Acoustic Solutions Compact 602

AER The Acoustic People®



Manual English

Acoustic Solutions

Compact 602

Operating Manual

Contents:

- 1. Introduction
- 2. Safety Precautions
- 3. Controls and Connections
- 4. Operation Summary
- 5. Technical Data
- 6. Block Diagram
- 7. Effects Table
- 8. Manufacturer's Declaration



1. Introduction

Welcome to AER!

Thank you for choosing the **Compact** 60². You have chosen a professional, powerful and compact amplifier system for acoustic instruments in superb quality with AER's typical authentic, transparent and self-asserting sound performance. Two channels make it possible to operate a microphone and an instrument independently of each other. The dynamically controlled power amplifier and the broad-sprectrum loudspeaker system guarantee distortion-free reproduction even at high volumes.

We wish you hours of happy playing with your Compact 602!

2. Safety Precautions

The following guidelines shall help minimize the risk of injury through fire or electric shock.

- 1. Carefully read these safety notes before you use the device!
- 2. Keep these safety notes in a safe place.
- 3. Pay attention to all warnings, instructions and additional texts on the unit.
- 4. Do not install or use your amp in close proximity to water or if you are wet yourself.
- 5. Use your amp in a safe place where nobody can step on cables or trip over and damage them.
- 6. Pay attention to an unhindered air circulation around the amp, never obstruct the air vents or grilles.
- 7. Always pull the mains plug before cleaning your amp. Use only a dry cloth for cleaning. Avoid the use of detergents and do not let any liquids seep into the unit.

- 8. Use only the right fuses with the same current rating and trigger characteristic as replacements. Never mend fuses! Pull the mains plug before replacing a fuse. Should a fuse blow again after a short while, the device needs to be checked.
- 9. Never install your amp close to devices with strong electromagnetic fields such as large mains transformers, revolving machines, neon illumination etc. Do not lay signal cables parallel to power current cables.
- 10. There are no user-servicable components inside the unit. To avoid the risk of an electric shock, the unit must not be opened. All maintenance, adjustment and repair works should be carried out by qualified staff only. Any unauthorized tampering will void the 2-year warranty.
- 11. In keeping with the EMV regulations screened cables with correctly fitted connectors must be used for all signal connections.
- 12. Always use an earthed power supply with the correct mains voltage. If you are in doubt about the power outlet's ground, have it checked by a qualified technician.
- 13. Cable up your amp only when it is powered off.

3. Controls and Connections

Front panel top (from left to right):



| channel 1 | |
|-----------|--|
| input | 6.3 mm stereo jack socket |
| high/low | Input sensitivity selector switch pressed = lower sensitivity |
| clip | This indicator lights up when overload is imminent in the respective channel. |
| gain | Input level control |
| colour | This switch activates the midrange contour filter. Boosts presence and slightly cuts midrange frequencies. |
| bass | Bass control |
| middle | Midrange control |
| treble | Treble control |

| channel 2 | | |
|-----------|---|--|
| input | XLR/6.3 mm jack plug combi socket | |
| line/mic | Signal source selector switch. line: For instruments (pickups), only via jack plug. | |
| | mic: For microphones with a jack or an XLR connector. | |
| clip | This indicator lights up when overload is imminent in the respective channel. | |
| gain | Input level control | |
| bass | Bass control | |
| treble | Treble control | |
| eff. pan | panorama control to distribute the effects between the channels. left: internal effect on channel 1 & external effect on channel 2 mid: internal & external effect on channel 1 and channel 2 right: internal effect on channel 2 & external effect on channel 1 | |
| select | push button for selection of four effects, indicated by the LEDs between return and master. | |
| return | level control for the internal effects | |
| power | This LED indicates that your amplifier is ready to use | |
| master | Adjusts the overall volume level | |

| AER | | | | |
|---|--|--|--|--|
| | | | | |
| Compact 60 ₂ twin channel acoustic amplifier | $ \begin{array}{c} $ | | | |

| phones | Output for a stereo headphone set. 6.3 mm stereo jack socket. | send | Output to the input of an external effects unit. 6.3 mm mono jack socket. | |
|----------|--|------------|--|--|
| | Never use mono jack plugs, otherwise the amp could be damaged! | return | Input for the output signals of an external effects processor. 6.3 mm mono jack socket. | |
| tuner | Output to an external tuner. 6.3 mm mono jack socket. | footswitch | connection to a double footswitch to switch internal | |
| line out | preamplifier output after the master control. 6.3 mm mono jack socket. | | and external effect on and off. (Tip = internal Effect, Ring = external Effect on/off). | |
| DI-out | Balanced preamp output, pre master, post EQ, | | 6.3 mm stereo jack socket. | |
| | with return and effects. XLR socket | power on | Combined power switch with fuse holder and IEC mains socket | |



4. Operation Summary

Cabling and startup

Check if your local mains voltage (e.g. 120 V in the USA, 230 V in Europe) complies with the required operating voltage for your amplifier. The proper mains voltage is printed on the rating plate on the rear panel of the unit, e.g. AC 230V (AC means alternating current).

Please take care that the **master**, **return** and all **gain** controls are set to zero (left stop) and all other controls to their center positions. The pushbuttons should be switched off (not pressed).

Then make all the necessary cable connections (mains, instrument etc.).

Now you may turn on your amplifier with the **power on** switch located on the rear. The green **power** control LED will indicate operational readiness.

Level adjustment

Using the **gain** controls, **high/low** and **line/mic** switches you can adapt the amplifier to your signal sources (guitar pickups, microphone etc.) to achieve the best possible signal-to-noise ratio (SNR).

First adjust the **line/mic** switch according to your signal source: **mic** is suitable for microphones, **line** for pickups and other signal sources.

Turn the **gain** control clockwise until the red **clip** indicator flashes momentarily when playing with a strong attack. Now lower the **gain** control (and also the instrument's volume control) again slightly to get some headroom for an undistorted reproduction. The **clip** control LED should now only rarely flash. In case you find the level setting difficult because the input signal is too strong, press the **high/low** switch as well. If the input signal is too weak, the **gain** control must be increased accordingly. With signal sources with a sufficient input signal strength the **gain** control should be adjusted between the ' 9:00 and 11:00 o'clock' position. Finally set the desired overall volume level with the **master** control.

• Equalization

The three-band equalizer with individual **bass**, **middle** and **treble** control of your **Compact** 60² has been designed in such a way that it both complies with the special requirements of acoustic instruments and also with the more general demands of other sources. The **colour** switch activates a midrange contour filter which is especially useful for picking techniques.

One more note: Adjusting the EQ controls can also affect the level setting. Whenever you see the **clip** indicator flashing frequently, you should slighty correct your **gain** setting (see,Level adjustment').

Effects

The **Compact** 60₂ has a built-in (internal) digital effect processor. The **return** control determines the intensity of the internal effects (left stop = no effect). Furthermore an additional effects unit (external effect) may be connected. For this purpose please use the send and return sockets located on the back of the amplifier (**send** goes to Input, **return** is connected to the output of the external effects device). The intensity is then adjusted at the external effects unit. The external effects loop works in ,parallel' mode, i.e. the effect signal is blended with the original signal.

A standard double footswitch can be connected to the **footswitch** socket on the rear of the amp with a stereo cable. This switch can be used to turn the internal and external effects on and off.

We wish you hours of happy playing with your Compact 602!

5. Technical Data

| Input (channel 1) | Stereo jack ¼″ (6.35 mm) High impedance, unbalanced jack input for | |
|-------------------|---|--|
| | Instruments (pick-ups) and line-level sources. high/low switch: –10 dB attenuator Impedance: 2.2 Meg | |
| Input (channel 2) | Combo socket, XLR jack ¼" (6.35 mm) line mode: High impedance, unbalanced jack input for instruments (pick-ups) and line-level sources. Sensitivity: 38 mV Impedance: 1 Meg | |
| | mic mode: XLR (balanced), stereo jack (balanced), or mono jack (unbalanced) input. Voice Filter 24 V-Phantom-Power through 6.8 kohms to XLR socket | |
| | Clip indicator: Headroom 6 dB | |
| Return | Return from external parallel effect loop | |
| | Sensitivity: 430 mV | |
| Clip | Headroom: 15 dB | |
| | Attack Time: 4 ms | |
| Outputs | | |
| Phones | Headphones output. When connected, internal speakers are muted. | |
| | Stereo jack, ¼″ (6.35 mm) | |
| | Output power: 100 mW | |
| | Caution: For stereo headphones with stereo jack plug only. Do not connect mono plugs. | |
| Tuner | Tuner output. Mono jack, ¼″ (6.35 mm) Output voltage: 310 mV | |
| Line out | Line output after tone controls, with return and effects. Mono jack, ¼" (6.35 mm). Output Voltage: 1.3 V | |
| DI-out | Line output after tone controls, with return and effects. Mono jack, ¼" (6.35 mm). | |
| | Output Voltage: 1.3 V | |
| Send | Send for parallel effect loop Mono jack, ¼" (6.35 mm) Output voltage: 1.3 V | |

| Output levels refer to 50 mV input at channel 1. | | |
|--|--|--|
| Input levels refer to 50 Wa | itts output. | |
| Notes: | | |
| weight | י, א כגי, א (גען כס.ס') א כגי, א כי, א | |
| Woight | 235 mm (9.25) deep | |
| | 330 mm (13 ") wide | |
| Dimensions | 265 mm (10.4 ") high | |
| Finish | Waterbased acrylic, choco spatter finish | |
| Cabinet | 15 mm (0.6") finnish birch plywood | |
| General | | |
| | slow 2 A for 100 V | |
| | slow 2 A for 115 V | |
| Mains fuse | slow 1 A for 230-240 V | |
| manis power | (other mains voltage available) | |
| Mains nower | AC 230 V 50-60 Hz max 120 W | |
| Speaker system | 8" (200 mm) twin cone speaker | |
| Analog signal | Subsonic filter, low distortion RMS limiter | |
| A | discrete bipolar transistor design | |
| Power amp | 60 W at 4 ohms, | |
| Power | | |
| External effect | Parallel effect loop (see send and return) | |
| | 4 – flanger | |
| | 3 – chorus with reverb | |
| | 2 – bright hall | |
| internal effect | 1 – warm hall | |
| Effects | | |
| | channel 2: ± 11 dB at 10 kHz | |
| Treble | channel 1: ± 8 dB at 10 kHz | |
| Middle | channel 1:±6 dB at 800 Hz | |
| | channel 2: ± 8 dB at 100 Hz | |
| Bass | channel 1: \pm 8 dB at 100 Hz | |
| | | |

6. Block Diagram



7. Effects Table

| LED | Description | Туре |
|-----|--------------------|---------------|
| 01 | warm hall | reverb |
| 02 | bright hall | reverb |
| 03 | chorus with reverb | chorus/reverb |
| 04 | flanging | flanger |

8. Manufacturer's Declaration

The disposal of electronic equipment in household waste is not permitted. AER GmbH waste electrical and electronic equipment is not to be taken to public collection points for disposal.

AER GmbH remains solely responsible for the disposal of AER GmbH waste electrical and electronic equipment labelled with a dustbin.

To dispose of AER GmbH waste electrical and electronic equipment that is labelled with a dustbin symbol, please contact us; we will ensure correct and cost-neutral disposal.

In the case of AER GmbH waste electrical and electronic equipment that is not labelled with a dustbin, the owner is responsible for correct disposal in accordance with the law.

However, we are also happy to help in this case and we can present you with the options of where to dispose of these electrical goods.

The telephone number of AER GmbH: +49 (0)2361 891789

Here, we will provide you with qualified information on the disposal of AER GmbH waste electrical and electronic equipment.

Declaration

The EU directive on the disposal of waste electrical and electronic equipment (WEEE, 2002/96/EC) has been changed to the electrical and electronic equipment act.

All AER electrical equipment affected by WEEE has been labelled with the symbol of a crossed out dustbin since 13.08.2005.

This symbol indicates that the disposal of the equipment is not permitted with household waste. It has been circulated in this form since 13.08.2005.

In the German registration department EAR, AER GmbH has been registered under WEEE registration number DE26301529.

European Union, Norway, Iceland and Lichtenstein

The disposal of electronic equipment in household waste is not permitted.

All AER electrical equipment affected by WEEE has been labelled with the symbol of a crossed out dustbin since 13.08.2005. This is also applicable for Norway, Iceland and Liechtenstein.

This symbol indicates that the disposal of the equipment is not permitted with household waste.

It has been circulated in this form since 13.08.2005.

The European directives of WEEE are anchored in different respective national laws in all European states. As such, we are unfortunately unable to provide you with one standard disposal solution.

The distributor or importer for the respective state is responsible for the observance of the laws of that state and must ensure the disposal of the waste electrical and electronic equipment in accordance with national regulations.

Other Countries

For correct disposal of the electrical goods, please ask the local dealer or the appropriate authority.

