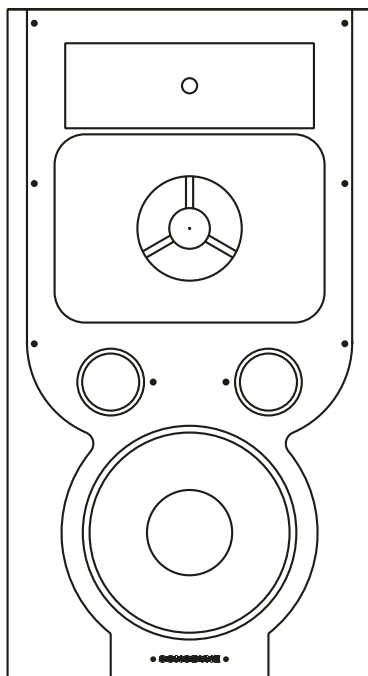
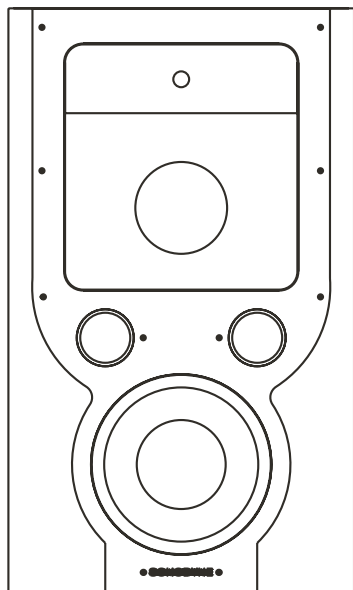


## SRT 4101/ SRT 4102

triamplified active speaker systems | owners manual



## ● introduction ●

The SRT 4101 and SRT 4102 are 3-way tri-amped active speaker systems for use as screen (LCR) speakers for multichannel audio reproduction technologies.

The SRT 4101 is a smaller, low-powered member of the family, while the SRT 4102 is the bigger, higher powered version.

The shallow depth allows them to be mounted behind the screen. Supplied mounting brackets permit easy installation. The speakers are connected to their respective DSP- based tri-amplifiers with dedicated connectors supplied with the units.

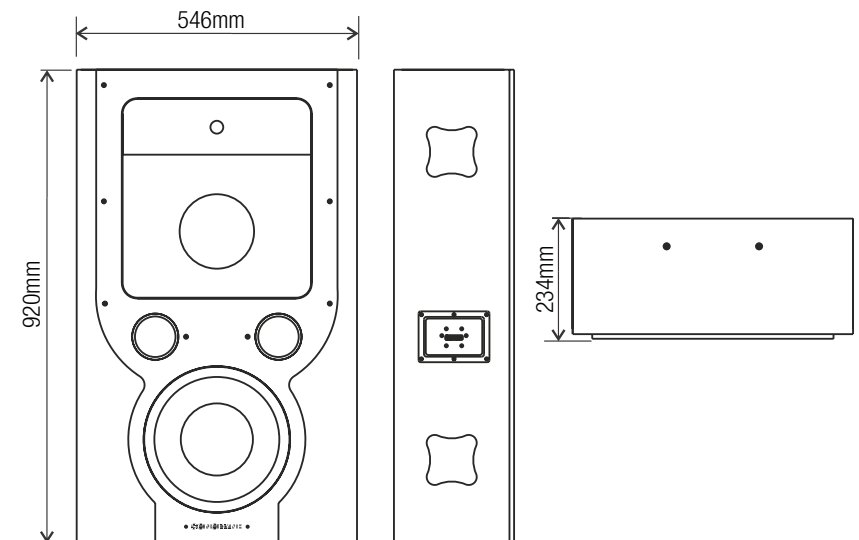
The SRT 4101/SRT 4102 consists of the following packed in separate boxes:

1. SRT 4101 SP/ SRT 4102 SP speaker system
2. SRT 4101 AMP/ SRT 4102 AMP amplifier
3. SRT 4101 WB - wall mount bracket

## ● description: SRT 4101 SP ●

This is a shallow-profile 3 way triamped active speaker with a 1" compression driver and 6" midrange mounted on a waveguide, having dedicated flares for the HF and mid, and a 12" woofer as LF. The 3-channel dedicated amplifier along with active crossover is mounted in a separate metal cabinet, for better ventilation, and connected to the speaker cabinet with a 6-core cable and connector.

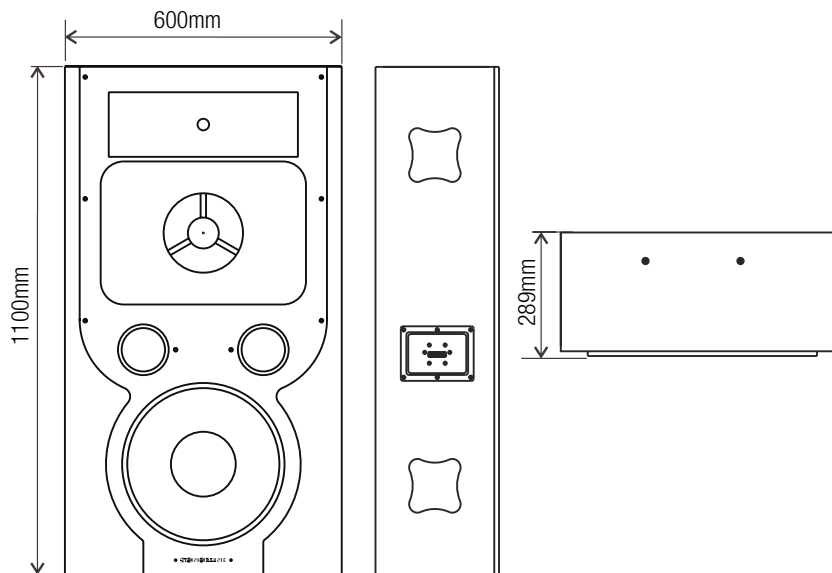
The drivers are acoustically time aligned. This, along with 4th order Linkwitz Riley filters for the active crossover ensure that the main radiation pattern is axi-symmetric in the vertical plane, which is evident from the vertical polar plots. This provides precise imaging. The active crossover is realised in the digital domain to provide accurate and identical crossover characteristics for each unit. The DSP uses 24 bit 96kHz sampling. The DAC has an SNR of 110dB. Together, this keeps noise and distortion at a very low level. Crossover frequencies are selected to match the directivity of the drivers, to ensure smooth transition between drivers and prevent abrupt changes in directivity. The overall frequency response is almost flat and extends from 50Hz to 20kHz,  $\pm 3$ dB as can be seen from the on-axis frequency response plot. The HF and midrange waveguide are constant-directivity type, which ensure a near-constant horizontal directivity of 90°, as is evident from the horizontal and vertical isobaric plots. Thanks to the active crossover and the dedicated tri-amplifier, the signal to the drive units are isolated from each other, ensuring that the sound stays clean and undistorted even at maximum power. Limiters prevent clipping and overdrive. All production units have identical frequency response which ensure matched L,C,R speakers.



# • description: SRT 4102 SP •

This is a shallow-profile 3 way triamped active speaker with 1" compression driver and 8" midrange mounted on a waveguide, having dedicated flares for the HF and mid, and a 15" woofer as LF. The mid driver is equipped with a phase plug to improve the directivity at higher frequencies, because of the larger cone area. The 3-channel dedicated amplifier along with active crossover is mounted in a separate metal cabinet, for better ventilation, and connected to the speaker cabinet with a 6-core cable and connector.

The drivers are acoustically time aligned. This, along with 4th order Linkwitz Riley filters for the active crossover ensure that the main radiation pattern is axi-symmetric in the vertical plane, which is evident from the vertical polar plots. This provides precise imaging. The active crossover is realised in the digital domain to provide accurate and identical crossover characteristics for each unit. The DSP uses 24 bit 96kHz sampling. The DAC has an SNR of 110dB. Together, this keeps noise and distortion at a very low level. Crossover frequencies are selected to match the directivity of the drivers, to ensure smooth transition between drivers and prevent abrupt changes in directivity. The overall frequency response is almost flat and extends from 50Hz to 20kHz,  $\pm 3\text{dB}$  as can be seen from the on-axis frequency response plot. The HF and midrange waveguide are constant-directivity type, which ensure a near-constant directivity of  $90^\circ$ , as is evident from the horizontal and vertical isobaric plots. Thanks to the active crossover and the dedicated tri-amplifier, the signal to the drive units are isolated from each other, ensuring that the sound stays clean and undistorted even at maximum power. Limiters prevent clipping and overdrive. All production units have identical frequency response which ensure matched L,C,R speakers.



# unpacking • mounting: SRT 4101 SP •

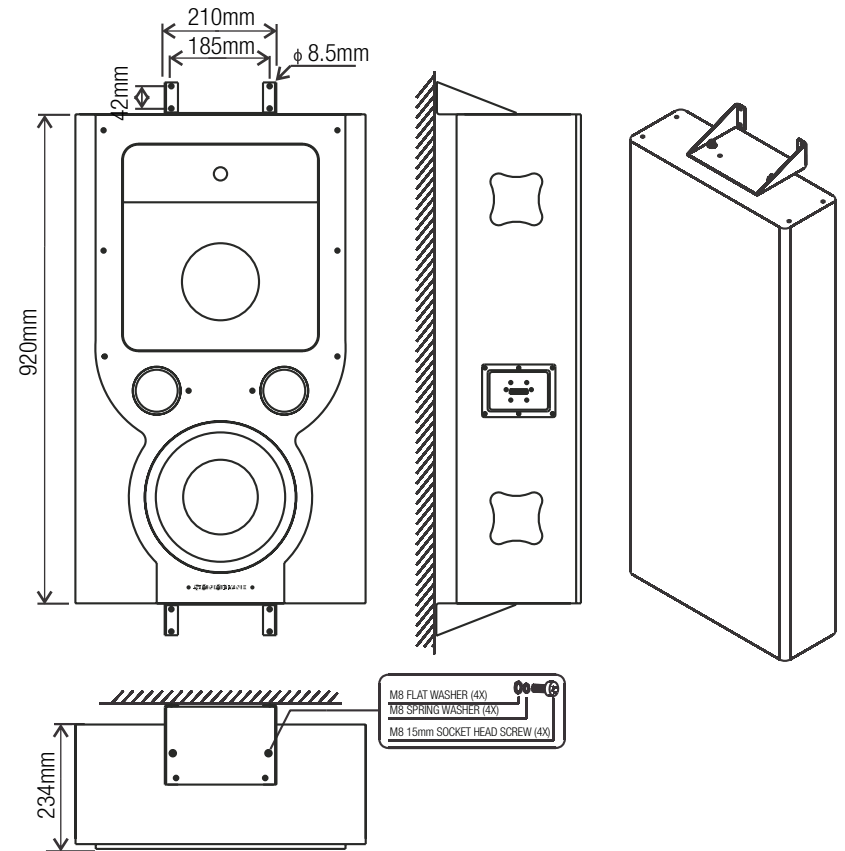
## UNPACKING SRT 4101/ SRT 4102

To unpack the unit, place the unit vertically and cut open the straps which hold the top and bottom tray and the sleeve together. Lift the top tray. Next hold the sleeve with both hands, and slide it up. Inside you will find one SRT4101/SRT4102 speaker wrapped in a protective bag and resting on buffers to prevent damage to the speaker. Inspect the speaker for any sign of damage.

Please retain all packing materials in case you have to transport the unit in future.

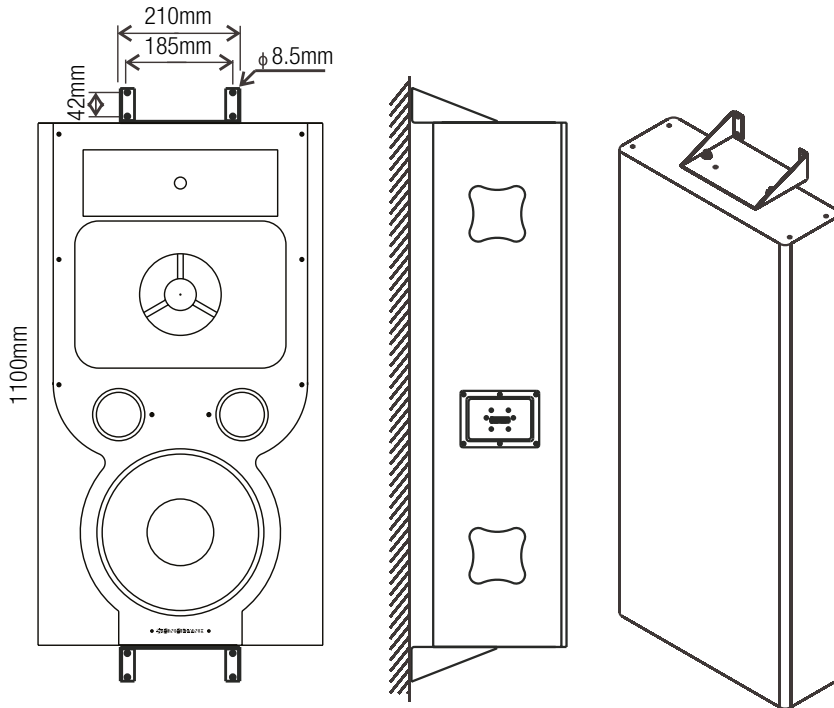
## MOUNTING SRT 4101 SP:

The SRT 4101 speakers are mounted using the SRT 4101 WB. First, the brackets are fixed to the speakers using the supplied hardware. Next, the speaker with brackets is fixed to the wall as shown below



# ● mounting: SRT 4102 SP ●

The SRT 4102 speakers are mounted using the SRT 4102 WB. First, the brackets are fixed to the speakers using the supplied hardware. Next, the speaker with brackets is fixed to the wall as shown below

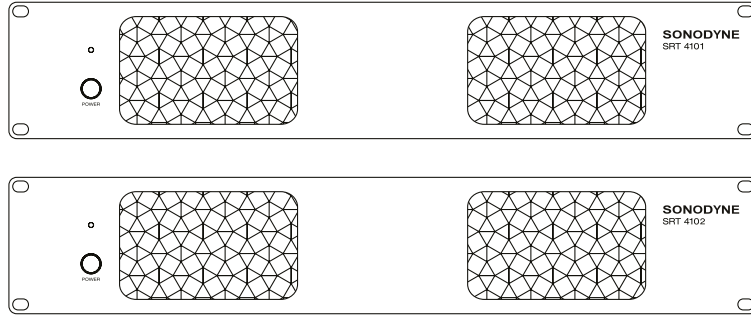


# ● speaker connections ●

The SRT 4101/ SRT 4102 speaker has a dedicated 6 pin plug-in, screwable connector mounted on the side panel. The legend printing on the sticker shows the connections for LF, MF and HF drive units. Connect these to the corresponding connector on the amplifier side which has the same connection nomenclature as the speaker, also printed on the rear panel of the amplifier. Since the connectors are pluggable, the cable assembly can be done separately, and connected to the amplifier and speaker after the mounting is completed. After fitting the connectors, the screws on the connectors should be tightened to prevent them from coming off inadvertently.

For cable selection, use the following chart to arrive at the proper gauge of cable depending upon the length of the connection. Use proper conduits while laying out cables to prevent cables from abrasion and damage.

Upto 5m	6 core multi-strand copper wire of equivalent cross-section 1.0 sq mm
5~10m	6 core multi-strand copper wire of equivalent cross-section 1.5 sq mm
10~20m	6 core multi-strand copper wire of equivalent cross-section 2.0 sq mm



## DESCRIPTION

These are 3- channel amplifiers with built-in active crossover for driving the SRT 4101/ SRT 4102 speakers. Connection to the speakers are through a 6 pin plug-in, screwable connector on the rear panel. The built-in active crossover and equaliser is DSP-based which provides accurate control of the LF, MF and HF drive units. A built-in limiter prevents amplifier overload. The amplifier is cooled by two temperature-controlled low-noise fans. At idling or low power levels, the fan noise is virtually inaudible. Extensive protection measures are built-in. Input is through a fully balanced XLR socket.

## UNPACKING SRT 4101 AMP/ SRT 4102 AMP

To unpack the unit, open the carton by cutting along the edge of the flaps. Push the flaps wide open. Inside you will find

- 1 x SRT 4101/4102 amplifier with 6 pin speaker connector fitted
- 1 x power cord with twist-lock power connector at one end and a 16Amp plug fitted at the other end
- Owner's manual

Carefully lift the unit from the EPE buffer. Inspect the unit for any sign of damage.

## RACK MOUNTING

The SRT 4101 and SRT 4102 amplifier is a 2RU full-rack mounting design. Rack-mounting slots are provided on the front panel.

# ● statutory information ●



The lightning flash with an arrowhead symbol is intended to warn the user that there is un-insulated (dangerous) voltage inside the unit.



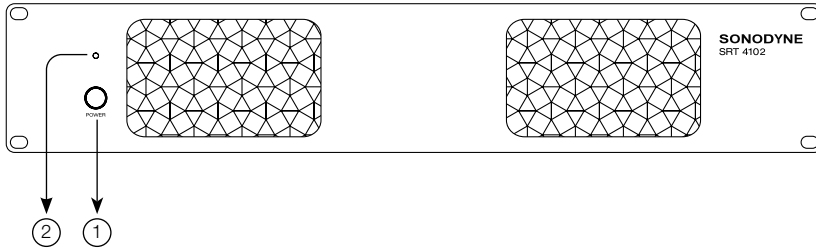
The exclamation mark within an equilateral triangle symbol is intended to alert the user of presence of important operating instructions in the owner's manual accompanying the product.

## Important safety instructions

1. The unit should be connected only to a wall outlet providing the correct mains voltage and frequency as printed on the product
2. Connect the unit to the mains only with the mains cable supplied with the unit
3. Ensure that the wall outlet is properly earthed, that is, the earth must be connected to a earth bus-bar which connects to other audio equipments and is not shared by noisy equipments like computers, air-conditioners, lighting appliances etc. The earth connection must be checked and certified by a qualified electrical engineer.
4. Do not cover the unit or block the ventilation holes on the back and front which may cause it to heat up and malfunction.
5. Do not open the unit or attempt to service it yourself. There is no user-serviceable part inside. Refer servicing to qualified service personnel only.
6. Replace only with the same type and rating of fuse as printed on the product.
7. Do not overload wall outlets that provide power to this unit.

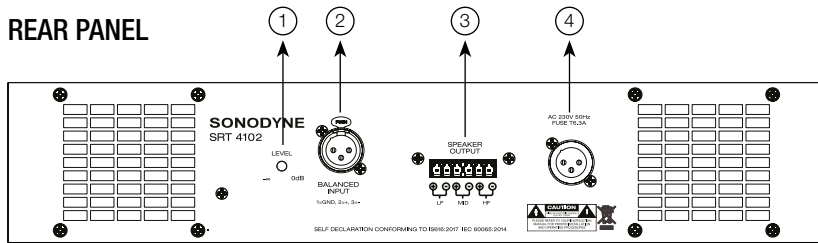
# ● SRT AMP controls & switches ●

## FRONT PANEL



1. **POWER:** This is a rocker type power switch which turns on power to the system. The ON position is indicated with a dot mark on the switch.
2. **POWER INDICATOR:** This is a blue indicator which lights up when power is switched on.

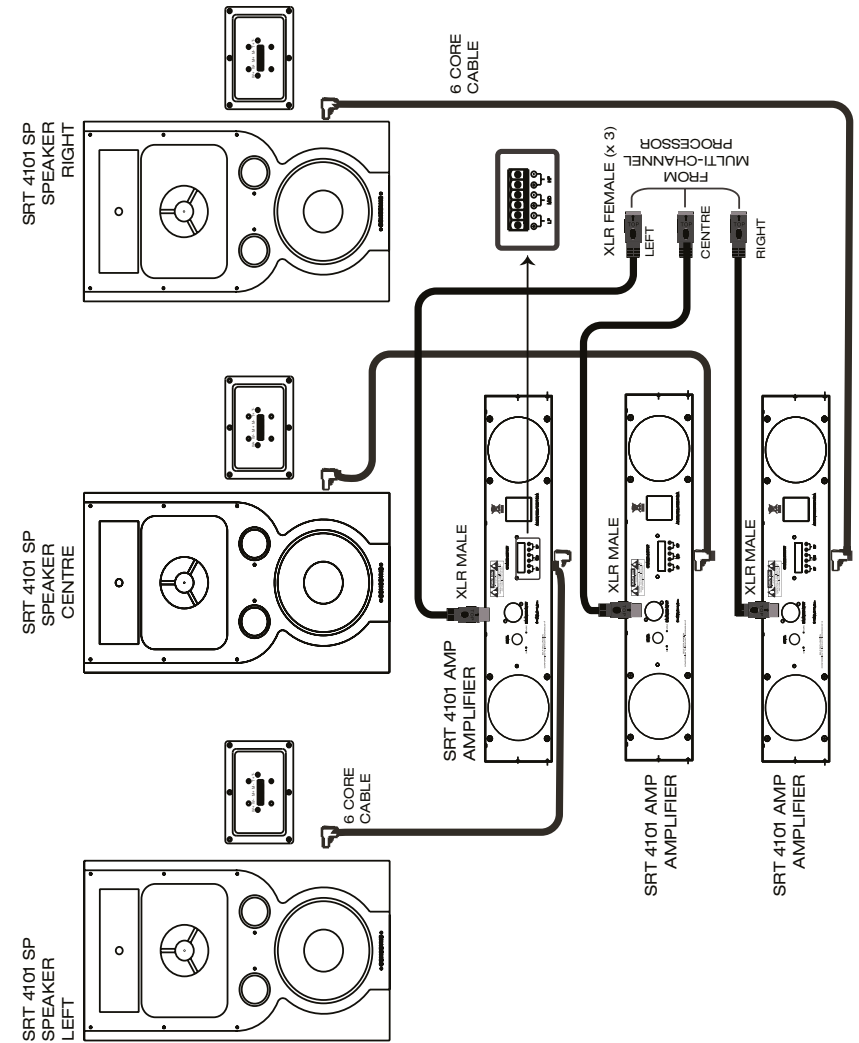
## REAR PANEL



1. **LEVEL:** This control adjusts the level of the amp. At the extreme anti-clockwise setting, the gain is  $-\infty$ , and the output is virtually muted. At the extreme clockwise setting, it is 0dB.
2. **INPUT SOCKET:** This is a fully balanced XLR input socket. Pin connections are 1 ground, 2 hot or positive, and 3 cold or negative.
3. **SPEAKER CONNECTOR:** This is a 6 pin plug-in type screwable connector. There are 3 groups marked LF, MF and HF. Connect this to the corresponding connector on the speaker, as discussed under Speakers.
4. **AC INPUT CONNECTOR:** This is a twist-lock type mains socket for power inlet. Use only the mains cable provided with the unit to apply power. Ensure that the wall outlet is properly earthed, that is, the earth must be connected to a earth bus-bar which connects to other audio equipments and is not shared by noisy equipments like computers, air-conditioners, lighting appliances etc. The earth connection is also required in the interests of your own safety, should any fault occur. Please check that the wall outlet is capable of providing the current requirement of the product, printed on the back panel near the AC socket.

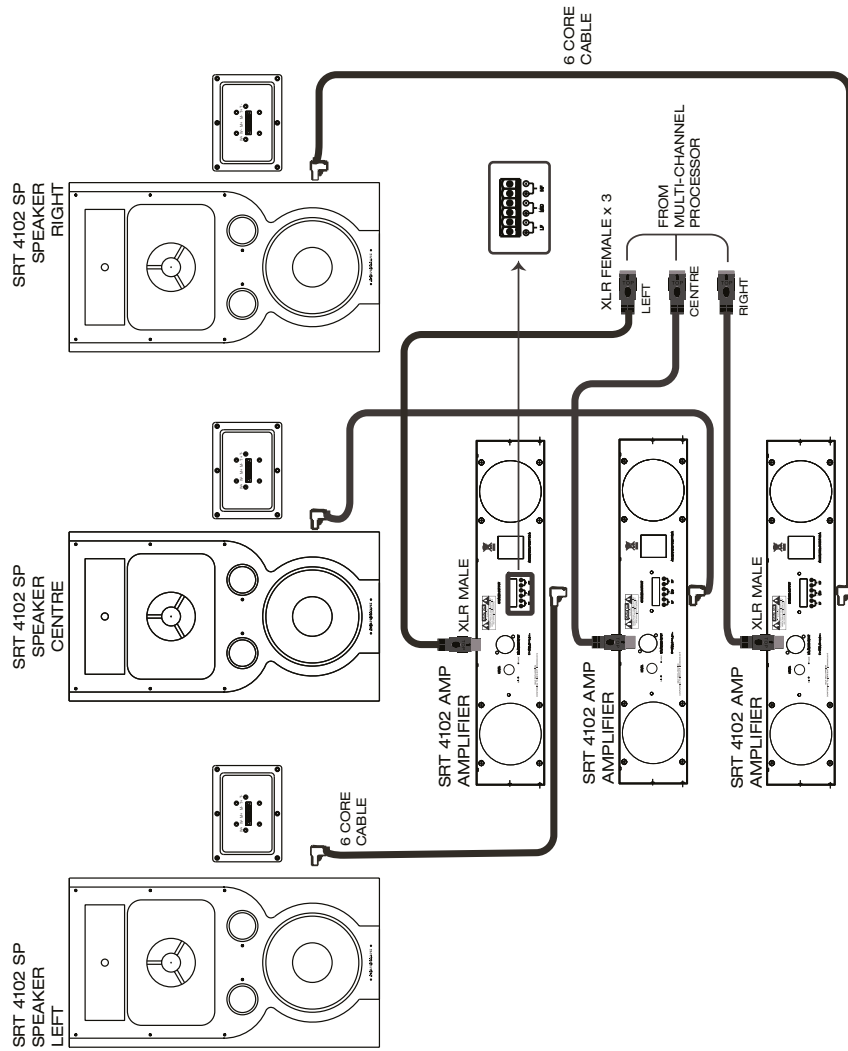
# ● connection diagram: SRT 4101 ●

## L,C,R CONNECTIONS



# ● connection diagram: SRT 4102 ●

## L,C,R CONNECTIONS



# ● operations ●

Connect the output of the processor or other source equipment to the input (XLR female connector) of the SRT 4101/ 4102 amplifier using balanced cable which is a 2-core screened cable with XLR connectors on either end. Pin connections are 1= ground, 2 = hot or positive, and 3 = cold or negative. If the output of your source equipment is unbalanced, (which however is not recommended because of noise pick-up problems), short pin3 to pin1.

Check that the utility outlet for powering your SRT 4101/ 4102 amplifier is of matching voltage and frequency printed on the back panel. Also ensure that it is capable of providing the required power, as printed on the back panel, and the earth of the power socket is connected to the safety earth of the premises through a separate conductor so that it does not share the earth with noisy equipments such as air-conditioning, lighting equipment or computers.

Connect the mains cable of the SRT 4101/ 4102 amplifier supplied with the unit, to the utility wall outlet after you have connected all other equipments. Switch on the console or source equipment first. Switch on power to the SRT 4101/ 4102 amplifier last. That way, you will not hear any nasty turn-on thumps which may be damaging to your ears and equipment.

A blue indicator on the front of the unit will light up. This indicates that your unit has powered up and is ready for operation.

Run the calibration on your processor to calibrate the levels and distances at the RSP in your room. The frequency response of the SRT 4101 and SRT 4102 system are virtually flat in a room with low reverberation, hence if your room has been designed to have an RDT between 0.2 to 0.5 seconds, as recommended in Section 9.1.1 of CEDIA RP-22 guidelines, you will probably not need to equalise the frequency response. However, it is recommended that you check the frequency response with the tools available in the processor, or an external analyser.

# • specifications •

	<b>SRT 4101 SP</b>	<b>SRT 4102 SP</b>
DESCRIPTION	3-way tri-amped large format home theatre active speaker systems	3-way tri-amped large format home theatre active speaker systems
TRANSDUCER COMPLEMENTS	LF: 12" woofer MF: 6" mid-bass with waveguide HF: 1" compression driver with waveguide	LF: 15" woofer MF: 8" mid-bass with waveguide HF: 1" compression driver
ENCLOSURE TYPE	Bass-reflex, through twin front-firing vents	Bass-reflex, through twin front-firing vents
ACOUSTIC FREQUENCY RESPONSE ( $\pm 3\text{dB}$ )	45Hz ~ 20kHz	40Hz ~ 20kHz
MAX. LONG TERM SPL	124dB (half space)	130dB (half space)
BEAM WIDTH (HxV)	H 90° x V 60° (averaged between 1 ~ 20kHz)	H 90° x V 60° (averaged between 1 ~ 20kHz)
THD (@95 dB SPL)	80Hz ~ 200Hz < 3%, > 200Hz < 1%	80Hz ~ 200Hz < 3%, > 200Hz < 1%
INPUT CONNECTOR	6 pin Phoenix type connector with locking screw	6 pin Phoenix type connector with locking screw
CROSSOVER FREQ	500Hz, 2kHz	500Hz, 1.2kHz
CABINET MATERIAL	MDF	MDF
FINISH	Black painted	Black painted
MOUNTING OPTIONS	Wall-mounting brackets SRT 4101WB	Wall-mounting brackets SRT 4102 WB
DIMENSIONS (HxWxD)	920mm x 546mm x 235mm	1100mm x 600mm x 290mm
SHIPPING DIM. (HxWxD)	1040mm x 666mm x 360mm	1220mm x 728mm x 404mm
NET WEIGHT	31.8kg	42.6kg
GROSS WEIGHT	38kg	50kg

	<b>SRT 4101 AMP</b>	<b>SRT 4102 AMP</b>
AMPLIFIER POWER BEFORE CLIPPING	LF: 200W, MF: 120W, HF: 80W (SYSTEM POWER 400W)	LF: 350W, MF: 150W, HF: 100W (SYSTEM POWER 600W)
S/N RATIO (AT UNITY GAIN)	> 90dB, referred to full output	> 90dB, referred to full output
AMPLIFIER THD	< 0.04% (@ rated power)	< 0.04% (@ rated power)
INPUT	Fully balanced through XLR socket	Fully balanced through XLR socket
INPUT SENSITIVITY	135mV for rated power, vol. control max	175mV for rated power, vol control max
VOLUME CONTROL	$-\infty$ to 0dB	$-\infty$ to 0dB
SUBSONIC FILTER	35Hz, 4th order	35Hz, 4th order
INPUT	Balanced input with 3-pin XLR female	Balanced input with 3-pin XLR female
SPEAKER OUTPUT	6 pin Phoenix type connector with locking screw	6 pin Phoenix type connector with locking screw
CONTROLS	Power switch on front panel, Volume control on rear panel	Power switch on front panel, Volume control on rear panel
INDICATOR	Power indicator on front	Power indicator on front
PROTECTION	Over current, Overheat, RFI, Switch on/ off transients	Over current, Overheat, RFI, Switch on/ off transients
POWER REQUIREMENT	230V AC $\pm 10\%$ 50Hz	230V AC $\pm 10\%$ 50Hz
FINISH	Black powder coated	Black powder coated
MOUNTING	2 RU, Rack-mounting	2 RU, Rack-mounting
DIMENSIONS (HxWxD)	88mm x 483mm x 250mm	88mm x 483mm x 250mm
SHIPPING DIM. (HxWxD)	185mm x 525mm x 335mm	185mm x 525mm x 335mm
NET WEIGHT	4.9kg	5.4kg
GROSS WEIGHT	6.2kg	6.7kg

*Due to continuous improvements, all specifications are subject to change*

# • warranty information •

In substitution of any warranty or condition implied, this equipment is warranted against failure arising through faulty workmanship or material for a period of 24 calendar months from the date of purchase. During this period, subject to the conditions stated here, the manufacturer will replace or repair any defective part free of charge (including parts and labour). This warranty is only given with respect to faulty workmanship and/ or materials and does not cover misuse or consequential damage. Claims under the warranty will be considered only if the product is returned to an authorised SONODYNE Service Centre directly, or through an authorized reseller.

- This warranty is applicable only to the original purchaser when purchase is made directly from SONODYNE or from an authorized SONODYNE reseller. Any claim be accompanied by the original Tax / GST invoice.
- The warranty DOES NOT COVER:
  - a. Damage resulting from incorrect installation or use not in accordance with the operating instruction issued by the manufacturer.
  - b. Consequential damage.
- This warranty will be rendered invalid if any unauthorized alteration, modification or substitution is carried out or if the Serial No. is altered and/ or defaced.
- All equipment for servicing must be sent, carriage paid, to an authorized Service Centre, The Company will accept no responsibility for loss or damage in transit
- If the equipment or any part of it is returned for any cause not covered by the warranty, all costs involved, including charges for inspection and handling will have to be borne by the customer.
- No reseller has the authority to vary the terms of this warranty.

Register your product  
to activate your warranty:  
<https://sonodyne.com/registerproduct>




Upload a picture or video of your Sonodyne  
product or write about your Sonodyne  
experience.  
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If you have anything less than a 5 star experience,  
please contact us at [response@sonodyne.com](mailto:response@sonodyne.com)  
and we will make it right

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