GUARDIAN WIRING REFERENCE

ALERT: BATTERY MUST BE CONNECTED BEFORE SOLAR for the system to work and so the solar regulator does not see the battery in a fault condition.

SOLAR REGULATOR WIRING

TERMINAL BLOCK 1

DOOR SWITCH WIRING

DOOR	RED
COM	BLACK

AP22 HARNESS WIRING

COM	YELLOW/BLACK
N.O.	YELLOW/WHITE
DC-	BLACK
DC+	RED

AP22 HARNESS WIRING (TXDOT)

COM	WHITE/YELLOW
N.O.	RED
DC-	WHITE/BLACK
DC+	WHITE/RED

TERMINAL BLOCK 2 WIRING SCHEMATIC

ALERT: BATTERY MUST BE CONNECTED BEFORE SOLAR
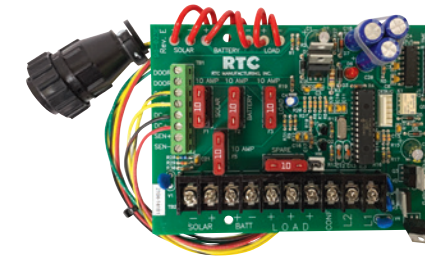

SOLAR   BATTERY   LED 1   LED 2   LED 3
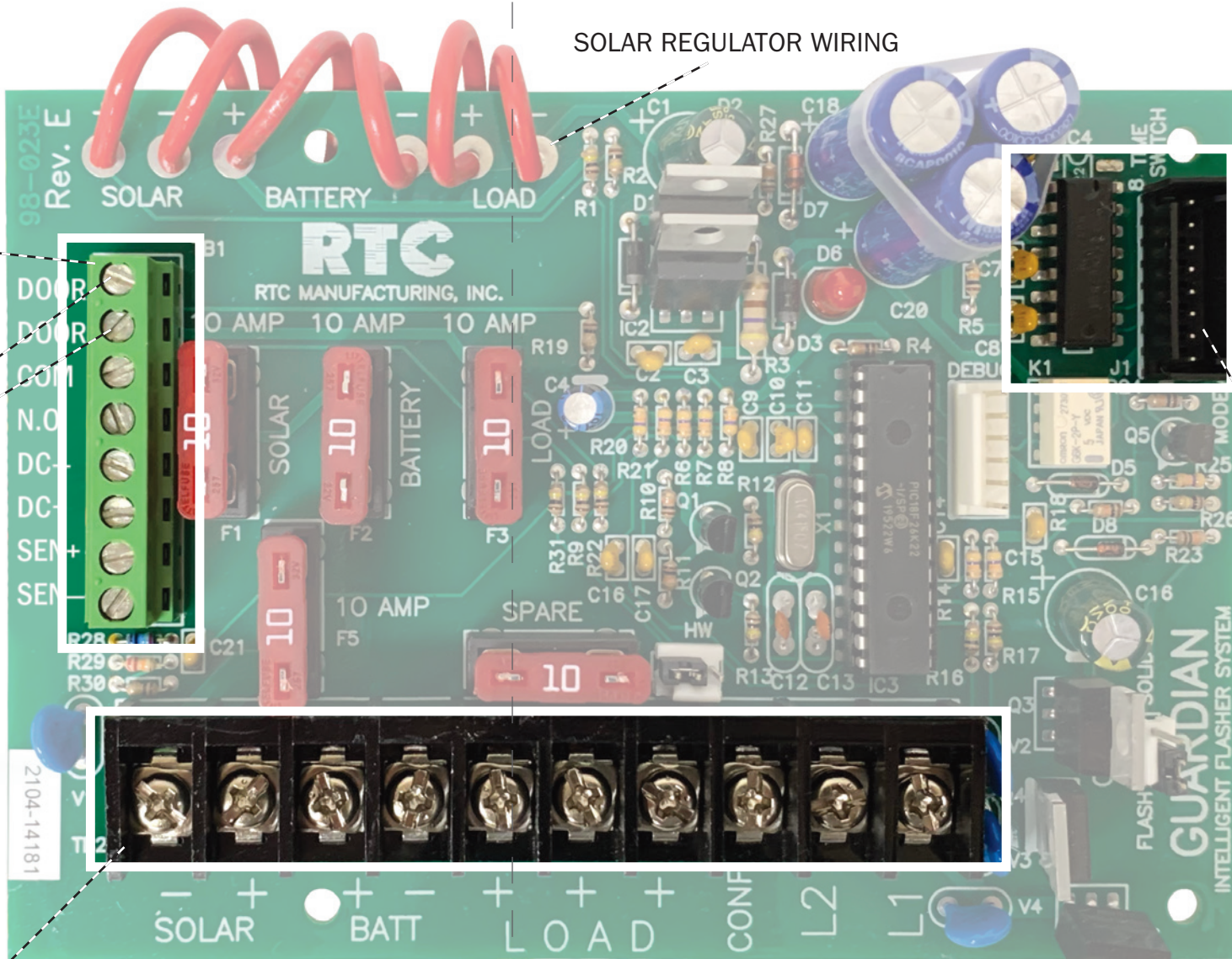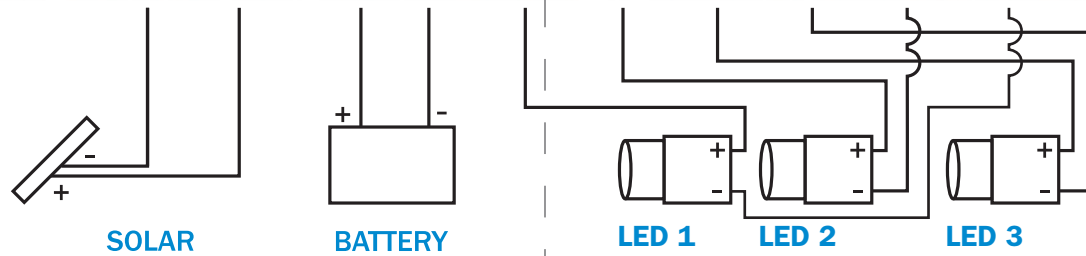
J1 WIRING

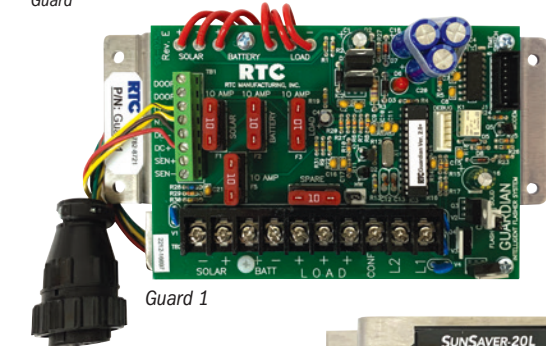# RTC | GUARDIAN SERIES

Intelligent Flasher System Installation Guide for the GUARD, GUARD1 and GUARD2

Guard

Guard 1

Guard2

22123/082922

RTC-TRAFFIC.COM

Step 3 – Mount Guardian Series Product

Follow the instructions based on the specific Guardian Series product you are installing:

Guard: *Remove existing RTC flasher control board by unscrewing it from the panel. The Guard circuit board can be installed using the existing mounting holes. Use the provided plastic screw in the mounting hole beneath BATT+ to reduce the possibility of an accidental short. You can use existing screws for the remaining mounting holes.*

Guard1: *The Guard1 needs to be installed directly beneath the existing solar regulator and close to where the AP22 and M2M products are/will be installed. Drill the provided self-tapping screws through the mounting holes in the silver bracket to secure the Guard1 to the cabinet in the proper location.*

Guard2: *The Guard2 needs to be installed close to where the AP22 and M2M products are/will be installed. Drill the provided self-tapping screws through the mounting holes in the silver bracket to secure the Guard2 to the cabinet in the desired location.*

Step 4 – Mount AP22 and M2M

If AP22 was removed from the cabinet during Step 2, remount the AP22 to the cabinet on the right-hand side of the Guardian product using existing hardware. If you are installing AP22 for the first time, drill three 8/32" x ½" screws through the mounting holes and into the cabinet to the right side of the Guardian product. The M2M installs directly onto the AP22 using the provided M2M mount.

Step 5 - Connect Solar Regulator *(see Guardian wiring reference on back)*

Please Note: *Connecting the solar regulator is only necessary if you are installing a Guard or Guard1 product. If you are installing a Guard2, skip to Step 6.*

The Guardian is equipped with six red embedded wires which correlate to the terminal positions on the solar regulator. When connecting these wires, **it is important to make the connections in the following order:**

1. Disconnect all wiring currently connected to the solar regulator
2. Connect the Battery + and Battery - wires to the solar regulator
3. Connect the Solar + and Solar - wires to the solar regulator
4. Connect the Load + and Load - wires to the solar regulator

Step 6 - Connect AP22 Time Clock and M2M *(see Guardian wiring reference on back)*

Connect the new AP22 wiring harness (attached to Guardian board) to the time clock. If any problem arises, see back of guide for terminal block 1 wiring diagram.)

Connect the Guardian to the cell modem using the provided connection harness labeled "modem/radio".

Step 7 – Install Door Switch *(optional)*

Please Note: *In order for the Guardian door-monitoring feature to work, a door switch must be ordered and correctly installed. Door switches do not come standard with Guardian Series Products, but can be purchased separately from RTC and shipped along with your order.*

The door switch operates as the "lever" of the switch is pressed in towards the black base of the switch. The door switch needs to be installed in a position & location that allows the cabinet door to press in the switch "lever" when the cabinet door is closed and let off "lever" when the cabinet is open. This will vary from cabinet to cabinet, but typically the side of the inside lip of the cabinet works well.

Choose a location that follows the above guidelines and mount the door switch using a drill and the provided mounting screws. **Using the flathead screwdriver, connect the red wire to the top DOOR terminal and the black wire to the bottom DOOR terminal on TB1.** Incorrect wiring can result in damage of product. See back of guide for wiring diagram.

Step 8 - Connect Cabinet Components to Terminal Block 2 (TB2)

Take the Battery +, Battery -, Solar + and Solar - conductors (previously disconnected in Step 1) and connect them to terminal block 2 on the Guardian Flasher Circuit Board.

ALERT: BATTERY must be connected before SOLAR for the system to work. We recommend the connection sequence as: 1) BATTERY, 2) SOLAR and then 3) LEDs.

Use the following TB2 schematic diagram as a reference:
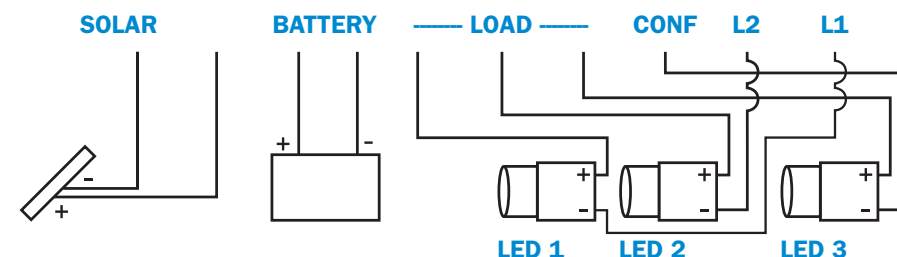
Step 9 - Setup Guardian Series Product in RTC Connect™

After the hardware installation is complete, the Guardian system must be set up in RTC Connect. Detailed steps can be found in the Quick Start Guide in RTC Connect. To access the guide, follow these steps:

1. Download & Open RTC Connect Software
2. Log In
3. Click on "Utilities" on the Left Tool Bar
4. Select "Quick Start Guide"
5. Click on the "Adding A Guardian" title and follow directions