

LIPPERT INSIGHTTM BACK-UP CAMERA KEYSTONE/DUTCHMEN/CROSSROADS LIPPERT CONNECT OEM INSTALLATION MANUAL

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Introduction

The Lippert Insight™ Back-up Camera is a 12V camera that streams wireless video to a mobile device using the Lippert Connect application showing the rear view of the trailer.

Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies differ.

For information on the assembly or individual components of this product, please visit:

https://support.lci1.com/lippert-insight-back-up-camera

Safety

Read and understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage, including voiding of the Lippert limited warranty.

AWARNING

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

A CAUTION

The "CAUTION" symbol above is a sign that a safety risk is involved and may cause personal injury and/or product or property damage if not safely adhered to and within the parameters set forth in this manual.

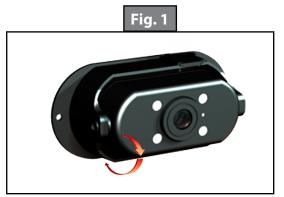
Resources Required

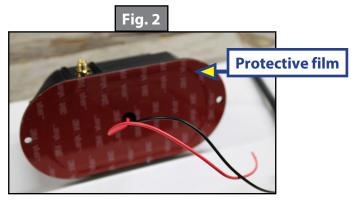
- Ladder
- Mobile device
- #8 panhead screws of appropriate length

- Wire strippers (if needed)
- All-weather silicone sealant

Installation

- 1. Locate a mounting area that allows electrical connection of the camera (Fig. 1) to the trailer's marker light circuit. This location should allow the camera lens to have a clear view of the rear area. This location should also be high enough that at least 5 inches of the camera's antenna extend above the roof line of the trailer.
- 2. Prepare the trailer and camera for installation:
 - A. Wipe the mounting surface clean of any debris with prep cleaner of choice.
 - B. With the antenna base facing up, rotate the camera into a downward viewing angle (Fig. 1).
 - C. Remove the protective film (Fig. 2) tape on the back of the camera.





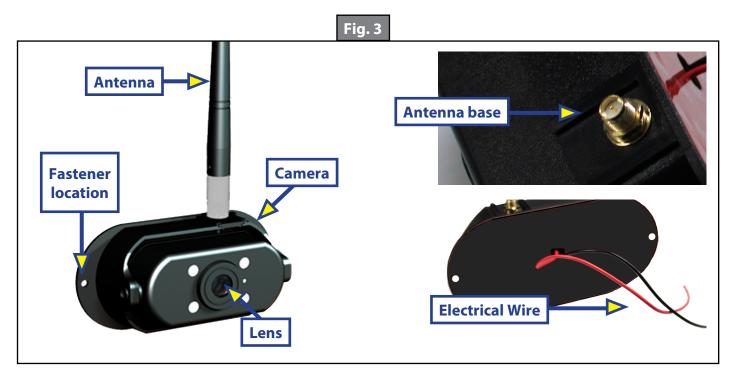
- 3. Drill an approximately 1" diameter hole to access the unit ground wire and power supply and apply silicone sealant to the hole.
- 4. Make sure the trailer's power is off, then connect the camera's red power wire and black ground wire to the unit as follows (Fig. 3).

Note: If necessary, use wire strippers to expose enough of the bare wire to make a good connection.

- A. Connect the camera black wire to the unit ground wire.
- B. Connect the camera red wire to the marker light circuit.
- 5. Secure the camera to the wall with two OEM-supplied #8 pan head screws.

Note: Place camera on wall carefully, as the adhesive will make it difficult to reposition.

- 6. Use all weather silicone sealant and seal around the perimeter of the camera and the heads of the panhead screws.
- 7. Screw the antenna clockwise to the antenna base on the camera (Fig. 3).



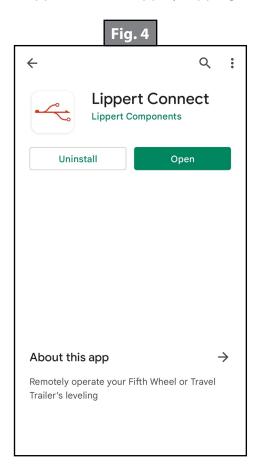
Camera Setup (If applicable)

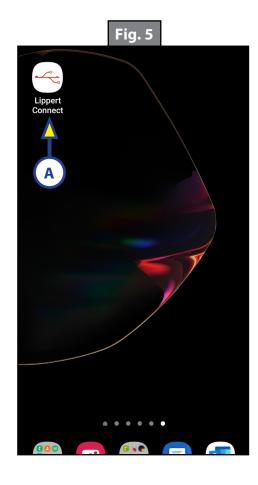
Note: In order for the back-up camera to function, the running lights must be ON. The camera requires power in order to operate, and the running lights are the power source.

1. Download and install the Lippert Connect app (Fig. 4) for either an iOS or Android mobile device.

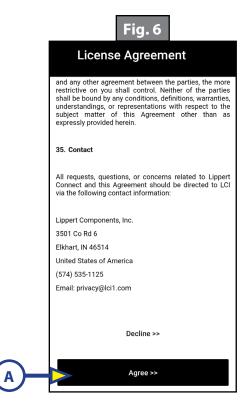
Note: Make sure that Wi-fi on the smart device is turned on.

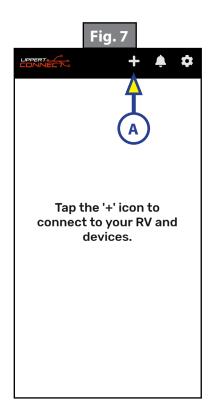
2. Start the Lippert Connect app by tapping the Lippert Connect icon (Fig. 5A) to launch the app.

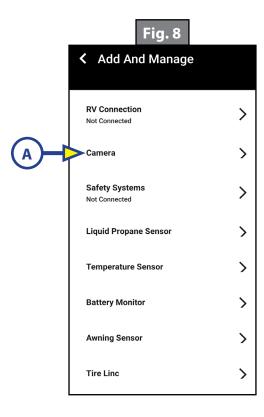




- 3. Read through and accept the License Agreement by tapping Agree>> (Fig.6A).
- 4. Begin connecting the Lippert Connect app to the new camera by tapping the '+' icon (Fig. 7A).
- 5. Select Camera (Fig. 8A) by tapping the screen.

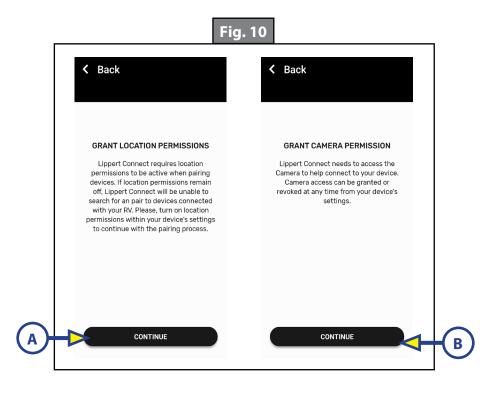






- 6. Choose Scan with Camera (Fig. 9A).
 - A. Tap Continue to grant location permissions (Fig. 10A) to the app.
 - B. Tap Continue to grant camera permissions (Fig. 10B) to the app.
- 7. Scan the device label (Fig 11). This label is found on the bottom of the camera (Fig. 12A) and also on a sticker placed in the unit by the OEM.





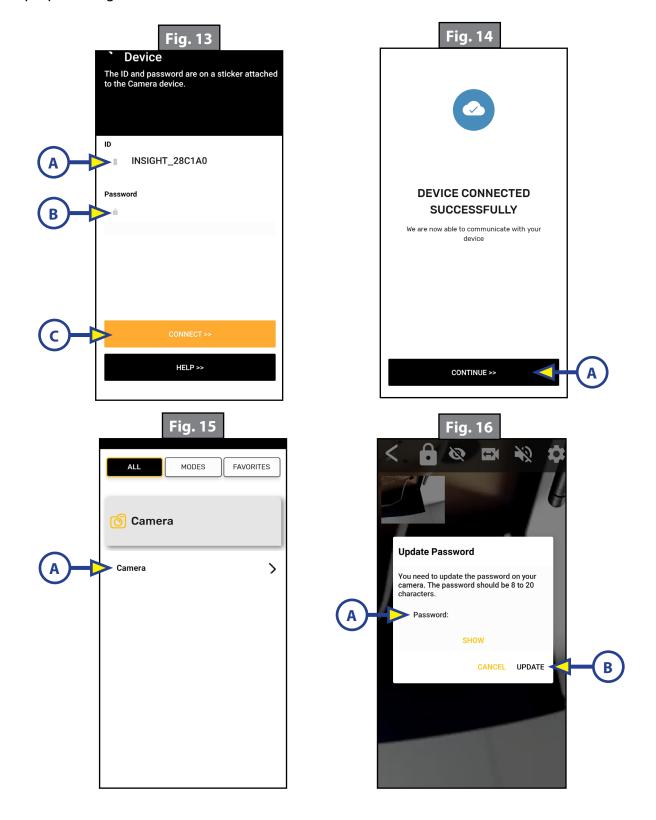




8. The ID field will auto populate with the camera's SSID number (Fig. 13A) and the Password field (Fig. 13B) will be blank. No password is needed at this time. Tap Connect >> (Fig.13C).

Note: Be sure that the mobile device's Wi-fi is turned on. If it is not, the app will prompt you to turn it on.

- 9. RV Connected Successfully should now be showing on your mobile device. Tap Continue>> (Fig. 14A).
- 10. Tap Camera (Fig. 15A) to open the back up camera view.
- 11. The app will now ask you to update the password for connection to the back-up camera (Fig 16A). Enter a password that is at 8 characters but no more than 20 characters in length.
- 12. Tap Update (Fig. 16B).





Adhere to all product or tool safety labels and weight limits to prevent possible personal injury. Do NOT exceed product/tool weight limits.

Operation

Note: In order for the back up camera to function, the running lights must be ON. The camera requires power in order to operate, and the running lights are the power source.

Note: The Lippert Back-up Camera is adjustable for acceptable visibility.

- 1. With a ladder, climb to location of the camera on the back of unit (Fig. 17).
- 2. Rotate camera up or down to achieve the desired view (Fig. 18).
- 3. When in full view (Fig. 19), you can use your thumb and index finger to "pinch zoom" the main viewing area of the camera (images displayed are for illustrative purposes only.)
- 4. While zoomed in, a small full view window will appear in the lower right corner of the screen (Fig. 20A).
 - A. Use your index finger to move around the main zoomed in view.
 - B. Double tap the full view window (Fig. 20A) to return to full camera view (Fig. 19).
- 5. The gear icon (Fig. 19A) may be used to view the current password or change it if desired.
 - A. Input new password and tap Update (Fig. 21A).
 - B. UNPAIR (Fig. 21B) will remove the camera connection to the Lippert Connect app.



Troubleshooting

What is happening?	Why?	What should be done?
Mobile device does not connect to camera.	Camera not powered up.	Turn battery disconnect on. Connect to shore power. Connect 7-way to tow vehicle.
	Wi-Fi not turned on.	Make sure Wi-Fi is active on mobile device.
	SSID is not correct.	Check that the SSID in the ID field (Fig. 10) is the same as the SSID shown on the sticker (Fig 9A & 9B).
Camera not powering up	Running lights are OFF.	Be sure running lights are ON. The camera requires power in order to operate, and the running lights are the power source.
Camera is displaying a blank screen after connection.	Another mobile device is connected to the camera.	Power down or restart other connected mobile devices.
	Cycle power to unit.	Remove power from camera for 2 minutes by cycling battery disconnect, disconnection and reconnection of shore power and the 7-way connector.
	Not connected to Wi-Fi.	Check Wi-Fi connections on mobile device. Connect to Wi-Fi network within mobile device's Wi-Fi manager, no password needed.
	Mobile device disconnected from camera Wi-Fi due to lack of Internet connection.	Select "continue to use network", or "keep network and use mobile data" when menu pops up on mobile device

If further assistance is required, please contact the Lippert Customer Care Center.

Camera reset

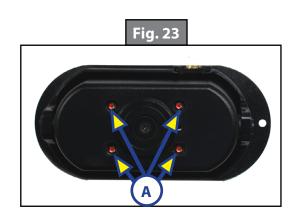
In the event that the password is forgotten, lost, or is unknown to the current user, a reset procedure can be performed to reset the camera to a factory installation state. Perform the following steps:

1. Press the reset button, located on the bottom of the camera (Fig. 22A), for 15 seconds.

Note: During reset, you should see the four red LEDs around the camera light up for approximately 1 second (Fig. 23A).

- 2. Disconnect all power from the trailer for 2 minutes:
 - A. Turn off battery disconnect.
 - B. Disconnect shore power.
 - C. Disconnect the 7-way connection from the tow vehicle.
- 3. After 2 minutes, restore power to the trailer and open up the Lippert Connect app on your mobile device and select Camera (Fig. 15A).
- 4. When prompted, create a new password (Fig. 16A).







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Please recycle all obsolete materials.

For all concerns or questions, please contact Lippert

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