LUCENTVUE

4K SMART REAR VIEW MIRROR



- GET THE APP -



is a trademark of



IMPORTANT GUIDELINES & DISCLAIMERS

Thank you for purchasing the LucentVue Smart Rear View Mirror System by Caballo Automotive. We hope you enjoy your new product. Please read the following guidelines carefully before use to ensure safe and trouble-free long-term operation.

Disclaimer: Do not operate the menu, touchscreen, or other auxiliary features while driving, as this can lead to driver distraction and impaired judgment.

Operating Temperature: This product is designed to function in temperatures ranging from -4°F to 158°F. Do not use in temperatures outside this range.

Water Resistance: The smart mirror is not waterproof. Keep it away from humid or wet environments. Avoid exposure to water or rain. The rear-mounted camera is IP68 waterproof.

Fire Hazard: Keep the product away from fire to prevent the risk of explosion.

Cleaning: Avoid using harsh chemicals, cleaning solvents, or detergents on this product.

Light Exposure: Do not point the camera directly at strong light sources such as the sun to prevent damage to the optics.

Dust: Avoid using the product in excessively dusty environments to prevent contamination of the lens and other components, which can negatively affect performance.

Avoid Distraction: For your safety and the safety of others, do not watch videos or operate the dash cam while driving. Many state regulations prohibit such activities while driving.

Avoid Liquid Exposure: Do not let this product come into contact with liquid substances to prevent electric shock, damage, overheating, and smoking.

Product Updates: This product is updated and upgraded regularly. In the event of hardware or software upgrades, specifications may vary from those listed in this pamphlet.

Caballo Automotive, LLC is not liable for any accidents caused by improper use of this product. Drivers must always comply with relevant laws and safety precautions.

SPECIFICATIONS

Front Camera: 4K Ultra HD Rear Camera: 4K AHD

Language Options: English, Simplified Chinese, Spanish, French, and others

Memory Card Slot: Micro TF

Storage Compression: H.264/H.265

Video Format: MP4 Image Format: JPEG

Working Temperature: -4°F (-20°C) to 158°F (70°C)

Operating Humidity: 15-65% RH

Memory Card Capacity: 128GB Maximum Supported

Display: LCD MIPI Display

Lens: All Glass Wide Angle Lens with High-Resolution Multi-Layer Filter

Power Interface: 5V $2A \sim 2.5A$

Built-in Speaker: 8Ω 1W

PROFESSIONAL INSTALLATION RECOMMENDED

All installation or repair must be performed by a qualified professional to avoid risks such as electric shock or other hazards. Improper installation may void the warranty. Do not attempt to modify or repair the product yourself as this will also void the warranty. Read all instructions carefully before installation.

- Ensure the vehicle is turned off and secured from rolling before installation. Disconnect the battery before performing any electrical work.
- Do not insert or remove the TF/SD memory card while the smart mirror is powered on to avoid data damage.
- Use a genuine brand TF memory card with Class 10 or above for optimal performance.
- After installation, double-check that all vehicle equipment is functioning properly, especially any systems that may have been affected during the installation process.

INSTALLATION

Prepare the Vehicle: Turn off engine and ensure vehicle is in park. Secure vehicle to prevent rolling and disconnect battery.

Insert TF Card: Insert a genuine high-speed TF card (U3 grade or above) with a capacity greater than 8GB into the card slot of the smart mirror.

Replace Rearview Mirror: Remove original mirror from the vehicle. Using the original mounting tab, affix the new mirror. (If the original mirror does not have a mounting tab, you can find these at a local auto parts store.)

Position Power Control Box: Ensure the power control box is located where fused power (constant and keyed) & secure ground are accessible, typically in fuse panel.

Route Wires: Route the mirror and camera connector wires from the control box. Plug the mirror into the mirror connector (large connector).

Connect Camera: Connect the camera connector (small connector) to the rear camera feed wire. Route the camera feed wire to the back of the vehicle. Use supplied camera extension cable if added length is needed.

Power Connections:

Yellow Wire	Constant 12V
Red Wire	Keyed Power 12V
Black Wire	Ground

(Use an appropriate fuse tap and 5A fuse to mount the two power wires.)

Test Smart Mirror: Reconnect battery. Test the mirror turns on and off appropriately. Should turn on when vehicle is turned to ON and shut down shortly after vehicle is turned OFF. Turn off vehicle.

Install Rear Camera: Install rear camera centered on rear of vehicle. Ensure camera is level, right side up and free of obstructions.

Verify Installation: Turn vehicle on and check image on mirror display screen to ensure it is displaying correctly. If display is inverted, enter Settings Menu and select Back Mirror option to flip image horizontally to a proper mirror image.

POWER BUTTON FUNCTION (Bottom of Mirror Housing)

When the Mirror is OFF:

• Press and hold the power button for 3 seconds to turn the smart mirror on. (The mirror will also turn on automatically when the vehicle is started).

When the Mirror is ON:

- Press & hold power button for 3 sec. System will automatically save video file & settings, then turn off.
- Short press (less than 1 second) the power button to turn off the screen display. Short press the power button again to turn the screen display back on.

TOUCHSCREEN INTERFACE

Starting the System: Turn on the vehicle. The smart mirror display will automatically start. If a TF card is installed, the recording function will begin.

Vertical View Adjustment:

- Swipe up/down on the left half of the display to adjust the mirror up or down.
- This has the same affect you would get on a traditional rear view mirror if you tilt the mirror up and down.

Brightness Adjustment:

- Swipe up on the right half of the display screen to increase brightness
- Swipe down to decrease brightness.

Camera Display Selection:

- Swipe right to left to switch between camera views (For safety, always keep the camera view in rear view mode when driving)
- Camera views rotate between Rear View (default), Split Front & Rear View, and Front View. Once you have looped through the available camera views, swiping again will return to the default view.

ICONS & INDICATORS

The following items appear at all times while the display is on:

Loop Recording Indicator: Red dot at top left of the display blinks when loop recording is active. This indicator will blink yellow when park monitor is recording

Date & Time Indicator: Displays the current time and date.

The following items appear when the touchscreen is pressed:

Microphone Icon: Press to enable or disable audio recording. This setting is saved automatically and does not need to be reset after restarting the vehicle.

Image Capture Icon: Press at any time to capture a still image of the current screen display.

Video Record Icon: Default state is ON, indicated by a white circle with a red dot. Press to toggle recording OFF, indicated by a white circle with a red square.

• The default recording state will reset to ON when the vehicle is restarted.

Settings Interface Icon: Enter the settings menu.

Playback Interface Icon: Enter playback interface to view and manage saved videos and images. You can select to view videos or images from the front or rear camera, and view only urgent videos.

Lock Icon: During recording, locks current video and extends recording by 20 sec. Press again to unlock.

Recording Time Indicator: Shows at top of screen to left of Date Time Indicator.

• Displays time of current recording in seconds. Default loop is 1 minute, adjustable in Settings Interface.

Resolution Indicator: Displays the current video resolution, which can be changed in the Settings Interface.

WiFi Icon: Indicates whether WiFi is on or off. Press to turn WiFi on.

• **Important:** Do not turn on WiFi while driving. Enabling WiFi disables the touchscreen and is intended for use when the vehicle is parked to allow control of the mirror and media files from a wireless device.

PLAYBACK INTERFACE

Press the Playback Interface icon on the main screen to enter the Playback Interface. Here you can view and manage saved videos and images.

Video File Mode: At the top middle of the screen, press the current video file mode to select between folders.

• **Options:** Front Oridinary Video (Default), Front Photo, Front Urgent Video, Rear Ordinary Video, Rear Photo, Rear Urgent Video.

Video Playback: Find video you want to play and press corresponding thumbnail image. Video will play on right half of screen. Tap the playing video to toggle between Play and Pause.

• If viewing Photos, pressing thumbnail image from the list will display the selected photo larger on right half of screen.

Video & Photo Deletion: To delete a video or photo, find the file you want to delete. Press the Select icon indicated by a box with a check mark. Press any files you want to delete to toggle them to selected. Once selected, press Delete icon (trash can).

Exit Playback Interface: To exit, press the back arrow on top left of the display.

SETTINGS INTERFACE

The following settings are available by accessing the Settings Interface.

To access the Settings Interface, press the main display and then select the gear icon on the lower part of the screen.

Back: Press to go back to the main display screen

Resolution: Adjust the recorded video resolution. This allows the option to save the videos in smaller file size if desired.

Options: 4K (Default), 2K or 1080P

Loop Record: Select the time for each loop recording.

• **Options:** 1 minute (Default), 3 minutes or 5 minutes

Time-Lapse: Used for Time-Lapse recordings (if equipped)

Record Audio: Select whether to record audio with video recordings.

Date Stamp: Select whether to add date stamp to video recordings **G-Sensor:** The G-Sensor or Gravity Sensor is a built-in collision sensor. When on, recordings will automatically lock when a collision is detected.

• Sensitivity Options: OFF (Default), Low, Medium & High

Parking Guard: Works with G-Sensor to monitor collisions/tampering when vehicle is parked. When G-Sensor senses a collision or tampering, mirror automatically records & locks next 30 sec on front & rear cameras.

License: Enter the license plate of the vehicle that your smart mirror is installed in. This is particularly valuable for fleet applications where monitoring and tracking of multiple vehicles is needed. When set up, the license plate number will be stamped on all video recordings.

Auto Power Off: Set to OFF by default. We recommend leaving OFF. If turned on, the smart mirror will automatically power off after 1, 2, 3 or 5 minutes.

Frequency: Sets the refresh rate of the video recordings to either 50hz or 60hz.

USB Mode: This mode is for maintenance only and should be left alone.

Back Mirror: Allows mirror display to be inverted. Some cameras display a standard image as opposed to mirrored. Pay careful attention during installation. If your image is inverted, toggle this setting to correct it.

Speaker: Set the speaker volume to Mute, Low, Middle or High.

Boot Sound: Turn the boot sound on or off.

Key Sound: Turn the key sound made when a selection is pressed on or off.

Language: Set the operating language of the smart mirror.

• Language Options: English, Simplified Chinese, Traditional Chinese, Japanese, Korean, Russian, German, French, Spanish and Italian.

Date Time: Set the date & time on the display. Swipe each selection up/down to set.

- Date Format Options: YYYY-MM-DD | MM-DD-YYYY | DD-MM-YYYY
- Time Format Options: 24-Hour | 12-Hour (AM/PM)

Format: Format the TF Memory Card. Erases all data on the installed TF card.

• Quick Format will format the card faster, but is not as thorough.

WiFi App: Displays the current WiFi settings (SSID and Password). To change these settings, please use the WiFi App.

• **Do not use the WiFi App while driving:** When WiFi is activated, the mirror touchscreen will automatically be deactivated so that all control is through the WiFi App. The WiFi feature is designed to allow for wireless management of the mirror settings and media files and is not intended for use while driving.

Version: Indicates the firmware version installed in your smart mirror.