REVCAMUK
Reversing cameras UK Ltd

Instructions for our MON9010AHD 9” IPS Panel High Definition Vehicle Monitor

Technical Specification

Screen Ratio : 16:9

Back Light Luminance : LED, 300 cd/㎡

Resolution : 1024 x RGB x 600

Compatible System : NTSC & PAL (automatically)

OSD Control : Brightness, Contrast, Saturation, Volume, Language (English, Simplified Chinese)

View Angle : Horizontal L(70) R(70), Vertical UP(50) DOWN(70)

Image Reversion : UP/Down and Left/Right

Power Requirement : DC 12–24V

Power Consumption : 5W

Storage Temperature : -30°C to 80°C

Working Temperature : -20°C to 70°C

AV Inputs : 3 channel HD video input, single image display, support 720P@25/30, 720P@50/60, 1080P@25/30

Number of Trigger and Display : 3 triggers

Optional Functions : 4 PIN connector or RCA connector

Other Features : OSD menu, Remote control, Sunshade design around

Accessories : Remote controller, Power supply cable, User manual, Bracket, Hexagon wrench

Safety Warnings

- **Installation Precautions:** Ensure the vehicle's battery is disconnected before installation to prevent short circuits or electric shocks.
- **Correct Wiring:** Always connect the wires as instructed. Incorrect wiring may cause damage to the monitor or vehicle's electrical system.
- **Secure Mounting:** Make sure the monitor is securely mounted to prevent it from shifting or falling while driving.
- **Avoid Obstruction:** Position the monitor so it does not obstruct the

driver's view or interfere with airbag deployment.

- **Power Supply:** Do not connect the monitor directly to a high-voltage source. Use a regulated 12V/24V power supply as specified.
- **Moisture and Heat:** Keep the monitor away from excessive moisture and direct heat sources to prevent damage.
- **Cable Protection:** Route cables away from sharp edges and moving parts to avoid wear and potential electrical faults.
- **Use While Driving:** Do not adjust monitor settings while driving. Ensure the system is set up before starting your journey.
- **Qualified Installation:** If unsure, seek professional assistance to install the monitor correctly and safely.

Introduction

Thank you for choosing the 9-inch display for your reversing and rear-view camera system. This high-definition monitor is designed to provide a clear and reliable view of your surroundings, enhancing safety and convenience when manoeuvring your vehicle in various conditions. Whether reversing, parking, or monitoring blind spots, this monitor improves visibility, reduces the risk of accidents, and makes manoeuvres easier and more controlled.

The 9-inch display supports multiple camera inputs, allowing you to connect and switch between up to three cameras as needed. This feature is particularly useful for vehicles requiring a reversing & rear-view camera, plus additional side camera. The monitor includes a user interface with accessible controls, enabling you to adjust brightness, contrast, and other display settings/features.

Built for durability, the 9-inch display is designed to withstand the demands of everyday use in a variety of vehicle types, including motorhomes, vans, HGVs, and agricultural machinery. Its sturdy construction ensures reliable performance even in challenging environments, making it a versatile solution for both professional and personal use.

This guide will walk you through the installation process, wiring setup, and operation of the 9-inch display, offering clear, step-by-step instructions to help you get the most out of your system. By following this manual, you'll ensure proper setup and optimal performance, allowing you to enjoy a safer and more stress free driving experience.

Contents and Wiring Harness Layout

- Monitor
- Wiring Harness
- Standard Hardwire / Power Wire
- Remote Control
- Sunshade

You will notice that the monitor has a short fly lead, this then plugs in to an approximately 200cm long lead that we refer to as the monitor wiring harness. One end of this has a 14 pin connector that fits in to the monitor fly lead, whilst the other end has the following inputs/wires listed below :

- 3x 4 pin male aviation (the inputs for the 2 available channels).
- Red wire + black wire combined to a 2.1mm/5.5mm DC power socket (this socket fits our various power leads eg standard, lighter plug, and fuse taps).
- 3x labelled and coloured trigger wires - can be connected to various power sources to trigger a camera if an event occurs e.g. show reversing camera when reverse light gains power.

Trigger Wire Function

There are 3 coloured wires that have CH1, CH2, and CH3 printed on their labels. When one of these wires has a voltage applied, the monitor will turn itself ON (if it was off), and select the channel number that is printed on the wire's label. If the monitor was already on but you were watching a different channel then the monitor would change channel to the related channel written on the trigger wire. When the voltage is no longer present the monitor will return to the previous state it was in before the trigger event.

The most common use for trigger wires is the reverse light e.g. you have a twin lens camera, you have placed the wire from the downward view parking camera in to CH2. In this scenario you would run a wire from the reverse light positive feed to the coloured wire labelled CH2.

Please kindly note that these trigger wires are not required to be attached. If you do not want to wire up to your reverse lights etc then you can leave these wires blank. We usually recommend adding a bit of insulation tape over the ends just in case.

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 trigger wires 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 - the monitor will still consume 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.

Controlling the Monitor

Please see image on page 7 for information about the use of each of the buttons on the monitor. The function may alter depending on if you are inside the menu system or not.

The menu allows you to make various adjustments to the picture settings e.g. brightness, as well as some more advanced settings, suchas trigger delays and mirroring. The following info pages should assist in choosing and making the changes that you require when setting up your new vehicle monitor.

When you make a change it is automatically saved when you leave the screen.

How to Navigate the Menu System

To enter the menu system, press the menu button on the front of the monitor. The instructions will be divided into the submenus, represented by the four icons visible on the left-hand side of the menu.

To toggle between submenus, press the menu button until you reach the submenu you wish to modify. Then, use the up/down arrow buttons to move the selection to the setting you want to adjust. Once on that setting, use either the CH1 or CH2 button to change the selection.

Down Arrow - Pressing this button will move the selection in the menu system downwards

Menu - Pressing this button will enter the menu system. When inside menu pressing again moves to next sub menu

Up Arrow - Pressing this button will move the selection in the menu system upwards

Standby / Power - Pressing this button will turn the display on and off.

Selects Channel 1 / If inside menu settings it will adjust the setting DOWN

Selects Channel 2 / If inside menu settings it will adjust the setting UP

Selects Channel 3

Image Settings (Menu Button Pressed Once Only)

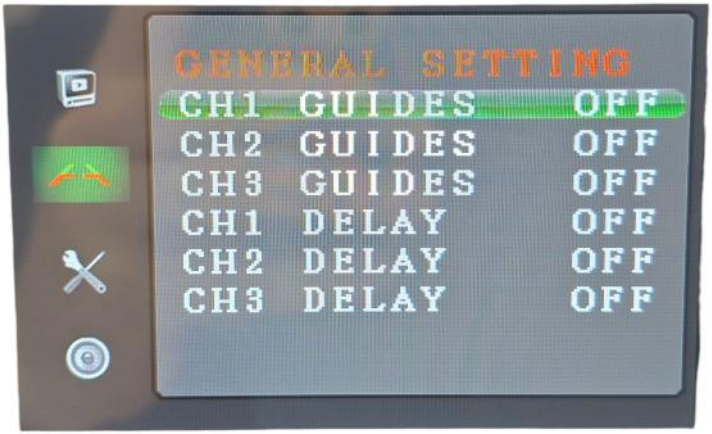
See the image on page 8 for a screenshot of the first page of the main menu, which covers image settings e.g. Brightness, contrast etc.

If you wish to modify something within the Image settings menu simply use the up or down arrow until the selection highlights the setting you wish to

change, then press either CH1 button to decrease the setting, or the CH2 button to increase the setting.

The brightness, contrast and saturation of the image can all be altered on this sub-menu. If you ever wish to reset back to factory image settings (doesn't impact changes elsewhere) simply scroll to reset and press either CH1 or CH2.

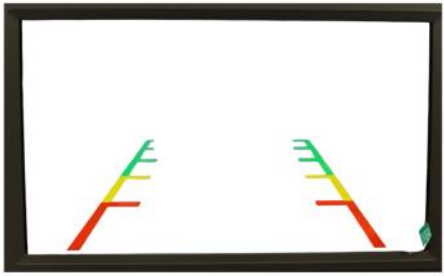
General Settings (Menu Button Pressed Twice)



The general settings screen allows you to add guidelines to the image when the Channel 1, 2, or 3 trigger wire receives a power supply, such as when the vehicle is in reverse gear. Additionally, this menu enables you to set a delay time between the trigger wire no longer receiving power and the monitor either turning off or returning to the previously viewed channel, if applicable.

CH1/CH2/CH3 Guides

Minimum Width of Guidelines



Maximum Width of Guidelines

This setting allows you to superimpose coloured static guidelines on to the screen when the corresponding trigger wire for that channel receives a positive power supply. The most obvious/common use of this feature is to add guidelines to the reversing camera image that only shows when reverse gear is engaged.

Use the arrow up/down key to move the green selection box over the channel number of the channel that you wish to add guidelines, then press either CH1/CH2 so that the setting says “ON”.

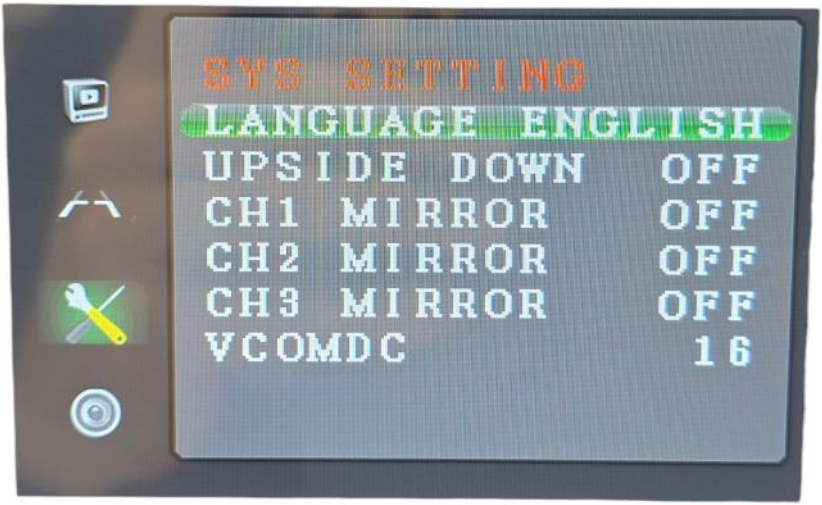
To see the guidelines you must apply power to the related trigger wire e.g. if you have a reversing camera inputted to CH2, you will set CH2 Guides to ON. Connecting the reverse light feed to the CH2 trigger wire, will mean the monitor displays this channel and adds the guidelines to the image.

You can change the width of the guidelines by activating them e.g. selecting reverse gear, then pressing the Menu button until you get the desired width (see image on page 9). Take note of the minimum and maximum widths you can set the guidelines to.

CH1/CH2/CH3 Delay

This setting is useful if you plan on using a trigger wire for the indicator lights to trigger a side camera. This prevents the monitor switching on/off with the flashing lights. Simply set the time using the up/down arrow so that the number of seconds is long enough to keep the monitor on between light flashes. You can change the setting anywhere from 1 to 10 seconds.

System Settings (Menu Button Pressed 3 Times)



The system settings are used to change language settings, as well as being able to The system settings allow you to change the language

and adjust image settinincluding flipping the display upside down or mirroring each of the three channels individually. The Ch1/Ch2/Ch3 Mirror ON/OFF function can be particularly useful in certain applications.

Almost all reversing cameras display a mirror image by default, which is ideal for viewing behind the vehicle. However, if you want to use a reversing camera to look forward, you can enable the mirror option for that channel. This effectively reverses the mirror image, providing a normal forward-facing view.

Volume Setting (Menu Button Pressed 4 Times)

The volume setting won't apply to most people since most reversing cameras do not have a microphone built in. If you do have a camera with a microphone, then you can use the CH1/CH2 buttons to modify the volume down/up.

Alternative Bracket Mounting Point

If you wish to use one of our alternative brackets you will be able to fit these to the rear central bracket channel, see image to the right.

ACC041

Quick Release Bracket for our stand on dash monitors

ACC20540

Ceiling Mount Bracket to fit a dash monitor to ceiling location

ACC705B

Alternative bracket for our stand on dash monitors

ACC38

Suction Mount for temporarily mounting stand on dash monitors