PedalPCB

Intelligent Relay Bypass
Datasheet

The **PedalPCB Intelligent Relay Bypass Module** provides silent relay switched bypass with intelligent switching functions.   The pinout is directly compatible with most true-bypass PedalPCB circuit boards. A latching relay is used for low power consumption.

Changing Modes
Holding down the footswitch while applying power cycles to the next mode.   The mode setting is persistent and will be retained until changed again.

Standard Mode
Pressing and immediately releasing the footswitch toggles the effect on or off.

Holding down the footswitch while the effect is active will momentarily bypass the effect until the footswitch is released.

Auto-On Mode
The Auto-On function automatically engages the effect when power is applied. This is useful for always-on effects or effects used in a looper or rack setup.

Channel Switching Mode
In Channel Switching Mode is designed for use in multi-effects pedals. Only one effect is activate at a time. Pressing any footswitch instantly activates that effect and bypasses any other active effect.

Relay Bypass Modules must be interconnected by the CTRL pads for Channel Switching Mode to function.

Parts List

RESISTORS (1/4W)
R1   10R
R2   10K
R3   100K

R3 is only required for Channel Switching Mode

CAPACITORS
C1   100n
C2   100n
C3   22n
C4   100u

DIODES
D1   1N5817
D2   1N5817

SEMICONDUCTORS
IC1   L78L05
IC2   ATTINY13A *Included*
Q1   2N3904

RELAYS
K1   TQ2-L-5V

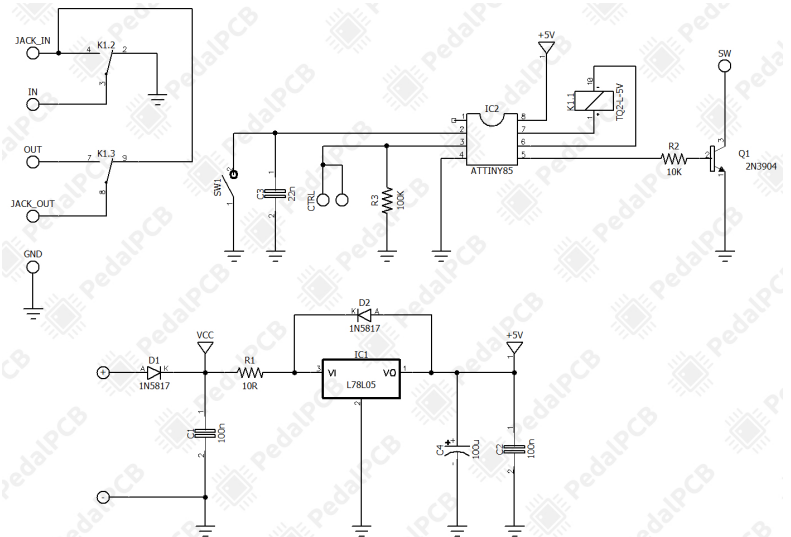**SWITCHES**
SW1   Momentary Footswitch

Schematic

Board Assembly