

Instruction Manual

Coupler Calibration Stand AL0011



CONTENTS

Coupler Calibration Stand AL0011.	3
Assembly of Reference Microphone and Preamp. for Calibrating IEC60318 Ear Simulator	4
Assembly of the Transmitter Adapter and the sound source microphone	5
Mounting of Transmitter Adapter and reference microphone in AL0011.....	6
Electrical block diagram	8

Coupler Calibration Stand AL0011

List of parts (Fig. 1)



Fig. 1 Showing the main parts of the AL0011

Assembly of Reference Microphone and Preamp. for calibrating IEC60318 Ear Simulator

Please pay attention to the mounting of the stop-washer: The recess must face towards the microphone (Fig. 2).

The black sleeve (GR0371) slides onto the preamplifier from the LEMO-plug side (see arrow).

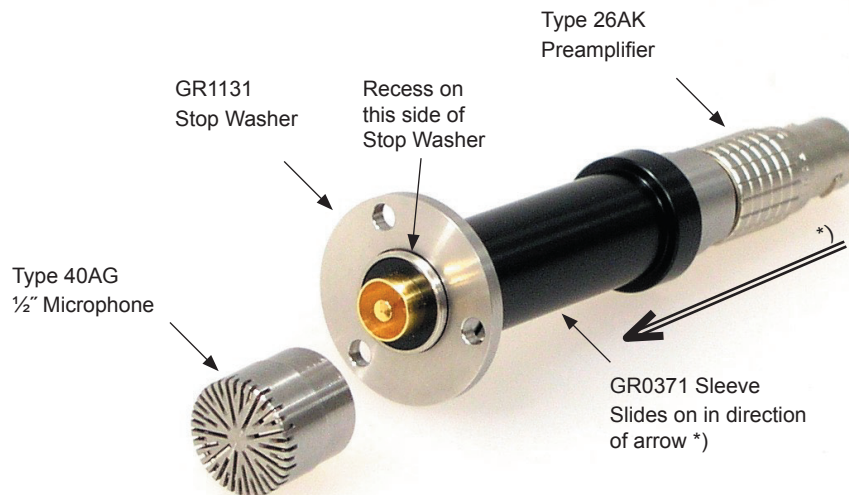


Fig. 2 Showing the correct orientation of the Stop Washer and the direction of sliding on the GR0371

The stop-washer (GR1131) is mounted between the preamplifier and the microphone (Fig. 3).

Caution: Screw the microphone on/off by gripping only its body not the protection grid. Do not over tighten. This will ensure that you do not inadvertently unscrew the protection grid when dismantling the assembly.

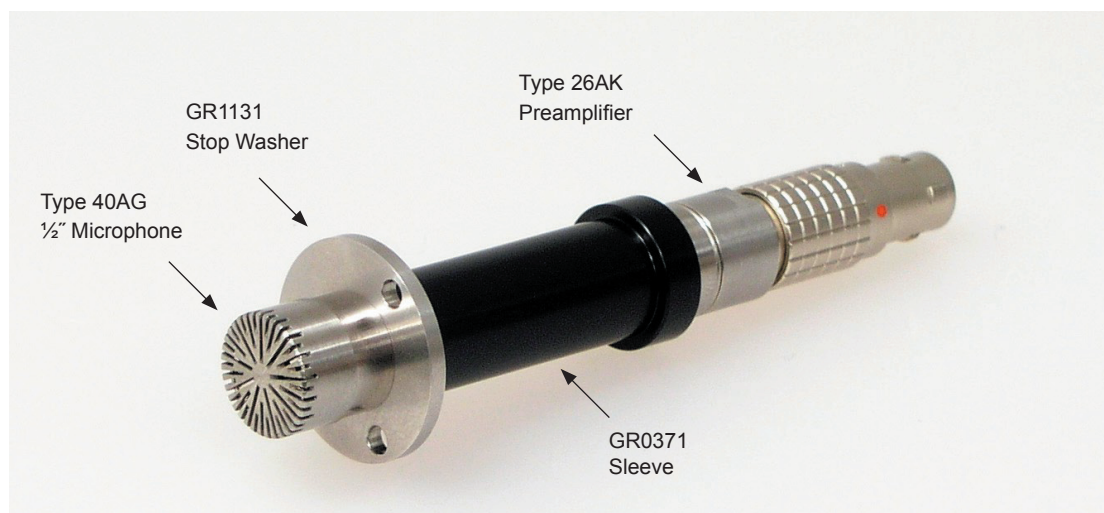


Fig. 3 Showing the correct assembly of the reference microphone and the preamplifier

Assembly of the Transmitter Adapter and the sound source microphone

This consists of three parts:

Microphone + Adapter + Transmitter (Fig. 4).

Held together by using the microphone as a “nut”.

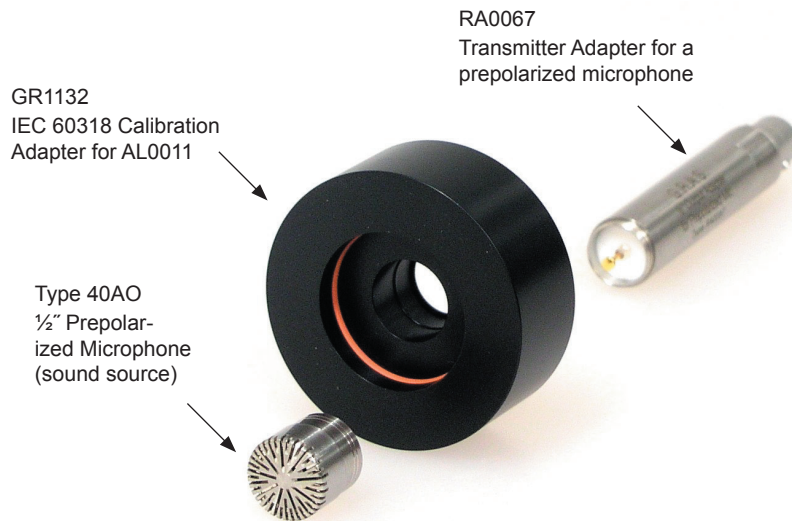


Fig. 4 Showing parts before assembly

The Calibration Adapter GR1132 assembled with the Sound Source Microphone (Type 40AO) and the Transmitter Adapter RA0067 (Fig. 4).

Caution: Use light finger pressure only to stop the microphone from rotating while screwing the Transmitter Adapter into place. Do not over tighten. This will ensure that you do not inadvertently unscrew the protection grid when dismantling the assembly.

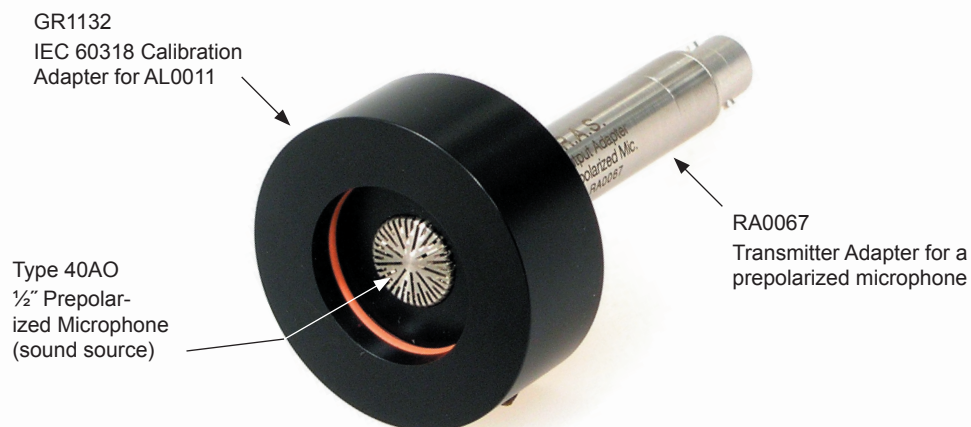


Fig. 5 Showing how the assembled parts are held together by using the microphone as a “nut”

Mounting of Transmitter Adapter and reference microphone in AL0011

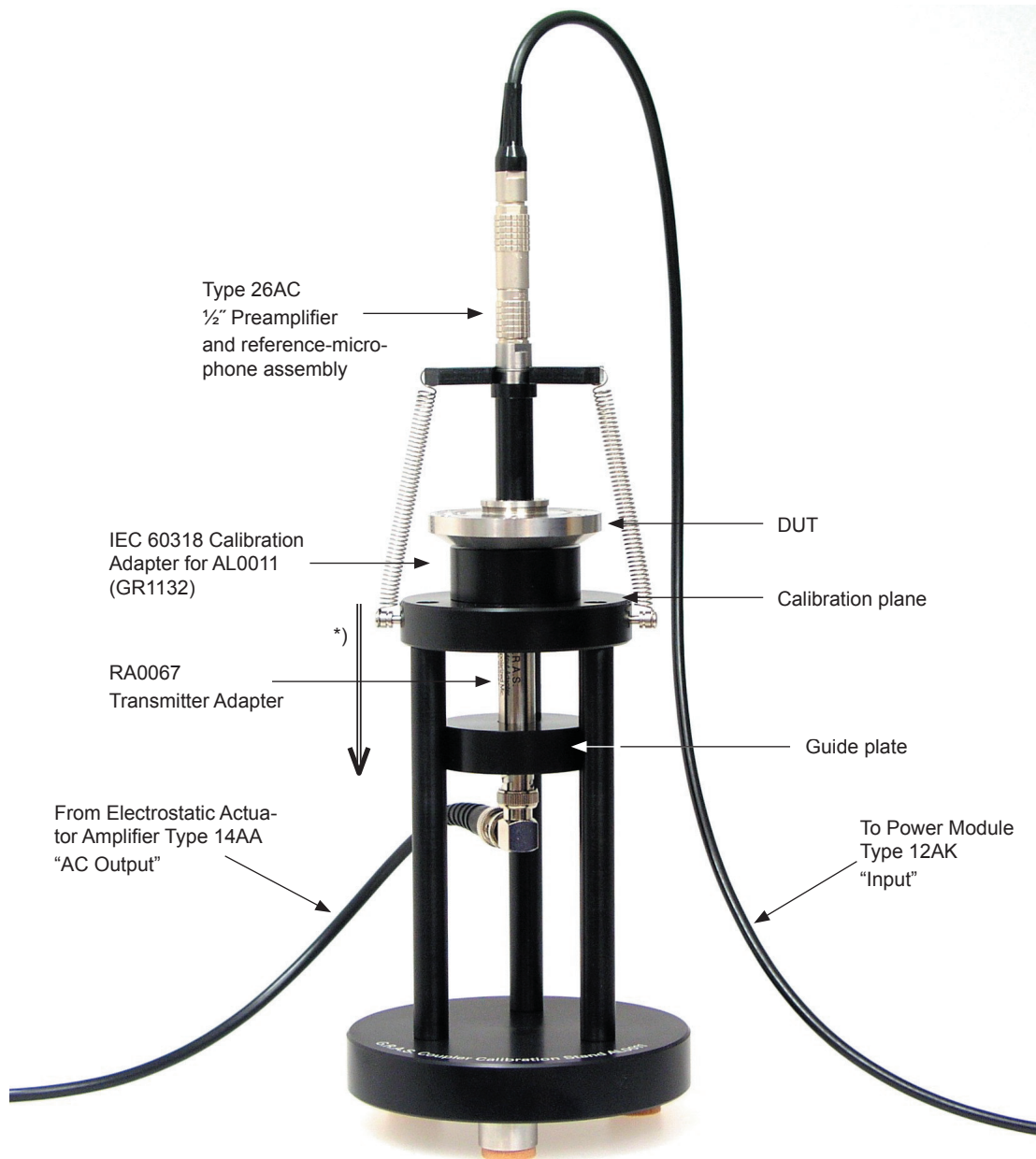


Fig. 6 Showing the AL0011 with device under test (IEC 60318 Ear Simulator) and the cables leading to additional equipment

The Calibration Adapter and Transmitter Adapter assembly (shown in Fig. 5) is mounted in the stand by sliding it down through the 1/2" hole in the calibration plane (in direction of arrow *) then passing it through the guide plate below.

Mount the BNC - BNC Angle Adapter and carefully slide the guide plate downwards as far as it will go.

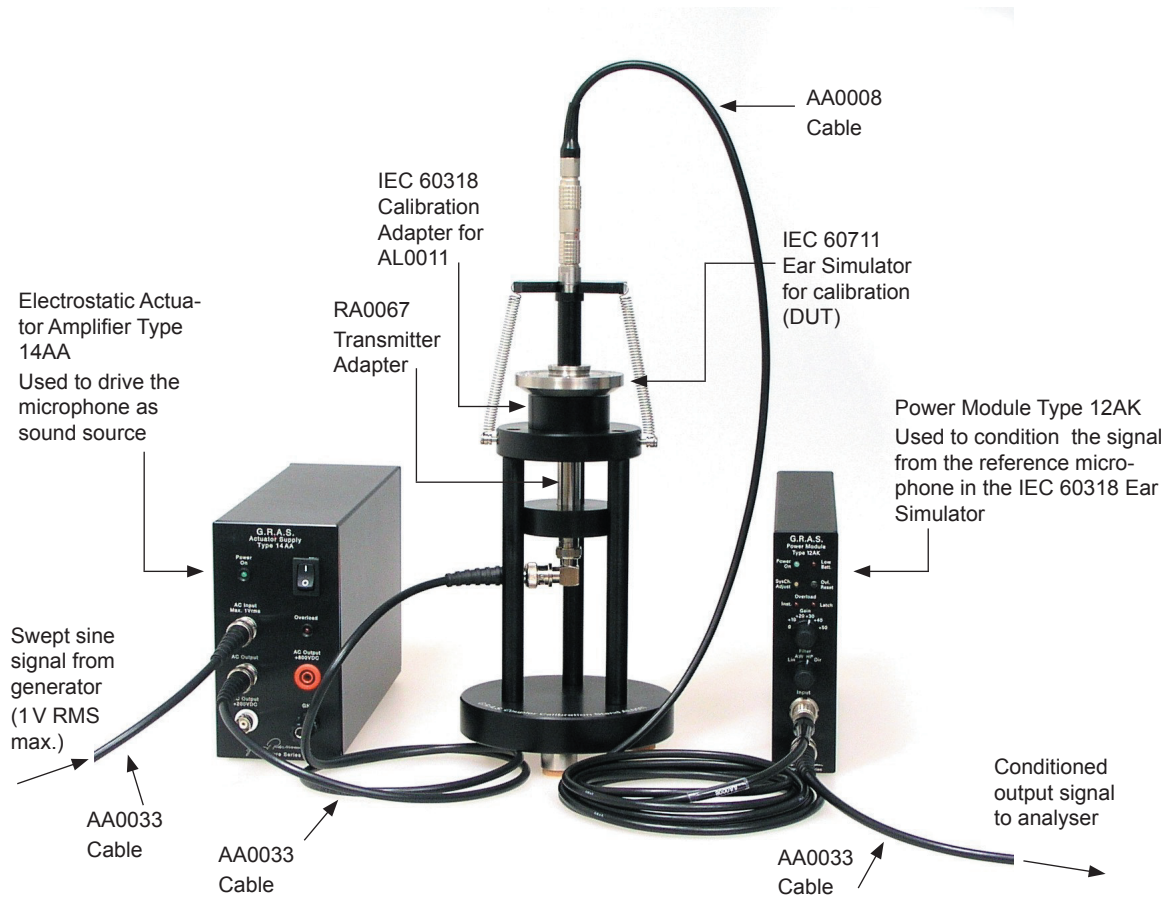


Fig. 7 Showing the AL0011 with device under test and additional G.R.A.S. equipment. Please note: max. input to Type 14AA is 1 V RMS

Additional parts (not included in AL0011):

- Transmitter amplifier: Electrostatic Actuator Amplifier Type 14AA.
- Transmitter Adapter for prepolarised microphone: Transmitter Adapter RA0067.
- Calibration Kit: IEC 60318 Calibration Adapter for AL0011, RA0183 (incl. Stop Washer GR1131 and Sleeve GR0371).
- Sound source: ½" Prepolarised, Pressure-field Microphone Type 40AO.
- Reference microphone for measuring coupler response: ½" Pressure-field Microphone Type 40AG.
- Preamplifier for reference microphone: ½" Preamplifier Type 26AK.
- Signal conditioning and power supply: Power Module Type 26AK

Cables:

- 1 × 7-pin LEMO to LEMO microphone cable (3 m) AA0008.
- 2 × BNC to BNC Coax.cable (1 m) for Power Module Output and Electrostatic Actuator Amplifier Input (AA0033).

Electrical block diagram

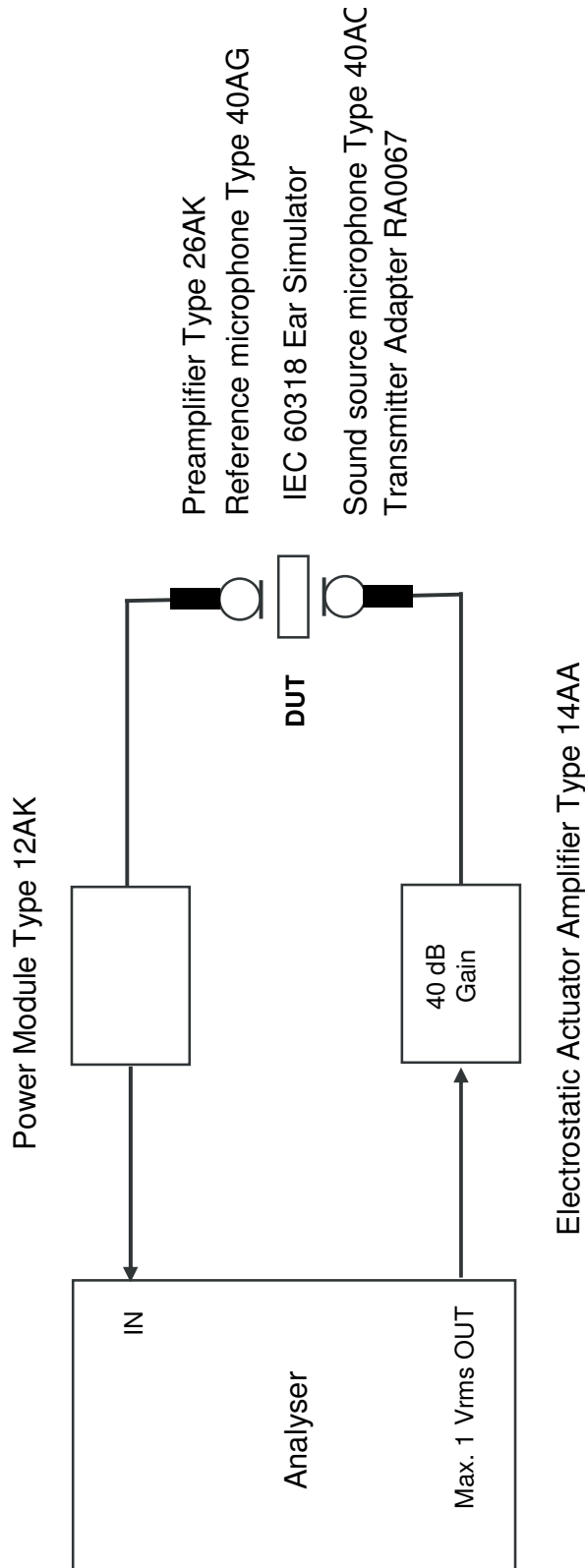


Fig. 8 Block diagram of a complete set-up