REVCAMUK
Reversing cameras UK Ltd

Instructions for our MON293GL Clip-over mirror monitor

This booklet contains information about our upgraded mirror monitor, and its menu system. This manual will explain the various menu options, as this model offers many more features compared to standard mirror monitors.

Technical Specifications

7” Colour LCD screen

Power supply: 12V/24V

Power Consumption: 8.64W or lower

Digital Screen Resolution: 800 x3(RGB)x480

Operating Temperature: -10C to +65C

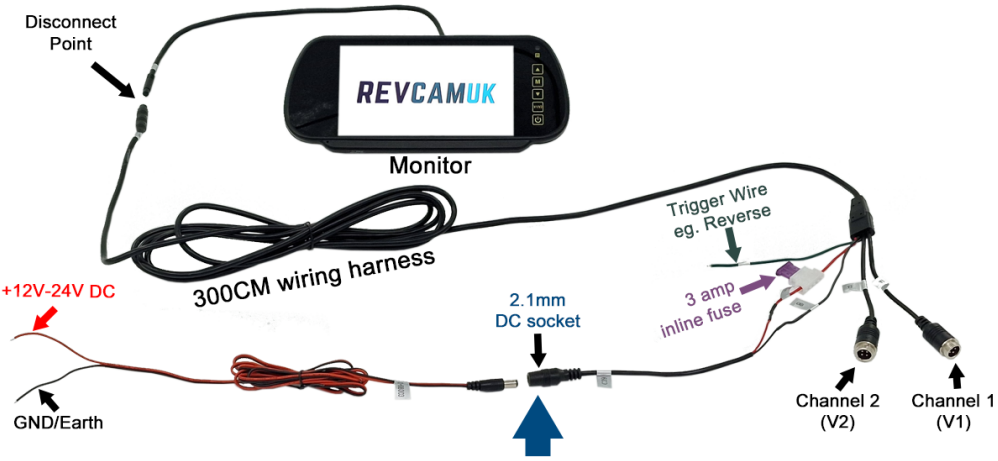
2 Inputs

PAL/NTSC/AUTO

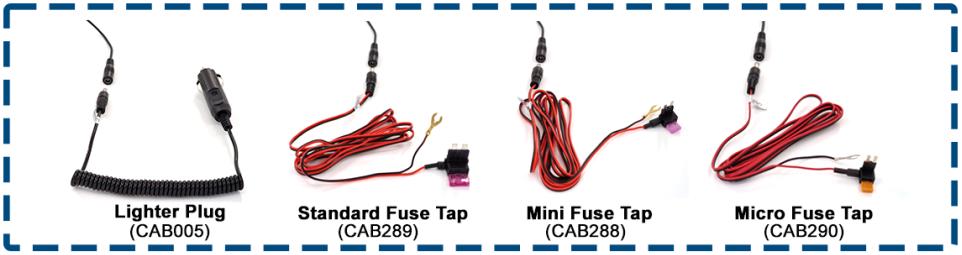
Rotation/Mirror on both channels

Full function Remote Control

Wiring Guide



Optional Power Leads to fit 2.1mm DC socket (Red/Black lead shown is included as standard)

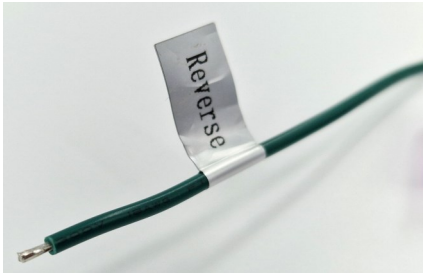


The optional power leads are available on our website if required. All leads except the lighter plug are fitted with red and black wires. Red is +12V/24V, and black is earth/ground.

Trigger Wire Function (Green wire)

<u>Please note : when the trigger wire is activated, the buttons and remote control will not function. This is because the trigger takes priority.</u>

The green wire does not need to be connected in all cases. It should ONLY be connected if you require your monitor to trigger/display your reversing camera automatically.



When this green trigger wire has +12V / 24V power present e.g. reversing light

supply, the monitor will turn on (if it was off), and select channel 2 (V2). If the monitor was on, and viewing channel 1, then it would swap channels.

If you wish to setup your monitor to run full time, you simply have to connect the red wire to a positive, and the black wire to earth. The green wire should be left unconnected in this case. The monitor will remember its last power state when power is lost. So, if you had your monitor on before you turn the ignition off, when ignition is turned back on, the monitor will power up by itself.

Choosing a power supply and earth

We recommend that you use a switched ignition power supply, either 12V or 24V (it will automatically work on either).

We advise against going directly to the vehicle battery. Otherwise the system will be at risk due to the voltage fluctuations experienced as the alternator kicks on/off.

Avoid always on power supplies, as the monitor will use power even when you press the power button and the monitor goes to standby mode.

We recommend earthing direct to the chassis, at a point with a bare metal surface. We recommend against piggybacking off another existing earth wire.

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 Arrow = Up

Down Arrow = Down

M = Menu/Enter

V1/V2 = Change Channel

⏻ = Power On/Off

How to use the Menu System

The menu system is easy to navigate using the top three buttons on the monitor.

To enter the menu system press the M button. You will now see the sub menus / functions as shown in the image to the right.

Press the up, or down buttons until the selection is on the required function that you wish to modify.

To enter your selected function, press the M button (the M button also acts as the enter button).

Picture Sub Menu

Scroll to the required option and press M button to enter/modify required option.

Brightness : Adjust the brightness of the picture

Contrast : Adjust the contrast of the picture

Colour : Adjust the colour of the picture

Reset : Resets values to default

Return : Returns to main menu

Exit : Exits menu completely

Volume Function

This section can be ignored as the monitor doesn't have a built in speaker.

Language Sub Menu

Select from the following options, these are in order should someone have changed these accidentally for you already.

English, French, German, Spanish, Portuguese, Italian, Dutch, Return, Exit.

Mirroring Sub Menu

This function will only be used by a few people with a specific need. 99% of our customers can ignore it.

An example of its use, is if you have a camera that you wish to cancel the built in mirror image, ie turn it in to a normal view camera, e.g. for viewing sideways as a junction camera.

1. Exit the menu system and select the camera you wish to modify using V1/V2 button.
2. Enter the main menu, arrow down until you select “mirroring” and press M to enter.
3. Select the channel number of the camera you wish to modify.
4. As default the option is set to off, change this to the option that you require. The options are : OFF, V = Vertical flip will turn the picture upside down, HV = Horizontal and Vertical flip will turn the picture upside down and mirror that image with the horizontal rotation, H = Horizontal flip this will mirror the image.
5. In our example we would have changed our camera to H, as this will mirror the picture (almost all of our cameras are mirror imaged as standard, so mirroring this mirror image will turn it in to a normal view image).

Video Sub Menu

As standard we recommend that you use Auto, which will auto detect the video type used by the camera. The options are PAL/NTSC/AUTO. Selecting the wrong type would most likely mean you get a black and white image, or sometimes no image at all.

Park Setup (Guidelines)

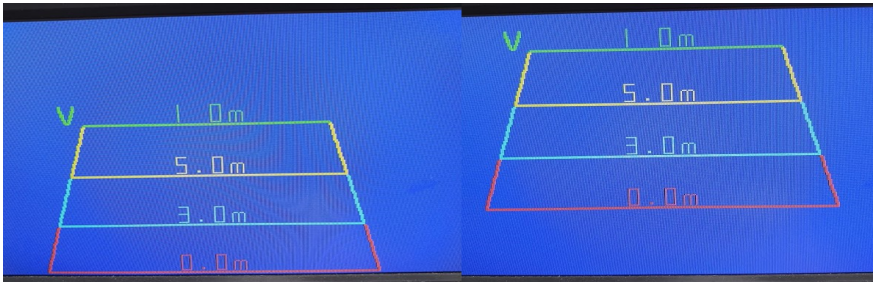
The monitor can add guidelines to the picture when the trigger wire has power (ie when reverse is selected). If you wish to have guidelines shown, then before continuing, ensure your camera is plugged in to Channel 2 / V2 and the green trigger wire is connected to the reverse light feed. The monitor should now trigger on and off every time you go in to and out of reverse.

Now enter the park setup menu and set **LINE 2** to **ON**.

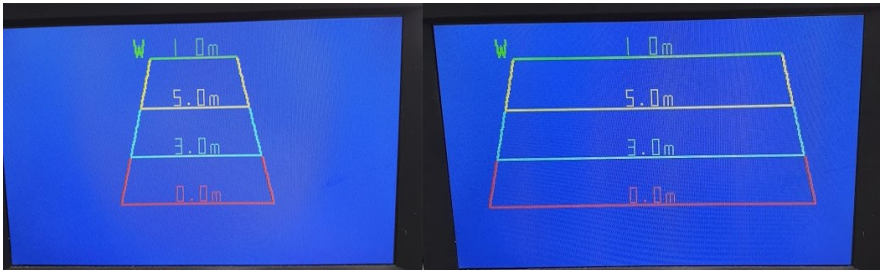
Now enter **Line 2 Setup**.

The first adjustment will allow you to move the batch of guidelines along the vertical axis, the image below shows the max adjustment up and down of the guidelines.

Tip: We find holding the up or down button will move it quicker than pressing individually lots of times.



When you are happy with the adjustment, press the M button to take you to the next screen to adjust the width of the guideline box ie the Horizontal adjustment. See the picture below for the min/max horizontal adjustment.



To adjust the values of the numbers assigned to the lines, go back to the main park setup menu and enter the line number menu. Use the up and down buttons to change the number to the required value, then press the M button to move to the next number for adjustment.

Option Sub Menu

Allows you to select picture mode and aspect ratio (16:9/4:3), this is usually left alone.

Imperial Function

Pressing this will allow you to use either M for metres, or F for feet. This only really applies if you are using the guideline function on the monitor.

Interval Config Sub Menu

This monitor can be setup to switch between two cameras automatically, switching channels according to a pre-assigned number of seconds per camera. This menu system will enable this function.

Enter the menu and you will have CAM1 and CAM2 listed. You can change either channel from 1 to 30 seconds. So if you wanted CAM1 on for 30 seconds then just a quick view of CAM2 for 3 seconds you would set CAM1 to 30, and CAM2 to 3.

To see the interval change in action, exit the menu system. Then press the M button for a few seconds until you see the word “Interval” pop up in green on the top of the screen, this should now change channels to the timings set in the interval config sub menu. To stop the monitor from switching, press the M button again for 3 seconds.

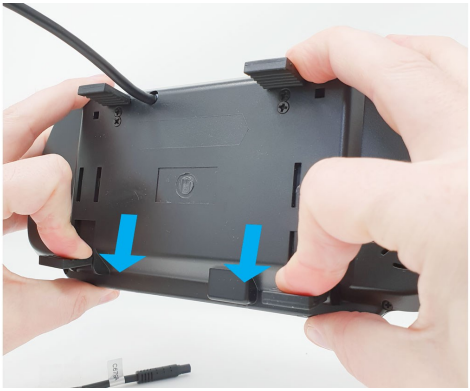
Cam Delay Sub Menu

Changing the time for channel 2 will mean the monitor stays on this channel for the number of seconds you set (1-20) after the trigger wire no longer has power. This is useful for people who don’t want the monitor to switch on/off when making small back and forth parking manoeuvres, or where channel 2 is a side camera and the trigger wire is attached to the indicator light, and would require a time delay to ensure the picture doesn’t flash on and off with the indicator light trigger source.

Fitting the monitor over the mirror

The monitor is designed to clip over an existing interior mirror. On the rear it has two spring loaded lower clips, and two fixed upper clips.

Firstly, pull down the two lower clips. You will feel the springs trying to pull the lower clips back upwards as you do this.



Next, place the monitor over the existing mirror, let go of the lower clips so that they clamp the monitor to the interior mirror.

Finally, check the monitor is firmly located against the original mirror, make any small adjustments as necessary.

Connecting the monitor to wiring harness

Please be careful when inserting the connection from the monitor to the wiring harness. There is a groove and a ridge on the 8mm connector to help line the pins up in to the correct position (see photo).