





available in 150W, 250W and 500W versions, guaranteed enhanced performance and stability

All mode continuous full power operation available 3.8-inch high brightness display
Class A 6CH DSC watch-keeping built in
Flexible black box (JSS-2150) and rack mount (JSS-2250/2500) configuration
Digital audio and integrated speaker
Easy operation with JOG dial



## MF/HF Radio Equipment

### – features

#### **Features**

The JSS-2150/2250/2500 MF/HF Class A DSC radio equipment features an intuitive user interface and a highly reliable circuit that enables all-mode continuous full power operation.

Shown with optional bracket



MF/HF

#### Class A 6CH DSC watch-keeping built-in

The MF/HF has Digital Selective Calling (DSC\*) as standard with a built in Class A 6CH DSC watch-keeping receiver. You can transmit and receive digital selective calls for quick and efficient establishment of distress, urgency, safety and routine communication with other ships and coast stations.

In distress situations, the MF/HF sends an alert once you press the distress button. The integrated DSC watch-keeping receiver monitors distress alarms through continuous scanning of distress frequencies.

\*Fully meets new ITU-R M.493-13

#### MF/HF controller settings

The MF/HF controller uses a 3.8-inch high visibility LCD display, which you can adjust at your own convenience. The display has 10 dim settings and you can set the contrast up to 11 different levels. An integrated screensaver and the ability to assign a commonly used menu to a user key for direct access, are just a few of the possibilities.

#### **Distress alerts**

The MF/HF controller includes a prominent distress button, with features to prevent accidental activation. When in distress, you can send a DSC message instantly, transmitting your MMSI, position, time of position and nature of distress, enabling an immediate response for search and rescue efforts.

#### Digital audio

The MF/HF controller integrates an advanced digital audio amplifier, which increases the amount of power, making the receiving message loud and clear.



#### Connect a remote control

Getting a second operation controller onboard is easy. Connect a second MF/HF controller to the transceiver and position the controller at a secondary location on the ship. The second MF/HF station is fully operable and you can transfer saved channel data to optimize your operation.

JSS-2150/2250/2500 - ensuring the ease of

## MF/HF Radio Equipment

### operation

#### Unified design

The MF/HF controller design allows you to carry out all operations simply by using the same unified keyboard layout as found in JRC's VHF radiotelephone. The keypad is solid and responsive, which allows for precise operation. The keys are also backlit, making it easy to operate in low-light settings on the bridge.



#### NBDP (telex) option

Complement your MF/HF with the NBDP\* kit for telex communcation with shore radio stations and with other ships. It includes a10.4-inch data terminal equipment featuring a color display with a variety of color backgrounds. The LCD gives you a bright picture with excellent color consistency, even when you are viewing the display from the side.



#### USB

The USB 2.0 port located on the front panel allows you to connect a mass storage device to save and load messages.

#### What is in the NBDP kit?

- Data terminal (NDZ-227)
- Keyboard (NDF-369)
- Printer (NKG-800)
- U-type bracket for display (MPBP31721)
- Signal & power cables for data terminal and printer
- Necessary NBDP software and manual

<sup>\*</sup> Narrow Band Direct Printing (NBDP)

## MF/HF Radio Equipment - flexibility

150W

#### Flexible installation

All MF/HF models are minimum configured as standard, consisting of a MF/HF controller+handset, transceiver and

antenna tuner. The 150W model can be applied for non-solas vessels, but also configured with necessary options up to GMDSS A4 area. In contrast to the other two models, the 150W version has a smaller transceiver and antenna tuner which allows for a more flexible installation approach in confined spaces.





#### High power models

When more power output is required, simply select the 250W or

500W version. Additionally, the new 250W and 500W version come with a redesigned antenna tuner, transceiver and power supply designed to fit into an optional 19 inch rack: NCU-515A.



Antenna tuner



Transceiver New

Built-in Class A DSC and NBDP modem.

Power supply New

Identical circuit breaker for AC and DC input.

Battery charger\*

Alarm notification function included.

\* battery charger(option) can be used for all models



Antenna tuner New Outside mounting available as standard. Built-in antenna grounding circuit. Same mounting

dimensions as preceding model (JSS-296/596).



#### **GMDSS** console

The MF/HF models can be installed together with a set of Inmarsat-C: JUE-87 in the optional GMDSS console: NCU-531A. Optionally the controller and handset of VHF radiotelephone: JHS-770S/780D can be installed in the same console.

#### In the box

- MF/HF controller+Handset
- Transceiver
- Antenna tuner
- MF/HF controller to transceiver cable (5 m)
- Power supply (250W/500W only)
- Manual

#### Options

- Power supply
- NBD-2150 (150W)
- Battery charger
- MF/HF controller
- NBB-724/714
- NCM-2150 (max 2)

- MF/HF controller cable
- Connection box
- Mounting bracket
- Mounting bracket
- Handset
- NBDP kit
- Self supporting antenna
- Whip antenna\*
- Joint box
- Junction box
- Printer (flush)
- Printer (table)
- DMC

- 7ZCJD0343 (5 m)
- NQD-2250 (for 2nd controller)
- MPBC42957 (flush)
- MPBX44354 (table)
- NQW-261 (IP66)
- 7ZZJD0089 (contents see left)
- NAW-208S (10 m) TX
- NAW-60 (6 m) RX and/or WKR
- JQD-69C (for RX & WKR)
- NQD-2253 (for antenna tuner)
- NKG-91
- NKG-800/DPU-414
- NCH-321A

<sup>\*</sup> Flag/class may require two RX antennas to separate RX from WKR.

### MF/HF Radio Equipment

#### - maintenance

#### Self diagnosis

With JRC's MF/HF radio equipment you can perform self-diagnosis checks on the controller and transceiver, allowing for easy maintenance and more reliability. The results are directly shown on the screen and can be saved as a log (up to 10 possible) or printed (with optional printer).



#### Remote Maintenance System (RMS)

JRC's unique RMS allows remote monitoring of bridge equipment from ashore. Using JRC VDR and INMARSAT FB satellite communication equiipment, JRC can establish a highly secured connection to the vessel and cost-effectively and accurately determine the operating status of the JRC equipment while at sea.

#### JRC global service network (Star Network)

JRC has been providing sales and support of products since 1915. Today, JRC offers comprehe nsive assistance through its organisation, in partnership with a worldwide StarNetwork of over 270 fully trained and qualified partners and agents, assisting you 24 hours a day, 7 days a week and 365 days a year.



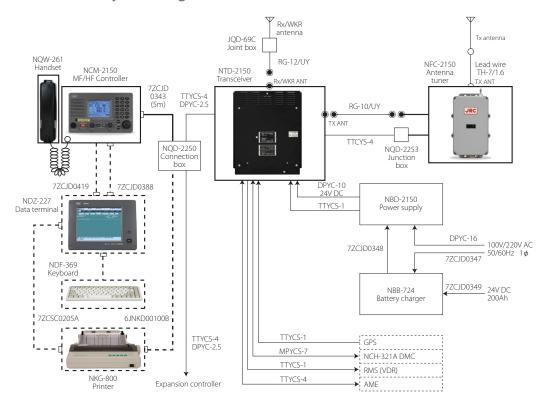
#### One number to call

With JRC you can go anywhere and if you need our support, simply call us at +81 3 3492 9201, anytime.

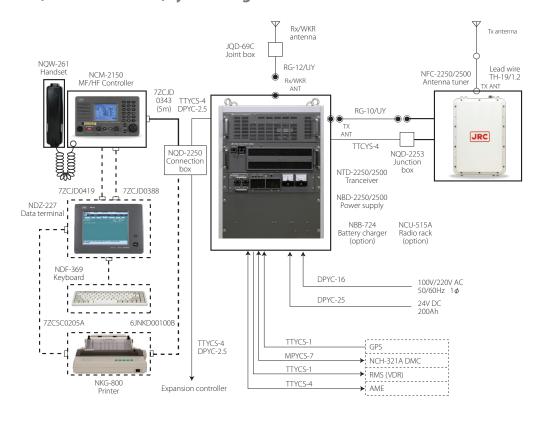


## MF/HF Radio Equipment – configuration

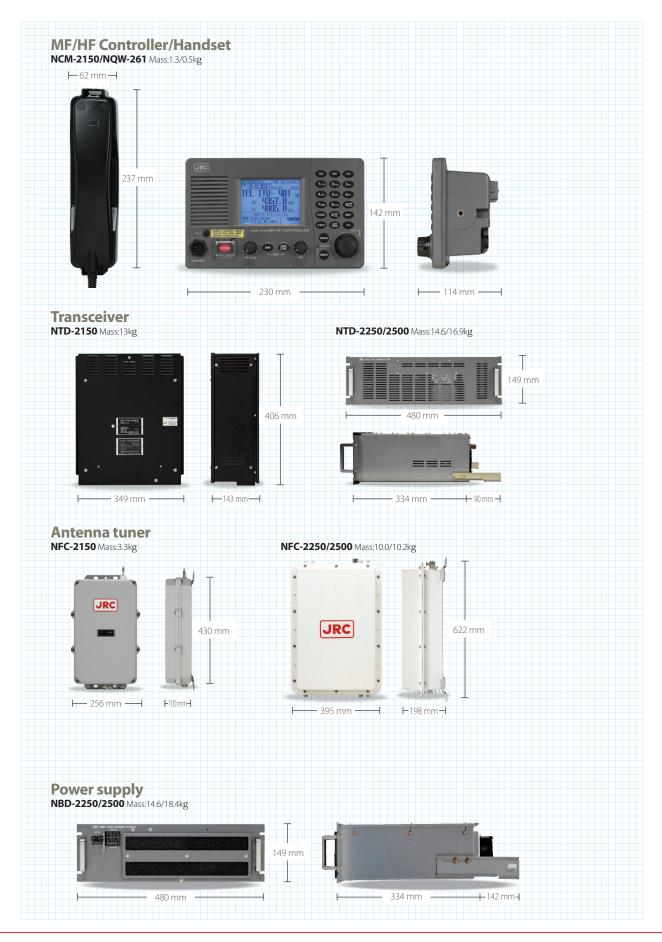
#### JSS-2150 (150W model) system diagram



#### JSS-2250/2500 (250/500W model) system diagram



## MF/HF Radio Equipment – dimensions and Mass



# MF/HF Radio Equipment – specifications

Name	MF/HF Radio equipment		
Model	JSS-2150	JSS-2250	JSS-2500
IMO type approved		√	
Output power	150W	250W	500W
Regurations	IMO A.806(19), A.694(17), MSC68(68), MSC/Circ.862, IEC 60945 Ed.4 2002-08		
Transmission frequency	1605.0 $\sim$ 27500.0kHz(100Hz steps)		
Reception frequency	90.0 ~ 29999.9kHz(100Hz steps)		
Frequency stability	Within ±10Hz		
DSC watch keeping frequency	2187.5kHz, 4207.5kHz, 6312.0kHz, 8414.5kHz, 12577.0kHz, 16804.5kHz		
Type of emission	J3E, F1B, A1A, H2B, J2D, H3E(receiving only)		
User programmable channel	Up to 400 (20 channels x 20 groups)		
ITU preset channel	1722ch		
Channel switching time	15sec or less		
Communication method	Push to talk (simplex, semi-duplex)		
Reception attenuation(ATT)	4 steps : 6dB, 12dB, 18dB, OFF		
Display	3.8 inch LED Backlit (320 by 240 pixels)		
Microphone input	-54dBm		
Audio output	Loud speaker : $5W(8\Omega)$ , Handset phone : $1mW(150\Omega)$		
Interface	IEC61162-1(GPS/AME/RMS)		
Compass safe distance	2.0m		
Receiving system	Double superhetelodyne		
Sensitivity(SINAD 20dB)	J3E∶≤2.5μV, F1B∶≤0.7μV, A1A∶≤1.4μV		
RMS interface	Built in		
Transmitter output 1.6 - 4MHz	DC:100Wpep	DC:100Wpep, AC:200Wpep	DC:100Wpep, AC:400Wpep
Transmitter output 4 - 27.5MHz	DC:150Wpep	DC:150Wpep, AC:250Wpep	DC:150Wpep, AC:500Wpep
Power DC	21.6 to 31.2V		
AC	option(90 to 132V, 180 to 264V)	90 to 132V, 180 to 264V	
Consumption	DC:TX ≤30A, RX ≤5A	DC:TX ≤40A, RX ≤6A AC:TX ≤2.0kVA, RX ≤0.5kVA	DC :TX ≤40A, RX ≤6A AC :TX ≤3.0kVA, RX ≤0.5kVA
Power saving	Relays are turned off when sleep mode		
Ambient condition	Operating temp:-15 to 55°C(controller), -25 to 55°C(antenna tuner) Storage temp:-15 to 55°C(controller), -25 to 70°C(antenna tuner) IP protection rate: IP22(controller), IP66(handset) Relative humidity: 0 to 93% non-condensing		

 $\bullet$  Specifications may be subject to change without notice.

For further information, contact:



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