

# ComNav®



## Explorer V3 Thermal Night Vision & Low Light Camera Systems

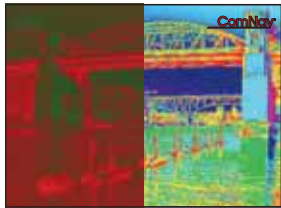
### Gyro Stabilized Crystal Clear Vision

For U.S. Sales: This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

- Crisp thermal images – 320 x 240 pixels
- ComNav Digital Pattern Enhancement (DPE) to provide superior high resolution images in complete darkness, light fog, smog or low light environments;
- Easy touch 2x electronic zoom via proportional joystick control keypad
- Rugged construction exceeds military standards to operate in challenging navigation environments & man-overboard rescues with increased situational awareness
- 360 degrees continuous pan and +/-90° tilt provides seamless view coverage
- Low-Lux, high resolution integrated camera with 36x optical zoom coupled with 10x digital zoom, giving sharp magnification of up to 360x
- Wide angle view DPE technology provides commanding aid in navigation during twilight hours and allows for optimal maneuvering for docking inside a marina.
- Rugged lightweight aluminum design with mono-crystalline germanium tempered glass embedded with hard carbon plating technology; weatherproof to IP67
- Thermal windows have built-in heaters for auto defrost in freezing environments;
- Wide angle and narrow angle thermal imagers available;
- Thermal Display Modes: Black Hot, White Hot, Red Hot, Fusion, Rainbow
- Scene Selection Modes: Night, Sunlight, Man Overboard, Night Docking
- Flexible mounting via gimbal sphere up or down; configurable on screen menu;
- Simple touch freeze frame video function to provide a clear snapshot
- Watch thermal and low light video simultaneously on single or multiple displays
- Home position and auto scan sweeps can be easily programmed on up to 8 Hot Keys; Camera system can be parked and protected when not in use;
- Multi-language on screen display capability; international symbology;
- LCD and keypad backlighting adjustable for night applications
- Optional up to four station remote joystick control units
- White or silver grey camera finish options
- CE, FCC certified and RoHS compliance

# EXPLORER V3

## SYSTEM CONFIGURATION & OPTIONS



**Easy Navigation – Various Colors**  
Assists by enhanced visual capability in darkest environments, allows for increased manoeuvring when twilight docking; long range distance awareness in low light conditions;



**Man Overboard Rescue**  
Can assist with faster response times in man overboard search and rescue applications;



**Security**  
Helps to identify and track vessels or objects on perimeter security; collision avoidance; vessel and crew protection;



**Situational Awareness**  
Anti-piracy security tool; allows for comprehensive multi-zone monitoring, long range viewing and greater night vision; iceberg detection; fire detection;

### Thermal Imaging Performance:

**Focal Plane Array Detector:** Uncooled Vanadium Oxide (VOx) Microbolometer  
**Pixel:** 320 x 240  
**Field of View:** 20° (H) x 15° (V)  
**Lens:** 50 mm  
**Electronic Zoom:** 2 x  
**Thermal Sensitivity:** <50 mK @ f/1.0 @ 25°C  
**Spectral Range:** 7.5 – 13.5 µm  
**Focus:** Auto

### Low Light Camera:

**Detector Type:** 1/4" HAD CCD  
**Lines of Resolution:** 752 (H) x 582 (V)  
**Minimum Illumination:** 0.01 LUX / F1.4  
**Field of Pan View:** 48° (@1x), 2.3° (@36 x)  
**Optical Zoom:** 36 x (maximum zoom 360 x)  
**Digital Zoom:** 10 x (maximum zoom 360 x)

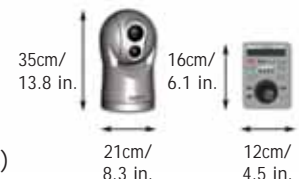
### Specifications:

**Camera Finish:** Silver Grey  
**Stabilization:** Gyro compensated (2 axis internal) Adaptively optimized (up to high speed vessels)  
**Operating Voltage:** 10 to 30 VDC  
**Power Consumption:** 10 W standby 25 W nominal 50 W max with heaters operating  
**Operating Temperature:** -25°C to +55°C  
**Storage Temperature:** -40°C to +85°C  
**Waterproof:** Sealed to IP67 standards; marine cables & corrosion resistant connectors  
**Wind Resistance:** 100 Knots  
**Encapsulation:** Sand & dust proof to Mil-Std-810E Salt mist & humidity to IEC60945  
**Shock Resistance:** 15 g vertical; 9 g horizontal  
**Vibration Resistance:** Mil-Std-810E  
**Additional built-in features:** Auto window de-icing & defrost, Lightning & surge protection  
**Compliance - approval pending:** CE, FCC, RoHS



### Dimensions:

**Camera:** 21cm / 8.3 inches in diameter  
35cm / 13.8 inches in height  
**Joystick Keypad:** 16cm (6.1 inches) x 12cm (4.5 inches)  
**Weight:** camera: 10 kg



### Additional Features:

- LED backlit 12", 15" and 19" sunlight LCD display options
- Multi-function joystick control keypad remote
- Flash upgradable software
- Multiple Thermal Display Modes and Scene Selection Modes
- Multiple Stabilization Response Modes
- Multi-protocol decoder: PELCO-P/D, RS422
- Power-off memory function and programmable home position
- Auto scan function; preset positioning tour;
- On Screen Display password protection
- Park Mode camera protection when not in use
- Auto internal heater for cold temperatures
- Remote can be surface or flush mounted
- Wide & narrow angle thermal imaging view options
- Auto or fixed focus lens options
- Extra remote station capability

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Worldwide Service

Printed in Canada

Represented by:

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