

YELLOW • B L E N D E R •	• U S E R • M A N U A L		S W I S S	M A D E +
CLASS-A DUAL CHANNEL PREAMPLIFIER				
	S C H E R T L E R			
V I E N	W W W . S C H E R T L E R . C O M			

INTRODUCTION

Congratulations on purchasing the SCHERTLER® YELLOW BLENDER preamp. It is our pleasure to welcome you to a growing family of musicians and technicians, including many of the world's leading soloists and sound engineers, who have chosen to work with SCHERTLER® products.

This dual-channel professional preamp has been specially designed to offer a compact, flexible solution that meets both studio recording and live performance needs. Each individual section has been developed and engineered to ensure maximum potential from any kind of sound source. The preamp features pure Class-A electronics with no integrated circuits and No Negative Feedback for optimum results.

Its modern sophisticated design and lightweight yet robust aluminum housing makes it highly suitable for constant use in a range of environments. YELLOW BLENDER's intuitive controls offer both flexibility and straightforward adjustment of sound parameters, giving you the freedom to bring out the best of your instrument's sound characteristics.

In our continuing quest to improve the transmission and reproduction of acoustic instrument sound, we hope that YELLOW BLENDER will also enhance your personal performing or recording experience.

Stephan Schertler
President, electronic designer

and the SCHERTLER Team

YELLOW BLENDER is a versatile Class-A preamp that has been specially developed to offer musicians and sound engineers a high-quality, flexible solution for a range of performing and recording applications. The preamp offers two dedicated inputs (one balanced XLR for microphones and one unbalanced jack for instruments), making it ideal for a solo vocal/acoustic guitar setup, or a duo. The RETURN socket can also be used as an additional line source input if required.

YELLOW BLENDER's two input channels offer 4-band EQ, 24 VDC phantom for condenser microphones and 10 VDC supply for electrostatic microphones, plus a range of dedicated filters for sound parameter adjustment. Four output lines (max) enable connection to active loudspeakers, mixers, recording devices and effects. The SEND and RETURN connectors enable an effect loop. A separate headphone output is also provided.

To make the most of your YELLOW BLENDER's capability and to ensure trouble-free operation, **please read this manual carefully before using the preamp for the first time.** We also advise keeping the manual for future reference.

SCHERTLER YELLOW BLENDER: Made in Switzerland

IMPORTANT SAFETY INFORMATION

SAFETY FIRST!

Safety is of major importance when operating any electrical equipment, so please note the following:

On a product, a lightning flash within a triangle indicates the presence of uninsulated “dangerous voltage” within the product enclosure. This may be of sufficient magnitude to cause risk of electric shock.



ELECTRICAL SAFETY

This information applies to all models and power supplies of the YELLOW series:

Before connecting your preamp to the mains, make sure that the mains voltage does not exceed the voltage specified on the power supply.

Do not use your preamp if its power supply, cable or plug are not in perfect condition. Replace these as necessary, using the exact models/types specified. If any fixed cables need replacing, this should be done by a suitably qualified professional.

When setting up or installing your preamp, make sure that the mains socket and the power supply's mains cable and plug are easily accessible.

Do not expose your preamp to rain or any other water (even in small amounts). Do not use the preamp near water.

Avoid spilling drinks or any other liquids on the preamp.

Do not operate your preamp in excessively humid conditions. Avoid excessive heat from sunshine, fire or similar. If your preamp is being used in a dusty environment, make sure it is adequately protected.

Avoid installing your preamp near any heat sources such as radiators, heat registers, stoves, or other heat-producing apparatus (including amplifiers).

Do not put any sources of open flame (e.g. candles or pyrotechnics) on or near your preamp.

Do not cover your preamp during use, or obstruct the ventilation flow in any way.

Unplug your preamp during lightning storms, or if it is not going to be used for a while. (Remove the plug from the mains socket to completely disconnect the preamp.)

Your preamp does not contain any “user serviceable” parts. Servicing and/or repairs should only be carried out by qualified personnel. See MAINTENANCE AND REPAIR (below).

OPERATIONAL SAFETY

During installation or live performances, make sure that your preamp's power supply cable cannot be walked on, tripped over or “pinched” – particularly at sockets, around waste bins etc. Also make sure that the power supply cable is not “stressed” at its point of connection to the preamp.

To avoid interference, do not install your preamp near power transformers, TV sets, RF transmitters, electric motors, or any other sources of electrical energy.

To avoid potential accidents, only use attachments, accessories and other equipment such as carts, stands, tripods, brackets or cases that are specified or recommended by the manufacturer, or sold with your preamp.

Loud volume levels can cause irreparable damage to hearing, so avoid the following while using your preamp:

- acoustic feedback (never point microphones directly at a loudspeaker)
- high levels of distortion
- impulse noises (loud “pops”) that can occur when a device is switched on/off, connected to or disconnected from a system.

MAINTENANCE AND REPAIR

Your preamp can be carefully cleaned, as necessary, using a dry cloth. No water must be used.

When cleaning, do not use any solvents (such as acetone or alcohol). These could damage the preamp's finish and its labeling.

Visually check your preamp on a regular basis for any signs of wear and tear or damage, but do not attempt any kind of servicing or repair.

If your preamp malfunctions, or has been damaged, e.g. if the power supply/cable or plug is damaged, liquid has been spilled or objects have fallen inside, the preamp has been exposed to rain or moisture, does not operate normally, or has been dropped, please call your nearest SCHERTLER technical assistance center. (For more information, contact us at the address on the last page of this manual.)

PRACTICAL ADVICE

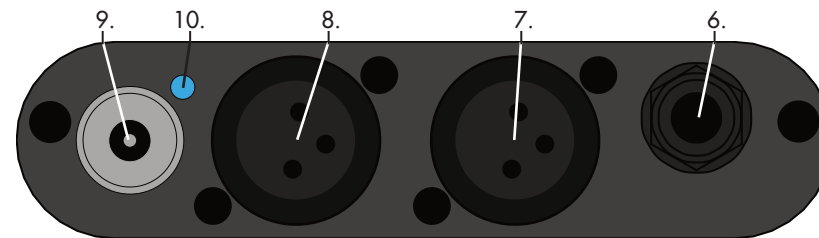
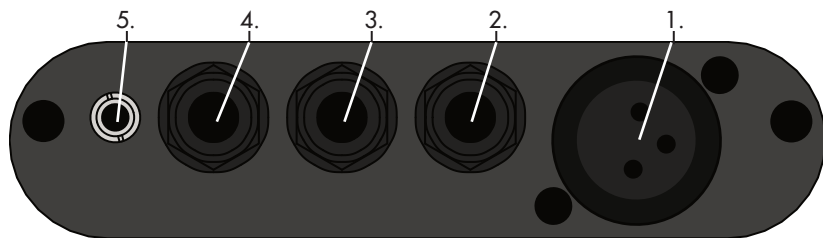
AVOID GAIN STAGING: When using YELLOW BLENDER with other equipment such as mixers, speakers or amplifiers, it is important to avoid distorted input signals as these can cause damage to equipment.

When setting input levels on your YELLOW BLENDER, start turning up the GAIN control until the OVERLOAD LED starts to blink. At this point, turn the GAIN back down slightly. This correctly sets the preamp level depending on your actual input signal. Set the MASTER VOLUME between 30% and 60% to avoid raising the natural noise level of the circuit to an audible level. Now you can freely set the channel volume as you please.

GROUND CONNECTION: Although all ground connections are correctly implemented on YELLOW BLENDER, they are not directly connected to ground (and are therefore “floating”), as they actually depend on the grounding connection of the device to which the YELLOW preamp is connected. If that device is not properly grounded, or generates a ground loop, it is possible to experience hum. Solving the problem requires attention to the device’s ground connection, usually via its GROUND LIFT switch. In short: the ground connection must be provided by the device to which YELLOW BLENDER is connected.

POWER SUPPLY: We highly recommend to only use the provided power supply in order to avoid any possible noise inducted by the electrical system. However, if you really want to use another PS, please be sure that the connection is center positive. You should see this symbol (or a similar one) on the DC connector.





1. MIC IN: This enables the connection of a condenser microphone or a dynamic microphone (if necessary, press the PHANT button to power the microphone).

2. LINE IN: This enables the connection of instruments like guitars equipped with the SCHERTLER LYDIA system, electric guitars, bass guitars or STAT Series bowed instrument pickups. (If necessary, use the +10V button to power the pickup.)

3. SEND: This enables you to send your signal to an external device. Adjust output level using the SEND (PRE) control on the relevant channel..

4. RETURN: This enables the connection of any external audio control effect. Use the RETURN LINE-IN control to adjust the input level of the return channel.

5. PHONES: This enables the connection of headphones with a 3.5 mm mini-jack connector.

6. MASTER OUT UNBALANCED: The signal can be sent to an active loudspeaker or/and to another device.

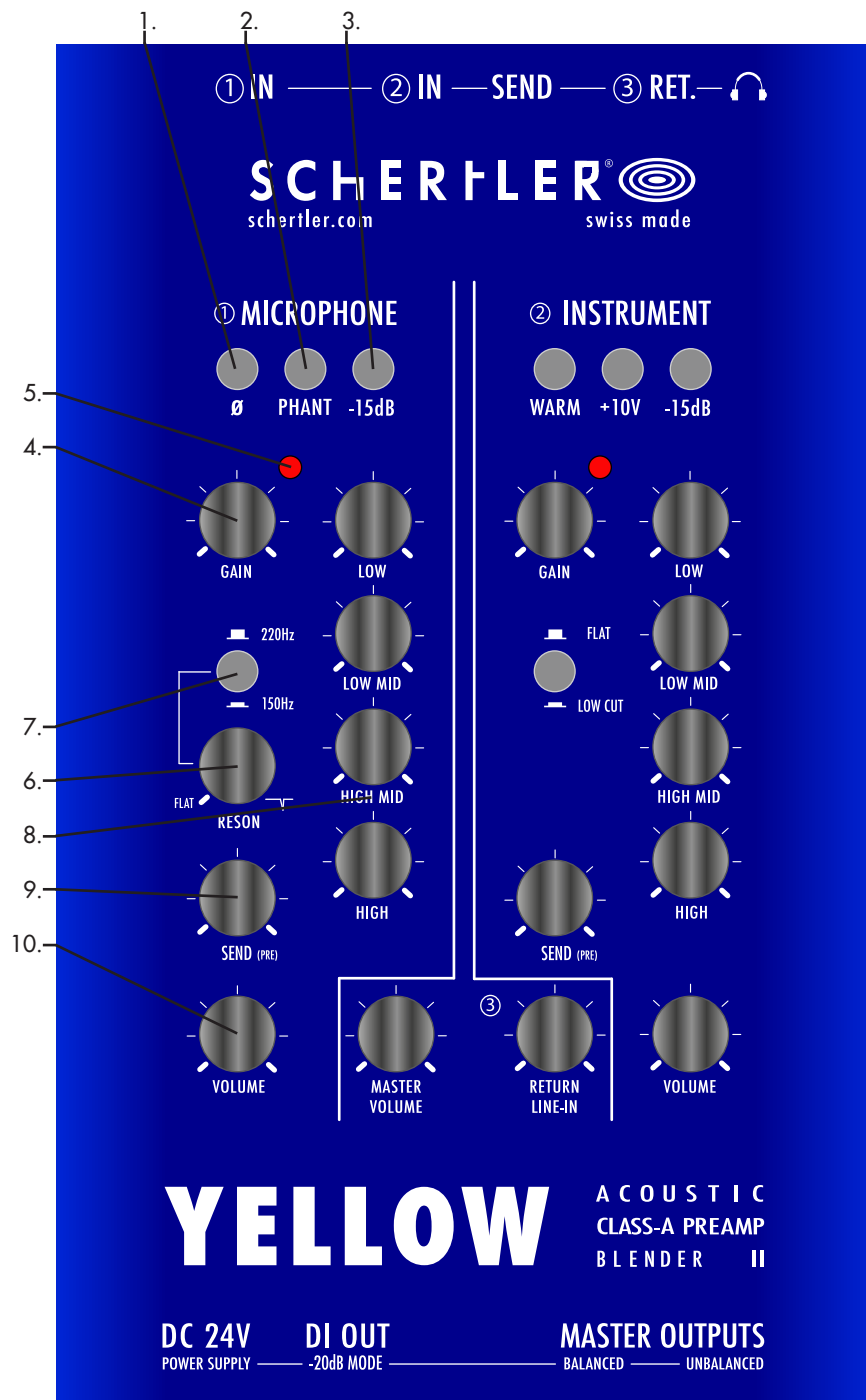
Output volume depends on both the VOLUME and MASTER VOLUME control: use the latter to only adjust the volume being sent to the speakers while leaving the other settings unchanged.

7. MASTER OUT BALANCED: The signal can be sent to an active loudspeaker or/and to another device. Output volume depends on both the VOLUME and MASTER VOLUME control: use the latter to only adjust the volume being sent to the speakers while leaving the other settings unchanged. DO NOT EVER use this output with phantom power enabled on the input device, as it will damage the YELLOW.

8. DI OUT: The signal can be sent to any external systems (even phantom powered), for example to another mixer. If you wish to record your music, connect your recorder to the same output and start recording.

9. DC 24V: Power supply plug-in connector.

10. POWER SUPPLY LED: This indicates when the preamp is ON.



1. Ø (PHASE): This button flips the phase of the signal. In the event of feedback, or unwanted effects between channels, use the PHASE button.

2. PHANT: Phantom power supplies the XLR connector with 24 VDC for powering condenser microphones.

3. -15dB (PAD): If the input signal is too powerful and you have overloads, use this PAD for a 15 dB reduction.

4. GAIN: This variable gain preamp adjusts the sensitivity level to ensure the best possible processing of the signal through the channel. It is important that this input level is set and optimized in the best way to achieve the cleanest sound possible.

5. OVERLOAD: This LED (when lit) indicates that the level of the input signal is too high and it might therefore introduce distortion.

6. RESON (pot): The Resonance (notch) filter cuts the frequency of 150Hz / 220Hz, to reduce low-frequency feedback.

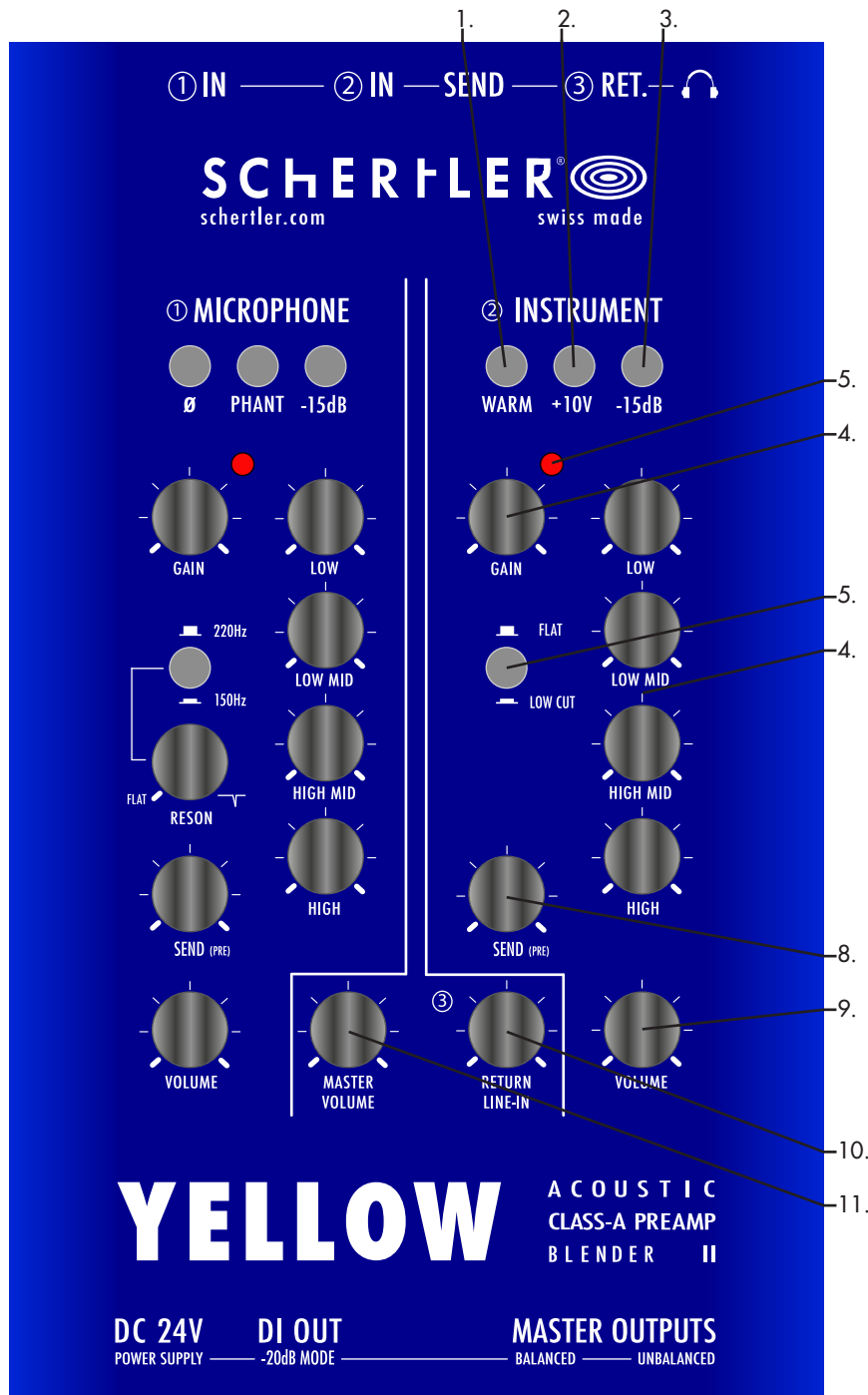
- Left: no attenuation (flat)
- Right: maximum attenuation

7. RESON (button): Use the RESON button to select the resonant frequency of the instrument (150 Hz/220 Hz).

8. HIGH, HIGH MID, LOW MID, LOW: These controls are for high, mid and low frequency regulation. Offering cut and boost of +/- 15dB, they allow a wide range of tonal variations to be explored. When the controls are positioned centrally there is no cut or boost of the selected frequency band.

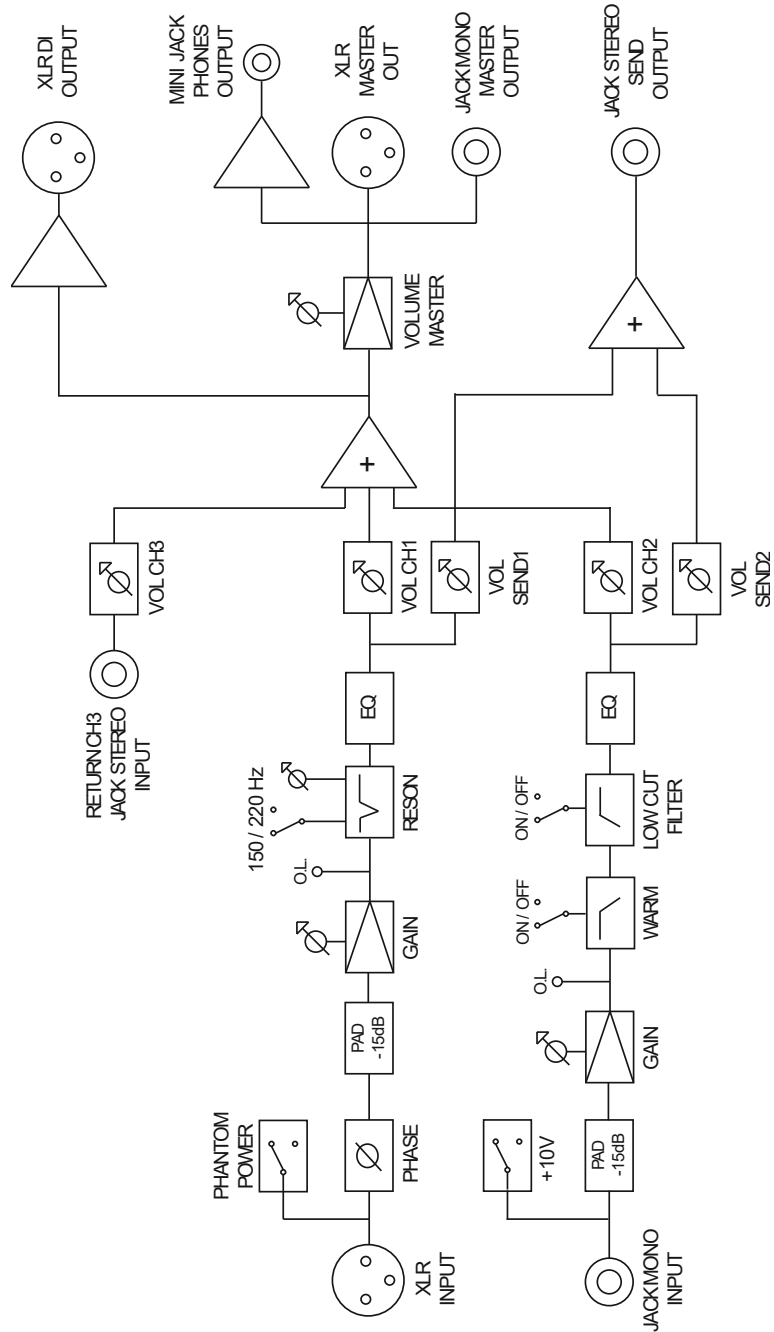
9. SEND: This control sets the level on the SEND output.

10. VOLUME: This control regulates the channel volume, which, in turn affects the SEND, DI OUT, MASTER OUT and PHONES.



1. WARM: When active, this low-pass filter dampens higher frequencies to produce a warmer sound when using bridge-mounted pickups such as SCHERTLER STAT Series transducers for violin, cello and double bass.
2. +10V: This supplies the jack connector with 10 VDC for powering electret microphones and SCHERTLER STAT, BASiK and LYDIA Series pickups.
3. -15dB (PAD): If the input signal from the 1/4" jack input is too powerful and you have overloads, use this PAD for a 15 dB reduction.
4. GAIN: This variable gain preamp adjusts the sensitivity level to ensure the best possible processing of the signal through the channel. It is important that this input level is set and optimized in the best way to achieve the cleanest sound possible.
5. OVERLOAD: This LED (when lit) indicates that the level of the input signal is too high and might therefore introduce distortion.
6. HIGH, HIGH MID, LOW MID, LOW: These controls are for high, mid and low frequency regulation. Offering cut and boost of +/-15 dB, they allow a wide range of tonal variations to be explored. When the controls are positioned centrally there is no cut or boost of the selected frequency band.
7. LOW CUT: When active, this filter cuts frequencies below 120 Hz - ideal if you play an instrument that generates aggressive low frequencies.
8. SEND: This control sets the level on the SEND output.
9. VOLUME: This control regulates the channel volume, which, in turn affects the SEND, DI OUT, MASTER OUT and PHONES.
10. MASTER VOLUME: This control regulates the master volume, which, in turn affects the MASTER OUT and PHONES.
11. RETURN LINE-IN: This control sets the input level on the RETURN input channel.

SIGNAL FLOW



TECHNICAL INFORMATION

Weight	0.4 kg
Dimensions (LxDxH)	20 x 10 x 3.8 cm
Frequency response (@ ±3 dB)	10 to 25 kHz
Construction	Anodized aluminum box
Mic In connector	XLR
Mic In sensitivity	-56 dB
Mic In impedance	4.7 kΩ
Instrument In connector	1/4" jack unbalanced
Instrument In sensitivity	-52 dB
Instrument In impedance	3 to 300 kΩ
Return connector	1/4" jack stereo
Return sensitivity	-30 dB
Return impedance	22 kΩ
Master Out connector	XLR - 1/4" jack unbalanced
Master Out level	20 dBu (XLR) / 14 dBu (jack)
Master Out impedance	100 Ω
DI Out connector	XLR
DI Out level	0 dBu
DI Out impedance	100 Ω
Send Out connector	1/4" jack unbalanced
Send Out level	5 dB
Send Out impedance	100 Ω
Phones connector	1/4" jack stereo
Phones level	10 dBu
Phones impedance	10 Ω
EQ	Yes on both channels
Low	Shelving, +15 / -23 dB (@60 Hz)
Low mid	Peaking, ±12 dB (@300 Hz)
High mid	Peaking, ±12 dB (@1.3 kHz)
High	Shelving, ±23 dB (@12 kHz)
Filters	
Reson (notch filter)	-20 dB (@150 Hz / @220 Hz)
Warm	1st order Low pass (cut freq. 1.5 kHz)
Low Cut	2nd order High pass filter (cut freq. 120 Hz)
Phantom power (nominal)	24 VDC
Stat power (10 VDC)	Yes
Preamp	Class-A, no negative feedback, no integrated circuits
Audio transformer	No
Supply	24 VDC 210 mA regulated power supply

Is my setup correct?

For specific information on personal instrument compatibility or setup, please email our assistance service. Our specialists will be pleased to help you. You can find all our contacts in the footer of every SCHERTLER website page: www.schertler.com

Can I get separated output for channel 1 and channel 2?

As its name suggests, YELLOW BLENDER is a preamp designed to blend the two signals together (like for example a pickup signal and the microphone in front of an instrument), but not to work as a mixer. However, there is a way to send one channel to a main output and the other to the SEND output. Just make sure that the SEND control is set to zero on the channel coming out from the Main output and the VOLUME control is set to zero on the other channel coming out from the SEND (the SEND control will regulate the volume of this channel). Unfortunately, this way you'll lose the possibility to use effects with a send-return loop. However, the signal coming out from the SEND output is unbalanced.

Will my condenser mic work with the YELLOW BLENDER's 24 V phantom power?

YELLOW BLENDER provides way more than the nominal 24 VDC, but, since it is not actually 48 VDC we cannot legally label it P48. However, most modern microphones will work just fine. For more technical information, please read the FAQ section on the SCHERTLER website.

WARRANTY

All SCHERTLER products are covered by a limited two-year factory warranty in respect of manufacturer defects. Details can be obtained from your local dealer / representative.

SCHERTLER SA strongly believes in "common sense". Therefore, misuse of our products is not covered under rights obtained through our warranty policy, or through internationally recognized terms and conditions. For more information on warranty, please visit the General Condition's page at www.schertler.com

PRODUCT DISPOSAL

This product must not be disposed of in general household waste. It should be taken to a disposal center for electrical / electronic waste. Please note any local or national regulations that may be applicable here.

TRADEMARKS

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