

Coastal Electronic Technologies, Inc. SYNC LOCKPICK[™] PRO

Thank you for your purchase of the Coastal Electronic Technologies, Inc., Sync LOCKPICK PRO. The Sync Lockpick PRO is designed to enable full functionality to your factory navigation system. It can also enable an input for single or multiple camera installations.

The Sync Lockpick PRO incorporates many important features including:

- NAVIGATION ADDRESS INPUT in motion, or any other blocked navigation function
- DVD play fully enabled automatically or can be set for manual enabling no loss of navigation!
- Use of radio touch screen and steering wheel controls for Lockpick operation
- Built in camera options for Front, Rear, Cargo, Left and Right cameras with manual or automatic viewing for full viewing of all areas of your vehicle
- ON SCREEN messages for simple setup and operation
- Advanced module with USB update ability
- Special cables and connectors for plug-in installations that are completely reversible

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

INSTALLATION

OVERVIEW

- 1. Remove radio trim panels to gain access to radio mounting screws.
- 2. Remove the radio partially to expose rear connectors.
- 3. Unplug factory connectors from radio and then plug them into Lockpick harness connectors.
- 4. Set Rotary Switch to #4
- 5. Set communication dip switches to: 3, 4, 5, 6 ON (down), the rest UP
- 6. Set Option dip switches to all OFF (up) or, set switch 5 (down) to enable FRONT, REAR, LEFT, RIGHT camera installations
- 7. Plug in Lockpick harness connectors to radio.
- 8. Connect camera connectors if installing an aftermarket system.
- 9. Reassemble and enjoy.

This written guide will detail the connections for the Lockpick harness and provide reference for general installation and operations. The Sync PRO is universal for many different Ford/Lincoln/Mercury models and individual dash disassembly is not addressed in this manual. Videos detailing complete installations in many different vehicles are available on our website at www.coastaletech.com/synclockpick.htm

1. Begin by removing the Sync radio and viewing the rear connectors. Some Sync systems may incorporate a separate screen with the radio system mounted directly below. For these 2-part systems, the standard connections for the Lockpick harness are on the radio below the screen and not to the screen itself.

The Lockpick harness is simple to install and consists of matching male and female connectors which are installed in line with the original factory connections. On the rear of the radio, unplug the factory connectors and plug them into the matching female Lockpick connectors. Finish by plugging the male Lockpick harness connectors back into the previous factory locations.

Example Installation - Standard Sync Radio System

Note: When installing the Lockpick in a 2 piece Sync radio system, with a separate screen above the radio, unplug the attached 10 pin radio connector harness from the Lockpick cable and instead, plug in the included 12 pin screen connector harness. (see next page).



Optional GPS CONNECTOR

Lockpick Harness Connections

Connectors are unique in size and keyed so you cannot make an error in plugging them in.

If your Sync system consists of a screen mounted above the radio, unplug the attached 10 pin harness and instead, plug in the included 12 Pin connector assembly to the Lockpick harness and then to the back of the screen – not the back of the radio.



Rear of screen with 12 pin connector plugged in.

- 2. Route Lockpick harness so that wiring is not crimped or pinched under the radio.
- 3. The Sync Lockpick PRO is a simple Plug-N-Play interface however additional wiring is labeled and available on your Lockpick harness. These connections may be used for your aftermarket accessory power needs. See explanation below:

RED – 12V ACC power output (Limit 1 amp) YELLOW – 12V constant power output BLACK – Vehicle GROUND connection ORANGE/BLACK STRIPE – 12V rearcargo camera power output (use this power source for your aftermarket rear view camera(s)) RED/BLACK STRIPE – 12V second camera power output

4. Lockpick SETUP - Before plugging in your Lockpick, insure that the switches and controls are properly set for your vehicle and options desired. For Sync radio systems, place the vehicle select rotary switch in position number 4. Place communications switches 3, 4, 5, and 6 in the DOWN (ON) position.



About 10 seconds after the vehicle is powered on for the first time with the Lockpick installed, a message will briefly appear on the screen reading "LOCKPICK SETUP STARTS IN 1 min". This will indicate that the Lockpick is installed and functioning. In about 1 minute, the Lockpick will guide the user through a few questions to determine how the radio will be programmed. The one minute wait is to allow the vehicle to complete its own initialization.



S.T

After 60 seconds the Lockpick programming process will start and a second menu will appear reading "LOCKPICK SETUP BEGINNING" followed immediately by the first setup question shown below



Answer this question YES or NO depending on whether you have a factory rear camera already present on your vehicle. Answering NO will prompt the Lockpick to ask if you would like to add one. The Lockpick uses the radio touch screen so touch the YES or NO screen buttons for any required response.



ES.NC

Answering YES to add a rear view camera will set the Lockpick to program the radio for camera operations. After setup, the radio will automatically switch to a camera view while in reverse gear. To make your camera installation simple, there are two optional camera input cables available (depending on your radio type) complete with factory connectors. See installation instructions step 1 for cable applications.



The Lockpick can also control multiple additional cameras if desired. These can include automatic front, 2nd rear (cargo) cameras, and turn signal activated left and right cameras. Answer YES or NO to add additional camera functions. The Cargo Camera option is used to enable an alternate Reverse Camera that you may desire to view the bed of a truck or the back of a trailer while in Reverse.

If you have activated the Sync Lockpick PRO option for front, rear, left and right cameras (dip switch 5 DOWN), the Lockpick will modify the menu structure to allow all cameras to be automatically or manually activated. Simply follow the on screen messages and select yes or no to program the Lockpick for your desired operations.



The Lockpick can automatically activate DVD IN MOTION while in Drive gear without any steering wheel or touch screen button presses. If you select NO, the option for viewing DVD IN MOTION will be added to the standard Lockpick menu structure and can be activated manually using the steering wheel and touch screen buttons.



To finish the initial Lockpick setup, the interface will program itself to your desired options, or it may reprogram the radio if the user selected to add a rear camera to a vehicle that did not have one from the factory. The radio programming will look like the picture above for a few seconds and then the radio will turn itself off and then back on. When the radio turns back on, it will now be programmed to accept a rear view camera and the message Lockpick setup complete will display. Now your interface is ready for action!

OPERATION

Operation of the SYNC Lockpick PRO is very simple and intuitive. Press the PHONE button on your steering wheel and hold it for 3 seconds to activate the Lockpick functions. Tap the PHONE button again to advance through the Lockpick on-screen menus which reflect your initial setup choices. The Lockpick menus will display with a YES or NO button for choosing. Select YES to perform the operation and NO to immediately end Lockpick activation.



The Lockpick will loop through the functions available with each PHONE button tap. To allow for quick and frequently used menus, it will remember the last function you were on and return to it automatically next time you activate the Lockpick . A sampling of messages and explanations are provided on the next few pages.

VOL PUSH	1			6	TUNE RPT	VOL	1 2			6	RPT
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MEDIA	Standard	Find Nearest PD	(C) Manager	el 🔼 Police	DEST	MEDIA	Standard	Find Necrost R3	In Honoitel	Police	DEST
SOUND	Edit Route	ENABLE	NAV INPUT	(Empty)	NAV	SOUND	Edit Route	NAV INPU ACTIVE FO	T WILL BE DR 60 sec	(Empty)	NAV
MENU		Yes	No	(Empty)	I	MENU		(Empty)	(Empty)	(Empty)	
	Dancel Route				PHONE		Cancel Route				PHONE
SEEK		COUND Title Chapter Elepsed Time DVD-V			DISP	SEEN ▼	G	CDCKG Title Chapter Blapsed Time DVD-V		DISP	
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When ENABLE NAV INPUT is selected, the Lockpick will provide 60 seconds for the user to input address information. At the end of 60 seconds it will time out and display NAV INPUT ENDED. You can also end the NAV input override immediately by pressing the PHONE button and holding it for 3 seconds.

While the NAV INPUT override is active, some information about the vehicle speed etc., is blocked by the Lockpick to allow you the ability to input your information. After inputting your address, if the 60 seconds has not timed out yet, go ahead and end it by holding the PHONE button. This will allow the Navigation system to quickly update your exact location and begin your route.

VOL PUSH	T				TUNE
RADIO	HOME		ŵ	1:35pm	МАР
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SOUND	Ce	NAV INPUT BLOCK IN	GPS ENABLED IPUT GPS?		NAV
MENU		Yes	No		C)
▲ SFFK					PHONE
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The Lockpick provides for an advanced NAV input function if your radio software requires it. Some Sync radio software systems are programmed to rely on GPS antenna information and may remain blocked or intermittingly block even if the Lockpick NAV INPUT function is enabled. No problem ⁽²⁾. Using your steering wheel PHONE button, advance the on-screen menus to the CHANGE LOCKPICK SETTINGS option and select YES. Select NO when prompted to RESTORE SETTINGS/REMOVE LOCKPICK. Next the Lockpick will display NAV INPUT GPS ENABLED BLOCK INPUT GPS? This lets you know that currently the Lockpick is set to allow (enable) GPS information when activating the NAV address input function. This is the default setting. To reprogram the Lockpick to BLOCK GPS information while activating the NAV input Lockpick function, select YES. If block GPS is turned on, the only difference to the user is, the navigation system will require a couple of extra seconds to update the vehicle position on the map once it times out or you turn it off. Most vehicles and radio systems do not require the advanced GPS block function or the connection for the GPS antenna in the back of the radio. This option is added to the SYNC Lockpick to allow for possible future Ford Sync software changes and current vehicles which already require it. Enabling the Block GPS feature for Nav input does not change the DVD in motion operation or block GPS while viewing the DVD.



If the automatic DVD override option was set to off, the Lockpick will add a manual button press option to the Lockpick menus. The DVD already plays while in Park so if you attempt to activate the DVD view while in PARK, the Lockpick will display a message reminding you to put the car in Drive before activating video. While in DRIVE, select YES to the ENABLE DVD VIEW menu. The Lockpick will enable DVD viewing until the car

is turned off, the steering wheel button is pressed and held for 3 seconds, or the gear is returned to the PARK position. It will also pop up messages to let you know when the function is activated or when it has ended.



If you have a factory rear camera or if you enabled the rear camera programming during the setup process, the Lockpick will add the menu choice to view the rear camera at any time. Selecting YES will turn on the rear camera and display it on your screen. To turn the camera off, simply press and hold the PHONE button for 3 seconds. Note: If you have added an aftermarket rear camera to a vehicle that did not have a factory rear camera, make sure that the power for the camera is connected to the Orange/Black wire on the Lockpick harness labeled REAR CAM 12V OUT. If you do not connect the Orange/Black wire as your aftermarket rear camera power source and instead connect your camera to a reverse taillight, the screen will only display the camera picture while in reverse and nothing when activated manually. Vehicles with factory cameras do not have to connect any additional wiring for full use of the enhanced rear camera function and viewing anytime.



The Lockpick PRO includes menu selections for each of the Camera or AUX video inputs allowing simple manual activation of each view. The Cargo Camera option can be used as an alternate rear view to see the bed of a truck or the rear of a trailer while in reverse or on demand. The front camera input is great as a parking aid, and side cameras increase safety while driving.

You can turn off any camera that is being viewed by pressing and holding the PHONE button for 3 seconds.



The Lockpick initial SETUP can modified to turn on or off automatic camera viewing or to change the way the Lockpick performs override operations by selecting the CHANGE LOCKPICK SETTINGS menu choice. Within the Settings menu select YES or NO to enable or disable individual functions. You may select automatic or manual DVD override or modify the type of NAV override from the default to advanced with GPS block.

The RESTORE DEFAULTS / REMOVE LOCKPICK will appear.

Select YES to restore all radio and Lockpick settings back to their original state before the installation. If you initially setup the Lockpick to add one or two aftermarket cameras to the radio operations, the Lockpick will remove these functions and reprogram the radio back to its original feature set. It will finish by turning the radio off and back on. When the radio turns back on, the Lockpick will then display the initial setup message and guide you through the complete installation again allowing you to select camera options as well as DVD play options.

If you wish to remove the Lockpick instead, power the car off and unplug the Lockpick without performing another setup. The Lockpick "reads" the individual radio settings and stores them so the radio can be returned exactly to its original state. Because of this, the RESTORE DEFAULTS / REMOVE LOCKPICK option must be selected to use the Lockpick in a second vehicle. NOTE: If the Lockpick is removed from one vehicle and placed in another without completing the above instructions, it will not operate.

USB UPDATING

The LOCKPICK PRO includes the ability to be updated via a USB connection to a laptop PC. If directed to update by one of our technicians, consult our website at CoastalEtech.com/usbupdate.htm for specific downloads and instructions for your Lockpick. It is not recommended to update the Lockpick without first consulting a technician.

LOCKPICK PRO MULTI-CAMERA OPTIONS

<u>The Lockpick PRO Option Switch 5 can be placed DOWN to program the Lockpick Pro for</u> <u>applications with a Rear camera along with Front and side mounted Turn signal activated cameras.</u> This key feature of the PRO line allows full 360° camera placement while the Lockpick controls automatic activation or manual viewing of each camera. The diagram on the last page details the input locations on the Lockpick module and cable for proper operations in this special mode. Plug the cameras into the locations shown and connect camera power to the Lockpick harness. Make sure that the Lockpick module is unplugged before Option switch 5 is placed in the DOWN position for this option to be activated. After this feature is enabled, the Lockpick will change the radio text to include manual and automatic activation of all multi-camera options.</u> You may use your factory rear camera (if equipped) for all rear camera Lockpick functions.

ENJOY YOUR LOCKPICK™ !!



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