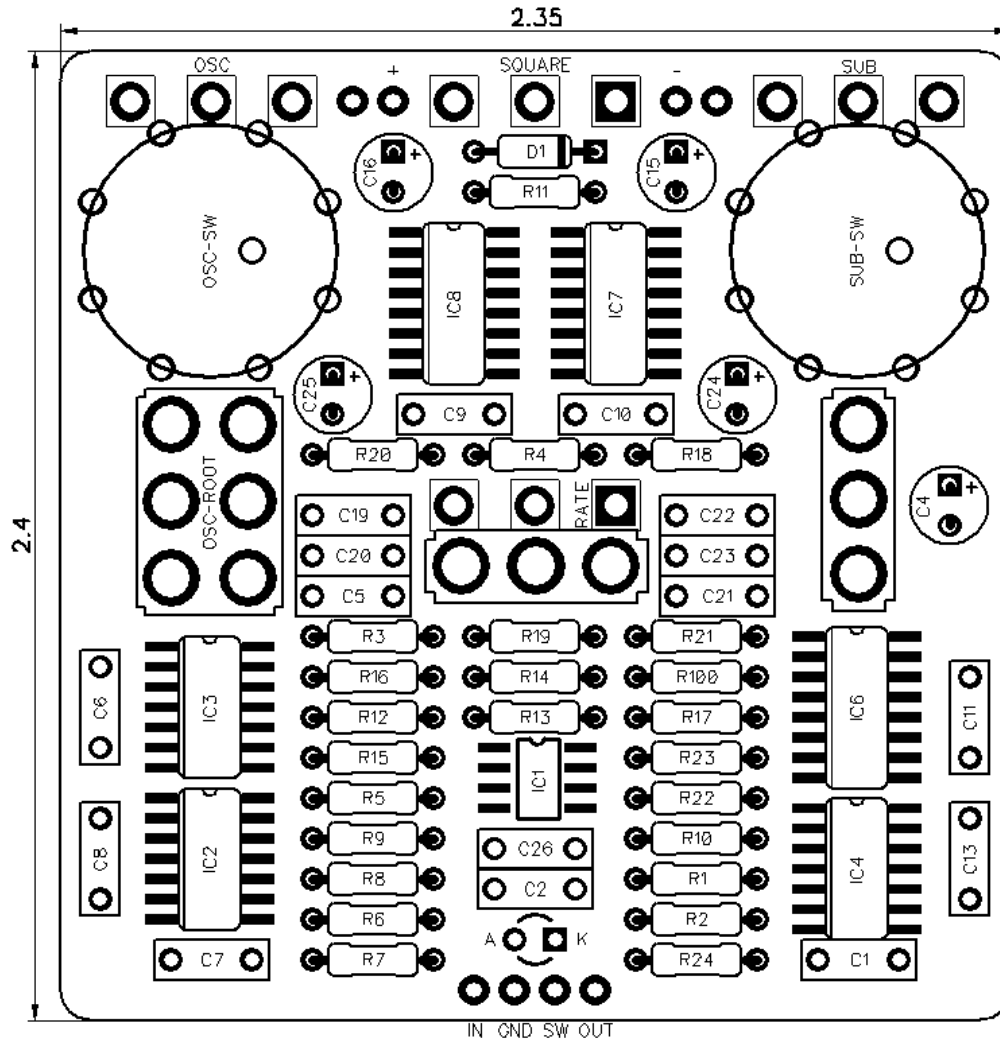


PedalPCB

Mini Heterodyne Receiver

Revision 03.31.19



Controls

Square – Controls level of square wave fuzz

Sub – Controls level of subdivided frequency

Super – Controls level of multiplied frequency

Sub Interval (Rotary switch) – Sets the interval of subdivided voice

Sub Root (Toggle switch) – Selects the source of the subdivided root

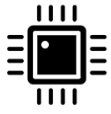
Super Interval (Rotary switch) – Sets the interval of the multiplied voice

Super Root (Toggle switch) – Selects the source of the multiplied voice

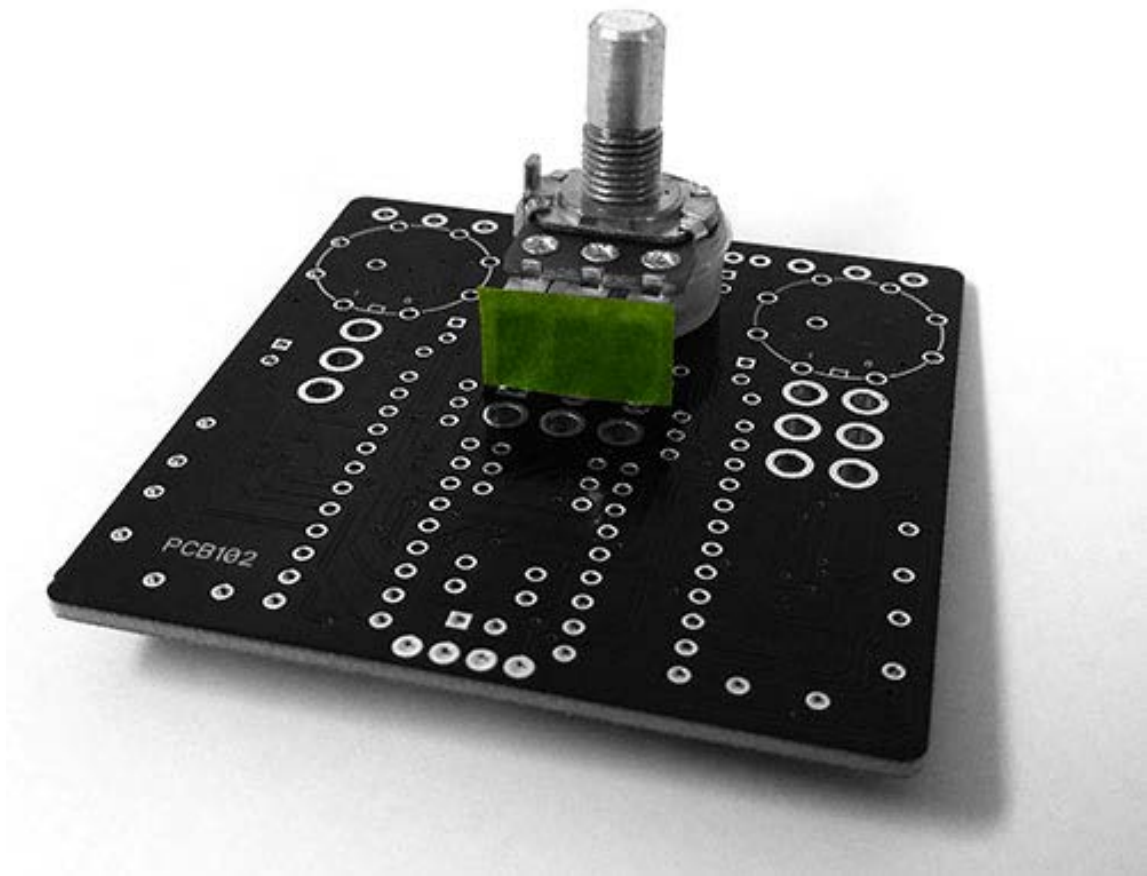
Portamento / Vibrato (Toggle switch) – Selects between Portamento / Vibrato pitch modulation

Modulation Rate – Controls the rate of pitch modulation

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Important Assembly Instructions



Apply a small piece of insulating tape (Kapton tape, electrical tape, etc) to the lugs of the Modulation Rate potentiometer to prevent contact with the metal housing of the Portamento/Vibrato toggle switch.

RESISTORS

R1 1M
R2 1K
R3 1M
R4 47K
R5 47K
R6 470K
R7 1M
R8 470K
R9 10K
R10 10K
R11 10R
R12 10K
R13 10K
R14 10K
R15 10K
R16 1K
R17 1M
R18 47K
R19 10K
R20 100R
R21 10R
R22 100R
R23 10M
R24 100K
R100 4K7

CAPACITORS

C1 100p
C2 100n
C4 10u
C5 1u
C6 100n
C7 22n
C8 100n
C9 100n
C10 100n
C11 100n
C13 100n
C15 100u
C16 100u
C19 1u
C20 1u
C21 1u
C22 1u
C23 100n
C24 22u
C25 2u2
C26 470p

INTEGRATED CIRCUITS

IC1 TL072CDR
IC2 CD4069UBM
IC3 CD40106BM
IC4 CD4024BM
IC6 CD4046BNSR
IC7 CD4017BM
IC8 CD4017BM

DIODES

D1 1N5817

POTENTIOMETERS

OSC B100K
RATE A500K
SQUARE B100K
SUB B100K

SWITCHES

OSC-SW Mini 1P8T - <https://www.pedalpcb.com/product/mini-1p8t/>
SUB-SW Mini 1P8T - <https://www.pedalpcb.com/product/mini-1p8t/>
SUB-ROOT SPDT (On/On) - *Short shaft toggle recommended*
GLIDE SPDT (On/On) - *Short shaft toggle recommended*

OSC-ROOT Type-2 DPDT (On/On/On)*

IMPORTANT NOTE: OSC-ROOT switch MUST be a Type-2 DPDT On/On/On toggle switch.

The following are known to be compatible parts:

100-DP6-T200B1M1QE (Short Shaft) **** RECOMMENDED ****
<https://lovemyswitches.com/taiway-dpdt-on-on-on-switch-solder-lug-short-shaft/>

100-DP6-T100B1M1QE (Long Shaft)
<https://lovemyswitches.com/taiway-dpdt-on-on-on-switch-solder-lug-long-shaft/>

1MD6T1B1C0M1QE (Long Shaft)
<http://smallbear-electronics.mybigcommerce.com/dpdt-on-on-on-solder-term/>



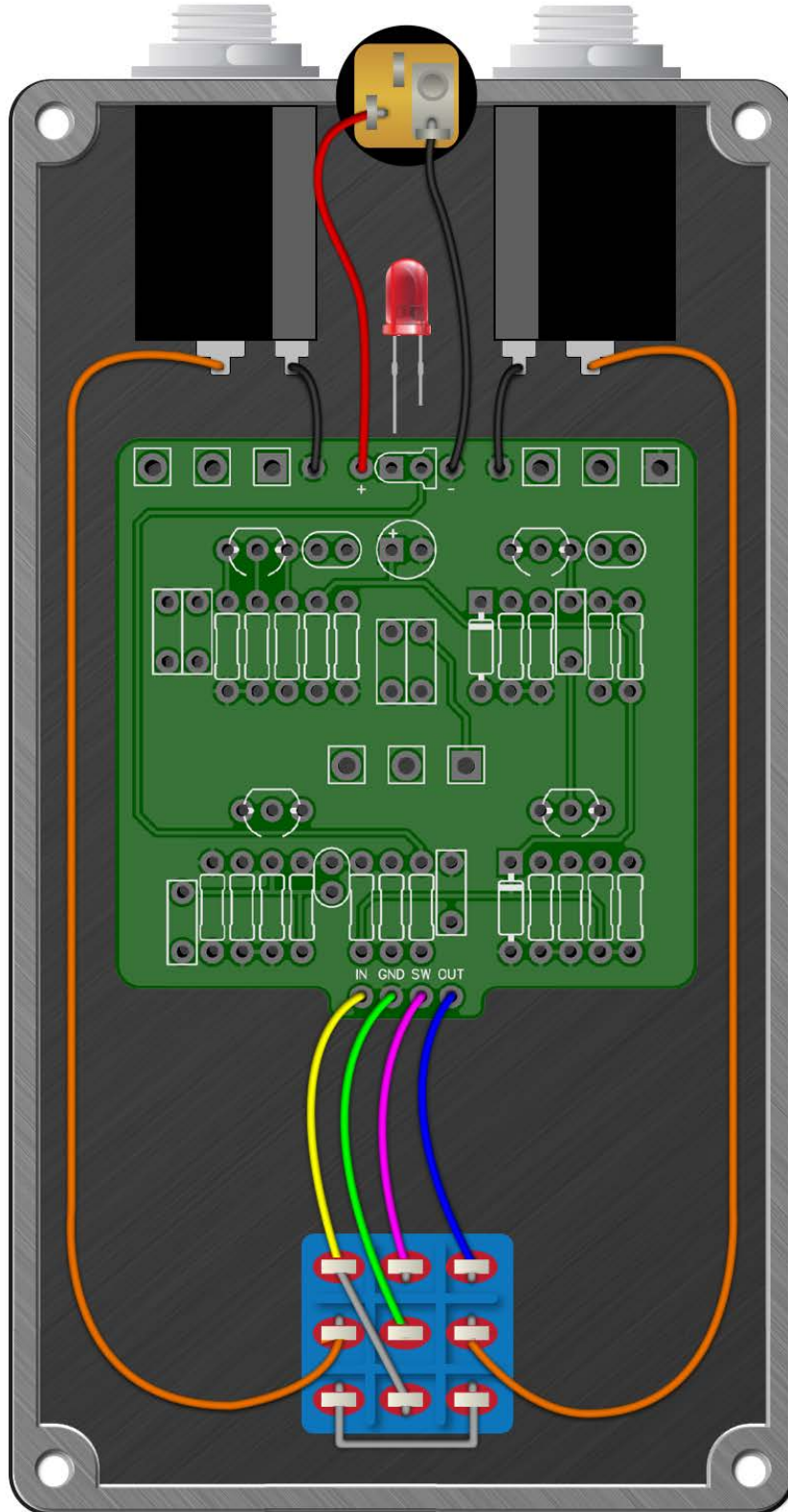
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Schematic coming soon....

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Wiring Diagram



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Drill Template

125B enclosure with top mounted jacks

