

GKFX-1

Subsonic Filter

USER'S MANUAL



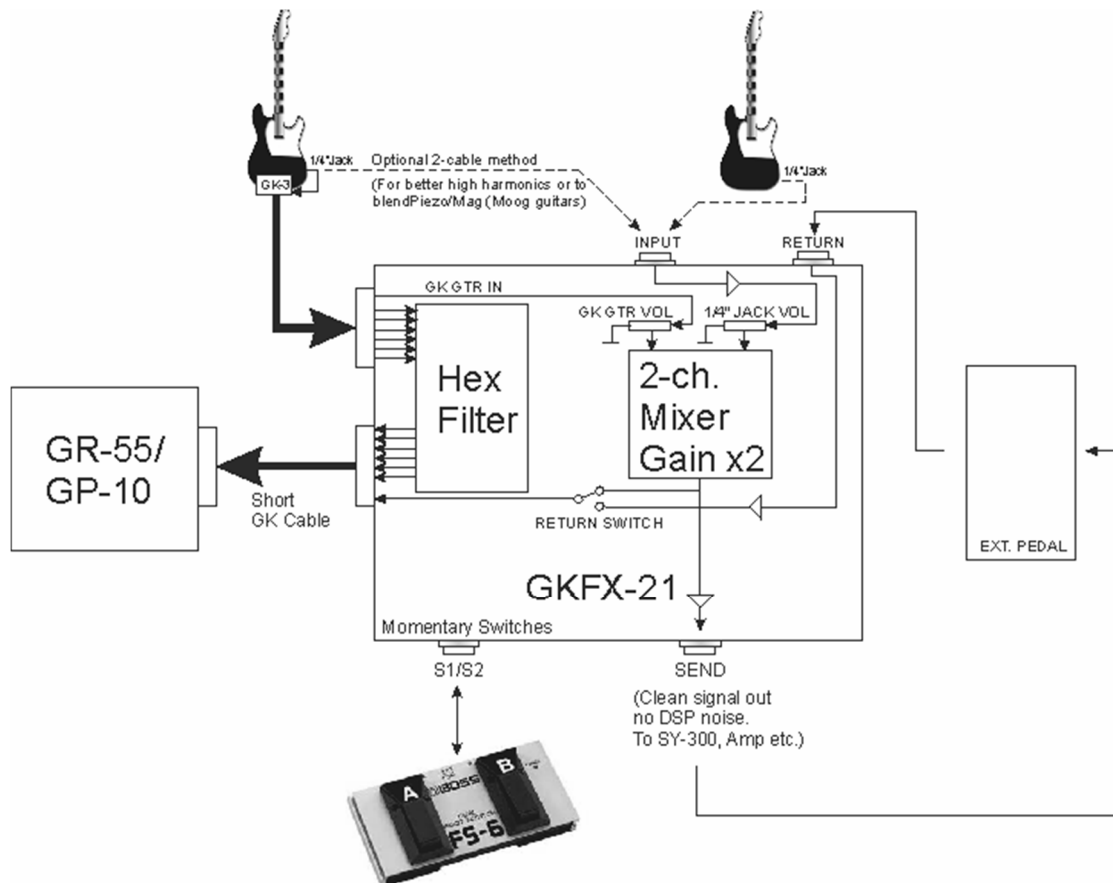
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GKFX-1 Subsonic Filter

INTRODUCTION



The GKFX-1 is to be connected between a 13-pin guitar and a synth unit. The synth unit provides power to the GKFX-1.

Make sure to connect the guitar to IN and the synth unit to OUT, otherwise either unit may be damaged. Do not turn on power until all connections are made.

This pedal combines six analog subsonic filters with an additional input jack, mix output jack and S1/S2 control jack (stereo connector for FS-6 or FS-7 dual foot switch).

HEX FILTER

The GKMX-1 contain specially designed hex high-pass filters to improve PCM/COSM tracking and ghost note immunity as well as lowering noise when palm muting. Most noted effect on GR-55 and VG-99 when using Piezo 13-pin guitars.

This filter is not intended for bass or other instruments than guitar.

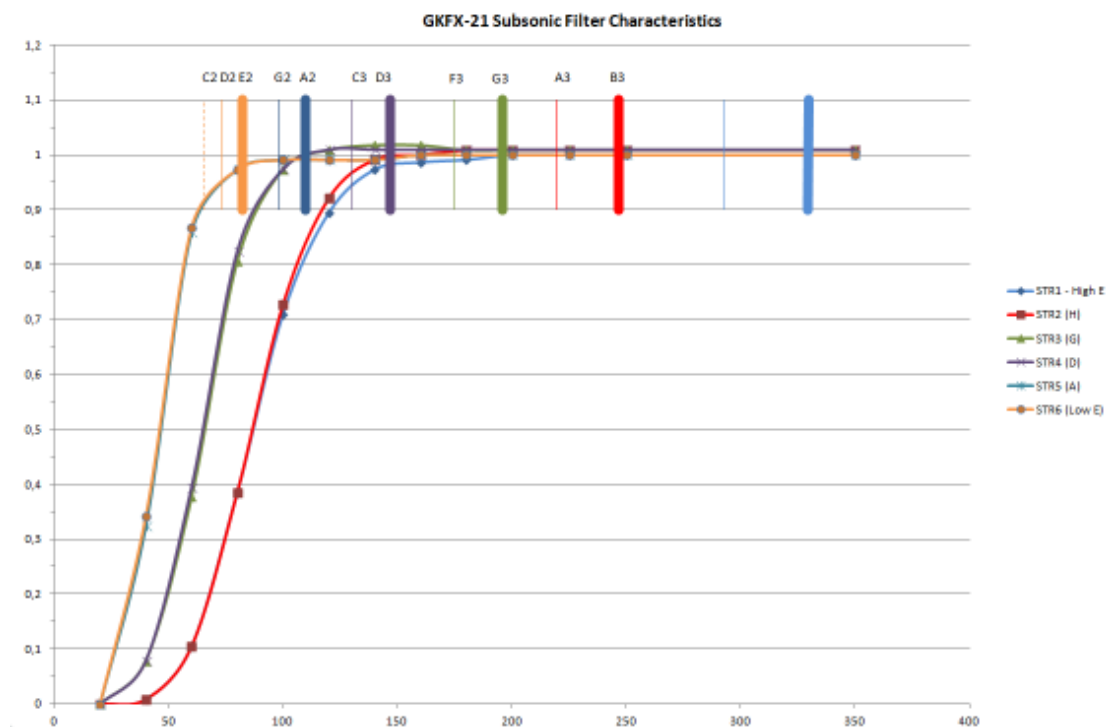
The filters are analog and introduce no additional latency. This unit has the same characteristics as other Piezo filters on the market. Every unit is carefully hand-built, tested and measured.

The Subsonic Filter consists of six filters (one for each string), eliminating rumble and low frequency noise. The High-Pass filters remove frequencies below:

50Hz (string E and A),

75Hz (string D and G)

100Hz (string B and High E)



13-PIN CONNECTORS

The 13-pin connectors are soldered to a printed circuit board. Please do not use more force or violence than required.

Connect the Guitar to the connector marked "IN" and a Guitar Synth to the output marked "OUT". Do not turn on power until all connections are made.

The current consumption is abt. 50 mA (25 mA from the +7V and 25mA from the -7V rail provided by synth unit)

FILTER ON/OFF SWITCH

When this switch is in ON position the HEX Subsonic Filter is used. When it is in OFF position the HEX GK signal is connected directly between IN and OUT without filtering.

INPUT JACK

The buffered INPUT jack allows you to connect any audio source and mix it with the pin 7 (GK GTR) signal. The audio source may be a second regular guitar or signal from secondary pickups on your instrument. You may also consider using the two-cable method and use a high quality guitar cable connected to your regular 1/4" guitar jack for richer harmonics (the regular pickup signal (pin 7) through a GK cable is known to damp higher frequencies).

If a regular guitar is connected only effects not related to hex processing can be used in the synth unit.

VOLUME CONTROLS

The unit has two potentiometers to control:

- A) The volume of the GK pin7 regular guitar signal (marked GK GTR)
- B) The volume of the signal from the INPUT jack (marked INPUT)

When the pots are in the minimum position (anti-clockwise) no sound will be reproduced. In the mid position the gain is x1 (+0dB) and if set to max position the gain is x2 (+6dB). Each input has an active input stage.

The mix of these two inputs is sent to pin 7 of the output GK connector (the dedicated pin for regular pickups).

SEND JACK

The jack marked "SEND" allows you to "hi-jack" the mix of GK GTR and INPUT jack signal. Connect this jack to a guitar amplifier or other high impedance device for high quality sound un-polluted by digital signal processors. You may also connect this jack to the input of various guitar pedals and feed their output to the RETURN jack, building pre-synth FX loop.

RETURN JACK

If you connect the SEND jack to a guitar pedal you connect the output of the pedal back to the RETURN jack. When a plug is inserted in this jack this RETURN input will be used instead of the GK GTR and INPUT jack mix.

S1/S2 JACK

The jack marked S1/S2 allows you to connect a Roland FS-6 or FS-7 compatible dual footswitch to control the S1 and S2 commands to the synth unit. Here you must use a stereo cable. The stereo jack has three connections:

TIP: When momentarily connected to ground (Sleeve) this corresponds to a S2 command (GK connector pin 11).

RING: When momentarily connected to ground (Sleeve) this corresponds to a S1 command (GK connector pin 10).

SLEEVE: Ground

USING A FS-6 (The FS-6 needs separate power to operate with GKFX-1) :

Set switch to: Momentary

A-Patch down

B- Patch Up

USING A FS-7 (The FS-7 needs separate power to operate with GKFX-1) :

Set switch to: Momentary

A-Patch down

B- Patch Up

GTR Jack input impedance: Abt. 1 MΩ

Power Consumption: 25 mA

WARRANTY

PRIMOVA WARRANTS THE GKFX PRODUCT FOR ONE YEAR. TWO YEARS IF INSIDE EU.

LIMITATION OF LIABILITY AND WARRANTY

NO WARRANTIES OF DAMAGES TO CONNECTED EQUIPMENT OR CABLES.

NO WARRANTIES IF UNSUITABLE VOLTAGE HAS BEEN APPLIED TO CONNECTORS.

PRIMOVA AB ONLY WARRANTS THE GKFX UNIT ITSELF.

CONNECTING THE GKFX UNIT OR THE GKFX BOARD, TO COMPONENTS SUCH AS GUITARS OR SYNTHESIZERS IS AT OWN RISK.

IN NO EVENT WILL PRIMOVA BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR THE INABILITY TO USE THE GKFX-UNIT EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN PARTICULAR, PRIMOVA IS NOT RESPONSIBLE FOR ANY COSTS INCLUDING BUT NOT LIMITED TO THOSE INCURRED AS A RESULT OF LOST PROFITS OR REVENUE, LOSS OF USE OF THE GKFX PRODUCT, LOSS OF DATA, THE COST OF SUBSTITUTING THE GKFX-UNIT, OR ANY CLAIMS BY THIRD PARTIES.

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