

# **UNICO**

### **INTRODUCTION**

After two years spent monitoring the market, SCHERTLER® decided to improve the already successful Unico to meet our users' needs even more effectively. Unico has made its success through its versatility and matchless natural sound. Now, we have further increased the amplifier's flexibility, adding some important functions. By changing the size and shape of the amplifier, we have achieved a tighter, more focused bass response. We have introduced a gain control function across the channels for improved input level control—this is vital for a clean signal. Individual channel gain controls allow maximum flexibility to easily match various input signals. Mid control has been added to the DYN and STAT channels and a four-band equalizer is now available in the MIC channel to suit the needs of demanding musicians. More compact and lighter, now Unico is even easier to carry!

150W + 35W RMS, in combination with a biamplified system, guarantee total transparency, harmonically rich sound and full low frequency control (down to 40Hz).

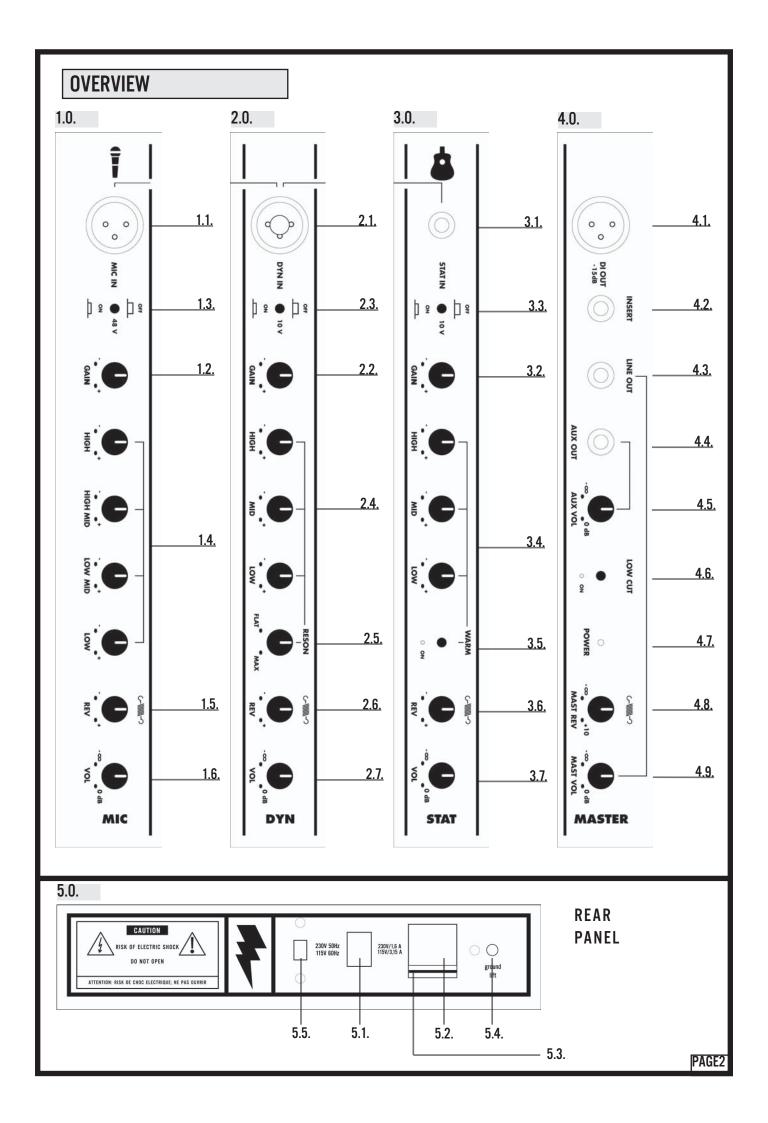
Compare Unico with the competition and you will appreciate the difference!

The SCHERTLER® Team.

### **WARNING**



- Please read this manual carefully before operating the UNICO.
- Keep the manual for future reference.
- Pay due care not to pour liquids on the device, nor operate it in excessively humid conditions.
- Do not install the UNICO near sorces of intense heat, expose it to direct sunlight, nor position it in dusty evironments without protection.
- Ensure that the supply voltage is not higher than the one stated on the Rear Panel.
- To prevent any induced disturbance in the UNICO, do not install near transformers, TV sets, RF transmitters, electric motors or any source of electric power.
- Never use the equipment if the cable or the electrical plug is damaged (if necessary change them or have them carefully repaired).
- Do not direct the microphones towards the speakers as this could cause acoustic feedback wich could damage the loudspeakers.
- To avoid damage, only use the original connection cables.
- Never connect any output and input channels of the device. It could create dangerous loops.
- Never use solvent based cleaning agents, such as acetone or alcohol to clean the equipment, as this will damage the external finish and the printing on the panels.
- In case of malfunction of any device in the system, contact the nearest SCHERTLER® technical assistance or a specialized center. Do not attempt repairs yourself.



### **UTILITIES**

#### **CONNECTING YOUR BLUESTICK**

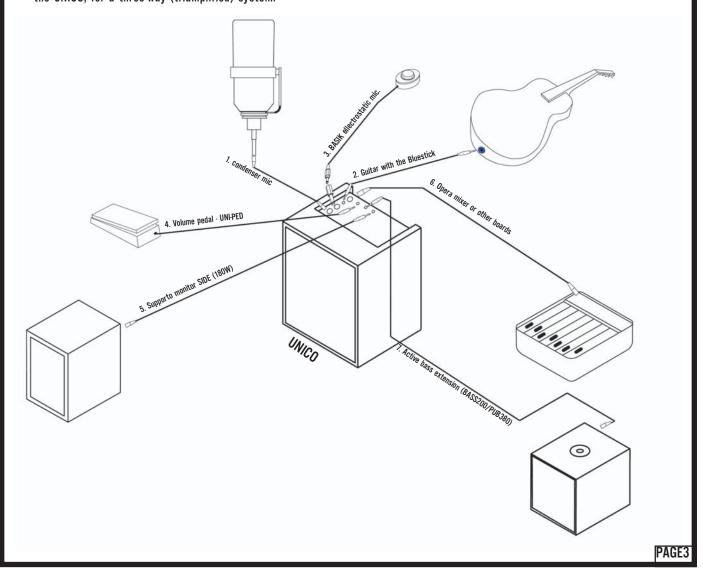
All BLUESTICK® models (except for MARINE series) can be connected to STAT and DYN inputs with the 10V switch OFF. BLUESTICK® MARINE: Connect to STAT input with the 10V switch ON.

CONNECTING HIGH-IMPEDANCE SIGNALS (piezos, magnetic pick-ups and similar sources)

To connect any passive piezo transducer or magnetic pick-up, use "Active Driver Cable" and connect to the STAT input with the 10V switch ON. The high-impedance cable is also used to connect electric guitars and bass guitars with magnetic pick-ups. Product order code: CA-ADRIVER-4

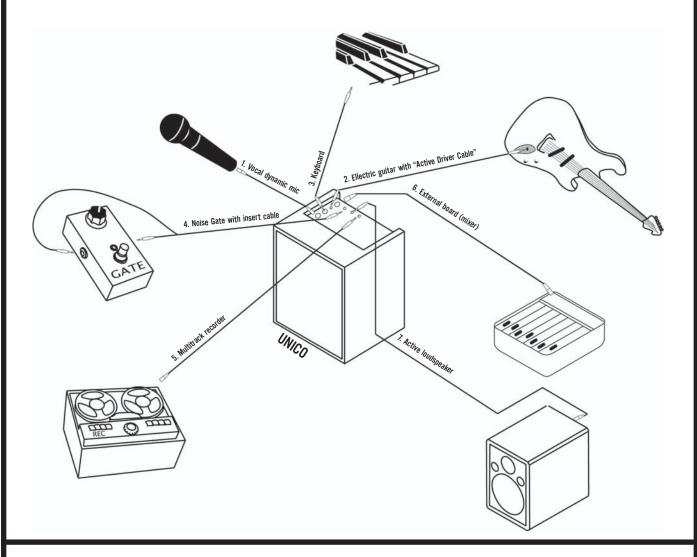
### **EXAMPLE 1**

- 1. MIC CHANNEL: This channel enables the connection of a condenser microphone, by activating the 48V button or dynamic microphone.
- 2. STAT CHANNEL: This channel enables, for example, the connection of a guitar equipped with a BLUESTICK® series system.
- 3. DYN CHANNEL: This channel enables, for example, the connection of a BASIK electrostatic microphone to amplify just any acoustic instrument.
- 4. INSERT: For easier volume control, you can use the "UNICO VOLUME CONTROL PEDAL" via the INSERT function.
- 5. AUX SEND: For increased volume or wider coverage o, connect an active (powered) extension speaker such as the SCHERTLER SIDE (180W) or PUB 280 (280 W) active loudspeaker and adjust output volume using the AUX SEND potentiometer. Alternatively, if you wish to record your music, connect your recorder to the same output and start recording.
- 6. DI OUT: Signal can be sent to another mixer, for example SCHERTLER's OPERA mixer.
- 7. <u>LINE OUT</u>: For use with bass or keyboards or to increse overall bass response, SCHERTLER® strongly recommends the use of a subwoofer such as the SCHERTLER® BASS200 or PUB380. Connect the LINE OUT to the INPUT of the sub-woofer, press the LOW CUT on the UNICO, for a three-way (triamplified) system.



### **EXAMPLE 2**

- 1. MIC CHANNEL: This channel enables, for example, the connection of a standard dynamic microphone for vocal applications.
- 2. STAT CHANNEL: This channel enables, for example, the connection of an electric guitar, using the "Active Drive Cable" and pressing the 10V button on the channel.
- 3. DYN CHANNEL; This channel enables, for example, the connection of an electronic keyboard in the " (6.3 mm) jack input.
- 4. INSERT: Enables you to connect, for example, a Noise Gate through a Y cable (stereo link on two monos).
- 5. AUX OUT: This output enables you to send your signal to a multi-track recorder, for instance. Through this output, you will be able to control the level of the signal to the recorder.
- 6. DI OUT: Your signal can be sent to external systems (PA or stage systems).
- 7. LINE OUT: Enables you to send your signal to another active loudspeaker, for instance, and to ensure volume control on both. This is made possible by the MAST VOL. potentiometer.



The two previous examples are just some of the wide range of possibilities offered by this amplifier and are provided to help you achieve better operation of your amplifier.

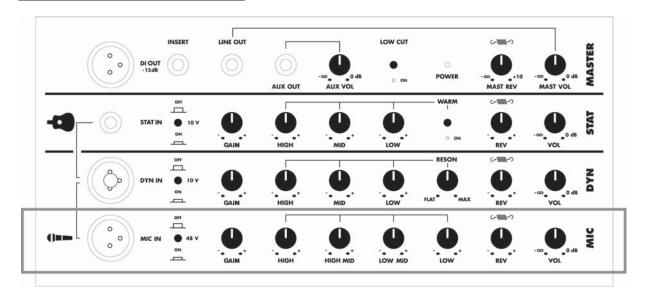
The UNICO amplifier can adapt to any need.

If you have questions or problems, see the FAQ section of our website at www.schertler.com

or

www.schertlerusa.com

### 1.0. MIC



### 1.1. MIC IN (microphone input)

This 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 nominal value of impedance is 4.7. Kohm. The input is perfect for dynamic or condenser vocal microphones.

### 1.2. GAIN (Trim)

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.

### 1.3. 48V

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

### 1.4. HIGH - HIGH MID - LOW MID - LOW

These controls are devoted to high, high mid, low mid and low frequency regulation. Offering cut and boost of  $\pm$ -15dB, they allow a wide range of tonal variations to be explored. When the controls are positioned at 12:00 there is no cut or boost of the selected frequency band.

#### 1.5. **REV**

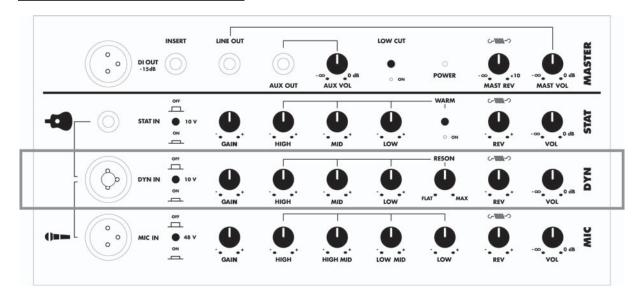
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This rotary control sets the level of the spring reverb on the individual channel.

### 1.6. VOL (Volume)

This rotary control regulates the channel volume.

### 2.0. DYN



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

This input is electronically balanced for XLR - type connections and unbalanced for 1/4" Jack type connections. It has been optimized for connecting microphones or other transducers having low impedance and low level. The nominal value of impedance is 10Kohm. 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. GAIN (Trim)

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.

#### 2.3. 10V

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

### 2.4. 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.

### 2.5. RESON (Resonance)

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

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

#### 2.6. REV

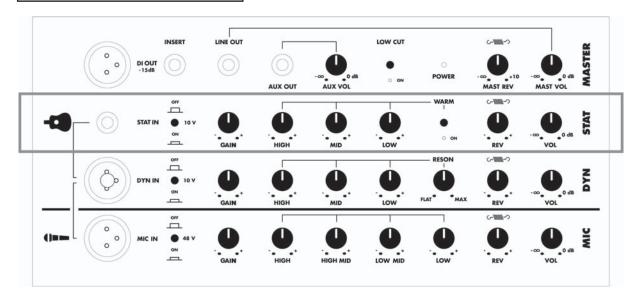
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This rotary control sets the level of the spring reverb on the individual channel.

### 2.7. VOL (Volume)

This rotary control regulates the channel volume.

### 3.0. STAT



### 3.1. STAT IN (Input)

Unbalanced input for the connection of (6.3mm or 1/4") jacks, high input impedance and optimal sensitivity for high level signals such as: audio players, active electric bass, guitars, keyboards, etc. Nominal input impedance is 100 Kohm. All of Schertler's STAT, BASIK and MARINE-series models 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 using the "Active Driver Cable" (which you will find in our product list) — simply by pressing the 10 V button.

### 3.2. GAIN (Trim)

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.

### 3.3. 10V

Phantom power supplies the (6.3mm or 1/4") Jack connector with 10 Volts for powering electret microphones microphones.

### 3.4. 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 at 12:00 there is no cut or boost of the selected frequency band.

#### 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 doublebass.

### 3.6. REV

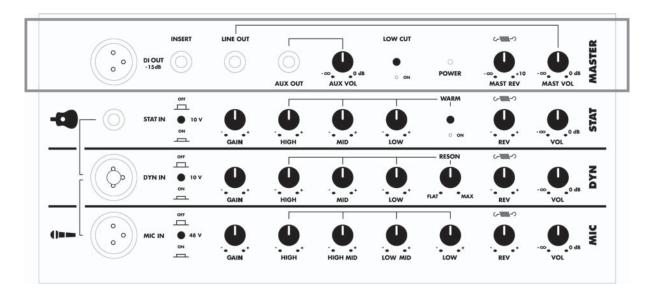
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This rotary control sets the level of the spring reverb on the individual channel.

### 3.7. **VOL** (Volume)

This rotary control regulates the channel volume.

### 4.0. 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 MAST VOL but is effected by changes in individual channel volume.

#### 4.2. INSERT

This (6.3mm or 1/4") stereo Jack enables the input-output connection of an external device connected in series to all the outputs. For example, the insert my be used to connect a compressor, equalizer, noise-gate, etc.

### 4.3. LINE OUT

This unbalanced 1/4" Jack enables the connection of external systems. The output volume depends on the regulation of the MAST VOL.

#### 4.4. AUX OUT

Additional output. This 1/4" (6.3mm) mono jack enables connection to other systems. Output volume is PRE-MASTER and POST-EFFECT (internal), therefore this jack is independent from VOL MASTER potentiometer volume adjustments. Output volume is controlled by AUX VOL potentiometer.

#### 4.5. AUX VOL

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

#### 4.6. LOW CUT

This push-button switch enables frequency cut for 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.

### 4.7. POWER (Blue Led)

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

### 4.8. MAST REV (Spring reverb)

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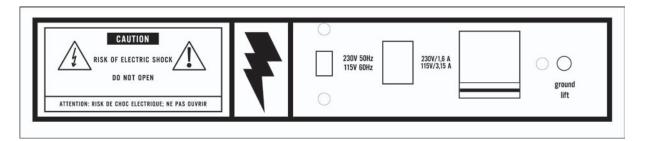
This control regulates the general level of the spring reverb, common to all channels. the amount of the effect can be regulated individually for the single channel trough the dedicated controls.

"THE ULTIMATE REVERB" is designed and engineerd to provide unequalled performance. It employs innovative new circuit technology, the reverb tank is shielded to reduce noise from stray magnetic fields. The spring reverb uses only the finest components to obtain the highest quality reproduction. The spring is driven by a pure class-A (constant current) circuit and captured by a balanced microphone preamp.

### 4.9. MAST VOL (master volume)

Controls overall system volume.

### 5.0. REAR PANEL



### 5.1. POWER ON/OFF

System ON/OFF switch.



#### 5.2. MAIN PWER CONNECTION

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

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

### **5.3. FUSE CARRIER**

Place for fuse (USA-JAPAN...) 115V - 3.15A; (EU...) 230V - 1.6A

### 5.4. GROUND LIFT

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

### 5.5. POWER SWITCH

This switch changes the main power voltage from 230vAC to 115vAC

### **6.0. TECHNICAL DESCRIPTION**

### DESCRIPTION

Box two way, bass reflex

### **ENCLOSURE SECTION**

Construction - Plywood Weight - 14.4 Kg

Dimensions - 33cm x 39cm x 29cm

### **AMPLIFIED SPEAKER SECTION**

Frequency resp. - 40Hz - 22KHz Sensitivity - (1W-1m) 93dB

SPL max - 112dB

### TECHNICAL SPECIFICATIONS INPUTS

MIC:

Connector - XLR balanced Sensitivity - 0dB to -40dB Impedance - 4.7Kohm

DYN:

Connector - XLR balanced, JACK 6,3mm unbalanced

Sensitivity - +5dB to -35dB Impedance - 10Kohm

STAT:

Connector - JACK 6,3mm unbalanced

Sensitivity - +10dB to -30dB

Impedance - 10Kohm

### TECHNICAL SPECIFICATIONS OUTPUTS

LINE OUT:

Connector - JACK 6,3mm unbalanced

Sensitivity - -12dB Impedance - 200ohm

DI OUT:

Connector - XLR balanced

Sensitivity - -15dB Impedance - 200ohm

**AUX OUT:** 

Connector - JACK 6,3mm balanced

Sensitivity - OdB Impedance - 200ohm

### **INTERNAL EFFECT** (spring reverb)

Freuency resp. - 200Hz - 10KHz
Delay Time - c.a. 30ms
Reverb time - c.a. 2s

### **COMPONENTS**

Woofer - 8"
Tweeter - Dome

Cross-over - Active, 24dB/octave

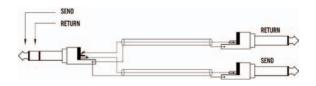
Amplifier - Biamplified 150W + 35W RMS power

- 0.1% THD - 80hm - 320W Peak

#### **INSERT**

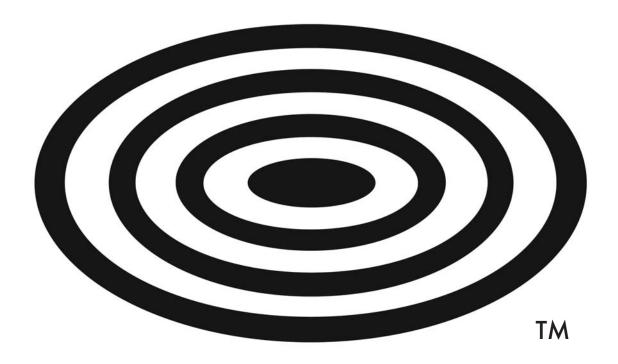
Jack Stereo - Unbalanced

TIP - send RING - return SLEEVE - ground



FUSE (slow type)

230V - 1.6A 115V - 3.15A



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