

# REVCAMUK

Reversing cameras UK Ltd

## Instructions for our MON293AHD V2 Clip-over mirror monitor

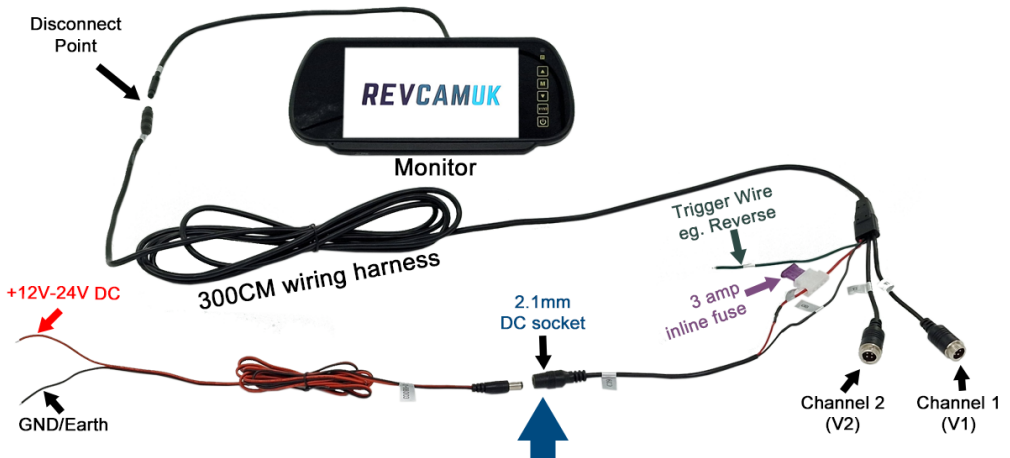


This booklet contains information about our AHD (analogue high definition) monitor, and its menu functions.

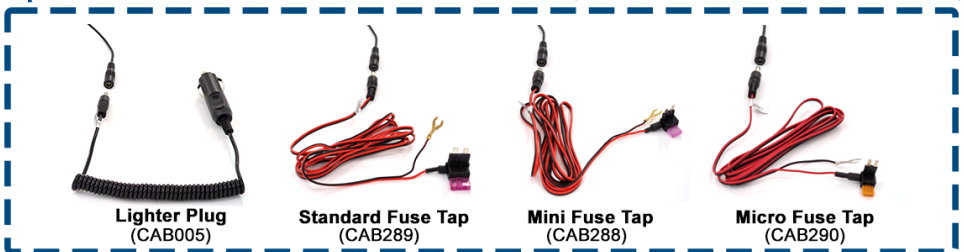
### Technical Specifications

- Screen Size : 7 inches diagonally measured
- Aspect Ratio : 16:9
- Resolution : 1024 (W) x RGB x 600 (H)
- TV System : Auto
- Brightness : 300cd / m2
- Contrast : 400 : 1
- Active Area : 154.08(w) x 85.92(h) mm
- Viewing Angle : U/D : 40°/65°, R/L : 65°/65°
- Video Format : AHD / CVBS
- Mirror Flip : Non-mirror, mirror, flip, mirror flip
- Video Channels : Two channel video input
- Reverse Function : Single trigger (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



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



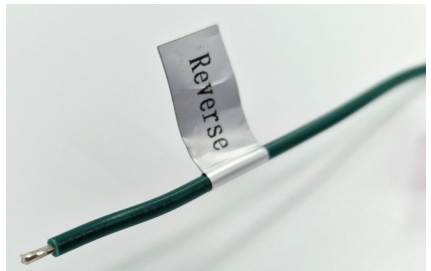
The optional power leads are available on our website if required. All leads except the lighter plug are fitted with red and black wires. Red is +12V/24V, and black is earth/ground.

## Trigger Wire Function (Green wire)

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

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 (pressing again moves to the next menu function)**

**V1/V2 = Change Channel**

**⏻ = Power On/Off**



## Signal Formats that this monitor can display

This is one of the latest generation of reversing camera monitor. It is designed to work best with AHD (analogue high definition) signal cameras. It will accept both PAL and NTSC camera formats (automatically adjusts by itself). This monitor supports 720P / 960P / 1080P AHD signals, as well as the traditional CVBS signals - although it is worth noting that AHD monitors don't display CVBS cameras as well as a dedicated CVBS monitor would. We recommend AHD cameras for the best performance with this monitor.

## How to use the menu system in the monitor

The menu system has been designed to be relatively simple to use. You will only need to use 3 buttons to navigate and alter the settings - M (Menu), and the arrow up/down buttons.

To navigate between the various settings, simply press the M button. When you wish to alter the setting you are currently on, simply press either the up, or down button. The monitor will remember the new setting when you toggle to the next screen.

### Brightness

The brightness setting is the first setting that you will find when pressing the M (menu) button. This is probably the most useful setting in the menu system. As standard, the monitor is supplied by the factory set to level 20 (range is 0-40). We find, as AHD cameras have such a bright vivid output, most of the time the best setting is around 17-18 (in fact we often set this during testing - when we remember). To modify simply press the up or down arrow to your desired setting.



### Contrast

The second press of the M (menu) button takes you to the contrast settings. We find that the default setting of level 20 (range of 0-40) is usually perfect.

## Colour

The English language in the menu system is based on American English, therefore colour is written as “color”. This setting controls how much colour you would like the monitor to apply to the image shown. As standard, the default level is set to level 20, which again we find is usually perfect for most AHD cameras.

## Language

The 4th press of the M (menu) button takes us to the language selection menu. The default is set to English, but pressing the arrows up or down will cycle through Portuguese, Spanish, Russian, Swedish, Italian, Turkish, French, German, Japanese, Korean, and Chinese.

If ever your kids/grandkids/dog sets the monitor to another language, you will be able to press the M button 4 times, then the arrow keys until you see a language you recognise again.

## Default Setting

When curiosity has well and truly killed the cat, and you have every setting modified beyond recognition, this menu function is your “get out of jail free card”. It will undo all of your handywork (or your dogs), and reset the monitor back to the way it left the factory. 5 presses of the menu button will take you to this screen, and pressing either the up or down key will activate the reset of all settings in the menu.



## Volume

Please note that this monitor **does not** have a speaker. We don't know why this setting is here, but it can be ignored.

## RLUD aka Rotation

The RLUD menu is the monitors rotation settings. These settings are useful in certain scenarios, although 99% of people probably won't use this setting.

2 = Normal (no alteration)

3 = will flip the image upside down and add a mirror image

4 = will just flip the image upside down

1 = Horizontal flip this will mirror the image (this is the option should you wish to convert one of the cameras to a normal view ie let the monitor cancel the cameras mirror image out by adding another mirror).

**YOU CAN SET EACH CHANNEL INDIVIDUALLY FOR ROTATION, SIMPLY ENSURE YOU ARE ON THE CHANNEL YOU WANT TO MODIFY WHILST IN THE MENU.**

## VCOM

We are currently not sure what this setting is used for, but it is only ever seen on AHD monitors. We recommend leaving it alone and not adjusting it.

## Rule setting AKA Guidelines

If you have turned the ruler setting ON, and connected the green wire to a reverse power supply, then everytime you reverse you should see lines. To adjust these, simply select reverse, then whilst the lines are visible use the Up or Down buttons to adjust the vertical position. Sadly no width adjustment can be made. See photos to the right for max and min adjustment range height adjustment.

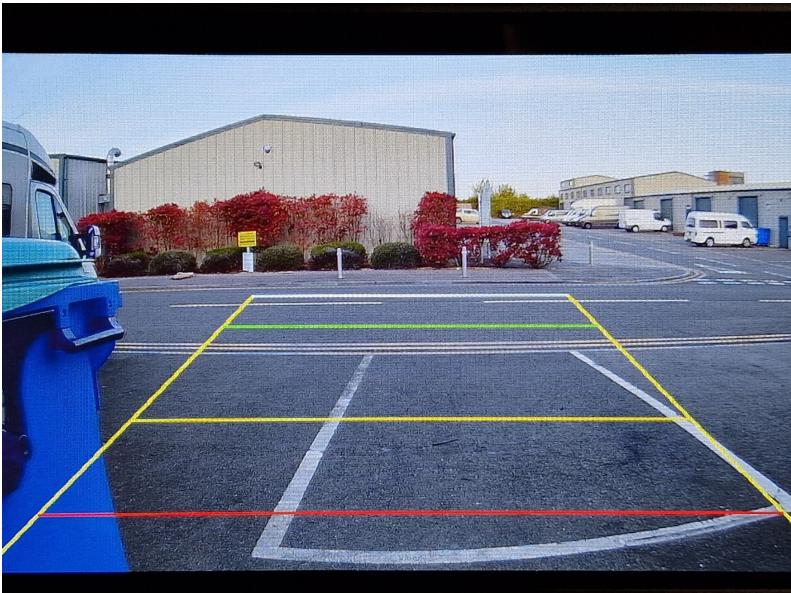




### Lowest Adjustment of Guidelines



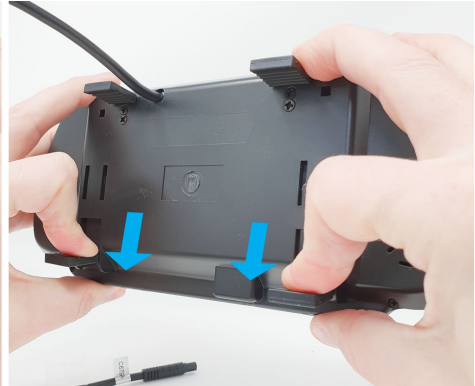
### Highest Adjustment of Guidelines



## 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/disconnecting the monitor to/from 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).

