G·LAB
GUITAR LABORATORY

# SIGNAL ADAPTER SA-1


- User Manual
- Mode d'emploi
- Instrukcja obsługi
- Bedienungsanleitung

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Dear Customer!

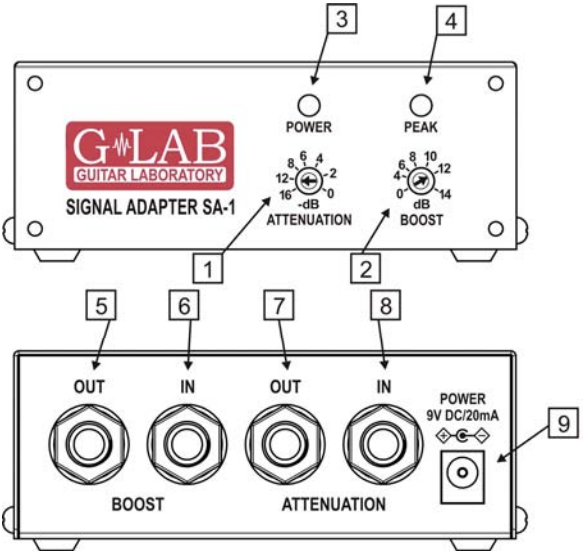
Thank you for choosing our product.

G LAB Signal Adapter SA-1 serves to adjust signal level appearing on the amp effect loop to the level required by the effects. If the signal level is too high it causes distortions and if it is too low it increase noise level and even causes inaction of some of the effects (e.g. for compressor). Adjustment of the signal is realized by two separated modules: ATTENUATION and BOOST.

Basic characteristics:

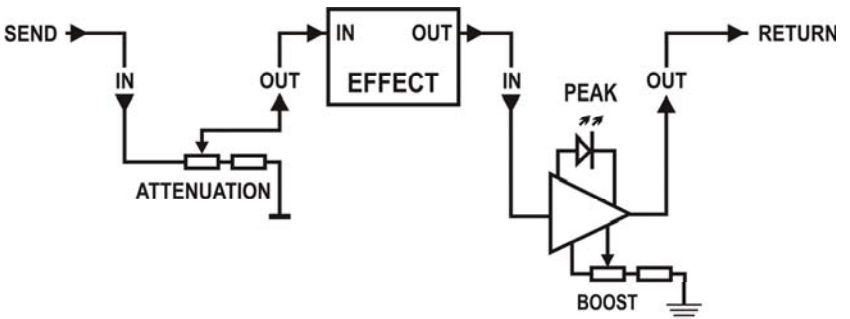
- Fully passive ATTENUATION module working in the range up to -16 dB (/6)
- BOOST module based on class A amp working in the range from 0 to 14 dB (x5)
- High level (19 dBu, 19Vpp) of the BOOST module transmitted signal
- PEAK indicator of crossing the BOOST module maximal signal level (>18 dBu)
- Possibility to install in the rack with the use of the GLAB 1U RMS FRONT PANEL.

**Structure**

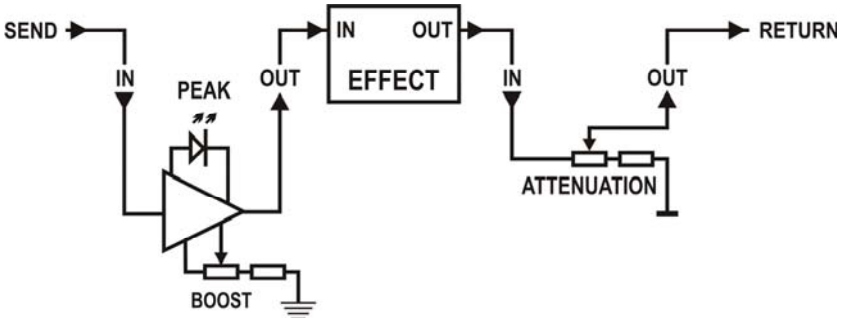

3
4
POWER
PEAK
G-LAB
GUITAR LABORATORY
SIGNAL ADAPTER SA-1
-dB
ATTENUATION
dB
BOOST
1
2
5
6
7
8
OUT
IN
OUT
IN
POWER
9V DC/20mA
9
BOOST
ATTENUATION

1 ATTENUATION regulator
2 BOOST regulator
3 Power supply indicator
4 PEAK indicator (>18 dBu)
5 BOOST module output connector
6 BOOST module input connector
7 ATTENUATION module output connector
8 ATTENUATION module input connector
9 9V power supply connector

If the signal level is to high adapter enables to attenuate the signal sent to the effect and to reinforce the return signal.



If the signal level is to low adapter enables to reinforce the signal sent to the effect and to attenuate the return signal.




**Power supply**

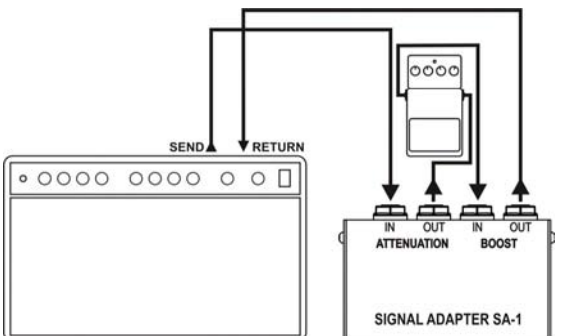
The SA-1 should be supplied from external regulated 9V DC power supply, with capacity of 20 mA or more. It is recommended to use separated source e.g. G LAB PB-1 in order to avoid ground loop. Before connecting check the connector's polarization.

The device is protected against opposite polarity. If this protection switches on it is needed to disconnect the power supply and wait few minutes before reactivation of the device.

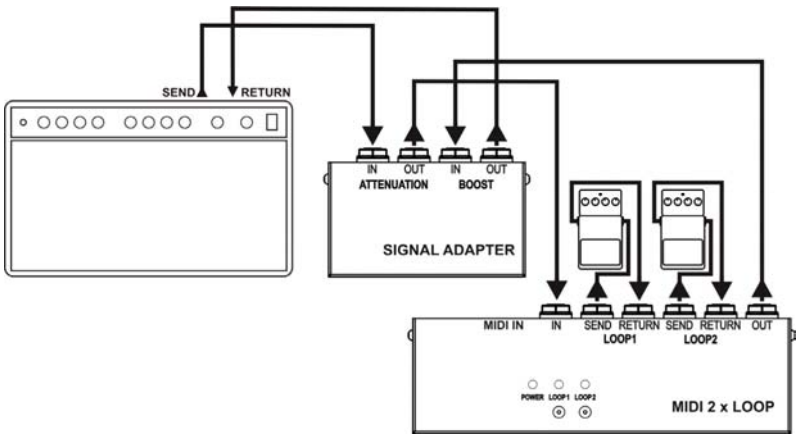
ATTENTION: Damages caused by improper power supply causes loss of the warranty.

**Way of connecting**

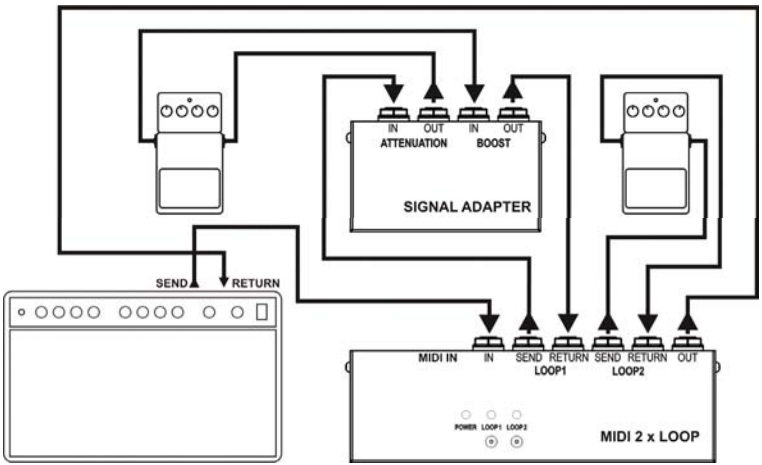
The way of connecting the adapter to the effects loop with to high signal level is shown below.



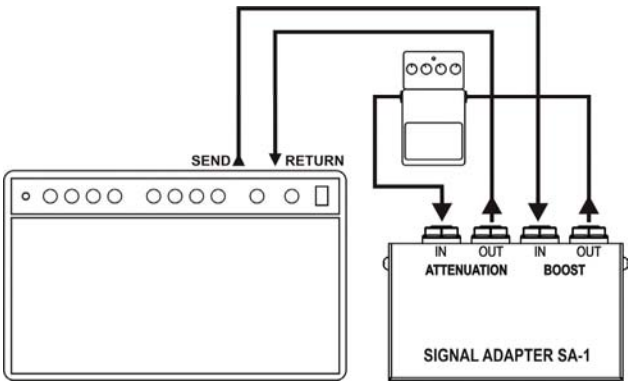
In case of using the looper the way of connecting the adapter to the effects loop with to high signal level is shown below.



The way of connecting the adapter in order to adjust the signal level (in this case signal attenuation) to one of the effects is shown below.



The way of connecting the adapter to the amp effects loop with too low signal level is show below.



**Setting ATTENUATION and BOOST regulators**

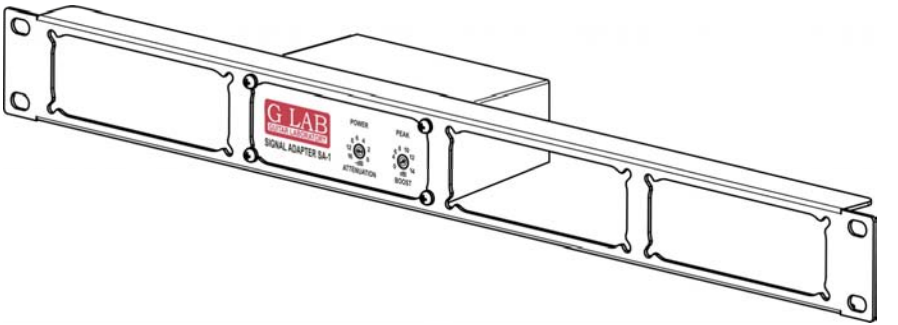
The ATTENUATION and BOOST regulators are placed on the SA-1's front panel. Setting is done by using small, flat screw.

If the effect posses the PEAK indicator the setting should be started by the module connected to the SEND output. For maximal utility signal (very often it is a clean tone) the regulator should be set to maximal value on which the PEAK indicator doesn't light. Further, the regulator connected to the RETURN input should be set on similar dB value (e.g. attenuation -6 dB and boost 6 dB) in order to keep the same signal level.

If the effect doesn't posses the PEAK indicator it is needed to set the regulator of the module connected to the RETURN input to minimal value and then set the regulator of the module connected to the SEND output to maximal value on which doesn't appear unwonted signal distortion. Further, the regulator of the module connected to the RETURN input should be set on similar dB value.

**Mounting**

Adapter can be installed in the 19” rack with the use of the GLAB 1U RMS FRONT PANEL – product code 00831 (see picture below).



**Technical parameters**

| | | |
|---|---|---|
| Dimensions: | width | 110 mm |
| | depth | 65 mm |
| | high | 40 mm |
| Weight | | 0,27 kg |
| Input impedance of the ATTENUATION module | | 60 kΩ |
| Maximal signal level for ATTENUATION module | | 20 dBu (44Vpp) |
| Input impedance of the BOOST module | | >40 kΩ |
| Output impedance of the BOOST module | | 200 Ω |
| Maximal output signal level for BOOST module with load: | | 19 dBu (19 Vpp) @ 50 kΩ |
| | | 18 dBu (17Vpp) @ 10 kΩ |
| Power supply | | 9V DC 20 mA<br>(8,7 to 9,4V regulated) |

**EMC/EMI & Certificate of conformity**

EMC/EMI

This device has been designed and manufactured to conform with directives and standards in the field of safety operations and electromagnetic interference.

This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However in spite of performing below standards there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception which can be determined by turning the device on and off, the user is encouraged to try to correct the interference by one or more of the following operations:

- Reorient or relocate the receiving antenna.
- Increase the separation between the device and receiver.
- Connect the device into an outlet on a circuit different from that to which the receiver is connected.
- Contact with the manufacturer.
- Consult the dealer for help.

**Certificate of Conformity**

ELZAB S.A., ul. Kruczkowskiego 39, 41-813 Zabrze, Poland,
hereby declares on own responsibility that the following product:

**Signal Adapter SA-1 (G LAB Signal Adapter SA-1)**

that is covered by this certificate and marked with CE 07 label conforms with following standards:

| | |
|---|---|
| PN-EN 60065:2004 | Safety requirements for mains operated electronic and related apparatus for household and similar general use |
| PN-EN 55103-1:1998 | Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. Part 1: Emission. |
| PN-EN 55103-2:1998 | Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use. Part 2: Immunity. |

with reference to regulations in following directives:
73/23/EEC, 2004/108/EEC

Issued in Zabrze, April 2009
Jerzy Biernat
President of the ELZAB S.A. Board of Directors

**DO NOT PLACE THIS PRODUCT INTO THE WASTE CONTAINER !**

This device is marked with a cross-lined waste container symbol according to 2002/96/EU Directive on Waste Electric and Electronic Equipment.

Such marking informs that after usage equipment can not be trashed together with other household waste.

An user obligation is to return wasted equipment to a party collecting wasted electric and electronic equipment. Parties collecting such equipment organise a system, including local collection points, shops and other units, allowing to return such equipment. This Directive assures an user free of charge utilisation of such delivered equipment.

This device is made of materials which can be recycled or utilised after becoming out of use. Proper handling of wasted electric and electronic equipment reduce demand for row materials and contribute in avoiding harmful consequences for environment and health of people caused by dangerous components and not proper storing and utilising of such equipment.

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GUITAR LABORATORY

www.glab.com.pl

**G LAB is a brand of ELZAB SA**

## COMPANY ADDRESS

**ELZAB SA**
ul. Kruczkowskiego 39, 41-813 Zabrze, Poland
phone: +48 32 272 20 21, fax: +48 32 272 81 90

**Sales & Export Department .....**
phone: +48 32 272 30 51 ext. 34, 39, 64
+48 32 272 20 21 ext. 308, 366, 468
e-mail: glab@glab.com.pl

**Technical Support .....**
phone: +48 32 272 30 51 ext. 64
+48 32 272 20 21 ext. 308
e-mail: help@glab.com.pl

G56TIN00