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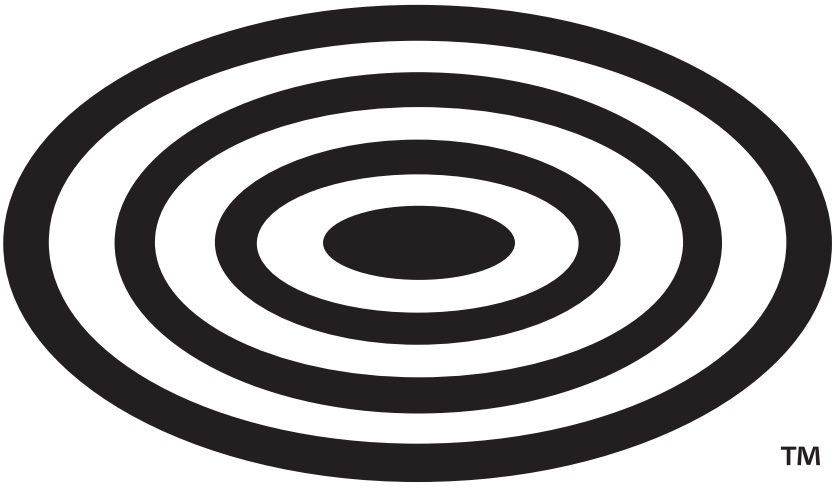

SCHERTLER®

ACOUSTIC FIDELITY

ARTHUR

ART48 - STEREO IN

Version 2017

USER MANUAL

Assembling instruction on ART48-L/Rmast manual

WARNINGS

PRECAUTIONS

WARNINGS

Please read this manual carefully before using your ROY amplifier and observe all safety precautions

Keep this manual for future reference

Do not pour any liquids onto this device, or operate it in excessively humid conditions.

Do not use or install this device near sources of excessive heat. Do not expose it to direct sunlight, or position it in a dusty environment without any form of protection.

Ensure that the mains voltage does not exceed the value indicated on the back panel.

Do not use this device if either the mains cable or its plug is not in perfect condition. (Replace if necessary.)

If the mains cable needs replacing, it must be done by an appropriately qualified person. The replacement cable must be exactly the same as the original.

To avoid interference, do not use this device near power transformers, TVs, RF transmitters, electric motors or any other source of electrical energy.

Do not point a microphone towards any speakers as this could result in feedback (Larsen effect) and ultimate damage to your device.

Only use the original connection cables – if supplied with the device. Otherwise this could prove both costly and inconvenient.

To completely disconnect this device from the AC mains, remove the power cable plug from the mains socket.

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

Do not attempt to service this device. If any malfunction is detected, call the nearest technical assistance centre, or a specialist technical centre.

To maintain good ventilation, never cover or obstruct the heat sink with blankets, sofas or any other furnishings.

Always leave sufficient clearance between the heat sink and any other surface.

No flammable sources, i.e. candles, should be placed on or near the device.

This device should never be exposed to water, even in small amounts. No object containing liquids should be placed on or near the device.

This device should only be connected to a mains socket outlet that has a protective ground.

When using or installing this device, always make sure that the mains socket and the mains cable plug are easily accessible.

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 CONSITUTE 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.

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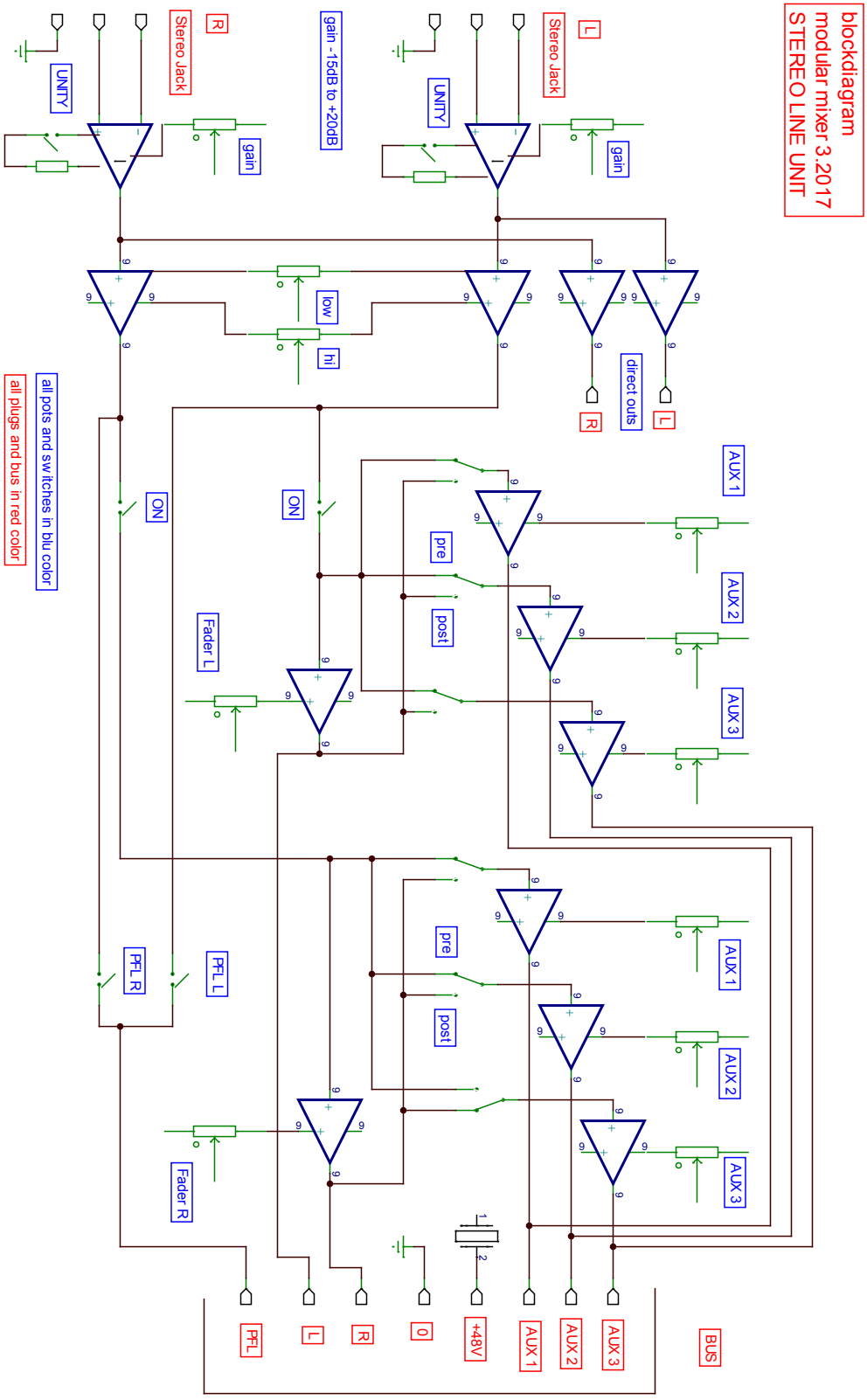
This CLASS-A unit can receive signals from various sources - mostly audio devices that generate a line signal (0 dBV) from their output(s). These include effects units, CD players, tape or digital recorders, preamps of any kind, as well as electronic instruments such as keyboards and Midi devices.



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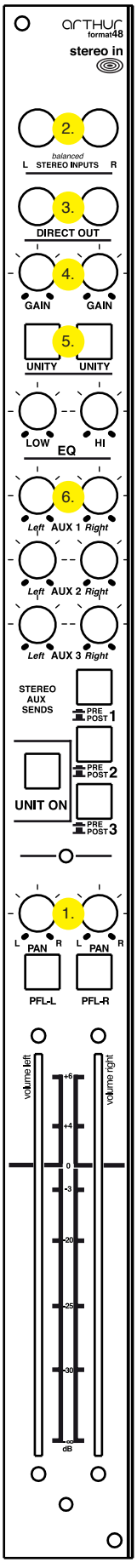

PAN (1.)
Each mono input channel has a PAN knob. Although somewhat unusual for a stereo input, it makes this particular unit more versatile. The Stereo In effectively consists of two independent mono input channels, each with their own controls - with the exception of the LOW/HI Filter that affects both inputs simultaneously.

The two PAN pots therefore play an important role: When set hard left and right respectively, the Stereo In unit gives you a stereo input - as its name suggests. When the PAN pots are set to the centre, you get a stereo input “switched to mono”. Setting one PAN pot slightly to the left and the other to the right lets you chamfer the stereo image.

When plugging two independent sources into the Stereo In – such as a guitar and a mono effect – you can then use the PAN pots to route each source left and right as required.

INPUT SECTION
As a stereo channel strip, the unit has two input connectors (2.): Left and Right. These are fully balanced, but use space-saving stereo phone plugs. The tip connects as usual to the hot signal, the ring to the cold and the sleeve to the ground. Another advantage of these phone plugs is that you can connect an unbalanced music signal, for example from a keyboard, via a simple guitar jack.

Although this stereo input unit is intended to accommodate nominal line level signals, the input amp’s sensitivity can be adjusted from -15 dBu to +24 dBu using the GAIN knobs(4.). Left and right input channels can be separately adjusted. Furthermore, by depressing the UNITY button(5.), the gain will be set to 1, allowing the signal to flow - without amplification or attenuation - independently from the Gain knob setting. This could be particularly useful in a recording situation for example, where several “line level” devices might be connected to multiple stereo line input units. Here, all inputs can be evenly set to an accurate nominal level by depressing the UNITY buttons.

DIRECT OUT(2.)
The Direct Out connections work as a sleeve out or “dry line out post input amp”. You can connect a simple mono phone jack or a stereo phone jack to the plugs. The unbalanced line signal will be transmitted through the “tip” of the phone jacks.

LOW and HIGH Filters(6.)
Line signals do not usually need strong shaping. However, a little correction of the higher and lower frequencies can be useful. The stereo LOW and HI filter knobs affect both the left and right inputs simultaneously.

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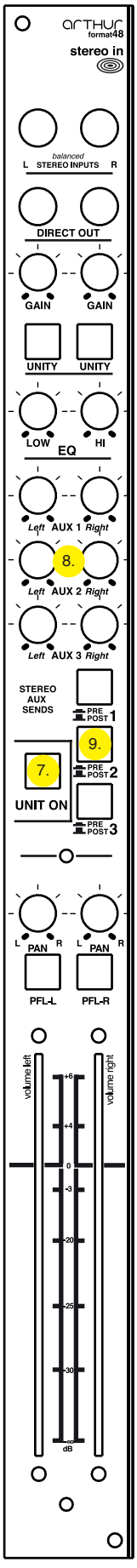

The UNIT ON button(7.) connects or disconnects the output routing for all outputs (AUX 1, AUX 2, AUX 3 and L/R), with the exception of the PFL routing. This function is similar to the MUTE button found on other mixers, except that its functionality is reversed: When the UNIT ON button is depressed, all outputs are connected (whereas a MUTE button in its depressed position disconnects the output). Also, a MUTE normally only disconnects the L/R routing (the channel's fader), whereas this module's UNIT ON button affects all outputs. Being able to switch off a channel strip makes sense: For example, it prevents a signal from still going through to stage monitors, or to the input of the reverb unit.

THE AUXILIARY SENDS

You will find the auxiliary sends, labeled STEREO AUX SENDS(8.), just above the UNIT ON button. There are three knobs for the left level control of each send (AUX 1, AUX 2, AUX 3) and three knobs for the right (AUX 1, AUX 2, AUX 3). Therefore, every single AUX send can be controlled independently from the other sends and from the other left or right channels.

What's more, the unit enables every AUX send to "read" the signal either pre or post fade, courtesy of the Pre / Post buttons(9.) located near the respective AUX level controls.

If a button is not depressed (orange light), it means that the signal will arrive "post fade". When in this position, the relevant auxiliary level will obviously be controlled by its level knob, but the final outcome will also be influenced by the channel fader's position. This is very useful when driving a reverb unit for example, where the proportion of reverb to original (dry) signal is set by the level knob, then maintained in proportion while any overall level changes are made using the channel fader.

If a button is depressed (blue light), the signal will arrive "pre fade": In other words, it will be sent to the AUX master without being influenced by the position or movement of the channel fader. This configuration will normally be chosen when driving stage monitors (or similar devices) through the respective auxiliary master, where influence from the main channel fader is not required.

Note: As well as the L/R Master unit, you will also need the AUX Master unit to benefit from all the AUX sends (and other additional options). The L/R Master can only receive AUX 1, but this is just intended as a basic configuration where, for example, only one auxiliary send is needed to operate a reverb device and no stage monitors are being used.

This AUX Master unit also offers a CLASS-A headphone output,

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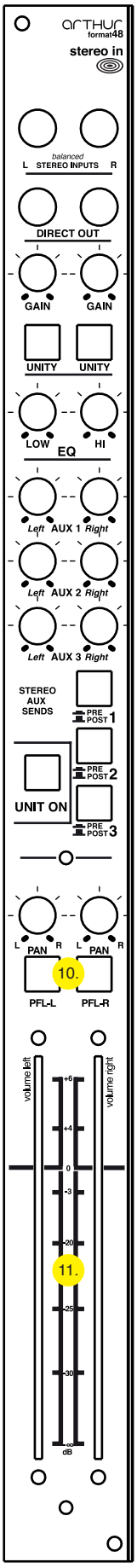

talkback function and control room output to control the studio monitors.

PFL(10.)
Each channel (left and right) has a PFL button. When depressed (red light), the PFL will send the respective signals to the phones or PFL output on the AUX Master. As well as being a traditional PFL (pre fade listen), this one also serves as a fourth AUX send, albeit without any possibility to set the level.

All channels that have the PFL button activated (red light) will be mixed in the AUX Master unit and sent to the PFL output, controlled by the PFL fader on the AUX Master.
This function can be useful when an additional monitor is needed, for example for a singer, where only one signal might be required (in this case the signal from the “voice channel”).
Note: The PFL section still runs if the CHANNEL ON button is deactivated (white light).

L / R FADER SECTION(11.)
The channel fader and its associated functionality is probably the most important part of the output process. In most cases, the signal going through here will be mixed in the L/R Master and will appear on the main L/R outputs that drive the recording device or the front-of-house PA speakers. This is the signal that is usually heard by the public.

The operation of the L/R fader section is identical to that on other mixing consoles. The channel faders let you control the total amount of signal that goes to the master. If you want to completely exclude the channel’s signal from the L/R Master without changing the fader position, you can simply deactivate the UNIT ON button (off = white light). This button will then be acting as a MUTE.

TECHNICAL SPECS

Input impedance:	20 kohm
Maximum input level:	+28dBu (@1kHz; THD<0.5%)
Maximum output level (through L/R):	+27dBu (@1kHz; THD<0.5%)
Sensitivity (accordingly to Gain):	-24dBu to 15dBu
Total Gain (through L/R):	36dB
Frequency response: (-3dB)	8Hz – 90 kHz
Low EQ:	500 Hz (Shelving) -16dB / +16dB
High EQ:	1.2 kHz (Shelving) -15dB / +14dB
Equivalent input noise (EIN):	109dB (Direct out, 25dB Gain, 150ohm)
Distortion (THD+N; @1kHz): -30dBu input level 0dBu output level	0.09% (2nd harmonic) 0.05% (3rd harmonic) 0.02% (4th harmonic) 0.011% (5th harmonic)
Power consumption:	105mA
Size & Weight:	36x58x475mm; 0,5 kg

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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