

FISCHER AMPS

MANUAL

In Ear Amp 2

[Art.No. 001120/2]



Dear customer:

You have decided to buy a *Fischer Amps* product. Thank you.

Please read this manual carefully prior to the first use, you will get important information for use and safety of the unit. These safety and operating instructions should be retained for future reference.

Should you have further questions, please do not hesitate to contact *FISCHER AMPS*.

Product Description:

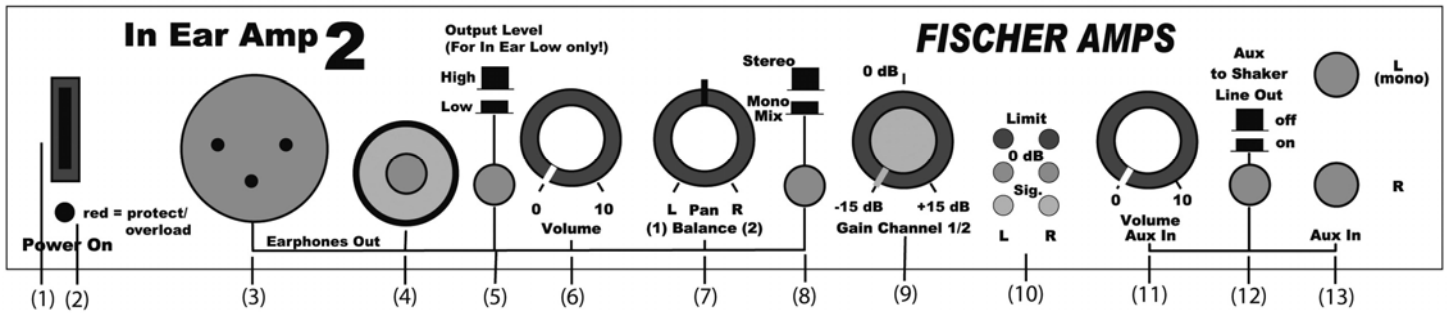
The In Ear Amp 2 is a revision of the Fischer Amps In Ear Amp. The new In Ear Amp 2 contains a Class A MOSFET amplifier with enormous reserves and high-precision sound which provides high-end earphone sound. The amplifier's output power can be selected via a two-step switch. This allows to use the In Ear Amp 2 with low-impedance in-ear earphones as well as with high-impedance headphones which makes the In Ear Amp 2 the perfect and versatile headphone amp system for use on stage, in the studio and high-end applications. All other practically relevant and popular features of version 1 were retained.

Basic information on the use of in-ear monitoring systems:

CAUTION:

Using this system at too high sound levels may cause permanent hearing defects. Adjust the volume so that you can hear sufficiently. Ringing in the ears can indicate that the adjusted hearing level is too high. Use headphone systems with good fitting which suppress the ambient noise well. This allows that the required listening volume can be low which is kind to your ears.

Actuators and Connections Front Side



Description of the actuators (front side) :

- (1)
On/Off Switch
The operating voltage of the Amp is switched off on the mains side. When switched off, the Amp needs no power from the mains.
- (2)
Control-LED
After switching on the Amp, the LED below the on/off power switch illuminated red for approx. 3 seconds and then changes to green. In case of defect inside the Amp or in case of overload, the internal relay cuts off the headphone output from the electronics and the LED illuminates red. If the LED does not change to green after switching on the Amp, there is an overload or the Amp is defective.
- (3)
Earphones Output
Earphone connection for the Fischer Amps Guitar In Ear Cable or XLR male 3-pole: to connect a symmetric standard microphone cable in combination with the Mini XLR Body-Pack. The use of microphone cables allows musicians to perform far off the In Ear Amp. Even the transmission of the earphone signal through a multicore or sub-multicore is very easy without the need for an adaptor.
- (4)
Earphones Output stereo connector 1/4"
Direct connection of earphones to the In Ear Amp. For use with 1/8" mini connector in ear earphones, an adaptor and a 2m extension cord is included in the In Ear Amp package. The two earphone outputs are switched in parallel, and – unless the connecting impedance of 10 ohms is exceeded – can be used together. The maximum output power is 250 mW per side.

IMPORTANT: The stereo jack may only be operated with a stereo earphone set with stereo jack connector. When using a mono jack connector, the right side of the amplifier is short-circuited permanently and is overloaded.

(5)
Output Level Switch
Headphone Amplifier

The headphone amplifier can be operated with two different output levels. In ear earphones or headphones with an impedance > 40 ohms require a lower output voltage, therefore the switch should be pressed "Low" (low output level).

Headphones with a higher impedance than 40 ohms require a higher voltage (switch not pressed "High" = high output level).

Please note that in ear earphones with low impedance can be damaged when operating them in position "high output level", and that in this position the hearing will be impaired when using a low impedance earphone.

When using in ear earphones, always work in position "Low" (output level switch pressed)!

(6)
Volume Control
Earphones Output

Adjusts the total volume at the earphones outputs.

This volume control is switched after the limiter unit. When the Mini Body Pack with passive volume control is connected, the maximum volume required should be adjusted at the volume control (6), as the volume can be set to the optimum hearing level at the Body Pack.

(7/8)
Change-Over switch Stereo / Mono-Mix (8)
PAN Control (7)

Stereo-Mode:

The device outputs the signal fed into the left input (channel 1) at the left earphone and the signal from the right (channel 2) at the right earphone.

Mono Mix Mode:

Channel 1 and channel 2 are mixed and output to both earphones. By means of the pan (balance) control the ratio between both channels can be adjusted.

If a stereo signal is connected at the Aux-Input, a Mono Mix signal is generated automatically from this stereo signal when the switch is in position Mono Mix.

(9)
Gain Control
Channel 1/2

Adjusts the correct working level of inputs 1 and 2, the level can be raised up to 15dB or can be attenuated to -15dB. The optimum working level is shown when the yellow LEDs 0dB illuminate with signal input, and when the red limiter LEDs flicker slightly with signal peaks. This ensures proper working of the limiter, which limits the sound level when it escalates, e. g. due to feedbacks.

(10)
LED Status Display

Shows the internal working level before the earphone power amp with Pan control and Stereo/Mono Mix changeover switch. The levels for channels 1/2 and Aux Input at the gain control are set in such a way that the yellow 0dB LEDs light when there is a signal, and the red LEDs flicker slightly when there are signal peaks. The red LEDs light from an internal working level of +3dB on, at +4dB the internal working level is limited. This ensures correct working of the limiter, which limits the sound level when it escalates, e. g. due to feedbacks.

(11)
Volume Control Aux-Input

Adjusts the correct working level of the Stereo Aux input. This control allows to raise very low levels so that the internal working level can be adjusted correctly. (max. +18 dB)

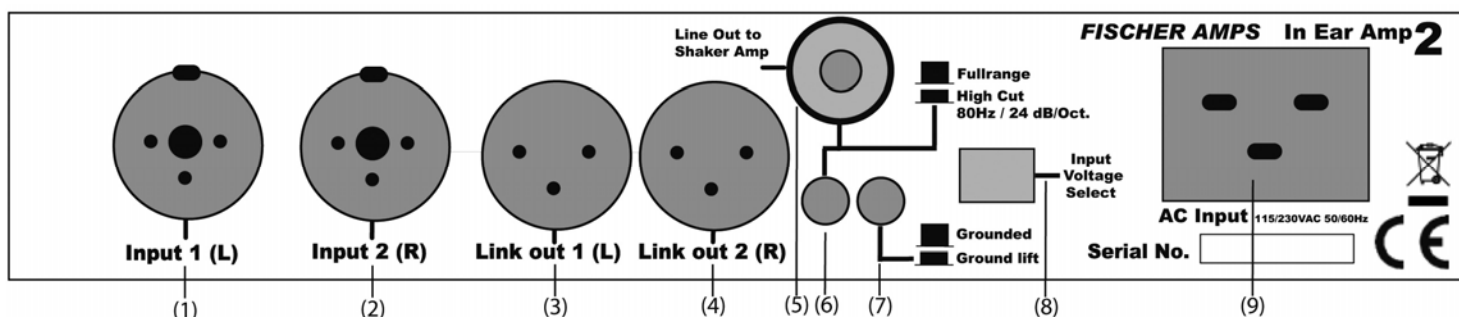
(12)
Switch
Aux-In to Shaker Out:

Add-on of the Aux input signal to the Shaker Line Out on the back of the Amp. If a stereo signal is connected at the Aux-Input, a Mono Mix signal (Post Volume control Aux-Input) is output automatically at the Shaker Out. The inputs of channels 1 and 2 are output at the Shaker Out and cannot be disabled (Post Gain control Channel 1 and 2).

(13)
Aux-Input

Input for an additional stereo or mono sound source (klick track, CD-/Mp3 player, sampler...) which can be mixed to the main signal of channel 1/2. The inputs are unbalanced. When a mono signal is looped in only at the left output connector, the signal is internally at the left and at the right side. When only the right input connector is occupied, the signal can only be heard at the right side. When the Stereo/Mono switch in the master section is adjusted to Mono Mix, the stereo signal at the Aux Input is automatically added to mono.

Actuators and Connections Back Side



(1 / 2)
Combined XLR-
Jack Connections
Channel 1 (left), Channel 2 (right)

Connections of the input signal from the mixing console or other audio sources. Assignment of the combined XLR connection:

XLR	stereo jack 1/4"
Pin 1 = Ground	sleeve
Pin 2 = Signal +	tip
Pin 3 = Signal -	ring

With asymmetric wiring with XLR cables, PIN 3 should be assigned to ground (bridge in connection plug). Nominal input level 0dBu, adjustable at front side from -15 dB to +15 dB, input impedance 10kohms.

(3 / 4)
Link Outputs
Channel 1 and 2

XLR outputs to loop input signals to more Amps.
Pin assignment: Pin 1 = Ground, Pin 2 = Signal (+), Pin 3 = Signal (-)
Please note: With asymmetric connection of inputs 1 and 2, the signal at the Link Out connectors is unbalanced as well and will not be balanced internally.

- (5)**
Line-Output To Shaker Amp
Unbalanced connection (jack 1/4“) for an amplifier to control a bass shaker. Nominal working level 0 dB. The added signals of channel 1 and 2 and the add-on signals of the Aux Input are at this output (after the gain control and before the earphone amplifier). No matter of the adjusted earphone volume level, the shaker output can be switched from full range to low pass with a cutoff frequency of 80Hz/24 dB/oct.
- (6)**
Switch Shaker-Amp Line Out
When the switch is pressed, the signal at the Shaker Amp Line Out passes a low pass with a cutoff frequency of 80 Hz / 24 dB-octave. This feature is very helpful when using a standard PA amplifier without integrated frequency crossover for the shaker. The cutoff frequency of 80 Hz corresponds to the optimum working level of the bass shakers. When the switch is not pressed, the signal is output full range. This is also the correct switch position when operating the Fischer Amps Shaker Amp or the ButtKicker Amplifier BKA 1000-4 in combination with the Fischer Amps In Ear Amp 2, as these units have an integrated, controllable low pass.
- (7)**
Ground Lift Button
Separates the audio ground from the system and cabinet ground. When there is a ground loop when connecting various appliances, pressing the Ground Lift button can solve the problem. (The cabinet of the In Ear Amp 2 is still connected with the protective ground of the power supply)
- (8)**
Input Voltage Select
115V /230V
Switch to adjust the appliance to the country's supply voltage 230V AC or 115V AC. Before switchover, always switch off the appliance and disconnect the mains cable from the operating voltage. Doing so prevents overload of the internal PSU. It is not necessary to replace a fuse in the appliance for adjusting the operating current.
- (9)**
Power In Jack
3-pole Euro mains socket to connect the provided 3-pole Euro power cable. To supply the appliance with voltage, connect it to a grounded power outlet. The metal casing of the appliance is permanently connected to the internal ground wire. The self-resetting fuses are all inside the appliance and do not have to be replaced in case of fault, but reset after trouble-shooting. If the power cable is damaged, replace it by a new, reliable cable immediately.

Specifications In Ear Amp	
Dimensions L x W x H:	220 x 190 x 43 mm
Weight:	2.4 kg
Operating Voltage:	115VAC or 250 VAC 50/60 Hz, switchable
Power consumption	18 watt max.
Mains Connection:	Euro-power connector 3-pole
Frequency Response:	20Hz to 50 kHz +/- 1 dB
Power Headphone Amp: low level	max. 250 mW, minimum impedance 8 ohms
Power Headphone Amp: high level	max. 250 mW, minimum impedance 40 ohms
Limiter in Headphone Amp:	yes (cannot be disabled)
Input Connectors:	2 x combined XLR/jack, symm., 0 dB input level 1 x Stereo Aux-Input jack, asymm. at front side, -10dB
Outputs:	2 x XLR Link out, 1 x Line Out Shaker-Amp, jack
Headphone Outputs: :	1 x XLR male for Guitar In Ear Cable 1 x 1/4" stereo jack with adaptor 1/8"

WARRANTY:

The manufacturer grants a warranty of 24 months from the date of purchase by the original owner for defects in materials or workmanship. When the appliance has been subject to misuse or has been altered, the warranty expires. When returning the defective unit, enclose the receipt, pack the unit to avoid transit damage, and return the unit carriage prepaid. The manufacturer does not accept carriage forward consignments.

FISCHER AMPS

HANS-ULRICH-BREYMANN-STR. 3, D-74706 OSTERBURKEN

TEL: +49 (0) 62 91-648 79 0, FAX: 648 79 19

E-MAIL: info@fischer-amps.de, Internet: www.fischer-amps.de



Assembly Instructions 9.5-inch Units

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Dear **FISCHER AMPS** User:

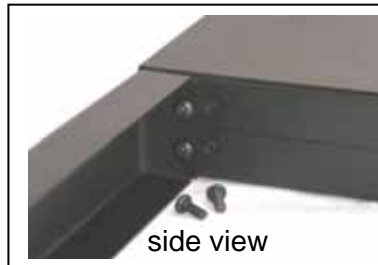
Our 9.5-inch units can be used as desktop units, or can be integrated into 19" racks, either individually or combined with other 9.5-inch Fischer Amps units.

For assembly, you just need a Phillips screwdriver size 1.

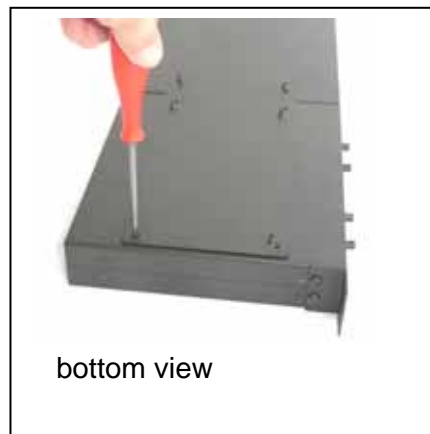
Parts supplied with a 9.5-inch unit (see picture)



Assembly of the brackets when using the single unit in a 19" rack:



Assembly of two Fischer Amps 9.5-inch Units into one 19" 1U:



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Hans-Ulrich-Breyman-Str.3, D-74706 OSTERBURKEN, FON +49 (0) 62 91 – 648 79 - 0, FAX 648 79 - 39

Notes:

FISCHER AMPS

Hans-Ulrich-Breymann-Str. 3, D-74706 Osterburken / Germany

Phone +49 (0)6291-648 79-0, Fax 648 79-19

E-MAIL: info@fischer-amps.de, Internet: www.fischer-amps.de

