

# **IRIS106**

## Installation Instructions & User Guide

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## Introduction

Thank you for purchasing your new IRIS106 camera from Iris.

The IRIS106 is a fully controllable Pan, Tilt and Zoom CCTV camera with low light operation, designed specifically for use on boats as a security safety and situational awareness aid.

The Camera is designed to be as small and low-profile as possible so that it doesn't protrude too much from head linings and so that it blends into the aesthetic of the vessel.

It's marine grade stainless steel bezel features a high polish finish and the mirrored dome provides enhanced privacy.

Key features include:

- Sony High Resolution Camera Module 700TVL
- 10x Optical Zoom
- High Speed Pan and Tilt
- Proportional Control
- Auto Focus
- Automatic Day / Night Filter switches from colour during the day, to monochrome at night or in low light for enhanced image clarity
- Built-in Fan to reduce condensation in hot environments
- Compact 4" Smoked Dome
- Marine Grade 316 Stainless Steel Bezel
- IP66 Water Resistant
- RS485 Communication / Pelco D Protocol

This document contains safety, handling, disposal and recycling regulatory and software information. In order to activate your warranty please follow the instructions within the guide.

Please ensure your camera is installed in accordance with the instructions and guidelines provided within this document. We recommend visiting <u>www.boat-cameras.com</u> from time to time to check for updates to the manual and observing the latest versions of the manual when released.

## **Camera Dimensions**



## **Conventions:**

At various points within this guide, the following icons are used to illustrate important and/ or potentially dangerous information:



### **INFORMATION:**

This symbol points out important information pertaining to the installation, operation and maintenance of the camera.



#### WARNING:

This symbol indicates a risk of damaging the camera or other items, or an important issue that may effect the operation of the camera.



#### DANGER:

This symbol is used to alert the user / installer / maintainer of a serious risk of damage or personal injury or death.

## **Limited Warranty:**

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER LEGAL RIGHTS, WHICH VARY FROM TERRITORY TO TERRITORY. IRIS DOES NOT EXCLUDE, LIMIT OR SUSPEND OTHER LEGAL RIGHTS YOU MAY HAVE UNDER THE LAWS OF YOUR TERRITORY.

This product is warranted to be free from defects in materials or workmanship for one year from the date of purchase. Upon registration of the product an additional 12 months warranty will be awarded FOC.

Within this period, Iris Innovations will, at its sole option, repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labour, provided that the customer shall be responsible for any transportation cost. Repaired or replaced devices have a 90 day warranty. If the unit sent for repair is still within its manufactures initial warranty period then the new warranty is limited to the end of the initial period and will not extend beyond the end of the initial warranty period.

If you seek warranty service outside of the original country of purchase, Iris cannot guarantee that the parts needed to repair or replace your product will be available due to differences in product offerings and applicable standard, laws and regulations. In that case, Iris, at its sole discretion and subject to applicable laws, repair or replace your Iris product with comparable Iris products or parts, or require you to ship your product to a service facility in another territory that can service your product in which case you will be responsible for complying with all applicable import and export laws and regulations and for paying all customs duties, VAT, shipping fees, insurances and any other associated taxes and charges.

This warranty does not apply to: (i) cosmetic damage, such as scratches, nicks and dents; (ii) consumable parts, such as batteries, unless product damage has occurred due to a defect in materials or workmanship; (iii) damage caused by accident, abuse, misuse, water, flood, fire, or other acts of nature or external causes; (iv) damage caused by service performed by anyone who is not an authorised service provider of Iris Innovations Limited; or (v) damage to a product that has been modified or altered without the written permission of Iris Innovations. In addition, Iris reserves the right to refuse warranty claims against products or services that are obtained and/or used in contravention of the laws of any country.

This product is intended to be used only as a travel aid and must not be used for any purpose requiring precise measurement of direction, distance, location or topography.

For products purchased through unauthorised dealers or online resellers, any warranty claims should be made against the seller and not Iris. Iris is not liable for any warranty claim made on products purchased through unauthorised vendor.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE WARRANTIES AND REMEDIES CONTAINED IN THIS LIMITED WARRANTY ARE EXCLUSIVE AND IN LIEU

OF, AND IRIS EXPRESSLY DISCLAIMS, ALL OTHER WARRANTIES AND REMEDIES, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, STATUTORY REMEDY OR OTHERWISE. IF IMPLIED WARRANTIES CANNOT BE DISCLAIMED UNDER THE LAWS OF YOUR TERRITORY THEN SUCH WARRANTIES ARE LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY.

IN NO EVENT SHALL IRIS BE LIABLE IN A CLAIM FOR BREACH OF WARRANTY FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE OR INABILITY TO USE THIS PRODUCT OR FROM DEFECTS IN THE PRODUCT.

## Warnings & Product Information:

#### LEGAL NOTICE:

In some jurisdictions it could be considered an invasion of privacy rights to take or publicly display photographs or videos of people or their vehicles using this product.

It is your responsibility to know and comply with applicable laws and rights to privacy I your jurisdiction.

#### **DISTRACTION WARNING:**

This device is intended to enhance the situational awareness when used properly. If used improperly you could become distracted by the display which could lead to an accident causing serious personal injury or death to yourself or others.

Always maintain awareness of your surroundings and do not stare at the display or become distracted by the display. Focusing solely on the display and not on your surroundings could cause you to miss obstacles or hazards. Use the device at your own risk.

Do not rely solely on the video from the camera to judge distances. Use the camera as a guide only to enhance your situational awareness.

#### INSTALLATION & OPERATION:

This product must be installed and operated in accordance with these instructions. Failure to do so may result in poor product performance, damage to the product or vessel and/or personal injury. Installation should only be carried out by qualified personnel or by persons competent in the installation of electronic systems.

#### POWER SUPPLY & GROUNDING:

Ensure the boats power supply is switched off during installation. Ensure suitably rated circuit breakers / fuses are used in the installation of the product in accordance with the electrical values shown in the technical specifications of the product. Never switch on power until the power connections are correctly terminated in accordance with the information provided in this document. Do not connect or disconnect the product with the power supply switched on. Never disconnect the DC ground with the power supply on. This could result in the DC power being grounded through the common video ground which could in turn damage the video output circuit of the camera.







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## WARNING: WIRING TERMINATIONS

Where the products video, power and data terminations are extended, ensure that suitable connectors are used and that the point of termination for each cable is adequately protected against moisture ingress. Ensure correct polarity is strictly observed. Do not cut or remove cable connectors without prior permission from Iris Innovations Limited.

#### WARNING: DO NOT OPEN THE UNIT

There are no user serviceable parts within the product so there s no need to open the device other than temporarily removing the Camera Address DIP Switch window whilst setting addresses. Ensure the DIP switch window is correctly replaced and that the rubber seal is not lost, pinched or damaged. The product has been certified to IP66 standards, however, submersion of the product, incorrect re-placement of the dome cover or exposure to high pressure washing will invalidate the warranty.

#### WARNING: DISCLAIMER

This product is intended to be used only as an aid to navigation and must never be used as an alternative to correct navigational practices and judgements made on the basis of approved navigation methods. It is the users responsibility to observe correct and proper navigational skill when using this product. Only officially approved charts and notices to mariners contain the current information required for safe navigation.

Operating the camera or viewing the video input whilst the vessel is moving could cause a distraction and result in accidental collision resulting in

property damage, injury or death. Iris Innovations cannot be held liable for any incidental, special, indirect or consequential damages whether resulting from the use, misuse or inability to use this product.

#### CAUTION: SWITCH CAMERA OFF WHEN NOT IN USE

To prolong the operation life of the camera's optical sensor we strongly advise that power to the camera is routed via a dedicated switch.

### **CAUTION: SERVICE AND MAINTENANCE**

This product contains no user serviceable parts. Please refer all maintenance and repair issues to your authorised Iris Innovations dealer. Any unauthorised work to the product may affect the warranty.







#### CAUTION: CARE AND CLEANING

This product is a sensitive piece of electronic, imaging equipment and must be handled and treated accordingly. Do not drop or shake the unit during installation. Never manually alter the pan or tilt position whilst the power to the unit is on as this may permanently damage the motors. Avoid exposure of the imager to direct sunlight where possible as this may degrade the cameras performance over time.

When cleaning the device, ensure power is switched off to avoid unintentional movement of the cameras motors. Clean the camera housing with a soft cloth. Moisten the cloth and use a mild detergent if required but take care not to get detergent on the lens window. The dome cover has a protective coating which may suffer damage as a result of improper cleaning. To clean the dome use a soft cotton cloth. Moisten with clean water if necessary. For further advise on cleaning the lens window, contact Iris Innovations.

#### INFORMATION: PRODUCT DISPOSAL AND RECYCLING

Dispose of this product in accordance with the WEEE Directive. The Waste Electrical and Electronic Equipment (WEEE) Directive requires the recycling of waste electronic and electrical equipment. Iris Innovations supports the WEEE policy and politely request you observe correct disposal methods. For further information on how to correctly dispose of this product please contact Iris Innovations.

Please recycle unwanted packaging and documentation. The cardboard carton, all paper manuals and documents and the protective plastic bag in which the camera is shipped are widely recyclable. Please check with your local recycling plant for confirmation.





## **Package Contents:**

Please unpack your new Sentinel camera and check to make sure the following items are included in the box. If there are any items missing please contact your Iris dealer immediately:

- The Manual (obviously ;-)
- IRIS106 Camera
- Fixing Screw Pack
- Screw Terminal Jack Plug / Socket set
- Fixing Template
- Warranty Card

## **Basic Configuration**

It is possible to create a system using multiple cameras, controllers and viewing positions simply by introducing video switchers and amplifiers, serial data distributors and a variety of other transmission peripherals.

If your system consists of a single camera / single controller setup, the simplest method of connection is shown below.

There are three aspects to the cameras connectivity:

Video: 1VP~P Composite Video 75Ω impedance (such as RG59 / RG6 etc) Data: RS485 Serial Data - 2 wire (RS485 A / RS485 B) - 24AWG Power: 2 Core (DC+ / DC GND), 18AWG, 12VDC < 2A

The diagram below show a basic 1 camera 1 controller setup using combined power/video/data cable to simplify cabling. For more details on Iris cable options see page 15.



+12VDC ±10%

## **Typical Configuration Examples:**

## Analogue cameras:

Another common practice is to use Balun adapters to facilitate video and data over CAT5 cable, viewing the video on a single monitor (or MFD). No additional hardware is required, simply connect your camera controller directly to the data lines of your breakout balun and do the same with the data wires at the camera end, hook the video feeds from the camera into the balun and from the control balun into your monitor, and finally hook your power up. See diagram below:



Single Camera / Controller / Monitor using Balun Transceivers

If there are multiple 106 cameras, controllers or other PTZ cameras on the system, it will become necessary to add a serial data distributor in order to balance the data and ensure there are no signal reflections that could result in over-runs and poor camera control. Below is an example of a system with 2 controllers and 2 cameras. An IRISEXP0204 data expander has been used to manage the data cables, and an IRIS-HVR4 Recorder / Switcher has been used to manage the two video feeds.



This example shows two control positions (upper and lower helm) and two cameras. An IRIS946 CAT5+2 cable is run to each of the cameras. The ethernet cable from the IRIS946 cable is used to carry network video traffic from the camera and the 2 x additional cores are used to handle the RS485 data. Power is either fed from a separate, suitably rated 2 core cable or taken from a source local to the camera. At the control end, each of the two network cables plug into a network hub, along with the network cables from your MFD (or PC). RS485 data from each controller hooks into the serial data distributor (IRIS-EXP0204) along with the additional cores from each of the IRIS946 cables.

Iris are working with MFD manufacturers to integrate camera control into their user interfaces. Please refer to <u>boat-cameras.com</u> for updates as to when this feature will be available and upon which MFD models.

## Using Web Encoders to Connect an Analogue Camera to a Network:

If you wish to connect an analogue camera to a network MFD, a suitable IP encoder can be used to encode the analogue video into a network stream as shown below. The example on the previous page shows how an IP encoder (such as the Axis M7011) can be used to encode the composite video from an analogue Sentinel camera into an IP stream and then connected directly to a network MFD (such as Garmin 8000 series or Raymarine Axiom). This example shows a basic connection of a single camera directly to an MFD, however you can connect multiple cameras in the same way shown above (depending on the scope and functionality of your MFD) using network hub(s) and serial data distributors.



## Compatibility Information:

### Compatibility with MFDs:

IRIS106 cameras all have an analogue video output (even the IP modules) compatible with all MFDs that feature a composite video input. IP camera compatibility depends on the make and model of your MFD.

IRIS106 cameras feature an RS485 serial data connection for control, and communicate using the Pelco-D protocol.

At time of publication, only a few MFD manufacturers have introduced IP camera compatibility into their devices, and those that have done have written their user interface software around certain models of cameras and encoders only. Therefore it is important that you ensure your MFD is compatible with any third party device before you purchase.

Certain IP Encoders also support RS485 connections specifically to drive PTZ cameras such as the IRIS106 but this feature will only work if it features in your MFD's software.

Iris are working with MFD manufacturers to integrate camera control into chart plotter interfaces. For progress updates visit <u>boat-cameras.com</u> or contact your Iris dealer.

### **Serial Data Distributors:**

If your MFD or web encoder do not support PTZ control, serial data distributor boxes can be used to connect multiple cameras and controllers.

Iris produce a range of serial data distributors depending on your requirement. Please contact your Iris dealer for further product information or visit <u>boat-cameras.com</u>

## **Camera Control**

IRIS106 cameras are controlled via an RS485 serial data connection, using a variant of the Pelco-D CCTV camera control protocol. The Pelco-D protocol was designed to provide accurate controls for a wide range of standard CCTV features, such as pan, tilt, user preset features etc, but do not include certain extended features supported by Iris cameras. Because of this, Iris have mapped their product specific features to certain user preset commands and to other modified Pelco-D commands. This means that IRIS106 cameras can be controlled either by a dedicated Iris controller such as the IRIS595 or Iris's IRIS596, as well as other control devices, such as compatible chart-plotters, multifunctional displays and third party joysticks. For further information on compatible third party control interfacing please contact Iris Innovations.

Sentinel IP cameras can also be controlled across an ethernet network (computer, NVR, network joystick etc) using standard ONVIF PTZ commands. Iris are working with MFD manufacturers to integrate camera control into chart plotter interfaces. For progress updates visit <u>boat-cameras.com</u> or contact your Iris dealer.

The camera will require video, data and power cables. Running separate cables may not be possible or desirable, therefore Iris supply optional combined cables to simplify installation and reduce costs.

Part No.	Details / Conductors	Unit	Termination
IRIS945	Waterproof CAT5e Cable / 7mm OD / IP68 Outer Sheath	Per Meter	Free Ends
IRIS946	Waterproof CAT5e Cable / 7mm OD / IP68 Outer Sheath with 2 additional 18AWG cores	Per Meter	Free Ends
IRIS961	Combined RG59 Coaxial Video Cable 75 $\Omega$ / 2 x 24AWG Cores for Serial Data + 2 x 18AWG Cores for Power	Per Meter	BNC Male Plugs for Video, other cables Free Ends
IRIS918	2 Core 18AWG Gauge for DC Power (10A)	Per Meter	Free Ends
IRIS959	RG59 Coaxial Video Cable, 75 $\Omega$	Per Meter	BNC Male Plugs
IRIS960	Combined RG59 Coaxial Video Cable $75\Omega$ with additional 2 core 18AWG for power or data	Per Meter	BNC Male Plugs for video, other wires Free Ends

Details of Iris Extension Cables are listed in the table below:

## POWER CONSIDERATIONS:

IRIS106 cameras are powered from a +12VDC supply. Ensure the voltage reaching the camera is as close to the input range as possible. When choosing your power cable, consider voltage drop over distance and select a gauge of cable that will minimise any potential issues.

Allow for a maximum power consumption of 24W.

Remember, the voltage going into the cable is not going to be the same as the voltage at the camera end, especially if the cable run is over distance or if the cable is kinked or damaged!

## **Power Connections**

Installation should only be carried out by qualified personnel or by persons competent in the installation of electronic systems. Failure to adhere to the wiring conventions in this guide and the practices stated could lead to product failure, damage to property and personal injury or death.

To prolong the lifespan of the cameras optical sensor, it is recommended that power to the camera is routed via a helm mounted switch, and that the camera is switched off when not in use.

The power cores within the IRIS106 Umbilical are colour coded **RED** for 12VDC+ and **BLACK** for DC GROUND. The power wires are terminated with a 2.5mm DC Barrel Socket Plug. Always ensure your power supply is protected by a sufficiently rated fuse or breaker depending on the supply voltage and cable characteristics.

## Video connections (Analogue):

The IRIS106 camera features an analogue composite video output (CVBS). The video format (PAL / NTSC) can be configured in the cameras on screen menu set up pages. See On Screen Menu for further details.

IRIS106's video output is a 1VP~P Composite video signal compatible with most Multifunctional Displays (MFD's), Digital Video Recorders (DVR's) and TV's (via AV input).

Use  $75\Omega$  Coaxial cable such as RG59. Please note, RG59 has a solid core conductor which may not be suitable. In this case use a stranded coaxial cable such as URM70.

A BNC 'straight-thru' adapter is supplied with the IRIS106 in case you need to extend the video cable run.

Many Multifunctional Displays (MFD's) / Chart Plotters use RCA (Phono) jacks for video inputs. Sentinel is supplied with a BNC/RCA adapter for this eventuality.





## Serial Data Connections:

Control commands are sent to your 106 over an RS485 Serial Data connection which has 2 wires usually labelled either A and B or + and -. The data wires from the 106 umbilical cable are identified accordingly:

RED: RS485 A (RS485+) / Black: RS485 B (RS485-)

When connecting directly to an IRIS595 controller, observe the following polarity:

IRIS106 Cable Umbilical	Function	IRIS595 Controller
RED	RS485 A (+)	Green
BLACK	RS485 B (-)	White

## NOTE:

One of the most common faults when connecting serial data is incorrect polarity. In the event that there is no camera control when you have connected up, please check the polarity of the data wires. You cannot damage the equipment by reversing polarity of the data wires.



## WARNING:

Colour conventions for RS485 data and DC power are the same and can therefore be confusing. Observe extreme caution when handling DC and data wires , as incorrectly applying a DC voltage to the data line could result in severe damage to the camera, boat and cause person injury or death.



## **Connecting Multiple Cameras & Controllers**

If your system features multiple cameras and / or controllers it is advisable to use a Serial Data Distributor. Iris supply a range of data distributors as listed below:

Part Number	Control Inputs	Outputs (Cameras)
EXP0204	2	4
EXP0408	4	8
EXP0208	2	8
EXP0216	2	16

Controllers are referred to as Inputs and cameras are referred to as outputs. If you require more than 2 controller inputs contact Iris for details of how to configure your system.

Page 12 shows an example of how Serial Data Distributors can be used. In this example the system consists of IP cameras being controlled via RS485, and using a Serial Data Distributor to facilitate multiple controllers and cameras. This works exactly the same with all analogue systems.

## Camera Addressing

Each camera must have it's own unique address so that only control data intended for that camera is received and processed by the camera. If multiple cameras had the same address, they would all move together when pan and tilt commands are transmitted.

Analogue cameras and IP cameras are addressed differently and addressing analogue Sentinel cameras depends on your controller. Consult the manual for your specific Iris controller for details of how to set the camera address.

## Analogue Camera Addressing:

Set the address for your IRIS106 via the bank of DIP switches the can be located by removing the dome cover as shown in the image below:



Address 4 / 9600 Baud Rate

To change the cameras address, remove the camera dome and locate DIP switch bank 1 as shown in the photo. There are 10 DIP switches in the bank. Switches 1~8 set the camera address (Binary 1~256) and switches 9 and 10 set the Baud Rate. The baud rate is set to 9600bps (switch 9 = OFF / switch 10 = ON).

## Installation

## Installation Considerations

It's important to fully consider the intended position of the camera and the desired fields of view prior to installation, in terms of how you are going to get cables to the position, will the camera be able to see the appropriate areas, will the camera interfere with any other fixture such as a doorway or walkway once it's fixed in place, or are there any obstructions behind the surface onto which the camera is to be installed.

It's strongly recommended that if possible the camera should be temporarily powered up prior to final installation and offered into position so that these factors can be assessed and any possible issue can be addressed before holes are drilled and difficult, time consuming and costly cable runs are attempted. Check third party hardware to ensure it doesn't effect the operation of the camera and vice versa.

## Camera Installation

Observe extreme caution when siting the camera. Ensure the act of drilling the pilot holes and camera cut out hole does not infringe any cables, equipment or fixtures behind the panel onto which the camera is to be installed.

Once you've established a suitable fixing position, offer the cutting template into position. You may find in helpful to use tape to fix the template into place prior to drilling and cutting. Mark off the four Fixing Positions and the centre position.

Use a 122mm hole saw to create the cut out into which the camera will fit. The camera is supplied with 4 x Stainless Steel self tapping screws. Drill pilot holes accordingly. The four screw positions are very close to the cut out hole so care myst be taken.

Pass the cable through your cut-out and terminate, carefully ensuring there are no polarity issues and the integrity of each termination is sound. Although the termination points may not be immediately exposed to moisture, the environment in which your camera operates may not always be completely dry - therefore, ensure any joints, connections, terminations etc are sealed using adhesive lines heat shrink or a suitable insulating / amalgamating tape.

When your cables are in place and correctly terminated, offer the camera up into the fixing position and firmly screw into place.

To avoid moisture ingress between the bottom of the camera and the surface onto which the camera is to be attached, apply a bead of suitable silicone sealant around the edge of the plate to create a seal. Use a non-permanent sealant in case the camera has to be removed at any point in the future. Using a permanent sealant could result in damage to both the mounting surface and the camera itself.



## Step 1:

After you have established the desired mounting position and are happy there are no obstacles behind the surface into which you are drilling, use a 105mm hole saw to carefully create the circular recess into which the camera body will sit.

### Step 2:

Once the mounting hole has been cut offer the camera into place and mark off the 4 fixing holes. Remove the camera carefully and use the 2mm drill bit to create 4 pilot holes. Now, once the cables have been run and connected up, re-insert the camera body into the recess and line up the four fixing holes with the pilot holes. Fix the camera in place with the four self tapping screws supplied. It is recommended that a marine grade sealant is used to add a bead of sealant behind the flange so that a seal is formed when the camera is screwed into place.

### Step 3:

Power up the camera to test operation. Upon power-up, the camera will perform a short initialization routine whereby it will pan and tilt to find it's limits. On your screen will be listed the cameras physical address, protocol and baud rate and show the status of each initialization test. This should last for around thirty seconds whereafter the cameras video will be displayed and you should now be able to control the camera.

#### Step 4:

Now carefully screw the bezel into position. Care should be taken to avoid cross threading the bezel at this stage and it is vital that the bezel is tightly screwed into position.

## Operation

## Powering Up / Initialisation:

## Never apply power to the camera unless all connections are terminated correctly. Never disconnect the DC ground for any reason whilst the camera is powered up as this could result in damage to the electronic circuitry.

Upon switching on the circuit breaker that isolates the camera, the unit will perform an initialisation routine. During this routine, which lasts approximately 30 seconds, the camera will pan and tilt automatically in order to calibrate itself. the device.

## Controlling the Camera - Overview

## Panning:

The camera pans through 360° continuously. Simply move the controller in the desired direction of travel.

## Tilting:

The camera tilts through 180° with an automatic 'Auto-Flip' feature so that the camera image is automatically flipped when the camera reaches its tilt appex (ie, points directly downwards) in order to correct the video orientation.

### Zoom:

The camera features 10x optical zoom (F=4.9mm ~ 49mm). When the camera reaches the extent of it's optical zoom range it will automatically switch to digital zoom. With digital zoom, each pixel that makes up the image is multiplied in size in order to increase the overall image size.

### Focus:

By default, the camera is set to Autofocus.

### **Preset Positions:**

The camera features 256 user definable 'memory' locations, known as Presets. These can be used to save physical pan/tilt positions into memory and recalled at the touch of a button. Refer to the documentation of the controller for details on how to save and recall preset positions.

## **OSD Menu (Extended Features)**

The camera features many extended features and settings that are accessed via an On Screen Display (OSD) menu. OSD Menu functionality may or may not be supported depending on the control interface. The OSD Menu is accessed by calling Preset 95. To exit the OSD menu call preset 56.

## Navigating OSD Menu

- Menu items with <> symbols indicate a drop down menu
- To access sub-menu, press either Near Focus or move joystick Right
- To return to the previous menu select the BACK option
- Use the joystick to navigate through menu options
- Use UP and Down to change values
- To save changes use Iris OPEN. To un-save use Iris CLOSE

### Important:

Changing certain values within the OSD menu can effect the control of the camera and it's functionality. It is greatly recommended that values within the OSD are left as default.

Incorrect adjustments made to the camera parameters within the menu system could effect the performance of the camera and/or render the camera unusable. Faults that arise as a result of improper configuration are not covered by the product warranty.

For more information contact Iris Innovations Technical Support.

