

### Learning Remotes (Standard Key):

- Step 1 – Cycle Key between OFF and ON 5x within 10 sec, should see 1 Parking Light flash (see Troubleshooting if anything different)
- Step 2 – TAP Lock on first Remote, should see 1 Parking Light flash. (see Troubleshooting if anything different), repeat step 2 for additional remotes.
- Step 3 – Wait 7-10 seconds for 2 Parking Flashes to verify Exiting Programming

### Learning Remotes (PTS Key):

- Step 1 – Cycle between OFF and IGNITION 5x within 10 sec (most vehicles will require 15x push on the PTS switch), should see 1 Parking Light flash (see Troubleshooting if anything different)
- Step 2 – TAP Lock on first Remote, should see 1 Parking Light flash. (see Troubleshooting if anything different) , repeat step 2 for additional remotes.
- Step 3 – Wait 7-10 seconds for 2 Parking Flashes to verify Exiting Programming

### Tach Learn:

- Step 1 - Start Vehicle with Factory Key
- Step 2 – Hold Foot Brake
- Step 3 – Press Remote Start button on FOB for 3 seconds
- Step 4 – Parking Lights should flash once (see troubleshooting if not)
- Step 5 – Tach learned

### Valet (Enter)

- Step 1 – HOLD Foot Brake
- Step 2 – Cycle Key between OFF and ON 5x within 10 seconds, should flash Parking Lights 1x

### Valet (Exit in Vehicle)

- Step 1 – Turn IGN ON
- Step 2 – Press and Release Foot Brake 10x within 10 seconds, will flash Parking Lights 2x

### Valet (Exit with Remotes)

- Step 1 – TAP Lock and Trunk, will flash Parking Lights 2x

### Trouble Shooting with Parking Lights:

- No Parking Light flash after 5<sup>th</sup> IGN cycle: BAD IGN wire connection, bad ground, or no POWER to unit.
- Parking Lights flash 2x immediately after 5<sup>th</sup> IGN cycle: Feedback on input or antenna or bad ground.
  - Remove all connections to brain, only plug in Main Power Harness and Antenna, retry programming
  - If still, immediately going to 2 Parking Flashes, unplug all connections, let brain sit for 15 seconds, re-plug Power Connector back in and try programming, if the unit does not immediately flash 2x, bad antenna or antenna cable
- Parking Lights flash 2 after 10 seconds and does not flash 1x after lock press: Weak remote batteries, bad remotes, bad antenna, or bad antenna cable.
- (PTS) If no Parking Light flash after 5<sup>th</sup> IGN cycle, use a jumper wire from constant 12 (RED) to IGN (GREEN) 5x within 10 seconds
- If Parking Lights flash 1x and do not flash with Remote Lock press, most likely a Brake input or Bypass communication issue. Remove bypass and Gray CN5 connector, try learn again.

### Trouble Shooting with Parking Lights:

- Parking flash 3x then 1x: Foot Brake not being registered, relocate or hardwire brake wire input on brain and turn off FOOT BRAKE STATUS in bypass
- Parking flash 3x then 10x: System in Valet, take unit out of Valet and retry
- Parking flash 2x then 1x: Engine Sense not set to Tach
- Parking flash 2x then 3x: Bad Tach signal, relocated Tach to different source

### Trouble Shooting with Parking Lights:

- Parking Lights flash 1x with entering Valet mode
- Parking Lights flash 2x with exiting Valet mode
- When using a **1 Button** remote to exit valet
  - Turn the key to the ignition or 'On' position.
  - Press and release the remote button for a half second.
  - Wait for the remote LED to stop flashing and repeat for a total of 5 times within 10 seconds.
- Once you have tapped the remote button 5 times the vehicles parking lights will flash 2 times to indicate the system has exited Valet Mode.

### Programming DAS:

- Step 1 – If using CM-6x00 series brain, Update and change option 4-12-2. If using CM-7x00 Series, jump to Step 2
- Step 2 – Mount DAS on large bundle of wires or heater vent
- Step 3 – If using CM-7200/6200, verify 3-06-2 is programmed. If using CM-7000/6000 Proceed to Step 4.
- Step 4 – Select your settings for dipswitches
- |           |                       |           |                       |
|-----------|-----------------------|-----------|-----------------------|
| Switch 1: | ON - 3 Degree Tilt    | Switch 2: | ON - 4 Inch Movement  |
|           | OFF - 1.5 Degree Tilt |           | OFF - 3 Inch Movement |
- Step 5 – Turn IGN to ON (Make sure all DOORS are closed, and spare key present in case vehicle locks and can't get back in)
- Step 6 – Hold LOCK and UNLOCK on Remote for 3 seconds, followed by 1 Parking Light flash
- Step 7 – TAP Lock on the remote to set Warn Away
- Step 8 – Strike vehicle physically as hard as you would like the Warn Away set for sensitivity. Siren Chirps from 1-most sensitive to 10-least sensitive will report back indicating setting. (Warn Away will automatically set Full Trigger)
- Step 9 – (Only used if wanting to manually set Full Trigger) TAP Unlock and strike vehicle slightly harder than when Warn Away was set.
- Step 10 – Turn OFF IGN
- Step 11 – ARM system and WAIT 45 seconds to test impact settings

### Trouble Shooting with Parking Lights:

NOTE: You must wait 45 Seconds after ARMING the brain to test impact.

- Impact is not registering: Move mounting location or during physical strike, flick DAS to see if impact is programmed (maybe bad sensor, or 3-06 setting is wrong).
- If you get 2x Parking Lights after HOLDING LOCK and UNLOCK for 3 seconds then when TAPPING LOCK to set warn away and the vehicle locks, you may have taken too much time, and programming timed out and exited. Try entering programming again, and be a little faster.
- Parking Lights flash 3x and 3x Chirps immediately after HOLDING LOCK and UNLOCK for 3 seconds
  - CM-7200/6200 change 3-06-2

### Programming RPS:

- Step 1 – Finish install and verify Lock/Unlock operation (must have door trigger hooked up to program)
- Step 2 – If using CM-6x00 series brain, Update and change option 3-16-2. If using CM-7x00 Series, jump to Step 3
- Step 3 – Mount RPS on front windshield and plug into brain
- Step 4 – Choose your RPS Touch 4 digit code. '0' is not an option
- Step 5 – Turn IGN ON and leave DRIVER DOOR OPEN
- Step 6 – HOLD finger over the 'Red Circle' for 3 seconds, siren will chirp and LEDs flash in circular pattern
- Step 7 – TAP on your first digit (HOLD the digit for 2.5 seconds for 6-10), after digit entry, a siren chirp and LED flash in circular pattern
- Step 8 – Repeat Step 7 until all four digits are set. You will get 1 siren chirp and 1 Parking Light flash once programming is finalized

### Trouble Shooting with Parking Lights:

- If 3 Siren Chirps and Parking Light flashes happen at step 8, Repeat Steps 5-8 again.
- If LCD is paged during 3 second 'Red Circle' hold, sensitivity of RPS might be too strong or too weak to register finger properly.
- To adjust sensitivity of RPS:
  - Open Driver Door
  - Hold the button on the back of the RPS Touch until the LEDs got out
  - Release button and TAP again (the number of solid LEDs represents the sensitivity, 1 being least through 5 being most sensitive).

### Programming EZGo:

- Step 1 – Finish install and verify Black Ground wire on EZGo antenna is grounded
- Step 2 – Verify that RF Remote antenna is Daisy chained through EZGo antenna and NOT plugged into the 4 pin port on 7X00 Series brain
- Step 3 – Mount EZGo antenna on driver side of vehicle (preferably in head liner or windshield) (TIP: Face sticker on antenna toward preferred entrance zone to get best results).
- Step 4 – Change Feature 1-14 (Auto Mode) to 3 on brain with OP500
- Step 5 – Go through Remote Learning Procedure for all RF Remotes and EZGo Remote with operation button on back.
- Step 6 – Verify Lock and Unlock operation of EZGo remote with button on the back.
- Step 7 – Once brain responds accordingly to button on EZGo remote, press and hold Button on the back for 10 seconds to turn on Proximity function.
- Step 8 – Test operation of Proximity

### Trouble Shooting:

- If EZGo remote does not want to learn with other RF Remotes
  - Unplug RF Remote antenna from EZGo antenna and try again.
    - If EZGo remote programs, double check ground location (use OBD2 pin4) or change EZGo antenna
    - If EZGo remote does not program, replace battery or replace EZGo kit.
- If Proximity does not work
  - Verify that Proximity is turned on, HOLD back button on EZGo remote for 10 seconds, 1 Parking Light Flash means proximity is ON, 2 means OFF
  - Verify that 1-14 is set to 3
  - Replace Battery (CR2032)
- If using the 6X00 Series, update to newest firmware and try again

NOTE: Gray EZ100R will not program to ANT-RFID-315 antennas. The 315 EZGo remotes are Black.

### Programming with OP500:

- Step 1 – Unlock Brain twice to verify unit is Disarmed
- Step 2 – Unplug antenna cable from antenna
- Step 3 – Plug in antenna cable into top of OP500
- Step 4 – Once at screen displaying 1-01, continue with selecting options for each feature that needs changing.
- Step 5 – Once all changes are finalized, PRESS and HOLD 'W' button for 2 seconds to write all changes to brain.
- Step 6 – '182 Success' should display if everything goes correctly

### Trouble Shooting:

- "ER 01" and LCD Line 2 "FAIL" means the Brain is still Locked and Armed
- "ER 02" and LCD Line 2 "FAIL" means there is not communication between Brain and OP500 but power is seen.
  - Unplug and plug in again, try writing again.
  - Bad antenna cable, replace and retry

### Turning on Features:

- Step 1 – Use OP500 and Feature Table to turn on the Feature you would like to have on.
- Step 2 – Using a 4 Button remote, turn on option with button sequence. 1x Parking Light Flash for Feature turned ON. 2x Parking Light Flash for Feature turned OFF.

### Remote Feature Cycling:

Valet Mode – Tap LOCK and TRUNK buttons  
Siren Mute – Tap LOCK and UNLOCK buttons  
Ignition Controlled Locks – Tap LOCK and REMOTE START buttons  
Passive Arm/Lock – Tap UNLOCK and TRUNK buttons  
Timer Mode – Tap UNLOCK and REMOTE START buttons  
Shock Sensor – Hold LOCK and TRUNK buttons for 2.5 seconds  
Turbo Timer – Hold TRUNK and REMOTE START buttons for 2.5 seconds

## Remote Start Error Codes

If the remote start fails to start the vehicle, the parking lights will flash three times immediately. Following those three flashes, the parking lights will flash the corresponding error code. Three parking light flashes then

- 1 Flash- Motor running or must learn tach before 1st remote start
- 2 Flashes- Key in the ON position
- 3 Flashes- Door open (manual transmission)
- 4 Flashes- Trunk open
- 5 Flashes- Foot brake ON
- 6 Flashes- Hood open
- 7 Flashes- Reservation not set (manual transmission)
- 8 Flashes- Tach or tachless sensing failure
- 9 Flashes- FT-DAS detected movement during start
- 10 Flashes- Valet mode

## Remote Start Shut Down Codes

If the vehicle shuts down after remote start sequence is confirmed, the vehicle's parking lights will flash 4 times, pause, then flash again with the error code. On 2-way remotes, you can tap button "IV" or "Key" to initiate the sequence. On 1-way remotes, hold the trunk and start buttons together for 2.5 sec. Four parking light flashes then

- 1 Flash- Lost engine sensing signal (tach/alternator/tachless)
- 2 Flashes- Lost parking brake signal (manual transmission)
- 3 Flashes- Foot brake triggered
- 4 Flashes- Hood pin triggered

## Remote Start Tach Learning Codes

Two parking light flashes followed by error flashes.

- 1 Flash- Programming not set to tach mode
- 2 Flashes- Key is in the off position
- 3 Flashes- Not an appropriate tach signal

## Alarm LED Diagnostic Codes

When the alarm is triggered the LED on the RPS (if installed) and the LED (if installed) will flash a certain amount of times. This number of flashes in correlation with which zone was triggered (see below).

These flashes will repeat until unit is disarmed. Parking Lights can also be used to diagnose alarm faults. By pressing the Key Start button, the Parking Lights will flash 2x with a pause and the corresponding zone as indicated below.

- 2 Flashes - Door / Hood / Trunk / Ignition Triggered
- 3 Flashes - 2nd Stage Shock Triggered
- 4 Flashes - 2nd Auxiliary Input Triggered
- 5 Flashes - Panic with Remote

## Trouble Shooting for RS Error Codes:

- 3x - 1x Parking Lights, LEARN TACH. If while learning Tach, you get 3x-1x again, foot brake is not being registered and needs to be checked
- 3x - 2x IGNITION has resting voltage on wire, verify IGNITION source is truly ignition and not constant
- 3x-3x Close DOOR and reset Reservation Mode, verify connection on DOOR PIN is solid and that DOOR PIN is not failing (replace OEM part).
- 3x-4x Close TRUNK and try again, if closed, unplug TRUNK PIN. If through data supplied by bypass, turn off TRUNK STATUS.
- 3x-5x Take foot off BRAKE, verify Lt. BLUE/WHITE on brain for resting voltage. Turn off BRAKE STATUS through bypass.
- 3x - 6x Hood is registered as open, check Gray/Black for GROUND. If Hood is through DATA, turn off HOOD STATUS put through Bypass. Remove power from brain for 10 seconds, reconnect, and test
- 3x - 7x Parking Lights, if not manual transmission, CUT LOOP in brain. If manual transmission, set reservation mode.
- 3x-8x Double check POWER, GROUND, and IGNITION connections if Voltage Sense or Tach connection needs to be checked if brain is set to Tach Sense
- 3x - 9x DAS detected movement during Remote Start, reset Reservation Mode and verify vehicle is out of gear. If vehicle is lifted, may want to change dipswitch to 4 inch movement to limit falses.
- 3x - 10x Parking Lights, Valet Mode is ON, exit Valet, and try again.