

IRIS035

Mini Marine Dome Camera

Basic Operation Manual

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.



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.

IRIS035 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 by 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 is 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 IRIS035 Miniature Marine Dome Camera.

The IRIS035 has been designed especially to provide the highest possible image quality in the smallest possible form factor, so as to blend in seamlessly to the lines and curves of the leisure marine aesthetic.

Measuring only 48mm x 48mm, the IRIS035 houses an impressive 700TVL resolution camera with automatic day / night operation, built in Infra Red LED's with a range of up to 8 meters, and automatic colour / mono switching in low light.

The IRIS035 has been fitted with a wide angle 2.3mm lens, providing an amazing 120° Horizontal Field of View (HFOV) making it a great choice for a back-up or engine room camera. With 1 IRIS035 you can achieve the same field of view previously only possible with two cameras, cutting costs and simplifying installation and operation.

The IRIS035 has an environmental rating of IP66 and works very well in extremes of heat.

Overview of Key Features

Here's a brief list of some of the IRIS035's key features:

- 700TVL Resolution
- High Performance LED - 8 Meter Range
- Mechanical IR Cutout filter for True Day / Night Operation
- Low Power 12VDC Operation <100mA
- IP66 Ingress Protection
- Small, Compact Housing
- Suitable for Multiple Applications, such as on-board security, sports fishing, engine room monitoring and vehicle monitoring.
- Wide Operating Temperature Range
- Compatible with all Chart Plotters with Composite Video Input.

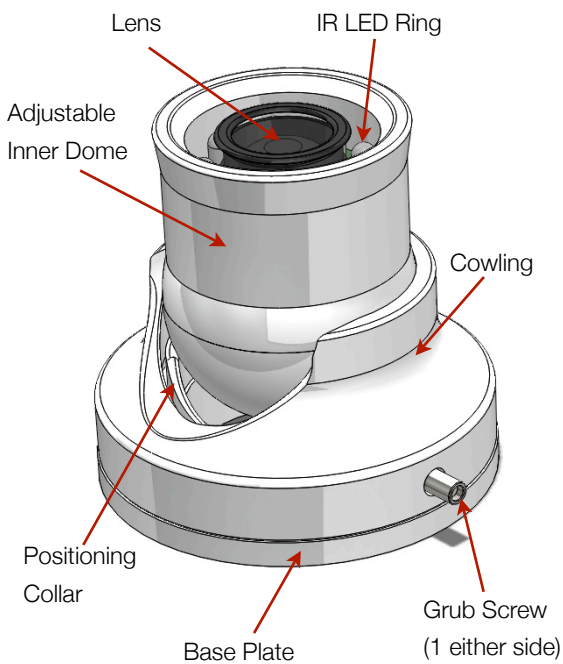
Contents of Package

Please unpack your IRIS404 and check to make sure the following items are included. If there are any items missing please contact your Iris dealer:

- 1 x IRIS035 Marine Mini Dome Camera
- 1 x Fixing Pack
- 1 x Instruction Manual

Camera Overview

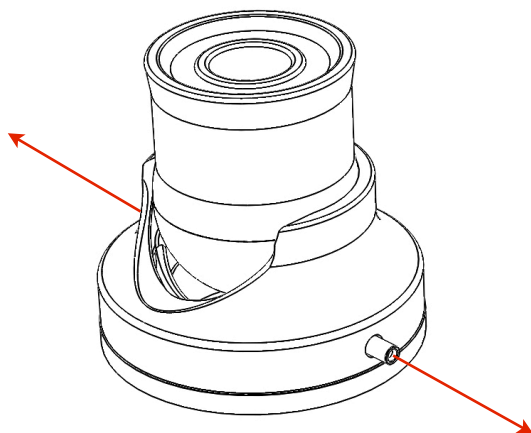
The diagram below details the various parts of your camera:



Warning!



TO AVOID DAMAGE TO THE CAMERAS PAINTWORK WHICH COULD RESULT IN EROSION TO THE HOUSING, ENSURE THE GRUB SCREWS ARE FULLY LOOSENED BEFORE MAKING ANY POSITIONAL ADJUSTMENTS TO THE INNER DOME. FAILURE TO DO SO WILL INVALIDATE ANY WARRANTY CLAIM IF THE PAINTWORK IS SCRATCHED OR DAMAGED.

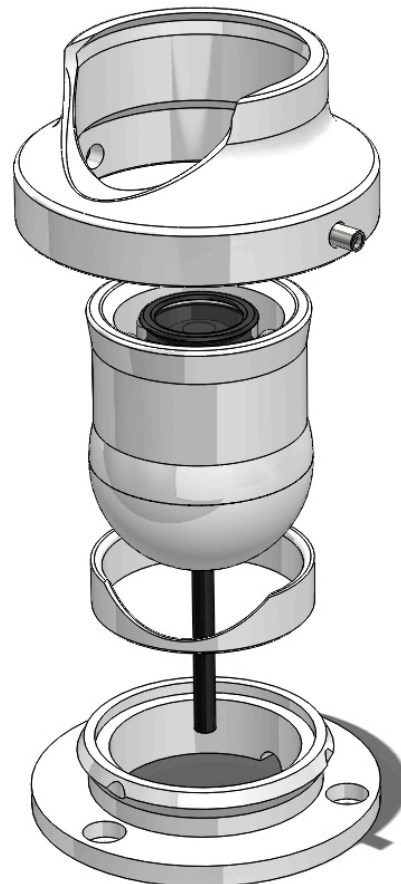


**FULLY LOOSEN PRIOR TO
ADJUSTING INNER DOME POSITION
(BOTH SIDES OF CAMERA)**

Camera Installation Sequence

The diagram below shows the sequence in which the camera parts are fit into place during installation...

1. Fit Base
2. Slide camera cable through Positioning collar and through base
3. Position Inner Dome ball into Positioning Collar and sit into base
4. Set desired camera field of view
5. Slide Cowling over inner dome onto base
6. Tighten Grub Screws



Installation

Step 1:

Offer base into desired mounting position and mark off screw hole positions and cable entry position through the mounting surface.

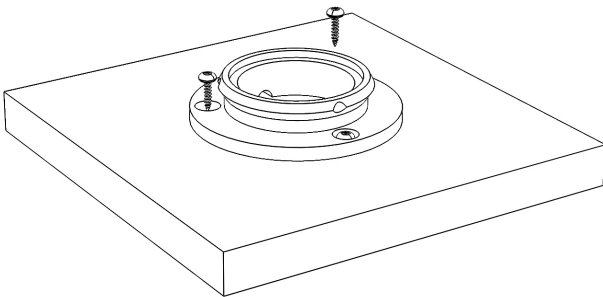
TIP!



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:

Fit the camera base into position. Drill pilot holes appropriate for the fixings you are using, and then screw base into place, observing caution not to splinter or damage the surface if fitting onto a GRP surface.



Step 3:

Present your power and video cables. The IRIS035 camera requires a stable 12VDC power feed / <100mA current draw, and the video output from the camera is a 1V P~P Composite Video Signal with 75Ω impedance. Use suitably rated power cable (2 core / 18AWG), and a good quality 75Ω coaxial cable for the video signal such as RG59, RG6 or URM70. The video cable requires 75Ω BNC Connectors

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.

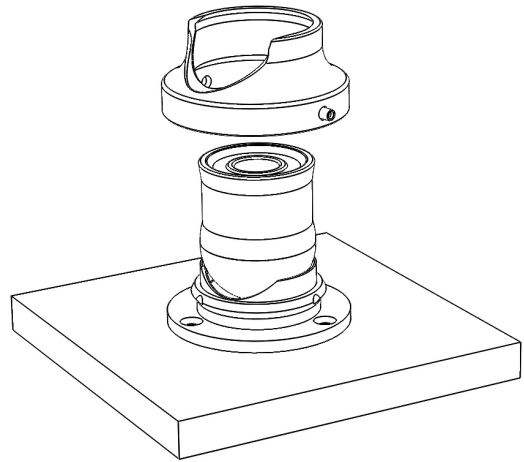
Switch off the power supply you are working on whilst installing the camera, until the product is correctly installed.

Step 4:

Slide the inner dome wire through the positioning collar and connect up the DC Power and Composite Video cables. Push the cables back through the panel cut-out from where the cables are routed.

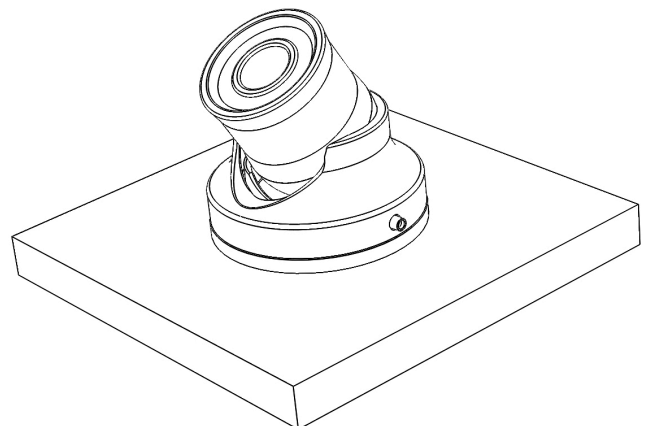
Step 5:

Offer the inner dome into the positioning collar, and then sit the positioning collar into the base. Holding the inner dome and collar together whilst seated in the base, carefully adjust the cameras sitting position until you have achieved the desired position.



Step 6:

Place the cowling over the inner dome and move into position. The cowling will fit over the inner dome and push up to the base. Once in position, carefully tighten the grub screws until they lightly hold the inner dome in position. Now power up the camera and check you have achieved the desired field of view. If any adjustments are required, loosen the grub screws to make the necessary adjustments, lightly tighten and then check again. Repeat until you have the desired field of view. Once you are happy with the cameras position, tighten the grub screws.





Iris Innovations Limited

Unit 15 Fareham Innovations Center, Meteor Way
Lee on Solent. Hampshire PO13 9FU. United Kingdom
Tel: +44(0)2392 556509 / email: irisuk@boat-cameras.com

Iris Innovations USA Corporation

2821 SW23rd Terrance Unit 5
Fort Lauderdale, 33312. Florida. USA
Tel: +1 (954) 533 9381 / email: info@boat-cameras.com

www.boat-cameras.com