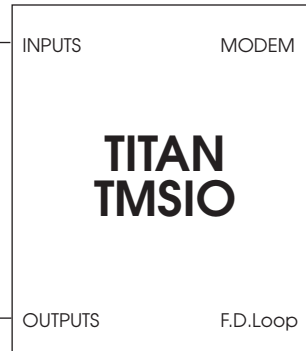


INPUTS (from car/remote starter)		
WIRE COLOUR	TYPE	FUNCTION
Brown	+	Siren/Horn
Purple	+	Positive Door Input
Green/White	-	Negative Door Input
Green/Red**	-	Floating Door input (cut loop)
Grey	-	Hood Pin Input
Red/White	-	Trunk Pin Input
Purple/White	~	Not Used

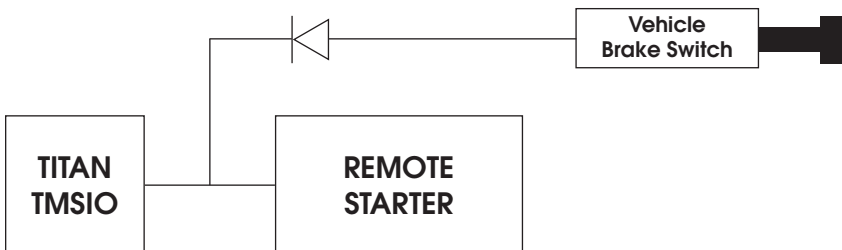
OUTPUTS (to car/remote starter)		
WIRE COLOUR	TYPE	FUNCTION
Blue	-	Unlock
Blue/White	-	Double Pulse Unlock
Blue/Black	-	Lock
Orange/White	-	Trunk Release
Pink/White	-	Remote Start Trigger
Black/White	-	Aux 2
Black/Yellow	-	Aux 3
Green	+	Brake Output (See Diagram)
Orange/Black	-	Not Used

TMS200 Series Modem		
WIRE COLOUR	TYPE	FUNCTION
Red	+	12V input (Battery)
Black	-	Ground (Chassis)
White		BB Data Output (To BLUE on TMS)
Orange		BB Data Input (To YELLOW on TMS)
Pink	+	Ignition (Hot with Crank)
Pink/Black	+	Not Used

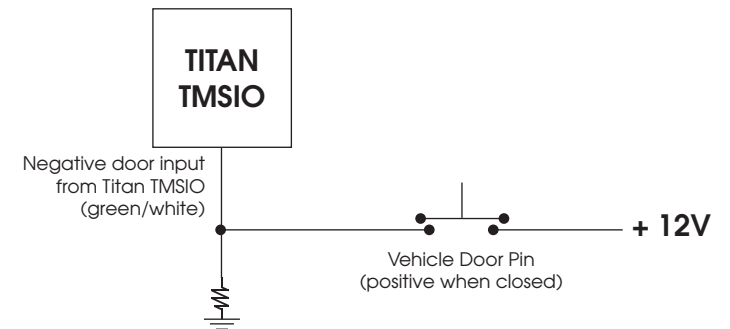
Floating Door Loop	
WIRE COLOUR	FUNCTION
Yellow**	Cut this loop when using floating door input (Green/Red)



DIODE ISOLATED BRAKE OUTPUT (green wire)



** POSITIVE WHEN CLOSED DOOR PINS



For Live Tech Support:
 Call Certified Tracking Solutions at 1-780-391-3800.
 8AM to 6PM Monday to Friday MST
www.TitanInnovations.ca

Wire Diagram: TITAN TMSIO (Input/Output Expander Module)

Titan TMS Modem	Red	12 Volt-Main Battery Source
	Black	Ground-Chassis Ground
	Pink	12 Volt- Ignition Source
	Orange	BB Data Input Port , this must be connected to the Yellow BB Data output port on the TMS Modem. This is used to send commands from the Cellular TMS Modem to the I/O expander for vehicle controls and starting.
	White	BB Data Output Port , this must be connect to the Blue BB Data input port on the TMS modem. This is needed in order for the I/O expander to be able to send alarm sounding and intrusion alarms to the TMS Modem for transmitting. (Do Not Add the 1K Pull-Up)

Inputs	Brown	(+) Alarm Siren or Factor Horn Input , used to detect if an alarm has been Triggered. The unit is looking for either 6 pulses or 6 seconds before transmitting the alarm event
	Purple	(+) Door Input , used to trigger an Alarm Intrusion "Door" alert. An event will be sent if the expander sees the siren / horn input triggered with a door input trigger
	Green/White	(-) Door Input , see above description
	Green/Red	(Floating) Door Input : Used on vehicles with a floating door pin for the intrusion alert detection
	Grey	(-) Hood Input , used to trigger an Alarm Intrusion "Hood" alert. An event will be sent if the expander sees the siren / horn input triggered with a hood input trigger
	Red/White	(-) Trunk Input , used to trigger an Alarm Intrusion alert. An event will be sent if the expander sees the siren / horn input triggered with a trunk input trigger
	Yellow	Floating Door Loop , please cut if using the Green / Red Floating door input ** The floating door wire will only work with a "GND when Closed" floating door application NOT "POSITIVE when Closed". If "Positive when Closed" door pins are present use a pull down resistor and connect to the "Negative door input" wire.

Outputs	Blue	(-) Door Unlock Single Pulse Output , Connect this output for vehicle unlock control requiring only one single pulse
	Blue/White	(-) Door Unlock Double Pulse Output , Connect this output for vehicle unlock control requiring a double pulse
	Blue/Black	(-) Door Lock Output , Connect this output for vehicle door lock controls
	Orange/White	(-) Trunk Output , Connect to control powered trunks
	Pink/White	(-) Instant Start Trigger , 1.5 second output to trigger remote starters that are equipped with a negative input to start trigger
	Black/White	(-) Aux 2 Output , 1.5 second output used to control powered sliding doors or other powered accessories
	Black/Yellow	(-) Aux 3 Output , 1.5 second output used to control powered sliding doors or other powered accessories
Green	(+) Brake Pulse Output , 1 second pulse used to trigger the brake line connected to the remote starter. This will allow the user to wirelessly shut down a vehicle that is running from the remote starter	