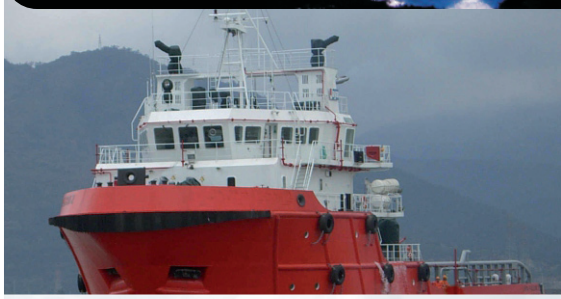
PROFESSIONAL
Night Vision Devices

STARLIGHT



0474-XY

MAIN FEATURES

Self Cleaning Lens

Pan 360° / Tilt ± 45°

Image Intensifier Technology

Direct Brightness Regulation

12" High Def. LED Monitor
15" Optional
17" for HSC

Erthalon Cup with Special Zn-Mg anode inside against salt corrosion

ZOOMING

Compact Model: None; Ratio 1:1
Supreme Model: 25X Optical continuous

DAY NIGHT FUNCTION

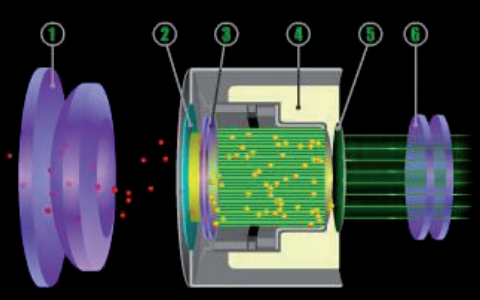
Compact Model: Ultra low light color camera
Supreme Model: None

THERMAL IMAGING DEVICES & IMAGE INTENSIFIER

Thermal Imaging Devices work the very deep IR spectrum. In opposition to classical Night Vision Devices (NVDs) these imagers use the distribution of all radiant heat availible to generate an image of the surrounding environment. In practice a detectable object must have a different temperature as the background, in order to be visible with a thermal scan. Therefore this technology is in the best way suitable for detection of radiating objects (e.g. hot objects, recognition of fire nests, overheating mechanical parts or specific thermal spikes). As generating an image only from temperature differences thermal imaging devices represent a very abstract night vision. Up to now their benefits are rather for detection than for orientation because in case of same temperatured surfaces of a different kind the imager can not display details or only at low-contrast.

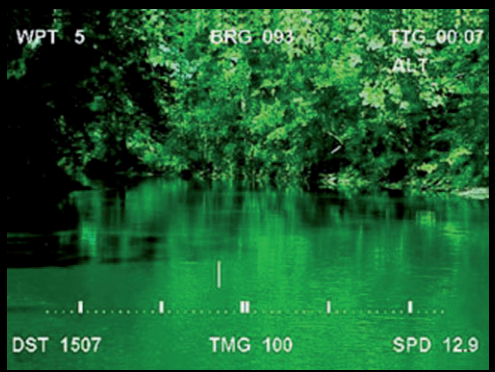
KEYWORD: IMAGE INTENSIFIER

The actual history of opto-electronic Night Vision Devices (NVDs) began with the development of the first image intensifier tube in the 30's of the last century. Since then every step in technology is associated with the notion of light amplification improvement. In World War 2 some few special forces already used first Night Vision Devices which utilized image intensifier tubes (Zero Generation). The human eye can't detect objects in enviroments with very low light level. Similar to the term 'photomultiplier' the operational basics of an image intensifier tube makes attentive to the physical working principle, the 'multiplication' or 'amplification' of the existing 'low light'. The night vision device functions like 'correction eyeglasses', by catching the low light radiation even present in the natural enviroment, amplifying / converting it electronically and delivering it as strong light within the visible spectral range to generate a clear and optimal image of the surrounding dark enviroment.



Intensifier Tube Schematic

IMAGE INTENSIFIER (Starlight NDVs)



Light Intensification

THERMAL IMAGE (infrared technology)

Thermal Imaging

WORK BOATS & DEEPSEA MODELS

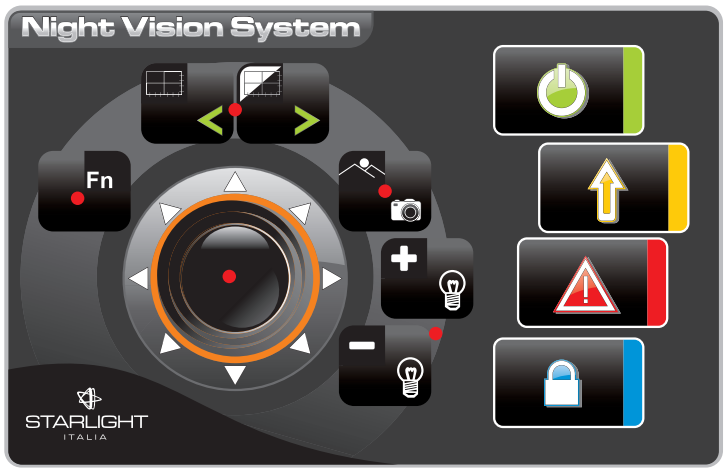
TECHNICAL DETAILS

MODEL	SUPREME
VOLTAGE	24VDC
POWER	12WATT
INTENSIFIER SENSOR	SUPERGENERATION
FIELD OF VIEW	40° UP TO 3.5°
CAMERA MOTION	350° PAN +/- 45° TILT
SPEED MOTION	30° /SEC. MINIMUM
DIGITAL NOISE REDUCTION	SSNR II UPGR. 3D
OSD (ON SCREEN DISPLAY)	YES
SENSOR PIXELS	MIN. 500X500
RESOLUTION	HI-RES 580TV LINES
STANDARD OUTPUT	PAL-SVGA (OPTIONAL)
HD DAY/NIGHT ULTRACOLOR	NO
ZOOM	OPTICAL 25X CONT.
OPERATION TEMPERATURE	-35° +70°
IP GRADE	IP 67 - AISI 316 INOX
DIMENSION (mm)	350X350X460
WEIGHT (Kg)	10
AUTO CLEANING LENS	OPTIONAL
OPTIONAL PAINT	YES
TCP/IP NETWORK	OPTIONAL

SCREENSHOT (camera button)

GRID CONTROL
right/left scrolling

DIMMER



FUNCTION BUTTON

JOYSTICK

POWER BUTTON

RESET AHEAD BUTTON

CHECK BUTTON FAILURE ALARM

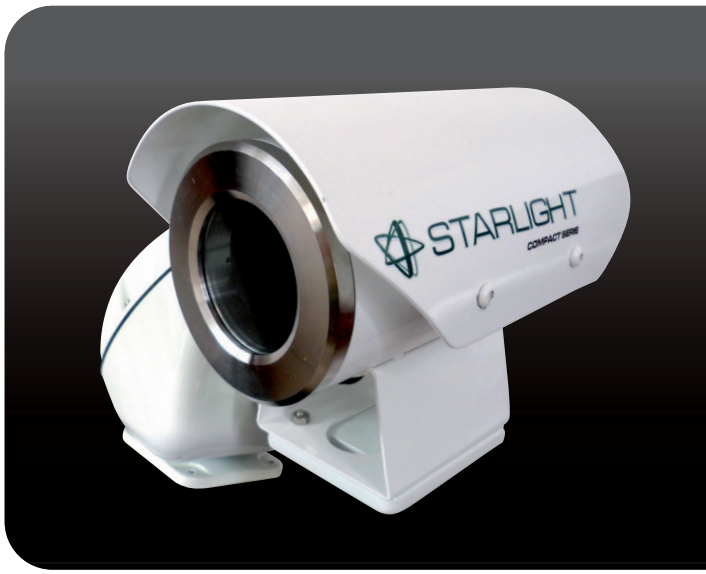
SUN BEAM LOCK LIGHT

CONTROL and FEATURES

WORK BOATS & DEEPSEA MODELS

TECHNICAL DETAILS

MODEL	COMPACT
VOLTAGE	24VDC
POWER	10WATT
INTENSIFIER SENSOR	SUPERGENERATION
FIELD OF VIEW	40° X 40°
CAMERA MOTION	350° PAN +/- 45° TILT
SPEED MOTION	30° /SEC. MINIMUM
DIGITAL NOISE REDUCTION	SSNR
OSD (ON SCREEN DISPLAY)	YES
SENSOR PIXELS	MIN. 500X500
RESOLUTION	HI-RES 560TV LINES
STANDARD OUTPUT	PAL-SVGA (OPTIONAL)
HD DAY/NIGHT ULTRACOLOR	YES
ZOOM	NONE - RATIO 1:1
OPERATION TEMPERATURE	-35° +70°
IP GRADE	IP 67 - AISI 316 INOX
DIMENSION (mm)	330X330X360
WEIGHT (Kg)	9
AUTO CLEANING LENS	OPTIONAL
OPTIONAL PAINT	YES
TCP/IP NETWORK	OPTIONAL



Crisp and clear images with Ultra Color Super Vision at low light level contitions

COMPACT
switch automatically in two different modes depending on light environment level:

UltraColor mode
It is the feature allows to obtain crisp and clear color images in daylight as up to very low light levels such as after the sunset or at night near the coast or the harbour.

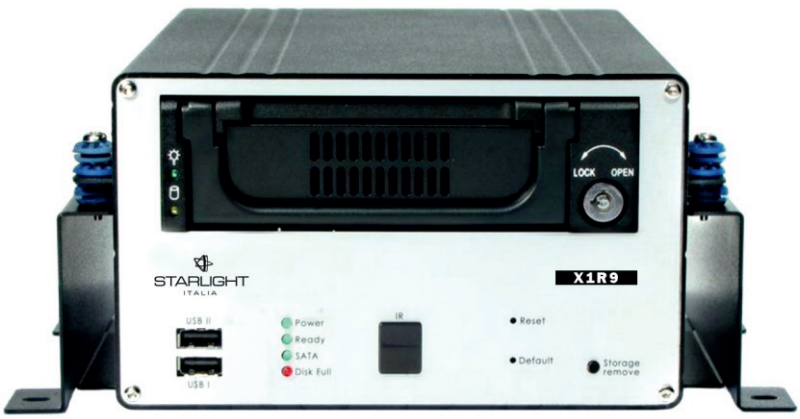
Military Vision with light intensifier mode in the complete darkness

Light intensifier mode:

When the light level is very low, for example in complete darkness conditions, away from the coast and from light sources, COMPACT automatically switch on light intensifier mode allows a clear and well definied green/black high level military vision.

SPECIAL OPERATIONS FEATURES

With adoption of **X1R9** special digital recording unit is possible to obtain a high quality professional continous or screeshot recording features.
designed to withstand to severe G Force level during high speed operations.
Moreover it is possible to obtain, in addition, GPS traking tex on video flux on live or recordings with the adoption of special **HTF GPS** module.



X1R9 Four channel DVR Anti-shock module.

HTF GPS module

HIGH SPEED CRAFT MODEL

TECHNICAL DETAILS

MODEL	ND 1200 PREDATOR
VOLTAGE	24V DC
POWER	15 WATT
SENSOR	HIGH GRADE 2 GEN +IA
DETECTION RANGE	>350 m / y
FIELD OF VIEW	max 40°
CAMERA MOTION	pan speed 30°/sec range 345° tilt speed 30°/sec range +/- 45°
DIGITAL NOISE REDUCTION	●
WDR	●
OPERATION TEMPERATURES	- 25° +70°
WATERPROOF	IP 67
DIMENSION (mm)	350 x 350 x 460
WEIGHT (Kg)	12,5
AUTOCLEANING LENS	●
CERTIFICATION	WHEEL MARK
RULES	IMO Res. MSC 94 (72) IMO Ris. MSC 97 (73) IMO ISO 16273 (2003) IEC 60945 (2002)

REFERENCE

Arab Bridge Maritime
HSC
Queen Nefertiti

Hellenic Seaways
HSC
Highspeed 6

Mary D Enterprises
HSC
Mary D Odissey

MAIN FEATURES

- Self Cleaning Lens
- Pan/Tilt 360°/± 45°
- Image Intensifier Technology
- Optional Steel Monitor Arm
- 12"/15"/17" TFT High Def. Monitor

Top Notch Materials: AISI 316 Steel + Special Zinc-Mg Sacrifical Anode

Control Box:

Light and Small
Very Easy to Install

Joystick Panel:

Space-Saving and
User Friendly