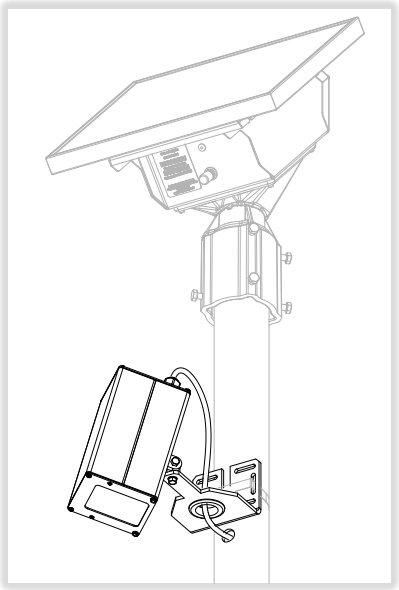
carmanah®
MX Series

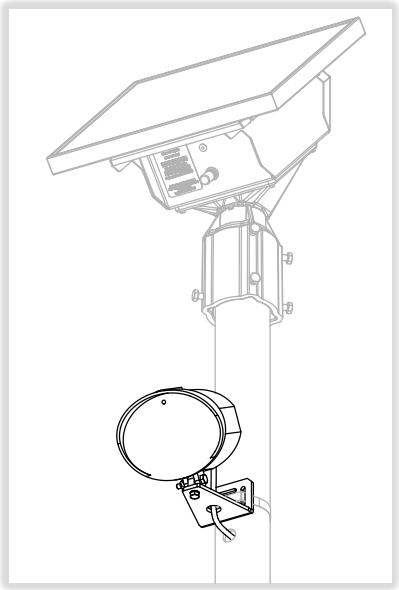
MX Series

PASSIVE SENSOR KIT INSTALL GUIDE

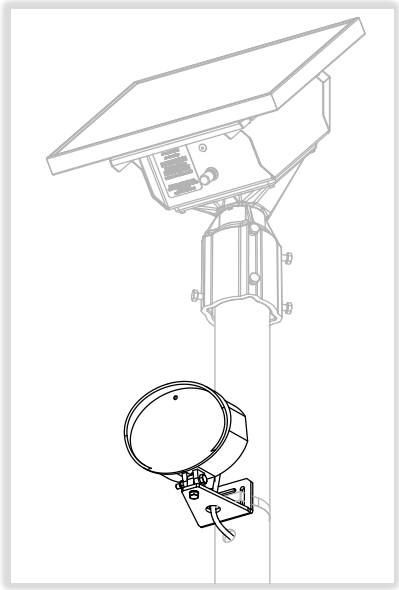
LEVEL 4



SmartWalk Sensor



VPR-27 Sensor



VPR-26 Sensor

NOTE This guide only covers interfacing the sensor to power and flasher modules. Sensor must be configured per manufacturer's documentation to operate properly.

NOTE
SmartWalk XP-S: crosswalk pedestrian sensing (Section 1.0)
SmartWalk TX-S: trail user sensing (Section 1.0)
VPR-27: trail user sensing (Section 2.0)
VPR-26: vehicle sensing (Section 3.0)

NOTE
VPR-27 supersedes SmartWalk TX-S (end of life 2024)
VPR-26 supersedes TC26-B (end of life 2024)

NOTE Pedestrian push buttons should be used in parallel with sensors used at pedestrian/trail crossings to provide manual activation option.

CAUTION Only SmartWalk model numbers ending in “-S” can be used with solar systems.

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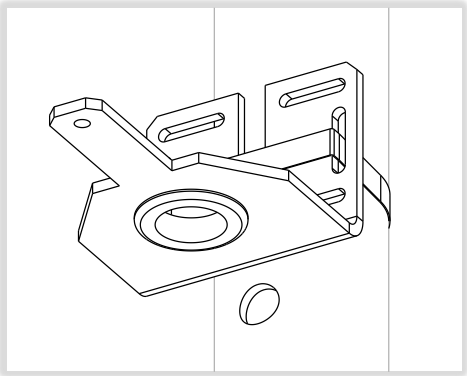
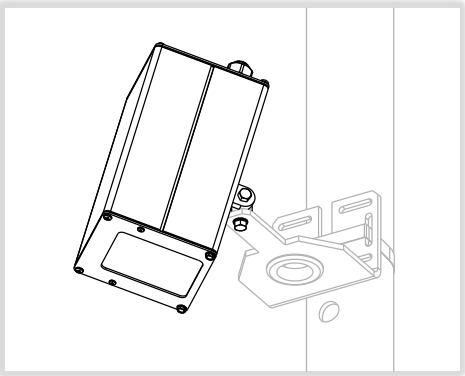
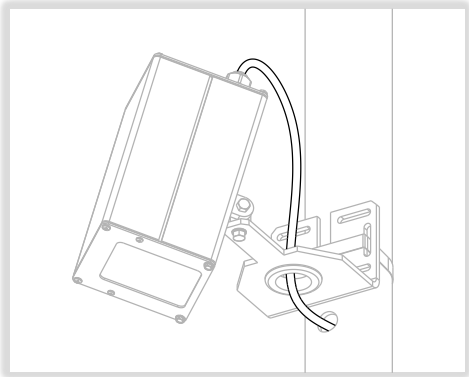
1.0 SmartWalk XP-S & SmartWalk TX-S (Crosswalk/Trail User Sensing)

1. Prepare pole and install bracket and sensor per manufacturer's instructions.
2. Ensure DIP switch #4 (Fail Safe) is set to OFF position.
3. Fish sensor cable through pole.



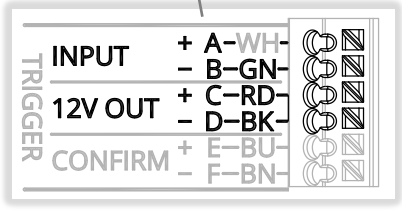




4. Cap (or cut at end of jacket if permitted by local regulations) unused **white** wire.
5. Except when connecting directly to MX 400 (which has screw terminals to accept spade/ring terminals), cut off terminals from wire ends and strip insulation 0.35".
6. Connect sensor wires to power or flasher module trigger terminals per table below.
7. Aim sensor towards detection zone per manufacturer's instructions.
8. Configure sensor per manufacturer's instructions and perform a walk/cycle test to confirm desired operation.

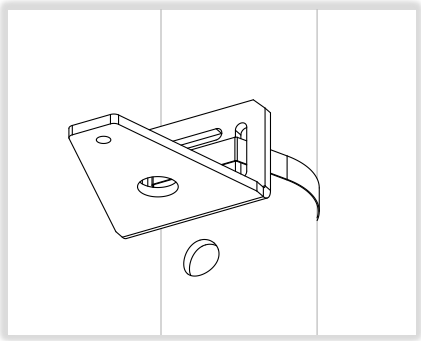
NOTE Brown or orange wire in terminal A

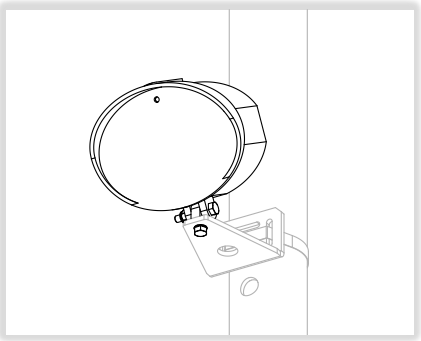
Sensor Terminal	Wire Color	Power or Flasher Module Trigger Input Terminal
N.O. (Normally Open)	Brown or Orange	A Input +
COM	Green	B Input −
N.C. (Normally Closed)	White	Not Connected
PWR +	Red	C 12V OUT +
PWR −	Black	D 12V OUT −

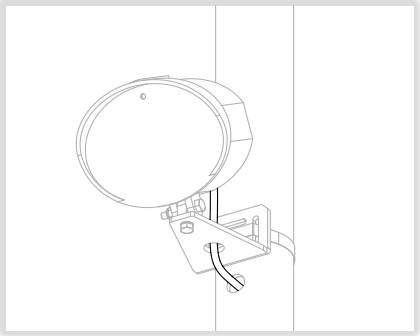


2.0 VPR-27 (Trail User Sensing)

1. Prepare pole and install bracket and sensor per manufacturer's instructions.
2. Fish sensor cable through pole.



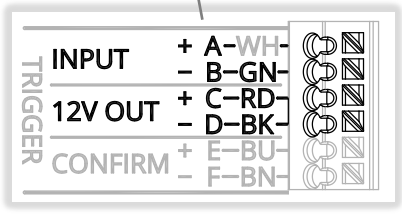




3. Cap (or cut at end of jacket if permitted by local regulations) unused **brown/orange** wire.
4. Except when connecting directly to MX 400 (which has screw terminals to accept spade/ring terminals), cut off terminals from wire ends and strip insulation 0.35".
5. Connect sensor wires to power or flasher module trigger terminals per table below.
6. Aim sensor towards detection zone per manufacturer's instructions.
7. Configure sensor per manufacturer's instructions and perform a walk/cycle test to confirm desired operation.
    a. Adjust Range Control dial based on your application. Rotate clockwise for more detection range.
    b. Adjust Delay Control dial to fully counterclockwise for lowest "hold time" when a detection occurs.
    c. Press the reset button after each adjustment.

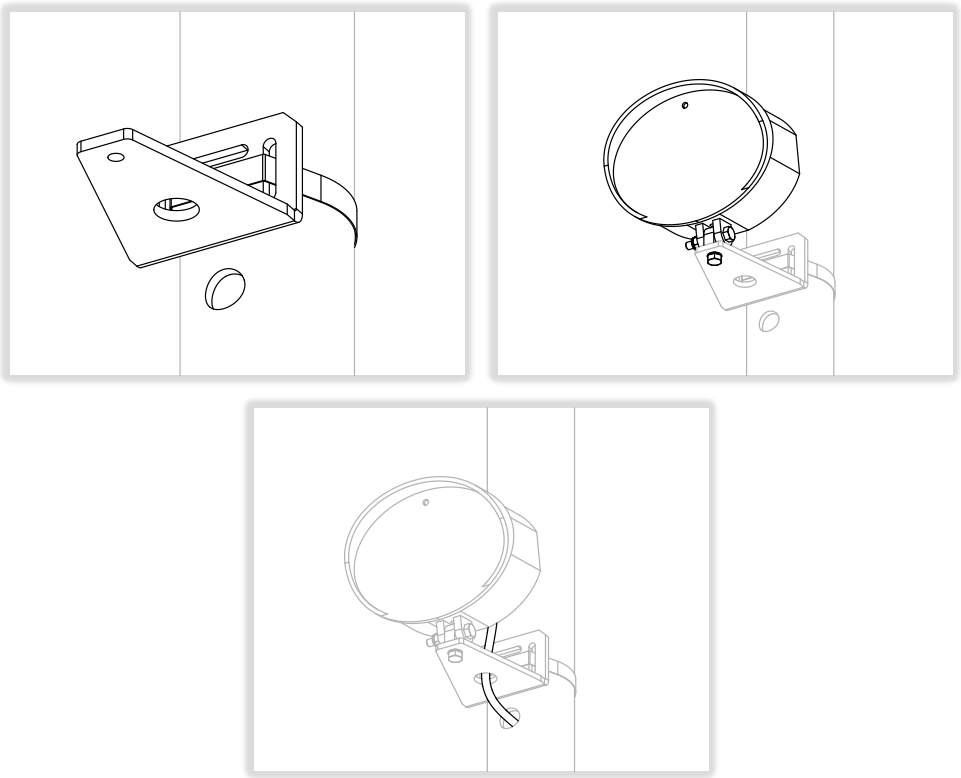
NOTE White wire in terminal A

Sensor Terminal	Wire Color	Power or Flasher Module Trigger Input Terminal
N.O. (Normally Open)	White	A Input +
COM	Green	B Input −
N.C. (Normally Closed)	Brown/Orange	Not Connected
PWR +	Red	C 12V OUT +
PWR −	Black	D 12V OUT −



3.0 VPR-26 (Vehicle Sensing)

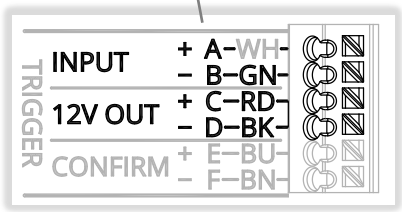
1. Prepare pole and install bracket and sensor per manufacturer's instructions.
2. Fish sensor cable through pole.



3. Cap (or cut at end of jacket if permitted by local regulations) unused **brown/orange** wire.
4. Except when connecting directly to MX 400 (which has screw terminals to accept spade/ring terminals), cut off terminals from wire ends and strip insulation 0.35".
5. Connect sensor wires to power or flasher module trigger terminals per table below.
6. Aim sensor towards detection zone per manufacturer's instructions.
7. Configure sensor per manufacturer's instructions and perform a drive-by test to confirm desired operation.

NOTE Brown or orange wire in terminal A

Sensor Terminal	Wire Color	Power or Flasher Module Trigger Input Terminal
N.O. (Normally Open)	White	A Input +
COM	Green	B Input −
N.C. (Normally Closed)	Brown/Orange	Not Connected
PWR +	Red	C 12V OUT +
PWR −	Black	D 12V OUT −



NOTE: READ ALL INCLUDED INSTALL GUIDES BEFORE SYSTEM INSTALLATION