



Around Vehicle Monitoring System

Configuration Guide

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Configuring the inView 360 HD AVM System

Now that the inView 360 HD AVM system has been calibrated, there are several ways that it can be configured to suit situational needs. The following should be configured via the configuration menu:

- System Time
- Monitor Shutoff/Wake-up
- Video Compression
- Video Clip Duration
- GPS
- Default View
- Network
- Image Overlay (for Outrigger)

NOTE: Using the Remote Control

A remote control is included with your inView 360 HD AVM system. We recommend that you connect as USB mouse (not included in your kit) and use it for navigating the ECU screens.

Logging Into the AVM System

1. Power up the inView 360 HD system.

When the monitor turns on, you should see two images on the Live screen:

- The 360 image on the left
- Channel 1 (left camera) on the right



2. Use the USB mouse that you previously connected to the ECU (see “3. Connect a USB Mouse” on page 4 of the Calibration guide”) to log into the system. Right-click anywhere on the screen, then select **Login**.

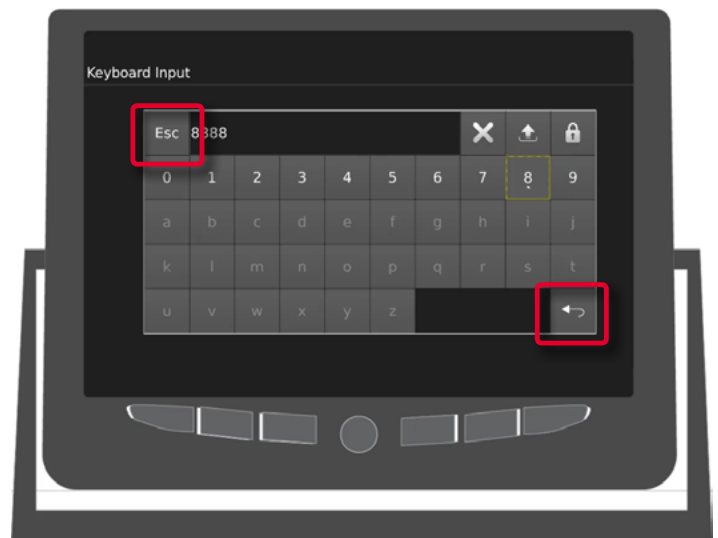


3. Select **Yes** when asked if you want to proceed with stopping the recorder.



4. Double-click in the input field to open the virtual keyboard, and then enter the default password: 88888888 (8 number eights).

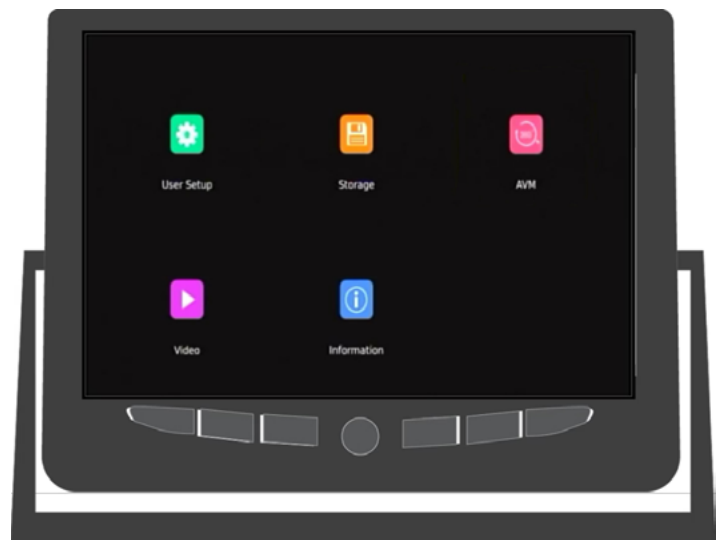
If you make a mistake, click the **X**.



5. Click ESC or the back key when you have finished entering the default password to return to the **Login** screen.



6. Click **OK** to log in.
The **AVM Calibration** main menu opens.



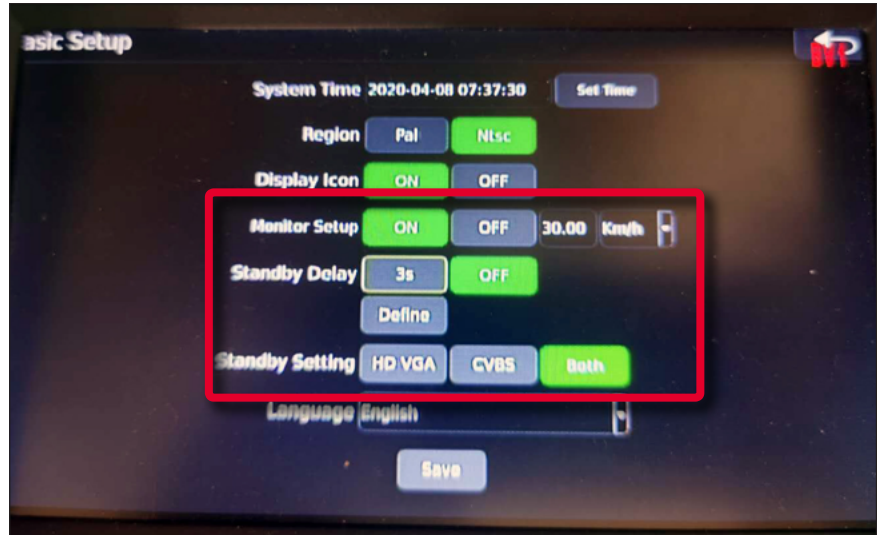
Configuring the System Time

1. Click **User Setup** on the main menu.
2. Select **Basic Setup**.
3. Enter the new system date and time.
4. Click **Save** to apply the changes.

Configuring the Monitor Shut Off and Wake Up Settings

These settings allow you to specify the vehicle speed threshold that automatically triggers when the monitor discontinues showing live video (a safety feature). A **Standby Delay** can be configured to delay how long after the speed threshold is reached before the live video is discontinued. The live video feed on the monitor automatically resumes after the vehicle speed is below the specified threshold.

1. Click **User Setup** on the main menu. See [page 5](#).
2. Select **Basic Setup**.
3. Select **ON** under **Monitor Setup**, and then enter a speed threshold the vehicle must reach before the live video feed is discontinued.
4. (Optional) **Standby Delay**: Either select the default (**3s**) or click **Define** to configure a value for **Standby Delay**, which delays the discontinuation of live video.
5. When you click **Define**, an option appears where you can enter a value, in seconds, for the delay. This new setting appears to the right of the **Define** button.
6. Select in the **Standby Setting** field which video output to disable: **None**, **VGA**, **CVBS**, or **Both**.
7. Click **Save** to apply the changes.



i NOTE: Video Output Options

Carefully consider what option you choose for disabling which video output. Remember that if you have connected a recorder to the CVBS video output, the recorder will lose the video feed when the feed is shut off. Therefore, the recorder will not record video during that time.

Configuring Video Compression Settings

These settings allow you to select the video compression. If you select 2 Mbps compression, the video will have a lower resolution but will use less storage space. If you select 4 Mbps, the video will have higher resolution but will use more storage space.

1. Click **User Setup** on the main menu. See [page 5](#).
2. Select **DVR**.
3. Select either **2 Mbps** or **4 Mbps** for the compression.
4. Turn **On** the **Auto Record** option.
5. Click **Save** to apply the changes.

Configuring Video Clip Duration Settings

All channels continuously record, so it is important that you specify here the maximum length of clips that are compressed and saved to the SD card.

1. Click **User Setup** on the main menu. See [page 5](#).
2. Select **DVR**.
3. Select a clip length: **3 min, 5 min, 10 min, or Custom**.
4. Click **Save** to apply the changes.

TIPS ! About Clip Size

If the clips are short, they will be more frequently compressed and saved to the SD. While this is ideal for security, having multiple short segments does make playback difficult, especially if there are multiple cameras recording at the same time. Each camera records a separate file, so you could potentially have 4 clips for the same time period times multiple time periods.

SD Card Compression Table

Compression Modes	Video Clip File Size Guidelines	Recording Length (hrs)	
		128 GB	256 GB
2 Mbps	4.3 GB / 4 Cameras / hr	30 hours	60 hours
4 Mbps	8.5 GB / 4 Cameras / hr	15 hours	30 hours

These guidelines are subject to compression variations. Data can be extrapolated for other SD sizes.

Configuring GPS

Enter a speed threshold to trigger event recording. GPS allows the reviewer to see where the vehicle was when the video was recorded.

1. Click **User Setup** on the main menu. See [page 5](#).
2. Select **DVR**.
3. Turn on **GPS Setup**.
4. Enter a speed threshold.
5. Click **Save** to apply the changes.

Configuring the Default View

This setting allows you to customize what views are seen by default on the monitor.

1. Click **User Setup** on the main menu. See [page 5](#).
2. Select **Display**.
3. Select a default view from the list. The default setting is “Dual + Front”.
4. Click **Save** to apply the changes.

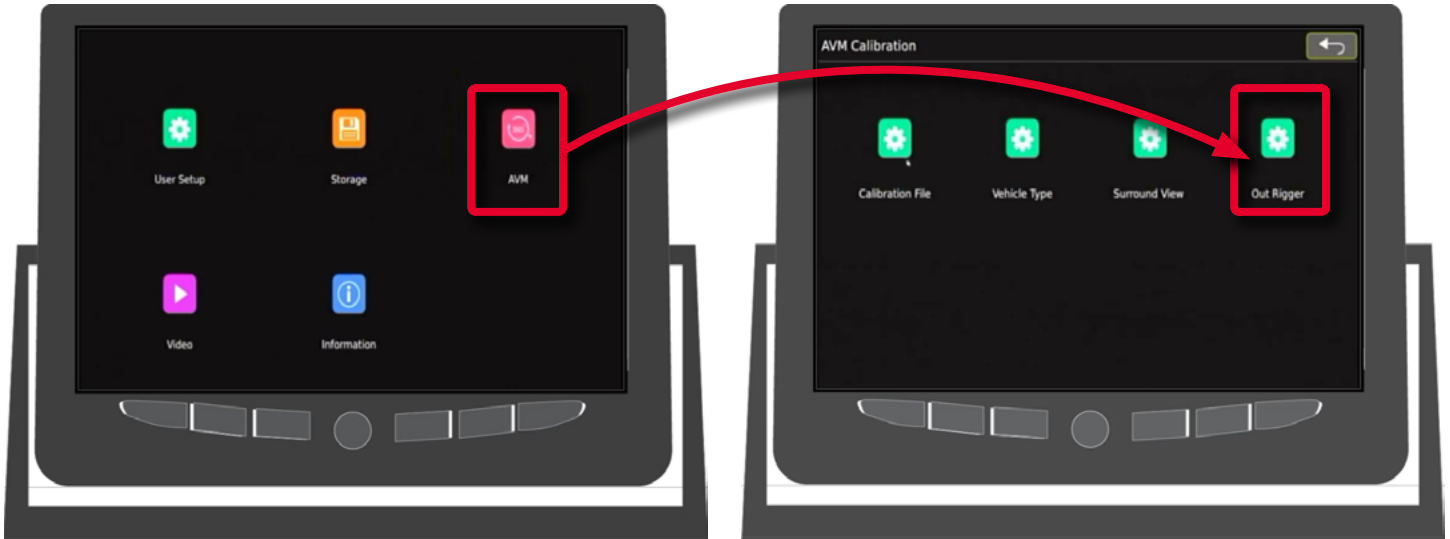
Configuring the Overlay Settings

Specialty vehicles, such as fire trucks and construction vehicles, might be equipped with outriggers to stabilize the vehicle. Outriggers are structural supports which extend from the sides of the vehicles. Therefore, they can make it a challenge to safely position these vehicles. When properly configured, the inView 360 HD AVM can provide a visual aids called overlays to help drivers safely position vehicles that have outriggers.

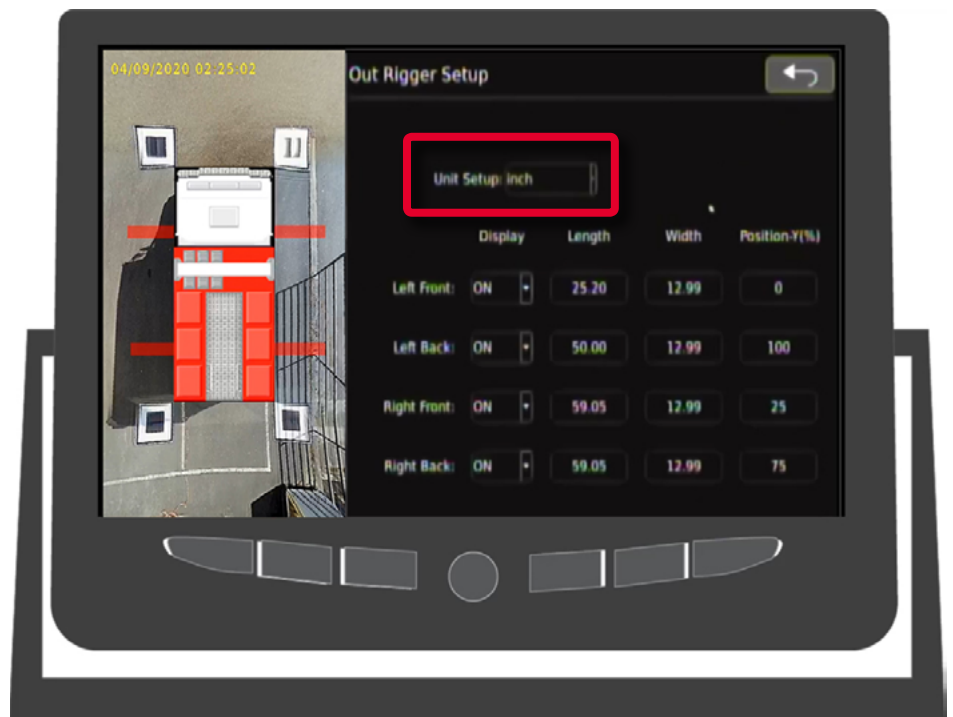
1. Deploy the outriggers from you vehicle. You should be able to see them in the 360 view on the Live monitor.



2. Log into the **Config** menu. (See the login procedures starting on [page 4.](#))
3. Select the **AVM** tab, and then select **Out Rigger** in the **AVM Calibration** window.



4. Click to select the **Unit Setup** field, then select the units of measure.



5. Click to select the **Left Front** settings fields, then select to display or hide the outrigger overlay on the screen.

NOTE: When not to use the Outrigger Overlays

If your vehicle does not have outriggers for stabilization, then we recommend that you toggle off the Overlay feature.

- Select the next field, the Length field. Left click if you want to change the length value.

A digital keyboard page opens.



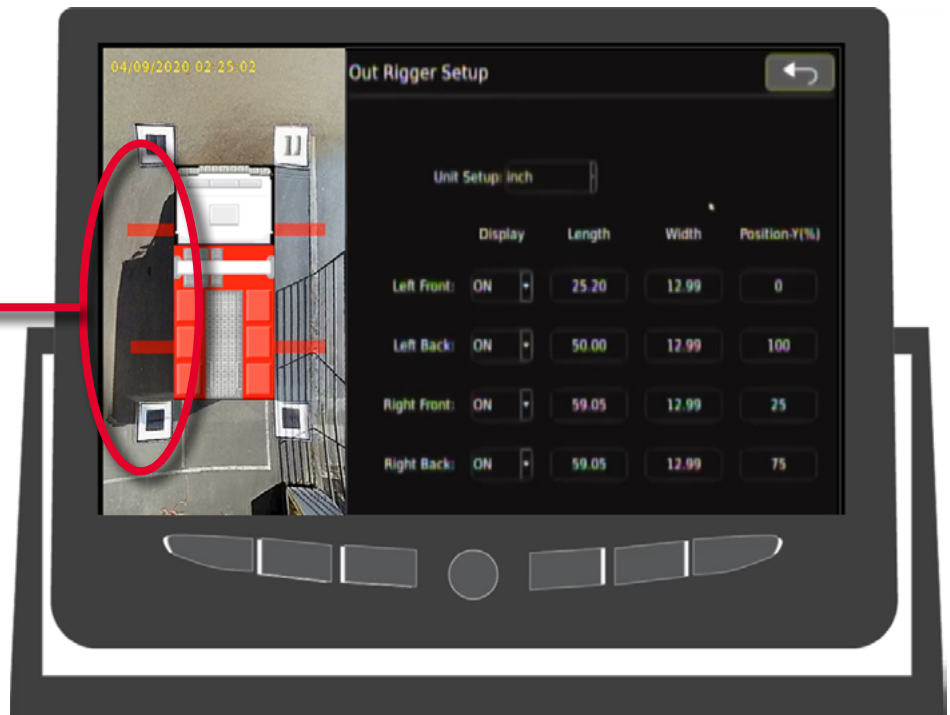
- Use the mouse to enter the new value for the length.

The larger the number in the length field, the longer the outrigger appears on the video overlay.



- Do the same for the width for the outrigger, if desired.
- Use the mouse to select the **Position-Y (%)** field. The number in this field determines the position for the outrigger along the vehicle body in the outrigger/vehicle overlay.

The higher the Y value, the higher the outrigger appears on the vehicle image.

The lower the Y value, the lower the outrigger appears on the vehicle image.

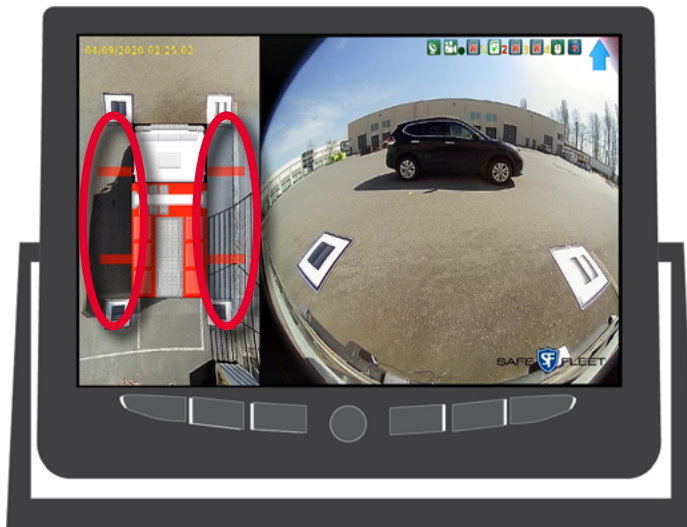


- Repeat this process until the outrigger configuration is complete.

11. Complete the process by pressing the **Back** button .
A **Do you want to save before exit** confirmation window appears.
12. Click **Yes** to save the new settings.
13. Continue pressing the **Back** button  to exit out of these windows and return to the main menu.



14. Right-click the mouse on the main menu. A window appears asking if you want to go back to live video. Click **Yes**.



Live video appears on the monitor. The newly configured outrigger overlays should also appear. If they are as expected, then you have finished calibration.

Operating Scenarios

Continuous Recording

The system automatically starts recording in continuous mode immediately after system initialization, a process (with self-diagnostics), that takes approximately 10 seconds. The continuously recorded video is stored in separate clips; the maximum length of these clips is configurable.

Low-Speed Maneuvers

The video feed to the monitor remains active during low-speed maneuvers as long as the vehicle speed is below the previously configured threshold speed. This allows the operator to monitor the around-vehicle view. Additionally, with the push of a button, the operator can activate the image overlay feature.

Depending on the external signal triggers, left-turn, right-turn, or reverse, the system automatically switches to the correct view. [The system can be configured to automatically switch to the corresponding view to the external turn signals: left turn, right turn, and reverse.]

Higher Speed Driving

After the system has been configured with the proper auto-shut-off speed and standby delay, the video feed to the monitor will automatically shut off after the vehicle speed exceeds the configured threshold speed and after the configured standby delay period. The video feed will be switched on again (without a delay) when the vehicle speed falls below the threshold speed.

Event Marking

A manual event can be generated by pressing the Event push button. A clearly visible message appears indicating that the panic event has been recorded.

There are other types of automatic events. These can be generated from the GPS receiver and the G-sensor. These events include exceeding speeding threshold and accelerometer-related events.

An event clip is automatically generated with a length of -15s to +15s. This resulting clip will be protected.

Safe Fleet Compatible Systems

The system works with Safe Fleet's DX, TH, and DH series DVRs. The CVBS output can be fed to these DVR systems.

The system is also compatible with the Predictive Stop Arm™ (PSA) system. The PSA violation signal, in this case, can be wired to trigger the external manual "Event" push button to simulate a PSA violation event as a panic event.

Support Information

Contacting FRC (Fire Research Corporation)

FRC Customer Service and Product Support:

(8am to 5pm EST weekdays)

- Main Phone: 631.724.8888
- Fax: 631.360.9727 (24 hours)
- Email: service@fireresearch.com

If your inView 360 HD system needs to be returned, please contact FRC Technical Support, and provide the model and/or serial number of your unit. Ask for a Return Merchandise Authorization (RMA) number. An RMA number allows the Service Technicians to better track your product when it comes in for service. Please show the RMA number on the outside of the package. ANY RETURNED PRODUCT WITHOUT AN RMA NUMBER MAY BE REFUSED.

Product Information

For product information and documentation related to the inView 360 HD system, please visit the inView 360 HD product page on the FRC website: <http://www.fireresearch.com/>. This product page can be found under the **Video** top level menu header, and then the **inView 360 HD** page is located under the fly-out submenu. Contact information can be found under the **Contact** menu item, and then from the **Contact FRC** fly-out submenu item. This Operation Guide and the rest of the inView 360 HD video manuals are linked as PDFs on the left side of the product page. Also, these manuals are available on the Manuals page (under the Video header), which is located under the Resources menu item, and then the **Manuals** fly-out submenu item.

Warranty

Complete warranty details are available online on the [FRC Limited Warranty page](#). This page can be found through the above link for the FRC website. Go to the **Manuals** tab (under the **Resources** menu item), and then scroll all the way down to the bottom of this page. There is a link for the [Warranty Policy](#) PDF under the [Reference/Data Sheets](#) header.