



UNICO DELUXE
combo amplifier
for acoustic instruments

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.



INTRODUCTION

Schertler is pleased to introduce the ultimate in acoustic instrument amplification, the Deluxe Series.

Schertler Deluxe Series amplifiers are the direct result of Stephan Schertler's 35 years spent developing professional-quality transducers and amplification systems. Mr. Schertler's lifelong dedication and passion to offer musicians simply the best acoustic sound reinforcement has resulted in these astonishing amplifiers.

Accuracy and "honesty" of sound has always been the focus at Schertler, and over past decades Stephan Schertler has introduced many unique innovations to the music industry. Innovations such as the DYN-Series and STAT-Series transducers and Classic Series amplifiers have made life better for thousands of musicians and sound engineers around the world.

Deluxe Series amplifiers define a new standard in acoustic instrument amplification. The transparency, clarity, warmth and accuracy of these all-new amplifiers must be heard to be believed. Schertler Deluxe Series amplifiers are simply the best.

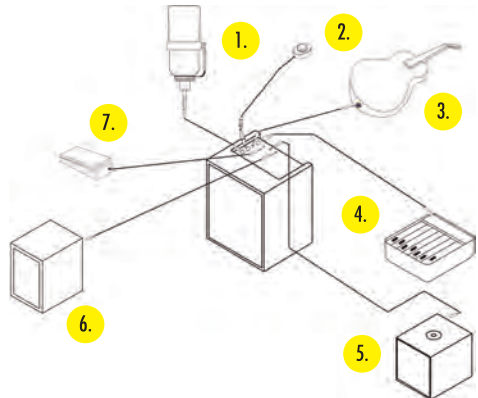
UTILITIES

The new Deluxe serie has been designed with the purpose of improving its sound performances (in quality and in power) and offering to the musician all that can be necessary for his needs.

- three input channels for all kind of microphones and pick-ups
- three output lines with multiple connections and a wide range of tonal controls
- one headphone output with its own volume control
- one more input channel for external effects or other sources

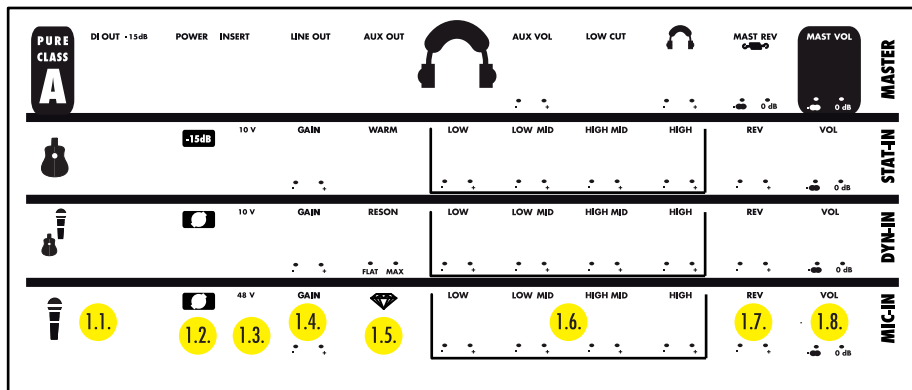
Every single section has been thought and engineered to avoid every possible problematic coming from all kind of sound sources.

Please find below possible uses of the Deluxe Amplifiers.



1. **MIC-IN:** enables the connection of a condenser microphone or a dynamic microphone (if necessary, press the 48V button on the channel to power the microphone).
2. **DYN-IN:** is perfect to enable the connection of a SCHERTLER BASIK electrostatic microphone or any SCHERTLER DYN-Series system.
3. **STAT-IN:** enables the connection of guitars equipped with SCHERTLER LYDIA or STAT-Series systems, electric guitars and bass guitars (if necessary, press the 10V button on the channel to power the microphone).
4. **DI-OUT:** signal can be sent to external systems, for example to another mixer.
5. **LINE-OUT:** signal can be sent to another active loudspeaker, for instance, and to ensure volume control on both. Using with bass, keyboards or to increase overall bass response, SCHERTLER strongly recommends the use of a subwoofer such as the SCHERTLER BASS200. Connect the LINE-OUT to the INPUT of the sub-woofer, press the LOW CUT on the UNICO, for a three-way (triamplified) system.
6. **AUX-OUT:** enables you to send your signal to a external device. For increased volume or wider coverage, connect an active extension loudspeaker such as the SCHERTLER SIDE (180W) or the SCHERTLER PUB 280 (280W) subwoofer and adjust output volume using the AUX-VOL potentiometer. Alternatively, if you wish to record your music, connect your recorder to the same output and start recording.
7. **INSERT:** enables the connection of any external audio control effect. For easier volume control, you can use the "UNICO VOLUME CONTROL PEDAL" via the INSERT function.

1. MIC-IN



1.1. MIC-IN

This microphone input is electronically balanced for XLR type connections. It has been optimized for connecting microphones or other transducers having low impedance and low level. The input is perfect for dynamic or condenser vocal microphones.

1.2. PHASE

In case of feedback, or unwished effects between different channels use the phase reverse switch!

1.3. 48V

Phantom power supplies the XLR connector with 48V for powering condenser microphones.

1.4. GAIN

This variable gain preamplifier adjusts the sensitivity level to ensure the best possible processing of the signal through the channel. It is important that this input level be set and optimised in the best way to achieve the cleanest sound possible.

1.5. BRILLIANCE

The Brilliance switch is made for the vocal presence. It reacts on approximately 5-7Khz.

1.6. HIGH, MID, LOW

These controls are devoted to 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.

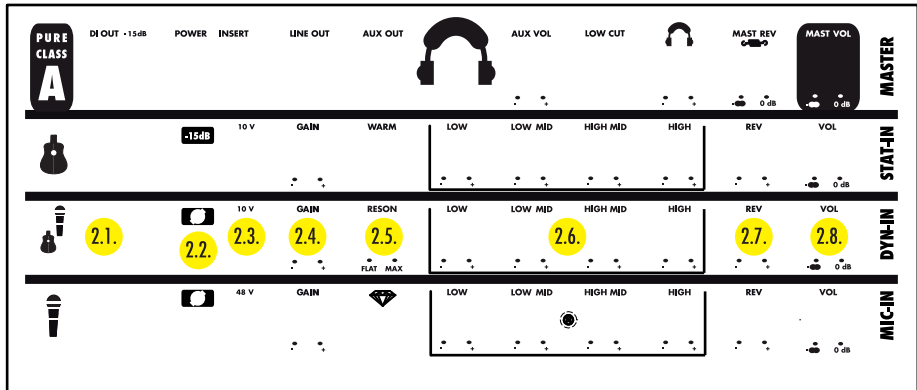
1.7. REVERB

This rotary control sets the level of the spring reverb on the individual channel.

1.8. VOLUME

This rotary control regulates the channel volume.

2. DYN-IN



2.1. DYN-IN (Combo connector XLR or 1/4" Jack)

This input is electronically balanced for XLR type connections and unbalanced for jack type connections (1/4" - 6.3mm). It has been optimized for connecting microphones or other transducers having low impedance and low level.

The 10V phantom power switch supplies the jack input and may be used for the electrostatic condenser microphones with low sensitivity. This input is also designed for electrodynamic microphones such as SCHERTLER DYN-Series transducers.

2.2. PHASE

In case of feedback, or unwished effects between different channels use the phase reverse switch!

2.3. 10V

Phantom power supplies the jack connector with 10V for powering electret microphones.

2.4. GAIN

This variable gain preamplifier adjusts the sensitivity level to ensure the best possible processing of the signal through the channel. It is important that this input level be set and optimised in the best way to achieve the cleanest sound possible.

2.5. RESON

The Resonance (notch) filter cuts the frequency of 180Hz, to reduce low-frequency feedback.

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

2.6. HIGH, MID, LOW

These controls are devoted to 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 dentrally there is no cut or boost of the selected frequency band.

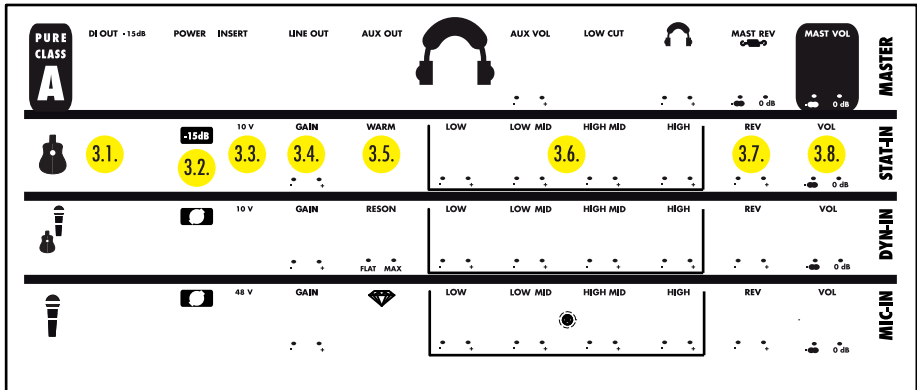
2.7. REVERB

This rotary control sets the level of the spring reverb on the individual channel.

2.8. VOLUME

This rotary control regulates the channel volume.

3. STAT-IN



3.1. STAT IN

Unbalanced input for the connection of jacks (6.3mm or 1/4"), with high input impedance and optimal sensitivity for high level signals such as: audio players, active electric bass, guitars, keyboards, etc.

All of SCHERTLER STAT, BASIK and MARINE-Series systems and any type of electrostatic microphone can be used directly in this input without preamplifier. Through this input, it is also possible to connect all passive piezoelectric sources simply by pressing the 10V button.

3.2. PAD (-15dB)

If the input signal is too powerful, and you have overloads, use the PAD switch to have 15dB reduction.

3.3. 10V

Phantom power supplies the jack connector with 10V for powering electret microphones.

3.4. GAIN

This variable gain preamplifier adjusts the sensitivity level to ensure the best possible processing of the signal through the channel. It is important that this input level be set and optimised in the best way to achieve the cleanest sound possible.

3.5. WARM

When engaged, this low-pass filter damps higher frequencies to produce a warmer sound when using bridge-mounted pickups such as Schertler STAT-series transducers for violin, cello and double bass.

3.6. HIGH, MID, LOW

These controls are devoted to 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.

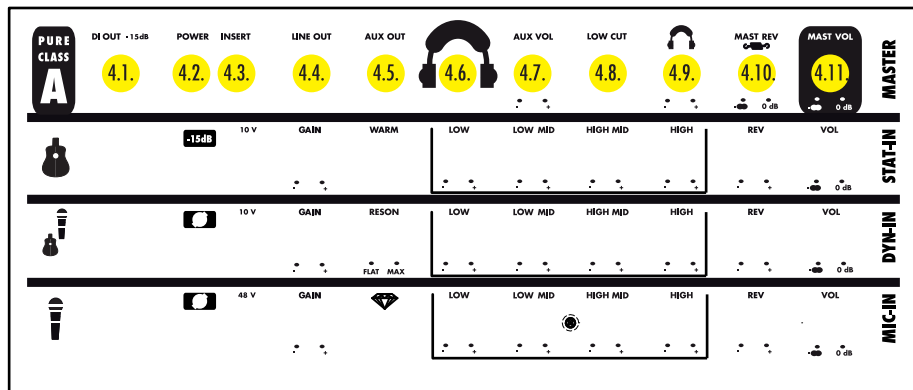
3.7. REVERB

This rotary control sets the level of the spring reverb on the individual channel.

3.8. VOLUME

This rotary control regulates the channel volume.

4. MASTER SECTION



4.1. DI-OUT

General output. XLR balanced type connector for connections of external systems. The output volume does not depend on the regulation of the MASTER-VOL but is effected by changes in individual channel volume.

4.2. POWER

This LED (when lit) indicates that the device is ON.

4.3. INSERT

This stereo jack plug enables the connection of an external device (compressor, equalizer, etc.) in series to all the outputs.

4.4. LINE-OUT

This unbalanced jack plug enables the connection of external systems. The output volume depends on the regulation of the MASTER-VOL.

4.5. AUX-OUT

Additional output. This mono jack plug enables the connection to other systems. Output volume is PRE-MASTER and POST-EFFECT (internal) REVERB, therefore this jack is independent from MASTER-VOL potentiometer adjustments.

4.6. PHONES

This stereo phone plug is made for headphones.

4.7. AUX-VOL

This rotary control sets the output level on the AUX OUT.

4.8. LOW CUT

When engaged, this filter cuts all the frequencies below 180Hz. This function is ideal if you play an instrument that generates aggressively low frequencies, as it enables you to connect a subwoofer (e.g., SCHERTLER PUB 380 or BASS200) and prevent unpleasant vibration and possible damage to your UNICO. All the outputs (Phones, Aux Out, Line Out, DI Out) continue to operate in full range.

3.9. PHONES-VOL

This control sets the output level on the PHONES.

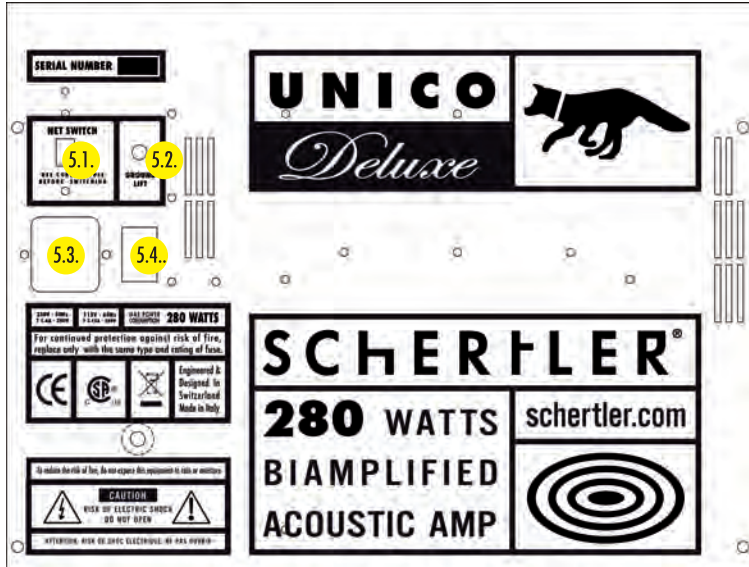
4.10. MASTER-REV

This control regulates the general level of the spring reverb, common to all channels. the amount of the effect can be regulated individually for the single channel through the dedicated controls.

4.11. MASTER-VOL

Controls overall system volume.

5. REAR PANEL



5.1. NET SWITCH

This switch changes the main power voltage from 230V~ to 115V~

5.2. GROUND LIFT

This switch connects and disconnects the ground between source and amplifier. Use this switch to suppress hum caused by the power mains.

5.3. MAIN PWR CONNECTION

Connection to mains (230V~/115V~ - 50Hz/60Hz)

PLEASE ENSURE THE PROPER VOLTAGE AND USE THE ORIGINAL CONNECTION CABLE!

Fuse carrier: 115V~ - 3.15A (USA-JAPAN...) or 230V~ - 1.6A (EU...)

5.4. POWER ON/OFF

System ON/OFF switch.

WARNINGS

PRECAUTIONS

WARNING

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 mains voltage does not exceed the value indicated on the back panel

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

If the mains 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 dissipation vents should never be covered or obstructed by blankets, sofas or similar furniture. Be sure also to leave sufficient clearance between the dissipation vents 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

TECHNICAL DESCRIPTION

6.1. DESCRIPTION

Box two way, bass reflex

6.2. ENCLOSURE SECTION

Construction: Plywood

Weight: 18kg

Dimensions: 36cm x 33.5cm x 42.5cm

6.3. AMPLIFIED SPEAKER SECTION

Freq. resp.: 40Hz - 20kHz (-3dB)

Sensitivity: 92dB

SPL max: 114dB

6.4. TECHNICAL SPECIFICATIONS INPUTS

MIC-IN

Connector: XLR balanced

Sensitivity: -52dB

Impedance: 4.7kohm

DYN-IN

Connector: XLR balanced, JACK 6.3mm unbalanced

Sensitivity: -52dB

Impedance: 4.7kohm / 820kohm

STAT-IN

Connector: JACK 6.3mm unbalanced

Sensitivity: -47dB

Impedance: 820kohm

6.5. TECHNICAL SPECIFICATIONS OUTPUTS

LINE OUT

Connector: JACK 6.3mm unbalanced

Level: 0dBu

Impedance: 100ohm

DI OUT

Connector: XLR balanced

Level: -15dBu

Impedance: 200ohm

AUX OUT

Connector: JACK 6.3mm unbalanced

Level: 0dBu

Impedance: 100ohm

6.6. INTERNAL EFFECT (spring reverb)

Freq. resp.: 200Hz - 10KHz (-3dB)

Delay time: c.a. 30ms

Reverb time: c.a. 2s

6.7. COMPONENTS

Woofers: 8"

Tweeters: Dome 1"

Cross-over: Active, 24dB/octave

Amplifier: 160W + 30W RMS (320W + 60W peak)

8ohm

0.001% THD (1000Hz)

ALL SCHERTLER® PRODUCTS ARE COVERED BY A LIMITED TWO-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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SCHERTLER®

ACOUSTIC AMPLIFICATION

SWISS MADE

schertler.com



TEL+41916300710

FAX+41916300711

info@schertler.com

SCHERTLER SA

Via Beroldingen 18

6850 Mendrisio