



**PASSPORT TECHNOLOGIES INC.**  
**TailGate INSTALLATION**  
**MANUAL**

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**[WWW.PASSPORTTECHNOLOGIES.COM](http://WWW.PASSPORTTECHNOLOGIES.COM)**

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***Disclaimer of Liability***

We have checked the contents of this manual for compliance with the hardware and software described. Nevertheless, discrepancies may exist. However, the data in this manual is reviewed regularly and any necessary corrections will be included in subsequent editions. Suggestions for improvement are welcomed.

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## TailGate Assembly Manual

Please read and follow these simple steps to ensure the proper installation of your Passport Technologies TailGate system.

### 1. System Contents and Tools Required

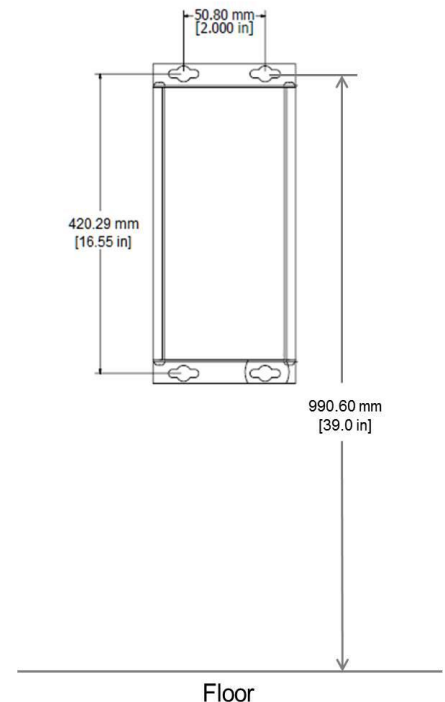
Before starting installation of the TailGate system, please verify that you have all items required.

- One (1) TailGate Emitter assembly # PPT-WMTG-E (single wire unit)
- One (1) TailGate Receiver assembly # PPT-WMTG-RS2 (with DB9 connector)
- One (1) TailGate Exit sensor # CM-419
- One (1) TailGate Door sensor # AMS-39CVS
- One (1) RS232 Port Connector (Not required for new installations)
- Tools: Philips and small flat-head screwdrivers, 4-foot level, installation wiring for various devices, and 8 screws for emitter/receiver assemblies (not supplied, according to type of wall or door frame).

### 2. Physical Installation of Emitter and Receiver units

The emitter and receiver units are designed to be installed indoors on door frames or walls adjacent the entrance and away from the swing path of the access door. Units should be installed with wire exit at the bottom of the assemblies.

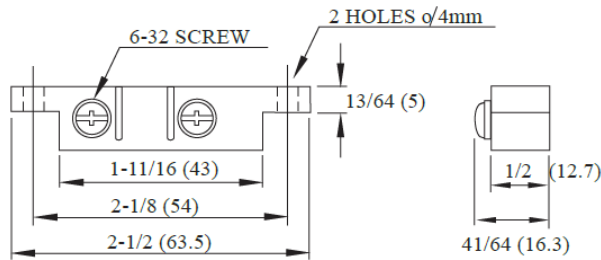
- See diagram at right for mounting details.
- Plan to hang the Emitter and Receiver assemblies with LEDs facing across the path of travel with wire exit at the bottom of the units.
- Door Frame Width 24" min. - 38" max.
- Use actual units as Templates for holes.
- Set top of receiver unit 39" off floor, check for level and plumb.
- Use a punch or scribe to mark the 4 mounting holes on mounting surface.
- Fasten receiver unit using appropriate hardware for your mounting surface.
- Repeat for emitter assembly installation. Use the level to ensure that the unit is installed at the same height and angle as the receiver.
- Once power is applied, adjust the position and angle of the emitter as required until all three yellow LEDs on the receiver unit (seen through 1-inch slots) are on and solid. A flashing yellow light indicates borderline alignment. For better LED visibility, the receiver cover may be removed by removing the screws on one end and sliding it out of its channel.



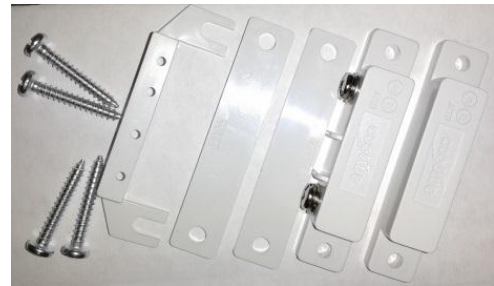
### 3. Install Magnetic Door Sensor AMS-39CVS

The magnetic door sensor is a simple two-wire device that provides an output when the door is opened. Mount the magnet (component without terminals) on the door itself and the sensor (component with screw terminals) on the door sill or frame. Connect as per instructions in Section 5.

Model	Contact	Contact Rating	Contact Type	Max. Carry Current	Max. Switching Current	Breakdown Voltage	Operating Gap	Mounting Method	Operating Temperature Range
AMS-39CVS (includes screws, covers, and spacers) 5 sets per pack	Terminal	10VA	Form A N.O.	1.0 Amp	.4 Amp	200VDC	3/4"	Screw	32°F to 120°F (0°C to 49°C)



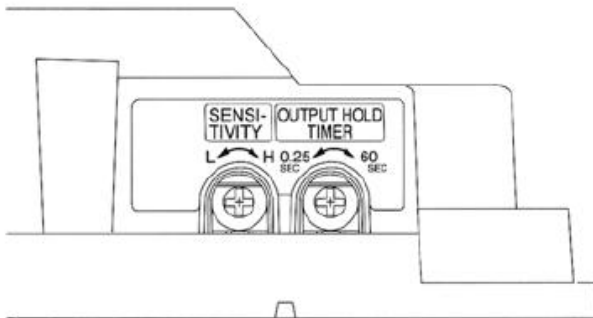
AMS-39



### 4. Install Exit Sensor CM-419

Follow the manufacturer's instructions included with the unit to install the Exit sensor above your door. Connect as per instructions in Section 5. Use the following settings:

- Sensitivity: Median (Factory default)
- Pattern Selector: Single Door
- Angle Adjustment: 1.5 feet from door
- Output Hold Time: Approximately 2 to 3 seconds.



#### Sensitivity

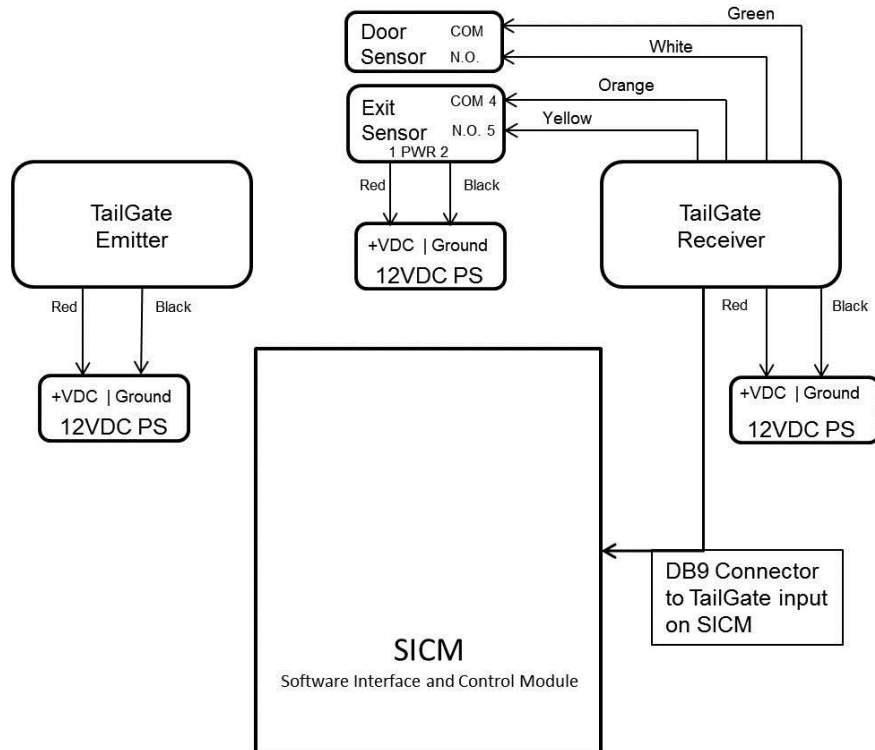
The detection sensitivity can be adjusted. Turn the dial by the sensitivity control clockwise for higher sensitivity and counterclockwise for lower setting. (FACTORY SET : MEDIAN)

#### Output hold time

The hold time for the 2 output relays and the LED can be adjustable between approximately 0.25 secs. and 60 secs. (SET TO BETWEEN 2 AND 3 SECS.)

## 5. TailGate System Connection Diagram

The TailGate emitter (PPT-WMTG-E) simply requires 12VDC power: Connect the Red wire to VDC+ and the Black wire to VDC Common (or ground). Use the following connection diagram and table to complete the wiring of your TailGate receiver (PPT-WMTG-RS2) and system. Note that the diagram below is for descriptive purposes only and that all Receiver (PPT-WMTG-RS2) connections are made via the pre-wired 8-conductor cable.



Color	Description
Black	Ground (common with DB9 pin #5)
Red	Power input (12VDC)
Brown	Serial data RX (DB9 pin #2)
Blue	Serial data TX (DB9 pin #3)
Green	Door sensor Common
White	Door sensor optoisolator N.O. input
Orange	Exit sensor Common, Terminal 4
Yellow	Exit sensor optoisolator N.O. input, Terminal 5

**Note:** If the communication cable must be extended, splice at connector end using 22 gauge stranded cable with shield while maintaining color integrity. A straight serial extension cable may also be used. **DO NOT** install a communications adapter or extension device between the Tailgate system and the SICM/CBSM. If the distance between the TG Receiver and the SICM/CBSM is greater than 30 feet, please call Passport Technologies support prior to installation.



## 6. Completing the Installation

Once the mechanical and electrical installation of the TailGate is complete and the three LED indicators on the receiver unit are all on and solid (not flashing), please contact Passport Technologies Technical Support at [support@passporttechnologies.com](mailto:support@passporttechnologies.com) to schedule system configuration and integration with the SICM/CBSM.

## 7. Troubleshooting Steps

If your Tailgate detection system is not sending emails to the email account listed in the Notifications section of your Passport Technologies interface, follow these steps to resolve.

- Verify all connections, including power supply to Tailgate emitter and receiver, and make sure that all indicator lights are on as per Section 2 above.
- Disconnect and reconnect the Tailgate serial DB9 connectors at the controller end, making sure that there are no damaged pins, etc. Once this is done, cycle power to the Tailgate Emitter and Receiver ONLY.
- These steps should resolve the communication issue and the system should start sending emails following the next tailgate incident.
- If these steps do not resolve the communication issue, please contact Passport Technologies Technical Support at [support@passporttechnologies.com](mailto:support@passporttechnologies.com) to verify system configuration.

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