

# FURUNO®

## 10" FACSIMILE RECEIVER

### Model FAX-210

#### High quality 8-Level printout. NAVTEX option

- Reception and printing of clear Black-on-white weather charts and Satellite Photos in 8 shades-of-gray on dustless, white thermal paper
- Quiet, reliable thermal print mechanism
- Automatic, unattended operation by programmable timer or WMO signals, while automatic "Best Frequency" selector selects channel to suit time of day and weather conditions
- All known Facsimile frequencies in 80-160 kHz and 2-25 MHz bands pre-programmed, each can be altered by the user if the stations change frequency. 300 extra channels are provided to accommodate new stations
- Internal NAVTEX option. Urgent messages are printed immediately, regular messages are stored until the printer is idle

The FAX-210 is a new marine weather facsimile receiver designed to provide the performance characteristic of much larger equipment in a small package.

It receives and prints high-quality, high-resolution charts and satellite images transmitted from shoreside stations all around the world. These pictures and text are printed with eight gray levels (from black to white) on high-contrast dustless 10" wide thermal paper.

The FAX-210 can be programmed for automatic operation by time or by WMO start-stop signal. Channel selection can be pre-programmed or set for computer controlled scan for the best channel even under changing weather, or time-of-day disruptions to communications.

```
2020 0057
A. COMDTINST M2000.3B, CHAP 11
1. BROADCAST INSTRUCTIONS:
  A. DMAHTC: REG ISSUE NAVAREA XII.
  B. LBRACHSARCOORD: ISSUE UMIB ON 2100. N1
  UPON RECEIPT AND EVERY 24 HOURS THEREAFTER.
  C. GAMPAG: BROADCAST VOICE, CW AND NAV
  EVERY TWENTY-FOUR (24) HOURS THEREAFTER UI
  AT C AND Q.
  D. SANTA PAULA CES: REG FLEET GROUP CALI
  TWENTY-FOUR (24) HOURS THEREAFTER. VERIFIC
  OCEAN AREA XII) SOUTH/CODE 14. ALL SHIPS,
  WITHOUT
```



The FAX-210 can incorporate an optional NAVTEX receiver module. This package permits unattended reception of weather and maritime safety information broadcast by NAVTEX stations on nearly all coastlines.

The optional broadband antenna coupler allows use of a single antenna for both FAX and NAVTEX reception on a single 2.6 m whip or wire antenna of the user's choice.



The future today with FURUNO's electronics technology.

**FURUNO ELECTRIC CO., LTD.**

9-52 Ashihara-cho, Nishinomiya City, Japan Telephone: +81 (0)798 65-2111

Telefax: +81 (0)798 65-4200, 66-4622, 66-4623

Catalogue No. FX-613f

TRADE MARK REGISTERED  
MARCA REGISTRADA

# SPECIFICATIONS OF FAX-210

## RECEIVER CHARACTERISTICS

1. **Frequency Range**  
80 to 160 kHz and 2 to 25 MHz, in 100 Hz steps
2. **Number of Channels**  
659 channels max. capability
3. **Receiving System**  
Double-conversion superheterodyne  
I.F.: 50.0 MHz and 455 kHz
4. **Mode of Reception**  
F3C, J3C (USB/LSB switchable)
5. **Sensitivity**  
80 to 160 kHz: 10  $\mu$ V at 20 dB SINAD  
2 to 25 MHz: 3  $\mu$ V at 20 dB SINAD
6. **Selectivity**  
Bandwidth: 2.4 kHz at 6 dB  
Attenuation: 60 dB at 6.0 kHz
7. **Tuning Monitor**  
3 LED's indicate whether the frequency is OK or whether it should be moved up or down.

## RECORDER CHARACTERISTICS

1. **Recording System**  
Thermal head printing. Paper TA-1030A (280 mm x 30 m)  
Effective width 264 mm (132 mm with scanning speed 240 r.p.m.)
2. **Scanning Speed**  
60, 90, 120 or 240 r.p.m., automatic or manual selection
3. **I.O.C.**  
576 or 288, automatic or manual selection  
Scanning density 5 lines/mm approx.
4. **Gradation**  
8 gradations
5. **Phase Control**  
Automatic or manual
6. **External Input Signal**  
Black: 1500 Hz, White: 2300 Hz  
Level 0 dBm at 600 ohms

## 7. Operation

**Automatic or manual**  
Automatic start/stop by W.M.O. remote control signal  
Schedule Timer: 16 programs/day

## NAVTEX RECEIVER (Optional)

1. **Frequency**  
518 kHz
2. **Sensitivity**  
2 $\mu$ V at 50 ohms  
5 $\mu$ V at 10 ohms +150pF  
(4% message error)
3. **Message Memory**  
7000 characters, 64 ID codes  
Storage hour 66 hours
4. **Format**  
79 characters/line, 13 x 9 dot matrix
5. **Print Speed**  
27 characters/sec

## POWER SUPPLY

- DC model: 10 to 40 VDC, 30W (15W at stand-by)
- AC model: 110/220 VAC

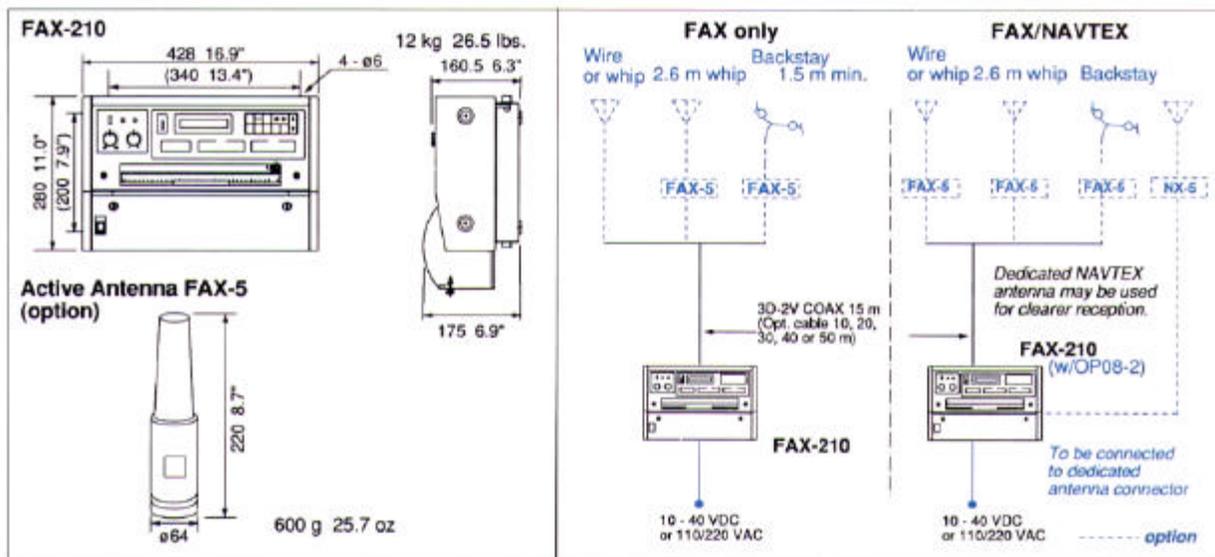
## EQUIPMENT LIST

### Standard

1. Main Unit (1 roll of paper inset) 1 unit
2. Installation Materials 1 set
3. 2 spare fuses and 1 roll of paper 1 set

### Option

1. NAVTEX Receiver Module OP08-2
2. Active Antenna (Pre-amp Unit) FAX-5 or NX-5(w/15 m 3D-2V)
3. 2.6 m Whip Antenna 04S4176 for use with FAX-5



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

**FURUNO U.S.A., INC.**  
Camas, Washington, U.S.A.  
Phone: +1 360-634-9300 Telefax: +1 360-634-9400

**FURUNO (UK) LIMITED**  
Dennead, Hampshire, U.K.  
Phone: +44 02392-230303 Telefax: +44 02392-230101

**FURUNO FRANCE S.A.**  
Bordeaux-Mérignac, France  
Phone: +33 5 56 13 48 00 Telefax: +33 5 56 13 48 01

**FURUNO ESPAÑA S.A.**  
Madrid, Spain  
Phone: +34 91-725-90-88 Telefax: +34 91-725-98-97

**FURUNO DANMARK AS**  
Hvidovre, Denmark  
Phone: +45 36 77 45 00 Telefax: +45 36 77 45 01

**FURUNO NORGE A/S**  
Ålesund, Norway  
Phone: +47 70 102950 Telefax: +47 70 127021

**FURUNO SVERIGE AB**  
Västra Frölunda, Sweden  
Phone: +46 31-709 89 40 Telefax: +46 31-49 70 93

**FURUNO SUOMI OY**  
Helsinki, Finland  
Phone: +358 9 341 7570 Telefax: +358 9 3417 5716

99073SS Printed in Japan

