Personalized Software offers a terminal (or “Time Clock”) for use with its attendance-tracking software, Time Manager. **This terminal uses two dry reed relays having 4 screws as contacts on the back of the terminal to open or close two external circuits.** These circuits could be used, for example, to unlock a door strike, sound a door chime, or flip a light on momentarily. For purposes of simplicity, assume that the terminal will control a door lock.

![Diagram 1](image1.png)  
**Diagram 1**

Notice that these are contacts to a switch only; the 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. That is, 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, locking or unlocking the door lock.

By default, the switches inside the terminal are open (and this behavior cannot be changed). Thus, if you intend for the terminal to be used to unlock the door, make sure that the door lock will be locked when the circuit through the terminal is open. Conversely, of course, that also means making sure that the door unlocks when the circuit through the terminal is closed.

There is no set polarity for the switches. That is, 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.

**Technical Note:** The dry reed contacts used for the relays have a maximum contact rating of 10 VA (e.g. 20 V DC @ 500 mA). The maximum switched voltage is 100 V DC. If more voltage is necessary, use the terminal to control a more powerful external relay. Of the two diagrams above, diagram 1 shows how to connect the door lock (“load”) using a solid state relay. Diagram 2 shows how to connect multiple “loads” (e.g. door lock and chime) using a standard mechanical relay.