

TM

SCHERTLER®
ACOUSTIC FIDELITY

ARTHUS
ART48 - YELLOW

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

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.

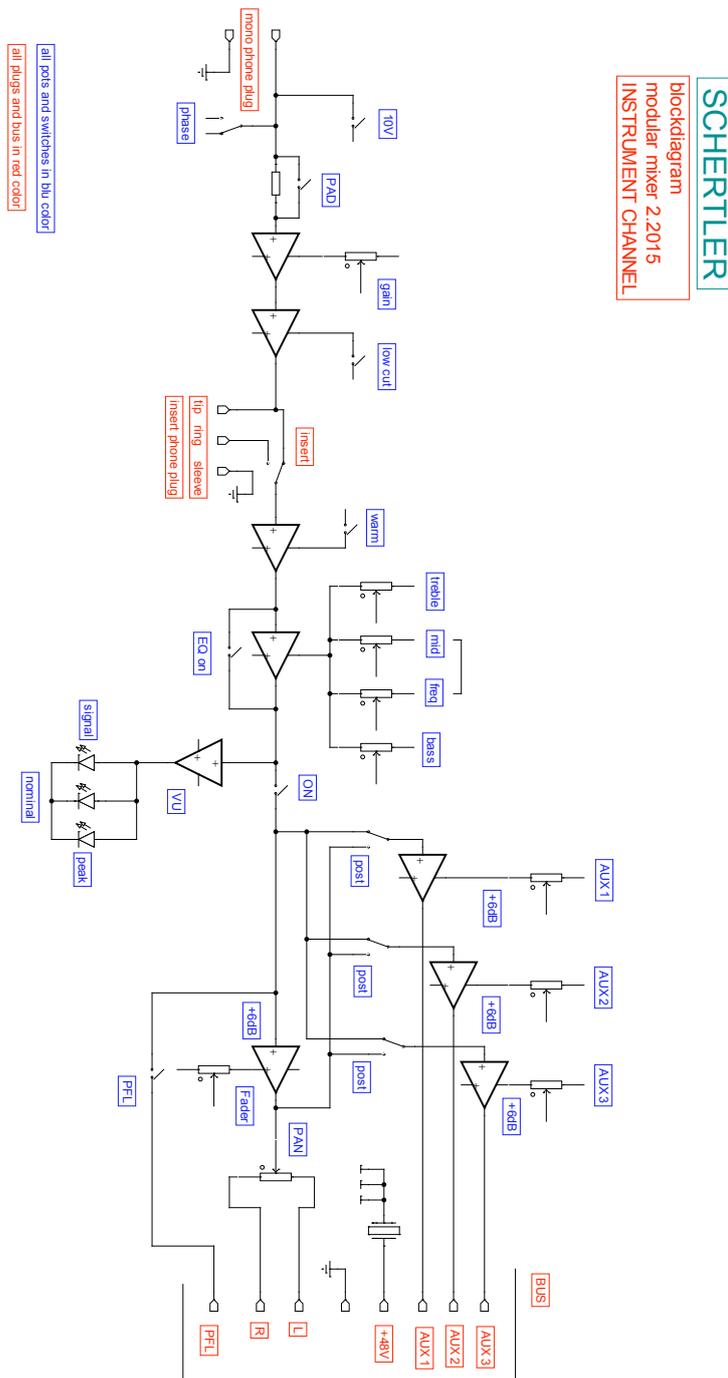


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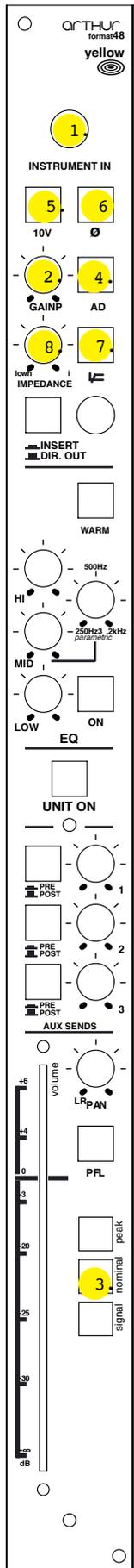
Arthur's instrument input unit is a very fine, high-voltage instrument preamplifier. Due to its wide gain control and its input impedance control (a novel feature), it can accept signals from any musical instrument pickup, including magnetic, piezo or SCHERTLER electrostatic string instrument pickups (active or passive).

The yellow unit is perfect for bringing a musical instrument signal directly into the mixer, without the need for an external preamp, pedal or guitar amp.

This unit is similar to the mic input unit, differing only in its input section. Otherwise, from insert to fader, the two units are virtually identical.



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The unbalanced phone plug input (1.) can receive signals from -42dbu to +9dBu. This 51dB range means that you can connect any musical instrument pickup to the unit.

Adjusting the GAIN knob affects the amplification rate of the input amplifier, amplifying a weak signal to a nominal level, or attenuating a stronger signal, so that a nominal signal level is always present at the output of the mic input amp.

On the VU level meter (3.), located next to the channel fader, you can “read” the amount of gain set. Turn up the gain to a point where the red overload light occasionally shows. But don’t worry too much about this. Thanks to the amount of headroom from input to output on Arthur, even strong overloads can be absorbed by the mixer’s electronics without resulting in distortion.

For active instruments that have a very strong output, depressing the PAD button (4.) (green light) will attenuate the signal by 15 dB.

The button labeled 10V (5.) will deliver the necessary 10-volt supply for all SCHERTLER electrostatic pickups (STAT- and BASiK series), so they can be directly connected to the instrument input unit, without using their original preamp. The 10V button can also be used for connecting unbalanced electret microphones to the instrument unit.

The PHASE button (6.), labeled Ø, swaps the “hot” and “cold” aspects of the input signal, inverting the signal phase 180°. This can be helpful when a pickup is combined with a microphone (going through its own mic unit). Combining two different sources can create phase cancellation, so just use your ears to find the best sounding position for the Ø button.

The “low cut” button (7.) limits low frequencies at 100Hz/second order, cutting out unwanted low frequencies from “boomy” signals, as well as letting you shape the sound of an acoustic instrument.

The IMPEDANCE knob (8.) changes the input impedance from 20k to 800kOhms, as the knob is turned from low to hi. For active instrument pickups it should be set to low. For magnetic pickups it should be set between the extremes. For piezo pickups it should be set to hi. Magnetic pickups in particular can benefit from a correctly adjusted input impedance. Just turn the impedance knob to optimize the response.

The signal flow from insert to fader (insert, EQ, CHANNEL ON / OFF, AUX SEND, PAN and PFL) is identical to that of the mic input unit. For further information, please read the Mic In Unit manual.

TECHNICAL SPECS

Input impedance:	variable from 20 kohm to 800 kohm
Maximum input level:	+24dBu (with PAD ON @1kHz; THD<0.5%)
Maximum output level (through L/R):	+30dBu (@1kHz; THD <0.5%)
Sensitivity (accordingly to Gain):	-42dBu to 9dBu
Total Gain (through L/R):	54dB
PAD attenuation:	15dB
Frequency response (-3dB):	5Hz – 50 kHz
Low cut (-3dB):	100 Hz (Shelving, 2nd order)
Warm (-3dB):	2 kHz (Shelving, 1st order)
Low EQ:	100 Hz (Shelving) -20dB / +15dB
Parametric Mid EQ:	250 Hz – 3 kHz -15dB / +15dB
High EQ:	4.5 kHz (Shelving) -12dB / +12dB
Distortion (THD+N; @1kHz):	0.11% (2nd harmonic)
-30dBu input level	0.05% (3rd harmonic)
0dBu output level	0.012% (4th harmonic)
	0.006% (5th harmonic)
Power consumption:	78mA
Size & Weight:	36x58x475mm; 0,5 kg

NOTES

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.

SCHERTLER SA IS CONSTANTLY AIMING TO IMPROVE ITS RANGE OF PRODUCTS THEREFORE, SCHERTLER SA RESERVES THE RIGHT TO AMEND PRODUCT SPECIFICATIONS WITHOUT NOTICE.

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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