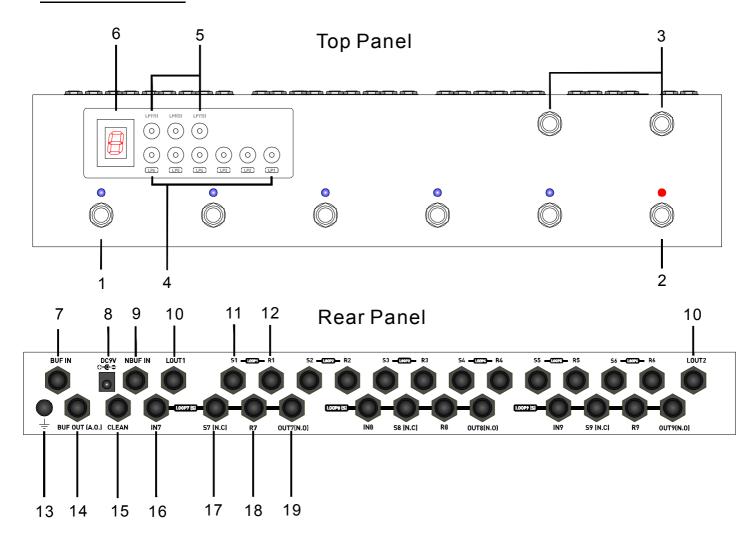


GEC9 OWNER S MANUAL

Guitar Effects Commander

Be sure to read this manual before using the product in order to ensure safe operation.

1- Overview



(1) PRESETS

These switches instantly recall the settings stored in the corresponding PRESET 1-5 when pressed, press the active PRESET switch again will bypass whole loops. All presets are stored in nonvolatile memory, will not be erased even without power supply.

(2) MUTE/CLEAN

This switch instantly shuts off the LOOP OUT (LOUT1&LOUT2) and switches the INPUT to CLEAN jack, press it again will get back to normal operation.

(3) BANK UP / DOWN

BANK UP/DOWN switch increases/decreases the BANK, there are 10 BANKS (A,b,C,d,E,F, G, H, I, J) available.

(4) LOOP1~6 Program Keys

These keys turn on / off LOOP1 to LOOP6 separately, the signal goes through the LOOP when a LOOP is on(LED on), LOOP off (LED off) means the LOOP is bypassed.

(5) LOOP7~9 Program Keys

These keys turn on / off LOOP7 to LOOP9 separately.

(6) NUMERICAL BANK DISPLAY

It indicates the active BANK.

(7) BUF IN (Buffered Input)

Signal input via this jack is fed to a buffer circuit prior to being sent to the loops.

(8) DC Jack

5.5 x 2.1 mm type, use negative center DC 9V / 500mA power supply.

(9) NBUF IN (Non Buffered input)

This jack bypasses the buffer circuit and directly sends singal to the loops. the BUF IN jack is automatically disconnected when a plug is inserted into it.

(10) LOUT1 and LOUT2

Output jacks for series loops (LOOP1 \sim 6), the input signal via buffered or non-bufferd Input jacks reaches the two jacks via 6 series loops, LOUT 1 and LOUT2 jacks are Internally connected in parallel.

(11) S1

This is send jack of LOOP1, connects to input jack of guitar effect.

(12) R1

This is return jack of LOOP1, connects to output jack of guitar effect.

(13) EARTH TERMINAL

Connect the commander frame to earth through this terminal.

(14) BUF OUT (ALWAYS OUTPUT)

Singal from INPUT goes through a buffer circuit, one branch feeds to LOOP1 ~LOOP6, The other branch feeds to BUF OUT(A.O) jack.

(15) CLEAN

When LOUT is muted, the input signal via buffered or non-bufferd reaches this jack.

(16) IN7

Input of separate LOOP7.

(17) S7(N.C)

SEND jack of separate LOOP7, this jack should be connected to the input on effect unit. When LOOP7 is on, signal from IN7 reaches SEND jack, enters external effect then back to R7 (RETURN jack), finally reaches OUT7 jack. When LOOP7 is off, the signal from IN7 directly reaches OUT7.

This jack also functions as latching N.C (Normally Closed) switch which works as footswitch to control amplifier channel. The jack is "closed"/"open" when LP7 is off/on.

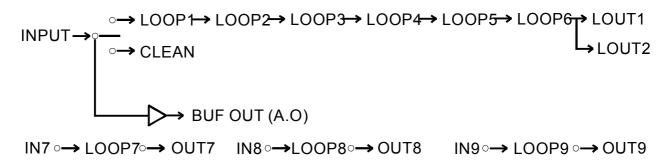
(18) R7

RETURN jack of separate LOOP7.

(19) OUT7(N.O)

OUTPUT jack of the separate LOOP7, This jack also functions as latching N.O (Normally Open) switch which works as footswitch to control amplifier channel. The jack is "open"/"closed" when LP7 is off/on.(Note: Leave RETURN7 unplugged)

2- Signal Path



Guitar signal feeds into GEC9 input (NBUF IN or BUF IN), enters series LOOP1~LOOP6 when MUTE switch is off, then outputs from LOUT1 and LOUT2. If MUTE is on, the signal outputs directly to CLEAN jack. The BUF OUT jack always outputs buffered input signal.

3- Recall Presetting and Bypass whole loop

Press preset switches to recall presettings, the corresponding LED lights on when a preset is active. Press the active preset switch again will bypass the whole loop, the corresponding LED will be turned off.

Recall / bypass operation will not change the MUTE status.

5- Mute / CLEAN

Press MUTE /CLEAN switch to mute the LOUT and send input jack signal to CLEAN jack, the MUTE status LED will turn on. To cancel MUTE function by pressing this switch again. MUTE function works individually, recall / bypass opertations do not change MUTE status.

6- Bank UP/DOWN

GEC9 have 10 banks from A to J, each bank store 5 presets. Press BANK UP or BANK DOWN switches to change the bank, the numerical bank display blinks when the bank is about to be changed. Press any preset switch to recall new bank presets.

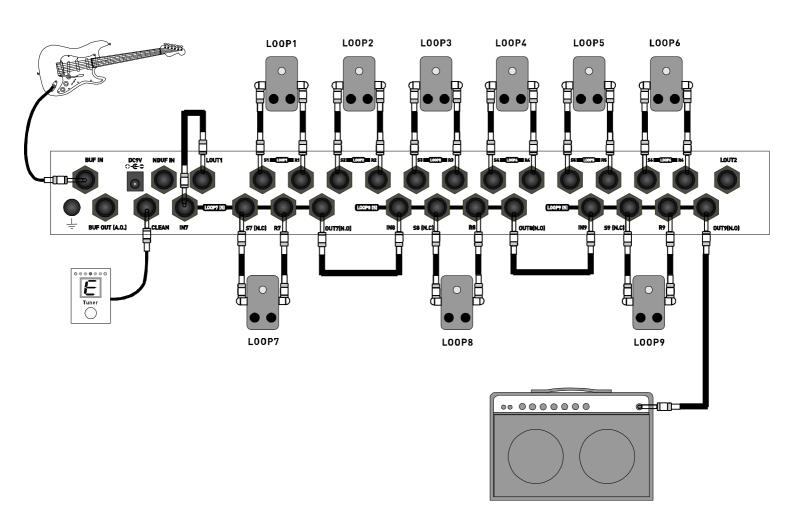
7- Programming

Program keys are inactive when the pedal works in bypass mode. (All presets LED are off), the keys will be active when a preset is active, press the program keys to turn on/off corresponding Loops, the loop status LED will be on/off accordingly. All loop on/off status are automatically stored into non-volatile memory which will be still available even the power supply is removed.

8- Specifications

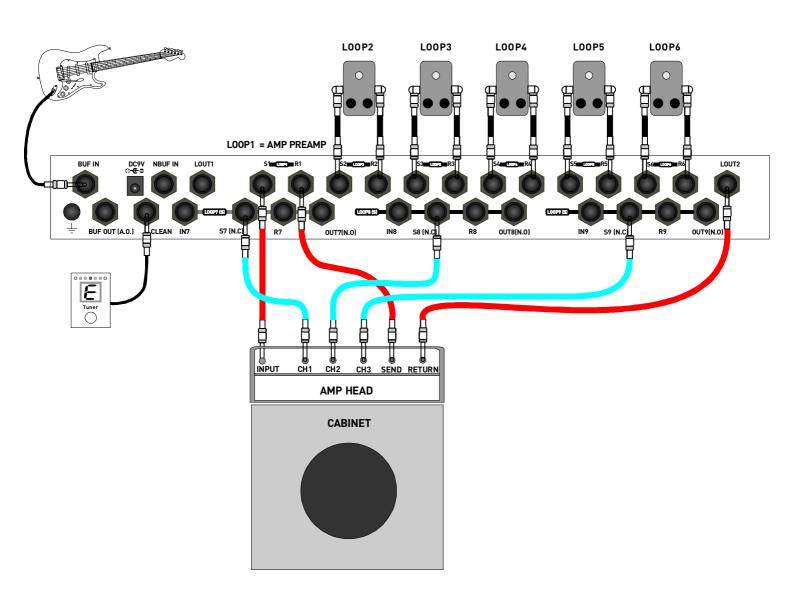
Dimensions	16.9(L) x3.8(W)X1.22(H) inch
Weight	1800g
Power Supply	
Current Drain	max. 350mA
Input impedance	500K ohm
Output impedance	10K ohm
Max. Buffered Input Vp-p	9V
Max. Non-Buffered Input Vp-p	30V

Typical Configuration 1 - Connect 9 pedals



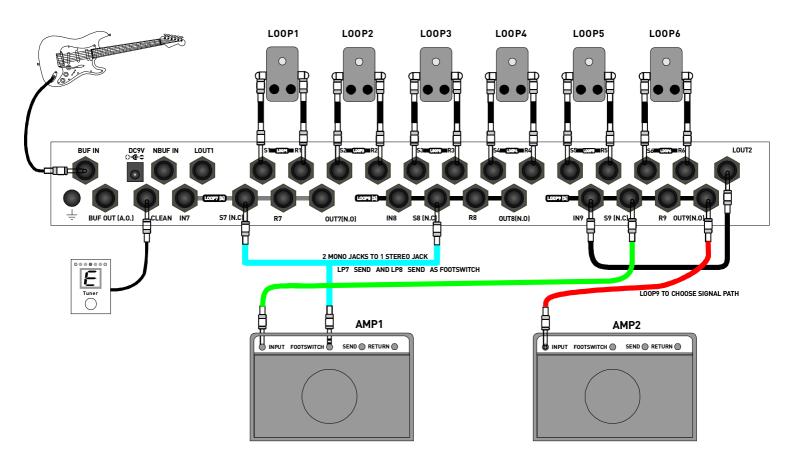
Configuration 2 - Separate loops as footswitch

In this configuration the separate loop send jack S7, S8, S9 are used to control the amplifier channels. The amplifier preamp is connected to GEC9 LOOP1, makes it possible to add modulation effects to the preamp.



Configuration 3 - Use multiple amplifiers

In this configuration, the separate loop9 is used to choose signal path to different amps.



Configuration 4 - Control Pedals in AMP ext. loops

This setup put 6 pedals (LP1,LP2,LP3,LP4,LP5,LP6) in front of AMP and 3 pedals (LP7,LP8,LP9) into AMP LOOP.

Preset example (1=ON, 0=OFF):

PRESET1 - LP1,LP2...LP7,LP8,LP9 = 1 0 1 0 1 0 1 0 1, the signal flow is GUITAR-FX1-FX3-FX5-Preamp -FX7-FX9- Power AMP

PRESET2 - LP1,LP2...LP7,LP8,LP9 = 0 1 1 1 1 1 0 0 1, the signal flow is GUITAR-FX2-FX3-FX4-FX5-FX6-Preamp -FX9-Power AMP

