

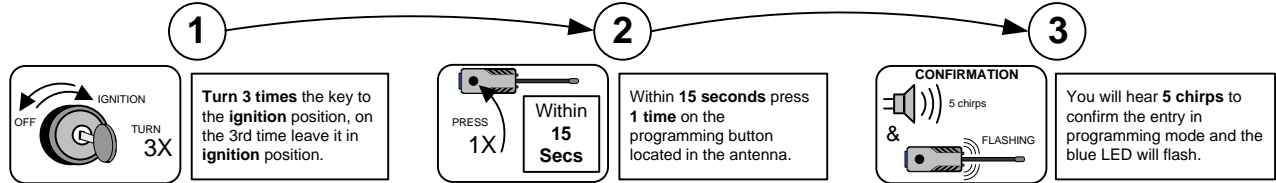
POWERstart

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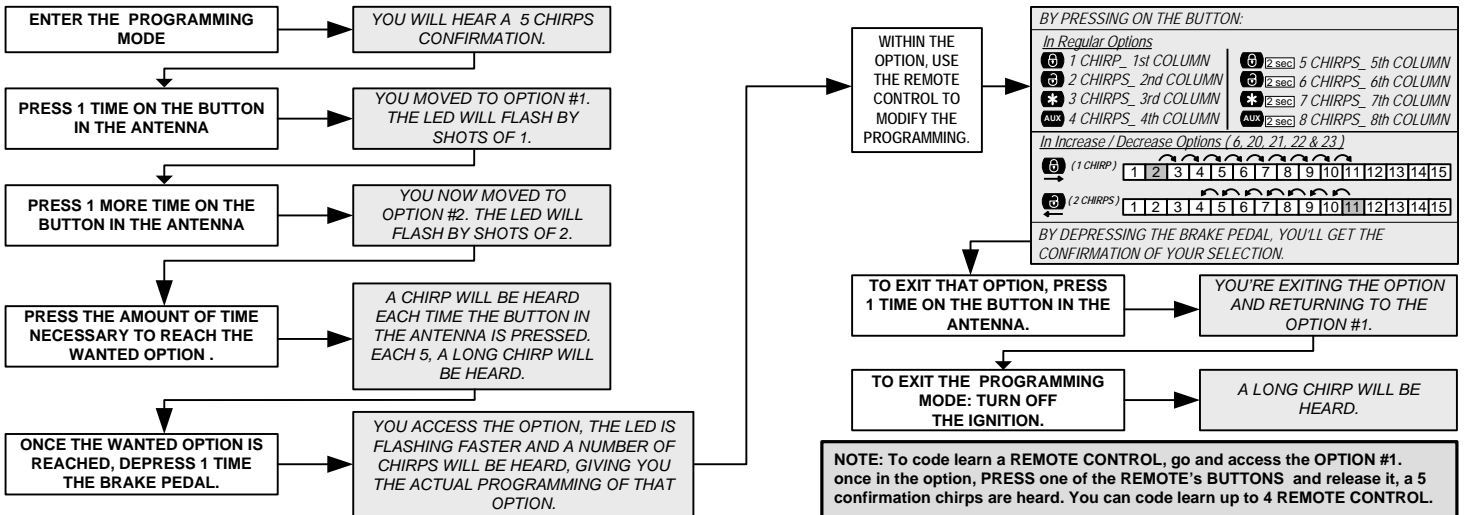
PS-1010 (AM) / 1015 (FM) 1 way remote & UART (DataLink) 1 way QUICK INSTALLATION MANUAL

3 jan 2013_1.00

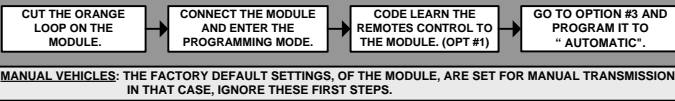
TO ENTER THE PROGRAMMING MODE



TO MODIFY AN OPTION



FIRST STEPS for AUTOMATIC VEHICLES



MANUAL VEHICLES restrictions

THE TYPE SELECTION IN OPTION #2 WILL ALLOW MANUAL TRANSMISSION TO WORK WITH TYPES THAT ARE USING NORMAL TACH or TACH DC.

REMOTE ENGINE STARTER & ALARM DIAGNOSTIC

DIAGNOSTIC FOR REMOTE STARTER:

Each time you try to remote start and the vehicle doesn't start, the parking lights will flash to indicate the diagnostic of the system. Please refer to this chart and locate the issues. You can also get the diagnostic code by pressing once on the antenna's button, with the system disarmed.

1 Flash	Brake pedal is depressed
2 Flashes	Valet mode is ON
3 Flashes	Hood is opened
4 Flashes	System shut down via transmitter
5 Flashes	Reserved
6 Flashes	Running time expired
7 Flashes	Starting time expired, but engine not running
8 Flashes	Reserved
9 Flashes	TACH cancelled the sequence (manual transmission only)
10 Flashes	H-Brake not pulled or cancelled Seq. (manual transmission only)
11 Flashes	Door is opened or cancelled Seq. (manual transmission only)
12 Flashes	Ignition is ON when remote start

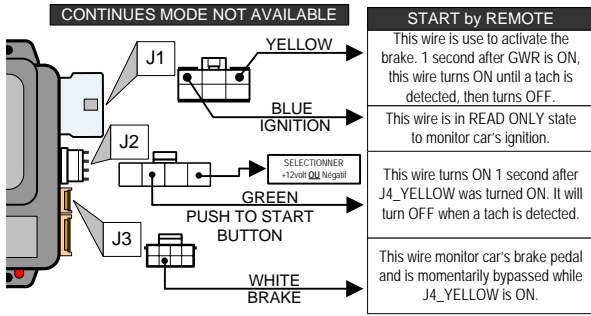
WARRANTY

The manufacturer guarantees to the purchaser of origin the remote starter and alarm to be free of defect material and labor. However, if it is proven that the product is defective, inside the two year period as from the original date of purchase, the manufacturer will repair or replace, without expenses towards the purchaser, any part (excluding any expenses incurred to deliver the product to the manufacturer) remote starter or alarm which the manufacturer considers defective. After the initial warranty period of 2 years, the manufacturer must repair or replace the defective products with a forwarding costs of 30.000US. All the guarantees apply to the original purchaser and ONLY to the vehicle in which it is initially installed. Repairs or replacement of the defective modules must remain at the discretion of the manufacturer. All the other parts, components, accessories or optional equipment relating to the remote starter and alarm are not included in the guarantee of the manufacturer. This guarantee is nontransferable. The original receipt must accompany a request for guarantee of service of any authorized retailer in factory. The fact of not conforming to these conditions can result in cancellation of the guarantee.

This guarantee does not cover the following elements: expenses for labor of removal or reinstallation, transport charges, abuse, misuse or accidental damage of the remote starter and the alarm or parts of the latter. This guarantee is cancelled in the event of amendments, repairs or deteriorations of any part of the product. The manufacturer does not guarantee or does not insure against the loss of the vehicle or its contents. The models of alarm are used only as dissuasion against any possible loss. This alarm can be considered for a reduction of the insurances; premiums please contact your insurance agent for more details. The manufacturer does not accept any responsibility for any damage resulting from the loss of the vehicle or its contents, caused or claimed caused, directly or indirectly, by a failure of the product.

CERTAIN DAMAGE IS EXCLUDED. The manufacturer declines any responsibility for additional damage caused by the product, including a financial loss, loss of use of the product, hiring of vehicle or all other expenses connected to the maintenance and the guard of the product. The manufacturer declines any responsibility for any additional damage caused by the product or resulting from his use, including the expenses of repair or replacement of other goods damaged or caused by his use, even if the product functions correctly. This product is designed to dissuade from an unauthorized use of the vehicles in which it is installed. The manufacturer does not guarantee that the product is proof against loss and vandalism and the human error or an inadequate use. The manufacturer does not accept any responsibility for any damage occurring any kind that it is caused by a vehicle in which the product is installed or resulting from damage from its use. The manufacturer does not accept any responsibility for any damage resulting from the loss of the vehicle or its contents, caused or claimed caused, directly or indirectly, by a failure of the product.

STARTER WITH MANUAL SHIFET - the installation of a remote starter MUST be carried out with an indicated manual transmission remote starter. It is the sole responsibility of the operator of the vehicle to make sure that the vehicle is left with the transmission in neutral when the remote starter is used. The manual transmission remote starter is designed as supplementary measure of safety ONLY. The manufacturer does not guarantee or does not insure against any damage or loss of life, which can result from remote starting the remote starter when the vehicle is in gear. The models for manual transmission are only designed to act as a preventive measure against starting in gear; it remains the sole responsibility of the operator or the owner of the vehicle to make sure the transmission is in neutral.



START by REMOTE
This wire is use to activate the brake. 1 second after GWR is ON, this wire turns ON until a tach is detected, then turns OFF.

This wire is in READ ONLY state to monitor car's ignition.

This wire turns ON 1 second after J4_YELLOW was turned ON. It will turn OFF when a tach is detected.

This wire monitor car's brake pedal and is momentarily bypassed while J4_YELLOW is ON.

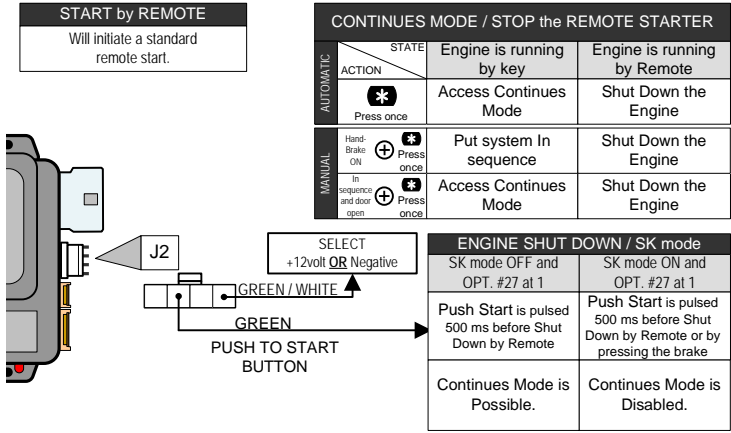
STOP the REMOTE STARTER
This wire will pulse 500 ms before Shut Down by Remote or by pressing the brake (with system armed) or when Running Time is completed.

TAKE OVER CONDITIONS

In all condition, if the system is ARMED pressing the brake will make the Push Start to be trigged to stop the engine.

With DOORS not connected	With DOORS connected
If the system is DISARMED, pressing the brake will not cause the Push Start to be trigged and will not stop the engine, unless the SK mode is enabled.	If the system is ARMED, Opening the DOOR will cause the Push Start to be trigged and to stop the engine. If the system is DISARMED, when the DOOR is detected a 60 seconds countdown is initiate. the brake needs to be press within that delay to avoid the Push Start to be trigged and to stop the engine, unless the SK mode is enabled.

When the module is in NORMAL or DC TACH mode



START by REMOTE
Will initiate a standard remote start.

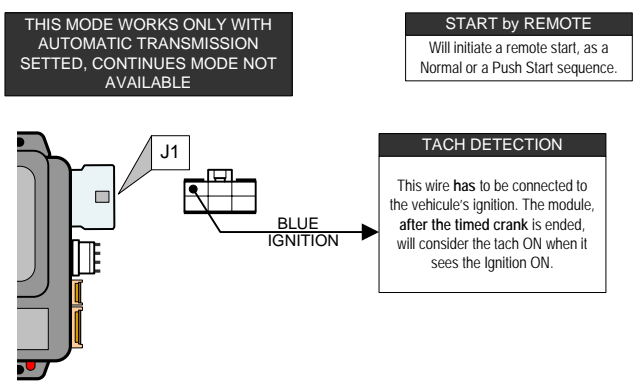
CONTINUES MODE / STOP the REMOTE STARTER

AUTOMATIC ACTION	STATE	Engine is running by key	Engine is running by Remote
Press once	Access Continues Mode	Access Continues Mode	Shut Down the Engine
Hand-Brake ON Press once	Put system In sequence	Shut Down the Engine	Shut Down the Engine
In sequence and door open Press once	Access Continues Mode	Shut Down the Engine	Shut Down the Engine

ENGINE SHUT DOWN / SK mode

SK mode OFF and OPT. #27 at 1	SK mode ON and OPT. #27 at 1
Push Start is pulsed 500 ms before Shut Down by Remote	Push Start is pulsed 500 ms before Shut Down by Remote or by pressing the brake
Continues Mode is Possible.	Continues Mode is Disabled.

When the module is in TIMED CRANK TACH mode

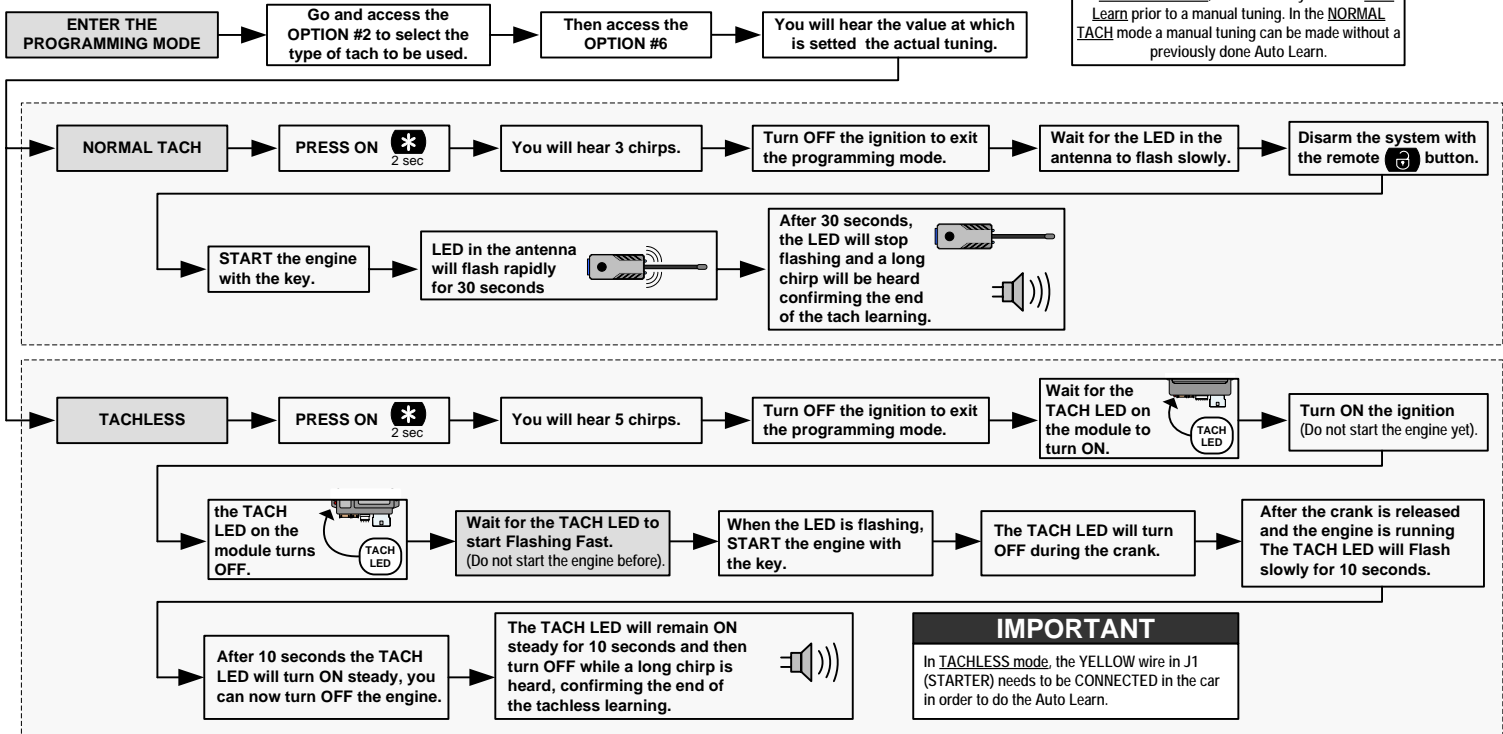


THIS MODE WORKS ONLY WITH AUTOMATIC TRANSMISSION SETTED, CONTINUES MODE NOT AVAILABLE

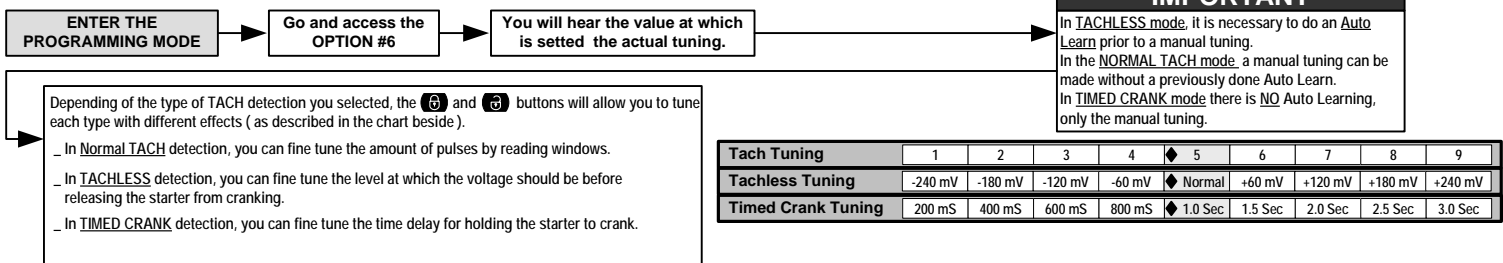
START by REMOTE
Will initiate a remote start, as a Normal or a Push Start sequence.

TACH DETECTION
This wire has to be connected to the vehicule's ignition. The module, after the timed crank is ended, will consider the tach ON when it sees the ignition ON.

Normal TACH and TACHLESS AUTO LEARNING



Normal TACH, TACHLESS, TIMED CRANK manual tuning



TEST to see if TACHLESS applies to the Vehicle

The TACHLESS feature refers to the reading of the voltage generated by the alternator. Therefore the alternator must be in good working condition as well as the battery. It is suitable that you run a couple of test on the vehicle before using the TACHLESS feature:

- 1_ Connect a Voltmeter Directly Across the battery Terminals.
- 2_ Start the Car and run at a normal idle. Within 20 seconds after starting the Car, the Voltage should raise over 13.4 Volts.
- 3_ Turn on Headlights to High Beam.
- 4_ check the battery Voltage.
 - _ The Battery voltage Should read between about 13.8 to 14.2 Volts. (Possibly up to 14.5 Volts.)
- 5_ Increase motor speed to about 1500 RPM. The Alternator should now produce a battery voltage between 14.2 and 14.6 Volts.
 - _ If it is Lower than 14.2 volts, the Alternator probably has one or more Bad Diodes.
- 6_ Now, Maintain the 1500 RPM and Turn off the Headlights. Run this test for One Full Minute.

"The Battery Voltage should NEVER Exceed about 14.8 Volts".

 - _ If it Does, the Alternators Voltage Regulator is probably Faulty, OVER CHARGING the Battery.
- 7_ At all time, with defrost ON and fan inside at high speed, the voltage should not drop under 13.2 Volt.

TACHLESS Cranking adjustment.

The OPTION #6, manual adjustment, applies only for the cranking duration.

The TACH monitoring LED on the module, as 2 types of flashing in TACHLESS mode.

- 1_ When the starter was release without any calculated overcrank based on the learned voltage when the starter is released in the auto learning procedure. The LED will flash **50% ON / 50% OFF** on the first and the second start.
- 2_ When the starter was release with calculated overcrank . The LED will flash **20% ON / 80% OFF** on the first start, and **80% ON / 20% OFF**. On the second start.

If by cold weather the vehicle does not start because it under cranks, try first to increase the voltage level in OPTION #6.
If this does not work, put back OPTION #6 to default value and go to OPTION #7 to force an over crank.

Note: It is important, during the learning to apply a good starter duration, because the module will learn that duration and this will be it's default crank duration.

TACHLESS detection ON / OFF

If the system, after 20 seconds stops the running engine. After it tries to do a second start and 20 seconds after shuts down the running engine again, that means that the TACHLESS detection level is to high.

The TACHLESS detection ON / OFF depends on the voltage recorded in the learning procedure during the last 10 seconds, after Ignition is OFF. If this level is to high the remote starter could shut down during the running time as if the TACH was OFF. In that case you have to return to the learning procedure and during these last 10 seconds, after Ignition is OFF, find a wait to drop the voltage (ex: turn ON High Beam) in order to get around 12.8 Volts.




These 10 seconds , after Ignition is OFF, can be cut short by pressing once the button in the antenna.

SPECIAL FEATURES**MULTIPLE SETTINGS OPTIONS.**

Few OPTIONS will set 2 or 3 settings at the time. It's the case for OPTIONS #8, #10, #12, #18, #23.

EXAMPLE #12: This OPTION will set at the time, the LOCK when BRAKE mode ON / OFF, the ANTENNA LED ON / OFF and the SK mode ON / OFF.

Some other OPTIONS offers you different operations within the same OPTION. It's the case for OPTIONS #3, #6.

EXAMPLE #6: This OPTION will set the manual tuning when using the  and  buttons. It will also enable the AUTO LEARNING for the proper type of TACH and if available for that type, when using  button.

SK mode and Push Start output.


The SK mode feature will force a PULSE on the Push Start wire output (5th RELAY if set) before the system shuts down when the BRAKE is triggered. It will, as well, cancel the continues mode.


The Push Start wire output (5th RELAY if set) will be PULSED, before the system shuts down, at the end of the running time and when the system is stopped by the remote. This output is active in NORMAL start sequences and in Push Start sequences.


In Push Start sequences this output is used, as well, at the start up of the engine.

DOOR PRIORITY UNLOCK _ OPTION #21-15 and / or #22-15

This feature is set at OPTIONS #21_15 and / or #22_15. It affects 3 outputs, WHITE / GREEN (unlock), ORANGE (negative parking lights), and WHITE / BLACK wires.

When not set: The GREEN / WHITE wire follows the setting of OPTION #13 when the  button is pressed.


When set: The ORANGE and / or WHITE / BLACK wire gives a 400 mS pulse when the  button is pressed.


When the  button is pressed, the ORANGE and / or WHITE / BLACK wire gives a 400 mS pulse and at the same time the WHITE / GREEN wire does what is settled in OPTION #13.
So if OPTION #13 is set to 400 mS with double pulse, the result would be that during the first pulse the 2 wires will be triggered and during the second pulse only the WHITE / GREEN will be triggered.

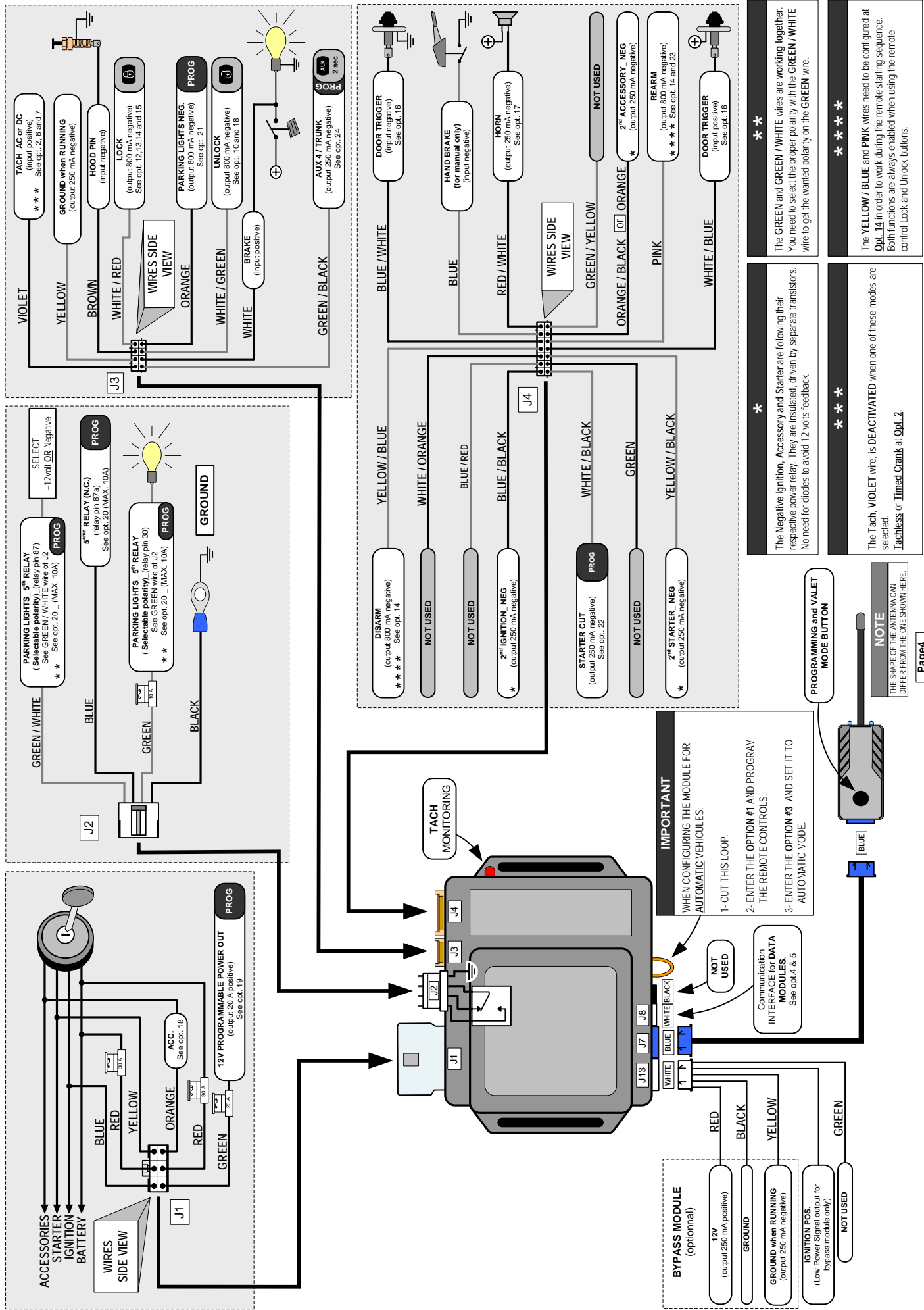
Note: This feature does not affect the sequences set in OPTION #14. The WHITE / GREEN will still work normally with all other OPTIONS.

AUDIBLE FUNCTION ON / OFF

This 2 features are accessible by the user. Both are disable by default.

Audible ON / OFF: With ignition ON, press ONCE on the  button. This will toggle the feature ON / OFF.

Audible ON / OFF for Manual transmission sequence : With ignition ON, press and hold brake pedal and press ONCE on the  button. This will toggle the feature ON / OFF.



PROGRAMMING CHART

OPT.	FUNCTION	PRESS ON	PRESS ON	PRESS ON *	PRESS ON AUX	PRESS ON	PRESS ON	PRESS ON	PRESS ON *	PRESS ON	AUX		
1	Transmitter Code Learning	Press any button until 5 chirps confirmation											
2	Installation TYPE	Normal	TachLess	DC Tach	Push to Start. Pulse the brake with the starter relay. Read only with Ignition wire. Read Brake except during start. WITH TACH	Push to Start. Pulse the brake with the starter relay. Read only with Ignition wire. Read Brake except during start. WITH TACHLESS	Push to Start. Pulse the brake with the starter relay. Read only with Ignition wire. Read Brake except during start. WITH DC TACH	Normal, Timed Crank, no tach, reads ignition only (Hybrid)	Normal, Timed Crank, no tach, reads ignition only (Hybrid)	Push Start, Timed Crank, no tach, reads ignition only (Hybrid)			
3	Selection of Vehicle Transmission & Alarm Or Factory Default reset	AUTOMATIC Transmission Without Reset	MANUAL Transmission Without Reset										
4	UART Protocol & Communication Type	Protocol ADS	Protocol FORTIN	Protocol ADS	Protocol FORTIN	Protocol FORTIN	Protocol FORTIN	Protocol FORTIN	Protocol FORTIN	Protocol FORTIN			
5	Reserved												
6	Tach Fine Tuning & Learning.	Increase	Decrease	Tach Tuning	1 -240 mV 200 mS	2 -180 mV 400 mS	3 -120 mV 600 mS	4 Normal 800 mS	5 +60 mV 1.0 Sec	6 +120 mV 1.5 Sec	7 +180 mV 2.0 Sec	8 +240 mV 2.5 Sec	9 +300 mV 3.0 Sec
7	Over Cranking Adjustment	Normal	+ 200 mSec	+ 400 mSec	+ 1.0 Sec	+ 1.5 Sec	+ 2.0 Sec	+ 2.5 Sec	+ 3.0 Sec	+ 3.0 Sec			
8	Running Time Duration	3 minutes	6 minutes	12 minutes	24 minutes	3 minutes	6 minutes	12 minutes	24 minutes	30 seconds	60 seconds	12 minutes	24 minutes
9	DIESEL MODE Glow Plug (Diesel Motor Only)	Disable	10 seconds	15 seconds	20 seconds	30 seconds	40 seconds	50 seconds	60 seconds	Turbo Mode 2mins / Panic 30secs	Turbo Mode 4mins / Panic 60secs	Turbo Mode 2mins / Panic 60secs	Turbo Mode 4mins / Panic 60secs
10	Turbo Mode (Manual) -Panic mode duration	Turbo Mode OFF / Panic 30secs	Turbo Mode 60secs / Panic 30secs	Turbo Mode 2mins / Panic 30secs	Turbo Mode 4mins / Panic 30secs	Turbo Mode 60secs / Panic 30secs	Turbo Mode 2mins / Panic 30secs	Turbo Mode 4mins / Panic 30secs	Turbo Mode 60secs / Panic 30secs	Turbo Mode 2mins / Panic 30secs	Turbo Mode 4mins / Panic 30secs	Turbo Mode 2mins / Panic 30secs	Turbo Mode 4mins / Panic 30secs
11	Automatic Sequence (Manual Vehicle Only)	Disable	Enable 1x H.Brake	Enable 2x H.Brake	Enable 1x H.Brake	Enable 2x H.Brake	Enable 1x H.Brake	Enable 2x H.Brake	Enable 1x H.Brake	Enable 2x H.Brake	Enable 1x H.Brake	Enable 2x H.Brake	Enable 1x H.Brake
12	Brake to Lock / LED ON OFF / SK mode Selection.	Disable _LED ON_ SK OFF	Enable _LED ON_ SK OFF	Disable _LED OFF_ SK OFF	Enable _LED OFF_ SK OFF	0.8 second (Unlock Double Pulse)	0.8 second (Unlock Simple Pulse)	0.8 second (Unlock Double Pulse)	0.8 second (Unlock Simple Pulse)	0.8 second (Unlock Double Pulse)	0.8 second (Unlock Simple Pulse)	0.8 second (Unlock Double Pulse)	0.8 second (Unlock Simple Pulse)
13	Lock / Unlock Pulse	0.4 second (Unlock Simple Pulse)	0.4 second (Unlock Double Pulse)	0.8 second (Unlock Simple Pulse)	0.8 second (Unlock Double Pulse)	1.2 second	1.6 seconds	2.4 seconds	3.2 seconds	4.0 seconds	4.8 seconds	5.6 seconds	6.4 seconds
14	Lock / Arm and Unlock / Disarm configuration In the remote start sequence.	Normal Lock, Unlock, Arm and Disarm DEACTIVATED In remote start seq.	Lock, Unlock, Arm and Disarm DEACTIVATED In remote start seq.	Lock After Start Lock After Shut Down	Lock After Start Lock After Shut Down	Lock After Start Lock After Shut Down	Lock After Start Lock After Shut Down	Lock After Start Lock After Shut Down	Lock After Start Lock After Shut Down	Lock After Start Lock After Shut Down	Lock After Start Lock After Shut Down	Lock After Start Lock After Shut Down	Lock After Start Lock After Shut Down
15	Starter Cut Arming	Passive Arming without lock	Active Arming With Safety Arming without lock	Active Arming Without Safety Arming	Active Arming With Safety Arming	Active Arming Without Safety Arming	Active Arming With Safety Arming	Active Arming Without Safety Arming	Active Arming With Safety Arming	Active Arming Without Safety Arming	Active Arming With Safety Arming	Active Arming Without Safety Arming	Active Arming With Safety Arming
16	Dome Light Delay	Disable	Enable 10 sec. when arming and on Shut Down.	Enable 45 sec. when arming and on Shut Down.	Enable 120 sec. when arming and on Shut Down.	Enable 45 sec. when ignition is OFF and arming or disarming are activated (Also on Shut Down. (Manual))	Enable 120 sec. when arming and on Shut Down.	Enable 45 sec. when ignition is OFF and arming or disarming are activated (Also on Shut Down. (Manual))	Enable 120 sec. when arming and on Shut Down.	Enable 45 sec. when ignition is OFF and arming or disarming are activated (Also on Shut Down. (Manual))	Enable 120 sec. when arming and on Shut Down.	Enable 45 sec. when ignition is OFF and arming or disarming are activated (Also on Shut Down. (Manual))	Enable 120 sec. when arming and on Shut Down.
17	Horn Pulse Duration / Siren	Horn 16 ms	Horn 32 ms	Horn 64 ms	Horn 128 ms	Horn 128 ms	Horn 128 ms	Horn 128 ms	Horn 128 ms	Horn 128 ms	Horn 128 ms	Horn 128 ms	Horn 128 ms
18	-Accessory Sequence -Select Pulse of Ignition, accessory & GWR during Disarm.	ON with IGNITION OFF during CRANKING Disarm without IG,ACC,GWR.	ON during CRANKING Disarm without IG,ACC,GWR.	ON before IGNITION OFF during CRANKING Disarm without IG,ACC,GWR.	ON during CRANKING Disarm without IG,ACC,GWR.	ON before IGNITION OFF during CRANKING Disarm without IG,ACC,GWR.	ON during CRANKING Disarm without IG,ACC,GWR.	ON before IGNITION OFF during CRANKING Disarm without IG,ACC,GWR.	ON during CRANKING Disarm without IG,ACC,GWR.	ON before IGNITION OFF during CRANKING Disarm without IG,ACC,GWR.	ON during CRANKING Disarm with IG,ACC,GWR.	ON before IGNITION OFF during CRANKING Disarm with IG,ACC,GWR.	ON during CRANKING Disarm with IG,ACC,GWR.
19	12V Programmable Power Out	2nd Ignition (+)	2nd Accessory (+)	2nd Starter (+)	2nd Parking Light (+)	2nd Starter (+)	2nd Accessory (+)	2nd Starter (+)	2nd Parking Light (+)	2nd Accessory (+)	2nd Starter (+)	2nd Accessory (+)	2nd Starter (+)
20	PROGRAMMABLE RELAY (5 th Relay COM. N.O. N.C.)	Increase	Decrease	Decrease	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.
21	OUTPUT #1 PROGRAMMABLE (NEGATIVE)	Increase	Decrease	Decrease	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.
22	OUTPUT #2 PROGRAMMABLE (NEGATIVE)	Increase	Decrease	Decrease	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.	SEE CHART #1 (1 to 15), for ALL the possibilities.
23	-Rearm Output (negative) -Disable Lock / Unlock and Arm / Disarm on Balance (UART).	Pulse Before, During and After Lock	Pulse Before Lock, Lock, Disable Lock / Unlock and Arm / Disarm on UART.	Pulse After Lock	Pulse Before, During and After Lock, Disable Lock / Unlock and Arm / Disarm on UART.	Pulse Before Lock, Lock, Disable Lock / Unlock and Arm / Disarm on UART.	Pulse Before Lock, Lock, Disable Lock / Unlock and Arm / Disarm on UART.	Pulse Before Lock, Lock, Disable Lock / Unlock and Arm / Disarm on UART.	Pulse Before Lock, Lock, Disable Lock / Unlock and Arm / Disarm on UART.	Pulse Before Lock, Lock, Disable Lock / Unlock and Arm / Disarm on UART.	Pulse Before Lock, Lock, Disable Lock / Unlock and Arm / Disarm on UART.	Pulse Before Lock, Lock, Disable Lock / Unlock and Arm / Disarm on UART.	Pulse Before Lock, Lock, Disable Lock / Unlock and Arm / Disarm on UART.
24	AUX4 Output (negative)	Ground When Running Cancel funct 2 secs on remote	1 sec with Unlock	2.5 secs with Unlock	10 secs with Unlock	10 secs with Unlock	10 secs with Unlock	10 secs with Unlock	10 secs with Unlock	10 secs with Unlock	10 secs with Unlock	10 secs with Unlock	10 secs with Unlock

CHART #1 - Settings for Options #20, 21, 22

1_ Follow Ignition	2_ Follow Starter	3_ Follow Accessory	4_ Follow GWR	5_ Fol. Parking Lights	6_ Pulse After Shut Down	7_ Follow LED	8_ Follow Lock
9_ Follow Unlock	10_ Follow Rearm	11_ Follow Disarm	12_ Follow Horn	13_ Starter Cut	14_ Follow AUX4 (Trunk)	15_ See note (1)	==

For Automatic Transmission Only, can not be selected in Manual Transmission.
 TACH wire DEACTIVATED
 Factory Default Setting
 == = Reserved, can not be selected.