

TM

SCHERTLER[®]
ACOUSTIC FIDELITY

CS THUS
ART48 - SUBGROUP

USER MANUAL
Assembling instruction on ART48-L/Rmast manual

WARNINGS

PRECAUTIONS

WARNINGS

Read carefully this manual and follow these precautions before operating the device

Keep this manual for possible future needs

Pay attention not to pour liquids onto the device and do not operate in conditions of excessive humidity

Do not install the device close to sources of excessive heat, do not expose it to direct solar radiation and do not position it without protection in a dusty environment

Be sure that the main voltage does not exceed the value indicated on the back panel

Do not use the device if the main cable or the plug aren't in a perfect condition (if necessary, replace it)

If the main cable has to be replaced, the operation must be carried out by qualified personnel. Replace the cable exclusively with one that is an exact substitute

In order to avoid interference, do not install the device close to power transformers, TV sets, RF transmitters, electric motors or any source of electric energy

Do not point microphones against speakers: this could generate annoying whistles (Larsen effect) that cause damage

In order to avoid unpleasant and costly inconveniences, use only original connecting cables

To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC socket

When cleaning, do not use solvents (e.g. acetone or alcohol). These could damage the external finishing and the serigraphy

Do not attempt to service this product. In case of malfunction of any part of the system call the nearest technical assistance centre or a specialized technical centre

For good ventilation, the heat sink should never be covered or obstructed by blankets, sofas or similar furniture. Be sure also to leave sufficient clearance between the heat sink and any other surface

No source of flames, e.g. candles, should be placed on or near the device

The device should not be exposed to water, even in small amounts. No object containing liquids should be placed on or near the device

The device should only be connected to a mains socket outlet equipped with protection ground system

When the device is installed, be sure the mains socket and the plug of the mains cable are easily accessible

ART48 - SUBGROUP

The ARTHUR **Subgroup** is a high-end, CLASS-A summing amp. It functions as an additional unit for configuring a group of input modules that are to be controlled via a single pair of faders.

Two Subgroup units can be directly mounted in the ARTHUR Format 48 mixer - along with a theoretically infinite number of other sub group units that must be cabled to either a **Stereo In** or **Multiple In** unit.

Let's see how this works in detail: Figure 1 shows an example of how to mount the **Subgroup** unit(s).

If you are only using two Subgroup units, which in most of cases should be sufficient, the mounting process is very simple: One Subgroup should be positioned to the left of the L/R master and the other sub group to the right.

The first step in mounting a sub group is to set the Master Side Switch, which you will find inside the module on the circuit board, near the BUS connector.

If the L/R Master is to the right of the Subgroup, do not depress the Master Side Switch. If it is to the left, then depress it. This obviously has to be done before the sub group is connected to the other units. Once the mixer is put together, one of two LEDs will light up showing which side has been selected.

The group of units being controlled via the Subgroup should be positioned "before" the sub group unit, i.e. on the opposite side from the L/R Master unit.

Depress the back to L/R button to let the summed signal flow back to the L/R BUS.

Any other input units that are next to the L/R master on its left or right sides will be summed by the L/R master and will not be affected by the Subgroup unit(s).

An ARTHUR mixer using two Subgroup could therefore be configured as follows, working from the mixer's left hand side: Input units controlled by the first sub group - the Subgroup itself (master side switch not depressed) - the independent inputs not affected by the sub group - the master L/R unit - another set of independent inputs (if necessary) - the second Subgroup (master side switch depressed) - the input units controlled by that second sub group.

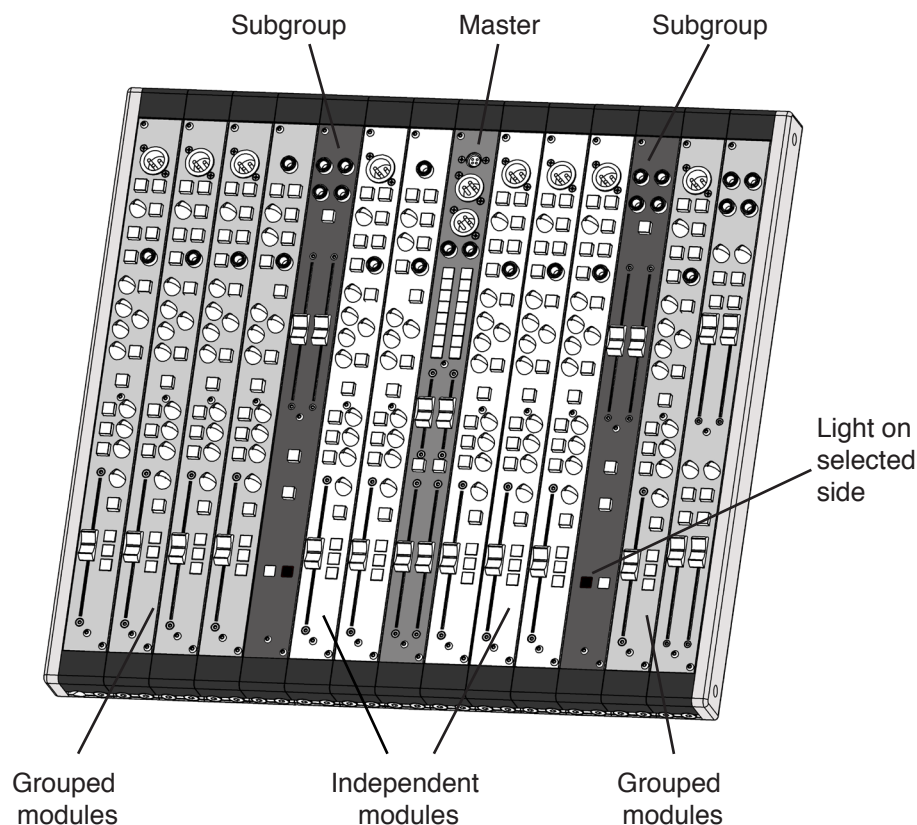
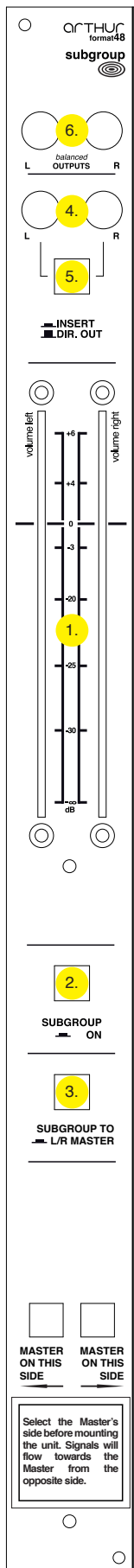


Fig. 1

ART48 - SUBGROUP



Using the Subgroup's L/R faders(1.), you can control the level of all linked input units. By depressing the mute button(2.), you can mute this entire sub group without touching the fader.

If using more than two Subgroups, the first two Subgroup units should be mounted as above. These are always positioned near the L/R master (with any other independent "non influenced" input units placed between the sub groups and the L/R Master).

Any further Subgroup units should be mounted towards the outer edges of the mixer. The outputs of these units must be connected to either a Stereo In or a Multiple unit (that can accommodate two sub groups) using stereo jack cables. These Stereo In and Multiple units should also be positioned near the L/R Master (together with any independent "non influenced" input channels), so that their signal can flow directly to the L/R Master.

Set the back to L/R button(3.) to OFF (not depressed), so that the signal will go through the cables to the Stereo In or Multiple input unit and from there to the L/R Bus.

Set the Master Side Switch on these subgroups in the same way that you did for the first two Subgroup units.

Insert plugs(4.)

The insert follows the summing amps of the Subgroup unit. It therefore works for both the above scenarios: Routing to the L/R BUS (first two Subgroups) and routing the L/R signal through cables to a separate stereo input unit (when there are more than two Subgroups).

If the INSERT DIRECT OUT button(5.) is not depressed (i.e. off, white light), the signal will not be interrupted by the insertion of a phone jack into the Insert connector. You can connect a simple mono phone jack or a stereo phone jack to the insert. The unbalanced line signal will be transmitted through the "tip" of the phone jack.

If the INSERT DIRECT OUT button is depressed (i.e. on, red light), the signal in the mixer will be interrupted and the insert will work in the usual way. By connecting a mono jack, you will get the simple output line signal on the "tip". By connecting a standard stereo phone jack, you get the (output) signal from the "tip" (send) and the return signal will be connected to the mixer through the "ring" (return) of the jack.

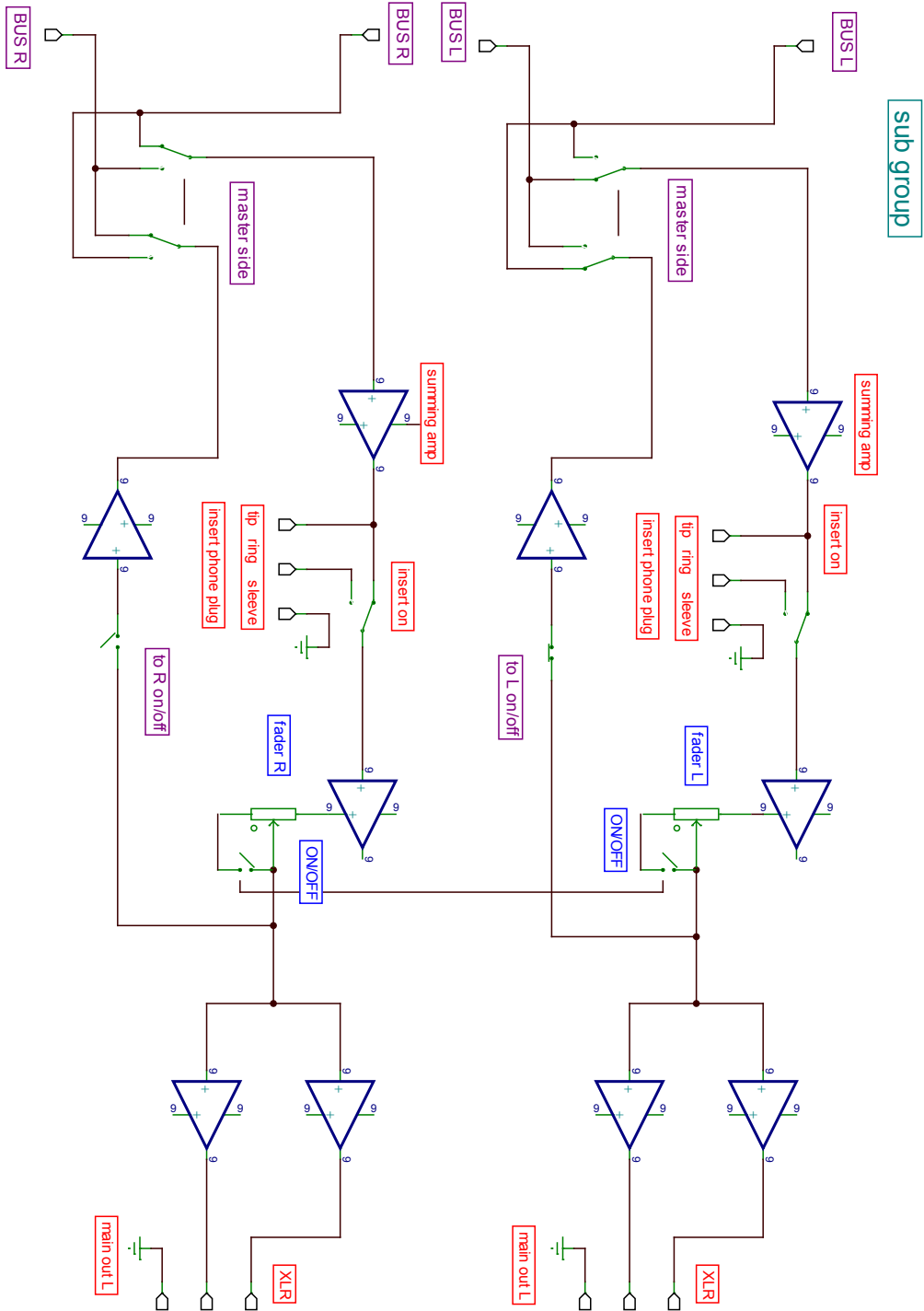
The Subgroup unit includes two outputs(6.). Please note that these are designed to send balanced signals, using space-saving stereo phone plugs. The tip connects as usual to the hot signal (+), the ring to the cold signal (-) and the sleeve to the ground.

We have already seen their use in connecting additional Subgroups to a Stereo In or Multiple unit.

These outputs are also active in the back to L/R mode and can therefore be used as a second independent Subgroup output. Not depressing the back to L/R button lets the Subgroup act as a simple master L/R, creating a "second mixer within the mixer".

Another interesting application for these outputs is as a balanced insert: Connect a stereo equalizer to them for example, then connect its outputs to a Stereo In or Multiple unit. This lets you profit from the effect unit's balanced inputs and outputs. This application could be useful with any Subgroup unit, routing it from its outputs, via cable, to one of the aforementioned Stereo In or Multiple units (simply by not depressing and therefore not activating the L/R to BUS / back to L/R button).

SIGNAL FLOW



TECHNICAL SPECS

Output Impedance:	113 ohm
Gain range:	-80dBu to +5dBu
Maximum output level:	+24dBu (@1kHz; THD <0.5%)
Frequency response: (-3dB)	< 10Hz - 40kHz
Distortion (THD+N):	= 0.01%
Insert input impedance:	14Kohm
Power consumption:	80mA
Size & Weight:	36x58x475mm; 0,5 Kg

IMPORTANT SAFETY INSTRUCTIONS



THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT ENCLOSURE THAT MAY BE OF A SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.

THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE PRODUCT.

WARNING

**TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK
DO NOT EXPOSE THE APPLIANCE TO RAIN OR HUMIDITY**

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) 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 third 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.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with 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.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service 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.



ALL SCHERTLER® PRODUCTS ARE COVERED BY A LIMITED THREE-YEAR WARRANTY (FROM THE DATE OF PURCHASE) AGAINST MANUFACTURES DEFECTS. DETAILS CAN BE OBTAINED FROM YOUR LOCAL DEALER/REPRESENTATIVE. SCHERTLER SA STRONGLY BELIEVES IN "COMMON SENSE" AND THUS, MISUSE OF OUR PRODUCTS ARE NOT COVERED UNDER RIGHTS OBTAINED THROUGH OUR WARRANTY POLICY OR THAT OF INTERNATIONALLY RECOGNIZED TERMS AND CONDITIONS.

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THE SCHERTLER® NAME/LOGO ARE REGISTERED TRADE-NAMES/ TRADEMARKS OF SCHERTLER SA, SWITZERLAND.
All SCHERTLER® PRODUCTS ARE OF PROPRIETARY TECHNOLOGY AND COVERED BY ONE OF MORE WORLDWIDE PATENTS.

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