HySecurity
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Installation Instructions

Hardwired Edge Sensor-Hy2NC™ for Slidegates

The leading fence or support post creates an entrapment zone where a slide gate runs adjacent to it. The best way to protect this in the open direction is with an edge mounted to this post and hardwired to the operator. Additional sensors should be installed where the risk of entrapment exists. Consult the manual supplied with the operator for more information. The following instructions are intended to assist the user in the installation of a hardwired Edge Sensor on slide gate operators. Please read all assembly instructions before installing the kit.

REQUIRED TOOLS

- Flat Head Screwdriver
- Self-Tapping Screws (x7) (not included)
- Electric Drill w/ drill bit for pilot holes/driver for screws
- Heat Gun or Lighter

PARTS

Verify that all parts included in operator are accounted for. See Figure 1 and Table 1.

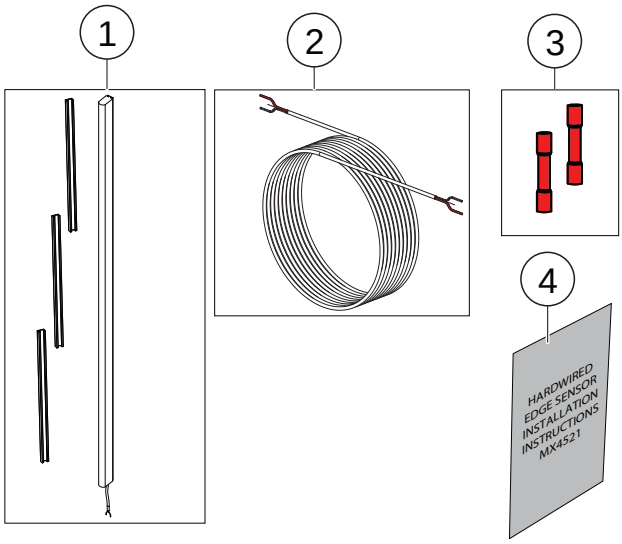

Figure 1. Hardwired Bundled Edge Sensor-Hy2NC Parts

Table 1. Hardwired Bundled Edge Sensor-Hy2NC

Item No.	Part No.	Description	QTY.	Remarks
1	AS1502-0440-05	Edge Sensor and Channel	1	
2	MX4506	Harness, Wire, Direct Burial, 10'	1	
3	MX3852	Butt Splice, 20-18 AWG, Shrink	2	
4	MX4521	Instructions, Hardwired Edge Sensor-Hy2NC	1	

WORK SAFELY!

Only a **qualified service technician** with proper training should perform this installation. Follow all safety rules when performing this installation.

PREPARATION

1. Make sure gate operator is turned off and moving components are idle.
2. Unlock and remove cover using key.
3. Set the cover aside.

EDGE SENSOR INSTALLATION

1. Using an electric drill with six self-tapping screws, align and secure three edge sensor channel segments along gate operator "draw-in post" above the junction box. See Figure 4.
2. Using an electric drill, drill one self-tapping screw through the bottom end of the channel segment closest to a junction box. See Figure 4, A.

NOTICE

The screw inserted at the bottom end of the channel segment closest to the junction box prevents the edge sensor from sliding in the channel.

3. Slide the edge sensor through the three channel segments. See Figure 4, B.

WIRING EDGE SENSOR INSTALLATION

1. Remove junction box cover. See Figure 4, C.
2. Route the edge sensor wire into the junction box below. See Figure 4, C.
3. Route direct burial wire through conduit side of the junction box leading to the Hy2NC adapter in the operator control box. See Figure 4, C.

NOTICE

Some installations may not have a junction box or conduit available. A junction box and conduit is recommended, but not required. HySecurity provides direct burial wire to allow this flexibility.

4. Using two 20-18 AWG heat shrink butt splices, connect the edge sensor and direct burial wires.

NOTICE

Heat shrink butt splices with either a heat gun or lighter.

5. Route direct burial wire to Hy2NC Adapter mounted in the operator control box. See Figure 4, D.
6. Connect direct burial wire to either Hy2NC CH1 or CH2 terminal connections. See Figure 4, D.
7. See Figure 5 for further Hy2NC wiring connections.

PHOTO EYE INSTALLATION

Install photo eyes as required per site and wire photo eyes as shown in, Figure 6. HySecurity recommends installing the photo eye across the road way.

CONFIGURE SENSOR INPUTS

During initial setup, after setting usage class, gate handing, and in some operators, the gate weight, the following prompt appears:

Figure 2. S1 Sensor Type

1. Select the appropriate sensor setting by pressing SELECT and then NEXT to select the correct sensor type for the sensor edge - typically Edge Open (#5). Press SELECT.
2. Press NEXT and proceed to apply the same process to program the Sensor 2 input:

Figure 3. S2 Sensor Type

3. Select the appropraite sensor setting by pressing SELECT and then NEXT to select the correct sensor type for the photo eye - typically Eye Close (#2). Press SELECT.
4. Program Sensor 3 accordingly.
5. Exit from Menu Mode by pressing the MENU button.

NOTE: Junction Box and Conduit are shown for illustrative purposes.
Installations may not have a junction box or conduit present.

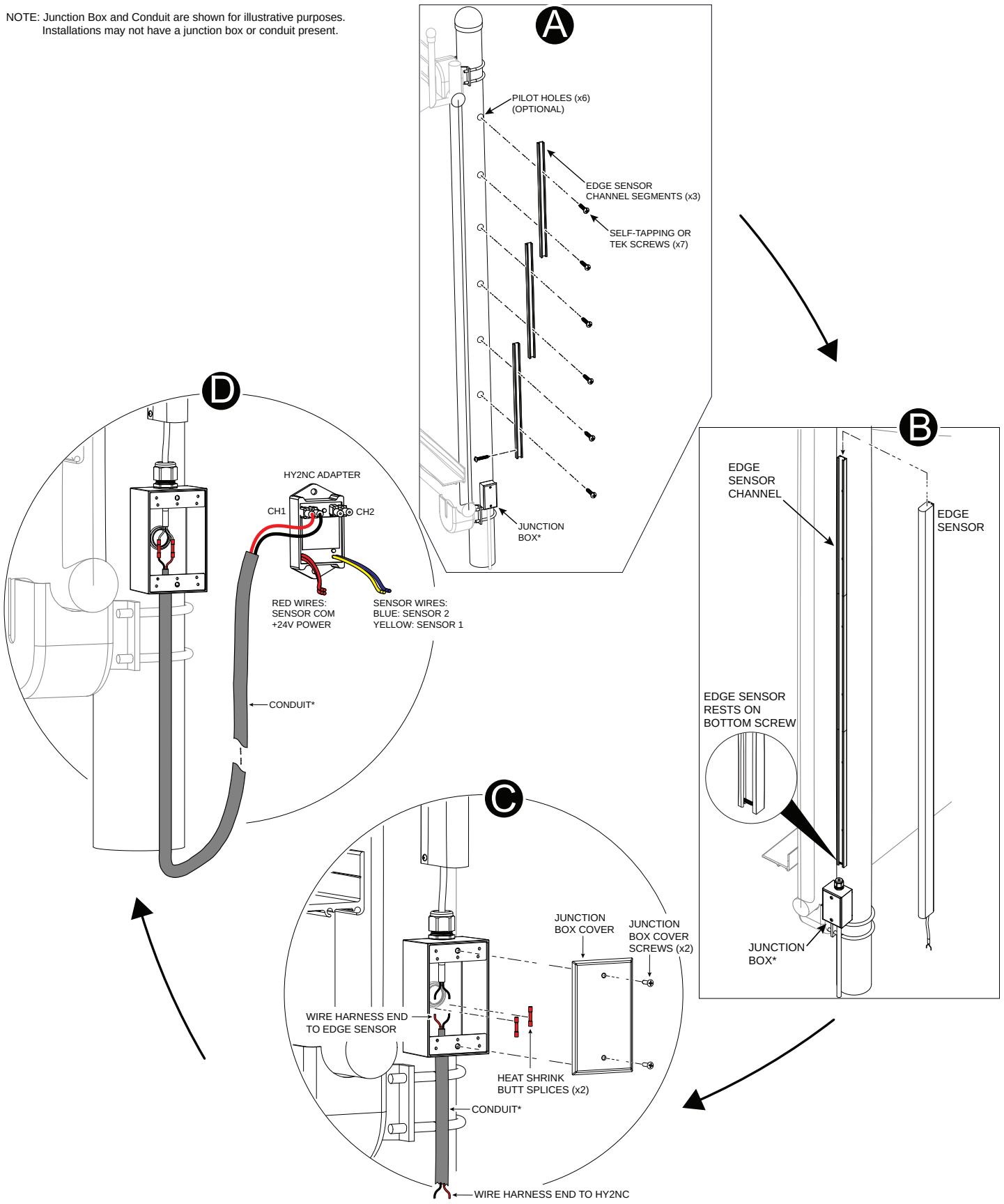

Figure 4. Edge Sensor Installation and Wiring

CAUTION

Connect all contact and non-contact sensors to same power source. Example, Do NOT connect photo eyes to +24VDC and gate edges to +12VDC. Incompatible electricity flow. A FAULT 2 will appear.

CAUTION

All external entrapment protection sensors must be NC sensor outputs and wired to the SENSOR COM terminal for monitoring and powering purposes.

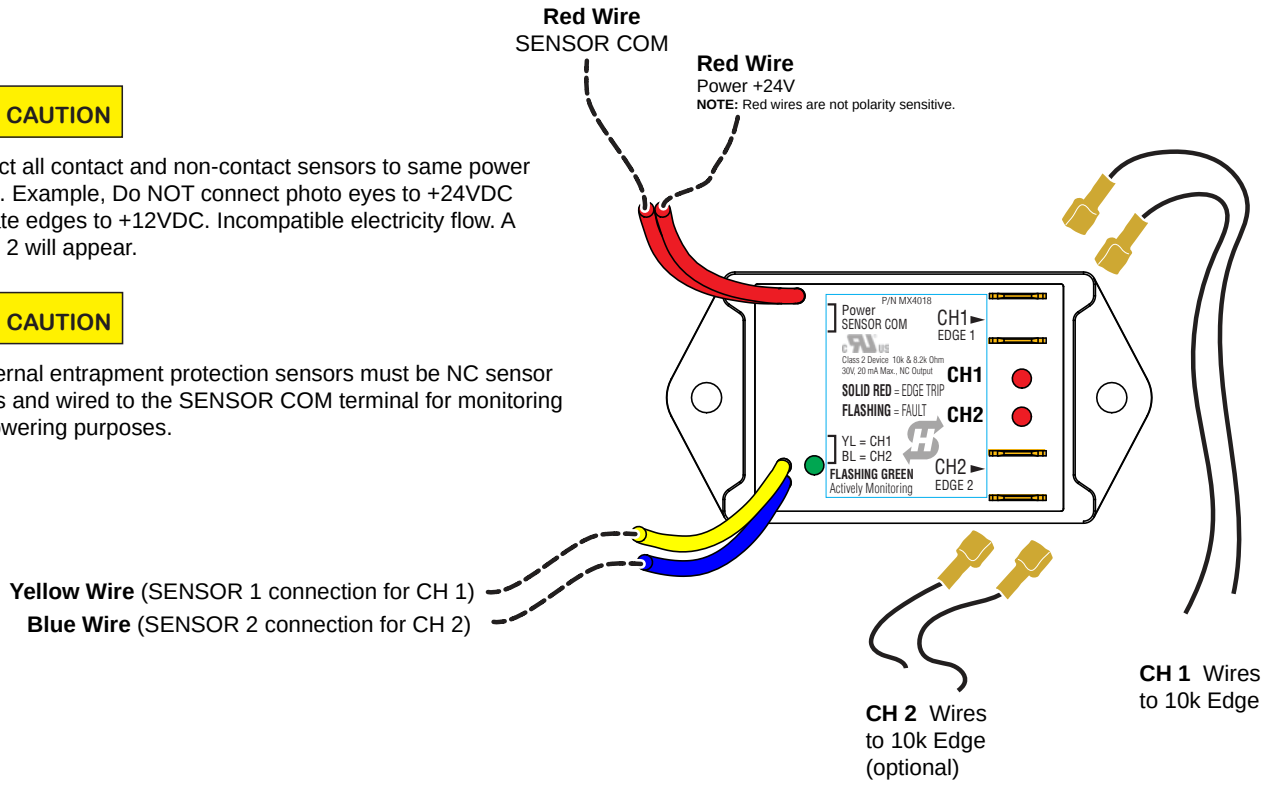

Figure 5. Hy2NC Wiring Diagram

CAUTION

Set DIP Switches
1 = OFF
2 = OFF
3 = OFF
4 = ON

NOTE: DIP switches must be set as shown otherwise the photo eye will not operate correctly.

Jumper POWER INPUT - 24V to COM in Receiver

RED → +24V
BLACK → COMMON / NEG. to SENSOR COM
WHITE → NC RELAY to SENSOR 3

RED → +24V
BLACK → COMMON / NEG. to SENSOR COM

CAUTION

DIP switches must be set as shown otherwise the photo eye will not operate correctly. If you receive an Alert, "!ACTION BLOCKED" "Photo Eye Open" PEO or "Photo Eye Close" PEC, take steps to align the photo eye.

Figure 6. IRB MON Photo Eye Wiring Diagram