

# JSS-2150/2250/2500 MF/HF radio equipment

**JRC**

150W

250W

500W



– 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**

**JRC**

*Japan Radio Co., Ltd.*

# 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



### 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

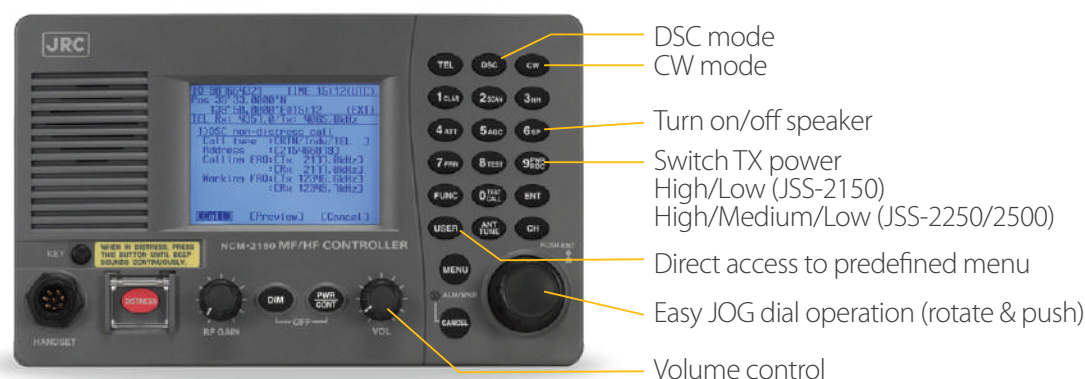
Getting a second operation controller onboard is easy. Connect a second MF/HF controller to the transceiver and position the controller at a secondary location on the ship. The second MF/HF station is fully operable and you can transfer saved channel data to optimize your operation.

# 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 communication with shore radio stations and with other ships. It includes a 10.4-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

\* Narrow Band Direct Printing (NBDP)

# MF/HF Radio Equipment

## – flexibility

**150W**

JSS-2150

### 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.

**New**

**250W**

JSS-2250

**New**

**500W**

JSS-2500

### 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



#### 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 NBB-724/714
- MF/HF controller NCM-2150 (max 2)

- MF/HF controller cable 7ZCJD0343 (5 m)
- Connection box NQD-2250 (for 2nd controller)
- Mounting bracket MPBC42957 (flush)
- Mounting bracket MPBX44354 (table)
- Handset NQW-261 (IP66)
- NBDP kit 7ZZJD0089 (contents see left)
- Self supporting antenna NAW-208S (10 m) TX
- Whip antenna\* NAW-60 (6 m) RX and/or WKR
- Joint box JQD-69C (for RX & WKR)
- Junction box NQD-2253 (for antenna tuner)
- Printer (flush) NKG-91
- Printer (table) NKG-800/DPU-414
- DMC NCH-321A

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

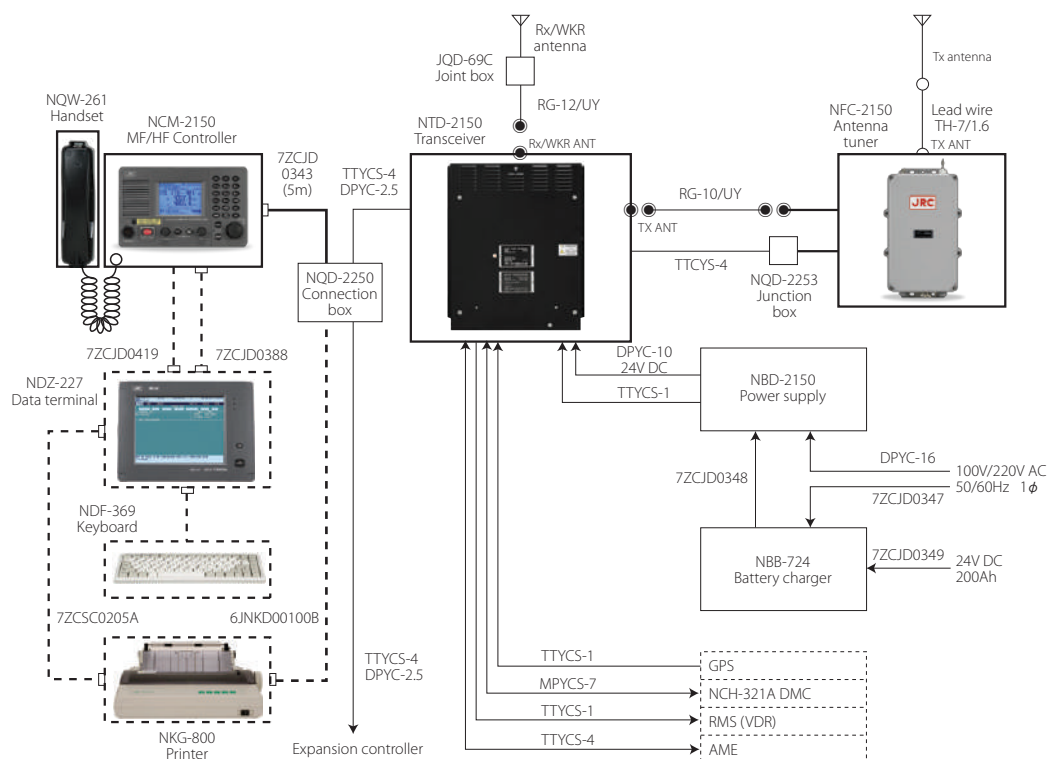


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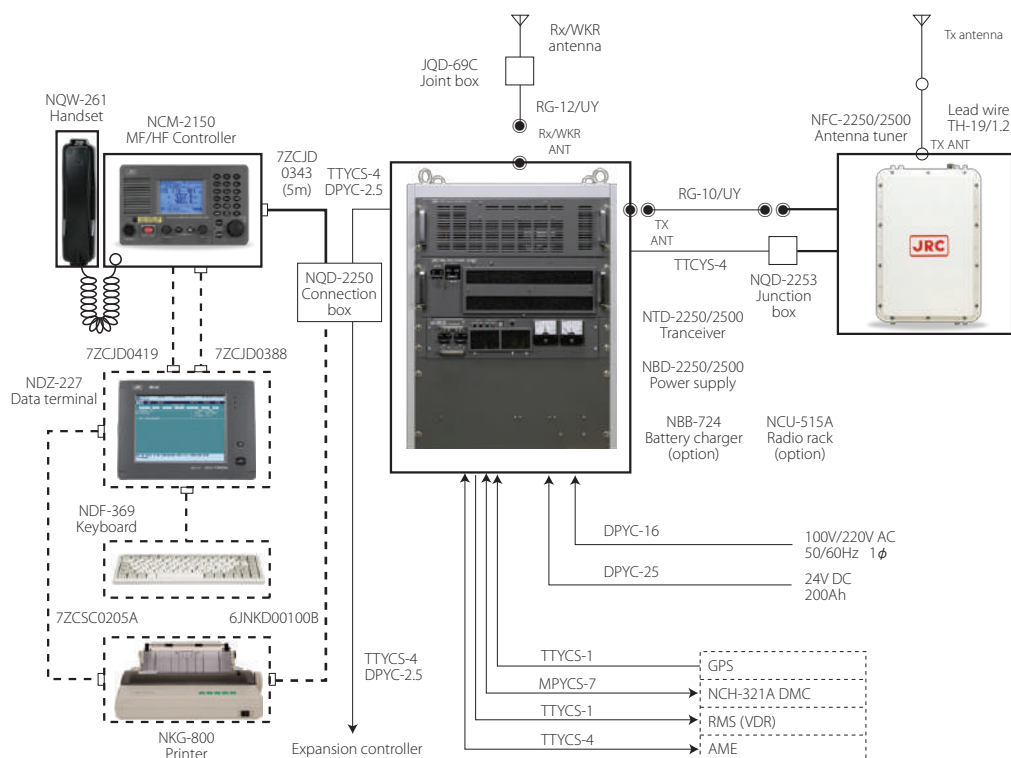


# MF/HF Radio Equipment – configuration

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



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

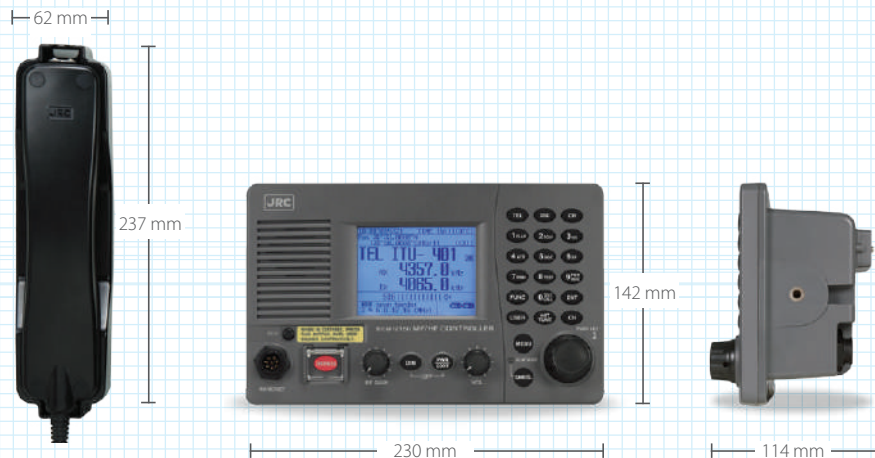


# MF/HF Radio Equipment

## – dimensions and Mass

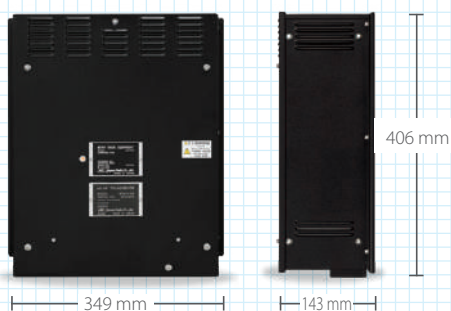
### MF/HF Controller/Handset

NCM-2150/NQW-261 Mass:1.3/0.5kg

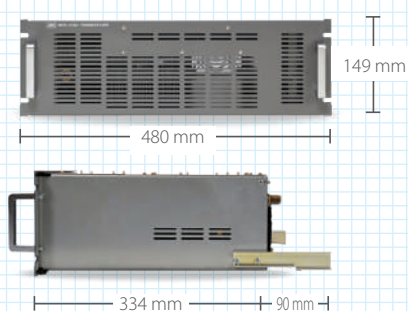


### Transceiver

NTD-2150 Mass:13kg

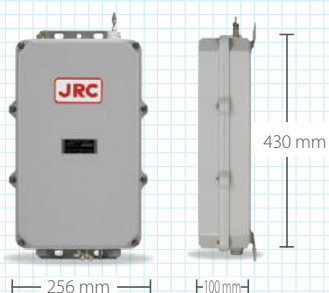


NTD-2250/2500 Mass:14.6/16.9kg

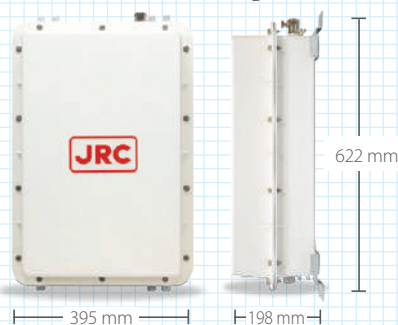


### Antenna tuner

NFC-2150 Mass:3.3kg

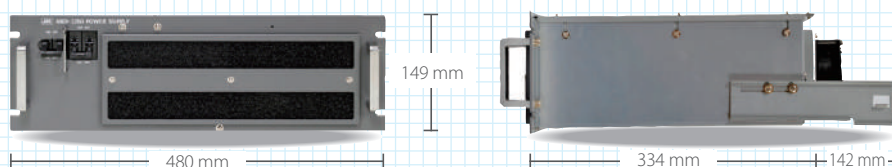


NFC-2250/2500 Mass:10.0/10.2kg



### Power supply

NBD-2250/2500 Mass:14.6/18.4kg



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# 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 ~ 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(8Ω), Handset phone : 1mW(150Ω)  |   |   |
| 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<br>AC : TX ≤2.0kVA, RX ≤0.5kVA | DC : TX ≤40A, RX ≤6A<br>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)<br>Storage temp : -15 to 55°C(controller), -25 to 70°C(antenna tuner)<br>IP protection rate : IP22(controller), IP66(handset)<br>Relative humidity : 0 to 93% non-condensing |   |   |

• Specifications may be subject to change without notice.

For further information, contact:



Since 1915

**Japan Radio Co., Ltd.**

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ISO9001, ISO14001 Certified