

EchoMaster Cam-LP1-N

EchoMaster Universal Backup Camera (Model Cam-LP1-N)

Instruction Manual

1. INTRODUCTION

The EchoMaster Universal Backup Camera (Model Cam-LP1-N) is designed to provide enhanced visibility for your vehicle, assisting with parking and maneuvering. This camera can be installed for either front or rear views, offering a 170-degree wide viewing angle and night vision capabilities. Its IP68 waterproof rating ensures durability in various weather conditions. This manual provides detailed instructions for installation, operation, and maintenance to ensure optimal performance.



Image 1.1: EchoMaster Universal Backup Camera with License Plate Mount. This image displays the compact camera module attached to a standard license plate bracket, ready for vehicle installation.

2. PACKAGE CONTENTS

Please verify that all items listed below are present in your package:

- Backup Camera Module
- License Plate Bracket
- Optional Lip Mount Bracket
- Mounting Hardware (screws, nuts, washers)
- Instruction Manual
- Video Cable (RCA type)
- Power Cable

3. PRODUCT FEATURES

- **Universal Compatibility:** Designed for use with various vehicles including cars, trucks, RVs, and mini-vans.
- **Versatile Mounting:** Includes both a license plate bracket and an optional lip mount bracket for flexible installation.
- **Wide Viewing Angle:** Features a 170-degree lens for comprehensive coverage behind or in front of the vehicle.
- **Night Vision:** Equipped with low-light capabilities for clear visibility in dark conditions.
- **IP68 Waterproof Rating:** Ensures reliable operation in adverse weather conditions, protecting against dust and water immersion.
- **Selectable Image Orientation:** Allows for mirror image (rear view) or normal image (front view) display.
- **Optional Parking Lines:** Integrated parking guidelines can be activated or deactivated.



Image 3.1: Close-up of the Camera Module. This image highlights the compact design and lens of the EchoMaster camera, demonstrating its discreet profile.

4. SAFETY INFORMATION

- Always disconnect the vehicle's battery before beginning any electrical installation.
- Ensure all wiring is properly insulated and secured to prevent short circuits or damage.
- Route cables away from hot surfaces, moving parts, and sharp edges.
- Do not obstruct the driver's view or interfere with vehicle controls during installation.
- This camera is an aid for safe driving and parking; it does not replace the driver's responsibility to check surroundings.
- If you are unsure about any part of the installation process, consult a qualified professional.

5. INSTALLATION GUIDE

The EchoMaster Universal Backup Camera offers two primary mounting options: license plate mount and lip mount. Choose the option best suited for your vehicle.

5.1. Choosing a Mounting Location

- **Rear View:** Typically mounted above the license plate or on the bumper. This provides a clear view of obstacles and parking lines when reversing.
- **Front View:** Can be mounted on the front bumper or grille. Useful for parking in tight spaces or navigating obstacles.

directly in front of the vehicle.

5.2. License Plate Mount Installation

1. Remove your vehicle's rear license plate.
2. Attach the camera module to the provided license plate bracket using the small screws and nuts. Ensure the camera lens faces outwards and downwards slightly for optimal viewing angle.
3. Position the assembled camera and bracket behind your license plate, aligning the mounting holes.
4. Secure the license plate and camera bracket to the vehicle using your original license plate screws. Ensure the camera is stable and does not obstruct the license plate characters.
5. Carefully route the camera's video and power cables through a discreet opening into the vehicle's interior. This may require drilling a small hole if no existing access point is available. Seal any drilled holes with silicone sealant to prevent water entry.



Image 5.1: License Plate Bracket. This image shows the metal bracket designed to integrate the camera discreetly with your vehicle's license plate.

5.3. Lip Mount Installation (Optional)

1. Identify a suitable flat surface on your vehicle's bumper or trunk lip where the camera can be mounted.
2. Attach the camera module to the optional lip mount bracket.
3. Mark the drilling points for the lip mount bracket and the cable pass-through hole.
4. Drill the necessary holes. Ensure the holes are appropriately sized for the mounting screws and cable.
5. Secure the lip mount bracket with the camera to the vehicle using the provided mounting hardware.
6. Route the camera's video and power cables through the drilled hole into the vehicle's interior. Seal the hole with silicone sealant.



Image 5.2: Camera with Lip Mount Bracket. This side view illustrates the camera attached to the lip mount bracket, suitable for mounting on a flat surface.

5.4. Wiring Connections

Refer to the wiring diagram below for proper electrical connections. It is recommended to have this step performed by a professional if you are not familiar with automotive electrical systems.

- **Power Connection (Red Wire):** Connect the red power wire from the camera to a 12V switched power source. For rear view cameras, this is typically the vehicle's reverse light circuit, so the camera activates when reverse gear is engaged. For front view cameras, connect to an ignition-switched 12V source or a dedicated switch.
- **Ground Connection (Black Wire):** Connect the black ground wire to a clean, unpainted metal surface on the vehicle chassis.
- **Video Connection (RCA Yellow Connector):** Connect the yellow RCA video cable from the camera to the video input of your display monitor or head unit.
- **Mirror Image / Parking Line Control:** The camera features small loops (often green for parking lines, white for mirror image) near the camera end of the cable.
 - To deactivate parking lines, cut the green loop.
 - To switch between mirror image (default for rear view) and normal image (for front view), cut the white loop (if present, otherwise consult specific product documentation).

6. WIRING DIAGRAM

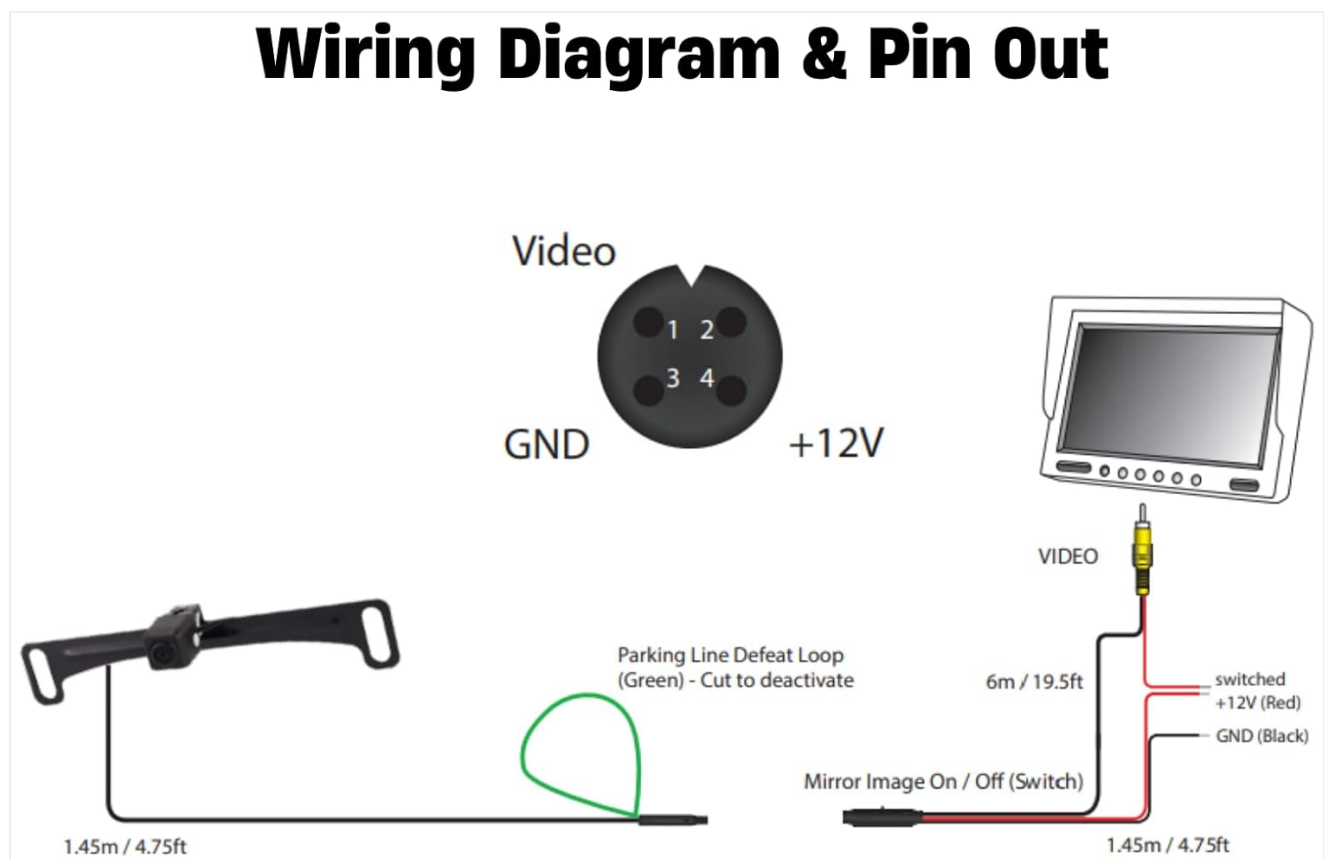


Image 6.1: Wiring Diagram and Pin Out. This diagram illustrates the connections for the camera's power (red +12V, black GND) and video (yellow RCA), along with the green loop for parking line deactivation and the mirror image switch.

7. OPERATION

Once properly installed and wired, the EchoMaster Universal Backup Camera operates automatically based on its power connection.

- **Rear View Camera:** When connected to the reverse light circuit, the camera will automatically power on and display the rear view on your monitor when the vehicle is shifted into reverse gear.
- **Front View Camera:** If wired to an ignition-switched power source or a dedicated switch, the camera will activate when the ignition is on or the switch is engaged, displaying the front view.
- **Image Display:** The camera provides a clear, wide-angle view. If parking lines are enabled, they will appear on the screen to assist with judging distance.

- **Night Vision:** The camera automatically adjusts to low-light conditions, providing enhanced visibility in the dark.

8. MAINTENANCE

- **Cleaning the Lens:** Periodically clean the camera lens with a soft, damp cloth to remove dirt, dust, or water spots that may obstruct the view. Avoid abrasive cleaners.
- **Cable Inspection:** Regularly inspect all cables and connections for signs of wear, fraying, or corrosion. Ensure all connections remain secure.
- **Mounting Security:** Check the camera's mounting bracket periodically to ensure it remains firmly attached to the vehicle. Tighten any loose screws if necessary.
- **Avoid High-Pressure Washing:** While the camera is IP68 rated, direct high-pressure water jets from car washes can potentially damage seals over time. Exercise caution.

9. TROUBLESHOOTING

Problem	Possible Cause	Solution
No image on monitor	No power to camera	Check power connections (red wire to +12V, black wire to ground). Ensure power source is active.
	Loose video cable connection	Verify RCA video cable is securely connected at both camera and monitor ends.
	Faulty camera or monitor	Test camera with a different monitor or test monitor with a different video source.
Distorted or flickering image	Poor video signal	Ensure video cable is not pinched or damaged.
	Interference	Route video cable away from high-current wires or ignition components.
	Loose connections	Check all connections for tightness.
Parking lines not appearing/disappearing	Green loop incorrectly cut/uncut	Verify the status of the green loop wire. Cut it to deactivate, ensure it's intact to activate.
Image is reversed (mirror vs. normal)	White loop incorrectly cut/uncut (if applicable)	Check the white loop wire (if present). Cut it to switch image orientation.
Poor night vision	Dirty lens or insufficient ambient light	Clean the camera lens. Ensure there is some ambient light for the night vision to function effectively.

10. SPECIFICATIONS

Feature	Detail
Model Number	Cam-LP1-N
Brand	EchoMaster
Real Angle of View	170 Degrees
Waterproof Rating	IP68
Optical Sensor Technology	CMOS




Feature	Detail
Voltage	12 Volts
Connector Type	RCA
Installation Type	Surface Mount (with included License Plate or Lip Mount brackets)
Product Dimensions	13.7 x 1.6 x 7 inches (overall package/bracket)
Item Weight	9.3 ounces

11. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official EchoMaster website or contact their customer service department. Keep your purchase receipt as proof of purchase.

You can visit the EchoMaster store for more products and support information: [EchoMaster Store](#)

Related Documents - Cam-LP1-N

 <p>MRCHDDVR2 FULL SCREEN REAR VIEW MIRROR REPLACEMENT MONITOR WITH DVR AND BACKUP CAMERA KIT USER MANUAL ECHO MASTER 1080P FHD</p>	<p>EchoMaster MRCHDDVR2 User Manual: Installation and Operation Guide</p> <p>User manual for the EchoMaster MRCHDDVR2 Rear View Mirror Monitor with DVR and Backup Camera. Covers installation, features, settings, and troubleshooting for enhanced vehicle safety.</p>
	<p>EchoMaster CAM-DPL Universal Reverse Camera User Manual</p> <p>User manual for the EchoMaster CAM-DPL universal reverse camera, detailing specifications, features, box contents, dimensions, and wiring diagrams for installation and use.</p>
	<p>EchoMaster PHDCAM10U Universal CVBS/AHD Camera User Manual</p> <p>User manual for the EchoMaster PHDCAM10U Universal CVBS/AHD Camera, detailing its features, specifications, box contents, and wiring diagram for improved vehicle safety and maneuvering.</p>
<p>EchoMaster backup alarms are designed to improve safety during backing up by providing loud tones in the vicinity of the vehicle.</p> <p>Please ensure you read and understand all aspects of this manual before fitting or using your EchoMaster backup alarm. Choose a suitable mounting place dependent on the application. Ensure that there are no wiring, harnesses, or hoses/pipes located behind the panel before fitting.</p> <p>email - support@echo-global.com phone - 1-888-611-4921 15000 Lightwave Drive, Suite 202 Clematis, Florida 32031 EchoMaster is a Power Brand of AMP Global EchoMaster.com</p>	<p>EchoMaster BUA-97C Backup Alarm: Specifications and Installation Guide</p> <p>Comprehensive guide for the EchoMaster BUA-97C backup alarm, detailing its purpose, installation instructions, box contents, wiring diagram, dimensions, and technical specifications for enhanced vehicle safety.</p>

[Installation Manual: EchoMaster P-BUA-SILVERADO Wiring Harness for 2016-2021 Chevrolet Silverado](#)

Step-by-step installation guide for the EchoMaster P-BUA-SILVERADO wiring harness, designed for 2016-2021 Chevrolet Silverado trucks. Includes required tools, parts list, compatible accessories, and detailed instructions for integrating a backup alarm.

[EchoMaster PBS-RD1 77GHz Blind Spot Detection Assist System Operation Guide and Manual](#)

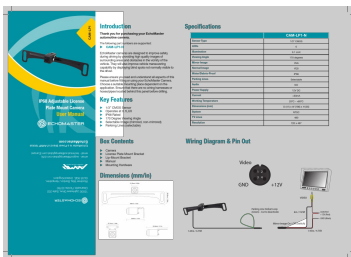
Comprehensive operation guide and installation manual for the EchoMaster PBS-RD1 77GHz Blind Spot Detection Assist System. Learn about system components, wiring, installation, functions, troubleshooting, and technical specifications.

Documents - EchoMaster – Cam-LP1-N

[\[pdf\]](#) User Manual Specifications Diagram

Introduction Key Features Box Contents Wiring Diagram Pin User Manual IP68 Adjustable License Plate Mount Camera CAM LP1 Thank you for purchasing your EchoMaster automotive camera
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or using Choose a suitable mounting place dependent on the application Ensure that there are no wiring
harnesses hoses pipes located behind this panel drilling u 1 3 CMOS Sensor Operates at 0 1LUX Rated
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15500 Lightwave Drive, Suite 202 Clearwater, Florida 33760 Woolmer Way, Bordon,
Hampshire, GU35 9QE, ... k you for purchasing your EchoMaster automotive camera.
The following part numbers are supported: u **CAM-LP1-N** EchoMaster cameras are
designed to improve safety during driving by providing high quality...

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EchoMaster UK Dealer Price List - November 2016

A comprehensive price list for EchoMaster automotive cameras, DVRs, dashcams, monitors, parking sensors, and accessories, effective November 1st, 2016. Includes part numbers, descriptions, and replacement information.

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2022 Product Price Guide Prices Effective As Of May 16th 2022 V3 PART NUMBER
CAMERAS CAM-01-N CAM-500 CAM-501 CAM-504L CAM-508L CAM-510 CAM-
510L CAM-550 CAM-580 CAM-580W CAM-DPL-N CAM-LB1B-N CAM-LB1C-N CAM-
LF1B-N CAM-LF1C-N CAM-LF2B-N CAM-LFDPLB-N CAM-LFDPLC-N **CAM-LP1-N**
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2022 Product Price Guide Prices Effective As Of May 16th 2022 V3 PART NUMBER
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LF1B-N CAM-LF1C-N CAM-LF2B-N CAM-LFDPLB-N CAM-LFDPLC-N **CAM-LP1-N**
CAM-MV6-N CAM-WLP PCAM-10FF...

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[EchoMaster 2018 US Product Catalog: Enhance Vehicle Safety and Visibility](#)

Explore the comprehensive 2018 EchoMaster US Product Catalog, featuring advanced automotive safety and visibility solutions including cameras, monitors, dash cams, and parking sensors designed to protect your precious cargo.

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Safe Driving Starts Here EchoMaster May 3 2019 · The visual alert is located within the vehicle easily seen line of sight side view mirrors Key Features Detects EchoMasterCAT2019 05 03 19 PRINT echomaster content |||

PRODUCT CATALOG 2019 Safe Driving Starts Here 2 Meet We ve Got Your Back Safe Driving Starts H ... ting Detachable Frame to use a Bar Style Camera Available in Black or Chrome 50 State Legal 45 **CAM-LP1-N** License Plate Mount Camera with Parking Lines for Front or Rear View, Mounts Behind Licen...

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Picture Old Part Number CAMERAS New Part Number BC-UN01 CAM-01-N BC-UN02 CAM-02-N AVCAM-6 AV ... VCI-LP3B CAM-LF2B-N VCI-LP3C CAM-LF2C-N VCI-SRVCB CAM-LF3B-N VCI-SRVCC CAM-LF3C-N BC-LP01 **CAM-LP1-N** AVCAM-SM1 CAM-SM1-P AVCAM-SMM1 CAM-SMM1-P AVCAM-WL1 CAM-WL1-P VM-10A PCAM-10A-N V...

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Product CatalogsCatalog EchoMaster Rcdn shopify s files 1 0601 5965 6104 Catalog R v 1676015504 ||| PRODUCT CATALOG 2023 Safe Driving Starts Here 2 Meet Safety is a Priority Safe Driving Starts ... o use a Bar Style Camera Available in Black or Chrome 50 State Legal 45 Safety is a Priority **CAM-LP1-N** License Plate Mount Camera with Parking Lines for Front or Rear View, Mounts Behind Licen...

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