JCX-161
BNWAS



RMS

JRC's JCX-161 BNWAS

- 4.5-inch high brightness display
- Dual color LED backlight
- Alarm input from other navigation equipment
- Newly designed light weight accessories
- Fully complies with IMO regulations MSC.128(75)

JRC Japan Radio Co., Ltd.

since 1915

Features

Features

The Bridge Navigational Watch Alarm System (BNWAS) main purpose is to monitor the presence of watch officers and their alertness for early detection of unsafe sailing conditions.

Dual LED backlight

The JCX-161 incorporates many display modes readily available on a highly visible 4.5-inch LCD display. Besides the display being fully dimmable and having backlit keys, it features dual LED backlight (white and orange), making it easy to operate in various light settings on the bridge.



Calling functions

Also available on the unit is the emergency call function which triggers all devices (buzzers) to activate. In addition, officer call also available which provides audible notice for backup officer at 2nd stage alarm.

Accessories

Along with the JCX-161, we introduce accessories that compliments our unified design approach.



Motion sensor | LED warning lamp | Reset button | Buzzer

Operation modes

The unit has automatic and manual operation modes. While the ship's heading TCS or HCS is active, the set period countdown operates automatically. In case you turned on the system to operate manually countdown operates continuously. When ship is in anchorage the unit can be turned off, however emergency calls, other call functions and bridge alarm transfer are still operable.

Operation

Uniform operation

In keeping with the company's philosophy of an easy to use Man Machine Interface, the new generation displays have allowed JRC's engineers to develop an exciting new software approach for uniform operation.



Motion sensor

An optional infrared motion sensor removes the need for the officer to manually press a button to stop the alarm. The sensor detects movement of the officer, which, once detected, will not allow the alarm to trigger.

No flush mount kit

With JRC's design approach, a flush mount kit is not required and screws are nicely concealed behind the front cover.



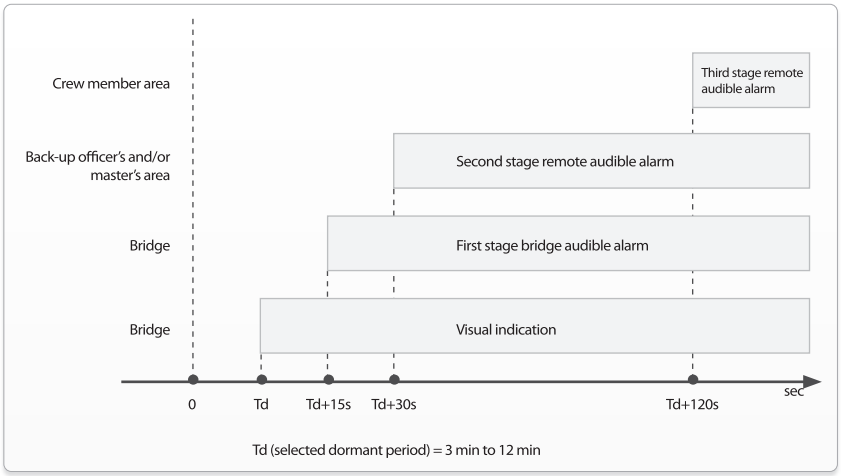
Remote Maintenance System (RMS)

JRC has the ability to cost-effectively monitor performance and functionality of the JCX-161 while at sea, significantly reducing downtime and maintenance cost. To establish RMS connection at sea maintenance server (JRC VDR) and satellite communications (JRC FB) are required onboard. More info jrceurope.com/rms

Flexibility

Resetting is easy

The system has a range of standard (and optional) possibilities to reset the timer for visual indication and audible alarm. On the display you can reset the alarms and a maximum of 6 reset buttons can be connected, regardless of normal or waterproof type. Movement detection by motion sensor resets the alarms but also when the BNWAS is connected to other navigation equipment such as radar (JMA-9100) or ECDIS (JAN-901B), the alarm is reset when the officer physically operating the controls.



Alarms

The user can define an interval sequence of between 3 and 12 minutes. This will only give a visual indication. The alarm can be reset at any point in time. There is a visual indicator of the time countdown. After the preset interval, an alarm sequence will go into effect.

Manage other alarms

When any connected equipment alarm is activated, the BNWAS displays a list of alarm information automatically. When the officers fails to acknowledge within pre-set intervals, visual and audible alarms will be generated in the wheelhouse and other crew spaces as necessary.

Connect to VDR

The system can output system status and alarm situation to the VDR through serial interfacing using the NMEA0183 ALR sentences.

IMO

BNWAS will be mandatory for all new build passenger ships and cargo ships above 150GT constructed on and after 1 July 2011 and will be phased in for existing ships over the coming years.

In the box

- Display + Bracket
- Control unit
- Spare parts
- Manual

Options

• Buzzer	NVS-785
• Reset button	NCJ-895
• Motion sensor	NYG-5
• LED warning lamp	NCD-2257
• Reset button (waterproof)	NCJ-896
• Instruction manual	7ZPNA4317
• Spare parts	7ZXNA4012

Weight and dimensions

Display unit

NWZ-4650 Weight 600 g (+ bracket 130 g)





Cutout dimensions



Control unit

NCK-175 Weight 4,5 kg



Buzzer (option)

NVS-785 Weight 200 g



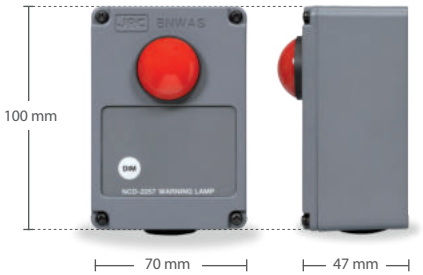
Reset button (option)

NCJ-895 Weight 200 g



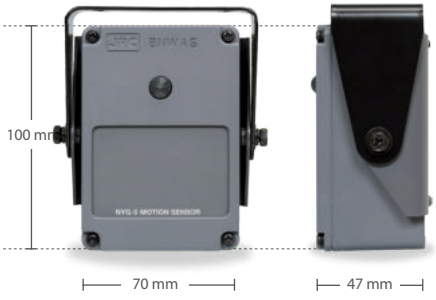
LED warning lamp (option)

NCD-2257 Weight 200 g



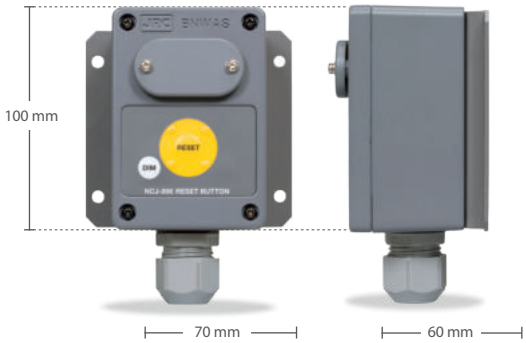
Motion sensor (option)

NYG-5 Weight 400 g



Reset button waterproof (option)

NCJ-896 Weight 500 g



Specifications

	JCX-161
IMO compliant	Yes
Control unit NCK-175	Power supply: 100-120V/200-240V AC ±10%, 50/60Hz, Power consumption: 2.5W Back up power: 24V DC -10%/+30%
Display unit NWZ-4650	4.5-inch monochrome LCD (128 by 64 dots) Backlight: white and orange LED selectable Dimmer levels: bright, medium, dark Serial in/output: 1x port RS-422, 1x port RS-485 Power supply: 12V DC (powered from control unit), Power consumption: 4W
Buzzer NVS-785	Tone: continuous on/off (default on) Sound pressure: high 85dB(A) and low 75db(A) (default low) Power supply: 12V DC (powered from control unit), Power consumption: 0.4W
Reset button NCJ-895	Color: yellow Mechanical life: 1 million presses Power supply: 12V DC (powered from control unit), Power consumption: 0.6W
LED warning lamp NCD-2257	Color: red Dimmer levels: bright, medium, dark Power supply: 12V DC (powered from control unit), Power consumption: 0.5W
Motion sensor NYG-5	Type: infrared sensor Detection range (temperature 20°C): Horizontal 100°, vertical 81°, distance up to 5 m Power supply: 12V DC (powered from control unit), Power consumption: 0.4W
Reset button WP NCJ-896	Color: yellow Mechanical life: 1 million presses Power supply: 12V DC (powered from control unit), Power consumption: 0.6W
Interfacing	6x input reset button 2x input reset by external navigational equipment (radar and/or ecdis) 2x input reset by motion sensor (5x inputs for reset button may also be used) 1x input automatic mode (autopilot) 1x input emergency call (shared with reset button input) 1x output system fail alarm 1x output to VDR (IEC61162-1) 1x output visual indication 1x output 1st stage bridge audible alarm 4x output 2nd stage audible alarm (3 parallel connections per point) 2x output 3rd stage audible alarm (5 parallel connections per point)
Ambient conditions	Temperature: -15 to 55°C (operating) Relative humidity: 0% to 93% non-condensing Protection: IP22 (reset button waterproof: IP56)

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