

Installation Notes DVR-2380 and DVR-2480

(25th, April 2024)

This document is supplemental to the Installer Basic Configuration Guide and describes the additional functionality of the latest versions of the DVR Firmware.

The following parameters can be configured by connecting a mouse into the USB port on the DVR and by displaying the DVR AV Output on the Drivers Monitor. If a Drivers Monitor is not available, the TViewer APP can be also used to change these parameters (Refer to Configuring the VRUD if using the TViewer APP.)

1. Automatic Detection of Camera Video format



This feature means that the installer does not need to ensure the DVR inputs and cameras are matched.

The DVR automatically identifies the camera type connected to an input.



2. Automatic setting of the Recording Resolution

There is a quirk of the automatic Recording Resolution function in that the resolution will be set for the lowest resolution camera that has been connected to an input.

For example, if a D1 resolution camera is connected the resolution is set to D1. But, if a higher resolution camera is fitted later, although the DVR adjusts the input to the new camera, the recording resolution is not updated. The resolution has to be entered manually.

3. HD AV Output



These DVRs provides an analogue and HD Video Output.

All current Vision Monitors support HD video and it is recommended the HD output is used whenever possible.

4. Setting up the Vulnerable Road Used Detection (VRUD) functionality Requires that the VRUD (Labelled as BSD – Blind Spot Detection - in the DVR nomenclature) firmware has been enabled on the DVR.

The first step is to allocate the camera channel to the appropriate VRUD (BSD) zones.

As standard we follow our normal camera channel allocation logic.

i.e. CH1- Front-BSD; CH-2 Back-BSD; CH-3 Left-BSD; CH-4 Right-BSD

The Pedestrian Detection Camera channel allocation table can be found in....

DETAILED SET>ALM SETUP>AI ALARM>INNER SOFT



The highlighted options define if the VRUD calibration lines are displayed on the Drivers Monitor, or if they are hidden.

The calibration lines can be displayed to help optimise the camera position, and/or, help adjust the calibration.

CLOSE = Hides the Lines, OPEN = Displays the Lines.

Camera type should be set as **FISH** for Front and Rear Cameras, and **ABACK** for side cameras





To configure the functionality of the VRU Detection alarms go to.....

DETAILED SET>ALM SETUP>AI ALARM>ALARM SETTINGS.....

Keep clicking through Alarm Setting options until you get to the **BSD Set**



5. Configuring the VRUD Zones

To adjust the calibration zones (which you will most likely need to do to optimise the VRU performance) you will need use the **TViewer App**. *The TViewer App is only available for Android.*

There are two options for connecting the App to the DVR:

- 1. Using a Wi-Fi dongle (recommended)
- 2. Using a USB Cable

Connecting a Wi-Fi Dongle

With this option the Wi-Fi dongle is inserted into the USB connector on the DVR.



Install the TViewer App on the Smart Phone and then enter Settings>Network and Internet>Internet.



USB Tethering

With this option the DVR and Smart Phone are connected through a USB cable.

Note not all Android Phones work reliably using this method, and for USB Tethering you may require a Smart Phone provided by Vision UK.



In this case again enter Settings, but this time select Settings>Connecting and Sharing>USB Sharing



Editing the calibration zones

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The TViewer App has the same functionality with either connection method.



BSD Calibration Screen



Understanding how to set up detection Zones on V25312SW Firmware

This firmware version has a number of improvements over the previous versions. The most significant change is the detection zones work differently to previous firmware versions.



When a VRU is detected in the green zone the algorithm will only display a green box around the target. When a VRU is detected in the amber zone the display will change and show an amber onscreen warning icon but will not play a Spoken Warning When a VRU is detected in the red zone the display will change, a red warning icon, and a Spoken Warning Message will be played.

PLEASE NOTE THE MAIN CHANGES WITH THIS FIRMWARE VERSION

Although a spoken warning message is not played when a VRU enters the **green** and **amber** zones, these zones still can affect the timing of when the first spoken warning message is played. Despite a spoken message not being played the **Interval Time** (see notes below) can still delay the verbal warning message being played when a VRU is detected in the **red zone**.

The interval between the first spoken message being played and it being repeated is determined by the **Interval Time in the BSD SET**.

Recommended Settings

To avoid the first spoken message being delayed more than we would like we recommend the **green** detection zone is set to line up with the outer detection zone of the **amber** zone (as shown below). This provides a 2-stage alarm but does not significantly delay the first spoken warning message.

To avoid any time delay of the spoken warning message you can line up both **amber** and **green** detection zones with outer detection zone of the **red zone**. Although, in this case, there will not be a 2-stage alarm.



