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Re: Certification for Martec DM-3003 Transmitter  
Model: DM-3003  
FCC ID: JCQ993  
IC: 1907A-993

### USER'S MANUAL INFORMATION

**(PRELIMINARY)**

The User's Manual is in preparation. The following material will be contained in the manual:

FCC ID: JCQ993

IC: 1907A-993

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

# DoorMinder

## Installation Instructions

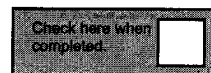
Confirm that the installation of the commercial garage door opener has been done properly, in accordance with the Instruction Manual supplied with the opener. Test and confirm the correct operation of all opener control functions before proceeding with the installation of the Multi-Task™ Receiver.



**NOTE: THE CONNECTION OF THE GARAGE DOOR OPENER MUST ALLOW THE DOOR TO BE CLOSED BY MOMENTARY PUSHBUTTON OPERATION AND HAVE A SAFETY LIMIT CUTOFF SWITCH.**

### **⚠ Disconnect the power to the opener after completion of the above preliminary test ⚠**

*This preliminary test is not necessary if the DoorMinder is being installed as a wireless system with no external wired controls such as pushbuttons or safety sensors*

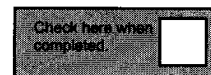


### **⚠ Do not reconnect power to the opener until instructed to do so ⚠**

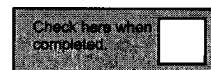
**⚠ WARNING ⚠**  
Improperly functioning doors, door springs, cables, pulleys and related brackets and hardware are under extreme tension and can cause serious injury or death. Call a professional door serviceman to repair or adjust door springs and hardware.

**⚠ WARNING ⚠**  
The garage door opener must be suitable for the application to which it has been assigned and installed in accordance with the Instruction Manual provided by the opener manufacturer.

1. Use four #8 x 1" long sheet metal screws, with or without anchors, to mount the Multi-Task Receiver onto or within close proximity to the Control Box of the Garage Door Opener with the two Status LED's visible to personnel from the floor. Orientation of the receiver is important. Mount the Multi-Task Receiver so that the antennae is horizontal.



2. Select suitable flexible conduit or cable to interconnect the Multi-Task Receiver with the garage door opener control. Three holes have been provided in the receiver enclosure to accommodate 3/8" flexible conduit connectors. A Maximum of eleven #18 ga wires may be required for the connection of the DoorMinder to the commercial opener.



- Connect wires between the Multi-Task Receiver and the Garage door opener control. See Picture #1 on the following page, and label your connections for future reference

NOTE: It is necessary to determine the connection requirements for the opener that you are installing. Most commercial opener controls are similar. The terminal numbers may vary, but the design features are the same ie: there is a common connection between the Open and Close pushbuttons and the Obstruction input. The Multi-Task Receiver is shipped set-up for this traditional connection arrangement. In rare cases an opener may require that the Close contacts or the Obstruction contacts must be isolated from the other control circuits. To facilitate this requirement 4 jumpers have been located next to the receiver terminal strip. Relocating the blue connectors from position 1 to position 2 will allow the needed isolation of a contact.

### Jumpers

- J-17** Select N.O. or N.C. Obstruction relay output
- J-6** Isolate Obstruction relay contact from circuit
- J-14** Isolate Close relay contact from circuit
- J-9** Select PCI.

### DoorMinder to Opener Connections

**Multi-Task Receiver  
Terminal # :**

- Comm
- 24vac (or +DC)

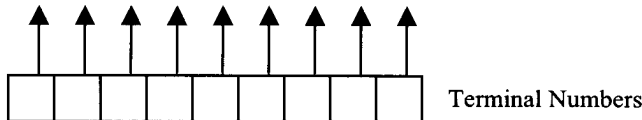
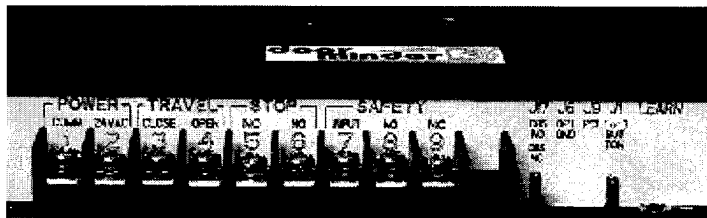
**Garage Door Opener  
Connection Names**

- 24 volt -DC/AC [See note below](#)
- 24 volt +DC/AC [See note below](#)

**NOTE:** The monitoring function requires that the AC input be connected as follows:  
Terminal 1 must be connected to the side of the transformer that is connected to the stop push button.  
Terminal 2 must be connected to the side of the transformer that is not connected to the Stop pushbutton.

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>Close</li> <li>Close Common (move jumper J-14)</li> <li>Open</li> <li>Stop NO</li> <li>Stop common</li> <li>Output control common</li> <li>Obstruction NO</li> <li>Obstruction NC (move jumper J-17)</li> <li>Obstruction common (move jumper J-6)</li> </ol> | <ul style="list-style-type: none"> <li>Opener Terminal for Close PB</li> <li>Opener terminal for Isolated Close PB</li> <li>Opener terminal for Open PB</li> <li>External Stop or 24 volt transformer*<br/>Stop PB terminal*</li> <li><i>*Remove jumpers from opener terminals</i></li> <li>PB common</li> <li>Safety input-normal (close on obstruction)</li> <li>Safety input-special (open on obstruction)</li> <li>Isolated obstruction terminal</li> </ul> |
|--|---|

### Multi-Task Receiver (Access cover removed)



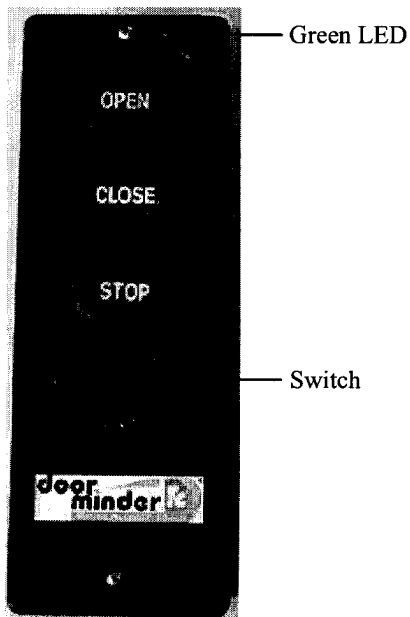
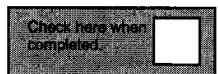
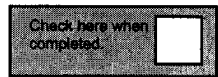
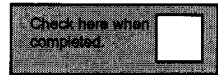
Write down your opener connections here for future reference

## ▲ Reconnect Power to the Opener ▲

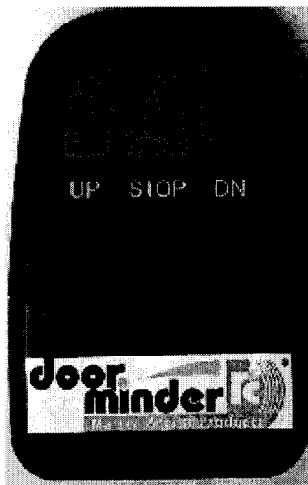
### 4. Install optional accessories:

#### a. **Wireless Wall Station**

- I. Mount within line of sight of the door using two #8x1" sheet metal screws with anchors.
- II. Program Wireless Wall Station into the Multi-Task receiver.
  - a. Press Learn button on the Multi-Task Receiver.
  - b. Green LED on the Multi-Task Receiver will turn on.
  - c. Press and hold the Stop button. The Wall Station LED will flash once and then go Out. Continue to hold depressed
  - d. The Wall Station will start flashing after the Stop button has been held depressed for about 5 seconds.
  - e. Release Stop button when flashing begins.
  - f. Immediately depress Stop button again. Led will turn on solid. Continue to depress Stop Button until LED starts flashing.
  - g. Release Stop button. Green LED on the Multi-Task receiver will go out. The wall station is now programmed into the system.
- III. Test push button control functions.
  - a. Depress and hold the "Close" button. The door should close as long as the button is depressed. (Constant Pressure Control) Continue to hold button until the door has closed about halfway. When the button is released the door will stop, and reverse toward the open direction.
  - b. Depress the "Stop" button. The opening door should stop and remain stationary.
  - c. Depress the "Open" button. The door should move in the open direction and stop on the Open Limit Switch.
  - d. Depress and hold the "Close" button. Continue to hold the button depressed until the door stops on the Close Limit Switch.
- IV. Move the "Lock-out" slide switch from the "Off" to the "On" position."
  - a. The door will not respond to any directional RF commands while in the "Lock-out" condition.



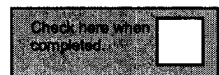
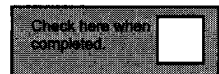
## b. Portable Hand Held Transmitter



Red LED  
Transmitting  
Indicator

**NOTE :** In applications where the Obstruction feature of the Multi-Task Receiver is in use, the portable transmitter will not close the door by momentary operation unless the intended wireless safety system is operational. The Constant Pressure feature is prohibited for use on portable transmitters.

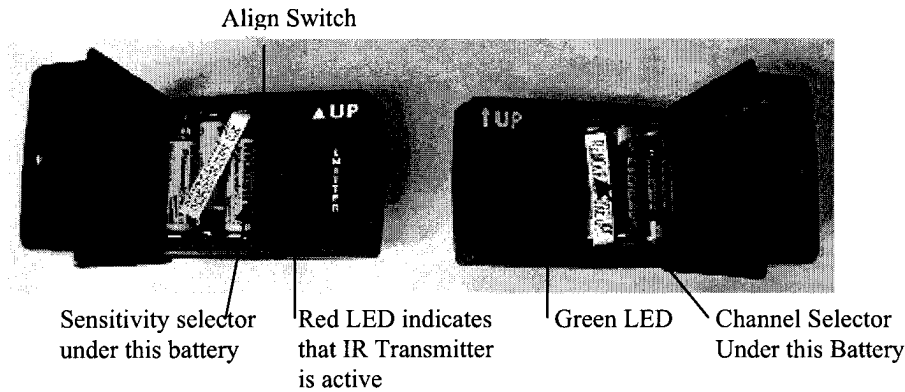
- I. Set Transmitter to rolling or fixed code format
  - a. Operate the Open and Close Transmitter pushbuttons. The LED will flash once and go out.
  - b. Release and operate the Open transmitter button twice while still pressing the Close transmitter button.
  - c. After the second operation of the Open transmitter button the transmitter LED will flash **once** to indicate **Rolling Code** mode or **twice** to indicate **Fixed Code** mode.
  - d. Repeat steps a., b. and c. to change code format.
- II. Program Portable Transmitter into the Multi-Task Receiver.
  - a. Press Learn button on the Multi- Task receiver.
  - b. Green LED on the Multi-Task Receiver will turn on.
  - c. Press and hold any portable transmitter button. Transmitter LED will flash once. Continue to hold depressed.
  - d. The transmitter LED will start flashing after the transmitter button has been depressed for about 5 seconds.
  - e. Release button when transmitter LED begins to flash.
  - f. Immediately depress transmitter button again. LED will turn on solid. Continue to depress the transmitter button until LED starts flashing.
  - g. Release the transmitter button. The Green LED on the Multi-Task Receiver will turn off. The portable transmitter is now programmed into the DoorMinder system.
- III. Test Portable Transmitter functions
  - a. Use wall station controls to close door halfway and stop.
  - b. Depress the portable transmitter "Open" button to cause the door to move in the open direction.
  - c. Depress the portable transmitter "Stop" button to cause the moving door to stop and remain at rest.
  - d. Depress the portable transmitter "Close" button to cause the door to move closed



PICTURE 4

Infra Red Transmitter

RF Transmitter



c. BeamGuard™ Wireless Safety Beams (Picture #4)

- I. Two sets of brackets are provided to mount the BeamGuard Transmitter and Receiver 5” from the floor. The brackets must be mounted in contact with the vertical track assembly of the door. This contact is necessary to provide the BeamGuard System with the motion sensing input necessary to cause the monitored safety system to start transmitting the “Safety Run” signal.

Draw Bar Operator -- Mount beam units with arrows "up" as marked.

Jack Shaft Opener -- Mount beam unit with green LED on the same side of the door as the Multi-Task receiver is located. Disregard arrows.

Check here when completed.

- II. Provide rough alignment between the BeamGuard transmitter (IRT) and receiver (IRF).

Check here when completed.

- III. Program the BeamGuard IRF into the Multi-Task Receiver.
  - a. Press the Learn button on the Multi-Task receiver.
  - b. The green LED on the Multi-Task Receiver will turn on.
  - c. Move the switch in the IRT safety beam from the “Normal” to the “Align” position.
  - d. Align BeamGuard transmitter and receiver.
  - e. The Green LED on the IRF safety beam will start flashing when the beams are aligned.
  - f. Move the switch in the IRT safety beam from the “Align” to the “Normal” position.
  - g. The Green LED on the Multi-Task Receiver will turn off.
  - h. The Green LED on the Multi-Task receiver will flash confirming that the installation has been accomplished.

Check here when completed.

- IV. Use either the wall station or the portable transmitter to start the door closing. With the door moving in the Close direction interrupt the BeamGuard IR Sensors. This will cause the door to stop and reverse. Allow door to move to the full open position.

Check here when completed.

**WARNING**

*Note:* Do not use any part of the human body to interrupt the BeamGuard sensors. Failure to reverse because of improper installation can cause serious injury or death. It is recommended that an object such as a rolled-up newspaper be used to interrupt the BeamGuard system.

- V. Test the adjustment of the BeamGuard sensors by placing an obstruction 6” high X 12” wide across the door opening. Locate the center-line of the 12” obstruction across the approximate middle of the door opening, in-line with the door edge.

Check here when completed.

- VI. Depress the Close Push Button. The door should start to move downward, and then reverse and return to the "Open" limit switch. This test confirms that the BeamGuard will protect obstructions up to six inches high against entrapment with-in six inches of the door edge.

Check here when completed.

Repeat Steps VI and VII two additional times locating the obstruction one foot (1') in from the left hand and right hand door edge.

- VII. The BeamGuard must be adjusted so that the door will not close with the test obstruction located in any of the three locations.

Check here when completed.

**▲ WARNING ▲**

*Note:* The BeamGuard system is provided for personnel safety entrapment protection. It is not intended to protect property, such as, but not limited to vehicles that may straddle the effective sensing area.

**d. EdgeGuard™ Wireless Edge Transmitter (Picture #5)**

- I. Mount the EdgeGuard Transmitter on the door with-in reach of the wire provided with the Safety Edge Sensor using four #6 x 3/4" sheet metal screws.
- II. Use a strain relief connector to mount the wire from the edge sensor to the EdgeGuard.
- III. Connect the four wire Edge Sensor to the EdgeGuard by connecting the two black wires to the terminals marked B and the two white wires to the terminals marked A.
- IV. Connect the two-wire sensor to the EdgeGuard by connecting the terminals marked A together and the terminals marked B together. Connect the black wire from the edge sensor to the jumpered B terminals. Connect the white wire to the jumpered A terminals.
- V. Remove the battery shipping insulating shim from the center battery of the EdgeGuard.
- VI. Program the EdgeGuard transmitter into the Multi-task receiver.  
a. Press learn button on the Multi-Task Receiver.  
b. The Green L.E.D. on the Multi-Task Receiver will turn on.  
c. Place the program switch on the edge transmitter in the "Set-Up" position.  
d. Rattle door to cause edge transmitter to "wake-Up" and light the Green LED.  
e. Return the program switch on the edge transmitter to the "Run" position.  
f. The Green LED on the Multi-Task Receiver will turn off.  
g. The green LED on the Multi-Task Receiver will flash confirming that the installation has been accomplished.

Check here when completed.

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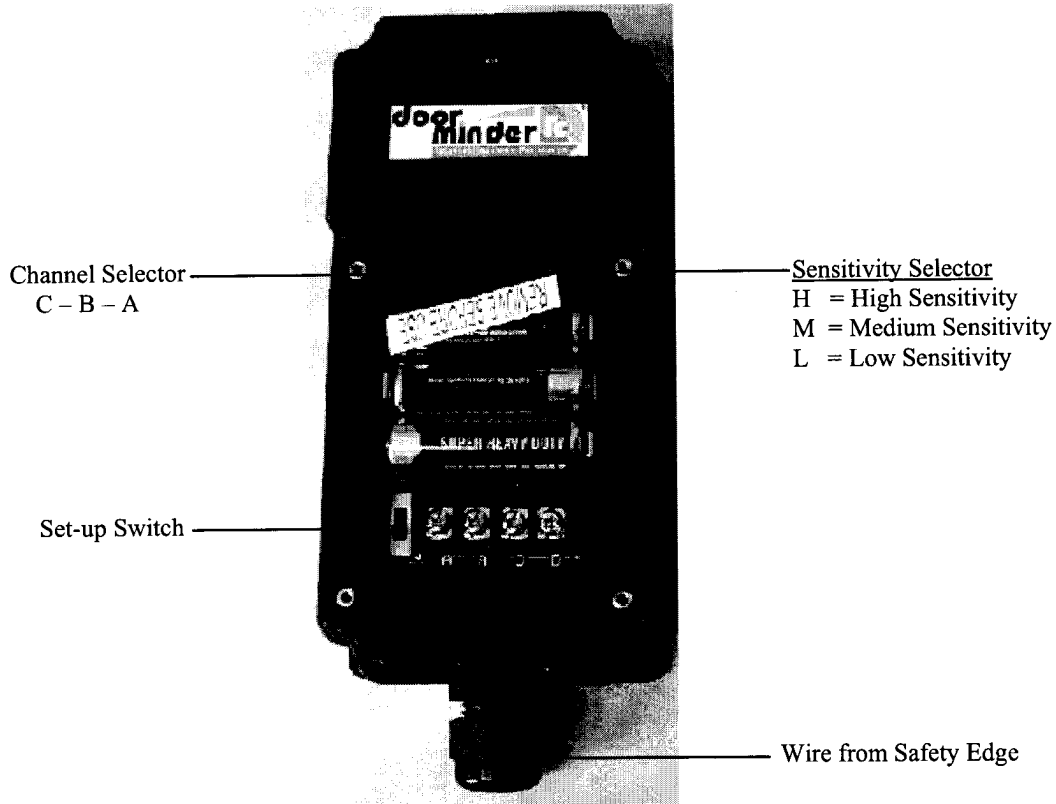
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- VII. Operate a directional pushbutton. The green status LED on the EdgeGuard should turn on within a second of the door starting to move. The Sensitivity selector switch must be changed to a more sensitive setting if the green status LED does not turn on.

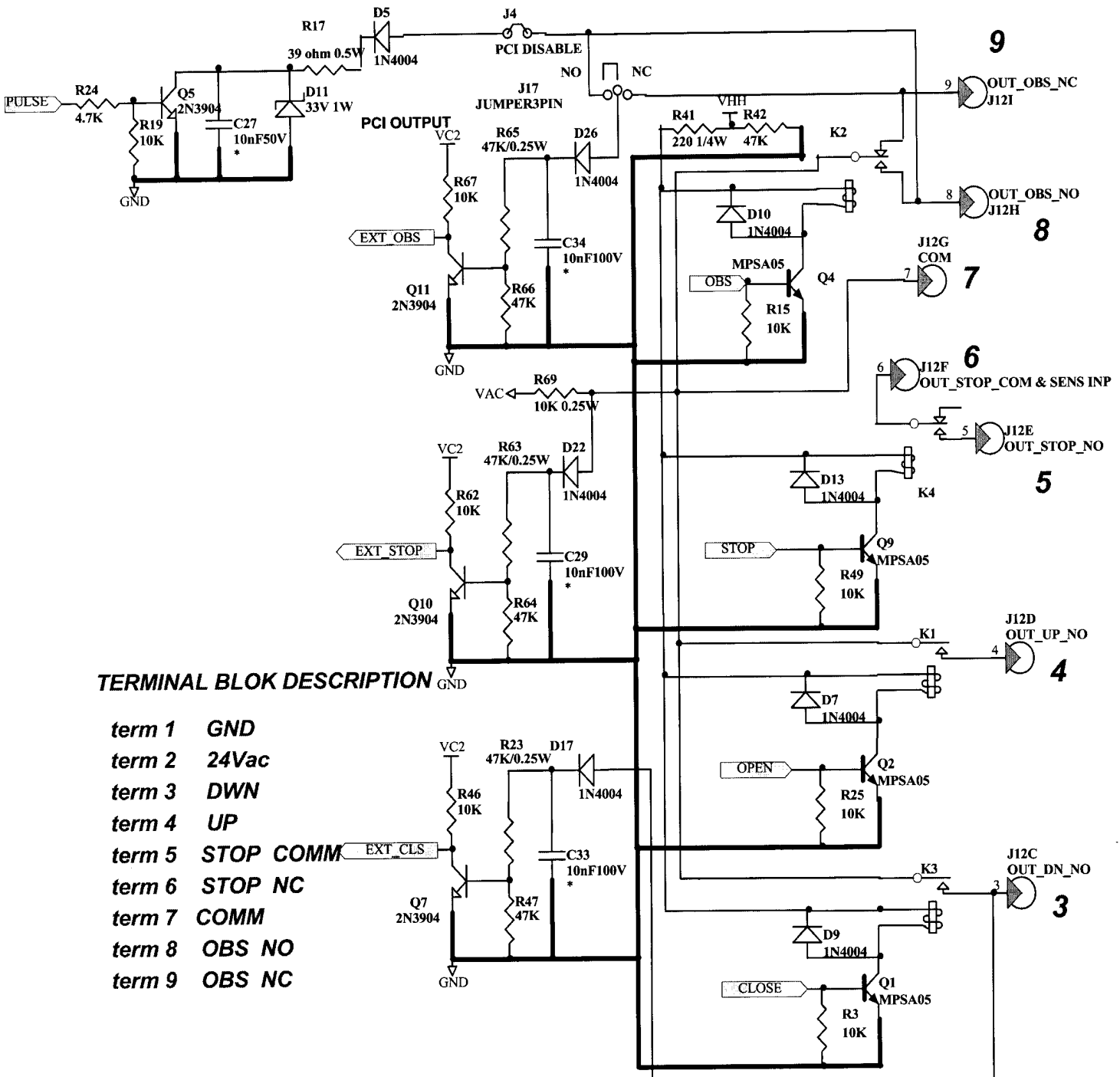
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Picture #5

EdgeGuard™ Wireless Edge Transmitter

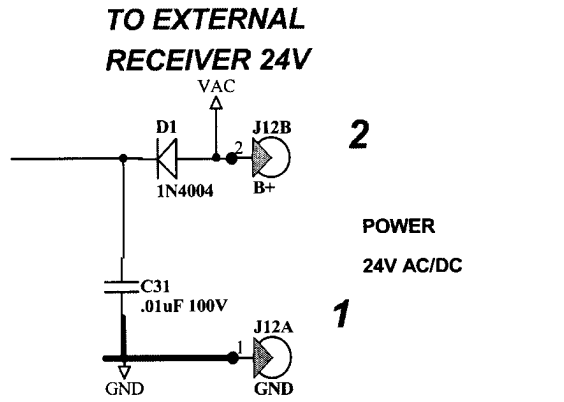






**TERMINAL BLOK DESCRIPTION**

- term 1 GND
- term 2 24Vac
- term 3 DWN
- term 4 UP
- term 5 STOP COMM
- term 6 STOP NC
- term 7 COMM
- term 8 OBS NO
- term 9 OBS NC



**2**

**POWER**  
24V AC/DC

**1**