REVCAMUK
Reversing cameras UK Ltd

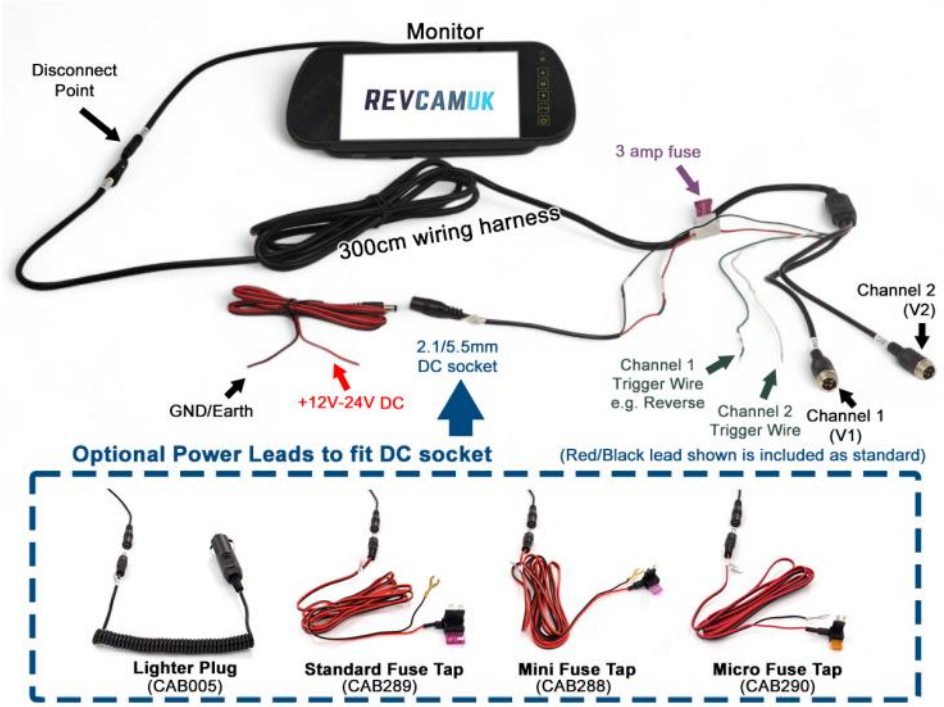
Instructions for our High Definition MON293AHDV2.2 Clip-over mirror monitor and MON293BAHDV2.2 Bracket mirror monitor

This booklet contains information about our AHD (analogue high definition) monitor, and its menu functions.

Technical Specifications

Screen Size : 7 inches diagonally measured
Aspect Ratio : 16:9
Resolution : 1024 (W) x RGB x 600 (H)
TV System : Auto
Brightness : 550cd / m2
Contrast : 800 : 1
Active Area : 154.08(w) x 85.92(h) mm
Viewing Angle : U/D : 80°/80°, R/L : 80°/80°
Video Format : AHD / CVBS
Mirror Flip Option
Video Channels : Two channel video input
Reverse Function : Two triggers (ruler setting function)
Power Supply : 12/24V DC, <6W
Operating Temperature : -20°C to +65°C
Storage Temperature : -25°C to +70°C

Wiring Guide



The optional power leads are available on our website if required. All leads except the lighter plug are fitted with red and black wires. Red is +12V/24V, and black is earth/ground.

Wiring for Trigger Function

This monitor is supplied with two coloured trigger wires — one green and one white. These wires are optional and only need to be connected if you want the monitor to automatically turn on or change channels when a specific event occurs.

The most common use for these wires is to connect them to a vehicle's reversing light circuit, so the monitor automatically switches to the reversing camera when reverse gear is selected.

Important Notes:

- If you choose to use the trigger wires, please ensure your reversing camera is connected to the matching 4-pin input on the monitor.

- When a trigger signal is active (e.g. when the reverse light is on), the monitor's buttons and remote control will not function. This is normal — the trigger signal takes priority.

- If you are using both trigger wires, channel 1 always takes priority. So if both the green and white wires receive a signal at the same time, the monitor will automatically switch to channel 1.

- For this reason, always connect the camera or event you consider most important to channel 1.

If you plan to use the camera system continuously (for example, for constant rear-view monitoring), you do not need to connect the trigger wires at all. In this case, simply power the system as normal and select the desired channel manually. The monitor remembers the state it was in when power was turned off, so if you were watching a camera when your ignition was turned off, it will automatically turn on when ignition is turned back on (no wires to connect for this).

Warning:
Do not connect the trigger wires to any other power source, such as the ignition supply. Doing so will lock you out of the monitor's button functions and prevent access to the settings menu.

Power Supply Recommendations

For the best performance and reliability of your monitor system, we strongly recommend connecting the monitor to a **switched ignition power supply**, suitable for either **12V or 24V** vehicles. The monitor is designed to automatically work with either voltage without adjustment.

Do not connect the monitor directly to the vehicle battery.
Direct battery connections expose the system to voltage fluctuations, especially when the alternator engages or disengages. These sudden spikes or drops in voltage can lead to instability, reduced lifespan of the electronics, or even damage to the system.

Avoid connecting the monitor to a permanent live (always-on) power supply.
Even if you turn the monitor off using the power button, the system remains in standby mode and will continue to draw power. Over time, this can drain the vehicle battery, especially if the vehicle is left stationary for extended periods.

Earthing (Ground Connection):

For the most stable operation and to reduce electrical interference:

- Connect the monitor's earth (black wire) directly to the vehicle chassis, ideally at a solid, bare-metal connection point.
- Remove any paint, rust, or debris from the surface to ensure a clean, reliable earth.
- Do not splice onto an existing earth wire or shared connection, as this can introduce noise, unreliable operation, or ground loop issues.

Important Safety Warnings

Working with vehicle wiring, especially when dealing with automated electronics like reversing cameras and monitors, requires care. Please observe the following:

- Always disconnect the vehicle battery before carrying out any wiring to avoid short circuits or electrical shock.
- Only use quality connectors and properly insulate all connections to prevent water ingress, corrosion, or accidental shorts.
- Avoid routing cables near sharp edges, moving parts, or areas exposed to excessive heat.
- Do not attempt to dismantle or modify the monitor or wiring beyond the provided instructions — doing so will void the warranty and may damage the system.
- If in doubt, consult a qualified auto electrician to carry out the installation.

By following these guidelines, you will protect both your vehicle and your new reversing camera monitor system, ensuring long-term reliable operation.

Button Layout

The mirror monitor has touch sensitive buttons, as opposed to physical push in buttons. We find these really responsive and easy to use. We have included a quick guide below to what each of the buttons do.

UP - This button will move the cursor up in the menu system, as well as adjust within individual settings

MENU - It will enter the menu system. When inside the menu system it will act as an ENTER button

DOWN - This button will move the cursor down in the menu system, as well as adjust within individual settings

CHANGE CAMERA / BACK BUTTON - If watching a channel, this will change channel. If in menu system it will go back

STANDBY / POWER - Presing this button will turn the monitor display ON/OFF.

Supported Camera Signal Formats

The MON293AHD V2.2 is part of the latest generation of reversing camera monitors and is designed to work best with **AHD (Analogue High Definition)** signal cameras.

This monitor automatically detects and adjusts to different video formats, supporting:

- **AHD 720P**
- **AHD 960P**
- **AHD 1080P**
- **Traditional CVBS (Standard Definition) signals**
- **Both PAL and NTSC camera formats**

Accessing the Monitor Menu

To adjust settings on your monitor, you must first access the menu by pressing the **M** button on the front of the monitor.

When you press the **M** button, the main menu screen will appear. This screen will look similar to the image shown on the left-hand side of this page.

From the main menu, you can access various sub -menus that allow you to adjust a range of settings, including:

- Brightness
- Contrast
- On-screen guidelines
- Trigger delay times
- Channel switching intervals
- And other display or system options

In this manual, we will cover some of the more commonly used and important settings. Many of the menu options are factory-set and may not be relevant for most users.

Note: If in doubt, we recommend only changing the settings covered in this manual to avoid affecting monitor performance.

Controlling and Navigating the Menu System

All menu adjustments are made using the buttons located on the monitor itself.

- To **enter the main menu**, press the **M** button.
- Once inside the menu, pressing the **M** button again acts as an **Enter** key.

Navigating the Menu:

1. After entering the main menu, use the **arrow buttons** to scroll through the available sub-menu options.
2. When the sub-menu you wish to adjust is highlighted, press the **M** button again to enter that sub-menu.
3. Inside each sub-menu, use the arrow buttons/menu button to adjust settings or select options.

Exiting the Menu:

- At any time, if you wish to exit back one step or leave the menu entirely, simply press the **V1/V2** button. This acts as a **Back** or **Exit** function.

Camera Settings Sub-Menu

The **Camera Settings** sub-menu is likely to be the most commonly used menu for most customers. It allows you to customise the picture to suit your preferences and viewing needs.

Within this sub-menu, you can adjust the following for each connected camera:

- **Brightness**
- **Contrast**
- **Colour**
- **Mirror Image Setting** (for each camera individually)

The ability to mirror each camera feed individually is particularly useful if your camera is mounted in an unconventional position or if you prefer the image reversed to match your perspective.

We recommend taking a few moments to adjust these settings during installation to ensure the best possible viewing experience.

Brightness
Adjusts how bright or dark the picture appears on the screen.

- Increase brightness for better visibility in low-light conditions.
- Reduce brightness in very bright environments to avoid glare.

Contrast
Controls the difference between the dark and light areas of the picture.

- Higher contrast gives a sharper, more defined image.
- Lower contrast produces a softer, less intense picture.

Colour
Alters the intensity of colour in the picture.

- Increase colour for a more vivid image.
- Decrease colour for a more natural or monochrome appearance.

Mirror Flip
This option allows you to flip the image horizontally, effectively reversing the left and right sides of the picture.

Why might Mirror Flip be Useful to SOME customers?

- Most reversing cameras produce a **mirror image** by default, which is ideal when viewing the camera on a mirror monitor — it makes the view feel natural, as if looking into a standard rear-view mirror.

- However, if you have installed a **forward-facing camera** (e.g., on the front of your vehicle) and it outputs a mirror image, the picture will appear incorrectly. In this case, enabling **Mirror Flip** corrects the image to display accurately.

- Similarly, if your reversing camera is set to output a standard (non-mirrored) image and you prefer a mirrored view, you can apply Mirror Flip through this menu.

You can adjust **Mirror Flip individually for each camera**, allowing for complete flexibility based on how and where your cameras are mounted.

Parking Line Setup

1. Select the Correct Channel
Before adjusting the parking lines, make sure you are aware of the channel that your reversing camera is plugged in to and that you are connecting up the related trigger wire (see below):

- **Channel 1** — triggered by the **green wire**
- **Channel 2** — triggered by the **white wire**

This ensures that any adjustments you make apply to the correct camera input.

2. Enter the Parking Line Menu

- Press the **M** button to access the main menu.
- Scroll to the **Parking Line** icon (as shown in the image earlier) and press **M** again to enter the sub-menu.

Camera Selection (Top Row)

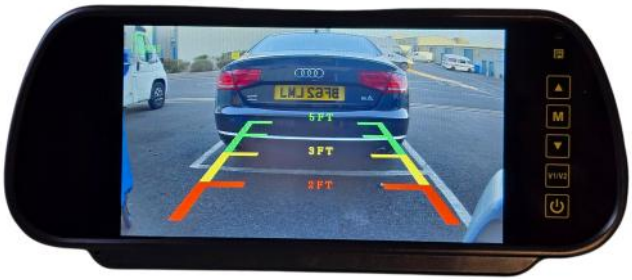
- Choose whether you want to adjust the parking lines for **Camera 1** or **Camera 2**.

Unit Selection — Metres or Feet

- Choose whether you want the guideline distance markings to be shown in **metres (m)** or **feet (ft)**.
- This is purely a display preference based on your own measurement system.

Guideline On/Off

- Make sure the **Guideline** is set to **ON** if you want the parking lines to appear when this channel is active.
- If set to **OFF**, no lines will be shown.



Customising the Grid

You can fully adjust the position, size, and layout of the parking grid to suit your vehicle and camera position:

- **Move Grid Left or Right** Allows you to shift the entire grid left or right on the screen. This is useful if the camera is mounted off-centre.
- **Move Grid Up or Down** Adjusts the grid vertically to suit your preference or camera mounting height.
- **Adjust Grid Width** Allows you to make the grid wider or narrower to match the width of your vehicle or parking space.

Distance Markings (Bottom Row)

- You can manually set distance numbers on the grid, based on real-world measurements.
- After carefully measuring from your camera to points behind your vehicle, you can enter these values so the grid lines accurately represent distances (in **metres** or **feet**, depending on your earlier selection).

- This provides a more realistic and useful reference when reversing.

Additional Tips:

- Take your time adjusting the grid to suit your vehicle setup. A well-positioned grid makes reversing and parking much easier.
- For best results, park your vehicle in an open space with clear markers or objects behind you, so you can measure distances accurately during setup.
- If unsure about positioning, ask a second person to help observe from outside the vehicle while you make adjustments.

Language Selection

Your monitor allows you to display the on-screen menus in a range of languages. This is set through the **Language Menu**, which is one of the first options in the monitor's main menu.

To Change the Language:

1. Press the **M** button to enter the main menu.
2. Use the **up** or **down** arrows to scroll to the **Language** option (identified by a globe icon).
3. Press the **M** button again to enter the Language menu.
4. Use the arrows to highlight your preferred language.
5. Press **M** to confirm your selection.

Available languages include:

- 中文 *(Chinese)*
- English
- Deutsch *(German)*
- Français *(French)*
- Italiano *(Italian)*
- Español *(Spanish)*
- 日本語 *(Japanese)*

Backlight Setting

The monitor's Backlight setting controls how bright the screen appears, especially useful for daytime use or in bright environments.

We recommend setting the backlight to **full**, which ensures the clearest possible image at all times. You can easily tell when the backlight is set to full — the **sun icon** on the main menu will appear as a complete yellow circle when at maximum brightness.

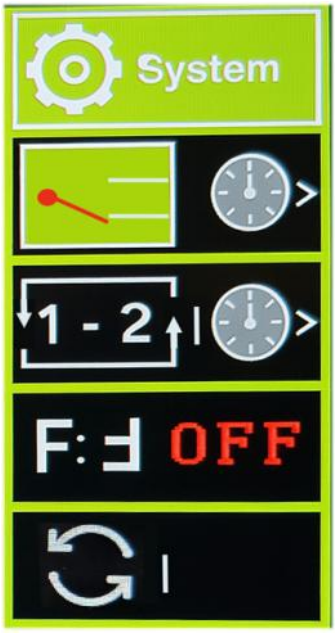
Step-by-Step Guide to Adjust the Backlight:

1. Press the **M** button to enter the main menu.
2. Use the **down** arrow to scroll down through the menu options.
3. Stop when you reach the option with the **sun icon** — this represents the backlight setting.
4. Simply press the **M** button when this option is highlighted.

There is no separate menu for the backlight — pressing the **M** button cycles through the available backlight levels.

System Menu Guide

The **System Menu** gives access to useful advanced settings that control how your monitor behaves. Below is a full breakdown of each option and how to use them effectively.



Trigger Delay Timer (Top Option)

This setting controls how long the monitor stays on a particular channel after the trigger signal (usually from the green or white wire) is no longer present.

Why is this useful?

In some setups, a camera may be powered from a **sidelight**, **indicator circuit**, or similar. Without the Trigger Delay Timer, the monitor would turn on and off rapidly every time the indicator or sidelight flashes. The delay timer keeps the monitor on the triggered channel for a set period after the trigger stops, preventing flickering or unwanted screen changes.

Available Settings:

- Adjustable from **0 to 20 seconds**.
- Setting to **0 seconds** means the monitor switches off the moment the trigger stops.
- Setting to **20 seconds** keeps the monitor on that channel for 20 seconds after the trigger ends.

How to Adjust:

1. Press **M** to enter the main menu.
2. Navigate to the **System Menu** (gear icon).
3. The first option is the **Trigger Delay Timer** — press **M** to adjust.
4. Use the arrows to set your preferred delay time.
5. Press **M** to confirm.

Scan Function (Second Option)

The **Scan** feature allows the monitor to automatically flick between two camera channels at regular intervals.

Ideal For:

- Towing a trailer or car
- Monitoring a load
- Checking on horseboxes
- Periodically checking a second camera view e.g. tow car trailer

How to Set Up Scan:

1. In the **System Menu**, scroll to the **Scan** option.
2. Press **M** to enter.
3. Use the arrows to set the number of seconds the monitor stays on each channel before switching.
4. Press **M** to confirm.
5. Exit to live view using the **V1/V2** button or by leaving the menu.

Activating Scan Mode:

Long press the **M** button for at least **three seconds**.The word **SCAN** will appear in small text at the top right corner of the screen. To deactivate Scan Mode, short press the **M** button again.

Flip Entire Display (Third Option)

This setting flips the entire screen upside down.

When is this useful?

In most standard installations, this setting should remain **OFF**. It is only intended for unusual installations where the monitor needs to be mounted upside down.

How to Use:

1. From the **System Menu**, scroll to the **Flip Display** option.
2. Press **M** to toggle this setting **ON** or **OFF**.
3. Exit the menu once your selection is made.

Reset to Factory Settings (Bottom Option)

This option resets all monitor settings back to the factory defaults.

When to Use:

- If settings have been changed accidentally
- If you're experiencing issues with the display or menu options
- As a general reset to restore normal operation

Caution:

Using this will erase all custom settings, including brightness, guidelines, mirror settings, and any other adjustments you've made.

To Reset:

1. In the **System Menu**, scroll to the **Reset** option.
2. Press **M** to confirm.
3. The monitor will return to default settings.

Fitting the Mirror Monitor

During the order process, you will have been offered a choice of either:

- A **Clip-Over Mirror Monitor**, or
- A **Windscreen Bracket Mirror Monitor**, with a selection of bracket attachments to fit pre-existing mounting plates (where applicable).

If you've chosen a bracket-mounted version, there may be extra instructions for

specific brackets — for example, the **MP35**, or the process for bonding a new mounting plate to the windscreen using **Loctite 319** glue. Please follow any additional instructions supplied with your order.

Fitting the Clip-Over Version

This version is designed to clip directly over your existing interior mirror. On the rear of the monitor, you will find two spring-loaded clips at the bottom and two fixed clips at the top.

To fit:

1. Pull down the two lower clips — you'll feel the spring tension as you do this.
2. Position the monitor over your existing mirror.
3. Release the lower clips so they clamp securely onto the mirror.
4. Check the monitor is sitting firmly and evenly against the original mirror.
5. Make any minor adjustments if necessary.

Fitting the Windscreen Bracket Version

This version attaches to a mounting plate (also called a "button") on your windscreen. This may be an existing mounting plate, if compatible, or a new one supplied if you ordered a **Glue + Button + Bracket Bundle** at checkout.

To fit:

1. Your chosen bracket will come with **4 small screws**.

2. Use these to attach the bracket to the back of the monitor, using **4 of the 6 available screw holes**.

3. The other side of the bracket will then clip onto the mounting plate on your windscreen.
4. Most brackets include a final securing screw to firmly lock the bracket onto the mounting plate — fit this carefully.
5. Adjust the monitor to your desired viewing angle — take your time and be gentle, as you're working with glass.

Once you're happy with the installation, sit back, admire your handy work, and enjoy a well-earned cup of tea (or coffee).

Safe and happy travels from all of us at **REVCAMUK**.