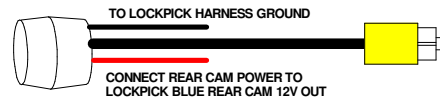


OPTIONAL SyncCAM CAMERA INPUT CABLE FOR ADDING AN AFTERMARKET CAMERA

SyncCAM 10 (1 PIECE RADIO)
PLUG INTO RADIO

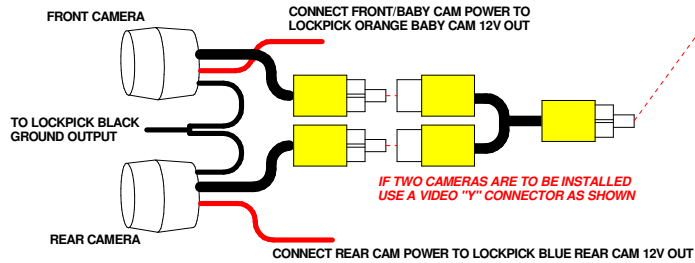
SyncCAM 12 (TWO PIECE RADIO)
PLUG INTO UPPER SCREEN

AFTERMARKET REAR CAM INSTALLATION



NOTE: CAMERA WIRING COLORS AS SHOWN ARE FOR COASTAL ELECTRONIC CAMERAS OTHER 12V CAMERAS MAY BE SUBSTITUTED - CHECK OTHER CAMERA INSTRUCTIONS FOR PROPER CONNECTIONS

ALTERNATE INSTALLATION WITH FRONT CAMERA AND REAR CAMERAS



FRONT/BABY CAM OR DVD VIDEO WITH AFTERMARKET REAR CAM

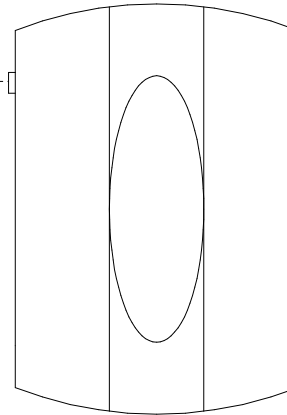
GPS ANTENNA OPTION INCLUDED



UNPLUG ORIGINAL RADIO CONNECTORS THEN PLUG IN HERE

PLUG AND PLAY NO OTHER CONNECTIONS ARE NECESSARY

CONNECT USB CABLE HERE FOR FUTURE UPDATES



PROGRAMMING DIP SWITCHES

OPTIONAL POWER OUTPUTS

- ACCESSORY 12V POWER OUTPUT
- CONSTANT 12V OUTPUT
- GROUND FOR ALL AFTERMARKET CAMERAS
- FRONT OR BABY CAM 12V POWER OUT
- REVERSE CAM 12V POWER OUTPUT

FOR AFTERMARKET REAR CAM INSTALLATIONS, USE THIS WIRE FOR YOUR REAR CAMERA 12V POWER NEEDS

SYNC-LP1 LOCKPICK INSTALLATION OPTIONS

Coastal Electronic Technologies, Inc.

Sync-LP1 Lockpick™

Thank you for your purchase of the Coastal Electronic Technologies, Inc. Sync-LP1 LOCKPICK. The Sync Lockpick 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-LP1 Lockpick 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
- 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. 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.

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. Plug in Lockpick harness connectors to radio.
5. Set dip switch 3 down on module if you want to **block** DVD play while in motion always.
6. Connect camera connector if installing an aftermarket system.
7. Reassemble and enjoy.

This written guide will detail the connections for the Lockpick harness and provide reference for general installation and operations. The Sync-LP1 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/syncllockpick.htm

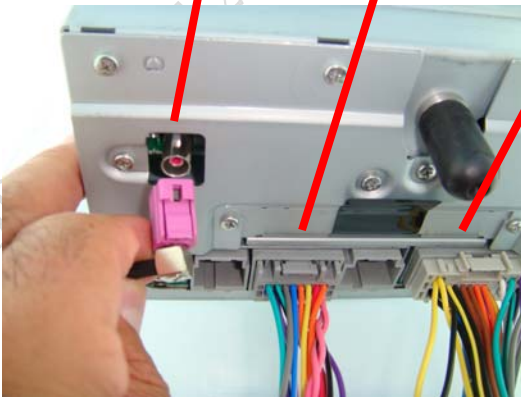
1. Begin by removing the Sync radio and viewing the rear connectors. Some Sync systems may incorporate a separate screen with the radio system mounted directly below. For these 2-part systems, the standard connections for the Lockpick harness are on the radio below the screen and not to the screen itself.

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.

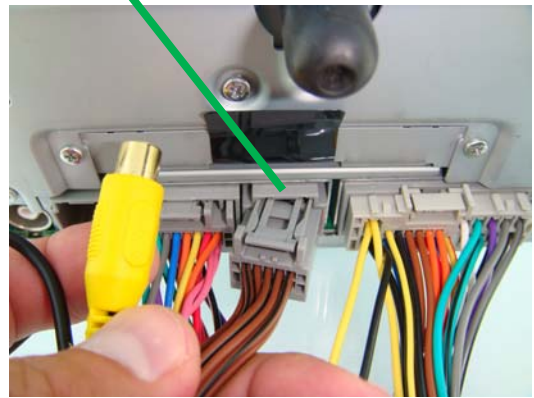
If you are installing a rear view camera in a vehicle which did not have one previously, plug in the optional camera harness. There are 2 models of optional camera cables depending on the radio type. Radios with a separate screen above (ex. F150 truck, etc.) use the SyncCAM 12 cable plugged into the screen. All others use the SyncCAM 10 plugged into the radio.

Example Installation

The Lockpick GPS antenna connection is optional. Most installations do not require GPS blocking for navigation override. The option is however available and already programmed in your Lockpick. Select YES for navigation GPS blocking during SETUP to enable the antenna switch.



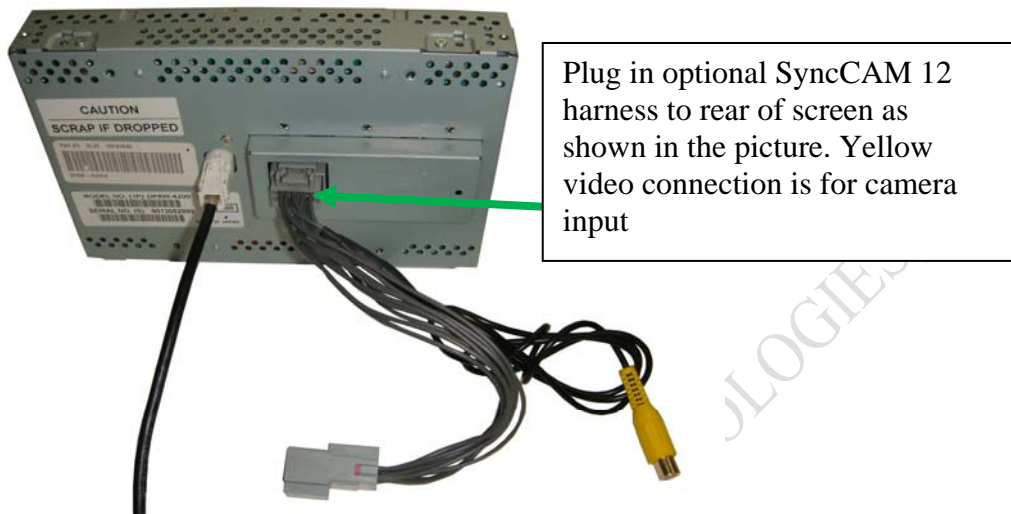
HARNESS CONNECTORS



OPTIONAL SyncCAM 10 CAMERA CABLE

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 and you wish to add a backup camera, plug in the SyncCAM 12 to the back of the screen – not the back of the radio.



Rear of screen with SyncCam12 plugged in. input.

2. Route Lockpick harness so that wiring is not crimped or pinched under the radio.
3. The Sync Lockpick 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. They include:

RED – 12V ACC power output (Limit 1 amp)

YELLOW – 12V constant power output

BLACK – Vehicle GROUND connection

BLUE – 12V rear camera power output (use this power source for your aftermarket rear view camera)

ORANGE – 12V second camera power output

4. **DEALER MODE** - Located on your Lockpick module are programming dip switches. These switches are to enable or disable certain function as desired for your particular installation. The Sync-LP1 Lockpick can be configured to disable the ability to view DVD in motion by placing DIP switch 3 to the DOWN/ON position. This will also remove the menu option for DVD IN MOTION when the Lockpick is operated by the user. All other functions including NAV IN MOTION plus camera control are still operational with switch 3 down.



**PLACE SWITCH 3 DOWN FOR DEALER MODE
- DVD IN MOTION BLOCKED-**

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 SYNC-LP1 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.



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.



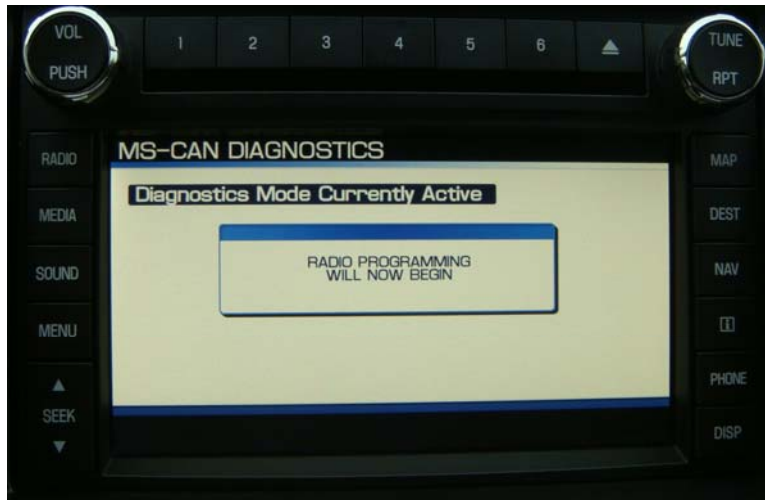
Answering YES to add a rear view camera will set the Lockpick to program the radio for camera operations. After setup, the radio will automatically switch to a camera view while in reverse gear. To make your camera installation simple, there are two optional camera input cables available (depending on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



The Lockpick can also control a second camera if desired. This can be used for a front camera or even an interior "baby" cam directed at the rear seats. Answer YES or NO to add second camera functions and move on to the next screen. If your vehicle already has a factory rear camera, this option will not appear.



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. If you want to completely eliminate the option for DVD IN MOTION, place dip switch 3 located on the outside of the Lockpick module, to the DOWN position as described earlier. With dip switch 3 DOWN, no options for DVD IN MOTION are available to the user.



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-LP1 Lockpick 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.



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.



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 intermittently block even if the Lockpick NAV INPUT function is enabled. No problem ☺. 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-LP1 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 you have installed one of the optional camera video input cables available from the website (SyncCAM 10 or SyncCam 12) for camera video, and that the power for the camera is connected to the BLUE wire on the Lockpick harness labeled REAR CAM 12V OUT.** If you do not connect the blue 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.



If your vehicle does not have a factory rear view camera, and the option for a second camera was enabled during the initial setup, the Lockpick will add a menu allowing you to activate and view a second camera. This camera can be helpful as a front camera or interior “baby cam” or for any purpose you desire. Power for your second camera is provided and labeled on your Lockpick harness. Select YES to activate and view the second camera video and press and hold the PHONE button for 3 seconds to turn it off.



The Lockpick allows the user to repeat the initial setup process by selecting the CHANGE LOCKPICK SETTINGS menu choice. The next menu, RESTORE DEFAULTS / REMOVE LOCKPICK will appear. Select NO if you want to change the DVD override to manual or automatic or if you need to change the type of NAV override from the default to advanced with GPS block.

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



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

Your Lockpick interface 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 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 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.

ENJOY YOUR LOCKPICK™ !!

Available accessories to make your camera installation easy



SyncCAM 10 for one piece radios
SyncCAM 12 for two piece radios
(separate screen)



MINICAM 221 Color Camera
Digital Distance Markings
Standard or Mirror Image
(front or rear)
Waterproof
21' Power and Video cable



BARCAM 221 Color Camera
Digital Distance Markings
Standard or Mirror Image
(front or rear)
Night Vision Illumination
Waterproof
21' Power and Video cable