

DAVID CLASSIC

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 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 ampli ers) 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 receptades, 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 now pleased to introduce DAVID, a more compact acoustic instrument combo amplifier. Featuring high attention to quality and sound, DAVID is perfect for the artist requiring only two input channels. From preamplifiers to loudspeakers, all components were selected for their natural and accurate response. Two power amps with an active crossover supply 50 watts to the 60 woofer and 30 watts to the 10 dome tweeter. The result is velvety, clear harmonics with a controlled, strong low end (down to 40 Hz). The technology of biamplification produces a very transparent sound as well a providing maximum efficiency by properly matching amplifiers to loudspeakers. In addition, each power amplifier features limiter circuitry to deliver secure speaker protection. Amplifiers are built with bipolar transistors (no MOS-FET) and are powered by a robust, traditional power supply (toroidial transformer).

DAVID's innovative CLASS-A circuitry and built-in analog spring reverberation deliver the warm, smooth and musical sound that acoustic musicians have been seeking. Whether your instrument is guitar or violin, mandolin or cello, listen to your playing through DAVID. You'll be amazed!

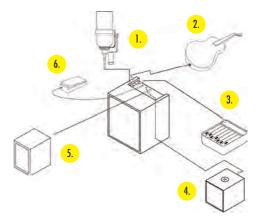
UTILITIES

CONNECTING YOUR LYDIA:

All LYDIA® models can be connected to STAT and DYN inputs with the 10V/48V switch OFF.

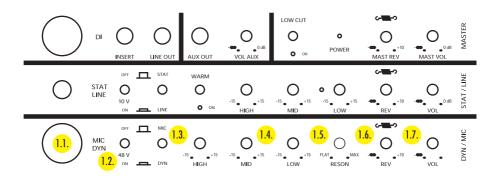
CONNECTING HIGH-IMPEDANCE SIGNALS: (piezos, magnetic pick-ups and similar sources)

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



- 1. MIC-IN / DYN-IN: enables the connection of a SCHERTLER DYN-Series system, a condenser microphone or any dynamic microphone (if necessary, press the 48V button on the channel to power the microphone).
- 2. STAT-IN / LINE-IN: enables the connection of SCHERTLER STAT-Series microphone, a keyboard or any other instrument with a pre-amplified output signal (if necessary, press the 10V button on the channel to power the microphone).
- 3. DI-OUT: signal can be sent to external systems, for example to another mixer.
- 4. 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 increse 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 DAVID, for a three-way (triamplified) system.
- 5. 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.
- 6. 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/DYN



1.1. MIC/DYN INPUT

This input is electronically balanced for XLR type connections. If selected, the MIC position (see 1.3.) is perfect for vocal condensers or dynamic microphones, and if it's in DYN position (see 1.3.) this input becomes perfect for SCHERTLER's DYN microphones. The nominal value of impedance is 4.7 Kohm.

1.2. 48V

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

1.3. MIC/DYN SWITCH

Sensitivity switch. It optimizes sensitivity based upon your needs (see 1.1.).

1.4. HIGH, MID, LOW

These controls are devoted to high, medium 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.

1.5. RESON

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

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

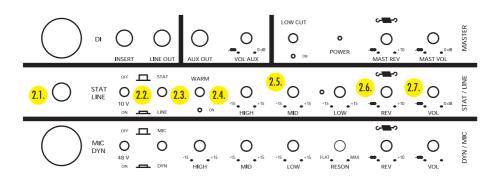
1.6. REVERB

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

1.7. VOLUME

This rotary control regulates the channel volume.

2. STAT/LINE



2.1. STAT/LINE-INPUT

This input is intended for unbalanced jack connectors (1/4" - 6.3mm). If the STAT position is selected (see 2.3.) this input is perfect for high-level audio signals such as E-Guitars or bass and similar instruments. In LINE position (see 2.3.) this input is perfect for high-impedance signals like CD players and other devices. The nominal input impedance is 100 Kohm.

The switchable 10V Phantom power supply provides power to electrostatic condenser microphones such as Schertler's Bluestick Marine acoustic guitar pickups and Schertler's STAT series electrostatic transducers. This input also allows to connect all passive piezo sources to the "Active Driver Cable" by pressing the 10V switch.

2.2. 10V

Provides switchable 10V Phantom Power to the STAT/LINE input.

2.3. STAT/LINE SWITCH

Sensitivity switch. It optimizes sensitivity based upon your needs (see 2.1.).

2.4. WARN

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

2.5. HIGH, MID, LOW

These controls are devoted to high, medium 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.

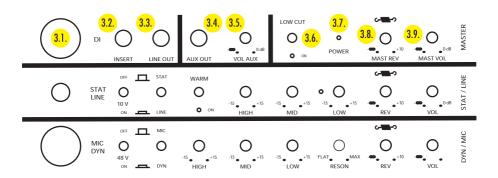
2.6. REVERB

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

2.7. VOLUME

This rotary control regulates the channel volume.

3. MASTER SECTION



3.1. 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.

3.2. INSERT

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

3.3. LINE-OUT

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

3.4. 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.

3.5. AUX-VOL

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

3.6. 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 DAVID. All the outputs (PHONES. AUX-OUT. LINE-OUT. DI-OUT) continue to operate in full range.

3.7. POWER

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

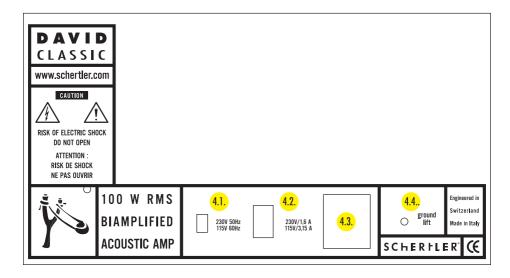
3.8. MASTER-REV

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.

3.9. MASTER-VOL

Controls overall system volume.

4. REAR PANEL



4.1. NET SWITCH

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

4.2. POWER ON/OFF

System ON/OFF switch.

4.3. MAIN POWER 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...)

4.4. GROUND LIFT

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

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 dose 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 deaning, 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

TECHNICAL DESCRIPTION

5.1. DESCRIPTION

Box two way, bass reflex

5.2. ENCLOSURE SECTION

Construction: Plywood Weight: 9 kg

Dimensions: 30cm x 34cm x 24.5 cm

5.3. AMPLIFIED SPEAKER SECTION

Freq. resp.: 40Hz - 22kHz (-3dB)

Sensivity: 91dB

SPL max: 106dB

5.4. TECHNICAL SPECIFICATIONS INPUTS

MIC/DYN-IN

Connector: XLR balanced / JACK 6.3mm unbalanced

Sensivity: -35dB (MIC)

-28dB (DYN)

Impedance: 4.7kohm

STAT/LINE-IN

Connector: JACK 6.3mm unbalanced

Sensivity: -28dB (STAT)

-16dB (LINE)

Impedance: 100kohm

5.5. TECHNICAL SPECIFICATIONS OUTPUTS

LINE OUT:

Connector: JACK 6.3mm unbalanced

Level: -12dBu Impedance: 200ohm

DI OUT

Connector: XLR balanced Level: -20dBu

Level: -20dBu Impedance: 200ohm

AUX OUT

Connector: JACK 6.3mm unbalanced

Level: OdBu Impedance: 200ohm

5.6. INTERNAL EFFECT (spring reverb)

Freg. resp.: 200Hz - 10kHz (-3dB)

Delay time: c.a. 30ms Reverb time: c.a. 2s

5.7. COMPONENTS

Woofer: 6"

Tweeter: Dome 1"

Cross-over: Active, 24dB/octave
Amplifier: 180W (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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All schertler® products are of proprietary technology and covered by one of more worldwide patents.



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