

***STANDARD HORIZON***

*Nothing takes to water like Standard Horizon*

# **YCE20**

## **PC Programming Software Reference Manual**

This software is used to program the HX890 VHF FM Marine Handheld Transceiver. With this software, the HX890 operating channels can be quickly and easily programmed from a personal computer.

# Table of Contents

<b>Before Using</b> .....	<b>2</b>	<b>“Edit” Menu</b> .....	<b>28</b>
System Requirements .....	2	“Model” .....	28
<b>Installation and Removal</b>		<b>“Transfer” Menu</b> .....	<b>29</b>
<b>of the Program</b> ...	<b>2</b>	“Read from Radio” .....	29
Installing the YCE20		“Program to Radio” .....	29
PC Programming Software ...	2	<b>“Option” Menu</b> .....	<b>29</b>
To remove the “Programming		<b>“Help” Menu</b> .....	<b>29</b>
Software” from the computer ...	2	<b>Channel List (USA)</b> .....	<b>30</b>
<b>Startup of the Program</b> .....	<b>2</b>	<b>Channel List (Canada)</b> .....	<b>31</b>
To close the YCE20 .....	2	<b>Channel List (International)</b> .....	<b>32</b>
<b>Connecting HX890 to a Computer</b>		<b>Channel List (UK)</b> .....	<b>33</b>
<b>and Entering CP Mode</b> ...	<b>3</b>	<b>Channel List (Belgium)</b> .....	<b>34</b>
<b>Model Setup</b> .....	<b>4</b>	<b>Channel List (Netherlands)</b> .....	<b>35</b>
To select the model .....	4	<b>Channel List (Sweden)</b> .....	<b>36</b>
<b>Main Screen</b> .....	<b>4</b>	<b>Channel List (Germany)</b> .....	<b>37</b>
<b>“Setup Menu” Category</b> .....	<b>5</b>	<b>Channel List (U.S. Weather)</b> .....	<b>38</b>
“DSC Setup” .....	5		
“GM (Group Monitor) Setup” .....	10		
“Waypoint Setup” .....	11		
“Channels Setup” .....	15		
“FM Setup” .....	18		
“GPS Setup” .....	19		
“Configuration” .....	21		
“ATIS Setup” .....	23		
<b>“DSC Log Data” Category</b> .....	<b>24</b>		
“DSC Log Data” .....	24		
<b>“GPS Log Data” Category</b> .....	<b>26</b>		
<b>“File” Menu</b> .....	<b>27</b>		
“New” .....	27		
“Open” .....	27		
“Save” .....	27		
“Save As...” .....	27		
“Print” ► “Print” .....	27		
“Print” ► “Print Option” .....	27		
“Print to File” .....	28		
“Exit” .....	28		

**Important Notice:** You assume full responsibility for the use of the YCE20.

The company and product names in this manual are trademarks and/or registered trademarks of their respective companies.

## Before Using

### System Requirements

#### Supported Operating Systems

- Microsoft® Windows® 10 (32 bit/64 bit)
- Microsoft® Windows® 8.1 (32 bit/64 bit)
- Microsoft® Windows® 7 (32 bit/64 bit)

#### Up to 20 M bytes of free hard disk drive space

#### USB port (USB 1.1/ USB 2.2)

#### .NET Framework 3.5 or 4.0

#### USB Cable (**T9101648**) supplied with the **HX890**

This reference manual was created using the Windows® 7 operating system. Operations and screen examples may vary based on another operating system.

## Installation and Removal of the Program

### Installing the YCE20 PC Programming Software

1. Download the **YCE20** PC Programming Software from the YAESU website, then decompress and save the files to a folder on the computer. Note that all the files must remain in the same folder.
2. Run “YCE20\_XXXXX\_setup.exe” in the same folder as the decompressed files.
3. Follow the instructions on the computer screen.  
If the YCE20 programmer is successfully installed, a shortcut icon “YCE20” will appear on the computer desktop. The instruction screen for installing the HX890 device driver will also appear.
4. Follow the instructions on the computer screen.  
The device driver will be installed.

### To remove the “Programming Software” from the computer

1. Click [**Start**] and then “**Control Panel**”.
2. Click “**Programs**” and then “**Remove Programs**”.
3. Select “**YCE20**” then click the menu item “**Remove**”.

## Startup of the Program

Double-click the “**YCE20**” icon on the desktop of your computer, or click “**YCE20**” in the Start menu displayed by clicking the [**Start**] button.

### To close the YCE20

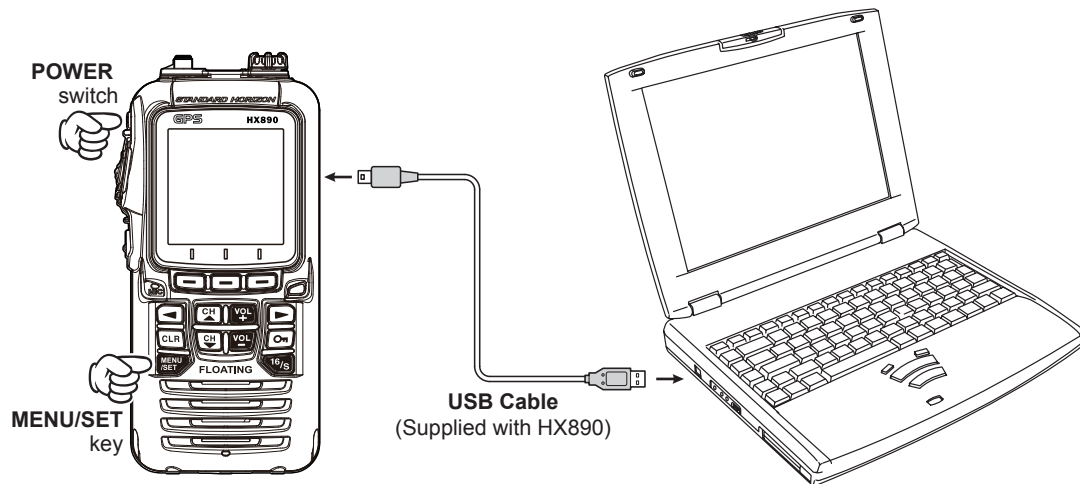
Click the [**X**] button in the top right corner of the YCE20 window, or click “**Exit**” in the “**File**” menu of the YCE20.


## Connecting HX890 to a Computer and Entering CP Mode

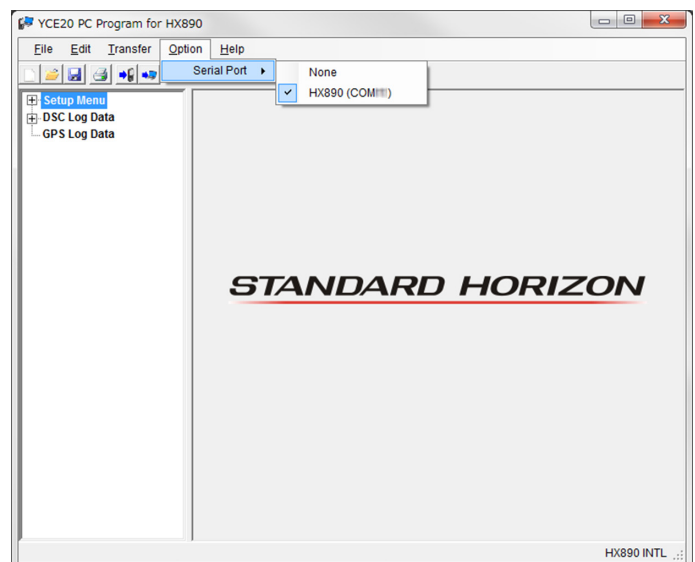
To use the **YCE20** programmer, connect the **HX890** to the computer and enter the CP mode.

1. Turn the transceiver OFF.
2. Connect the computer to the transceivers **DATA** jack using the USB Cable (**T9101648**) supplied with the **HX890**, as shown below.
3. Press and hold the [**MENU/SET**] key while turning the transceiver On, to enter the CP mode.

The transceiver will beep and display “**CP MODE**” on the LCD.



4. Start the **YCE20** program and click “**Option**”.
5. Place the mouse cursor over “**Serial Port**”, then select “**HX890 (COMxx)**” from the menu.
6. Click the  button or click “**Transfer**”, then select “**Read from Radio**”.

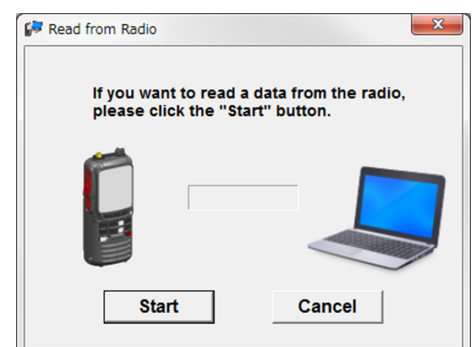


The “**Read from Radio**” screen will appear.

7. Click [**Start**].

In the left panel of YCE20, the setting menu will appear.

**Note:** *YCE20 cannot be used when HX890 is not connected.*

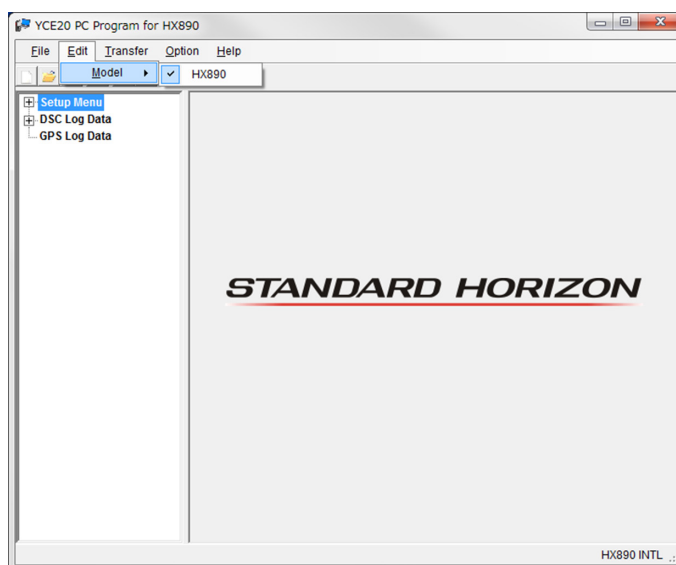


## Model Setup

Items and values available in the **YCE20** program depend on the model of the radio and the region of the world where it is to be used.

### To select the model

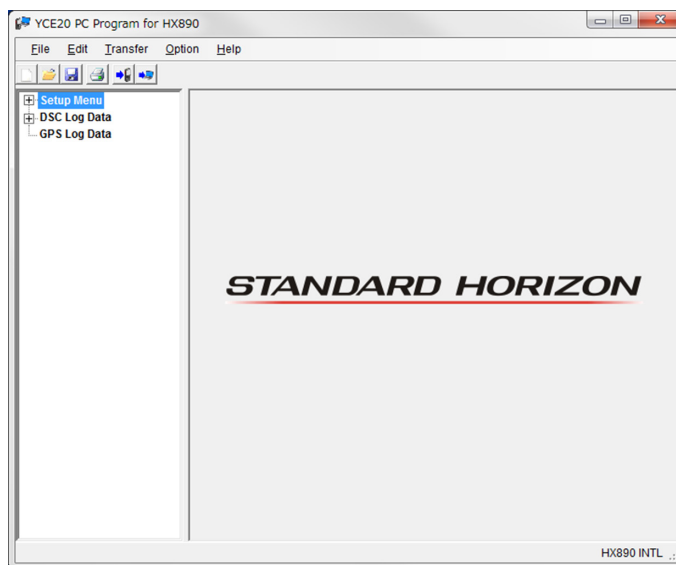
1. Click “**Edit**” on the menu bar.
2. Select “**HX890**” under the “**Model**” item.



## Main Screen

The YCE20 main screen consists of two major sections: the **System Tree View** (left pane) and the list of detailed settings or entries of each category (right pane).

The **System Tree View** includes five categories: “**Setup Menu**”, “**DSC Log Data**”, “**GPS Log Data**”, “**Advanced Setup**”, and “**EXP Channels**”.



## “Setup Menu” Category

Double-click the “**Setup**” category to display the setup list (“**DSC Setup**”, “**GM Setup**”, “**Waypoint Setup**”, “**Channels Setup**”, “**FM Setup**”, “**GPS Setup**” and “**Configuration**”), then click the desired item to display its contents.

### “DSC Setup”

This setting includes the parameters set in the DSC SETUP menu of the SETUP mode on the **HX890** transceiver.

#### MMSI:

To register the MMSI (your ID).

Enter your 9-digit numeric MMSI, then click [**Save MMSI**].

Click [**Yes**] in the displayed message to register your MMSI. A confirmation message will appear.

Click [**Ok**] to register the MMSI and close the message.

#### **Important Notice:**

**Use of inaccurate MMSI numbers is a violation of FCC rules. Vessel owners must obtain an MMSI from the appropriate source prior to using a DSC radio. Self-assigning an MMSI is prohibited.**

#### **Notes:**

- **Once the MMSI is registered, it cannot be changed. The MMSI will be grayed out. At the same time, the [Save MMSI] button will update to the [Saved MMSI] button.**
- **When the MMSI has been previously registered, a notification window will pop up. Click [Ok] to close the window.**
- **To delete the registered MMSI, click “Advanced Setup” then click “DSC Setup” then click the “DSC Setup 1” tab, and then click “MMSI” followed by the [Clear] button.**

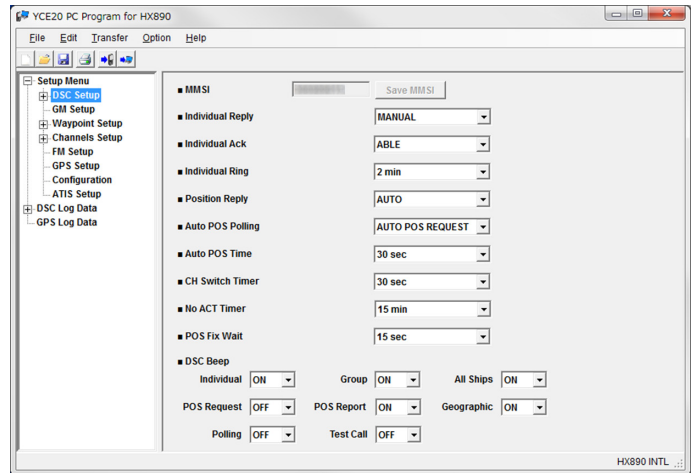
#### Individual Reply:

This parameter sets the transceiver to automatically (default setting), or to manually respond to a DSC Individual call requesting listeners switch to a working channel for voice communications.

When “**MANUAL**” is selected the MMSI of the calling vessel is shown, allowing you to see who is calling. This function is similar to caller ID on a cellular phone.

#### Individual Ack:

The radio can select either reply message “**ABLE**” (default) or “**UNABLE**” when the individual reply setting (described in the previous section) is set to “**Auto**”.



### **Individual Ring:**

The transceiver may be setup to ring like a telephone to alert that a DSC individual call has been received.

Available ring time values are: “**5 sec**”, “**10 sec**”, “**15 sec**”, “**20 sec**”, and “**2 min**”. The default setting is “**2 min**” (2 minutes).

### **Position Reply:**

This parameter sets the transceiver to respond either automatically or manually to a position request call from another vessel.

Available values are “**AUTO**”, and “**MANUAL**”. The default setting is “**AUTO**”.

### **Auto POS Polling:**

The **HX890** has the capability to automatically track seven vessels that have been programmed into the individual directory, or to automatically send its own position information to the programmed stations.

Available values are “**AUTO POS REQUEST**”, or “**AUTO POS REPORT**”. The default setting is “**AUTO POS REQUEST**”.

### **Auto POS Time:**

The **HX890** has the capability to automatically track seven vessels that have been programmed into the individual directory. The auto position polling time interval between position request transmissions may be setup.

Available values are: “**30 sec**”, “**1 min**”, “**2 min**”, “**3 min**”, and “**5 min**”. The default setting is “**30 sec**” (30 seconds).

### **CH Switch Timer:**

When a DSC distress or an all ships (urgency or safety) call is received, the **HX890** will automatically switch to Channel 16. This menu selection allows the automatic switching time to be changed.

Available values are: “**OFF**”, “**10 sec**”, “**30 sec**”, “**1 min**”, and “**2 min**”. The default selection is “**30 sec**” (30 seconds). When “**OFF**” is selected, the “**C**” icon will light up on the screen.

### **No ACT Timer:**

If no key is pressed during the “**MENU**” or “**DSC CALL**” screen, the **HX890** will automatically return to radio operation.

Available values are: “**1 min**”, “**3 min**”, “**5 min**”, “**10 min**”, and “**15 min**”. The default selection is “**15 min**” (15 minutes).

### **POS Fix Wait:**

This menu allows setting the maximum time to wait for position information when receiving a distress call, a POS Report call, or an acknowledgment to a POS request call.

Available values are: “**15 sec**”, “**30 sec**”, “**1 min**”, “**1.5 min**”, and “**2 min**”. The default selection is “**15 sec**” (15 seconds).

## DSC Beep:

This feature allows the alarm beeps to be turned “ON” or “OFF” when a DSC call is received. DSC call selections are as follows.

- Individual
- Group
- All Ships
- POS Request
- POS Report
- Geographic
- Polling
- Test Call

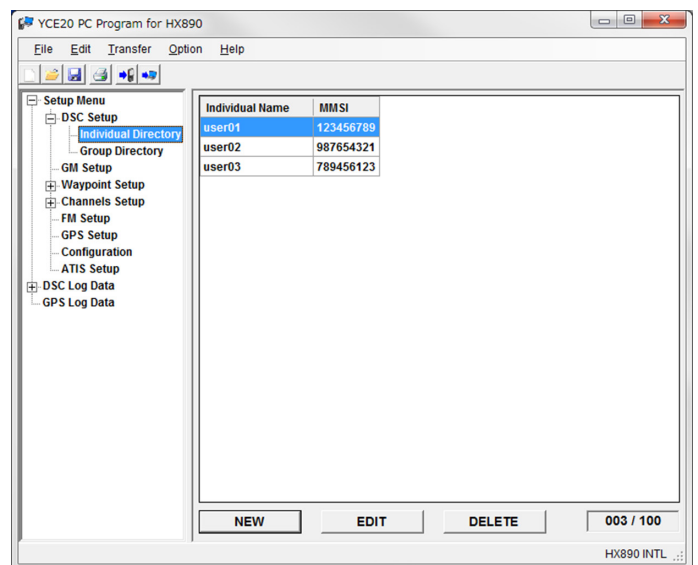
## “Individual Directory”

Double-clicking “DSC Setup” will display the “Individual Directory” menu.

The **HX890** has a DSC directory that allows storing the vessel or person’s name, and the associated MMSI number of stations you wish to contact by: individual calls, auto polling, position request, position report, or polling transmissions. To transmit an individual call, this directory must be programmed with the MMSI information of the contact you wish to call, similar to a cellular phones telephone directory.

Clicking “Individual Directory” will display the entire directory of registered members.

**Note: The items can be sorted by clicking the item name.**





## Individual NAME:

This parameter displays the name of each individual or vessel in the Individual Directory.

## MMSI:

This parameter displays the MMSI number for each vessel in the Directory.

## Registering

1. Click [**NEW**].  
The registration screen will appear.
2. Set the following items.

### Individual Name:

Enter the registration name of the member using up to 15 alphanumeric characters and symbols.

### MMSI:

Enter the 9-digit MMSI number of the member.

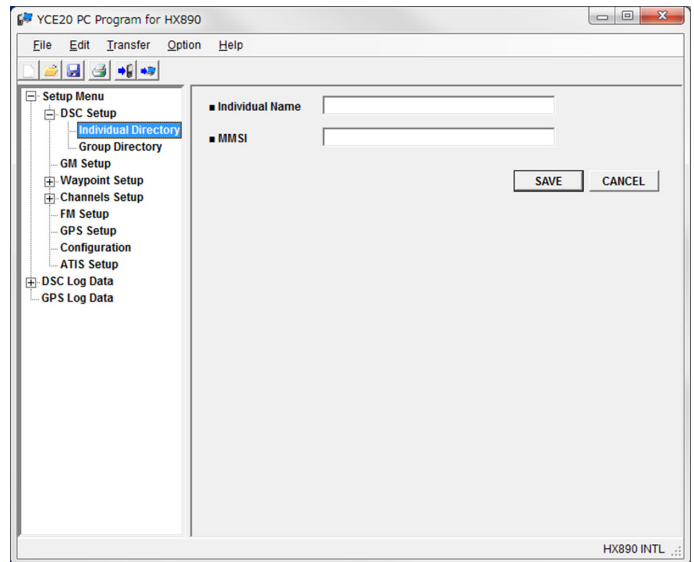
3. Click [**SAVE**].  
The member will be registered.

## Editing

1. Select and click on the member to be edited, then click [**EDIT**].  
The editing screen will appear.
2. Edit each item.  
**Note: For details about each item, see step 2 of “Registering”.**
3. Click [**SAVE**].  
The member information will be changed.

## Deleting

1. Select and click on the member to be deleted, then click [**DELETE**].  
The confirmation screen will appear.
2. Click [**Yes**].  
A message will appear.
3. Click [**Ok**].  
The member will be deleted.



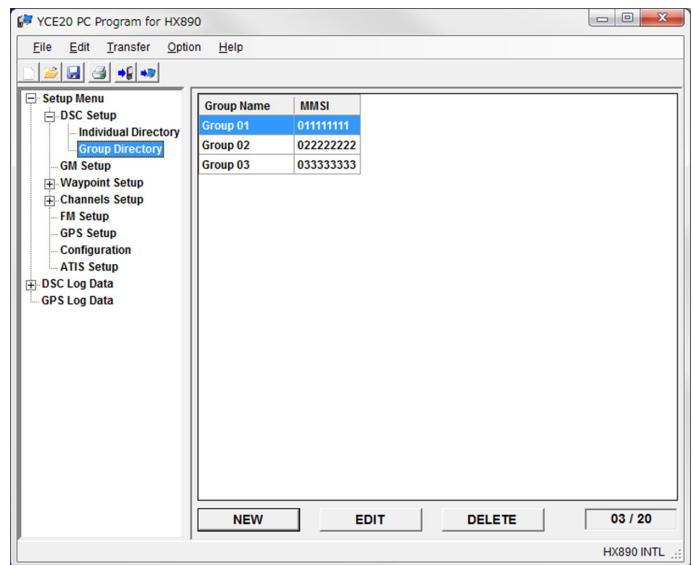
## “Group Directory”

Double-clicking “DSC Setup” will display the “Group Directory” menu.

For this function to operate, the same group MMSI (Maritime Mobile Service Identity Number) must be programmed into all the DSC VHF radios within the group of vessels that will be using this feature.

Clicking “Group Directory” will display the directory of registered Groups.

**Note:** *The items can be sorted by clicking the item name.*



### Group NAME:

This parameter indicates the Group Name for each Group Directory.

### MMSI:

This parameter indicates the MMSI number for each Group Directory.

**Note:** *For details of Group MMSI, see “HX890 Owner’s Manual”.*

## Registering

1. Click [NEW].

The registration screen will appear.

2. Set the following items.

### Group Name:

Enter the registration name of the Group using up to 15 alphanumeric characters and symbols.

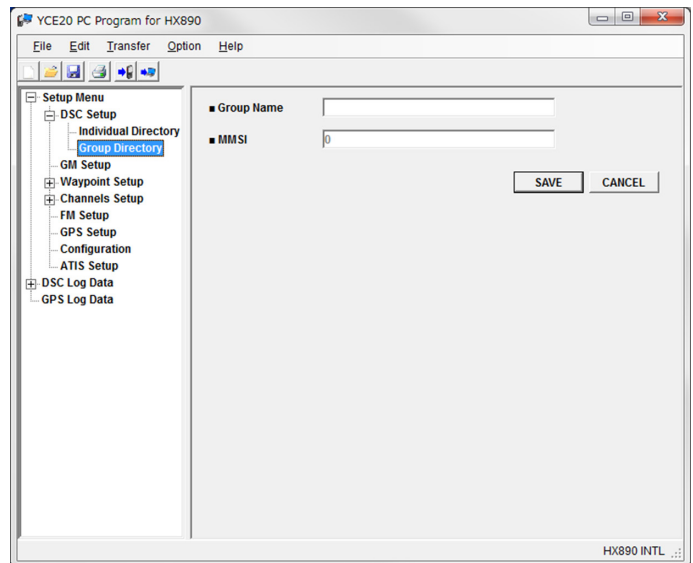
### MMSI:

Enter the 8-digit MMSI number.

**Note:** *The first digit is permanently set to “0” and is entered already.*

3. Click [SAVE].

The Group will be registered.



## Editing

1. Select and click on the Group to be edited, then click [EDIT].

The editing screen will appear.

2. Edit each item.

**Note:** *For details about each item, see step 2 of “Registering”.*

3. Click [SAVE].

The Group information will be changed.

## Deleting

1. Select and click on the Group to be deleted, then click [**DELETE**].  
The confirmation screen will appear.
2. Click [**Yes**].  
A message will appear.
3. Click [**Ok**].  
The Group will be deleted.

## **“GM (Group Monitor) Setup”**

This item includes the parameters that are set in the GM SETUP menu of the SET-UP mode on the **HX890** transceiver.

Clicking “**GM Setup**” will display the directory of registered GM Groups.

**Note:** *The items can be sorted by clicking the item name.*

From “**GM Interval**”, select the polling time interval for the GM function.

Available values are: “**1 min**”, “**3 min**”, “**5 min**”, “**10 min**”, and “**15 min**”. The default selection is “**3 min**” (3 minutes). GM Groups can also be registered, edited and deleted. The **HX890** is capable of storing up to 10 groups with 1 to 9 members each.

## Registering

1. Click [**NEW**].  
The setup screen will appear.

2. Set the following items.

### **GM Name:**

Enter the name of the GM Group using up to 11 alphanumeric characters and symbols.

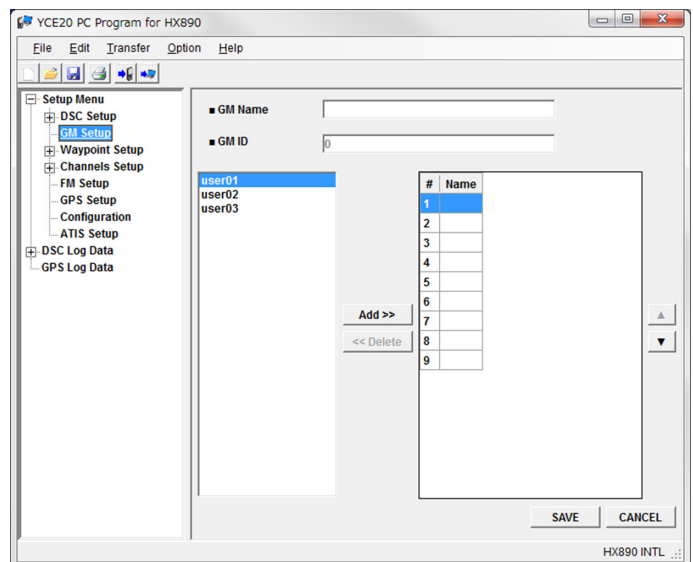
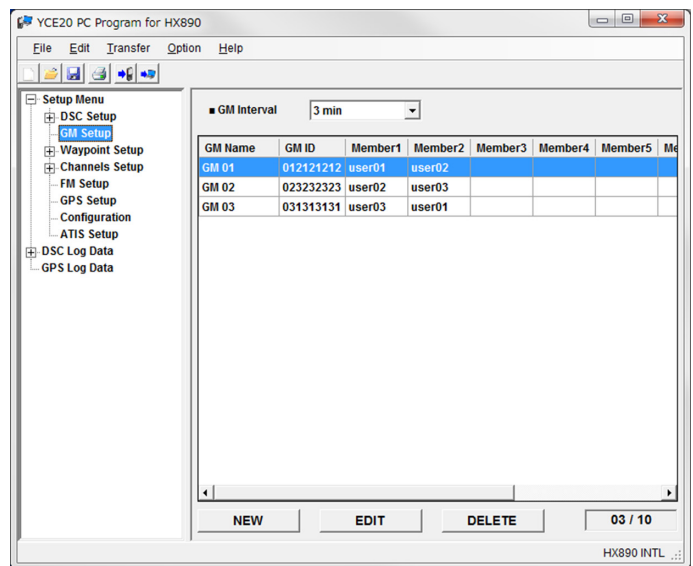
### **MMSI:**

Enter the 8-digit MMSI number of the GM Group.

**Note:** *The first digit is already permanently set to “0”.*

3. Select the member to be registered from the list on the left, then click [**Add>>**].

**Note:** *The members registered to “Individual Directory” are shown in the list on the left.*



The selected member is shown in the directory on the right.

○ To unregister, select the member from the directory on the right, then click [**<<Delete**].

○ To change the registration order, select the member from the directory on the right, then click [**▲**] / [**▼**].

4. Click [**SAVE**].

The GM Group will be registered.

## Editing

1. Select and click on the GM Group to be edited, then click [**EDIT**].

The editing screen will appear.

2. Edit each item.

**Note: For details about each item, see step 2 of “Registering”.**

3. If necessary, follow step 3 of “Registering”.

4. Click [**SAVE**].

The GM Group information will be changed.

## Deleting

1. Select and click the GM Group to be deleted, and then click [**DELETE**].

The confirmation screen will appear.

2. Click [**Yes**].

A message will appear.

3. Click [**Ok**].

The GM Group will be deleted.

## “Waypoint Setup”

This item includes the parameters that are set in the WAYPOINT SETUP menu of the SETUP mode of the HX890 transceiver.

The **HX890** is capable of storing up to 200 waypoints for navigation using the compass page.

### Display Range:

This menu item allows setting of the range on the compass display.

Available values are “**AUTO**”, “**2 nm**”, “**5 nm**”, “**10 nm**”. and “**25 nm**”.

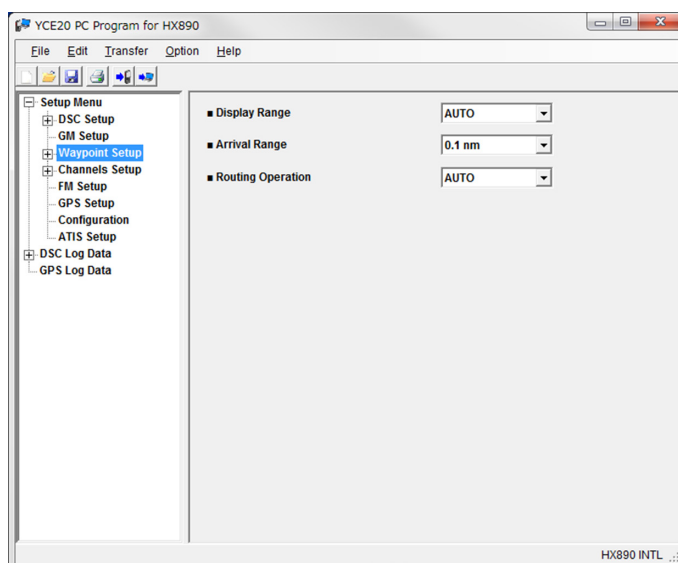
The default setting is “**AUTO**”.

### Arrival Range:

This menu item allows setting of the range within which the **HX890** determines to be the destination.

Available values are: “**0.05 nm**”, “**0.1 nm**”, “**0.2 nm**”, “**0.5 nm**”. and “**1 nm**”.

The default setting is “**0.1 nm**”.



**Note:** From the “GPS Setup” menu, select “Units of Measure Setup” - “Distance” to change the unit.

## Routing Operation:

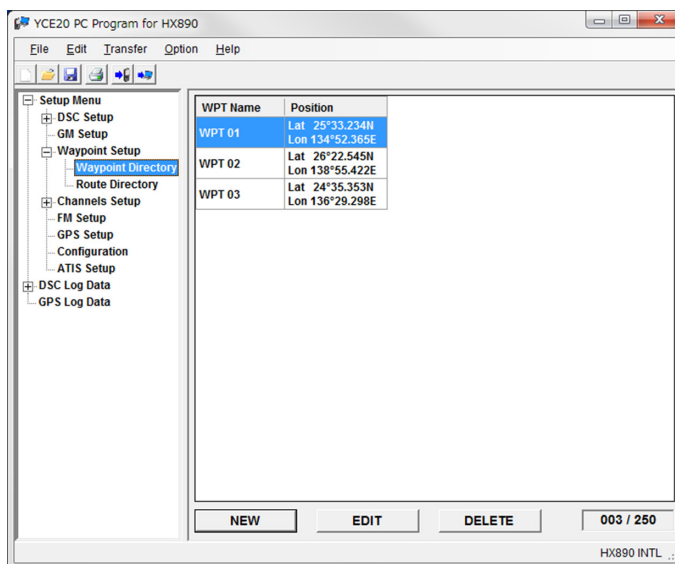
This selection allows starting navigation to the next target automatically or manually when your vessel has arrived at a target point.

Available values are “**AUTO**”, or “**MANUAL**”. The default setting is “**AUTO**”.

## “Waypoint Directory”

Double-clicking “Waypoint Setup” will display the “Waypoint Directory” menu. Clicking “Waypoint Setup” will display the directory of registered Waypoints.

**Note:** The items can be sorted by clicking the WPT Name.



## Registering

1. Click [**NEW**].

The registration screen will appear.

2. Set the following items.

### WPT Name:

Enter the registration name of the Waypoint using up to 15 alphanumeric characters and symbols.

### Position - Lat:

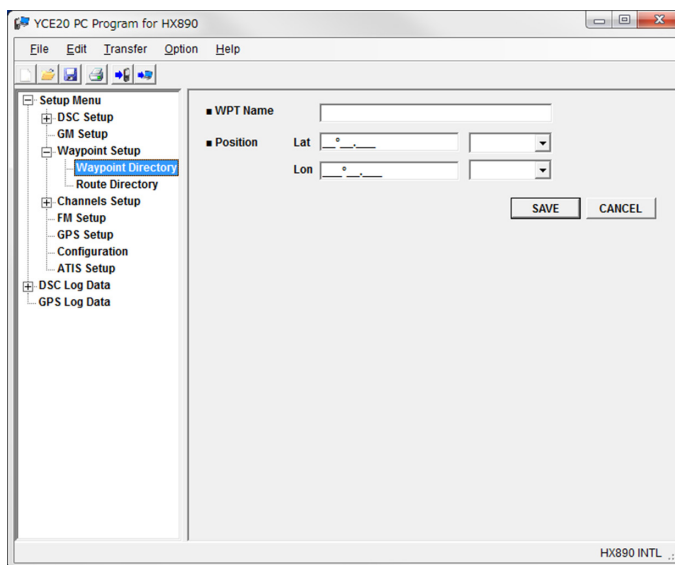
Enter the latitude in “degrees/minutes/seconds” and select “N” or “S” from the dropdown list.

### Position - Lon:

Enter the longitude in “degrees/minutes/seconds” and select “E” or “W” from the dropdown list.

3. Click [**SAVE**].

The Waypoint will be registered.



## Editing

1. Click and select the Waypoint to be edited, then click [**EDIT**].

The editing screen will appear.

2. Edit each item of “WPT Name”.

**Note:** For details about each item, see step 2 of “Registering”.

3. Click [**SAVE**].

The Waypoint information will be changed.

### Deleting

1. Click and select the Waypoint to be deleted, then click [**DELETE**].

The confirmation screen will appear.

2. Click [**Yes**].

A message will appear.

3. Click [**OK**].

The Waypoint will be deleted.

### “Route Directory”

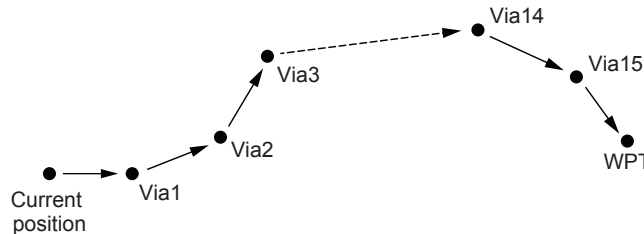
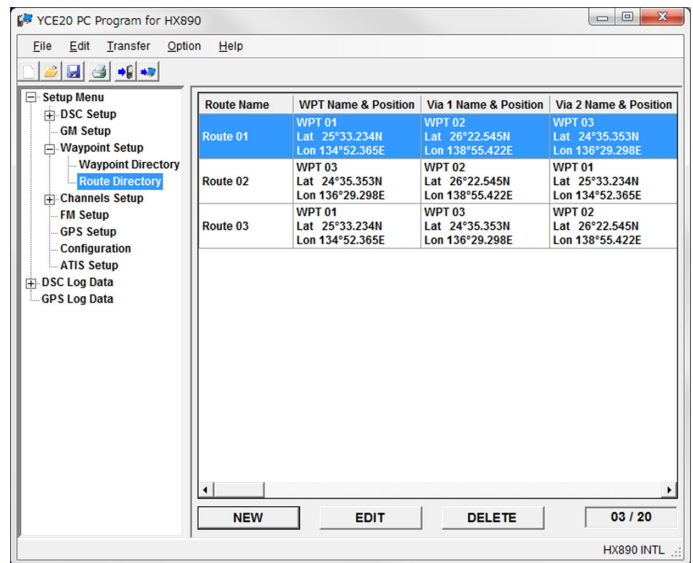
Double-clicking “Waypoint Setup” will display the “Route Directory” menu.

Clicking “Route Directory” will display the directory of registered routes.

**Note:** The items can be sorted by clicking the Route Name.

To create a Route, register its waypoint (WPT) and pass points (Via).

Only 1 waypoint (WPT) and up to 15 pass points (Via) can be registered.



### Registering

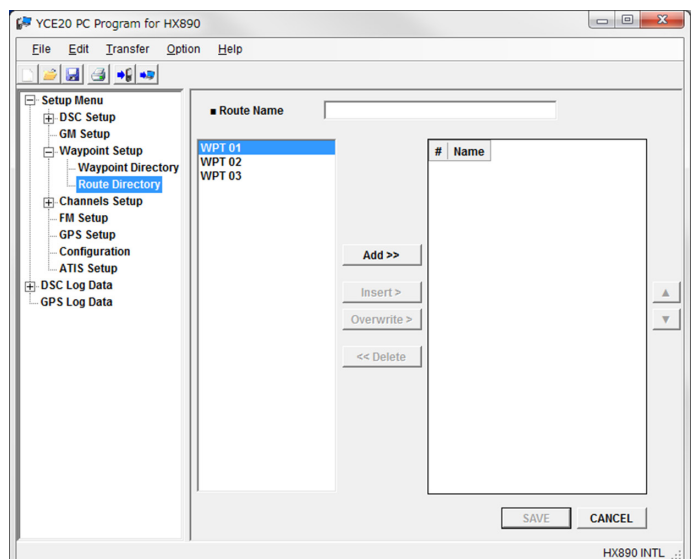
1. Click [**NEW**].

The registration screen will appear.

2. In the “Route Name” box, enter the registration name of the Route using up to 15 alphanumeric characters and symbols.

3. Select the Waypoint to be registered as WPT from the list on the left, then click [**Add**].

The selected Waypoint will appear as WPT in the directory on the right.



**Note: The Waypoint registered to “Waypoint Directory” will be shown in the list on the left.**

4. Select the Waypoint you want to register as Via from the list on the left then click **[Add]**.

The selected Waypoint will be shown as Via in the directory on the right.

**Note: The Waypoint at the top of the list is WPT.**

- To insert a Waypoint above the Waypoint registered in the directory on the right, select the Waypoint to be add from the list on the left, then from the directory on the right, select the Waypoint above which the waypoint is to be inserted. Click **[Insert]**. The new Waypoint will be registered above the Waypoint selected in the directory on the right.
  - To overwrite the Waypoint shown in the directory on the right with another Waypoint, select a Waypoint from the list on the left followed by the Waypoint to be overwritten from the directory on the right, and then click **[Overwrite]**. The Waypoint selected in the directory on the right will be overwritten with the Waypoint selected from the list on the left.
  - To unregister the Waypoint shown in the directory on the right, select the Waypoint, and then click **[Delete]**.
  - To change the Waypoint registration order, select the Waypoint from the directory on the right, then click **[▲] / [▼]**.
5. Click **[SAVE]**.  
The Route will be registered.

### **Editing**

1. Click and select the Route to be edited, then click **[EDIT]**.  
The editing screen will appear.
2. Edit “**Route Name**”.
3. If necessary, follow steps 3 to 4 of “**Registering**”.
4. Click **[SAVE]**.  
The Route information will be changed.

### **Deleting**

1. Select and click on the Route to be deleted, then click **[DELETE]**.  
The confirmation screen will appear.
2. Click **[Yes]**.  
A message will appear.
3. Click **[Ok]**.  
The Route will be deleted.

## “Channels Setup”

This item includes the parameters that are set in the CHANNEL FUNCTION SETUP menu of the SETUP mode on the **HX890** transceiver.

Clicking “**Channels Setup**” will display the “**General**”, “**CH Group 1**”, “**CH Group 2**” and “**CH Group 3**” tabs.

### ● “General” tab

Configure the common settings for Channel Setup.

#### **SCAN Type:**

This selection is used to set the receiver scan mode to either “**PRIORITY**” or “**MEMORY**”. The default setting is “**PRIORITY**”.

#### **SCAN Resume Time:**

This selection is used to select the time the **HX890** waits after a received signal ends before the receiver starts to scan channels again.

Available values are: “**1 sec**”, “**2 sec**”, “**3 sec**”, “**4 sec**”. and “**5 sec**”. The default setting is “**2 sec**” (2 seconds).

#### **Weather Alert:**

Enables/disables the NOAA Weather Alert function. The default setting is “**OFF**”.

#### **Multi Watch:**

This selection is used to select the watch type between “**DUAL**” and “**TRIPLE**”. The default setting is “**DUAL**”.

#### **Noise Cancel:**

Enables/disables the Noise-canceling function of the transmitter and receiver independently.

For each of “**TX**” and “**RX**”, select “**ON**” or “**OFF**”. The default setting is “**Off**”.

#### **AF Pitch CONT:**

This menu item allows setting the internal audio filter for comfortable listening.

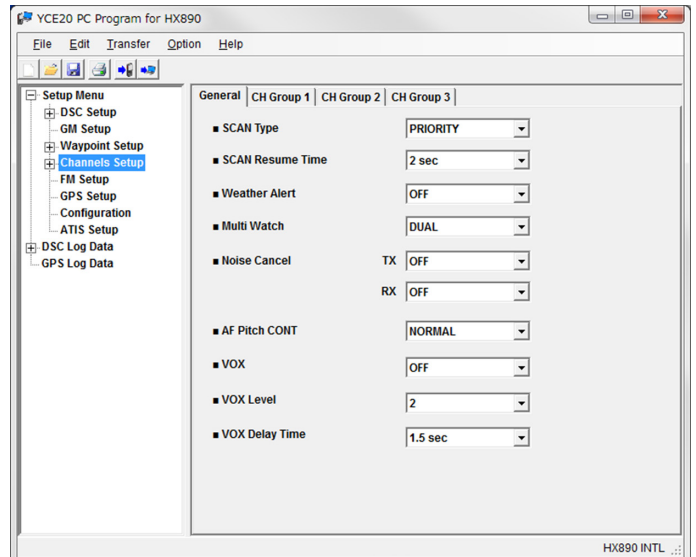
Available values are: “**NORMAL**”, “**HIGH-LOW CUT**”, “**HIGH-LOW BOOST**”, “**LOW BOOST**”. and “**HIGH BOOST**”. The default setting is “**NORMAL**”.

#### **VOX:**

Turn on or off the VOX function. The default setting is “**OFF**”.

#### **VOX Level:**

Selects the VOX gain. Available values are “**0**”, “**1**”, “**2**”, “**3**”. and “**4**”. The default setting is “**2**”.





## VOX Delay Time:

Selects the VOX delay time. Available values are “0.5 sec”, “1 sec”, “1.5 sec”, “2 sec”, and “3 sec”. The default setting is “1.5 sec” (1.5 seconds).

## ● “CH Group 1”, “CH Group 2”, “CH Group 3” Tab Setting

Configure the settings for each channel group.

CH Group 1 is for USA mode.

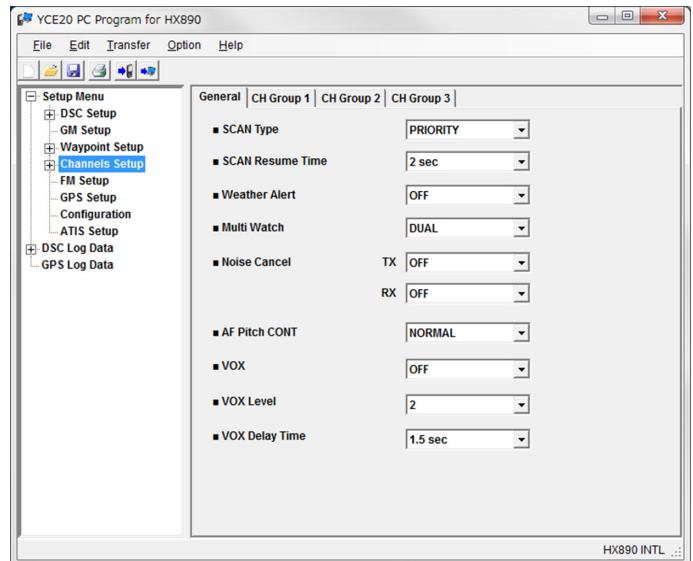
CH Group 2 is for International mode.

CH Group 3 is for Canada mode.

**Note: The setting of items for each CH Group is the same.**

### Group Name:

Displays the Group name. “USA” is displayed for CH Group 1, “INTL” is displayed for CH Group 2, and “CAN” is displayed for CH Group 3.



### Priority CH:

This procedure allows setting the radio to use a different priority channel when priority scanning. By default, the priority channel is set to Channel 16.

### SUB CH:

This procedure allows the radio to assign a different sub channel for instant access. By default, the sub channel is set to Channel 9.

### Preset CH:

Ten preset channels can be set: “Preset 1” to “Preset 10”. The default setting for each Preset CH is “none”.

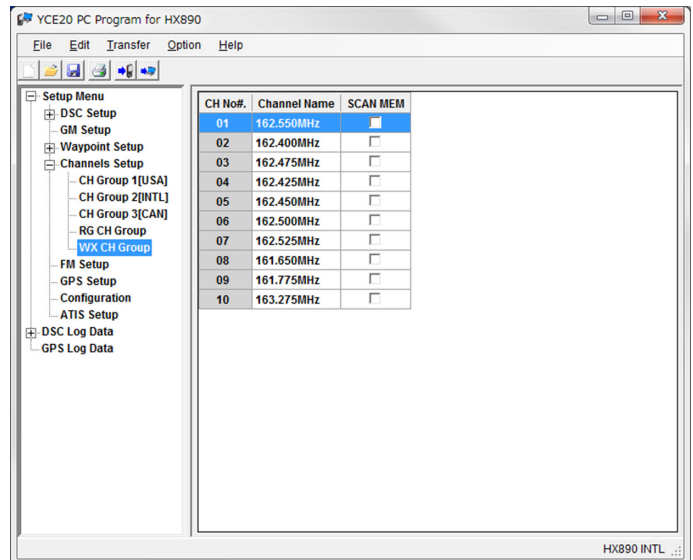
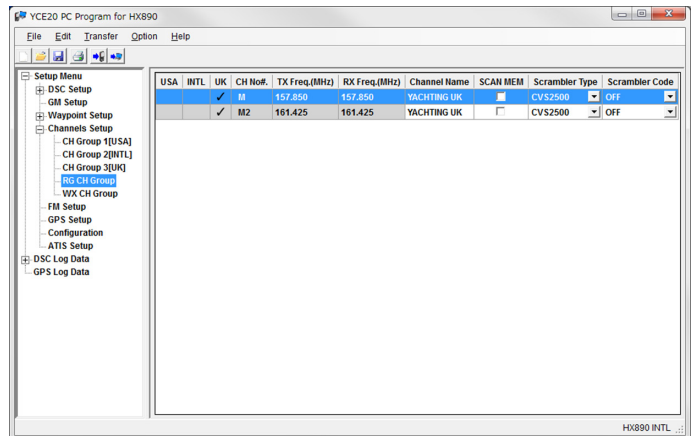
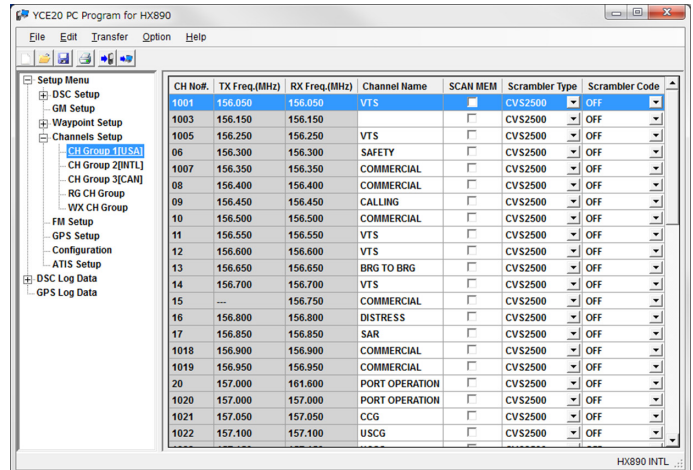
## “Channel Name” & “SCAN Memory” Setup for: “CH Group 1[USA]”, “CH Group 2[INTL]”, “CH Group 3[CAN]” and “WX CH Group”

Double-clicking “Channels Setup” will display the “CH Group 1[USA]”, “CH Group 2[INTL]”, “CH Group 3[CAN]”, “RG CH Group” and “WX CH Group” menus.

Clicking the “CH Group 1[USA]”, “CH Group 2[INTL]”, “CH Group 3[CAN]”, “RG CH Group” or “WX CH Group” menu will display the list of channel numbers and channel names. Check the boxes of the channels you want to designate for memory scan.

### Notes:

- For details of each channel, see “HX890 Owner’s Manual”.
- “WX CH Group” may not appear depending on the country or region in which the radio was purchased.
- “Scrambler Type” and “Scrambler Code” columns may not appear, depending on the country or region in which the radio was purchased.



## “FM Setup”

This item includes the parameter that are set in the FM SETUP menu of the HX890 transceiver SETUP mode

### Registering

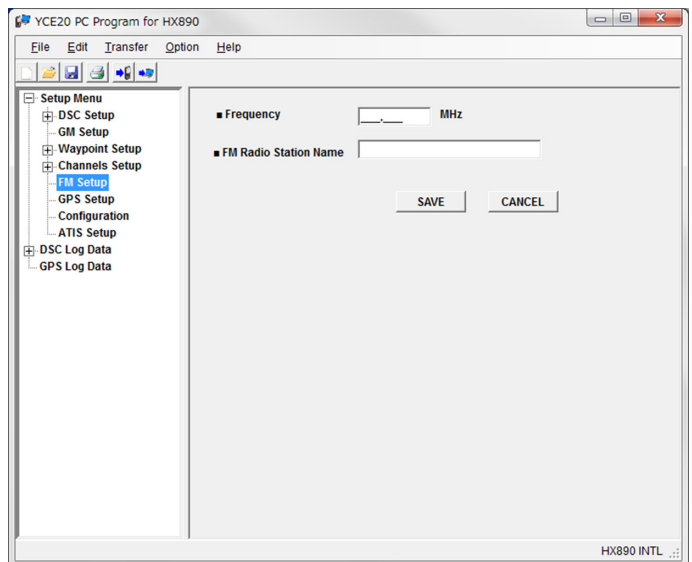
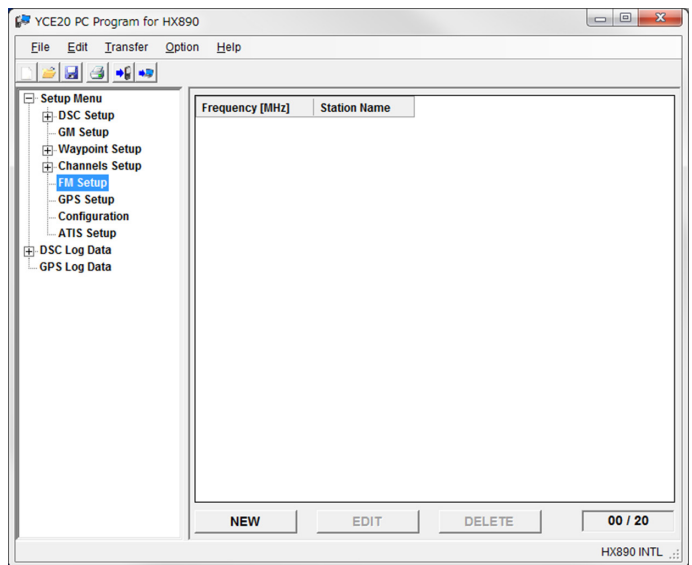
1. Click [**NEW**].  
The registration screen will appear.
2. Set the following items.  
**Frequency:**  
Enter the frequency between 65.000 MHz and 108.000 MHz in steps of 100 kHz.  
**FM Radio Station Name:**  
Enter the FM Radio Station name. You can use up to 12 characters. Uppercase and lowercase characters, numbers and symbols can be used.
3. Click [**SAVE**].  
The FM Radio Station frequency will be registered.

### Editing

1. Click “**FM Setup**” to display the list. On the list, click the FM Radio you want to edit followed by [**EDIT**].  
The editing screen will appear.
2. Edit each item.  
**Note: For details about each item, see step 2 of “Registering”.**
3. Click [**SAVE**].  
The FM Radio information will be changed.

### Deleting

1. Click “**FM Setup**” to display the list. On the list, click the FM Radio you want to delete followed by [**DELETE**].  
The confirmation screen will appear.
2. Click [**Yes**].  
A message will appear.
3. Click [**Ok**].  
The FM Radio will be deleted.



## “GPS Setup”

This item includes the parameters that are set in the GPS SETUP menu of the SETUP mode on the **HX890** transceiver.

The “GPS Setup” mode allows the parameters for the **HX890** internal GPS unit to be customized for personal operating requirements.

### Unit Power:

This selection permits setting the internal GPS unit On or Off. The default setting is “**ON**” to conserve battery power.

### Power Save:

This menu item selects the Battery Save Mode for the internal GPS unit.

Available selections are:

**OFF:** GPS Signals are always being received.

**AUTO:** Activates the GPS receiver automatically when GPS signals are received

**50%:** Activates the GPS receiver for 3 seconds every 3 seconds.

**75%:** Activates the GPS receiver for 3 seconds every 9 seconds.

**90%:** Activates the GPS receiver for 3 seconds every 27 seconds.

The default setting for the Power Save Mode is “**AUTO**”.

### Location Format:

This menu item selects the notation of position information.

Available values are “**ddd°mm’ss**”, “**ddd°mm.mm**” and “**ddd°mm.mmmm**”. The default setting is “**ddd°mm.mmmm**”.

### Time Setup - Area:

This menu selection sets the time to be displayed as UTC or local time with the offset.

Available values are “**UTC**” and “**LOCAL**”. The default setting is “**UTC**”.

### Time Setup - Offset:

Sets the local time offset between UTC (Universal Time Coordinated) and local time shown on the display. The offset is added or subtracted from the time received from the GPS.

### Time Setup - Format:

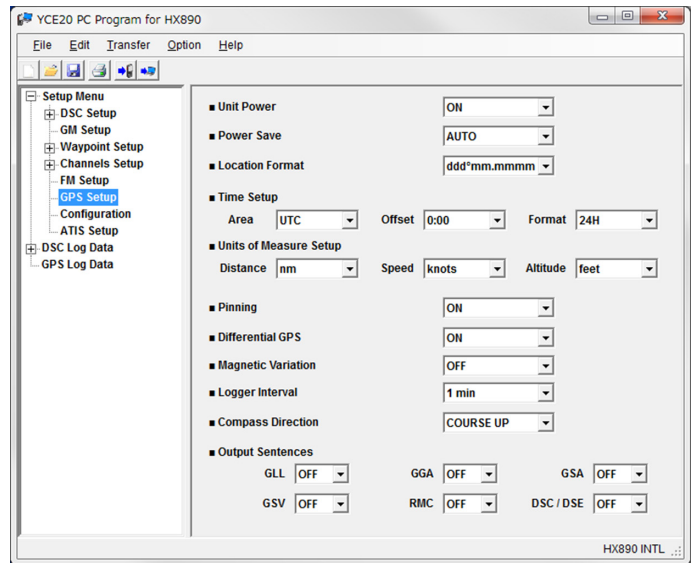
This menu selection set the radio to show time in 12-hour or 24-hour format.

Available values are “**12H**” and “**24H**”. The default setting is “**24H**”.

### Units of Measure Setup - Distance:

This section permits setting the distance units.

Available values are “**nm**”, “**sm**”, and “**km**”. The default setting is “**nm**”.



### **Units of Measure Setup - Speed:**

This section permits setting units of speed per hour.

Available values are “**knots**”, “**mph**”, and “**km/h**”. The default setting is “**knots**”.

### **Units of Measure Setup - Altitude:**

This section permits setting the altitude units.

Available values are “**feet**” and “**meter**”. The default setting is “**feet**”.

### **Pinning:**

This selection is used to enable or disable position updates when the vessel is not underway. The default setting is “**ON**”.

### **Differential GPS:**

This selection enables or disables SBAS such as WAAS, EGNOS and MSAS as some areas (Australia for example) can have problems with GPS reception with SBAS enabled. The default setting is “**ON**”.

### **Magnetic Variation:**

Enables/disables the magnetic variation function. Available values are “**OFF**” and “**ON**”. The default setting is “**OFF**”.

### **Logger Interval:**

Sets the interval time between each logged position.

**5 sec:** (Approx. 8 hours logging time)

**15 sec:** (Approx. 25 hours logging time)

**30 sec:** (Approx. 50 hours logging time)

**1 min:** (Approx. 100 hours logging time)

**5 min:** (Approx. 500 hours logging time)

The default setting is “**1 min**”.

### **Compass Direction:**

This menu item selects the compass direction to be shown on the **HX890** display. Available values are “**NORTH UP**” and “**COURSE UP**”. The default setting is “**COURSE UP**”.

### **Output Sentences:**

This selection is used to setup the NMEA output sentences of the **HX890**. The settable Output Sentences are as follows.

- GLL
- GGA
- GSA
- GSV
- RMC
- DSC / DSE

By default, all the NMEA sentences are turned “**OFF**”.

## “Configuration”

This item includes the parameters set in the CONFIGURATION menu of the SETUP mode on the **HX890** transceiver.

### Display mode:

This menu selects the display mode according to the time of day the radio is in operation. Available values are “**DAYTIME**” and “**NIGHT**”. The default setting is “**DAYTIME**”.

### Dimmer:

This menu selection adjusts the back light intensity.

Available values are “**OFF**”, “**1**”, “**2**”, “**3**”, “**4**”, and “**5**”. The default setting is “**5**”.

### Lamp:

This menu selection is used to setup the illumination time of the display and keypad. Available selections are:

**OFF:** Disables the display/keypad lamp illumination.

**3 / 5 / 10 / 20 / 30 Sec:** Illuminates the display/keypad for the selected time when you press any key (except the **PTT** switch).

**CONTINUOUS:** Illuminates the display/keypad continuously. The default setting is “**3 sec**”.

### Contrast:

The display contrast can be adjusted to suit the operating environment.

Available values are “**0**” to “**30**”. The default setting is “**10**”.

### Key Beep:

This selection is used to select the beep tone volume level when a key is pressed.

Available values are: “**OFF**”, “**1**”, “**2**”, “**3**”, “**4**”, and “**5**”. The default setting is “**3**”.

### Battery Save:

This function allows you to change the battery save mode setting.

Available values are “**OFF**”, “**50%**”, “**70%**”, “**80%**”, and “**90%**”. The default setting is “**70%**”.

### Emergency LED:

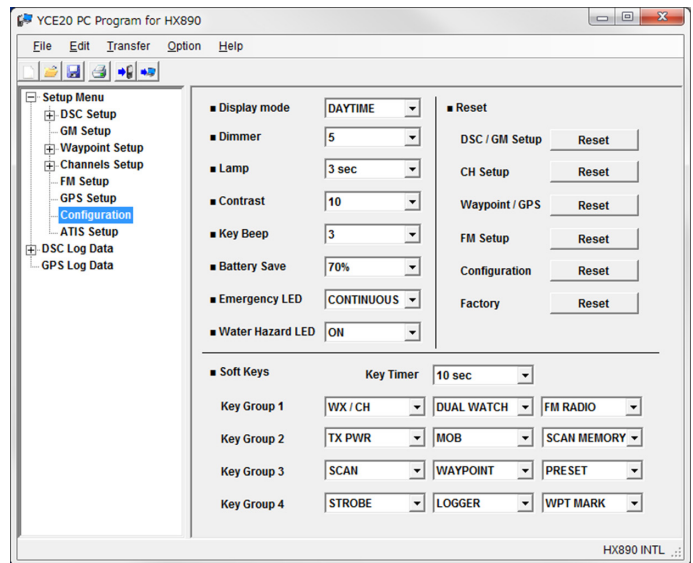
This selection is used to switch and set the function of the emergency LED.

Available values are “**CONTINUOUS**”, “**SOS**”, “**BLINK 1**”, “**BLINK 2**”, and “**BLINK 3**”. The default setting is “**CONTINUOUS**”.

### Water Hazard LED:

This selection is used to switch and set the function of the water hazard LED.

Available values are “**OFF**”, “**ON**”, and “**ON / PWR ON**”. The default setting is “**ON**”.



## Reset:

The memory and settings of the setup categories may be initialized independently, or the transceiver may be returned to the original factory setting.

Click [**Reset**] of the desired category to initialize the settings or to erase the data.

The resettable setting items are as follows:

- **DSC / GM Setup**
- **CH Setup**
- **Waypoint / GPS**
- **FM Setup**
- **Configuration**
- **Factory\***

*\*(The “**Factory**” item may not appear, depending on the country or region in which the radio was purchased.)*

- If a reset is started before connecting the radio to the computer, the settings that have been entered on the **YCE20** programmer will be cleared.
- If a reset is started after connecting the radio to the computer, the radio’s settings and data will be cleared.

**Note: See Page 3 for details about the connection between the radio and the computer.**

- Clicking [**Reset**] will display the confirmation message. Clicking [**Yes**] will reset the settings and cause a confirmation message to appear. Click [**Ok**] in the displayed message.

## Soft Keys:

This menu item allows soft key assignment and setting how long the display will show the soft key icon after a soft key is pressed.

From the “**Key Timer**”, select the soft key icon display duration time. Available values are “**3 sec**”, “**5 sec**”, “**7 sec**”, “**10 sec**”, and “**15 sec**”. The default setting is “**10 sec**”.

From “**Key Group 1**” to “**Key Group 4**”, select the functions to be displayed by the soft key icon. The selectable functions are listed in the below table.

DISPLAY	FUNCTION
NONE	Hides the soft key icon display.
TX PWR	Changes transmit power.
WX / CH	Switches channels between weather and marine.
SCAN	Turns scanning function On or Off.
DUAL WATCH	Turns dual or triple watch scan function On or Off.
WPT MARK	Marks the current position for a “Waypoint”.
COMPASS	Enables the “Compass” display.
WAYPOINT	Enables the Waypoint Navigation.
MOB	Marks the position where a person falls overboard.
SCAN MEMORY	Add or remove channels from memory channel scan.
PRESET	Programs or deletes the preset memory channel.
STROBE	Turns the strobe light LED On or Off.
CH NAME	Edit channel names.
LOGGER	Starts and stops logging of position data.

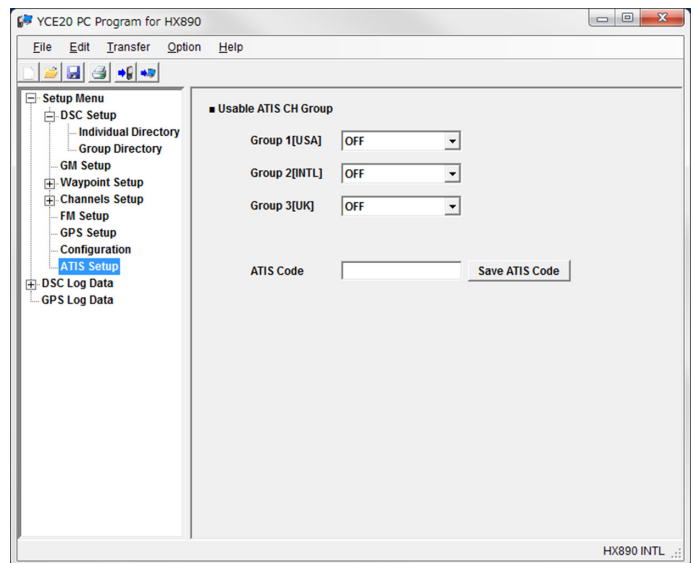
DISPLAY	FUNCTION
NOISE CANCEL	Enables the noise canceling settings display.
FM RADIO	Starts the FM Broadcast radio receiver.
BACKLIT	Enables the Display Mode.

## “ATIS Setup”

ATIS Setup allows you to enter your authorized 10-digit ATIS code as well as Enable or Disable ATIS for each Channel Group: Group1[USA], Group2[INTL], Group3[CAN].

### Note:

- *The “ATIS Setup” menu is displayed only when a checkmark is inserted in the “ATIS Enable” box from “Advanced Setup” - “ATIS Setup”.*
- *To delete the registered ATIS Code, click “Advanced Setup” > “ATIS Setup” > “ATIS Code” followed by the [ATIS Code Clear] button.*



### Usable ATIS CH Group:

For each: “Group 1[USA]”, “Group 2[INTL]”, and “Group 3[CAN]”, select “**ON**” from the dropdown list to enable the ATIS CH Group. Select “**OFF**” when the ATIS CH Group is not used.

To set the ATIS Code, enter the code in the “ATIS Code” text box, then click [**Save ATIS Code**]. The ATIS Code is a 10-digit number.



## “DSC Log Data” Category

Double click the “**DSC Log Data**” category to display the setup list (“**Transmitted Logs**”, “**RX Distress Logs**”, and “**RX Other Call Logs**”), and then click the desired item to display its contents.

Click “**DSC Log Data**” to display the operation screen, where logs can be deleted or downloaded as text files.

### “DSC Log Data”

#### ● Log Data Erase

##### Transmitted Log:

Click [**Erase**], to delete the DSC Transmitted Log. Click [**Yes**] in the confirmation message. The log will be deleted, then Click [**Ok**] in the displayed message.

##### RX Distress Log:

Click [**Erase**], to delete the RX Distress Log. Click [**Yes**] in the confirmation message. The log will be deleted, then Click [**Ok**] in the displayed message.

##### RX Other Call Log:

Click [**Erase**], to delete the RX Other Call Log. Click [**Yes**] in the confirmation message. The log will be deleted, then Click [**Ok**] in the displayed message..

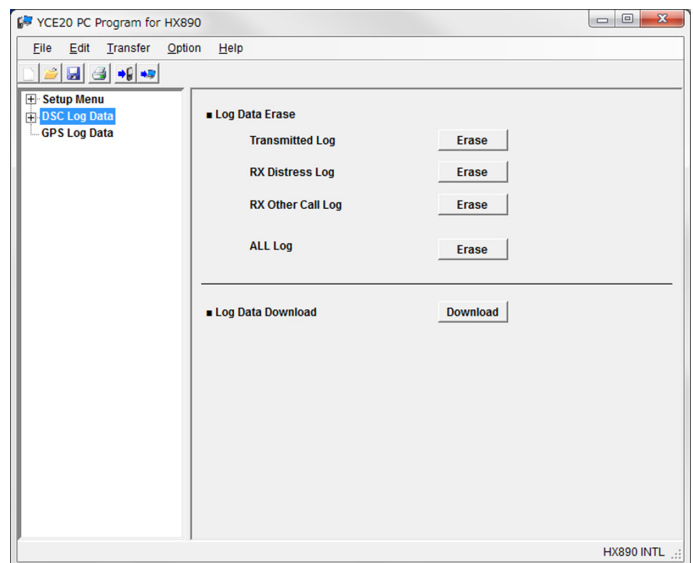
##### All Log:

Click [**Erase**], to delete all logs. Click [**Yes**] in the confirmation message. All logs will be deleted, then Click [**Ok**] in the displayed message.

##### Log Data Download:

Click [**Download**], to save a log as a text file.

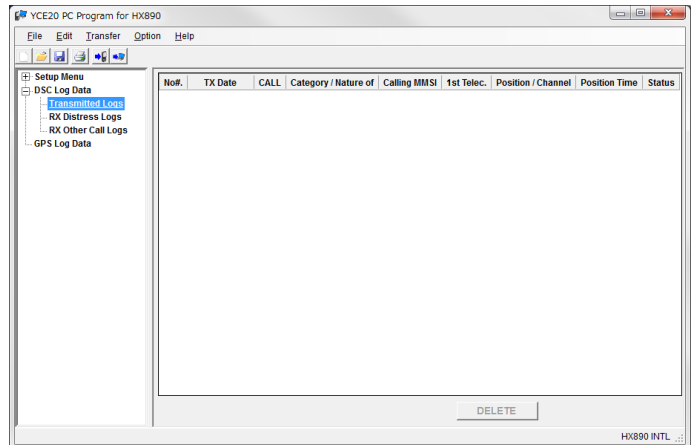
On the displayed destination selection screen, specify the file name and then navigate to the folder where the file is to be saved, then click [**Save**].



## “Transmitted Logs”

Double-click “**DSC Log Data**” to display the “**Transmitted Logs**” menu. Click “**Transmitted Logs**” to display the Transmitted Logs.

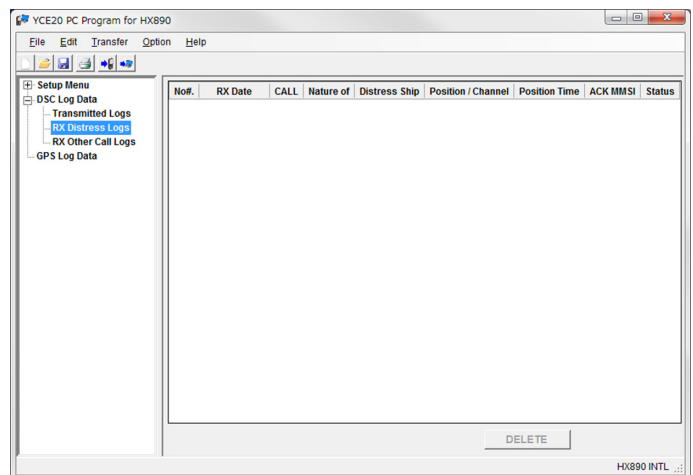
Select the log and click [**DELETE**] to delete the log.



## “RX Distress Logs”

Double-click “**DSC Log Data**” to display the “**RX Distress Logs**” menu. Click “**RX Distress Logs**” to display the RX Distress Logs.

Select the log to be deleted and click [**DELETE**].

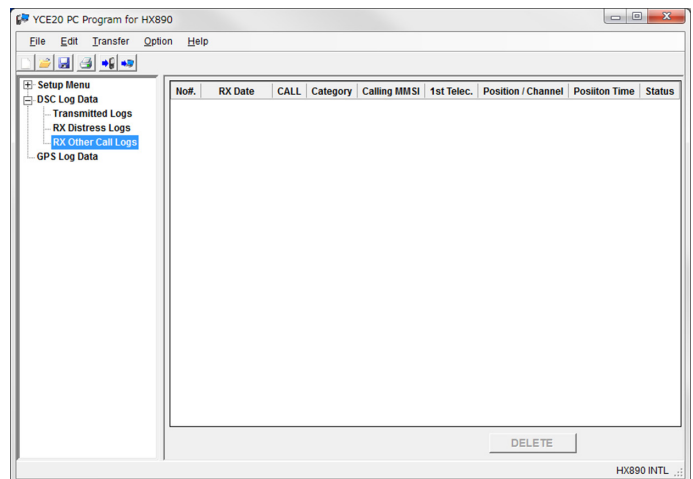


## “RX Other Calls Logs”

Double-clicking “**DSC Log Data**” will display the “**RX Other Calls Logs**” menu.

Clicking “**RX Other Calls Logs**” will display the RX Other Calls Logs.

Select the log to be deleted and click [**DELETE**].



## “GPS Log Data” Category

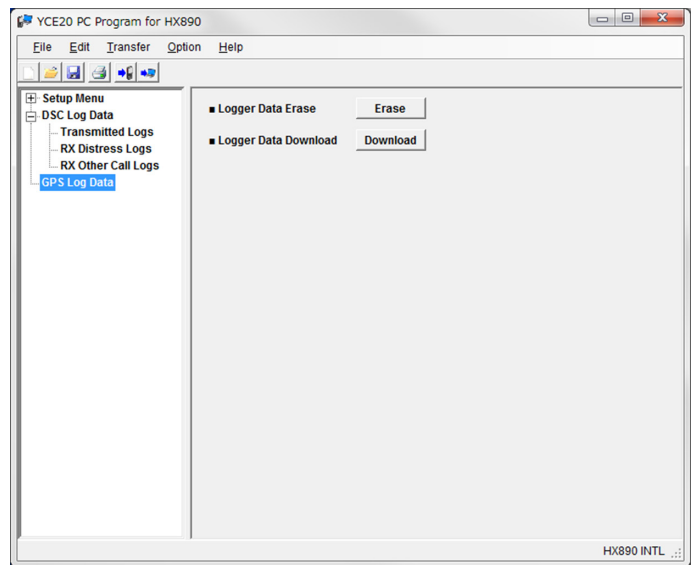
Click “**GPS Log Data**” to display the operation screen, where the desired log may be deleted or downloaded as a text file.

### Logger Data Erase:

Click [**Erase**], to delete the GPS Log. Click [**Yes**] in the confirmation message. The log will be deleted and a message will be displayed. Click [**Ok**] in the displayed message.

### Logger Data Download:

Click [**Download**] to save the GPS Log as a text file, NMEA, KML, or GPX format. On the displayed destination selection screen, specify the file name, data format and navigate to the folder where the file is to be saved, then click [**Save**].



## “File” Menu

This menu performs opening, saving, and printing of files with a “.dat” extension; these files contain the settings and channel memory of the radio.

### “New”

This selection opens a new file.

Click the left mouse button on the “New” parameter in the “File” menu, open the default configuration of the YCE20 programming software.

### “Open”

This selection opens a previously-saved configuration from the computer.

Click the left mouse button on the “Open” parameter in the “File” menu, a pop-up window will display all the current files saved in the specified path. Double click the left mouse button on the desired configuration file to open it.

### “Save”

This selection saves the programming file to the computer with the same name and directory.

Click the left mouse button on the “Save” parameter in the “File” menu, a caution message appears. To agree and over-write the current file, click the left mouse button on the “OK” box.

### “Save As...”

This selection saves the programming session to the computer with a new name.

Click the left mouse button on the “Save As” parameter in the File menu, a pop-up window will show all the current files saved to the specified path.

To save the programming session with a new name, type a file name in the bottom box, then click the left mouse button on the “OK” box.

### “Print” ► “Print”

This selection prints a programming configuration to hard copy.

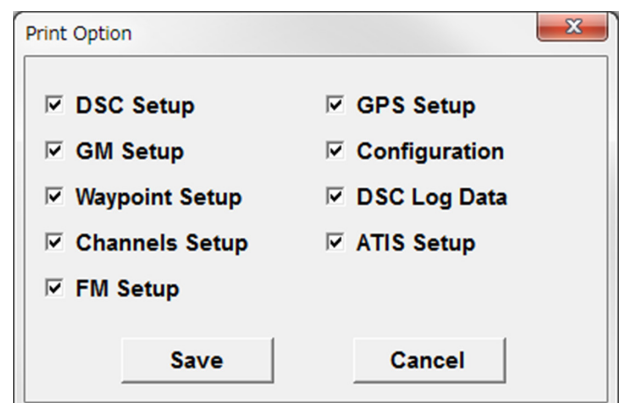
Click the left mouse button on the “Print” parameter in the “File” menu, the “Printer” window will open.

### “Print” ► “Print Option”

This sub-item allows selection of the “System Tree View” data categories to be output for printing or to be saved as plain text.

Only the selected files in the Print Option dialog box “ON (  )” will be output.

After changing the settings of the check boxes, click [Save].



## “Print to File”

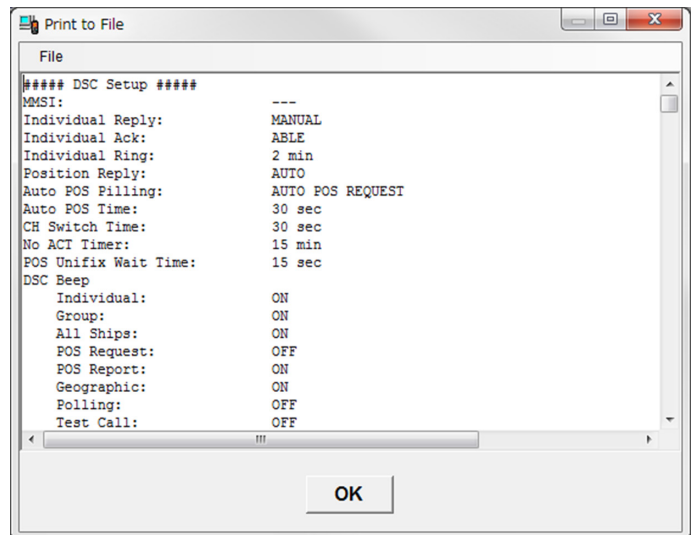
This item allows saving the opened and edited settings in plain text. A window showing the settings in the format to be saved will be displayed.

To save the settings, click the **“File”** menu at the top left of the window, and select **“Save As...”**.

To cancel the saving, click **[OK]** at the bottom of the window.

## “Exit”

This selection quits the program and closes the window. If the present configuration has not been saved to the computer, you will be asked to confirm whether or not to save it.



## **“Edit” Menu**

### “Model”

This item allows selection of the model radio to be programmed with settings and channel memory (see Page 3).


## “Transfer” Menu

This menu facilitates uploading and downloading information to or from a radio. To transfer data to or from the radio, make a proper connection between the computer and the radio (see Page 3 “Connecting HX890 to the Computer and Entering CP Mode”), and then select the “**Transfer**” menu.

**Note:** *The radio must be in CP mode to download or upload data. Press and hold the MENU/SET button on the radio while powering it On, “CP MODE” will be displayed.*

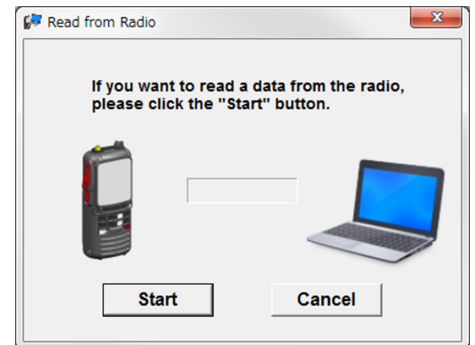
### “Read from Radio”

The “**Read from Radio**” selection uploads the stored data from the radio to the computer.

Select “**Read from Radio**” (or click the  button) to open the pop-up window, then click [**Start**] to start uploading.


When the upload is complete a new pop-up window will appear. Click OK to complete the procedure.

**Note:** *The radio must be in CP mode to read data from the radio.*



### “Program to Radio”

The “**Program to Radio**” selection downloads the data from the computer to the radio.

Select “**Program to Radio**” (or click the  button) to open the pop-up window, then click [**Start**] to start downloading.

When the download is complete a new popup window will appear. Click OK to complete the procedure.

**Note:** *The radio must be in CP mode to program it.*



## “Option” Menu

This menu allows you to set up the program according to your computer’s configuration.

### “Serial Port”

This item selects the communication port used to connect the **HX890**.

If multiple transceivers or USB devices are connected to the computer, all the active ports will be listed here. Select an appropriate port before resetting a transceiver, erasing or reading the GPS log data, or programming or reading the settings in a transceiver.

## “Help” Menu

Click “**Help**”, then select “**About Version**” to display the software version information.

## Channel List (USA)

CH	TX	RX	Simplex/Duplex	LO PWR	CHANNEL NAME
1001	156.050		Simplex	-	VTS
<b>1003</b>	<b>156.150</b>		<b>Simplex</b>	-	
1005	156.250		Simplex	-	VTS
06	156.300		Simplex	-	SAFETY
1007	156.350		Simplex	-	COMMERCIAL
08	156.400		Simplex	-	COMMERCIAL
09	156.450		Simplex	-	CALLING
10	156.500		Simplex	-	COMMERCIAL
11	156.550		Simplex	-	VTS
12	156.600		Simplex	-	VTS
13	156.650		Simplex	LOW	BRG TO BRG
14	156.700		Simplex	-	VTS
15	----	156.750	Simplex	-	COMMERCIAL
16	156.800		Simplex	-	DISTRESS
17	156.850		Simplex	LOW	SAR
1018	156.900		Simplex	-	COMMERCIAL
1019	156.950		Simplex	-	COMMERCIAL
20	157.000	161.600	Duplex	-	PORT OPERATION
1020	157.000		Simplex	-	PORT OPERATION
<b>1021</b>	<b>157.050</b>		<b>Simplex</b>	-	CCG
1022	157.100		Simplex	-	USCG
<b>1023</b>	<b>157.150</b>		<b>Simplex</b>	-	USCG
24	157.200	161.800	Duplex	-	TELEPHONE
25	157.250	161.850	Duplex	-	TELEPHONE
26	157.300	161.900	Duplex	-	TELEPHONE
27	157.350	161.950	Duplex	-	TELEPHONE
28	157.400	162.000	Duplex	-	TELEPHONE
<b>1061</b>	<b>156.075</b>		<b>Simplex</b>	-	CCG
1063	156.175		Simplex	-	VTS
<b>1064</b>	<b>156.225</b>		<b>Simplex</b>	-	COMMERCIAL
1065	156.275		Simplex	-	PORT OPERATION
1066	156.325		Simplex	-	PORT OPERATION
67	156.375		Simplex	LOW	BRG TO BRG
68	156.425		Simplex	-	SHIP-SHIP
69	156.475		Simplex	-	PLEASURE
70	----	156.525	Simplex	-	DSC
71	156.575		Simplex	-	PLEASURE
72	156.625		Simplex	-	SHIP-SHIP
73	156.675		Simplex	-	PORT OPERATION
74	156.725		Simplex	-	PORT OPERATION
75	156.775		Simplex	LOW	PORT OPERATION
76	156.825		Simplex	LOW	PORT OPERATION
77	156.875		Simplex	LOW	PORT OPERATION
1078	156.925		Simplex	-	SHIP-SHIP
1079	156.975		Simplex	-	SHIP-SHIP
1080	157.025		Simplex	-	SHIP-SHIP
<b>1081</b>	<b>157.075</b>		<b>Simplex</b>	-	CCG
<b>1082</b>	<b>157.125</b>		<b>Simplex</b>	-	CCG
<b>1083</b>	<b>157.175</b>		<b>Simplex</b>	-	USCG
84	157.225	161.825	Duplex	-	TELEPHONE
85	157.275	161.875	Duplex	-	TELEPHONE
86	157.325	161.925	Duplex	-	TELEPHONE
87	157.375		Simplex	-	COMMERCIAL
88	157.425		Simplex	-	COMMERCIAL

**NOTE:** Simplex channels, 1003 (03A), 1021 (21A), 1023 (23A), 1061 (61A), 1064 (64A), 1081 (81A), 1082 (82A) and 1083 (83A) CANNOT be lawfully used by the general public in U.S.A. waters.

# Channel List (Canada)

CH	TX	RX	Simplex/Duplex	LO PWR	CHANNEL NAME
01	156.050	160.650	Duplex	-	TELEPHONE
02	156.100	160.700	Duplex	-	TELEPHONE
03	156.150	160.750	Duplex	-	TELEPHONE
1004	156.200		Simplex	-	CCG
1005	156.250		Simplex	-	VTS
06	156.300		Simplex	-	SAFETY
1007	156.350		Simplex	-	COMMERCIAL
08	156.400		Simplex	-	COMMERCIAL
09	156.450		Simplex	-	CALLING
10	156.500		Simplex	-	COMMERCIAL
11	156.550		Simplex	-	VTS
12	156.600		Simplex	-	VTS
13	156.650		Simplex	LOW	BRG TO BRG
14	156.700		Simplex	-	VTS
15	156.750		Simplex	LOW	COMMERCIAL
16	156.800		Simplex	-	DISTRESS
17	156.850		Simplex	LOW	SAR
1018	156.900		Simplex	-	COMMERCIAL
1019	156.950		Simplex	-	COMMERCIAL
20	157.000	161.600	Duplex	LOW	PORT OPERATION
<b>1021</b>	<b>157.050</b>		<b>Simplex</b>	-	CCG
2021	---,---	161.650	Simplex	-	CMB SERVICE
1022	157.100		Simplex	-	USCG
23	157.150	161.750	Duplex	-	INTERNATIONAL
2023	---	161.750	Simplex	-	CMB SERVICE
24	157.200	161.800	Duplex	-	TELEPHONE
25	157.250	161.850	Duplex	-	TELEPHONE
2025	---,---	161.850	Simplex	-	CMB SERVICE
26	157.300	161.900	Duplex	-	TELEPHONE
27	157.350	161.950	Duplex	-	TELEPHONE
28	157.400	162.000	Duplex	-	TELEPHONE
2028	---,---	162.000	Simplex	-	CMB SERVICE
60	156.025	160.625	Duplex	-	TELEPHONE
<b>1061</b>	<b>156.075</b>		<b>Simplex</b>	-	CCG
1062	156.125		Simplex	-	CCG
1063	156.175		Simplex	-	SHIP TO SHIP
64	156.225	160.825	Duplex	-	TELEPHONE
<b>1064</b>	<b>156.225</b>		<b>Simplex</b>	-	COMMERCIAL
1065	156.275		Simplex	-	PORT OPERATION
1066	156.325		Simplex	-	PORT OPERATION
67	156.375		Simplex	LOW	BRG TO BRG
68	156.425		Simplex	-	SHIP TO SHIP
69	156.475		Simplex	-	PLEASURE
70	---,---	156.525	Simplex	-	DSC
71	156.575		Simplex	-	PLEASURE
72	156.625		Simplex	-	SHIP TO SHIP
73	156.675		Simplex	-	PORT OPERATION
74	156.725		Simplex	-	PORT OPERATION
75	156.775		Simplex	LOW	PORT OPERATION
76	156.825		Simplex	LOW	PORT OPERATION
77	156.875		Simplex	LOW	PORT OPERATION
1078	156.925		Simplex	-	SHIP TO SHIP
1079	156.975		Simplex	-	SHIP TO SHIP
1080	157.025		Simplex	-	SHIP TO SHIP
1081	157.075		Simplex	-	CCG
<b>1082</b>	<b>157.125</b>		<b>Simplex</b>	-	CCG
<b>1083</b>	<b>157.175</b>		<b>Simplex</b>	-	CCG
2083	---,---	161.775	Simplex	-	CMB SERVICE
84	157.225	161.825	Duplex	-	TELEPHONE
85	157.275	161.875	Duplex	-	TELEPHONE
86	157.325	161.925	Duplex	-	TELEPHONE
87	157.375		Simplex	-	PORT OPERATION
88	157.425		Simplex	-	PORT OPERATION

**NOTE:** Simplex channels, 1003 (03A), 1021 (21A), 1023 (23A), 1061 (61A), 1064 (64A), 1081 (81A), 1082 (82A) and 1083 (83A) CANNOT be lawfully used by the general public in U.S.A. waters.



## Channel List (International)

CH	TX	RX	Simplex/Duplex	LO PWR	CHANNEL NAME
01	156.050	160.650	Duplex	-	TELEPHONE
02	156.100	160.700	Duplex	-	TELEPHONE
03	156.150	160.750	Duplex	-	TELEPHONE
04	156.200	160.800	Duplex	-	INTERNATIONAL
05	156.250	160.850	Duplex	-	INTERNATIONAL
06	156.300		Simplex	-	SAFETY
07	156.350	160.950	Duplex	-	INTERNATIONAL
08	156.400		Simplex	-	COMMERCIAL
09	156.450		Simplex	-	CALLING
10	156.500		Simplex	-	COMMERCIAL
11	156.550		Simplex	-	VTS
12	156.600		Simplex	-	VTS
13	156.650		Simplex	-	BRG TO BRG
14	156.700		Simplex	-	VTS
15	156.750		Simplex	LOW	COMMERCIAL
16	156.800		Simplex	-	DISTRESS
17	156.850		Simplex	LOW	SAR
18	156.900	161.500	Duplex	-	INTERNATIONAL
19	156.950	161.550	Duplex	-	INTERNATIONAL
1019	156.950		Simplex	-	
2019	161.550		Simplex	-	
20	157.000	161.600	Duplex	-	PORT OPERATION
1020	157.000		Simplex	-	
2020	161.600		Simplex	-	
21	157.050	161.650	Duplex	-	INTERNATIONAL
22	157.100	161.700	Duplex	-	INTERNATIONAL
23	157.150	161.750	Duplex	-	INTERNATIONAL
24	157.200	161.800	Duplex	-	TELEPHONE
25	157.250	161.850	Duplex	-	TELEPHONE
26	157.300	161.900	Duplex	-	TELEPHONE
27	157.350	161.950	Duplex	-	TELEPHONE
28	157.400	162.000	Duplex	-	TELEPHONE
60	156.025	160.625	Duplex	-	TELEPHONE
61	156.075	160.675	Duplex	-	INTERNATIONAL
62	156.125	160.725	Duplex	-	INTERNATIONAL
63	156.175	160.775	Duplex	-	INTERNATIONAL
64	156.225	160.825	Duplex	-	TELEPHONE
65	156.275	160.875	Duplex	-	INTERNATIONAL
66	156.325	160.925	Duplex	-	INTERNATIONAL
67	156.375		Simplex	-	BRG TO BRG
68	156.425		Simplex	-	SHIP TO SHIP
69	156.475		Simplex	-	PLEASURE
70	--- ---	156.525	Simplex	-	DSC
71	156.575		Simplex	-	PLEASURE
72	156.625		Simplex	-	SHIP TO SHIP
73	156.675		Simplex	-	PORT OPERATION
74	156.725		Simplex	-	PORT OPERATION
75	156.775		Simplex	LOW	
76	156.825		Simplex	LOW	
77	156.875		Simplex	-	PORT OPERATION
78	156.925	161.525	Duplex	-	INTERNATIONAL
1078	156.925		Simplex	-	
2078	161.525		Simplex	-	
79	156.975	161.575	Duplex	-	INTERNATIONAL
1079	156.975		Simplex	-	
2079	161.575		Simplex	-	
80	157.025	161.625	Duplex	-	INTERNATIONAL
81	157.075	161.675	Duplex	-	INTERNATIONAL
82	157.125	161.725	Duplex	-	INTERNATIONAL
83	157.175	161.775	Duplex	-	INTERNATIONAL
84	157.225	161.825	Duplex	-	TELEPHONE
85	157.275	161.875	Duplex	-	TELEPHONE
86	157.325	161.925	Duplex	-	TELEPHONE
87	157.375		Simplex	-	PORT OPERATION
88	157.425		Simplex	-	PORT OPERATION

## Channel List (UK)

CH	TX	RX	Simplex/Duplex	LO PWR	CHANNEL NAME
01	156.050	160.650	Duplex	-	TELEPHONE
02	156.100	160.700	Duplex	-	TELEPHONE
03	156.150	160.750	Duplex	-	TELEPHONE
04	156.200	160.800	Duplex	-	INTERNATIONAL
05	156.250	160.850	Duplex	-	INTERNATIONAL
06	156.300		Simplex	-	SAFETY
07	156.350	160.950	Duplex	-	INTERNATIONAL
08	156.400		Simplex	-	COMMERCIAL
09	156.450		Simplex	-	CALLING
10	156.500		Simplex	-	COMMERCIAL
11	156.550		Simplex	-	VTS
12	156.600		Simplex	-	VTS
13	156.650		Simplex	-	BRG TO BRG
14	156.700		Simplex	-	VTS
15	156.750		Simplex	LOW	COMMERCIAL
16	156.800		Simplex	-	DISTRESS
17	156.850		Simplex	LOW	SAR
18	156.900	161.500	Duplex	-	INTERNATIONAL
19	156.950	161.550	Duplex	-	INTERNATIONAL
1019	156.950		Simplex	-	
2019	161.550		Simplex	-	
20	157.000	161.600	Duplex	-	PORT OPERATION
1020	157.000		Simplex	-	
2020	161.600		Simplex	-	
21	157.050	161.650	Duplex	-	INTERNATIONAL
22	157.100	161.700	Duplex	-	INTERNATIONAL
23	157.150	161.750	Duplex	-	INTERNATIONAL
24	157.200	161.800	Duplex	-	TELEPHONE
25	157.250	161.850	Duplex	-	TELEPHONE
26	157.300	161.900	Duplex	-	TELEPHONE
27	157.350	161.950	Duplex	-	TELEPHONE
28	157.400	162.000	Duplex	-	TELEPHONE
60	156.025	160.625	Duplex	-	TELEPHONE
61	156.075	160.675	Duplex	-	INTERNATIONAL
62	156.125	160.725	Duplex	-	INTERNATIONAL
63	156.175	160.775	Duplex	-	INTERNATIONAL
64	156.225	160.825	Duplex	-	TELEPHONE
65	156.275	160.875	Duplex	-	INTERNATIONAL
66	156.325	160.925	Duplex	-	INTERNATIONAL
67	156.375		Simplex	-	BRG TO BRG
68	156.425		Simplex	-	SHIP TO SHIP
69	156.475		Simplex	-	PLEASURE
70	------	156.525	Simplex	-	DSC
71	156.575		Simplex	-	PLEASURE
72	156.625		Simplex	-	SHIP TO SHIP
73	156.675		Simplex	-	PORT OPERATION
74	156.725		Simplex	-	PORT OPERATION
75	156.775		Simplex	LOW	
76	156.825		Simplex	LOW	
77	156.875		Simplex	-	PORT OPERATION
78	156.925	161.525	Duplex	-	INTERNATIONAL
1078	156.925		Simplex	-	
2078	161.525		Simplex	-	
79	156.975	161.575	Duplex	-	INTERNATIONAL
1079	156.975		Simplex	-	
2079	161.575		Simplex	-	
80	157.025	161.625	Duplex	-	INTERNATIONAL
81	157.075	161.675	Duplex	-	INTERNATIONAL
82	157.125	161.725	Duplex	-	INTERNATIONAL
83	157.175	161.775	Duplex	-	INTERNATIONAL
84	157.225	161.825	Duplex	-	TELEPHONE
85	157.275	161.875	Duplex	-	TELEPHONE
86	157.325	161.925	Duplex	-	TELEPHONE
87	157.375		Simplex	-	PORT OPERATION
88	157.425		Simplex	-	PORT OPERATION
M	157.850		Simplex	-	YACHTING UK
M2	161.425		Simplex	-	YACHTING UK

## Channel List (Belgium)

CH	TX	RX	Simplex/Duplex	LO PWR	CHANNEL NAME
01	156.050	160.650	Duplex	-	TELEPHONE
02	156.100	160.700	Duplex	-	TELEPHONE
03	156.150	160.750	Duplex	-	TELEPHONE
04	156.200	160.800	Duplex	-	INTERNATIONAL
05	156.250	160.850	Duplex	-	INTERNATIONAL
06	156.300		Simplex	LOW	SAFETY
07	156.350	160.950	Duplex	-	INTERNATIONAL
08	156.400		Simplex	LOW	COMMERCIAL
09	156.450		Simplex	-	CALLING
10	156.500		Simplex	LOW	COMMERCIAL
11	156.550		Simplex	LOW	VTS
12	156.600		Simplex	LOW	VTS
13	156.650		Simplex	LOW	BRG TO BRG
14	156.700		Simplex	LOW	VTS
15	156.750		Simplex	LOW	COMMERCIAL
16	156.800		Simplex	-	DISTRESS
17	156.850		Simplex	LOW	SAR
18	156.900	161.500	Duplex	-	INTERNATIONAL
19	156.950	161.550	Duplex	-	INTERNATIONAL
1019	156.950		Simplex	-	
2019	161.550		Simplex	-	
20	157.000	161.600	Duplex	-	PORT OPERATION
1020	157.000		Simplex	-	
2020	161.600		Simplex	-	
21	157.050	161.650	Duplex	-	INTERNATIONAL
22	157.100	161.700	Duplex	-	INTERNATIONAL
23	157.150	161.750	Duplex	-	INTERNATIONAL
24	157.200	161.800	Duplex	-	TELEPHONE
25	157.250	161.850	Duplex	-	TELEPHONE
26	157.300	161.900	Duplex	-	TELEPHONE
27	157.350	161.950	Duplex	-	TELEPHONE
28	157.400	162.000	Duplex	-	TELEPHONE
31	157.550	162.150	Duplex	LOW	NED JACHTHAV
60	156.025	160.625	Duplex	-	TELEPHONE
61	156.075	160.675	Duplex	-	INTERNATIONAL
62	156.125	160.725	Duplex	-	INTERNATIONAL
63	156.175	160.775	Duplex	-	INTERNATIONAL
64	156.225	160.825	Duplex	-	TELEPHONE
65	156.275	160.875	Duplex	-	INTERNATIONAL
66	156.325	160.925	Duplex	-	INTERNATIONAL
67	156.375		Simplex	-	BRG TO BRG
68	156.425		Simplex	-	SHIP TO SHIP
69	156.475		Simplex	-	PLEASURE
70	---,---	156.525	Simplex	-	DSC
71	156.575		Simplex	LOW	PLEASURE
72	156.625		Simplex	LOW	SHIP TO SHIP
73	156.675		Simplex	-	PORT OPERATION
74	156.725		Simplex	-	PORT OPERATION
75	156.775		Simplex	LOW	
76	156.825		Simplex	LOW	
77	156.875		Simplex	-	PORT OPERATION
78	156.925	161.525	Duplex	-	INTERNATIONAL
1078	156.925		Simplex	-	
2078	161.525		Simplex	-	
79	156.975	161.575	Duplex	-	INTERNATIONAL
1079	156.975		Simplex	-	
2079	161.575		Simplex	-	
80	157.025	161.625	Duplex	-	INTERNATIONAL
81	157.075	161.675	Duplex	-	INTERNATIONAL
82	157.125	161.725	Duplex	-	INTERNATIONAL
83	157.175	161.775	Duplex	-	INTERNATIONAL
84	157.225	161.825	Duplex	-	TELEPHONE
85	157.275	161.875	Duplex	-	TELEPHONE
86	157.325	161.925	Duplex	-	TELEPHONE
87	157.375		Simplex	-	PORT OPERATION
88	157.425		Simplex	-	PORT OPERATION

## Channel List (Netherlands)

CH	TX	RX	Simplex/Duplex	LO PWR	CHANNEL NAME
01	156.050	160.650	Duplex	-	TELEPHONE
02	156.100	160.700	Duplex	-	TELEPHONE
03	156.150	160.750	Duplex	-	TELEPHONE
04	156.200	160.800	Duplex	-	INTERNATIONAL
05	156.250	160.850	Duplex	-	INTERNATIONAL
06	156.300		Simplex	LOW	SAFETY
07	156.350	160.950	Duplex	-	INTERNATIONAL
08	156.400		Simplex	LOW	COMMERCIAL
09	156.450		Simplex	-	CALLING
10	156.500		Simplex	LOW	COMMERCIAL
11	156.550		Simplex	LOW	VTS
12	156.600		Simplex	LOW	VTS
13	156.650		Simplex	LOW	BRG TO BRG
14	156.700		Simplex	LOW	VTS
15	156.750		Simplex	LOW	COMMERCIAL
16	156.800		Simplex	-	DISTRESS
17	156.850		Simplex	LOW	SAR
18	156.900	161.500	Duplex	-	INTERNATIONAL
19	156.950	161.550	Duplex	-	INTERNATIONAL
1019	156.950		Simplex	-	
2019	161.550		Simplex	-	
20	157.000	161.600	Duplex	-	PORT OPERATION
1020	157.000		Simplex	-	
2020	161.600		Simplex	-	
21	157.050	161.650	Duplex	-	INTERNATIONAL
22	157.100	161.700	Duplex	-	INTERNATIONAL
23	157.150	161.750	Duplex	-	INTERNATIONAL
24	157.200	161.800	Duplex	-	TELEPHONE
25	157.250	161.850	Duplex	-	TELEPHONE
26	157.300	161.900	Duplex	-	TELEPHONE
27	157.350	161.950	Duplex	-	TELEPHONE
28	157.400	162.000	Duplex	-	TELEPHONE
31	157.550	162.150	Duplex	LOW	NED JACHTHAV
37	157.850		Simplex	LOW	YACHTING UK
60	156.025	160.625	Duplex	-	TELEPHONE
61	156.075	160.675	Duplex	-	INTERNATIONAL
62	156.125	160.725	Duplex	-	INTERNATIONAL
63	156.175	160.775	Duplex	-	INTERNATIONAL
64	156.225	160.825	Duplex	-	TELEPHONE
65	156.275	160.875	Duplex	-	INTERNATIONAL
66	156.325	160.925	Duplex	-	INTERNATIONAL
67	156.375		Simplex	-	BRG TO BRG
68	156.425		Simplex	-	SHIP TO SHIP
69	156.475		Simplex	-	PLEASURE
70	---,---	156.525	Simplex	-	DSC
71	156.575		Simplex	LOW	PLEASURE
72	156.625		Simplex	LOW	SHIP TO SHIP
73	156.675		Simplex	-	PORT OPERATION
74	156.725		Simplex	-	PORT OPERATION
75	156.775		Simplex	LOW	
76	156.825		Simplex	LOW	
77	156.875		Simplex	-	PORT OPERATION
78	156.925	161.525	Duplex	-	INTERNATIONAL
1078	156.925		Simplex	-	
2078	161.525		Simplex	-	
79	156.975	161.575	Duplex	-	INTERNATIONAL
1079	156.975		Simplex	-	
2079	161.575		Simplex	-	
80	157.025	161.625	Duplex	-	INTERNATIONAL
81	157.075	161.675	Duplex	-	INTERNATIONAL
82	157.125	161.725	Duplex	-	INTERNATIONAL
83	157.175	161.775	Duplex	-	INTERNATIONAL
84	157.225	161.825	Duplex	-	TELEPHONE
85	157.275	161.875	Duplex	-	TELEPHONE
86	157.325	161.925	Duplex	-	TELEPHONE
87	157.375		Simplex	-	PORT OPERATION
88	157.425		Simplex	-	PORT OPERATION

## Channel List (Sweden)

CH	TX	RX	Simplex/Duplex	LO PWR	CHANNEL NAME
01	156.050	160.650	Duplex	-	TELEPHONE
02	156.100	160.700	Duplex	-	TELEPHONE
03	156.150	160.750	Duplex	-	TELEPHONE
04	156.200	160.800	Duplex	-	INTERNATIONAL
05	156.250	160.850	Duplex	-	INTERNATIONAL
06	156.300		Simplex	-	SAFETY
07	156.350	160.950	Duplex	-	INTERNATIONAL
08	156.400		Simplex	-	COMMERCIAL
09	156.450		Simplex	-	CALLING
10	156.500		Simplex	-	COMMERCIAL
11	156.550		Simplex	-	VTS
12	156.600		Simplex	-	VTS
13	156.650		Simplex	-	BRG TO BRG
14	156.700		Simplex	-	VTS
15	156.750		Simplex	LOW	COMMERCIAL
16	156.800		Simplex	-	DISTRESS
17	156.850		Simplex	LOW	SAR
18	156.900	161.500	Duplex	-	INTERNATIONAL
19	156.950	161.550	Duplex	-	INTERNATIONAL
1019	156.950		Simplex	-	
2019	161.550		Simplex	-	
20	157.000	161.600	Duplex	-	PORT OPERATION
1020	157.000		Simplex	-	
2020	161.600		Simplex	-	
21	157.050	161.650	Duplex	-	INTERNATIONAL
22	157.100	161.700	Duplex	-	INTERNATIONAL
23	157.150	161.750	Duplex	-	INTERNATIONAL
24	157.200	161.800	Duplex	-	TELEPHONE
25	157.250	161.850	Duplex	-	TELEPHONE
26	157.300	161.900	Duplex	-	TELEPHONE
27	157.350	161.950	Duplex	-	TELEPHONE
28	157.400	162.000	Duplex	-	TELEPHONE
60	156.025	160.625	Duplex	-	TELEPHONE
61	156.075	160.675	Duplex	-	INTERNATIONAL
62	156.125	160.725	Duplex	-	INTERNATIONAL
63	156.175	160.775	Duplex	-	INTERNATIONAL
64	156.225	160.825	Duplex	-	TELEPHONE
65	156.275	160.875	Duplex	-	INTERNATIONAL
66	156.325	160.925	Duplex	-	INTERNATIONAL
67	156.375		Simplex	-	BRG TO BRG
68	156.425		Simplex	-	SHIP TO SHIP
69	156.475		Simplex	-	PLEASURE
70	------	156.525	Simplex	-	DSC
71	156.575		Simplex	-	PLEASURE
72	156.625		Simplex	-	SHIP TO SHIP
73	156.675		Simplex	-	PORT OPERATION
74	156.725		Simplex	-	PORT OPERATION
75	156.775		Simplex	LOW	
76	156.825		Simplex	LOW	
77	156.875		Simplex	-	PORT OPERATION
78	156.925	161.525	Duplex	-	INTERNATIONAL
1078	156.925		Simplex	-	
2078	161.525		Simplex	-	
79	156.975	161.575	Duplex	-	INTERNATIONAL
1079	156.975		Simplex	-	
2079	161.575		Simplex	-	
80	157.025	161.625	Duplex	-	INTERNATIONAL
81	157.075	161.675	Duplex	-	INTERNATIONAL
82	157.125	161.725	Duplex	-	INTERNATIONAL
83	157.175	161.775	Duplex	-	INTERNATIONAL
84	157.225	161.825	Duplex	-	TELEPHONE
85	157.275	161.875	Duplex	-	TELEPHONE
86	157.325	161.925	Duplex	-	TELEPHONE
87	157.375		Simplex	-	PORT OPERATION
88	157.425		Simplex	-	PORT OPERATION
L1	155.500		Simplex	-	PLEASURE
L2	155.525		Simplex	-	PLEASURE
L3	155.650		Simplex	-	PLEASURE
F1	155.625		Simplex	-	FISHING
F2	155.775		Simplex	-	FISHING
F3	155.825		Simplex	-	FISHING

# Channel List (Germany)

CH	TX	RX	Simplex/Duplex	LO PWR	CHANNEL NAME
01	156.050	160.650	Duplex	-	NAUTIK
02	156.100	160.700	Duplex	-	NAUTIK
03	156.150	160.750	Duplex	-	NAUTIK
04	156.200	160.800	Duplex	-	NAUTIK
05	156.250	160.850	Duplex	-	NAUTIK
06	156.300		Simplex	LOW	SHIP TO SHP
07	156.350	160.950	Duplex	-	NAUTIK
08	156.400		Simplex	LOW	SHIP TO SHIP
09	156.450		Simplex	-	NAUTIK
10	156.500		Simplex	LOW	SHIP TO SHIP
11	156.550		Simplex	LOW	SHIP TO PORT
12	156.600		Simplex	LOW	SHIP TO PORT
13	156.650		Simplex	LOW	SHIP TO SHIP
14	156.700		Simplex	LOW	SHIP TO PORT
15	156.750		Simplex	LOW	ON-BOARD
16	156.800		Simplex	-	DISTRESS
17	156.850		Simplex	LOW	ON-BOARD
18	156.900	161.500	Duplex	-	NAUTIK
19	156.950	161.550	Duplex	-	NAUTIK
1019	156.950		Simplex	-	
2019	161.550		Simplex	-	
20	157.000	161.600	Duplex	LOW	NAUTIK
1020	157.000		Simplex	-	
2020	161.600		Simplex	-	
21	157.050	161.650	Duplex	-	NAUTIK
22	157.100	161.700	Duplex	-	NAUTIK
23	157.150	161.750	Duplex	-	INTERNATIONAL
24	157.200	161.800	Duplex	-	TELEPHONE
25	157.250	161.850	Duplex	-	TELEPHONE
26	157.300	161.900	Duplex	-	TELEPHONE
27	157.350	161.950	Duplex	-	TELEPHONE
28	157.400	162.000	Duplex	-	TELEPHONE
60	156.025	160.625	Duplex	-	NAUTIK
61	156.075	160.675	Duplex	-	NAUTIK
62	156.125	160.725	Duplex	-	NAUTIK
63	156.175	160.775	Duplex	-	NAUTIK
64	156.225	160.825	Duplex	-	NAUTIK
65	156.275	160.875	Duplex	-	NAUTIK
66	156.325	160.925	Duplex	-	NAUTIK
67	156.375		Simplex	-	NAUTIK
68	156.425		Simplex	-	SHIP TO SHIP
69	156.475		Simplex	-	PLEASURE
70	------	156.525	Simplex	-	DSC
71	156.575		Simplex	LOW	SHIP TO PORT
72	156.625		Simplex	LOW	SHIP TO SHIP
73	156.675		Simplex	-	NAUTIK
74	156.725		Simplex	LOW	SHIP TO PORT
75	156.775		Simplex	LOW	SHIP TO PORT
76	156.825		Simplex	LOW	NAUTIK
77	156.875		Simplex	LOW	SHIP TO SHIP
78	156.925	161.525	Duplex	-	NAUTIK
1078	156.925		Simplex	-	
2078	161.525		Simplex	-	
79	156.975	161.575	Duplex	-	NAUTIK
1079	156.975		Simplex	-	
2079	161.575		Simplex	-	
80	157.025	161.625	Duplex	-	NAUTIK
81	157.075	161.675	Duplex	-	NAUTIK
82	157.125	161.725	Duplex	-	TELEPHONE
83	157.175	161.775	Duplex	-	TELEPHONE
84	157.225	161.825	Duplex	-	TELEPHONE
85	157.275	161.875	Duplex	-	TELEPHONE
86	157.325	161.925	Duplex	-	TELEPHONE
87	157.375		Simplex	-	PORT OPERATION
88	157.425		Simplex	-	PORT OPERATION

## Channel List (U.S. Weather)

CH	FREQUENCY (MHz)	ENABLE/DISABLE	CHANNEL NAME
WX01	162.550	Enable	WX
WX02	162.400	Enable	WX
WX03	162.475	Enable	WX
WX04	162.425	Enable	WX
WX05	162.450	Enable	WX
WX06	162.500	Enable	WX
WX07	162.525	Enable	WX
WX08	161.650	Enable	WX
WX09	161.775	Enable	WX
WX10	163.275	Enable	WX

***STANDARD HORIZON***  
*Nothing takes to water like Standard Horizon*

Copyright 2019  
YAESU MUSEN CO., LTD.  
All rights reserved.

No portion of this manual may be  
reproduced without the permission of  
YAESU MUSEN CO., LTD.

**YAESU MUSEN CO., LTD.**

Tennozu Parkside Building  
2-5-8 Higashi-Shinagawa, Shinagawa-ku, Tokyo 140-0002 Japan

**YAESU USA**

6125 Phyllis Drive, Cypress, CA 90630, U.S.A.

**YAESU UK**

Unit 12, Sun Valley Business Park, Winnall Close  
Winchester, Hampshire, SO23 0LB, U.K.