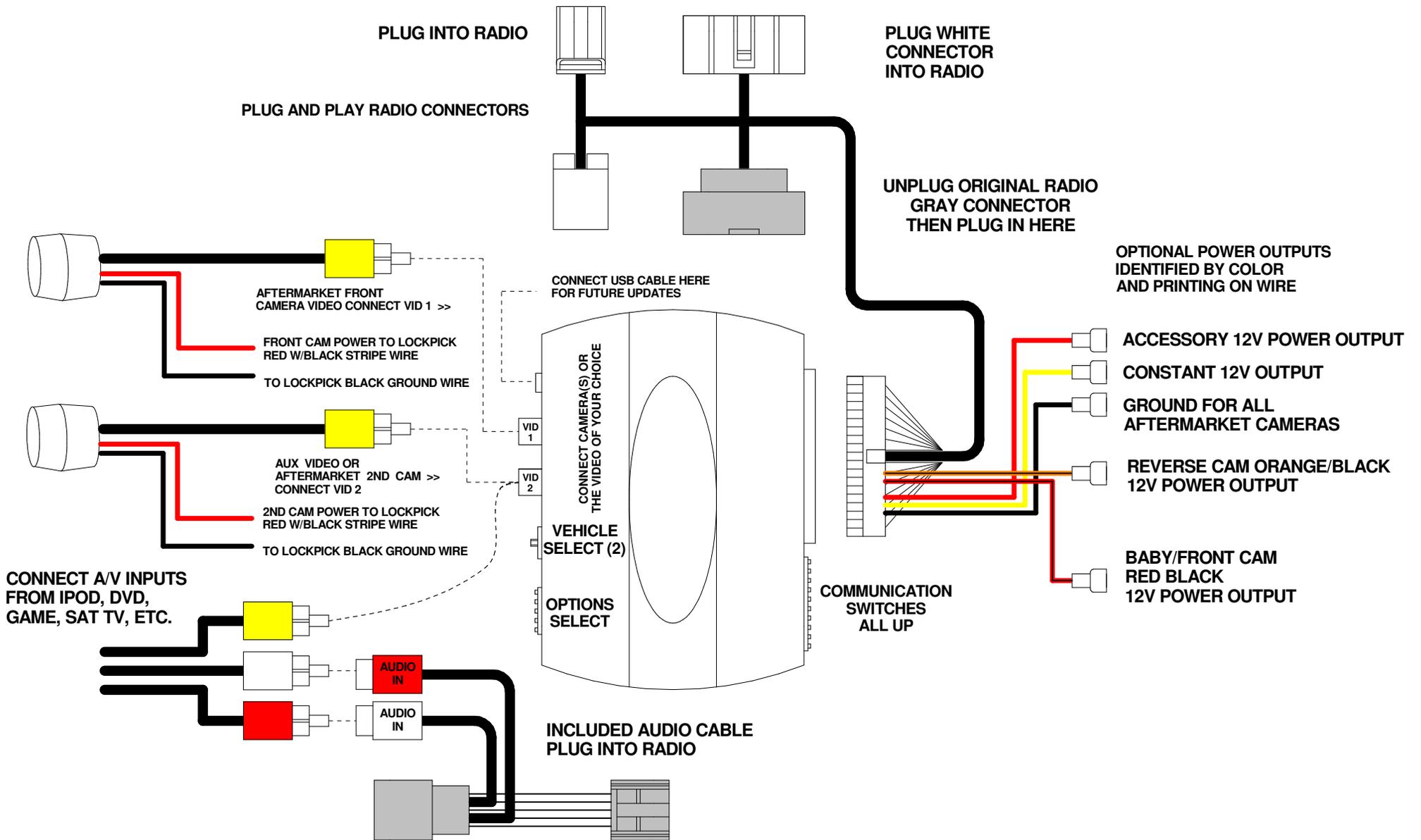


# REC FIM LOCKPICK™ INSTALLATION OPTIONS



# Coastal Electronic Technologies, Inc.

Chrysler/Dodge/Jeep

## FREEDOM IN MOTION

### REC LOCKPICK

## Installation and Operation Instructions

Thank you for your purchase of the Coastal Electronic Technologies, Inc. FREEDOM IN MOTION REC LOCKPICK . The FIM REC LOCKPICK has many features and capabilities to unlock and allow full use of your Chrysler/Dodge/Jeep REC navigation radio. This can include:

- The ability to use your navigation system without restrictions including the ability to input addresses, search points of interest, etc. while in motion.
- Even if your car does not already have rear seat entertainment with AUX input jacks, the Lockpick can provide full multimedia audio/video inputs. With the Apple multimedia cable you can plug in your IPOD, iPhone, or iPad, or directly connect any audio and video source to view them on demand and while in motion.
- The Lockpick interface will automatically or manually turn on the REAR VIEW CAMERA function of your REC radio. Plug in standard video to the included camera connector to have automatic rear views placed on your screen while in reverse. You can also manually turn on the camera, even in Park or Drive !!
- Already have a FACTORY REAR VIEW CAMERA? The Lockpick lets you add full control of your factory camera. Now you can turn it on while in any gear and while in motion with a single connection provided by the Lockpick . Monitor a trailer, car or anything behind you at any time!!
- The Lockpick is Front camera ready and will power and control a front or baby cam.
- Includes power for your cameras directly from the Lockpick harness for simple connections.

This manual will document in detail, the many functions of the new REC LOCKPICK and how to properly set the programming switches to your desired operation. Installation diagrams are included to guide you in various connection strategies. Please read this manual fully so that you can learn to take advantage of all of the exciting features and capabilities of the REC LOCKPICK.

The REC LOCKPICK is plug and play for unblocking of NAV/ VIDEO/AUDIO INPUT/FRONT AND REAR CAMERAS. Factory Rear View Cameras are fully supported for automatic viewing while in reverse, but will require the connection of the REVERSE power source included in your harness if you want to view them on demand such as when you are in DRIVE or Park.

*At this time, Coastal Electronic Technologies, Inc. would like to recommend that you have this installation completed by a certified mechanic or someone familiar with automotive electronics. This installation, while not time consuming, does require careful attention to detail and precise following of installation instructions.*

*Coastal Electronic Technologies, Inc. accepts no responsibility due to the improper installation or use of this product. Installation and / or use of this product implies and signifies user acceptance of this term of use. Please adhere to all driving laws in your state.*

OK, let's get started. On your REC LOCKPICK control box are switch settings which allow you to program your Lockpick for the features you would like to enable. The diagram below will detail the function of each. More than one switch may be turned on at a time to create the feature list you desire. Default setting when shipped is all switches up. This turns on all options for your REC navigation radio. If your system already has rear seat entertainment present or you will not be installing a rear view camera, then adjust the switches as shown in the following diagrams and photos. Improper switch settings will not damage anything however it could cause your radio to fail to turn on or conflict with existing accessories.

### 1. VES MODE

Place switch 1 **DOWN** if you wish to add the VES (rear entertainment mode) to your radio to enable VIDEO and AUDIO inputs

Place switch 1 **UP** if you already have the factory rear entertainment system

### 2. AUTO FRONT CAMERA

Place switch 2 up for manual only activation of front camera video input

Place switch 2 **DOWN** to enable automatic Front camera activation at speeds below 7 mph.

### 3. AUTO REAR CAMERA

Place switch 3 **UP** to activate the Reverse camera view any time the vehicle is placed in Reverse gear. The camera can still be activated manually.

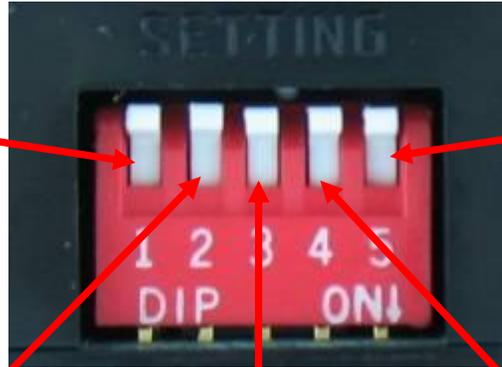
Place switch 3 **DOWN** for manual only activation of rear cam video input.

### 5. DEALER MODE

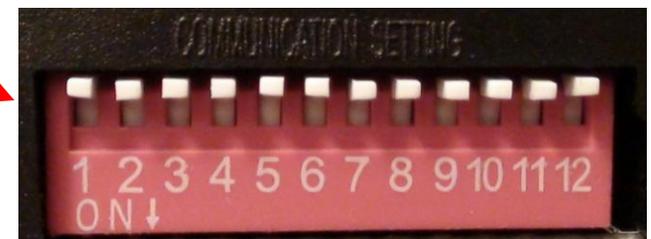
Place switch 5 up for normal installations

Place switch 5 **DOWN** to block Lockpick navigation overrides while in motion

### 4. UP ALWAYS



Place rotary switch on number 2 position and all communication switches **UP** as shown in the photos here.



The new FIM REC LOCKPICK is designed with a simple “T” harness connector, equipped with factory male and female connectors for direct connection to your screen. Specific links with videos demonstrating methods of gaining access to the rear of the standard REC radio and placement of the module is available for viewing at various links at: [http://www.coastatech.com/REC\\_LOCKPICK.htm](http://www.coastatech.com/REC_LOCKPICK.htm) Most installations are relatively simple with just a single panel surrounding the radio which must be pulled free before exposing the radio. Remove 4 screws holding the radio to view the connectors on the rear of the radio. Consult a professional installer if you require assistance plugging in your Lockpick.

1. **With access to the rear of the screen**, unplug the matching connectors and plug it into the female connector of your REC LOCKPICK harness. Then plug the male connectors of the LOCKPICK harness into the earlier factory locations. The connectors are keyed and cannot be plugged in to the wrong location. Press hard and make sure the connector is fully seated.



PLUG WHITE CONNECTOR FROM MYGIG LOCKPICK HARNESS INTO LOCATION SHOWN



IF YOU DO NOT HAVE FACTORY VES, PLUG IN THE VES AUDIO CONNECTOR.



PLUG THE LOCKPICK VIDEO CONNECTOR INTO THE LOCATION SHOWN. IF YOUR RADIO DOES NOT HAVE A VIDEO CONNECTOR, IT IS AN OLDER MODEL REC RADIO AND NOT CAPABLE OF CAMERA/VIDEO INPUT

2. **The switch settings for your Lockpick were detailed earlier and should be configured before plugging the controller into the harness.** If you plug in the controller and then change switch settings, the new settings will not be programmed and improper operation will result. To reset the box if you accidentally perform switch changes while plugged in, turn the car off and unplug the Lockpick harness from the factory connector. Momentarily place all switches down. Then set them to the desired setting and plug the harness back in to the factory connector to lock in the programming.
3. **If you have added the optional VES AUDIO harness, plug in any audio desired at this time.** On your cable are standard RCA connections for Audio inputs. While the radio is in the VES mode created by the Lockpick, audio from your connected source will play through the factory sound system. If you already have factory VES, the audio inputs for the Lockpick are not used. The unit is preprogrammed to allow operation of an FM modulator to allow multimedia of direct video input and audio via FM mode when factory VES is already present.
4. **If you would like to enable full control and viewing of your FACTORY REAR VIEW CAMERA while in DRIVE or other gears, the included REVERSE 12V output wire must be connected as the power source for your camera.** This 12V power output will turn on when the vehicle is placed in reverse and also when selected by the user using the radio buttons. Currently, your factory camera is powered from the reverse taillight source. This power is only present while you are in reverse.

If you choose not to connect the REVERSE 12V wire provided by the Lockpick harness to your factory rear camera, the rear camera view while backing up will continue working as normal. However, because the rear camera will have no power in other gears, it cannot be activated by the Lockpick and will display as a blank or flashing picture if activated manually while in Drive.

**Installation of the REVERSE 12V wire to enable factory camera operation in all gears** is simply a matter of running a wire to the factory camera and connecting it in place of the original power wire. Remove any panels covering the rear hatch in your vehicle. Then use a meter or indicator lamp to determine the reverse power connection on the factory camera connector. Make sure you are measuring directly on the connector at the camera location and not further back in a different location. This wire will switch to 12V while the vehicle is in REVERSE and will be zero at other times. Then cut this wire and connect the REVERSE 12V power connection from the Lockpick to the camera directly. Do not reconnect the original camera power source wire or fail to cut the wire at the camera. Instead tape it up and disregard it. The Lockpick will provide all necessary power and timing for the factory camera. Failing to cut the wire or connecting the Lockpick power and factory power at the same time could cause the reverse tail light to illuminate at improper times. Also, cutting the wire at a different location other than directly on the camera connector could possibly interrupt power to other functions such as the actual reverse taillights or rear obstacle detection systems.
5. **If you do not currently have a rear view camera and want to add one to your vehicle, the Lockpick makes it easy.** Plug in your video to the Lockpick rear cam input and power the camera from the REVERSE 12V power and ground output provided on the Lockpick harness.
6. **A separate input and power source is available on your harness for connecting a second camera.** Plug in your additional video to the Front/Baby cam input and power it from the Lockpick harness as shown in the installation drawing provided.
7. **The REC Lockpick can enable a connected front camera to activate automatically at speeds below 7 mph for ease in parking.** Place option switch 2 down to enable this function. As the vehicle slows to below 7 mph, the camera will activate and display on you screen, As the vehicle accelerates again, the Lockpick will automatically turn off the camera and return to the standard radio view. **To turn off the front camera without accelerating, simply press the power button 2x.**

8. **Also present on your Lockpick harness is a 12V ACC output connection.** This ACC output is created by the Lockpick and can be used as a convenient 12V switched power source for many of your accessories. It is rated for a constant 1.5 AMPs and will automatically turn on and off at the proper times of your vehicle use.

**\*\*If your power needs are greater than 1.5 Amps, you may use the CONSTANT 12V output conveniently provided by the Lockpick harness and switch it on and off through a relay powered by the ACC power output of the Lockpick harness.**

**\*\*NOTE:** The connections for 12V Constant Battery power (YELLOW), ACC Ignition power (RED), GROUND (BLACK), Reverse CAM 12Vpower (ORANGE W/STRIPE), FRONT/BABY CAM 12V power (RED W/STRIPE), are provided as a BONUS in your wiring harness for you to use when connecting additional accessories such as a DVD player, Game, Cameras, Radar detector, Bluetooth handsfree kit etc., without worry that they might drain your battery when the car is turned off. The ACC wire can power up to 1.5 Amps constant. Higher loads should be connected with a relay.

**\*\* Do not attach the Constant or ACC wires directly to the vehicle wiring or ignition switch. The Lockpick is plug and play for standard NAV/VIDEO/AUDIO/CAM unblocking and does not require connections for power or ground. Connecting these Lockpick outputs to the vehicle wiring can damage the unit and cause improper operations.**

## REC LOCKPICK OPERATION INSTRUCTIONS


<b>PRESS POWER 2 TIMES WHILE ON ADDRESS INPUT SCREEN TO UNLOCK NAVIGATION FUNCTIONS IN MOTION</b>
<b>PRESS POWER 2 TIMES WHILE IN VES MODE TO TURN ON VIDEO INPUT FOR MULTIMEDIA A/V USE</b>
<b>PRESS POWER 2 TIMES WHILE IN OTHER MODES TO ACTIVATE REAR CAMERA VIDEO ON DEMAND, PRESS 2X AGAIN TO TOGGLE TO FRONT/BABY CAM INPUT PRESS 2X AGAIN TO TURN CAMERA OFF</b>

**\*\*\*The REC LOCKPICK has many features which are preset and ready to go right out of the box. You are free to change each of these options to limit or expand the operations according to your installation needs or desires.**

### **DEFAULT PROGRAMMING:**

- 1. When your vehicle is placed in reverse gear, the display will automatically enable a rear view camera view. This fully supports a factory rear view camera or allows the installation of an aftermarket rear view camera for automatic operation while in REVERSE.**

- If you will not be adding a rear view camera and wish to disable the automatic rear camera view, UNPLUG the Lockpick module and set switch 1 to the down position. This will stop the Lockpick from enabling rear view camera viewing automatically when in REVERSE gear.
- If you decide later to add a rear view camera, simply UNPLUG the Lockpick module and set switch 1 back to the UP position. This will restore the automatic viewing enabled by the Lockpick.
- Even if you turn off the automatic rear camera view, the Lockpick will always allow you to manually enable a camera when desired simply by pressing the Power button 2x within 2 seconds. This feature enables you to turn on a rear view camera at any time desired and view it while in any gear and in motion. To turn off the manual viewing of the camera, press the Power button 2x again.

**NOTE: The rear camera function is designed to allow simultaneous input of MULTIPLE video sources.** While the radio is in the VES mode created by the Lockpick (switch 1 UP), the rear camera will not be activated when the power button is pressed 2 times. Instead, it will activate the Aux video input on the Lockpick module and display it on the screen.

If your vehicle is already equipped with factory VES, the rear camera programming will modify itself to activate in all modes except FM to allow multimedia input on this mode instead of using the VES mode. This will allow video to be input and not have the rear camera turn on at the same time while in FM mode. Audio input can be accomplished via an FM modulator for complete multimedia use.

The rear camera will not activate when you press the power button 2 times while in navigation mode. Instead the button press will signal the Lockpick to unlock navigation functions blocked while in motion.

- **The Lockpick is capable of enabling and viewing a second camera manually when desired.** The Lockpick allows use of a second camera which is activated when the power button is pressed 2 times. The action will follow the pattern described above – press power button 2x – rear camera video input activated, press 2x again – front/baby cam input activated, press 2x again – all cameras turned off and radio returned to standard views.
2. **The Lockpick is capable of creating a VES (rear entertainment) mode in vehicles which do not already have a factory system. (DIP SWITCH 1 DOWN)**
    - The VES mode created by the Lockpick is already configured as a full multimedia source with Audio and Video inputs enabled. The video viewing of the VES video input is made available by pressing the power button 2 times while in the new VES mode.
    - If you already have factory VES, make sure switch 1 is in the UP position to avoid communication conflict.
  3. **The Lockpick can temporarily block Map tracking to allow full navigation operations without restrictions.**
    - While in Navigation mode, if the power button is pressed 2 times the user will be allowed the ability to input addresses, search POI or any other blocked function. Press the power button 2 times again, and the standard map operation will resume.  
\*Note: It may take several seconds for the map to pinpoint your exact location after you have completed your input and pressed the power button 2x again.

## ***Installation Q & A:***

1. *When I put the car in Reverse, the radio screen blanks out. I do not have a rear view camera.*  
The Lockpick can activate a rear view camera input for your radio. If you do not intend to install a rear view camera or do not want it activated automatically, set option switch 3 to the down position.
2. *I installed the Lockpick and now my factory VES rear entertainment is intermitting.*  
Check switch 1 on the interface and correctly set it to the UP position so it will not conflict with factory VES.
3. *I turned on the video while in VES mode or the Camera function created by the Lockpick and all I see is a blank screen.*  
This means you don't have anything connected or do not have the device (cam, DVD, iPOD, etc.) turned on to supply a video output. The radio screen will be blank when there is no video from your connected device. Common solutions for camera pictures are normally resolved by rechecking the power connections and insuring that all cameras are powered by the connections provided on the Lockpick harness. This includes the factory rear view camera if you wish to view it while in a gear other than Reverse.
4. *I used the Lockpick to enter an address while in motion, but when I returned to the Map, it was not moving.*  
**Press the power button 2x again to restore active map tracking.**

## **USB UPDATING**



(make sure module is also connected to Lockpick harness and vehicle)

Your Lockpick module includes the ability to be updated via a USB connection to a PC. Included with your interface is a cable designed to plug into the mini USB jack on the Lockpick module and connect it to the standard USB jack on a laptop computer. A software program is available for download and installation on our website at [www.coastaletech.com/usbupdate.htm](http://www.coastaletech.com/usbupdate.htm) Download the application and save it to your computer. Open the folder and select the SETUP file to install the FIRMWARE UPDATER program on your computer. On our website we provide updates and changes that will use the FIRMWARE UPDATER program to allow simple updates to your Lockpick module when desired.

If an update becomes available, download and save the desired Lockpick FIM update from our website. Make sure the module is plugged into the Lockpick harness and connected to your vehicle with the key off. Plug in the USB cable to the Lockpick module and your computer. Then open the FIRMWARE UPDATER program on your computer and when prompted, browse to the location you saved the desired update. Start the update as directed in the software and do not stop the process once begun. After completion, disconnect the USB cable, start the car and explore the installed firmware changes.