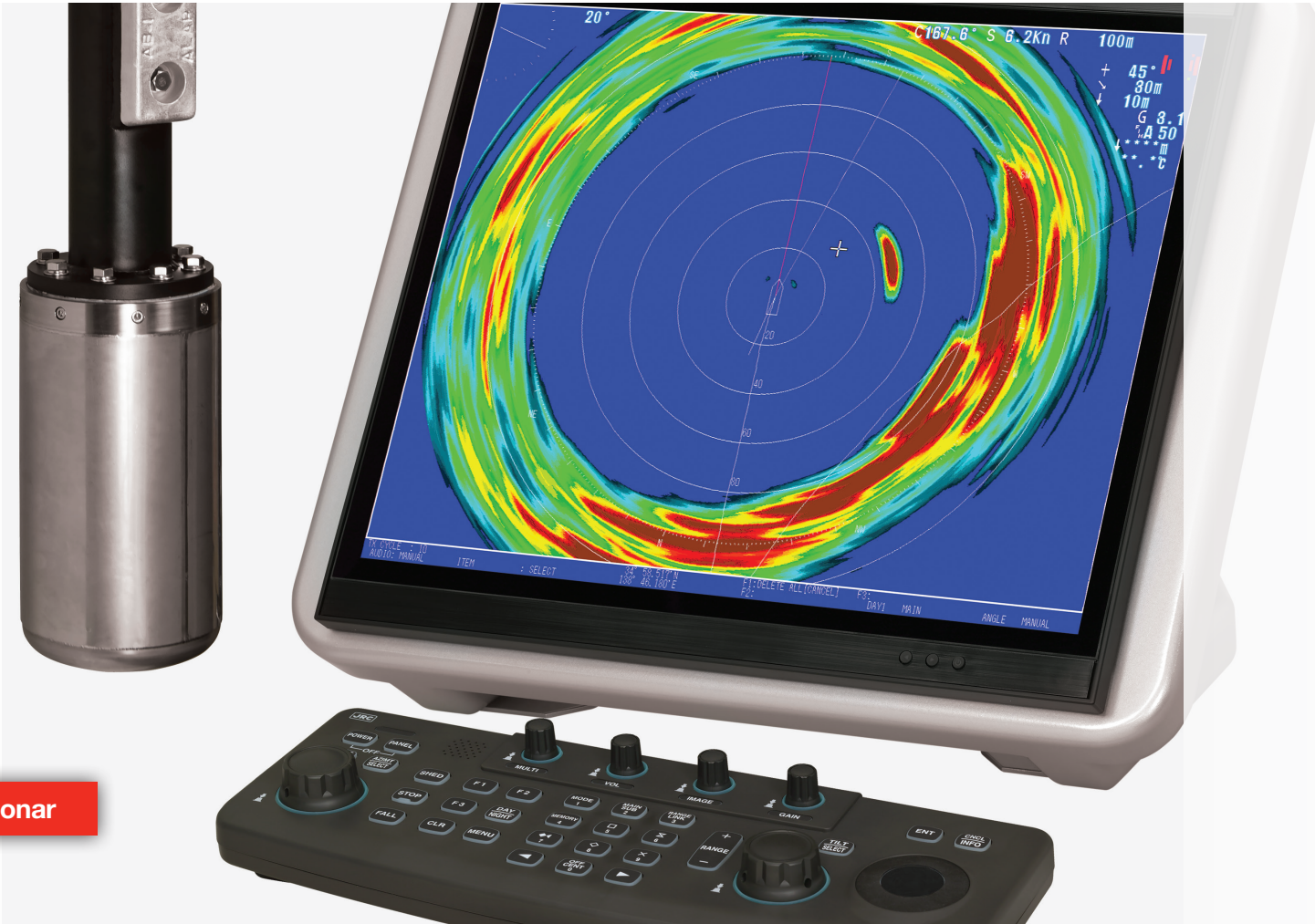




ALPHATRON
Marine



Sonar

JFS-280

Robust design and fully stabilized



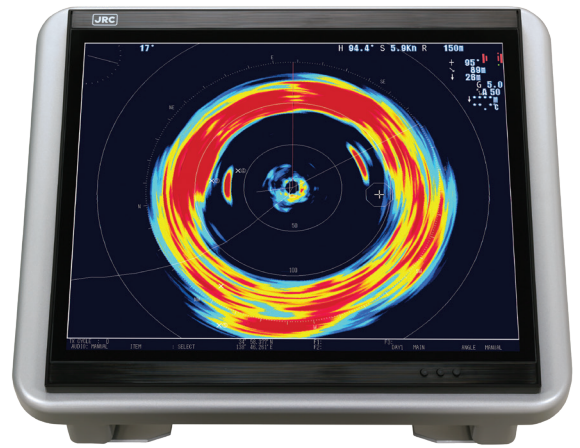
Marine Electronics &
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www.mackaymarine.com

www.jrc.am

Features

The JFS-280 is a compact and fully stabilized omni-directional sonar, incorporating a robust transducer consisting of 512 elements. With the medium frequency of 62 KHz, the sonar provides an excellent and clear image, displaying schools of fish with astonishing discrimination, in shallow waters as well as in deep waters.



- Stabilized transducer
- Quick variable beam angle
- High power and long pulse
- Narrow angle beam
- SXGA pixel resolution (1280 x 1024 px)
- Easy to use keyboard
- Stainless steel dome transducer
- Auto retractable hull unit
- Outside breaker switch
- Complete system 24V DC powered

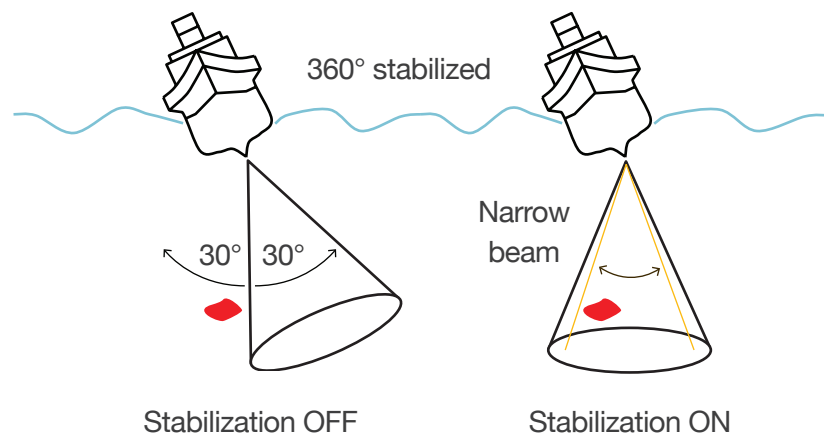
Accuracy

Following its successful predecessor, the new JFS-280 has a greatly improved detection range and crisp images using the newly designed transducer and transceiver utilizing the latest digital technologies. The transducer is 1.4x larger and range expanded to 2000 meter. The JFS-280 also includes a manual and an automatic tilt function (-5° to 60°) to vertically scan for a school of fish. With a single press of the button you can activate automatic tracking of a fish of school. The tilt angle is continuously adjusting to the target as the ships moves forward.

Features like these are typically seen on long range sonars. And with the stabilizing function activated during transmission and reception, it gives the fisherman better on screen results and potentially providing a greater catch, even in rough and stormy seas.

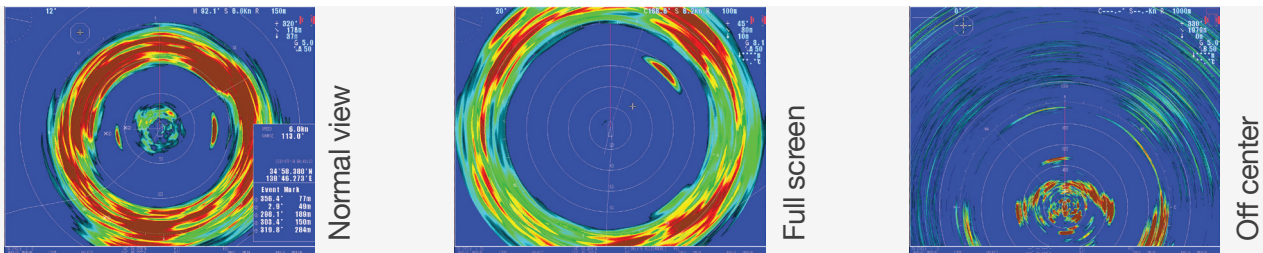
Stabilization

With the pitching and rolling on vessels, a high-performance inclinometer is built in with an accuracy of less than 1 degree and a data output of 20ms interval rate. The stabilizer function can handle 30° movements of the vessel in all directions. Even on small vessels, the sensitive omni-directional sonar will keep the supersonic beam stable.



Display modes

The JFS-280 make your sonar images more brilliant than ever with a sharp 19-inch high resolution LCD display. You can set the motion to head up or north up (sensors required) and you can show the sonar image as normal, full, split screen or off center mode, which is approx. 1.5x the normal range. With the SXGA resolution and 32 color video output, it shows detail image on screen. With a single press of a button, you can save a single screenshot in the system memory. Input a CF card to take and save multiple screenshots. On the same CF card, you can save and import setting to match a type of fish and fishing method, while you are fishing.

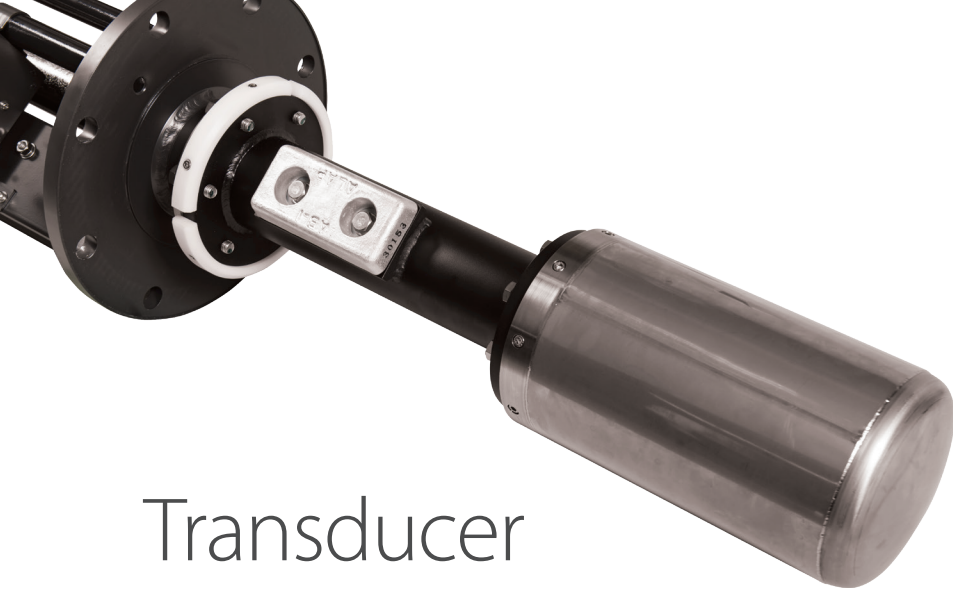


We have also included five presets in the JFS-280, designed for several fishing applications. Combined with a new level of transmission, more sonic elements and digitized lobes, it offers unprecedented clear and clean supersonic images.

Keyboard

With its new case design, the keyboard of the JFS-280 allows you to carry out all sonar operation simply by using the keyboard or on-screen using the trackball. The responsive keys allow logical and precise operation and integrates keys for one-touch access to range, tilt, gain, off center and various other dedicated buttons are integrated. This makes it easy to navigate through all commonly used tasks.





Transducer

The transducer has 512 separately controlled sonic elements for a vertical narrow beam transmission, built inside a powerful and robust stainless steel dome. You can select the setup for clear view of fish school by choosing a wide or narrow beam angle. A narrow beam angle improves identification of school of fishing shallow waters or at sea bed level.

The transducer is auto retractable and keeps the dome safe in case of ship sailing at higher speeds and the emergency breaker switch is conveniently located in the hoist unit. This thought through hull unit makes the dome easily accessible, shockproof and is protected from corrosion, saving maintenance costs and makes it extremely suitable as high end fishing sonar.

Output power

Although the JFS-280 is compact and small in design, features and performance are not seen on this type of sonar before. The high-performance transducer in combination with the pulse width which can be set from 0.4ms to 36ms allows for great discrimination, even when any (schools of) fish are swimming close to each other. It easily spots the seabed and even allows detection of low reflectance fish, such as squid. And with optional speaker the sonar tone will be heard on the bridge allowing immediate action by skipper.



Speaker

Installation

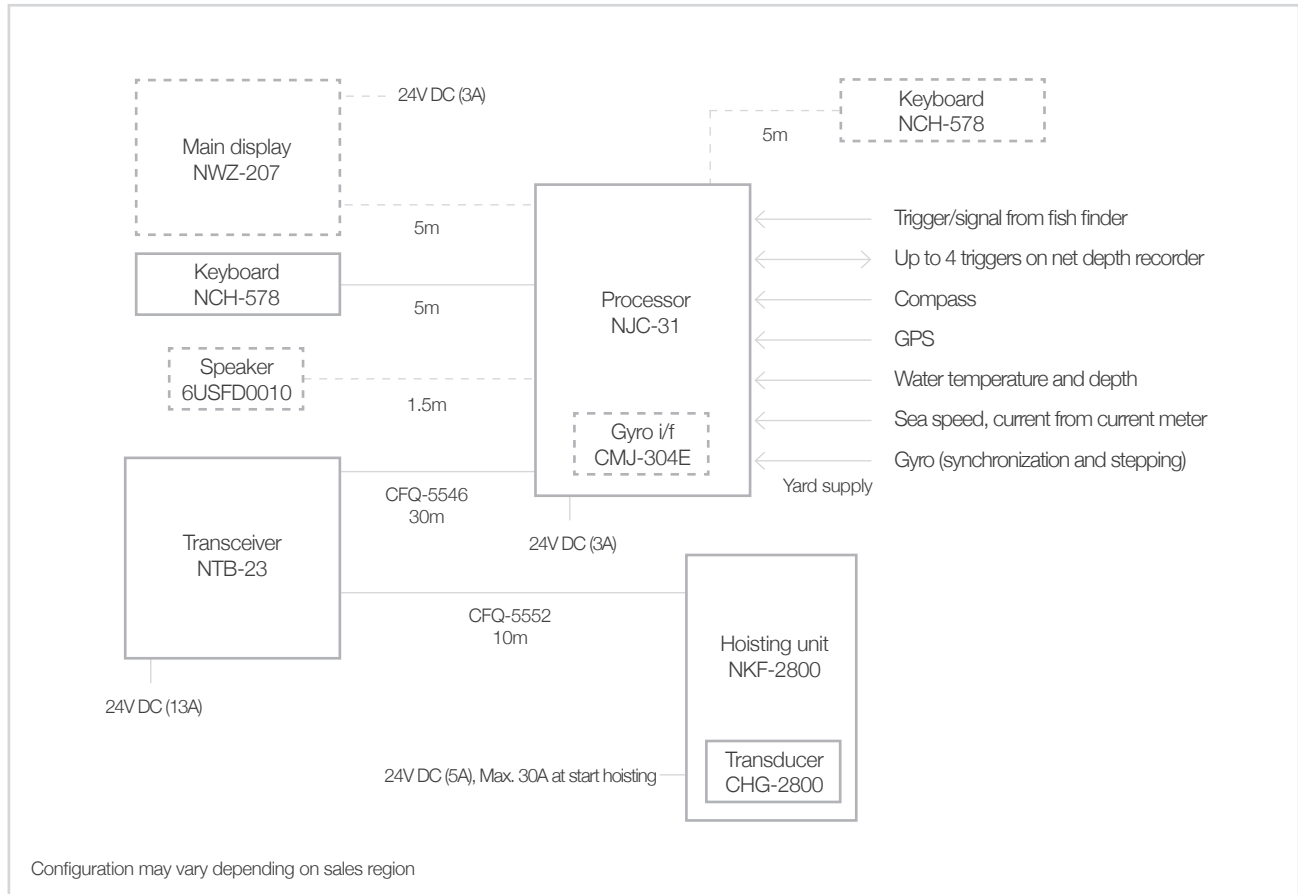
The JFS-280 consists of the hull unit including transducer, transceiver, processor, keyboard and (optional) monitor, allowing for a flexible installation approach in confined spaces. Due to the nature of this black box setup, a second display and keyboard can be connected. The entire system operates on 24V DC, making it suitable especially for smaller fishing vessels that do not have AC power onboard.

Alarms

The JFS-280 incorporates a variety of alarms for angle, distance, area size, level, amount and lost count, contributing to safer navigation and more efficient fishing. The keyboard has a built-in speaker to support the audible alarm.

System diagram

The JFS-280 onmi-directional sonar can be connected to various equipment and sensors onboard a ship. JRC's straightforward configuration assures continuous performance.



In the box

- Processor NJC-31
- Keyboard NCH-578
- Transceiver NTB-23
- Hoisting unit NKF-2800
- Transducer CHG-2800
- Cable processor to transceiver CFQ-5546
- Cable transceiver to hoist unit CFQ-5552
- Spare parts
- Instruction manual

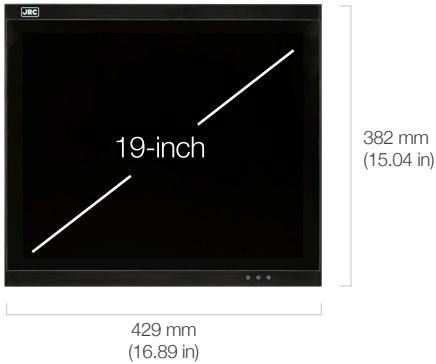
Accessories

- 19-inch display NWZ-207
- Desktop frame for NWZ-207 CWB-1594
- Keyboard NCH-578
- Speaker 6USFD0010
- Gyro interface CMJ-304E
- Tank MPBX31141
- AC/DC power supply GPSA-600-24P-TP
- Extension cable 50m CFQ-5546-50
- Extension cable 70m CFQ-5546-70

Tech Specs

Display (option) RoHS

NWZ-207 Weight 6 kg (13.22 lbs)



1280-by-1024-pixel resolution
2000:1 contrast ratio (typical)
500 cd/m2 max brightness
View angle (H/V) 178°C
5:4 aspect ratio
VGA in, DVI-D in
Power input 21.6 to 31.2V DC (3A)

Keyboard RoHS

NCH-578 Weight 1.3 kg (2.87 lbs)



Rotate/push and trackball operation
Dedicated (user defined) buttons
Direction, hoist and title functions
JRC original design
Flush mount installation available
(Forced) power button
Powered via processor

Processor RoHS

NJC-31 Weight 11 kg (24.25 lbs)

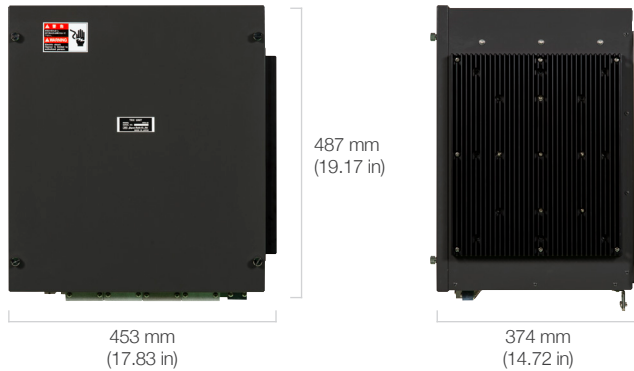


Digital signal processor
800 Hz/2W audio output
Display motion: head up/north up
Display mode full screen/off center
16 preset ranges
Sonar range scale 100 to 2000m
Power input 21.6 to 31.2V DC (3A)

Tech Specs

Transceiver RoHS

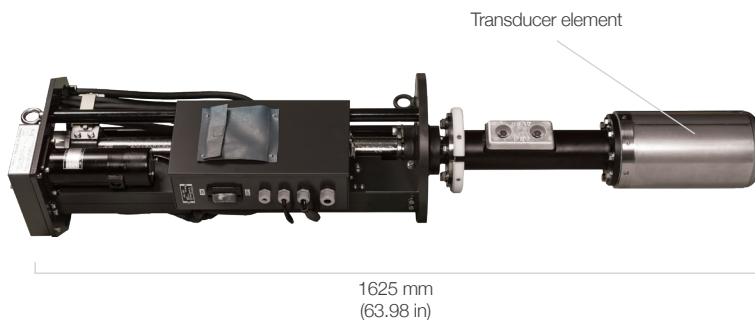
NTB-23 Weight 34 kg (74.96 lbs)



- Straight amplifier
- Full digital beam method
- Average system consumption 0.5 kW
- Pulse width 0.4 to 36ms
- Tilt angle -5° to 60°
- RCG, AGC, TVG supported
- Power input 21.6 to 31.2V DC (13A)

Hoisting unit/transducer RoHS

NKF-2800/CHG-2800 Weight 110 kg (242.51 lbs)



- Omni-directional transmission (62kHz)
- Max consumption currency 30 A (when hoisting)
- Hoisting 600mm/interval under 20 sec
- Max speed 18 knots when hoisting
- Power input 21.6 to 31.2V DC (5A)
- Max consumption when hoisting: 30A

Speaker (option) RoHS

6USFD00010 Weight 400 g (0.88 lbs)



- Standard table mount bracket
- Flush mount installation possible
- JRC original design
- Temperature -25 to 55°C
- Rated input power 2W
- Maximum input power 6W
- Impedance 4Ω



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