



Taking the Heat out of Thermal



Introducing

NR[®]

NIGHTRUNNER

Dual Payload Thermal Imaging / Daylight Colour Camera

High Resolution 17 micron Thermal Sensor

<50mK Thermal Sensitivity

Daylight Camera with 500TVL, Wide Dynamic Range & Digital Noise Reduction

Digital Image Stabilisation

360° Continuous Rotation Pan / 180° Tilt with Auto-Flip

On Screen Positional Indicator

Digital Zoom

Single CAT5 Cable Connection for Easy Install

Integrated Fixing Bracket

The New Nightrunner represents an exciting milestone in marine camera design. By incorporating high resolution thermal and daylight camera cores into a newly styled, fully controllable housing, and building an elegant fixing bracket into the base, Iris have once again produced an exciting new product that delivers functionality, practicality and an aesthetic that serves only to enhance the elegant lines of your boat.

The Nightrunner was conceived to maximise your time and safety on the water. You no longer have to worry about ending your boating experience before nightfall or in poor visibility. Nightrunner does exactly what the name suggests. It allows you to enjoy your boat at Night.

ABOUT IRIS

For 12 Years, Iris have specialised in Marine Camera Systems. From our humble beginnings in 2001, where we introduced the world's first specially designed docking camera, the IRIS001, right up to the present day where we manufacture for some of the world's leading marine electronics companies, Iris have strived to deliver innovative and unique products that set us apart from the field.



Housing:

By taking our popular 116 series waterproof housing and reworking the front hemisphere and base, we've produced a compact and reliable gimbal that is still the smallest, fully controllable dual payload device on the market. The new base moulding means you no longer have to fit a separate fixing plate which could detract from the style of the housing. The new base offers a sturdy fixing mechanism and blends up from the fixing surface into the body of the camera, softening the transition into the body of the camera. The unit can be installed in either a standard or hanging orientation.

Cameras:

Thermal Core:

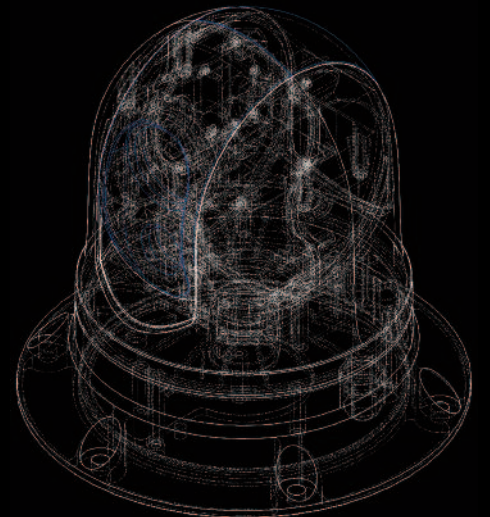
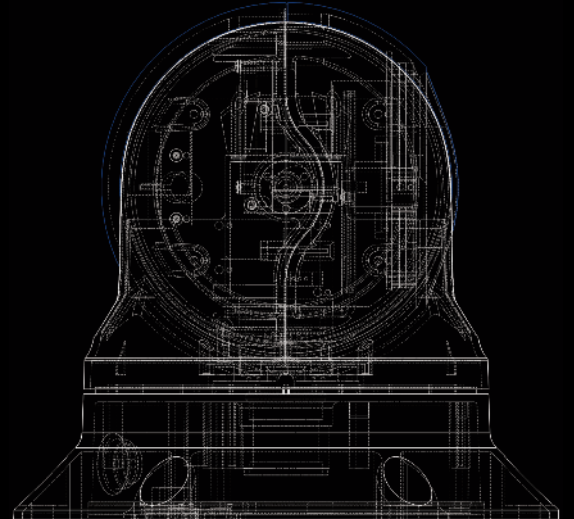
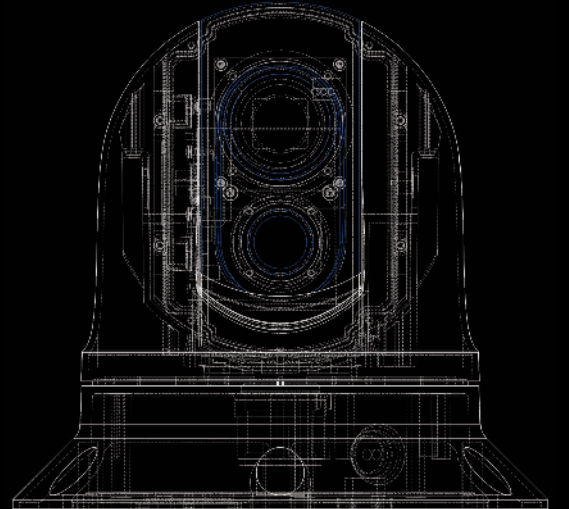
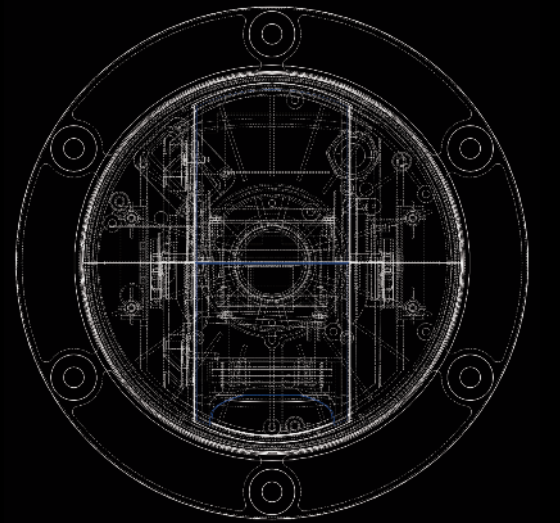
At the heart of the Nightrunner is a unique Vanadium Oxide (VOx) 17M pitch, high resolution QVGA core that provides crisp detailed images to a thermal sensitivity of less than 50mK. To enhance the user experience we've provided intuitive control by stripping away unnecessary features and simplifying operation of the most necessary features such as digital zoom and palette inverse. Regardless of lighting conditions, Nightrunners thermal core produces crystal clear imagery, day and night through smoke, dust and fog and is so sensitive, it can even pick up shadows and detect foot-prints where people have recently walked.

Daylight Camera:

For the times thermal images aren't necessary, we've built in a high quality Sony Effio-P colour camera module to guide your way. The high resolution 700TVL sensor with built in Wide Dynamic Range (WDR) and Dynamic Noise Reduction works in conjunction with a mechanical auto-iris to cope with bright and highly reflective marine conditions and like the thermal core, the camera has a powerful digital zoom feature. This camera is perfect for enhancing navigational duties at sea and along intracoastal waterways, harbour entrances and in marinas.

Cabling:

One really important factor to consider when specifying new equipment for your boat is the installation and how your device is going to hook up with the controller and monitor or chart-plotter. Pulling multiple cables through already heavily populated conduits is difficult and costly - both in terms of material cost and labour. Iris have put themselves in the position of both the customer and the installer to conceive a unique solution that simplifies both new and retro-fits and more importantly reduces installation costs. Whereas before a separate cable would be required for each of the power, video and data connections, now only a single, inexpensive CAT5 cable is required. This connects directly from the camera into a breakout adapter at the controller end into which your power, video and data connections are terminated. The Nightrunner is supplied with a 60ft waterproof CAT5 cable and 6ft video cable and a BNC / RCA adapter jack to maximise compatibility with your monitoring device. And the beauty of having a breakout adapter at the control end is that it's quick and easy to upgrade if at a later date you decide to add the Nightrunner IP Encoder Module (due Feb 2014). This provides the benefits of live video whilst on-board, and IP video for remote or wireless operation.





Height: 160mm

Diameter: 172mm



Dimensions	160mm High x 172mm Diameter	
Weight	14Kg	
Material	UV Stabilised ABS Plastic Housing, Anodised Aluminum Base	
Pan Movement	Range:360° Continuous Rotation	Speed:0.05-70°/Sec ~ 0.05-240°/Sec (Max)
Tilt Movement	Range:180° with Auto-Tilt at tilt azimuth	Speed:0.03-38°/Sec ~ 0.03-140°/Sec (Max)
Fixings	6 x 6mm x 30mm Blue Anodised Self Tapping Screws (Supplied)	
Connections	RJ45 Socket - Waterproof. Screw Type Seal. IP66. Single CAT5 Cable (20m Cable Supplied)	
Power Consumption	Voltage:8-36 VDC	Consumption:15A Max Under full load
Video Output	1V P-P Composite Video Output / 75Ω Impedence	
Synchronization	Internal	
Temperature Range	-30°C ~ +55°C	
Environmental	IP66	
Thermal Core	17Mm 320 x 240 Uncooled Vanadium Oxide (VOx) Long Range Infrared Core	
Thermal Attributes	8-14Mm Spectral Band / Thermal Sensitivity <50mK	
Video Format	NTSC:480i @ 30Hz	PAL:576i @ 25Hz
Thermal Image Control	White Hot / Black Hot	
Digital Zoom Control	Thermal:1-4x (32 Steps)	Daylight:1-10x (255 Steps)
Daylight Camera Imaging Device	1/3" SONY Super HAD CCD II Sensor (960H Double Speed CCD)	
Picture Elements	NTSC:976 x 494	PAL:976 x 582
Resolution	700 TVL	
Lens Option	Thermal:	Daylight:
Mirror Imaging	Thermal:OFF / V-Flip / H-Flip / HV-Flip	Daylight:OFF / V-Flip / H-Flip / HV-Flip
Digital Image Stabilization	Thermal:ON	Daylight:ON
Wide Dynamic Range	Thermal:ON	Daylight:ON
Dynamic Noise Reduction	Thermal:ON	Daylight:ON
Gain Control	Thermal:Automatic	Daylight:Automatic
Serial Data Control	RS485 / Pelco-D (Extended Features Access via Iris Variant).	
Shock & Vibration	IEC60945 MIL STD 810E	
Sand & Dust	IEC60945 MIL STD 810E	



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