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## **Sidewinder HD OSM On Screen Menu Operation Manual**

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Rev A

## INTRODUCTION

The Sidewinder SW720 HD camera is provided with an On Screen Menu (OSM) setup feature that allows some camera features to be customized for different applications. The OSM menu system can be accessed by using the WTI HHC-SW controller, the WTI DTC-720 controller, the RCU, the RCU-JS, the WTI Camera Control GUI or most other industry standard controllers that are capable of setting camera presets up to #95.

### 1. Entering the On Screen Menu Mode

- 1.1. To enable the OSM menu using either the HHC-SW or DTC-720 controllers, use the “Set Preset 95” command. Press “9”, then “5” and then press and hold the “Preset” key for 5 seconds.
- 1.2. To enable the OSM mode using the RCU or RCU-JS controllers, set the “LOCAL/REMOTE” switch to the local position. Then press the FOCUS “Manual/Auto” and the IRIS “Manual/Auto” switches both to the “Auto” position at the same time and hold them for 5 seconds.
- 1.3. To enable the OSM mode using the WTI Camera Control GUI click the button labeled “OSM” next to the Pan-Tilt control area. The following menu will be displayed on the video monitor:

#### SIDEWINDER CAMERA

<CONFIGURATION>  
<SYSTEM>  
<CAMERA PARAMETER>  
<EXIT>

### 2. The OSM menu is navigated slightly differently depending on whether you are using the HHC-SW, the RCU controller, the DTC-720 controller or the RCU-JS type controller.

- 2.1. The HHC-SW controller and the RCU use the following buttons or switches for OSM operation:
  - 2.1.1. UP and DOWN arrow buttons or switches move the highlight selection within the menu options, and the “ZOOM IN” button or switch performs the “ENTER” function for selecting options.
- 2.2. The DTC-720 controller and RCU-JS use the joystick for OSM operation:
  - 2.2.1. UP and DOWN joystick commands move the highlight selection within the menu options, and the rotating the “ZOOM” knob clockwise performs the “ENTER” function for selecting options.
- 2.3. The WTI Camera GUI uses the UP and DOWN arrows near the “OSM” button to navigate up and down the menu selections and the RIGHT arrow to select the function.

3. CONFIGURATION OPTIONS – After selecting the <CONFIGURATION> menu item, the following options will appear (defaults shown):

<PROTOCOL> COHU  
<DEVICE ADDRESS> 1  
<BAUD RATE> 9600  
<POWER UP> LAST POSITION  
<2<sup>ND</sup> HOME SEARCH>  
<NORMAL FLIP>  
<CONFIGURATION II>  
<BACK>  
<EXIT>

- 3.1. <PROTOCOL> PELCO D [PELCO P] [COHU]– The three options for protocol are Pelco D protocol at 2400 baud, Pelco P protocol at 4800 baud and COHU protocol at 9600 baud.
- 3.2. <DEVICE ADDRESS> 1 – Addresses up to 99 are currently supported.
- 3.3. <BAUD RATE> – The baud rate is selected automatically - 9600, according to the protocol that is selected.
- 3.4. <POWER UP> – [LAST POSITION] [STAY AT HOME] [GOTO PRESET 1] [START TOUR 1] – The four choices for power up mode after camera initialization are; go to the stored last known position before power up, stay at the mechanical initialization “zero” coordinates, go to preset one or start tour 1.
- 3.5. <SECOND HOME SEARCH> [NO SECOND HOME SEARCH] – This feature allows the user to specify that a second initialization be performed 30 minutes after power up. This feature is usually only necessary on location where the temperature gets below freezing. The second initialization after the camera has had a chance to warm up will allow a more accurate home position to be determined.
- 3.6. <NORMAL FLIP> [INVERT FLIP] – This feature allows the camera video signal to be flipped in applications where the camera is mounted in an inverted configuration.

3.7. <CONFIGURATION II> – This selection provides a link to less commonly used camera features.

<NO 24h RESETTING>  
<BRAKE CONTROL>  
<HALF AND MICRO STEPS>  
<NORMAL ACCELERATION>  
<TERMINATION>  
<CONFIGURATION I>  
<LOAD DEFAULTS>  
<BACK>  
<EXIT>

3.7.1. <NO 24h RESETTING> [RESETTING EVERY 24h] – This feature provides a once a day camera re-initialization. This feature would only be used in situations where the camera position may get moved by an external cause, like heavy birds or other impacts to the camera.

3.7.2. <BRAKE CONTROL> [NO BRAKE CONTROL] – This feature allows the internal electric brake controls to be set so that the brakes remain open at all times when the camera is powered up, or to have the brakes engage and hold the camera still when it is not moving.

3.7.3. <HALF AND MICRO STEPS> [ONLY MICROSTEPS] – This feature allows the camera to be set to use only micro-stepping, in order to provide a very smooth pan and tilt motion at all zoom settings. This would typically be used when the camera is operated at very high magnification.

3.7.4. <NORMAL ACCELERATION> [SLOW ACCELERATION] – This feature allows the camera pan and tilt motion to be slowed down to provide more available motor torque reserve in very high wind areas.

3.7.5. <TERMINATION> [ON] [OFF] – This feature allows the RS-485 internal termination resistors to be switched off in situations where more than one camera is attached to the same set of RS-485 control signal lines.

3.7.6. <CONFIGURATION I> – This selection returns to the previous configuration menu.

3.7.7. <LOAD DEFAULTS> - This selection returns the features in CONFIGURATION I and CONFIGURATION II to the factory default condition. Note: These are commands not options.

<ERASE ALL SETTINGS>  
<ARE YOU SURE?>  
<BACK>  
<YES LOAD DEFAULTS>  
<ERASE PRESETS/TOURS>  
<EXIT NOTHING CHANGED>

3.7.8. <BACK> – This menu selection returns to the previous menu.

3.7.9. <EXIT> – This menu selection calls up the final save and store functions.

## 4. SYSTEM MENU

<POSITION>  
<COMPASS ID>  
<ZONE ID>  
<PRESET ID>  
<ID TEXT>  
<INTERFACE>  
<ABOUT>  
<BACK>  
<EXIT>

- 4.1. <POSITION>[DISABLE] [PERMANENT] [TIMEOUT] -This feature allows the visibility of the on screen azimuth and elevation values to be set for a 3 second display each time the camera is moved by the operator, always on or always off.
- 4.2. <COMPASS ID> [TIMEOUT] [PERMANENT] [DISABLE] – This feature allows the visibility of the on screen compass text to be set for a 3 second display each time the camera is moved by the operator, always on or always off.
- 4.3. <ZONE ID> –[PERMANENT] [TIME OUT] [DISABLE] This feature is not currently supported.
- 4.4. <PRESET ID> [TIMEOUT] [PERMANENT] [DISABLE] – This feature allows the visibility of the on screen preset ID text to be set for a 3 second display each time the camera is moved by the operator, always on or always off.
- 4.5. <ID TEXT> - This menu selection calls up the feature that allows a title to be placed on the video image.
- 4.6. <INTERFACE> - This feature allows the camera tube pressure and camera temperature to be displayed on the video image. The type of interface board (pressurized or non-pressurized) used in the camera will also be displayed.
  - 4.6.1. <MAINTENANCE MODE> - This feature displays the camera tube pressure and camera temperature on the video display.
  - 4.6.2. <BACK>
  - 4.6.3. <EXIT>
- 4.7. <ABOUT> FIRMWARE VERSION
- 4.8. <BACK>
- 4.9. <EXIT> menu selection calls up the final save and store functions.

5. <CAMERA PARAMETERS> - This menu selection allows special thermal imaging camera parameters to be set.

<LOW LIGHT>  
<SET VIDEO MODE>  
<DIGITAL ZOOM X12>  
<BACK>  
<EXIT>

- 5.1. <LOW LIGHT MODE> [AUTOMATIC] [COLOR] [B/W] This feature allows the camera to be set to Color and Black and White (Auto) or Color only or Black and White only.

- 5.2. <SET VIDEO MODE> Select preferred video mode.

5.2.1. Once selected go to <TEST VIDEO>.

5.2.2. When test is finished if you select this mode you must select <ACCEPT VIDEO MODE> or <DISCARD VIDEO MODE> press corresponding button.

1080I/60  
1080I/59.94  
1080I/50  
1080P/30  
1080P/29.97  
1080P/25  
720P/60  
720P/59.94  
720P/50  
720P/30  
720P/29.97  
720P/25

5.2.3. <TEST VIDEO MODE> This feature samples video mode before setting.

5.2.4. <ACCEPT VIDEO MODE> This feature allows accepting desired video mode that was tested.

5.2.5. <DISCARD VIDEO MODE> This feature allows discarding video mode that was tested.

- 5.3. <DIGITAL ZOOM X12> [OFF] [X2] [X5] [X10] [X12] This feature allows the Digital Zoom limit to be set.

5.4. <BACK>

5.5. <EXIT>

6. <EXIT> This menu selection goes to the final menu screen where changes can be accepted or discarded before exiting the OSM setup menus.

<EXIT NOTHING CHANGE>  
<LOAD DEFAULT SETTINGS>  
<SAVE CHANGES>  
<DISCARDING CHANGES>  
<BACK>  
<EXIT SAVING CHANGES>

- 6.1. <EXIT NOTHING CHANGE> - This selection discards any changes that were made during the current OSM session and exits the OSM session.  
6.2. <LOAD DEFAULTS> - This selection returns the features in CONFIGURATION I and CONFIGURATION II to the factory default condition. Note: These are commands not options

6.2.1. <ERASE ALL SETTINGS>  
6.2.2. <ARE YOU SURE?>  
6.2.3. <BACK>  
6.2.4. <YES LOAD DEFAULTS>  
6.2.5. <ERASE PRESETS/TOURS>  
6.2.6. <EXIT NOTHING CHANGED>

- 6.3. <SAVE CHANGES> - This menu selection saves the changes made during the current OSM session and stays in the OSM session.  
6.4. <DISCARDING CHANGES> - This menu selection discards any changes made during the current OSM session and remains in the OSM session.  
6.5. <BACK> - This menu selection goes back to the main menu.  
6.6. <EXIT SAVING CHANGES> - This menu selection saves the changes made during the current OSM session and exits the OSM menu system.

## 7. Returning to Normal Operation

- 7.1. RCU and RCU-JS – In order to return to normal front panel switch operation of the RCU or RCU-JS, press the LOCAL/REMOTE switch to the LOCAL position and hold it up for 5 seconds, or until the FOCUS LED and IRIS LED start flashing. The camera will go to Preset 1 and normal operation will resume.  
7.2. When using the HHC-SW or DTC-720 controllers, no extra operations of the controller is required for returning to normal camera control operations.  
7.3. When using the WTI Camera Control GUI, be sure to click the OSM button back to the “OFF” position.