



# **CE121**

## **PERSONAL PROGRAMMING SYSTEM**

### **REFERENCE MANUAL**

This Personal Programming System is used to program the HX380 VHF/FM Marine Handheld Transceiver. With this Programming System, you can quickly and easily program the Standard Horizon HX380 operating channels from your personal computer.

## INSTALLING OR REMOVAL OF PROGRAM

Minimum System Requirements:

- ☐ IBM®-Compatible PC with Pentium® processor or equivalent.
- ☐ 32 bit Operating system such as Windows® 2000, Windows® XP, or Windows® Vista.
- ☐ CD-ROM Drive
- ☐ Up to 20 Megabytes of free hard disk drive space
- ☐ Mouse or other pointing device
- ☐ 256-color display adapter (24-bit color recommended) and monitor with 640 x 480 resolution or higher

### INSTALLING THE “PROGRAMMING SOFTWARE”

1. Install the CE121 Programming Software onto your computer’s hard disk drive.
2. Click the “**Start**” button and select “**Run ...**” then browse to where the files were saved on the Hard Drive in step 1 and select “**setup.exe**” and press the [ENTER] key.
3. Follow the directions on your computer screen.

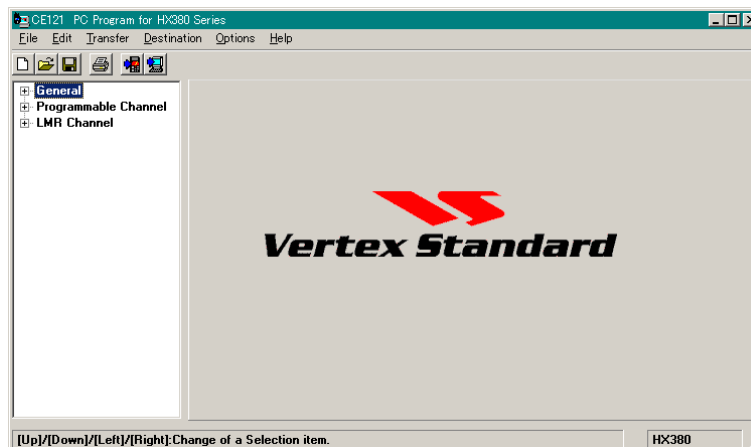
### TO REMOVE THE “PROGRAMMING SOFTWARE” FROM YOUR COMPUTER

1. Click the “**Start**” button and select “**Settings**”, then “**Control Panel**”.
2. Select “**Add/Remove Programs**” from the “Control Panel” page.
3. Select “**CE121**” then click “**Add/Remove**” box.

## MAIN SCREEN

The CE121 Personal Programming System consists of two major sections: the “**SYSTEM TREE VIEW**” (left side) and its lower folder (right side).

The “**SYSTEM TREE VIEW**” consists of two categories: the “*General*” and “*Programmable Channel*”. However, when open the CE121 first time, does not appear the “*LMR Channel*” category from the CE121 Main Screen.



## **“GENERAL” SELECTION**

Double click the left mouse button on the “**General**” selection in the left window of the screen to display its lower folder (“**Available CH Group Setup**”, “**Common Setup**”, and “**ATIS Setup**”), then click the left mouse button on the desired folder to display its contents.

### **AVAILABLE CH (CHANNEL) GROUP SETUP**

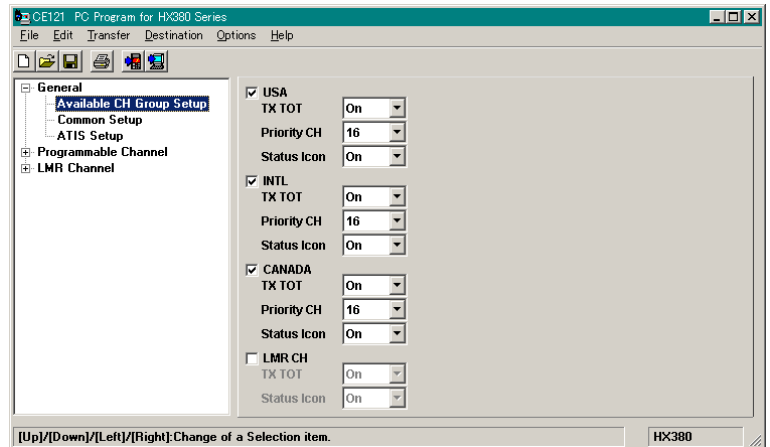
#### **USA / INTL / CAHADA / LMR CH:**

These parameters determine which of the possible Channel Groups shall be “Used (☒)” or “Not Used (☐)” for the radio.

#### **TX TOT:**

This parameter toggles the TX Time-Out Timer feature “**On**” or “**Off**”.

When this parameter is set to “**On**”, if you transmit continuously for more than five minutes, the radio will automatically return to the receive mode, and transmission will be inhibited for 10 seconds.



#### **Priority CH (Channel):**

This parameter selects the Priority Channel to be used during Priority Scan and Dual Watch operation. Available selections are channels “**09**”, “**16**”, and “**Off**.”

#### **Status Icon:**

This parameter selects whether the Status Icon shall appear “(**On**)” or not “(**Off**)” on the display.

## “GENERAL” SELECTION

### COMMON SETUP

#### Starting TX Mode (TX Po Display):

This parameter sets the TX output power used when the radio is first turned on.

Available selections are:

**Lo Po Only:** Sets the TX output power to “LO”, when the radio is turned on.

**Lo Po on Changing CH:** Sets the TX output power to “LO”, when the radio is turned on or when you switch to a different channel.

**Last TX Po:** Sets the TX output power to the same setting used when the radio was turned off.

#### Scanning Function (Scan):

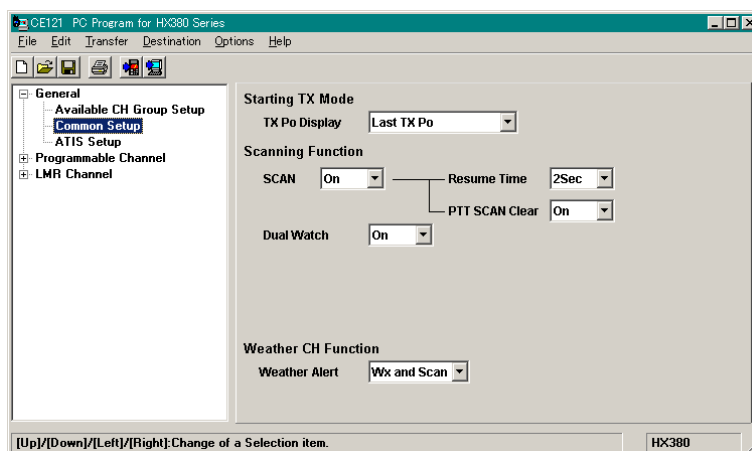
This parameter toggles the Scan feature “On” or “Off”.

#### Scanning Function (Resume Time):

This parameter selects the Scan Resume Time. Available values are “1Sec”, “2sec”, “3sec”, and “Off”.

When this parameter is set to “1Sec”, “2sec”, or “3sec”, the scanner will

hold for the selected period (seconds), then resume whether or not the other station is still transmitting. When this parameter is set to “Off”, the scanner will stop when a signal is received, and will not restart.



#### Scanning Function (PTT SCAN Clear):

This parameter defines whether the Scan function shall be aborted “(On)” or not aborted “(Off)” when the PTT switch is pressed while Scanning is engaged.

#### Scanning Function (Dual Watch):

This parameter toggles the Dual Watch feature “On” or “Off”.

#### Weather CH Function (Weather Alert):

This parameter sets the Weather Alert features. Available selections are:

**Off:** The Weather Alert feature is not enabled.

**On Wx:** The Weather Alert feature is enabled while receiving on a Weather (Wx) Channel.

**On Scan:** The Weather Alert feature is enabled while the Scan feature is activated.

**Wx and Scan:** The Weather Alert feature is enabled during Weather (Wx) Channel reception, or while Scanning is engaged.

## “GENERAL” SELECTION

### ATIS SETUP

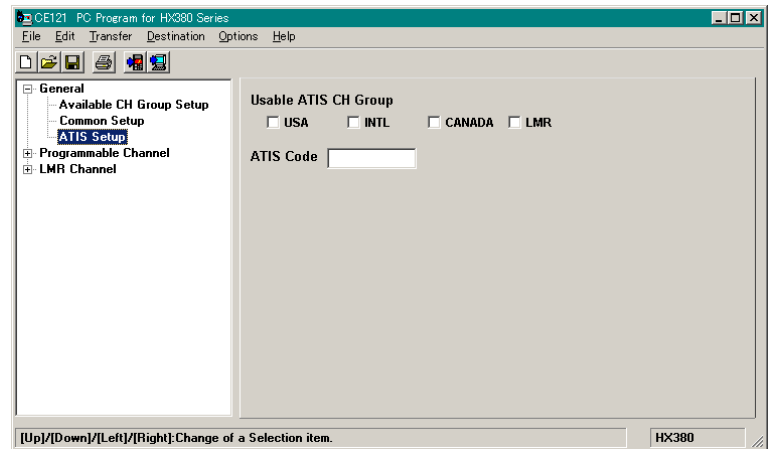
#### USA / INTL / CANADA / LMR:

These parameters define whether the ATIS function shall be Enabled “(☒)” or Disabled “(☐)” for each Channel Group.

#### ATIS Code:

This parameter allows entry of your (authorized) nine-digit ATIS Code.

**Important Notice:** Entering the ATIS Code incorrectly will cause trouble and inconvenience to other ATIS users. Be sure to enter the ATIS code accurately.



## “PROGRAMMABLE CHANNEL” SELECTION

Double click the left mouse button on the “Programmable Channel” selection in the left window of the screen to display its lower folder (“USA”, “INTL”, “CANADA”, and “Weather”), then click the left mouse button on the desired folder to display the “Program Channel List Table”. The “Program Channel List Table” can not be edited.

### “USA”, “INTL”, AND “CANADA” FOLDER

**CH:** *Channel Number*

This parameter indicates the operating channel number.

**RX [MHz]:** *Receive frequency*

This parameter indicates the Receive frequency of the channel.

**TX [MHz]:** *Transmit frequency*

This parameter indicates the Transmit frequency of the channel.

CH	RX[MHz]	TX[MHz]	TX	LOW	UP	DUP	VS	CH Name
01A	156.050	156.050	TX	---	---	---	---	VTS
03A	156.150	156.150	TX	---	---	---	---	VTS
05A	156.250	156.250	TX	---	---	---	---	VTS
06	156.300	156.300	TX	---	---	---	---	SAFETY
07A	156.350	156.350	TX	---	---	---	---	COMMERCIAL
08	156.400	156.400	TX	---	---	---	---	COMMERCIAL
09	156.450	156.450	TX	---	---	---	---	CALLING
10	156.500	156.500	TX	---	---	---	---	COMMERCIAL
11	156.550	156.550	TX	---	---	---	---	VTS
12	156.600	156.600	TX	---	---	---	---	VTS
13	156.650	156.650	TX	LOW	UP	---	---	BRG/BRG
14	156.700	156.700	TX	---	---	---	---	VTS
15	156.750	---	---	---	---	---	---	COMMERCIAL

**TX:** *Enable/Disable the Transmission*

This parameter indicates whether the transmitter shall be Enabled (“TX”) or Disabled (“--”) on this channel.

**LOW:** *Transmitter Power Output*

This parameter indicates the transmitter’s power output. Default values are programmed into each channel, according to international standards.

**UP:** *Transmit Power Selection (User Power)*

This parameter indicates whether transmit power selection capability by the user shall be Enabled (“UP”) or Disabled (“--”).

**DUP:** *Duplex Operation*

This parameter indicates whether duplex operation (separate transmit/receive frequencies) shall be Enabled (“DUP”) or Disabled (“---”).

**VS:** *Voice Scrambler*

This parameter is not available.

**CH Name:** *Alpha/Numeric “Tag”*

This parameter indicates the Alpha/Numeric “Tag” used to identify the channel.

## “PROGRAMMABLE CHANNEL” SELECTION

### “WX CHANNEL” FOLDER

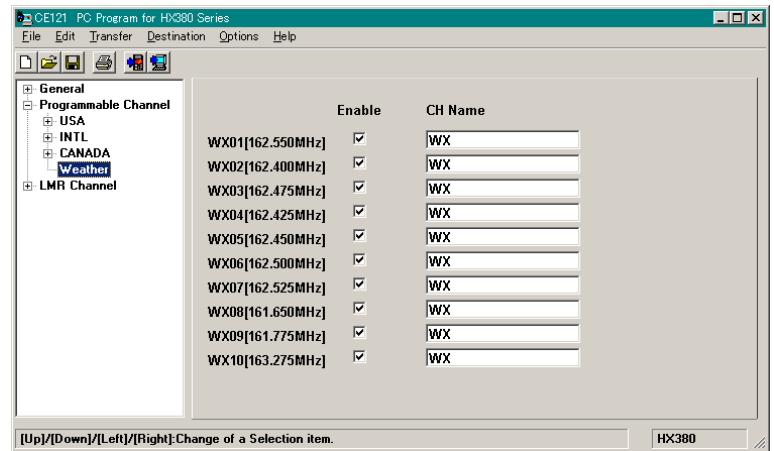
#### Enable: *Channel Operation Status*

This parameter toggles whether the channel shall be Enabled (“☒”) or Disabled (“☐”) for operation.

#### CH Name: *Alpha/Numeric “Tag”*

This field allows entry of the 12-character Alpha/Numeric “Tag” used identify the WX channel.

To enter the Alpha/Numeric Tag, click the left mouse button on this parameter to enable programming, then type the characters of the desired Alpha/Numeric Tag, then press the [ENTER] key to save the programmed “Tag.” The characters to be used include “0 ~ 9”, “A ~ Z”, and some characters.



## “PROGRAMMABLE CHANNEL” SELECTION

### “LMR CHANNEL” FOLDER

**CH:** *Channel Number*

This number is used to identify the channel. The channel numbers occur in sequence, and their order cannot be changed.

**ENABLE:** *Channel Operation Status*

This parameter indicates whether or not this channel can be used for operation.

**DISP:** *Operating Channel Number*

This parameter indicates the operating channel number.

**RX [MHz]:** *Receive frequency*

This parameter indicates the Receive frequency of the channel.

This field will show “---.---” when the channel has not been enabled to allow reception.

**TX [MHz]:** *Transmit frequency*

This parameter indicates the Transmit frequency of the channel.

This field will show “---.---” when the channel has not been enabled to allow transmission.

**LOW:** *Transmitter Power Output*

This parameter indicates the transmitter’s power output. Default values are programmed into each channel, according to international standards.

**UP:** *Transmit Power Selection(*U*ser* P*ower)*

This parameter indicates whether transmit power selection capability by the user shall be Enabled (“**UP**”) or Disabled (“--”).

**VS:** *Voice Scrambler*

This parameter is not available.

CH	ENABLE	DISP	RX[MHz]	TX[MHz]	LOW	UP	VS	CH Name	W/N	RxTone	Comp	TxTone
1	[Enable]	01	156.8000	156.8000	---	---	---		---	---	---	---
2		02	156.8000	156.8000	---	---	---		---	---	---	---
3		03	156.8000	156.8000	---	---	---		---	---	---	---
4		04	156.8000	156.8000	---	---	---		---	---	---	---
5		05	156.8000	156.8000	---	---	---		---	---	---	---
6		06	156.8000	156.8000	---	---	---		---	---	---	---
7		07	156.8000	156.8000	---	---	---		---	---	---	---
8		08	156.8000	156.8000	---	---	---		---	---	---	---
9		09	156.8000	156.8000	---	---	---		---	---	---	---
10		10	156.8000	156.8000	---	---	---		---	---	---	---
11		11	156.8000	156.8000	---	---	---		---	---	---	---
12		12	156.8000	156.8000	---	---	---		---	---	---	---



---

## **“PROGRAMMABLE CHANNEL” SELECTION**

---

**CH Name:** *Alpha/Numeric “Tag”*

This parameter indicates the Alpha/Numeric “Tag” used to identify the channel.

**W/N:** *Transmit Deviation Level*

These parameters indicates the channel spacing environment. The available selections are “Wide (25 kHz Channel Spacing,  $\pm 5$  kHz deviation)” and “Narrow (12.5 kHz Channel Spacing,  $\pm 2.5$  kHz deviation).”

**RX Tone:** *CTCSS/DCS Decoder*

This parameter indicates the Tone Frequency/Code of the CTCSS/DCS Decoder.

**Comp:** *DCS Code Complement*

This parameter indicates whether the DCS Code Complement shall be Enabled (“**CMP**”) or Disabled (“--”).

When this parameter is indicate to “Enabled (**CMP**)”, the radio can be decode the “Normal” and “Inverted” DCS code.

**TX Tone:** *CTCSS/DCS Encoder*

This parameter indicates the Tone Frequency/Code of the CTCSS/DCS Encoder.

## PROGRAMMING CHANNEL WINDOW

This section displays the channel list, and allows selection of the channel on which you wish to make changes to the configuration of the channel data.

Double click the *left* mouse button on the each items (“USA,” “INTL,” “CANADA,” and “LMR Channel”) to display its lower folder.

On the lower folder in the left column, click the *left* mouse button on any channel to open its programming window, so you can program or modify the channel data on that channel.

### “USA”, “INTL”, AND “CANADA” WINDOWS

#### CH Enable: *Enables/Disables the Channel*

This parameter toggles whether this channel shall be Enabled (“☒”) or Disabled (“☐”) for operation.

#### CH Display: *Channel Number*

This parameter indicates the operating channel number.

This parameter can not be edited.

#### Rx Frequency: *Receive frequency*

This parameter indicates the Receive frequency of the channel.

This parameter can not be edited.

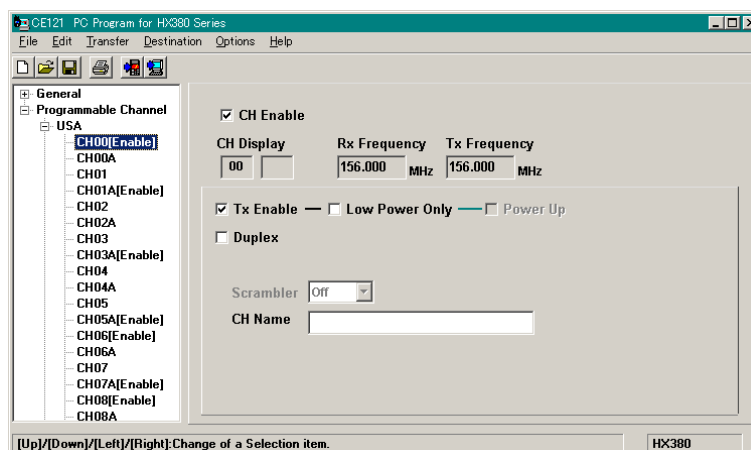
#### Tx Frequency: *Transmit frequency*

This parameter indicates the Transmit frequency of the channel.

This parameter can not be edited.

#### Tx Enable: *Enables/Disables Transmission*

This parameter defines whether the transmitter shall be Enabled (“☒”) or Disabled (“☐”) on this channel.



---

## “PROGRAMMABLE CHANNEL” SELECTION

---

### **Low Power Only:** *Transmitter Power Output*

This parameter toggles the transmitter’s power output on this channel between HI (“☐”) or Low (“☒”). This parameter is ignored when the “**Tx Enable**” parameter is set to Disabled (“☐”).

### **Power Up:** *Transmit Power Selection Capability*

This parameter toggles whether the transmit power selection by the user shall be Enabled (“☒”) or Disabled (“☐”). This parameter is ignored when the “**Low Power Only**” parameter is set to HI (“☐”).

### **Duplex:** *Duplex Operation*

This parameter toggles whether duplex operation (separate transmit/receive frequencies) shall be Enabled (“☒”) or Disabled (“☐”).

### **Scrambler:** *Voice Scrambler*

This parameter is not available.

### **CH Name:** *Alpha/Numeric “Tag”*

This field allows entry of the 12-character Alpha/Numeric “Tag” used to identify the channel.

To enter the Alpha/Numeric Tag, click the left mouse button on this parameter to enable programming, then type the characters of the desired Alpha/Numeric Tag, then press the [ENTER] key to save the programmed “Tag.”

The characters to be used include “0 ~ 9”, “A ~ Z”, and some characters.

## “PROGRAMMABLE CHANNEL” SELECTION

### “LMR CHANNEL” FOLDER

#### CH Enable: *Enables/Disables the Channel*

This parameter toggles whether the channel shall be Enabled (“☒”) or Disabled (“☐”) for operation.

#### CH Display: *Channel Number*

This field allows entry of the operating channel number for the LCD display.

Both box will accept two characters.

Acceptable characters are 0 - 9, A, b, C, d, E, F, G, H, I, J, (K), L, (M), n, o, P, q, r, S, t, U, and y.

**Important Note:** K and M character is use only for the first letter on the left box.

#### Rx Frequency: *Receive frequency*

This parameter allows entry of the channel’s receive frequency. This field will show “---.---” if reception has not been enabled on the channel.

#### Tx Frequency: *Transmit frequency*

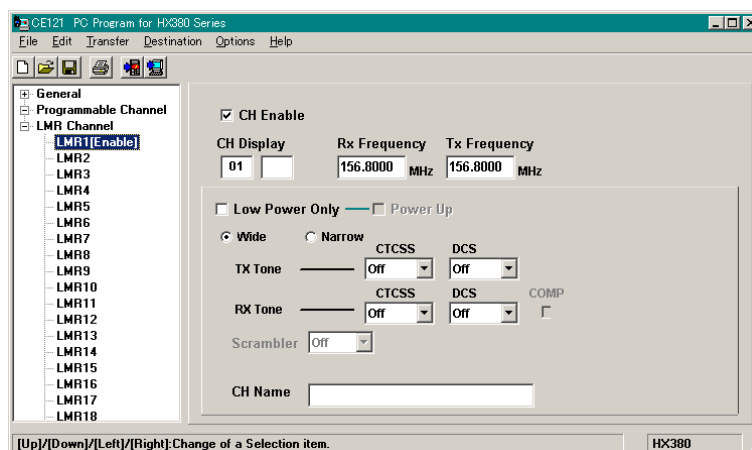
This parameter allows entry of the channel’s transmit frequency. This field will show “---.---” if transmission has not been enabled on the channel.

#### Low Power Only : *Transmitter Power Output*

This parameter toggles the transmitter’s power output on this channel between HI (“☐”) or Low (“☒”).

#### Power Up: *Transmit Power Capability*

This parameter toggles whether the transmit power selection by the user shall be Enabled (“☒”) or Disabled (“☐”). This parameter is ignored when the “**Low Power Only**” parameter is set to Hi (“☐”).



---

## **PROGRAMMING CHANNEL WINDOW**

---

### **Wide/Narrow:** *Transmit Deviation Level*

These parameters define the channel spacing environment between “Wide (25 kHz Channel Spacing,  $\pm 5$  kHz deviation)” and “Narrow (12.5 kHz Channel Spacing,  $\pm 2.5$  kHz deviation).”

### **TX Tone:** *CTCSS/DCS Encoder*

This parameter defines the Tone Frequency/Code of the CTCSS/DCS Encoder.

### **RX Tone:** *CTCSS/DCS Decoder*

This parameter defines the Tone Frequency/Code of the CTCSS/DCS Decoder.

### **COMP:** *DCS Code Complement*

This parameter determines whether the DCS Code Complement shall be Enabled (“☒”) or Disabled (“☐”).

When this parameter is set to Enabled (“☒”), the radio will be able to decode both “Normal” and “Inverted” DCS Codes.

### **Scrambler:** *Voice Scrambler*

This parameter is not available.

### **CH Name:** *Alpha/Numeric “Tag”*

This field allows entry of the 12-character Alpha/Numeric “Tag” used to identify the channel.

To enter the Alpha/Numeric Tag, click the left mouse button on this parameter to enable programming, then type the characters of the desired Alpha/Numeric Tag, then press the [**ENTER**] key to save the programmed “Tag.”


The characters to be used include “0 ~ 9”, “A ~ Z”, and some characters.

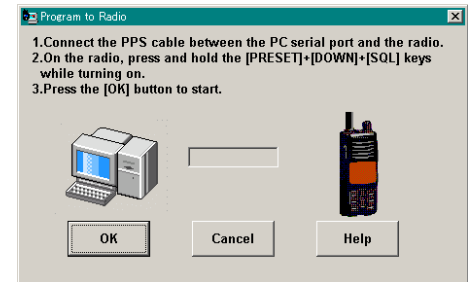
## TRANSFER MENU

This menu performs the Downloading or Uploading information from/to a radio. To Download/Upload data to/from radio, make the proper connections between the computer and radio and turn on the radio before selecting the “**TRANSFER**” menu.

### “Program to Radio” Item


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

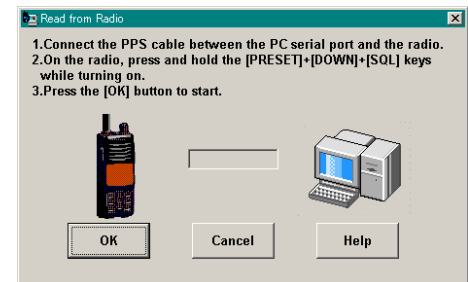
To do this: click the left mouse button on the “**Program to Radio**” item (or the “” icon) to open the pop-up window, then click the left mouse button on the “**OK**” box to download the programming data to the radio.



### “Read from Radio” Item

The “**Read from Radio**” item uploads the programming data from the radio to the computer.

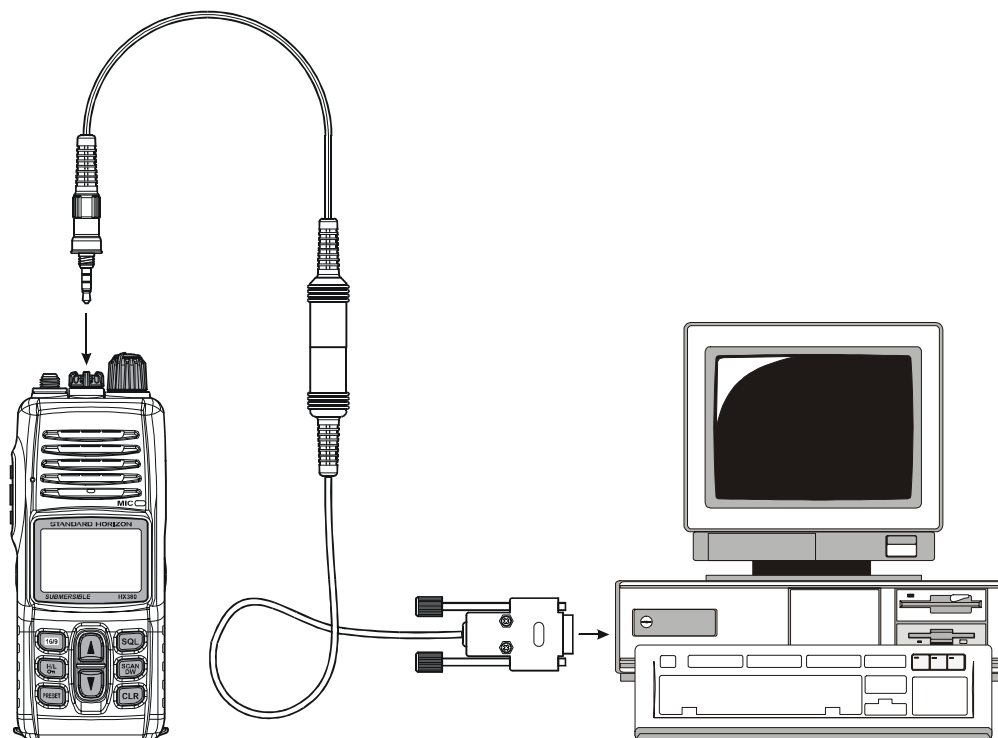
To do this: click the left mouse button on the “**Read from Radio**” item (or the “” icon) to open the pop-up window, then click the left mouse button on the “**OK**” box to upload the programming data from the radio to the computer.



## TRANSFER MENU

### Programming Setup

1. Turn the transceiver off.
2. Connect the computer's serial port and the transceiver's **MIC/SP** jack using the optional **CT-111** Clone Cable.
3. Press and hold in the [**PRESET**], [**▼**], and [**SQL**] keys while turning the transceiver on to enter the programming mode (then "Edt" notification will appear on the LCD).

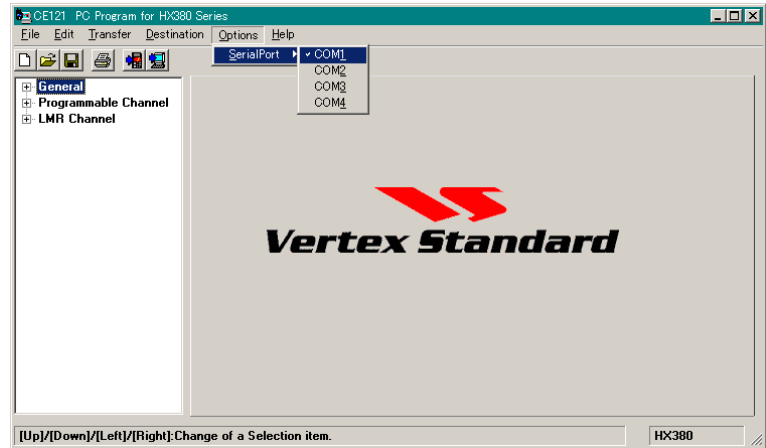


## OPTION MENU

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

### “Serial Port” Item

This item selects the communication port to the PC Programming cable which is connected to the radio. Click the left mouse button on the communication port (“**COM1**,” “**COM2**,” “**COM3**,” or “**COM4**”) which is connected to the PC Programming cable which is connected to the radio.





## CHANNEL LIST (USA)

CH	TX (MHz)	RX (MHz)	S/D	LO PWR	CHANNEL NAME
01 A	156.050	156.050	S	—	VTS
03 A	156.150	156.150	S	—	----
05 A	156.250	156.250	S	—	VTS
06	156.300	156.300	S	—	SAFETY
07 A	156.350	156.350	S	—	COMMERCIAL
08	156.400	156.400	S	—	COMMERCIAL
09	156.450	156.450	S	—	CALLING
10	156.500	156.500	S	—	COMMERCIAL
11	156.550	156.550	S	—	VTS
12	156.600	156.600	S	—	VTS
13	156.650	156.650	S	LO	BRG/BRG
14	156.700	156.700	S	—	VTS
15	—	156.750	S	—	COMMERCIAL
16	156.800	156.800	S	—	DISTRESS
17	156.850	156.850	S	LO	SAR
18 A	156.900	156.900	S	—	COMMERCIAL
19 A	156.950	156.950	S	—	COMMERCIAL
20	157.000	161.600	D	—	PORT OPR
20 A	157.000	157.000	S	—	PORT OPR
21 A	157.050	157.050	S	—	CCG
22 A	157.100	157.100	S	—	USCG
23 A	157.150	157.150	S	—	USCG
24	157.200	161.800	D	—	TELEPHONE
25	157.250	161.850	D	—	TELEPHONE
26	157.300	161.900	D	—	TELEPHONE
27	157.350	161.950	D	—	TELEPHONE
28	157.400	162.000	D	—	TELEPHONE
61 A	156.075	156.075	S	—	CCG
63 A	156.175	156.175	S	—	VTS
64 A	156.225	156.225	S	—	COMMERCIAL
65 A	156.275	156.275	S	—	PORT OPR
66 A	156.325	156.325	S	—	PORT OPR
67	156.375	156.375	S	LO	BRG/BRG
68	156.425	156.425	S	—	SHIP-SHIP
69	156.475	156.475	S	—	PLEASURE
70	—	156.525	S	—	DSC
71	156.575	156.575	S	—	PLEASURE
72	156.625	156.625	S	—	SHIP-SHIP
73	156.675	156.675	S	—	PORT OPR
74	156.725	156.725	S	—	PORT OPR
75	156.775	156.775	S	LO	PORT OPR
76	156.825	156.825	S	LO	PORT OPR
77	156.875	156.875	S	LO	PORT OPR
78 A	156.925	156.925	S	—	SHIP-SHIP
79 A	156.975	156.975	S	—	SHIP-SHIP
80 A	157.025	157.025	S	—	SHIP-SHIP
81 A	157.075	157.075	S	—	CCG
82 A	157.125	157.125	S	—	CCG
83 A	157.175	157.175	S	—	USCG
84	157.225	161.825	D	—	TELEPHONE
85	157.275	161.875	D	—	TELEPHONE
86	157.325	161.925	D	—	TELEPHONE
87 A	157.375	157.375	S	—	COMMERCIAL
88 A	157.425	157.425	S	—	COMMERCIAL

## CHANNEL LIST (INTL)

CH	TX (MHz)	RX (MHz)	S/D	LO PWR	CHANNEL NAME
01	156.050	160.650	D	—	TELEPHONE
02	156.100	160.700	D	—	TELEPHONE
03	156.150	160.750	D	—	TELEPHONE
04	156.200	160.800	D	—	INTL
05	156.250	160.850	D	—	INTL
06	156.300	156.300	S	—	SAFETY
07	156.350	160.950	D	—	INTL
08	156.400	156.400	S	—	COMMERCIAL
09	156.450	156.450	S	—	CALLING
10	156.500	156.500	S	—	COMMERCIAL
11	156.550	156.550	S	—	VTS
12	156.600	156.600	S	—	VTS
13	156.650	156.650	S	—	BRG/BRG
14	156.700	156.700	S	—	VTS
15	156.750	156.750	S	LO	COMMERCIAL
16	156.800	156.800	S	—	DISTRESS
17	156.850	156.850	S	LO	SAR
18	156.900	161.500	D	—	INTL
19	156.950	161.550	D	—	INTL
20	157.000	161.600	D	—	PORT OPR
21	157.050	161.650	D	—	INTL
22	157.100	161.700	D	—	INTL
23	157.150	161.750	D	—	INTL
24	157.200	161.800	D	—	TELEPHONE
25	157.250	161.850	D	—	TELEPHONE
26	157.300	161.900	D	—	TELEPHONE
27	157.350	161.950	D	—	TELEPHONE
28	157.400	162.000	D	—	TELEPHONE
60	156.025	160.625	D	—	TELEPHONE
61	156.075	160.675	D	—	INTL
62	156.125	160.725	D	—	INTL
63	156.175	160.775	D	—	INTL
64	156.225	160.825	D	—	TELEPHONE
65	156.275	160.875	D	—	INTL
66	156.325	160.925	D	—	INTL
67	156.375	156.375	S	—	BRG/BRG
68	156.425	156.425	S	—	SHIP-SHIP
69	156.475	156.475	S	—	PLEASURE
70	—	156.525	S	—	DSC
71	156.575	156.575	S	—	PLEASURE
72	156.625	156.625	S	—	SHIP-SHIP
73	156.675	156.675	S	—	PORT OPR
74	156.725	156.725	S	—	PORT OPR
75	156.775	156.775	S	LO	PORT OPR
76	156.825	156.825	S	LO	PORT OPR
77	156.875	156.875	S	—	PORT OPR
78	156.925	161.525	D	—	INTL
79	156.975	161.575	D	—	INTL
80	157.025	161.625	D	—	INTL
81	157.075	161.675	D	—	INTL
82	157.125	161.725	D	—	INTL
83	157.175	161.775	D	—	INTL
84	157.225	161.825	D	—	TELEPHONE
85	157.275	161.875	D	—	TELEPHONE
86	157.325	161.925	D	—	TELEPHONE
87	157.375	161.975	D	—	TELEPHONE
88	157.425	162.025	D	—	TELEPHONE

## CHANNEL LIST (CANADA)

CH	TX (MHz)	RX (MHz)	S/D	LO PWR	CHANNEL NAME
01	156.050	160.650	D	—	TELEPHONE
02	156.100	160.700	D	—	TELEPHONE
03	156.150	160.750	D	—	TELEPHONE
04 A	156.200	156.200	S	—	CCG
05 A	156.250	156.250	S	—	VTS
06	156.300	156.300	S	—	SAFETY
07 A	156.350	156.350	S	—	COMMERCIAL
08	156.400	156.400	S	—	COMMERCIAL
09	156.450	156.450	S	—	CALLING
10	156.500	156.500	S	—	COMMERCIAL
11	156.550	156.550	S	—	VTS
12	156.600	156.600	S	—	VTS
13	156.650	156.650	S	LO	BRG/BRG
14	156.700	156.700	S	—	VTS
15	156.750	156.750	S	LO	COMMERCIAL
16	156.800	156.800	S	—	DISTRESS
17	156.850	156.850	S	LO	SAR
18 A	156.900	156.900	S	—	COMMERCIAL
19 A	156.950	156.950	S	—	COMMERCIAL
20	157.000	161.600	D	LO	PORT OPR
21 A	157.050	157.050	S	—	CCG
22 A	157.100	157.100	S	—	USCG
23	157.150	161.750	D	—	INTL
24	157.200	161.800	D	—	TELEPHONE
25	157.250	161.850	D	—	TELEPHONE
26	157.300	161.900	D	—	TELEPHONE
27	157.350	161.950	D	—	TELEPHONE
28	157.400	162.000	D	—	TELEPHONE
60	156.025	160.625	D	—	TELEPHONE
61 A	156.075	156.075	S	—	CCG
62 A	156.125	156.125	S	—	CCG
63A	156.175	156.175	S	—	SHIP-SHIP
64	156.225	160.825	D	—	TELEPHONE
64 A	156.225	156.225	S	—	COMMERCIAL
65 A	156.275	156.275	S	—	PORT OPR
66 A	156.325	156.325	S	LO	PORT OPR
67	156.375	156.375	S	—	BRG/BRG
68	156.425	156.425	S	—	SHIP-SHIP
69	156.475	156.475	S	—	PLEASURE
70	—	156.525	S	—	DSC
71	156.575	156.575	S	—	PLEASURE
72	156.625	156.625	S	—	SHIP-SHIP
73	156.675	156.675	S	—	PORT OPR
74	156.725	156.725	S	—	PORT OPR
75	156.775	156.775	S	LO	PORT OPR
76	156.825	156.825	S	LO	PORT OPR
77	156.875	156.875	S	LO	PORT OPR
78 A	156.925	156.925	S	—	SHIP-SHIP
79 A	156.975	156.975	S	—	SHIP-SHIP
80 A	157.025	157.025	S	—	SHIP-SHIP
81 A	157.075	157.075	S	—	CCG
82 A	157.125	157.125	S	—	CCG
83	157.175	161.775	D	—	CCG
83 A	157.175	157.175	S	—	CCG
84	157.225	161.825	D	—	TELEPHONE
85	157.275	161.875	D	—	TELEPHONE
86	157.325	161.925	D	—	TELEPHONE
87	157.375	157.375	S	—	PORT OPR
88	157.425	157.425	S	—	PORT OPR

**CHANNEL LIST (WEATHER CHANNEL)**

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

---

## **NOTE**

---

