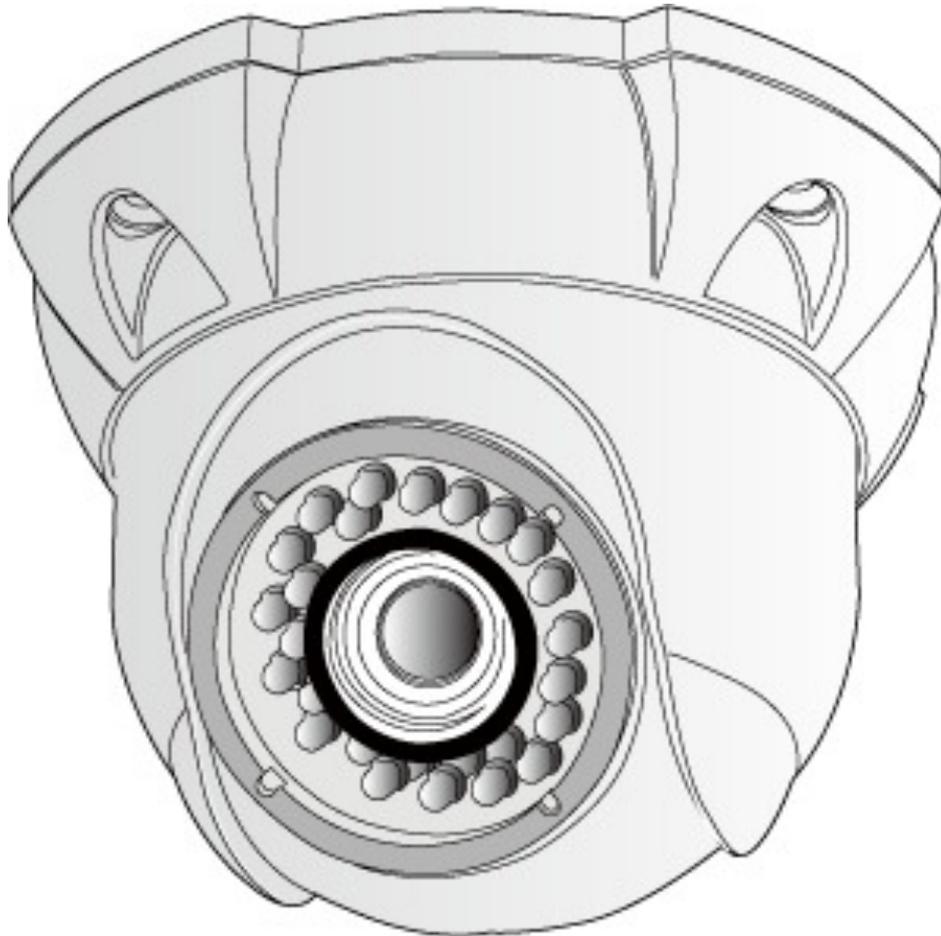


IM-DND-80

Vari-Focal Water-Resistant Infra Red Dome Camera



USER GUIDE



Iris Innovations Limited
Unit 9 Swanwick Business Center
Bridge Road, Swanwick
Hampshire SO31 7GB. United Kingdom
T: +44(0)1489 570797 / F: +44(0)1489 875990
info@boat-cameras.com
www.boat-cameras.com

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An Introduction to the IM-DND-80

Mid-Range Day/Night Infra Red Vari-Focal CCTV Camera, with NEW Wide Dynamic Range Image Processing.

Description

The IM-DND-80 Vari-Focal Dome Camera from Iris Innovations is an extremely tough and compact, waterproof, Day / Night CCTV camera for use in applications that are exposed to harsh environments such as marine, outdoor etc and where there are extremes of contrast in light levels. For marine environments where there is reflection from water, white-boats and metal fixtures, the Wide Dynamic Range processing of the IM-DND-80 provides a superior image to standard CCTV cameras.

Features

Extremely High Resolution - 600 TVL

Waterproof - IP66

Vari-Focal Lens - Adjustable 2.9mm~12mm.

Wide Dynamic Range - Provides superior images internally and externally under extreme light conditions.

Digital Noise Reduction - Automatically reduces noise in low light conditions.

Digital Image Stabilization - Anti-Shake compensation against outside influences such as wind and vibration.

High Sensitivity True Day / Night - Delivers high quality colour rendition and converts image to monochrome as luminance levels drop.

40 x Infra Red LED's - Provides up to 30 meters visibility at night in outdoor conditions.

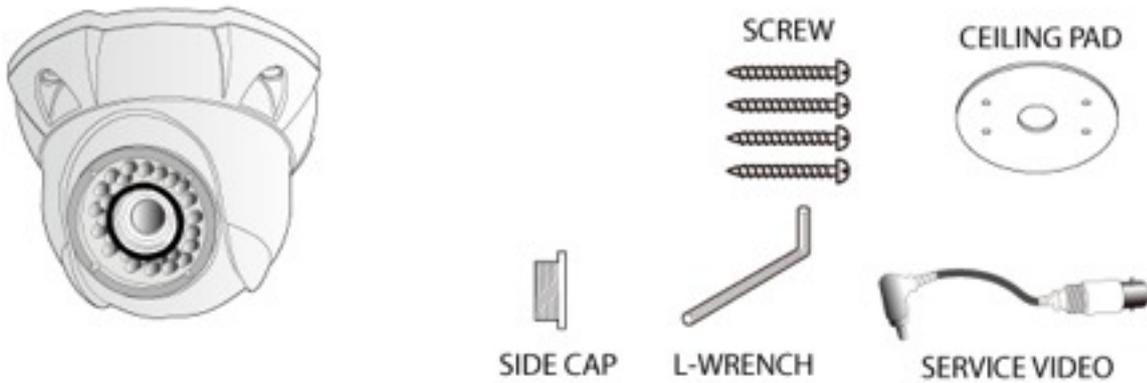
Built-in On Screen Menu Functions for Extended Feature Set -

Mini in-line joystick controller to access the extended feature set within the camera. Features include; Privacy Masking, Reverse Image, Digital Zoom (x1~x10) as well as all the other usual camera features.



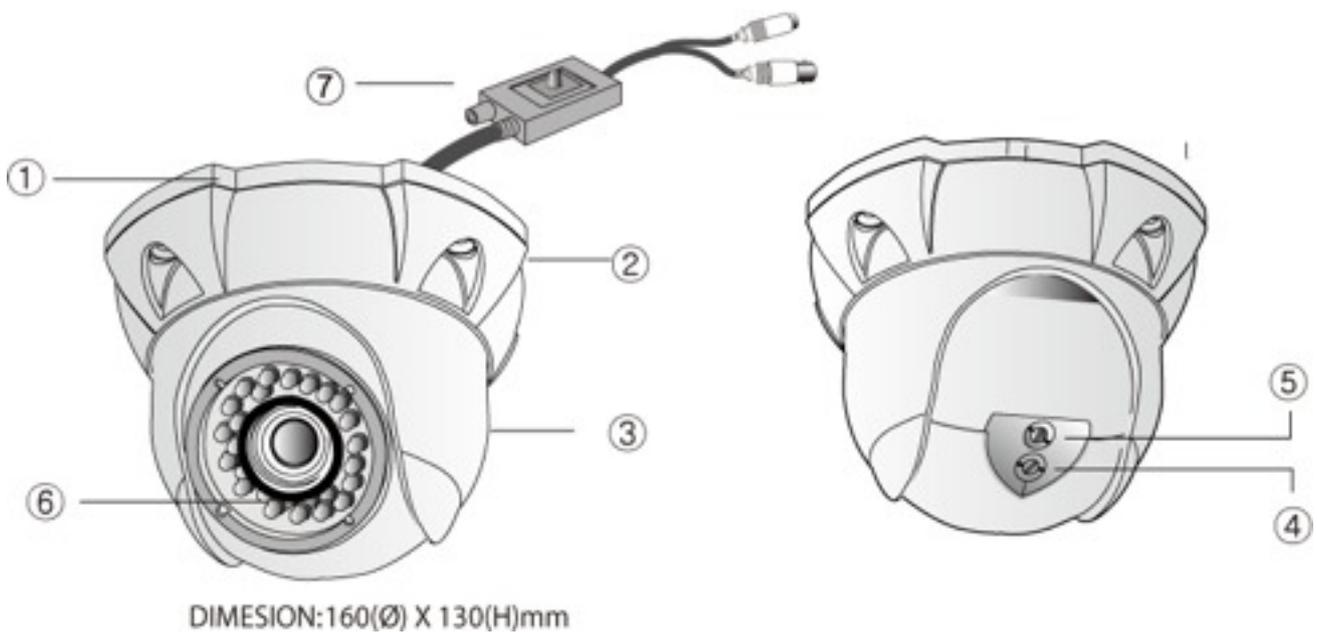
Carton Contents

Before commencing your installation please ensure all the correct components are present, as listed below:



Description of Parts

Names and functions of parts and components:



1. Camera Base
2. Dome Cover Ring
3. Dome Cover
4. Focus Pot
5. Zoom Pot
6. 40 x IR LEDES
7. In-Line Control Unit

Installation

Before you fix your IM-DND-80 into place we recommend you power up the camera and check the video output to ensure the desired scene is achievable from the installation position. Complete the installation only when you are happy you can see what you need to see!

Cable (VIDEO)

Use a suitable video cable such as RG59 / URM70 Coaxial with an impedance of 75Ω, or CAT5 cable if baluns are to be used to transmit the video system.

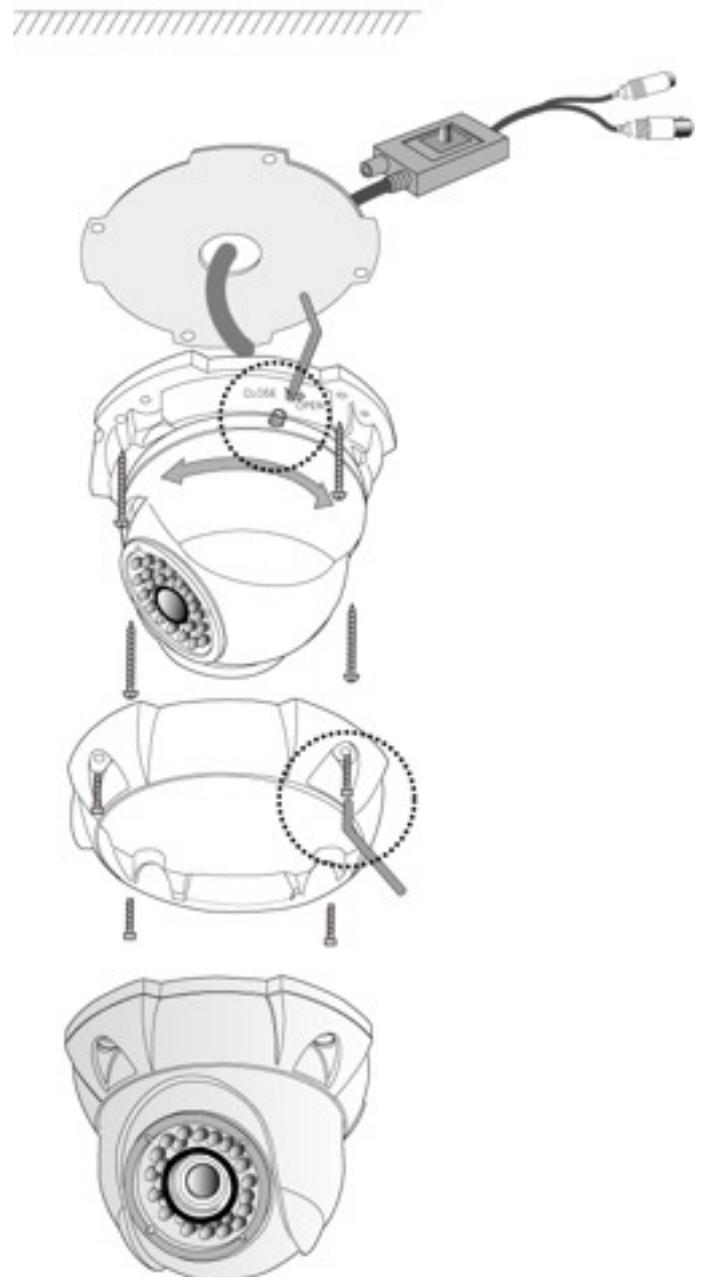
Cable (POWER)

Use suitably rated power cable to drive the camera. The supply voltage is rated at 12VDC ± 20% and the current consumption is 500mA maximum.

The camera cable tail has a built in joystick unit for use during set-up. Please allow for this when planning cable entry holes. Use a 20mm hole cutter to facilitate the joystick controller. The cable tail is fitted with a female 75Ω BNC connector for the video signal and a 2.1mm DC 'Barrel' connector jack for the power supply. These connectors have been specified as they are both widely used and familiar components and can easily be sourced and fitted. If desired these connectors can be removed and replaced with connectors of your choice. This will not effect the warranty of the product unless damage has been caused as a result of this process or incorrect subsequent re-connection.

To install remove the hex screws that fix the dome cover ring(2) in place and remove the dome cover ring. Loosen the grub screws that lock the dome cover(3) and remove dome cover. Remove the camera dome from the camera base(1) and offer the camera base(1) into position to mark your fixing holes and cable entry hole. Fix the camera base(1) into position using fixings appropriate to the installation. Use the rubber ceiling pad if desired to protect the mounting surface. Now re-assemble the camera.

It is advised that the fixing screws that retain the camera dome and dome cover are tightened only loosely until the camera is finally powered up and adjusted accordingly. It is also advised to carry out camera set-up before finally locking everything into place.



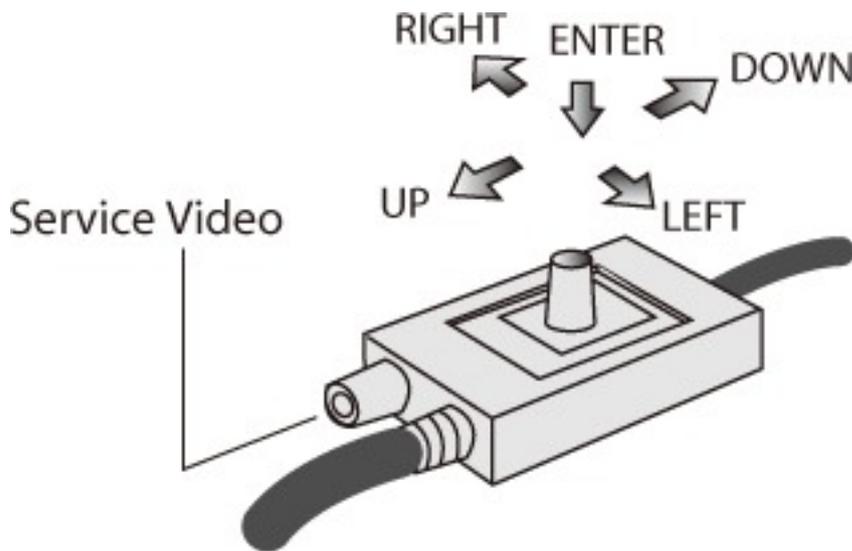
Setting Up your Camera

Setup should be carried out before the camera is finally locked into place unless it is possible for the installer to gain access to the cable mounted joystick controller (pictured below) following install.

The joystick controller has a separate service video input to connect a local monitor if necessary, otherwise simply view the on screen menus from your system monitor or chart plotter screen.

The joystick can be moved up, down, left and right through the menus and selections made by pressing the joystick.

To access the on screen menus, press the joystick once.



Enter: Use to access the Main Menu and Sub Menus and return to the Main Menu.

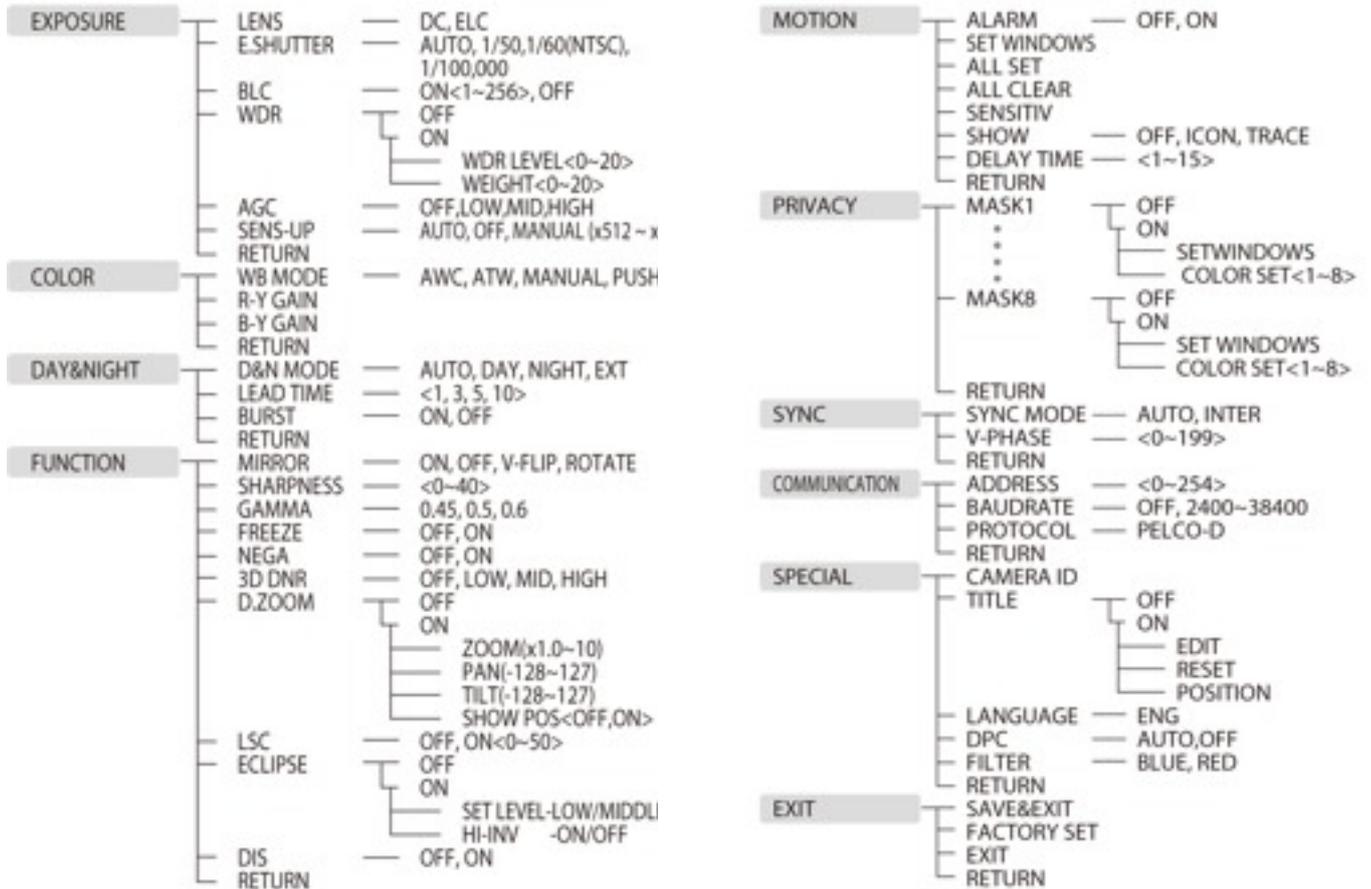
UP / DOWN: Moves the cursor UP and/or Down to select a desired menu item.

LEFT / RIGHT: Use to select (change) or adjust the parameter value of the selected item.



Setting Up Menu Flow

Use the joystick controller to navigate through the menus and make desired changes in accordance with the menus and values detailed below:



Specifications

TV System		NTSC	PAL
Sensor		Sony 1/3" SuperHAD II CCD	
Synchronization	Internal	H/V 15.734/59.94Hz	H/V 15.625/50Hz
	Line Lock	H/V 15.750/60Hz	H/V 15.625/50Hz
Scanning System		2:1 Interlace	
Horizontal Resolution		600 TV Lines (Max.) / 700TV Lines(B/W)	
Min. Illumination	Sens-Up Off	0.12Lux(15IRE), 0.2Lux(30IRE), 0.4Lux(50IRE) F1.2	
	Sens-Up On	0.0002Lux(15IRE), 0.0005Lux(30IRE), 0.0008Lux(50IRE) F1.2	
Video Output		1.0Vp-p/ 75ohm Video 0.714Vp-p	
γ Correction		0.45, 0.5, 0.6	
S/N		More than 52dB(AGC off)	
O.S.D		LENS,E-SHUTTER, BACKLIGHT,WDR, AGC, SENS-UP WHITE-BALANCE, DAY&NIGHT, MOTION, MIRROR SHARPNESS, GAMMA, FREEZE, NEGA, DNR, D-ZOOM LSC, ECLIPSE, DIS, PRIVACY, COMMUNICATION SYNC, TITLE, LANGUAGE, DPC, FILTER	
Electrical Shutter		1/60~1/100,000	1/50~1/100,000
Privacy Masking		8 Windows(Polygonal, 8 Colors)	
Day & Night		AUTO / COLOR / BW / EXT	
Motion Detection		ON / OFF	
Digital Zoom		x1.0 ~x10	
Sens-Up(Low Shutter)		AUTO, OFF ~x512	
SYNC		AUTO / INTERNAL / DIGITAL LINE LOCK(Option)	
White Balance		ATW / AWC / MANUAL / PUSH	
WDR		ON / OFF(WDR LEVEL, WEIGHT)	
3D-DNR		OFF, LOW, MID, HIGH	
LSC		ON / OFF	
DIS		ON / OFF	
ECLIPSE		ON / OFF	
AGC		OFF / LOW / MIDDLE / HIGH	
			
IR LEDs		40 units	
Night View Distance(Outdoor)		30 m	
LENS		Aspherical 2.8~12mm DC Auto Iris Lens	
LENS(Option)		Aspherical 3.5~16mm DC Auto Iris Lens	
Operating Temperature/Humidity		-20℃ ~60℃ /30% ~80%	
Storage Temperature/Humidity		-30℃ ~60℃ /20% ~90%	
Supply Voltage		Only DC12V (±20%)	Dual AC 24 / DC 12V
Current		500mA	250mA / 550mA
Power Consumption		6W	6W / 7W
		[Recommended - Voltage : +/-20%, Current : Adapter with rated power of 2 times(than real using current)	

Specifications Subject to Change Without Prior Notice

Installations should only be carried out by fully qualified service personnel and should conform to all local codes.

WARNING: READ BEFORE USE

 **CAUTION** 
ELECTRIC SHOCK RISK. DO NOT OPEN

TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER OR DISMANTLE DEVICE. NO USER SERVICEABLE PARTS INSIDE. IN THE EVENT OF MALFUNCTION OR PRODUCT FAILURE CONTACT YOUR DEALER.
DO NOT ATTEMPT TO CONNECT TO ANY POWER SUPPLY OUTSIDE OF THE RATING SPECIFIED IN THE SPECIFICATION TABLE OR GUIDELINES DETAIL WITHIN THIS DOCUMENT.

Declaration of Conformity

Model Number: IM-DND-80-P / IM-DND-80-N
Trade Name: Iris Marine
Responsible Party: Iris Innovations Limited
Address: Unit 9 Swanwick Business Center,
Bridge Road, Swanwick, Hampshire SO31 7GB.
United Kingdom.
Telephone: +44(0)1489 570797

This device complies with Part 15 of the FCC Rules. Operation is subject to the following: (1) this device may cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Electrical and electronic equipment, batteries, battery chargers and equipment housings, at the end of their life should be disposed of separately from your household waste. Please dispose of all components correctly at your local waste collection / recycling centre.



Dealer

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