MARTEC ACCESS PRODUCTS, INC.
DOOR-GUARD™ TK8300
UNIVERSAL SAFETY BEAM SYSTEM

APPLICATION

This device is intended as a supplementary non-contact safety system to be used with commercial garage door openers. The DOOR-GUARD™ interface module requires 24VAC/DC power and can be connected for either N.O. or N.C. relay contact interconnection with the garage door opener. For indoor use only.

WARNING:

The interconnection between the DOOR GUARD™ Safety Beam System and the OPERATOR CONTROL SYSTEM IS NOT MONITORED. Shorted or open wiring connections from the interface module, or component failure within the operator control, can allow the operator to CLOSE WITHOUT THE EXPECTED ENTRAPMENT PROTECTION. The system must be tested periodically to insure that obstruction of the safety beam will cause the door to reverse.

INSTALLATION INSTRUCTIONS

1. Remove power from the operator control.
2. Remove cover from the TK8200 interface module by squeezing sides. Mount module near operator control.
3. Connect the TK8200 interface module, using terminals 1 and 2, to 24VAC/DC supplied by the operator control. (Refer to Diagram # 2, Page 2)

   NOTE: Use 24 VAC Adapter Transformer #MK 8001 if 24VAC/DC is not available
4. Refer to Operator Control Instruction Manual and determine the mode of operation for the Interface Relay. The relay output, terminals 5 and 6 of the TK8200 (Diagram 2, Page 2) interface module, can be connected to the Open direction pushbutton, Safety Edge or Obstruction terminals of the operator control.

   a. Relay contact normally open; close at obstruction. Install jumper between center pin of 3-position connector and pin marked NO. (Refer to Diagram # 3, Page 2)
   b. Relay contact normally closed; open at obstruction. Install jumper from center pin of 3-position connector and pin marked NC. (Refer to Diagram # 3, Page 2)
   c. Interconnect the Interface Module to the operator control. (Refer to Diagram # 2, page 2)

5. Mount the photo-beam transmitter and photo-beam receiver on either side of the door opening using the brackets and hardware provided, no higher than 6 inches above the floor. (Refer to Diagram # 1, Page 2)
6. Connect the wires from the photo-beams to terminals 3 and 4 on the TK 8200 Interface Module. (Refer to Diagram # 2, Page 2)
7. Restore power to the operator control.
8. Align the photo-beam transmitter and photo-beam receiver units. The red LED on the photo-beam receiver will light when the units are properly aligned.

TEST PROCEDURE

1. Depress pushbutton to close door.

   a. Check photo-beam alignment and relay contact connection if the door does not start to close.

   a. Check for obstruction attached to the door if reversal occurs before reaching full close position.

2. Depress pushbutton to open door.
3. Depress pushbutton to close door. Interrupt photo-beam, which will cause the door to return to the full open position.
4. Place a 6" X 12" object on the floor as depicted in Diagram #1. Test with this obstruction in three different locations: 12" in from both sides of the opening, and on the centerline of the opening. *This test is an intentional obstruction of the Photo-Beam System. It shall prevent an open barrier from closing, and cause a closing barrier to reverse.* ***ADJUST THE ELEVATION OF THE PHOTO-BEAMS TO INSURE THAT THE SYSTEM PERFORMS AS DESCRIBED.***

NOTICE: Test the Operator monthly using Test Procedure 4 described above. An open door shall not close and a closing door must reverse when the photo beam system is interrupted by a 6" X 12" obstruction.

WARNING: FAILURE TO TEST AND ADJUST THE PHOTO BEAM SYSTEM MAY RESULT IN SERIOUS INJURY OR DEATH

DIAGRAM # 1

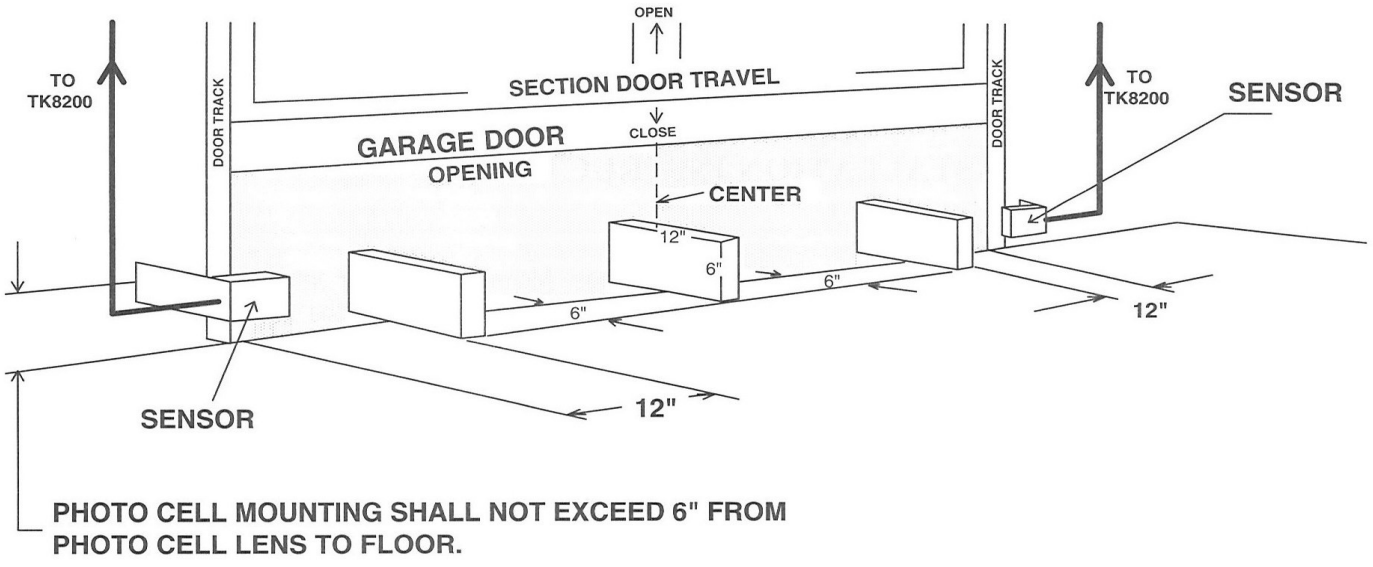


PHOTO CELL MOUNTING SHALL NOT EXCEED 6" FROM PHOTO CELL LENS TO FLOOR.

DIAGRAM #2

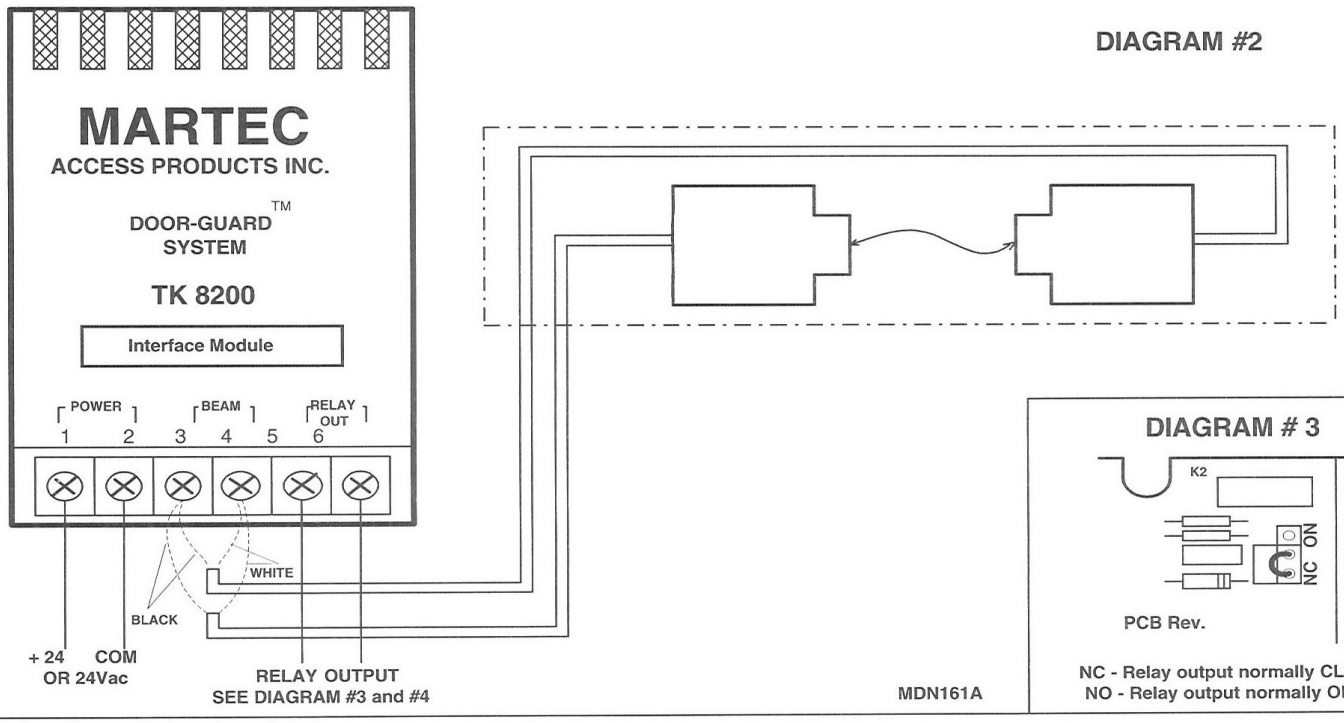
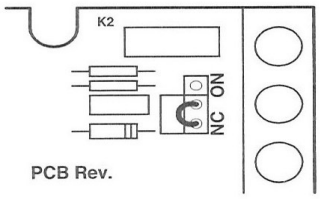


DIAGRAM # 3



NC - Relay output normally CLOSE
NO - Relay output normally OPEN

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