

# Instructions for our MON293GL Clip-over mirror monitors



This booklet contains information about our mirror monitor and its menu system, explaining what the various options inside actually do (as the menu system is quite a bit more versatile than most of the basic mirror monitors menus).

Please be aware that some of the menu systems are subject to change (if you notice anything that differs then please let us know so we can keep these instructions up to date).

Please keep this guide handy in case you ever find someone has been playing with your monitor and changed all the settings.

#### **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 Harness Layout



We often get calls from people who have connected the green trigger wire to an ignition source because they want it to come on all the time, this then locks out the buttons and keeps it on channel 2. If you wish to have it on all the time then please do not attach the green wire to anything, the monitor will remember the last power state when the monitor gets power so no trigger is needed in this case.

# Choosing a power supply and earthing

We recommend that you use a switched with ignition power supply (either 12V or 24V it will automatically work on either). We advise against going directly to the vehicle battery, or on a permanent supply as you will discharge your battery even when the monitor is powered down as well as the equipment being at risk due to the voltage fluctuations experienced when the alternator kicks on/off. We recommend earthing direct to chassis at a point with a bare metal surface.

#### 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).



#### **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 in-

cluded a quick guide below to what each of the buttons do.

Up Arrow = Up Down Arrow = Down M = Menu/Enter V1/V2 = Change Channel



#### How to use the Menu System

The menu system is easy to navigate through using the top three buttons on the monitor. To enter the menu system press the M button. You will now see the options as shown in the image to the right.

Press the - or down button to move down until your selection is over the required function you wish to modify. To enter the sub menu/function press M button (this works as an enter



button as well as the menu button). Pressing + or up arrow will move the selection up at any time.

## **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 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.

If for example you have a camera you wish to cancel mirror image on to use as a normal view camera looking to the side then you can use this menu to do so.

- 1. Exit the menu system and select the camera you wish to modify using CAM button.
- 2. Enter the main menu, arrow down to mirroring and press menu 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 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.
- 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 back in to a normal view image).

# Video Sub Menu

As standard we recommend that you use Auto, which will auto detect the video type of the camera. The options are PAL/NTSC/AUTO. Selecting the wrong type would mean you get a black and white picture or no picture.

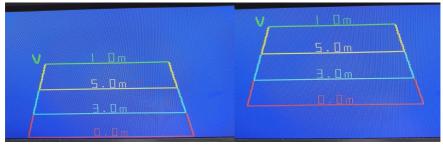
# Park Setup (Guidelines)

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.

Enter this menu and set LINE 2 to ON.

#### Now enter Line 2 Setup.

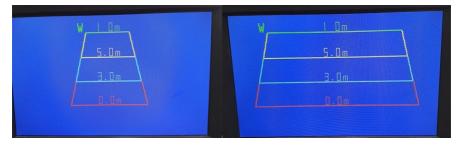
The first adjustment will allow you to move the batch of guidelines along the vertical axis, the image below shows the max adjustment up and down of the guidelines.



#### 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 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 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. To modify values use the up and down keys to change the number to the required value and the Menu button to go to the next number to adjust.

# **Option Sub Menu**

Allows you to select picture mode and aspect ratio (16:9/4:3), this is usually left alone and picture mode can be changed when not in menu by pressing the mode button.

# **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 guidelines on the monitor.

# **Interval Config Sub Menu**

This monitor can be setup to switch between two cameras automatically on a pre-assigned number of seconds per camera. This menu system will allow you to do so. 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.

Now press the Menu 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.

# **Cam Delay Sub Menu**

Changing the time for channel 2 will mean the monitor stays on this channel for however many 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.

# Fitting the monitor over the mirror

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

First you must pull down the two lower clips, you will feel the springs trying to pull the clips up and as you do this.

Place the monitor over the existing



mirror by resting the upper clips on the top of your interior mirror and placing the lower clips underneath.

Next release the lower clips so the springs clamps these on to the underside of the interior mirror.



Check the monitor is firmly located against the mirror and make any small adjustments as necessary.