

# JAN-2000 **NEW** ECDIS



*– Paperless, Powerful, Economic. A secure choice.*

**19 and 23-inch high brightness display**  
**New high performance processor**  
**AVCS pre-installed & C-Map e-Token standard**  
**Multiple and wide screen viewing**  
**Built in UPS for safety shutdown**



*Japan Radio Co., Ltd.*

*since 1915*

# Features

## Features

The second generation JAN-2000 integrates a new, more powerful processor, designed to deliver the high performance standard while still keeping the ECDIS an economical choice.

## Economic solution

The JAN-2000, a fully type approved system, is a highly cost-effective solution for mid-small size ships & workboats. The number of serial ports tripled to 9 available as standard while excluding function as TCS and radar overlay. And with such standardized interface configuration JAN-2000 can also be considered as an economical back-up solution for our full featured JAN-901B/701B, as commonly installed on large vessels.

### Standard

- Gyro (heading)
- Log (speed)
- GPS 1 (position)
- GPS 2 (position)
- Radar (TTM only)
- AIS
- Navtex
- Echo sounder (depth)
- Anemometer (wind)

## New processor

The JAN-2000 comes standard with the same processor that is also found on the JAN-901B/701B. Feedback from captains, factory testing and benchmarks show the new processor is a fast improvement. Especially remarkable is the operational performance running very smooth and speedy when changing range scale or dragging the chart.

Chart import time (7500+ AVCS charts)

48 sec 7.4x faster

Previous model

353 sec

Chart drawing time 300 active AIS targets

1.6 sec 10.8x faster

Previous model

17.2 sec

## Checklist

There are many aspects to a successful implementation of ECDIS on your vessel or fleet. Here are a few examples which may be helpful for this multi-stage process.

- ✓ Fully in house developed and produced
- ✓ Almost 25 years of ECDIS experience
- ✓ Complies with 2014 S-63 Edition 1.1
- ✓ Meets current IHO standard
- ✓ Online TST courses available
- ✓ Support of AIO for AVCS
- ✓ Close to 10,000 ECDIS TST trained officers
- ✓ Global support and after sales service
- ✓ AVCS pre-installed & C-Map e-Token standard
- ✓ Over 1,000 trained engineers globally
- ✓ TST training available in over 30 countries
- ✓ Solid State Drive for OS and JRC software

# Operation



## Dedicated keyboard

Our dedicated keyboard allows you to carry out all operations simply by using the keyboard or trackball. The responsive feel keys allow logical and precise operation, even under heavy sea conditions.

## Back up via LAN

The JAN-2000 ECDIS can directly be connected via LAN to JRC's VDR and S-VDR. This way, you can easily backup important data, without the need for additional interfaces.

## Grounding avoidance

As standard, the JAN-2000 integrates a grounding avoidance function, which protects vessels from collision and entering dangerous areas. This system allows real-time display of the ship's position on electronic charts, allowing to easily avoiding routes for dangerous areas. You can simply make a crossing warning and it is possible to check safety contour lines and dangerous at the route planning stage.



60 sec

## UPS built in

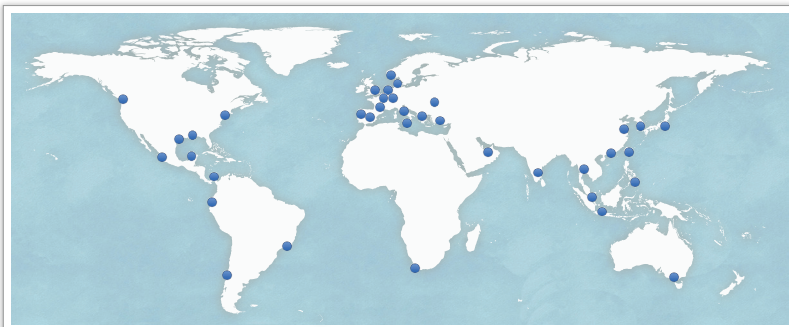
The JAN-2000 has a small Uninterruptible Power Supply (UPS) built in as standard, holding up to 60 seconds until OS closes automatically.

## Regulations

IMO amendments to the international SOLAS convention make it compulsory to fit an ECDIS. The legislation will be phased by vessel type and size and will eventually apply to almost all large merchant ships started July 2012. A single ECDIS may be used for navigation but it requires a backup by paper charts or a secondary ECDIS. (If you use ECDIS as a primary means of navigation, it's essential to understand both your flag state and class society requirements for installation and operator certification.)

Type	Size	Newbuild	Existing
Passenger	> 500 GT	July 2012	July 2014
Tanker	> 3,000 GT	July 2012	July 2015
Cargo	> 3,000 GT	July 2014	July 2015
	> 10,000 GT	July 2013	July 2018
	> 20,000 GT	July 2013	July 2017
	> 50,000 GT	July 2013	July 2016

Also, as ECDIS is a total change from paper charts, the master, officers and other watch keeping bridge officers should as a minimum undertake generic training, followed by a JRC type specific (familiarization) training.



6 continents, 30+ countries, 50+ partners, 120+ trainers

## Type specific training

JRC is working globally with various dedicated training establishments and distributors that provide JRC type specific training. Today, close to 10,000 bridge officers passed the JRC TST course. On [jrceurope.com](http://jrceurope.com) you can find all approved ECDIS training locations.

# Flexibility

## Flexible black box configuration

The JAN-2000 consist of a 19 or 23-inch display (option), processor and keyboard, allowing for simple configuration and flexible installation approach. It is also possible to install selected third party displays as alternative.



## Advanced route planning

The advanced nature of JRC's new JAN-2000 ECDIS allows route planning in different ways. Either plan your route by using the table editor, while displaying current waypoint or graphically draw your next waypoint on the chart. Editing the route is just as simple as inserting. Dedicated menus are readily available to assist the mariner in effective route planning. Not only can you save the routes, but import favorite or commonly used files, even from previously ECDIS models, using industry-standard CSV format.

During the voyage, you can add an alternative route, which can be displayed simultaneously. You can move, insert, add and delete waypoints instantly and easily exchange the alternative route with route in progress.

## Man Overboard

Some items could strike you on the vessel, a slippery deck or unexpected movement of the vessel are situations in which a person may possibly fall of the vessel. The JAN-2000 integrates a single-press Man Overboard (MOB) operation. Instantly, a dedicated symbol arises on the screen, providing a range detailed info such as positioning, bearing, range and time till arriving at MOB. This emergency system enables immediate and accurate search and rescue efforts.

## Multi view

Multiple and wide screen viewing is possible with the new JAN-2000. You can divide the chart screen into two sections, in which the same or different charts can be displayed, in a mixture of ways. In this field of view, it provides a 'look-ahead' capability, especially useful in coastal areas. With the wide screen view function, an additional screen in the display area, showing a segment of the chart, allows viewing at a glance.

### In the box

- Processor
- Keyboard
- e-Token (C-Map Ed.3)
- Spare parts
- Manuals

### Options

- 19-inch display NWZ-173-E
- 23-inch display NWZ-170-E
- NSK unit NCT-4106A
- Hub 5EZQM00009
- Printer 7HPNA4003

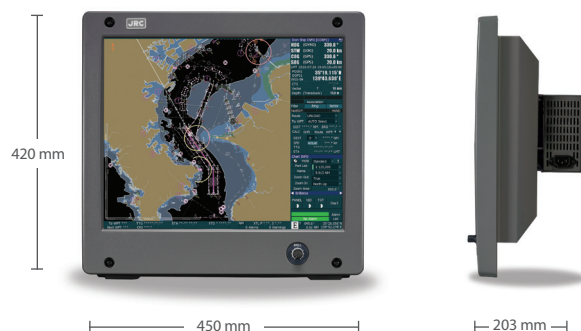


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# Weight and dimensions

## 19-inch display option

NWZ-173-E Weight 9 kg



### Flush mount

Height 347 mm  
Width 420 mm  
Depth 155 mm

## 23-inch display option

NWZ-170-E Weight 16 kg



### Flush mount

Height 462 mm  
Width 560 mm  
Depth 78 mm

## Keyboard

NCE-5163-EA Weight 3,5 kg



## Processor

AVCS Pre-installed ENC

C-MAP e-Token dongle

NDC-2000M2 Weight 12 kg



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# Specifications

	JAN-2000
IMO compliant	✓
Display	19-inch (1280 by 1024 pixels), 23-inch (1600 by 1200 pixels)
Bearing indication	North up, Course up (simultaneously in multi view)
Presentation mode	True, Relative, Free motion
Multi view	9 display modes available
Scale, Range	1:1.000 to 1:75.000.000, 0.125 to 120 NM
Vector charts	ENC, C-Map Ed. 3 (AVCS ENC pre-installed, e-Token C-Map supplied)
Raster charts	ARCS
Route planning	Graphical, Numerical (Route editing, Alternative route editing, Safety check of planning route)
Safety check	Grounding, Obstruction, Dangerous areas
Import/export	Yes, CSV format
Plotting	Own position, Track
TT tracking	200 targets
AIS tracking	300 (sleeping+activated), Class A+B
AIS/TT alarms	CPA, TCPA
Navigation monitoring	Own ship's position, Crossing safety contour, Approaching obstruction and prohibited areas, Cross track error, Arrival at waypoint, Off course, Dragging anchor
Licensing	Static, Dynamic (C-Map)
Serial input	9 standard + 1 keyboard
LAN	2 ports (1000 Mbps)
USB	4 ports: 1 for e-Token dongle, 1 for HASP (ECDIS license key), 1 for printer (option), 1 for import/export
Import/export	Route, Chart files, Logbook (via USB, Harddisk)
Route transfer via LAN <sup>1</sup>	Share active route to JRC radar (JMA-900B, 9100, 7100, 5300Mk2) Share route (stored in memory) to/from JRC (D)GPS (JLR-7500/7800)
Share info via LAN <sup>1</sup>	Network printer: screen, route, logbook, RPS: route planning, Conning: monitoring navigation and alarms, VDR/S-VDR: sensor data back up, RMS
Power supply voltage	100-115V/200-230V AC ±10%, 50/60Hz , Consumption: less than 250VA <sup>2</sup>
Ambient conditions	Temperature: -15 to 55°C (operating) Relative humidity: 0% to 93% non-condensing

1. Hub may be required.
2. Consumption includes 19-inch display (NWZ-173-E)

**Note** These specs are applicable for JAN-2000 from serial number KG00907 or later.

## JRC offices around the world

## Authorized reseller

Amsterdam	Hanoi	Manilla	Seattle	Taipei
Athens	Hong Kong	New York	Shanghai	Tokyo
Hamburg	Jakarta	Rio de Janeiro	Singapore	

[jrc.co.jp](http://jrc.co.jp)