

GarageInstruments

User manual

FADED – 50

GarageInstruments®
Rudianska ulica 1044
01864, Košeca
Slovakia
www.garageinstruments.com

Table of contents

Table of contents.....	2
Safety warning.....	3
Thank you for purchasing Faded 50!	4
Safety instructions.....	5
Technical parameters.....	7
Control panel description.....	8
Back panel description	9
Amplifier control.....	10
A. Turning on the amplifier.....	10
B. Best settings	10
C. Switching the channels	11
D. Footswitch connection	12
E. Effect loop connection.....	13
F. Ground loop protection (GROUND LIFT).....	14
Troubleshooting	15

Safety warning

This device is powered by **hazardous voltage** so please read this user manual carefully and always respect instructions.



Manufacturer does not bear any responsibility with respect to breakdowns or damages caused by using the product in a manner other than described in the user manual.

Thank you for purchasing Faded 50!

Our team appreciates that you have chosen our guitar amplifier **FADED-50**. We believe, that the joy, enthusiasm and quality that we put in our products will resonate in your ears and you will experience the new dimension of guitar tone and joy of play.

In the name of our company, thank you for your trust.






.....


Maroš Ďurík


.....


Andrej Halás


Safety instructions

-  1. Always protect the amplifier from the water and keep it away from water sources. Minimize using this device on hot, humid weather, when possible. Do not put any objects filled with water.
-  2. The device itself and its ventilation gaps **CANNOT** be covered with **ANY** material, because of the possibility of overheating or fire outbreak.
-  3. Do not insert **ANY** object inside the device. Keep away from the children.
-  4. In case of device failure, contact your local vendor or the manufacturer. Do not try in **ANY** case to repair the device by yourself.
-  5. **ALWAYS** disconnect the power cable before cleaning the surface of the device. If the device is operating, turn it off with the main power switch, disconnect the power cable and **WAIT** for the device to cool down. Do not clean the device with chemicals and organic solvents. Wet micro-fiber cloth is recommended for cleaning the surface. Turn on the device **ONLY** after it is completely dry.

 6. Use the supplied line cable to power the device. The device is designed to work with **230V/50Hz (EU version)** or **115V/60Hz (US version)** mains grid with **grounding conductor (PE)**. Do not plug the device to the socket without the protective earth and in **ANY** case, do **NOT DISCONNECT** the **PE** conductor.

 7. Do not attempt to replace fuse with any object except the fuse that is prescribed by the manufacturer!

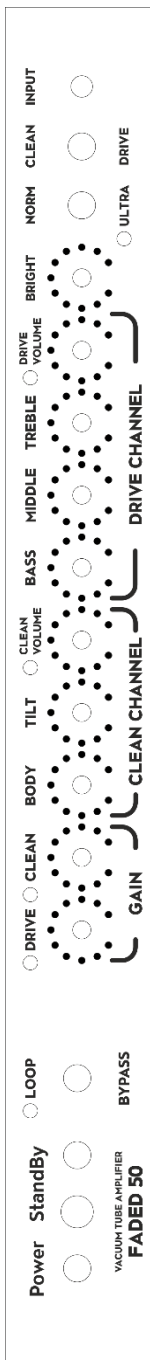
 8. Do not open case of the amplifier. All of the control devices are placed in the front or the back of the amplifier.

 9. Before turning the device on, make sure that the speaker is connected to the speaker output connector and make sure the impedance of connected speaker matches the value of the output connector on the back of the amplifier.

Technical parameters

RMS power	50W
Output impedance	4Ω / 8Ω / 16Ω
Channels*	Clean / Drive / Ultra Drive
Foot switch function	Clean / Drive / Loop / Ultra
Output stage tubes	2x 6L6
Preamp tubes	4x ECC83S
CLEAN channel corrections**	BODY, TILT
DRIVE/ULTRA channel corrections	BASS / MIDDLE / TREBLE
Ground loop protection	Yes
Effect loop	Yes
Effect loop type	Parallel
Presence (Bright) setting	Yes
Main fuse	230V: T2A/250V 115V: T4A/250V
Power supply EU/US	230V/115V @ 50-60Hz
Power consumption [W]	78W
Weight	13.2kg
Dimensions	602x250x250
Notes:	
* Channel ULTRA is a function of DRIVE channel	
** TILT sets ratio of BASS/TREBLE and TILT is amount of MIDDLE	

Control panel description



1. POWER

- Main switch of the device.

2. STANDBY

- Stand-by switch and signalization LED.

3. LOOP

- Effect loop control.

4. GAIN (Drive)

- Setting of gain for DRIVE channel.

5. GAIN (Clean)

- Setting of gain for CLEAN channel.

6. CLEAN CHANNEL (Body)

- Setting of middle for CLEAN channel.

7. CLEAN CHANNEL (Tilt)

- Setting of ratio between BASS/TREBLE for CLEAN channel.

8. CLEAN CHANNEL (Volume)

- Volume setting for CLEAN channel.

9. DRIVE CHANNEL (Bass)

- Setting of low frequencies for DRIVE channel.

10. DRIVE CHANNEL (Middle)

- Setting of middle frequencies for DRIVE channel.

11. DRIVE CHANNEL (Treble)

- Setting of high frequencies for DRIVE channel.

12. DRIVE CHANNEL (Volume)

- Volume setting for DRIVE channel.

13. BRIGHT

- Setting of high frequency gain richness for both CLEAN and DRIVE channel.

14. NORM/ULTRA

- Switch for addition of „ultra“ gain for DRIVE channel.

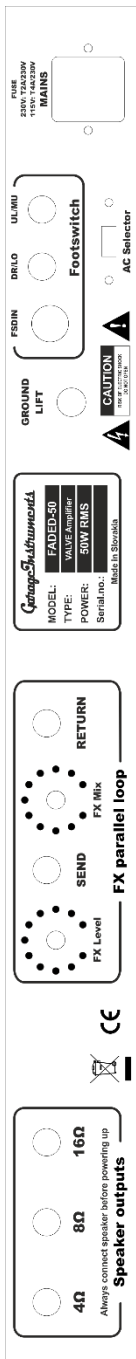
15. CLEAN/DRIVE

- Switching between CLEAN and DRIVE channel.

16. INPUT

- Amplifier input jack.

Back panel description



17. MAINS & FUSE

- Power supply input with fuse. WARNING: FUSE cannot be replaced with any object except the fuse that is prescribed by the manufacturer!

18. AC SELECTOR

- Switch for EU / US mains grid selection.

19. GROUND LIFT

- Switch for interruption of ground loop.

20. Footswitch (FSDIN)

- DIN input for the footswitch.

21. Footswitch (DR/LO)

- Input for connection of TRS footswitch. Switches between CLEAN/DRIVE channel and triggering on/off of the effect loop.

22. Footswitch (UL/MU)

- Input for connection of TRS footswitch. Triggers on/off „ULTRA“ function and MUTE.

23. SEND

- Amplifier output signal FADED-50 (DRY).

24. FX Level

- Setting of DRY signal level of FADED-50 amplifier.

25. RETURN

- Return of effect (WET) signal to FADED-50 amplifier.

26. FX Mix

- Setting of the effect loop ratio between DRY and WET.

27. Speaker 4Ω

- Output for 4Ω speaker (cabinet).

28. Speaker 8Ω

- Output for 8Ω speaker (cabinet).

29. Speaker 16Ω

- Output for 16Ω speaker (cabinet).

Amplifier control

A. Turning on the amplifier

Before turning on **check**, if speaker is connected to the right output connector (**n.27, n.28 or n.29**) according to the impedance of used speaker (cabinet). All switches on the front panel trigger down and fade out both volume controls **n.8 and n.12**.

Connect the enclosed line cable to connector **n.17 (Mains)** and **check if the right mains grid (US/EU) is set on the switch n.18 (EU-230VAC, US-110VAC)** and then connect the power plug to the mains socket. Turn on the device with POWER switch (**n.1**).

Red control light STANDBY starts flashing with 1 second interval, what means that tubes are warming up and amplifier is getting ready. After the light is stable (approx. 1min) you can turn on the output of the amplifier by switching the STANDBY trigger n.2 to the higher position.

You can extend the life of your vacuum tubes by using STANDBY switch if you turn on the STANDBY mode during the break¹ (up to 30mins).

B. Best settings

There is no such thing as best settings, because every each human ear/brain is unique and hears sounds differently. We set the controls to have wide range so that you can find the best sound for your hearing apparatus.

¹ It is not recommended in common to operate amplifier with tubes **heated up** in **STANDBY mode** longer than 30 minutes (red LED flashing) because of bad influence on life of vacuum tubes (cathode poisoning might happen).

C. Switching the channels

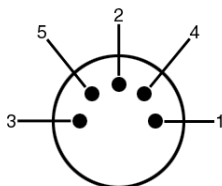
Switching channels CLEAN/DRIVE, switching to ULTRA and triggering the effect loop can be done directly on the front panel of the amplifier or by the footswitch provided by Garage Instruments or another TRS footswitch.

To enable footswitch, switching off (lower switch position) of the switch **n.3**, **n.14** and **n.15** is required.

For further information about connection of the footswitch, please read chapter D.

D. Footswitch connection

The original Garage Instruments footswitch distributed with Faded 50 is connected via DIN connector to **n.20** on the back of amplifier. Pinout of FADED-50 amplifier connector **n.20**:



Pin 1	LOOP
Pin 2	GROUND
Pin 3	MUTE
Pin 4	DRIVE
Pin 5	ULTRA

Correct topology of FS in case of using TRS footswitches:

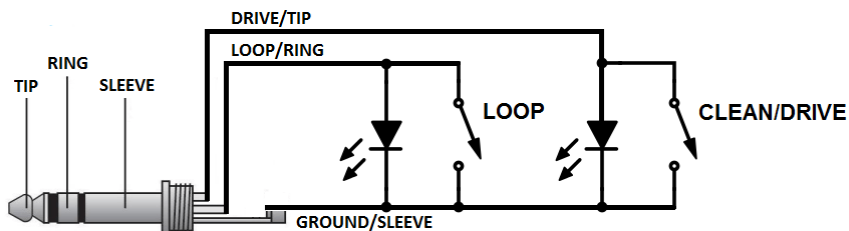


Fig. 1 - CLEAN/DRIVE and LOOP footswitch scheme

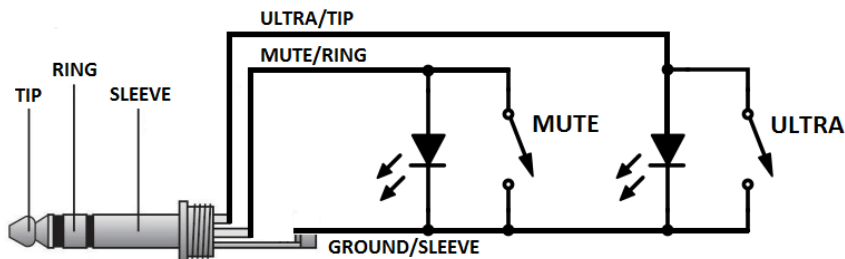


Fig. 2 - ULTRA and MUTE footswitch scheme

E. Effect loop connection

FADED-50 effect loop consists of back panel connectors SEND / RETURN (**n.23** and **n.25**), controls FX Level and FX Mix (**n.24** and **n.26**). Function of the effect loop is to put the external guitar effect in the way of amplifier audio chain (for instance delay, chorus, EQ an so on).

Connect the external guitar effect according to **fig.3** through 6.3mm MONO Jack/Jack cables. Fade out FX Level control and channel volume control (CLEAN and DRIVE). Trigger the LOOP switch **n.3** to the upper position so the LOOP control light lights up.

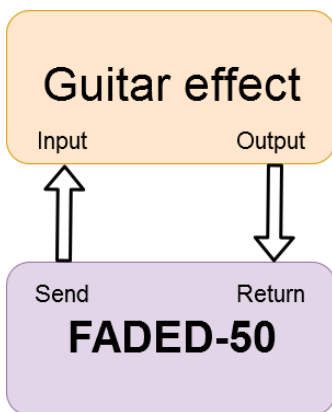


Fig. 3 – Connection of external guitar effect

After the connection try to add some volume and FX level. You should be able to hear the output from the speaker now. DRY /WET (no-effect and after-effect signal) ratio is now controlled by turning the FX MIX control (**n.26**).

Switching the control **n.3** or switching footswitch button, the effect loop is activated/deactivated. To change topology of the loop from parallel to series, set the FX Mix control to 100% WET.

F. Ground loop protection (GROUND LIFT)

FADED-50 amplifier is equipped with GROUND LIFT function, which can be activated/deactivated by switch **n.19**.

The meaning of this function is to disconnect the ground loop which most likely comes from using the effect loop (different grounding points) to eliminate disturbing hum noise.

The GROUND LIFT function disconnects this disturbing ground loop together with preserving all safety measures.

There is no need to use this function if disturbing hum is not present.

Please do not mistake common signal noise/hum of the amplifier itself or noise of single coil guitar pickup with noise caused by GROUND LOOP. Identifying the ground loop:

Compare the hum noise of amplifier without (only guitar, amplifier and speaker) and with respective effects connected to the effect loop or directly to the amplifier input.

Troubleshooting

Problem:

Amplifier is not working after turning on the main switch n.1.

Possible solution:

Check if the mains cable is connected to the amplifier and to the grid.

Problem:

Amplifier output is not working even after the warmup.

Possible solution:

a) Check if guitar is connected directly to the amplifier input and check all volume controls (guitar, amplifier, effect).

b) Check if the effect loop is not turned on at the same time when no effect is connected to the amplifier. **Also, check if FX Mix is not set to 100% WET.**

c) Check if STANDBY switch is turned ON.

d) Check gain and all correction controls on the respective channel. Also, check if MUTE is not turned ON.

e) Check if speaker is connected to the amplifier output.