G-LAB
GUITAR LABORATORY

BOOSTING COMPRESSOR BC-1

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

Table of contents

Dear Customer!

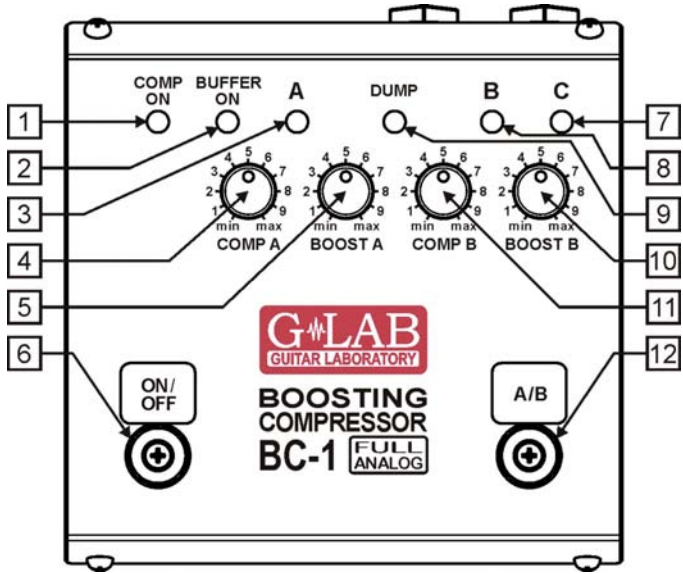
Thank you for choosing our product.

G LAB Boosting Compressor (BC-1) is a compressor type guitar effect which can be used as booster or as a booster-compressor.

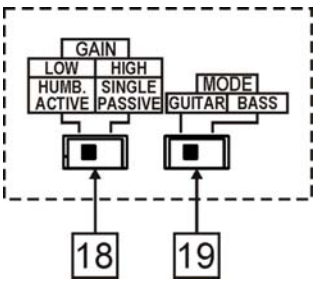
Basic features:

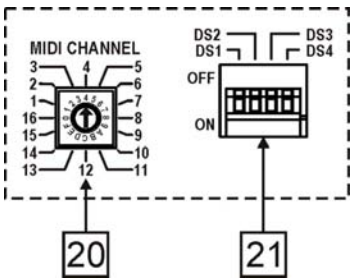
- Analog compression circuit with opto component
- Compression circuit matched to the electric and bass guitar in terms of signal and time
- Two sets (A and B) of signal compression and boost regulators
- Compression level indicator (DUMP)
- Ultra low noise level enabling to work as a booster and/or booster-compressor on crunch and overdrive tones
- Two footswitches: effect ON/OFF and compressor A/B
- Work MODE switch: electric and bass guitar
- Optical TRUE BYPASS and signal buffer mode
- Four work modes of footswitches
- Input sensitivity range switch (GAIN)
- MIDI input for connecting foot controllers e.g. G LAB GSC.

Structure

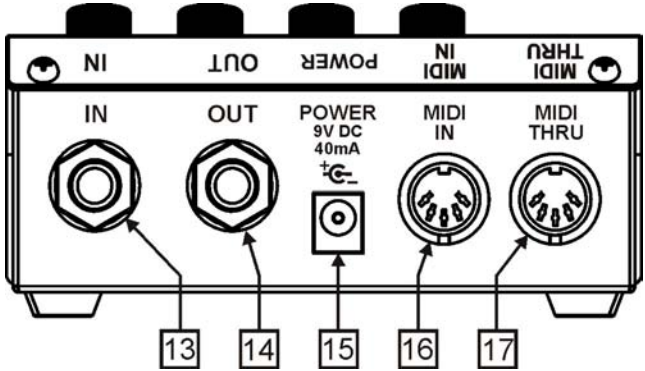

COMP ON
BUFFER ON
A
DUMP
B
C
1
2
3
4
5
6
7
8
9
10
11
12
min
max
COMP A
BOOST A
COMP B
BOOST B
G-LAB
GUITAR LABORATORY
ON/ OFF
A/B
BOOSTING COMPRESSOR
BC-1
FULL ANALOG

1 - COMP ON indicator
2 - BUFFER ON indicator
3 - COMP A ON indicator
4 - COMP A level knob
5 - BOOST A level knob
6 - ON/OFF footswitch
7 - COMP C ON indicator
8 - COMP B ON indicator
9 - DUMP - compression level indicator
10 - BOOST B level knob
11 - COMP B level knob
12 - compressor A/B switch





18 - GAIN - sensitivity switch
19 - MODE - work mode switch
20 - MIDI channel switch
21 - DS1 - DS4 switches



13 - IN signal connector

14 - OUT signal connector

15 - 9V power supply connector

16 - MIDI IN input

17 - MIDI THRU output

Power supply

The BC-1 should be supplied from external regulated 9V DC power supply, with capacity of 40 mA or more. It is recommended to use separated source e.g. G LAB

PB-1 in order to avoid ground loop. Before connecting please check if the connector's polarization is CTR – (center negative).

The BC-1 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.

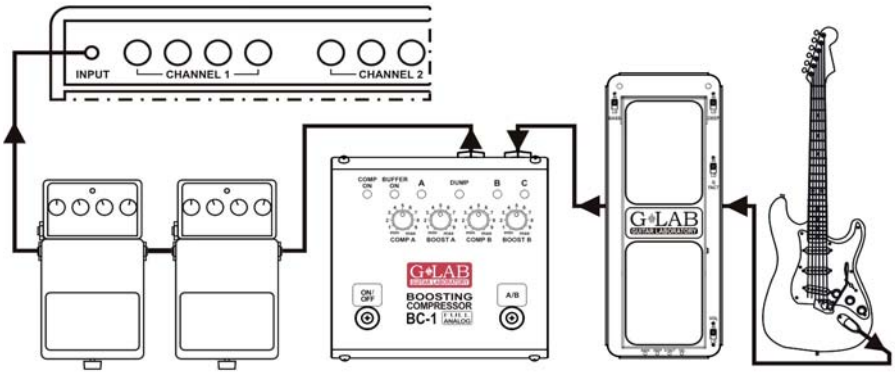
ATTENTION: Damages caused by improper power supply causes loss of the warranty.

MODE switch

MODE switch enables to match the compressor release time to the electric (GUITAR) or bass guitar (BASS).

Way of connecting

It is recommended to connect the BC-1 as the first stompbox after a wah-wah effect in the effects chain.



GAIN switch

GAIN switch enables to match the compressor sensitivity to the guitar signal. If you play the guitar with minimum one humbucker the GAIN switch should be set on LOW position. If the guitar signal is too low to get needed compression level (e.g. when the guitar has only SINGLE COIL pickups) GAIN switch should be set on HIGH position (the sensitivity is two times bigger then).

Current compression level is indicated by DUMP indicator (the brighter it lights the bigger is signal compression).
For the bass guitar the procedure is similar. If you play the bass guitar with active pickups or/and humbucker the GAIN switch should be set on LOW position. If you play the bass guitar with passive pickups, especially the single coil ones, the GAIN switch should be set on HIGH position.

Footswitches

The BC-1 features effect ON/OFF and compressor A/B selection footswitches. The DS3 and DS4 switches enable to change the footswitches' function.

MODE	DS3	DS4	⊕	⊕
1	OFF	OFF	ON/OFF	A→B
2	ON	OFF	ON/OFF	A→B→C
3	OFF	ON	A	B
4	ON	ON	C→B→A	A→B→C

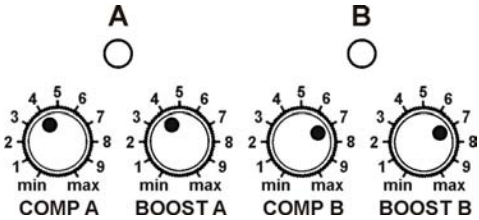
In work modes No. 1 and No. 2 left footswitch has a function of activating and deactivating the effect and the right footswitch enables switching between the A and B compressors (in work mode No. 1) or A, B and C compressors (in work mode No. 2).

In work mode No. 3 the compressor is permanently activated and the left footswitch serves to choose the A compressor and the right one serves to choose the B compressor.

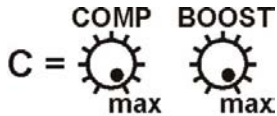
In work mode No. 4 the compressor is permanently activated and the left footswitch serves to switch to „lower" compressor (C to B and B to A) and the right one serves to switch on „higher" compressor (A to B and B to C).

Compression and boost level

To set the compression level serves the COMP knob and to set the boost level serves the BOOST knob. The BC-1 posses two sets of regulators and the choice of them is indicated by lighting of corresponding A or B indicator.



Lighting of C indicator signifies activation of the compressor with maximal compression and boost levels.



Clean tone

It is recommended to start setting of the BC-1 by setting the COMP level on the minimum and the BOOST level on the value No. 4. The test of sound should be done with guitar volume knob set on maximum. It is recommended to increase the compression level with COMP knob and the decrease of the volume should

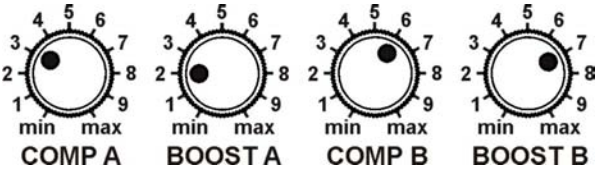
be compensated by the increase of the BOOST. The BC-1 enables to obtain big signal compression without the „pump” or „breath” effect.
If you play with C compressor it is recommended to set the A compressor on lower compression level than B compressor is set on.

Crunch and overdrive tones

It is recommended to use the BC-1 on the crunch and overdriven tones as a booster with limiting the signal level by compressor. On the crunch tone you will get the effect of the sound sustain without increasing of the overdrive level. On the overdriven tones the sound will be more selective and the real guitar tone will be better heard. For high gain tones it is recommended to use the C compressor what can require to decrease the amp GAIN by a half (about 6 dB).

Using with an amp with distorted power amp

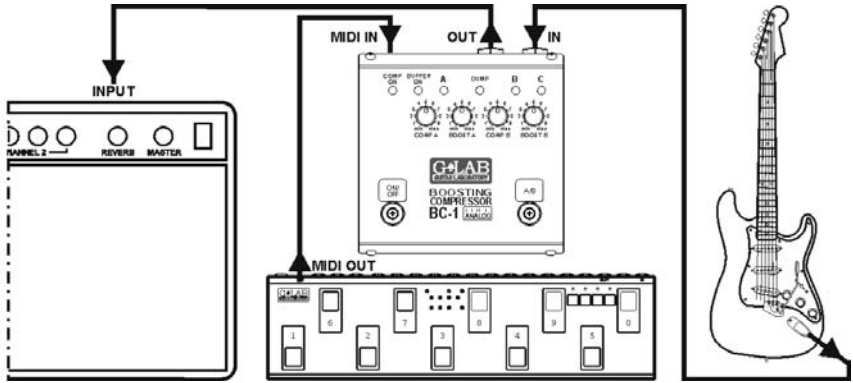
The BC-1 enables to obtain three basic tones: clean, crunch and overdrive on tube amps with distorted power amp. It is recommended to set the regulators as on the picture below and to choose 4th working mode of the footswitches.



The A compressor becomes then a clean or delicate crunch channel (setting the BOOST knob on the value below 4th enables to attenuate the signal). The B compressor is then a crunch channel and the C compressor becomes an overdriven channel. Because of the signal boosting the compressor improves the sound quality of the effects connected between the BC-1 and an amp input.

Using with multi-channel amp

If you use a multi-channel amp the BC-1 enables to enlarge the quantity of available sounds by the combination of channel and compressor (A, B or C) selection. In this case the best solution is to use a MIDI controller (e.g. G LAB GSC-2/3) to control simultaneously an amp and the compressor.



Buffer function

The BC-1 posses a buffer that enables to boost the guitar signal power (without the voltage increase) and has input impedance same as the tube amps (find more at http://www.glab.com.pl/tips). The buffer can be activated in place of the BYPASS function when the DS-1 switch is set to ON position.

DS1 OFF	BYPASS (COMP OFF)
DS1 ON	BUFFER (COMP OFF)

MIDI controlling

To set the MIDI channel on which the BC-1 receives the commands serves the MIDI CHANNEL rotary switch. To set the channel it is needed to use a small flat screwdriver and to turn right or left the middle part of the switch. The arrow-head indicates the set channel.

The BC-1 can be controlled by Program Change and/or Control Change commands.

The tables below show the functionality of Program Change and Control Change commands.

PRG CHANGE	FUNCTION
1	BYPASS ON
2	BUFFER ON
3	COMP A ON
4	COMP B ON
5	COMP C ON
6	SELECTED COMP ON

CTRL CHANGE		FUNCTION
No.	VAL	
108	0-63	COMP OFF
	64-127	COMP ON
109	0-63	SELECT COMP A
	64-127	SELECT COMP B
110	1	SELECT COMP A
	2	SELECT COMP B
	3	SELECT COMP C
111	1	BYPASS ON
	2	BUFFER ON
	3	COMP A ON
	4	COMP B ON
	5	COMP C ON
	6	SEL COMP ON

Technical parameters

Dimensions:	depth	120 mm
	width	120 mm
	height	60 mm
Weight		0,56 kg
Input impedance		1 MΩ
Maximal input signal		0 dBu (GAIN LOW), - 4 dBu (GAIN HIGH)
Output impedance		700 Ω
Power supply		9V DC (8,7 to 9,4V regulated)
Current consumption		40 mA

FCC Compliance

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, 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, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Declaration of Conformity

ELZAB S.A., ul. Kruczkowskiego 39, 41-813 Zabrze, Poland,
declare under sole responsibility, that the following product:

G LAB/Boosting Compressor BC-1 (G LAB BC-1)

conforms with requirements of the EC Council Directives:

- 2006/95/EEC Low Voltage Directive,
- 2004/108/EEC Electromagnetic Compatibility,

and holds CE mark. Above named product conforms with the following standards:

- PN-EN 60065:2004 /EN 60065:2002/ Audio, video and similar apparatus - Safety requirements.
- PN-EN 55103-1:2000 /EN 55103-1:1996/ Electromagnetic compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - Part 1: Emission
- PN-EN 55103-2:2001 /EN 55103-2:1996/ Electromagnetic compatibility - Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use - Part 2: Immunity

Jerzy Biernat

President of the ELZAB S.A. Board of Directors

Copy of original EC declaration of conformity is available for download on our webside http://www.glab.com.pl

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 organize a system, including local collection points, shops and other units, allowing to return such equipment. This Directive assures an user free of charge utilization of such delivered equipment.

This device is made of materials which can be recycled or utilized 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 utilizing of such equipment.

G LAB
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. 39, 64
+48 32 272 20 21 ext. 308, 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

G53TIN00