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# IRIS036 Mini Marine IP Dome Camera

## **USER-GUIDE**

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## **Regulatory Information**

## Disposal of Waste Equipment by Users in Private Household in the European Union.



This symbol on the product or its packaging indicates that it must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment

by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling please contact your local city office, your

household waste disposal service or the shop where you purchased the product.



This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance

with the instructions, may cause harmful interference to radio or television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: Reorientate or relocate the receiving antenna; Increase the separation between the equipment and the receiver, connect the equipment to an outlet on a different circuit from that to which the receiver is connected; consult the dealer or an experienced radio / TV technician for help.

## CE

We hereby declare that the product is in compliance with the essential requirements and other relevant provisions of European Directive 2004/108/EC, the RoHS Directive 2011/65/EU.

## **IRIS436 User Guide**

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IN THE EVENT OF ANY CONFLICTS BETWEEN THIS MANUAL AND THE APPLICABLE LAW, THE LATER PREVAILS.

## Warnings & Important Product

## Information

## WARNING: Installation and 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 be qualified personnel or by persons competent in electrical systems.

#### WARNING: Power Supply and 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.

#### 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. The product has been certified to IP66 standards, however, submersion or the product 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 the cameras 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 authorized Iris Innovations dealer. Any unauthorized 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. 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. Clean the camera housing with a soft cloth. Moisten the cloth and use a mild detergent if required. The lens window has a protective coating which may suffer damage as a result of improper cleaning. To clean the lens window 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.

## Introduction

Thanks for buying the IRIS036 Miniature IP Dome Camera from Iris Innovations.

The IRIS036 is a stylish and robust recess mounting marine camera which can be used for a multitude of applications, from monitoring decks and companionways, engine rooms and bathing platforms to cabins, saloons and cabins.

With its compact form factor, the IRIS036 looks at home on luxury craft as well as in commercial boating applications and features a high polish marine grade A316 stainless steel casing.

The IRIS036 camera module features a high end sensor delivering crisp analogue video which can be viewed on any chart-plotter or screen with a composite video input and is available in both PAL and NTSC formats.

## **Overview of Key Features**

Here's a brief list of some of the IRIS436's key features:

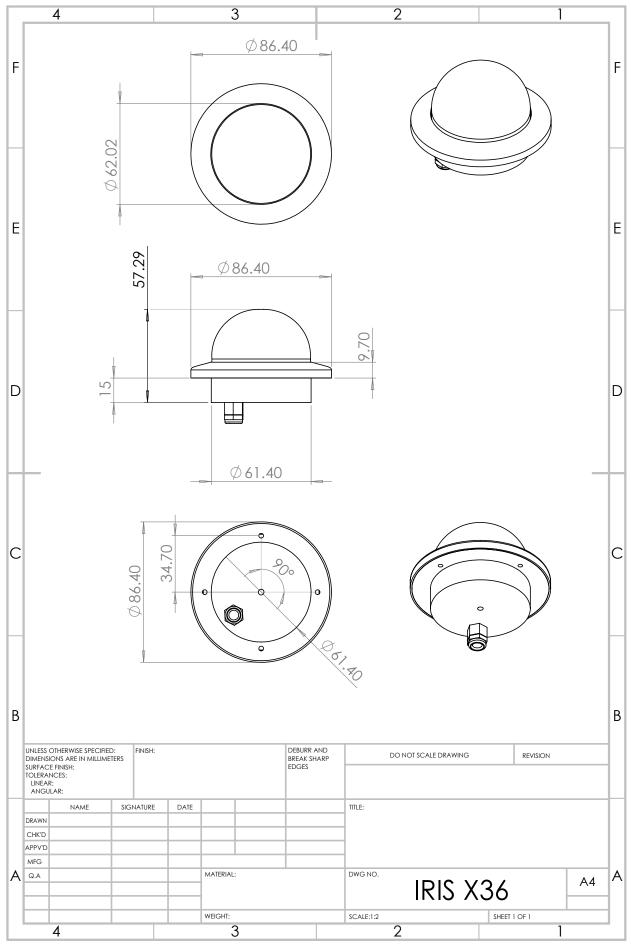
- 1000TVL Resolution
- · Mechanical IR Cutout filter for True Day / Night Operation
- Low Power 12VDC Operation <100mA
- IP66 Ingress Protection
- Small, Compact Housing
- Marine Grade A316 Stainless Steel Housing
- Suitable for Multiple Applications, such as on-board security, sports fishing, engine room monitoring and vehicle monitoring.
- Wide Operating Temperature Range
- · Compatible with chart plotters with composite video inputs.

## **Contents of Package**

Please unpack your IRIS036 and check to make sure the following items are included. If there are any items missing please contact your Iris dealer:

- 1 x IRIS036 Marine Mini Dome Camera
- 1 x Fixing Pack
- 1 x Instruction Manual
- 1 x DC Connector pack (1 x male / 1 x female)

## **Camera Dimensions**



## Installation

## WARNING!

Only trained electrical installers or competent persons should install this product. Incorrect installation could lead to personal injury or death and/or damage to property. Ensure the electrical regulations specific to your region are observed, and observed wiring colour conventions.

Ensure the cameras power supply is connected via a suitably rated fuse or circuit breaker.

Switch off the power supply you are working on whilst installing the camera, until the product is correctly installed.

## Step 1:

Decide the mounting position of your camera and use a small drill to make a pilot hole where the center of your camera will be installed.

## TIP!

Power up camera and check to ensure you have the desired field of view prior to drilling any holes and mounting the camera in place.

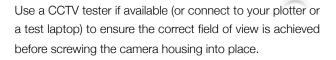
## Step 2:

Use a 62mm hole saw to drill the hole necessary to fit the camera body. Prior to drilling, ensure it is safe to do so and there are no cable runs behind the panel.

## Step 3:

Offer the camera up into the hole you have just made, ensuring that you will be able to sufficiently adjust the camera module position prior to screwing the housing into place. The camera module within the housing has limited 'Pan' axis adjustment so ensure you can manipulate the camera to the desired position before proceeding. Twist the camera as desired then mark off the fixing holes ready for drilling your pilot holes.

## TIP!



## Step 4:

Present your cables to the camera through the hole you've just drilled. The camera operates at 12VDC and draws extremely low current. We recommend you use an 18AWG pair for +DC and DC GND. For the video signal, use a 75 $\Omega$  coaxial cable such as RG59, URM70, RG6. For marine applications we recommend the conductor is stranded.

Use waterproof tape /self amalgamating tape to protect the video and power termination and ensure moisture does not penetrate the connections.

Iris offer a range of power, video and combined power/ video cables. When combining with Balun adapters, you can also use a single CAT5e/CAT6 cable for power and data. Contact your Iris dealer for more information.

## WARNING!



Ensure the camera power is connected via a suitably rated fuse or breaker to avoid damage to the vessel or personal injury.

## Step 5:

Slide the 'slack' cable from the camera back through the hole in your panel, ensuring connectors are still in tact and sit the inner dome onto the protective foam / rubber ring on the base.

## Step 8:

Offer the camera up into the hole you have made, line up the fixing holes with your screw pilot holes (if you've made them) and screw firmly into place.

## Step 9:

Adjust the pan and tilt position of the camera module as desired. Once the camera is pointing in the correct position, lock the camera module adjustment screws into place to prevent the camera module moving under vibration. Power up the camera and test to ensure you are happy with the final position. Leave the camera running for 30 minutes without the dome cover and then finally carefully screw the bezel cover into place, taking care to avoid cross-threading.



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