Personalized Software’s TimeKlock terminal uses two 10A 250V AC relays having a six screw terminal block accessible inside the case which is used to drive two separate loads. These circuits could be used to unlock a door strike, sound a door chime, or flip a light on momentarily.

For instruction purposes we will assume that the terminal will control a door lock. Here are some sample circuits:

The relays provide contacts to a switch only; the TimeKlock Terminal does not provide a power source for the door lock. The design of the terminal is intended for the terminal to be part of the circuit that is to be closed for the door to unlock. Once the door lock has been installed simply include the terminal as part of the circuit so that it can make or break the connection resulting in the locking or unlocking the door lock.

The two relays inside the USB Terminal are wired to a six screw terminal block which is divided into two groups of three terminals. The screw terminals are as follow for each group; NC – normally closed, NO – normally opened, and C as the common between NC and NO. NO is typically used for solenoid type locks where NC is typically used for magnetic type locks.

There is no set polarity for the relays; either side of the circuit can be attached to either end of the relay. When including the terminal in the door lock circuit, it does not matter which wire connects to which end of the relay. To attach the wires you will need to remove the wire port plug located on the right side of the base.

**Technical Note 1:** The relay contacts have a maximum contact rating of 10A @ 250V AC. The PCB that the relays are mounted to does not carry the same rating. A safe usage range for the PCB is 5A or less, for short periods of time (less than 15 seconds). If you need to drive a larger load, use either diagram 2 or 3 above.

**Technical Note 2:** Although you can use 120V AC directly into the case, it is not recommended for the safety of the children and staff. If you have to use 120V AC use every precaution to insulate the wires and keep people from tampering with the case. This may include sealing the case with tape or screws.