

INFORMATION ON THE MANUAL

Warning notes

! IMPORTANT! Before proceeding with the installation, please have a look at the following notes.

Every effort has been made to ensure that the information in this document is complete, accurate, and up-to-date. CTE International assumes no responsibility for the results of errors beyond its control. The manufacturer of this equipment also cannot guarantee that changes in software and equipment made by non authorized people and referred to in this guide will not affect the applicability of the information in it.

Only authorized and qualified technicians should be allowed to follow the operation described in this manual.

This manual has been written by CTE International for dealers and distributors who are programming the **Alan HPx08** handheld transceivers for customers. You should be familiar with conventional radio system and radio network settings parameters as well as general PC operations. Channel parameters must be programmed according to your local regulations and directives. Doing that outside them is at your total risk and responsibility.

! Please read the whole manual before starting any operation. Chapters and paragraphs must be read in the order they are written. Crossed references are only made to increase its usability.

All the PC operations described/shown in this manual are meant made with Windows XP.

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INSTALLATION

Unpacking

The package includes the following items:

- (a) CD ROM with instructions and software programming
- (b) Connection cable/adaptor (USB port to connect to transceiver's programming port)

If anything is missing, promptly contact your supplier.

System requirements

To use this programming software, the following hardware and software requirements must be met:

- (a) PC with Pentium (I) or higher processor (depending on the operating system)
- (b) Operating system: Windows 2000 or following versions.
- (c) Hard drive with at least 20 MB free disk space
- (d) Random Access Memory (RAM) suitable to the operating system (at least 32 MB; recommended: 64 MB)
- (e) Free USB port
- (f) Free virtual COM port (from COM 1 to COM 4)

Programming software installation

To install the programming software, follow the procedure described below.

Steps can be slightly different according to the operating system and its version (service pack, etc.).

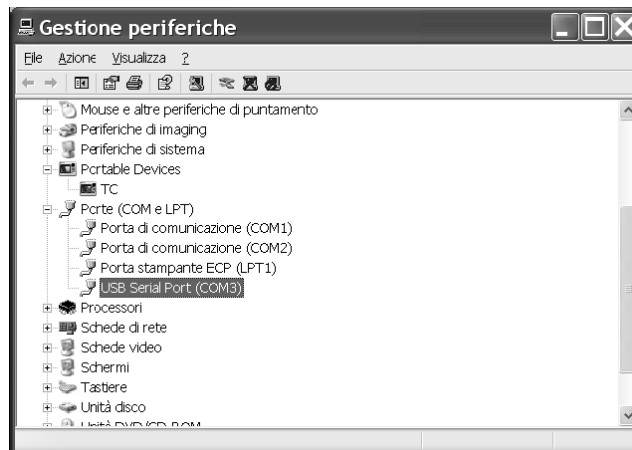
To avoid any kind of problems with the software use, carefully follow the below steps:

- 1) Click on the PC program installation setup.
- 2) The installation immediately runs up and the PC programming software will be installed in the directory **C:\PC Program**.
- 3) At the end of the installation, the window **C:\PC Program** will appear.
- 4) To run the PC program, just click on the **HPx08** icon in start program or make a link on your desktop for an easier and faster access.
- 5) Now the software is ready to be used. Just open it and set the COM port with the following instructions.

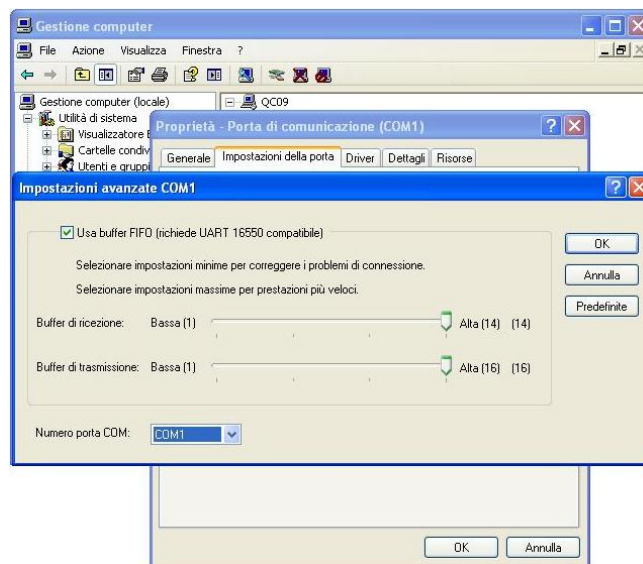
Checking/changing the COM port

Verify that the virtual COM port number, automatically created by the driver, corresponds to 8 or less; otherwise the programming software cannot communicate with it.

- 1) Unplug the USB connector of the programming cable from the PC.
- 2) Select **Start – Control panel**, then double click on the **System** icon. The **System** window will appear.
- 3) Click the **Hardware** tab, and then press the **Device Manager** button. The **Device Manager** window will open.



- 4) Click the small box on the left **Ports (COM & LPT)** in order to show all the ports in use
- 5) Plug the USB connector of the programming cable to the PC. After one second you will see **USB serial port** and its COM port (in the previous example it's **COM 3**).
- 6) If the COM port number is between 1 and 8, exit and go to step 10. Otherwise, go on with the next steps.
- 7) With the right button of the mouse click on **USB serial Port** and select **Properties**. The **Properties** window will appear.
- 8) Select the **Port settings** tab, then click the **Advanced** button. The **Advanced Settings** window will open.




- 9) Using the **COM Port Number**: drag down the button to change the COM port number with another one (from 1 to 4). You will see which COM port is in use by the indication **“(in use)”**. In the over stated screenshot **“COM4”** is in use, so you can't select it.
- 10) To save the settings and exit, clic OK many times.
- 11) Write down the COM port number currently used by the USB port because it will be useful for the next operations.

Setting the COM port in the programming software

After the software has been installed and opened for the first time, the correct COM port must be set, to allow the data exchange between PC and software.

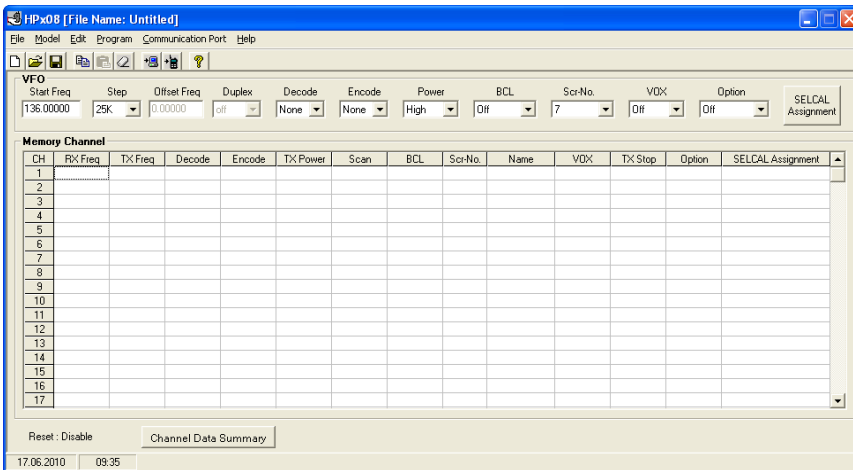
- 1) In the program window, press the **Communication Port** button.
- 2) Use the selector and set one port (from **COM1** to **COM4**). Insert the port number noted in the last step of the previous paragraph.

Software Version

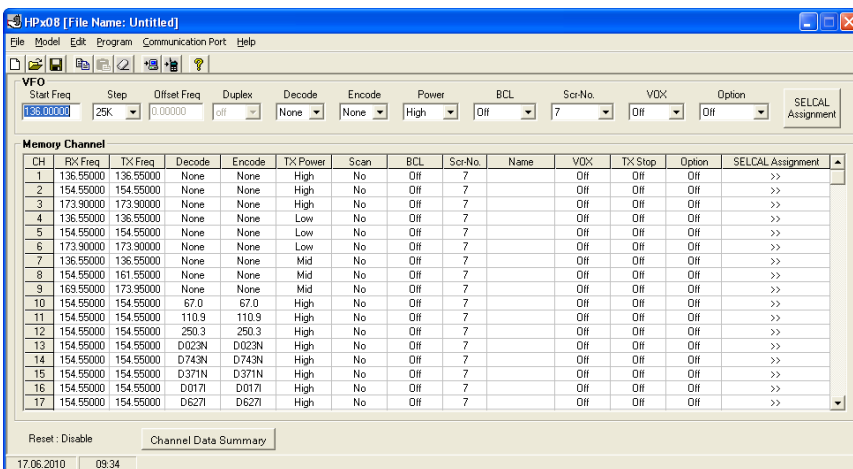
When you run the software, in the **Help** window you can read the version currently in use. Or you can read it by pushing. 

Radio customization

When you open the software, the **Memory Channel** window is empty.



Here you can create the desired operating file: insert the frequency bands for every channel and the following features. Here below you can see the example of the default programming.



You can select the following functions:

Encode / Decode: to select the CTCSS/DCS sub-audio tones in rx and tx.

TX Power: to select high, middle or low power.

Scan: To enable the scanning of the channels.

Busy Lock Out: if you think you will only use the basic functions, we suggest deactivating all the functions and enable the Busy Lock Out. This function doesn't allow the transmission even though the PTT is pressed. You can choose amongst the following options:

off: Busy Lock out deactivated. You can transmit and receive as usual.

Carrier: Busy Lock out activated. The transmission is possible only when the radio doesn't receive any carrier.

QT/DQT: Busy Lock Out activated. The transmission can be done only on the sub-audio tones that you have set.

Scr-No: The scrambler is a feature designed to protect your communications, that can be heard only by the users that have set your level. You can choose the frequency level from 1 to 8.

Name: with the programming software you can set a name instead of the channel number on the display of the radio.


Vox: Enables the vox function.

TX Stop: If activated, disables the transmission.

Option: to activate the **Scrambler** or **Compand** (voice compression).

SELCAL Assignment: with this menu you set the selective calls, tones for repeaters and Monitor function on every channel.

In the **File** window the following options can be selected:

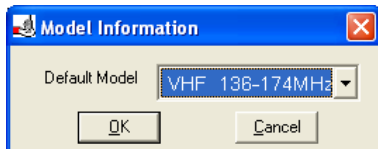
New: to make a new programming file. 

Open: To open a programming file previously saved. 

Save: To save, anytime you want, a file previously saved. 

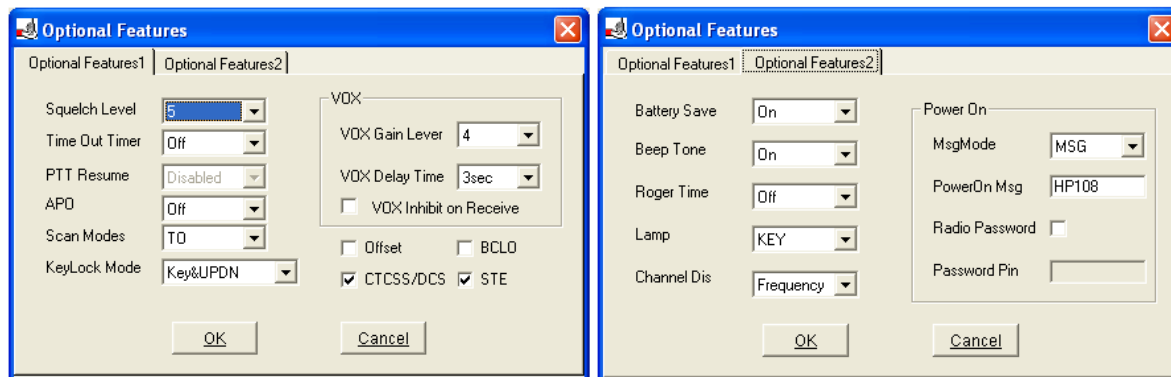
Save as: To save a programming file everywhere on your pc.

In the **Model** window you can verify and select the desired model type:



In the **Edit** window the following options can be enabled: **Optional Features**, **Optional Signal**, **Embedded Message**.

If you select **Optional Features** the following window will be shown:



In the **Optional Features 1** window you can select/modify these options:

Squelch: to select the squelch sensitivity levels. (9 levels are available)

Time Out Timer: it temporarily stops the transmission if it is used over a pre-set time. When the maximum time is reached, the unit switches to reception.

PTT Resume: this feature can be enabled only when **TOT** is activated. It selects the maximum time when the transmission is not possible.

APO: The unit automatically turns off at a pre-set time (from 1 to 15 hours from setting). One minute before the switching off, **APO** blinks on the display and a beep tone is heard.

Scan Modes: 3 types of scanning are available.

SE: the radio stops on a busy channel and exits the scanning mode.

TO: Time-operated scan. The scanning will stop when the radio detects a signal on a busy channel and will resume after 5 seconds even though the signal is still present.

CO: Carrier-operated scan. The scanning will stop on an active channel till the signal is detected. It will resume scanning after 2 seconds when the channel is no longer active.

Note: Scanning is interrupted by pushing PTT.

KeyLock Mode: 4 options are available.

K+S: keypad and ▲/▼ buttons lock. **PTT:** PTT lock to avoid accidental transmissions. **KEY:** Keypad lock. **ALL:** all buttons are locked.

Vox Gain Lever: you can choose amongst 8 VOX sensitivity levels.

Vox Delay Time: it keeps the radio in transmission mode after you stop talking, so that the transmission is not interrupted while you are still talking.

Vox Inhibit on Receive: this function stops the transmission when the radio receives a signal.

Offset: it allows the selection of the frequency offset shift.

BCLO: Busy channel lock out. When this function is enabled, it stops the transmission on a busy channel, to avoid interferences.

CTCSS/DCS: if disabled, doesn't allow the user to enter the setting menu and set the DCS/CTCSS tones.

STE (Side Tone Eliminate): it eliminates the background noise after receiving a signal. It's particularly useful when you use a headset connected to the radio. This function properly works when it's activated on both radios.

In the **Optional Features 2** window the following options can be selected/modified:

Battery save: this feature reduces the battery consumption up to 50%. It automatically activates when the radio doesn't receive any signal for longer than 7 seconds.

Beep Tone: if this feature is enabled, you will hear an acoustic signal every time a button is pressed.

Roger Time: end transmission tone.

Lamp: OFF: Backlight deactivated. **KEY:** Backlight activated (5 seconds for each operation), it automatically turns off if no operation is done; the backlight turns on again when the **Lamp** button is pressed. **CONT:** continuous backlight.

Channel Dis: when a channel is stored and it has been given a name with the **NM SET** function, you can select what will appear on the display. **ALPHA:** channel name displayed. **FREQ:** channel number displayed (CH-001).

MsgMode: with this function you can choose what will be displayed when the radio is switched on. You have three possibilities:

OFF: the stored channel is displayed.

DC: the battery voltage is displayed.

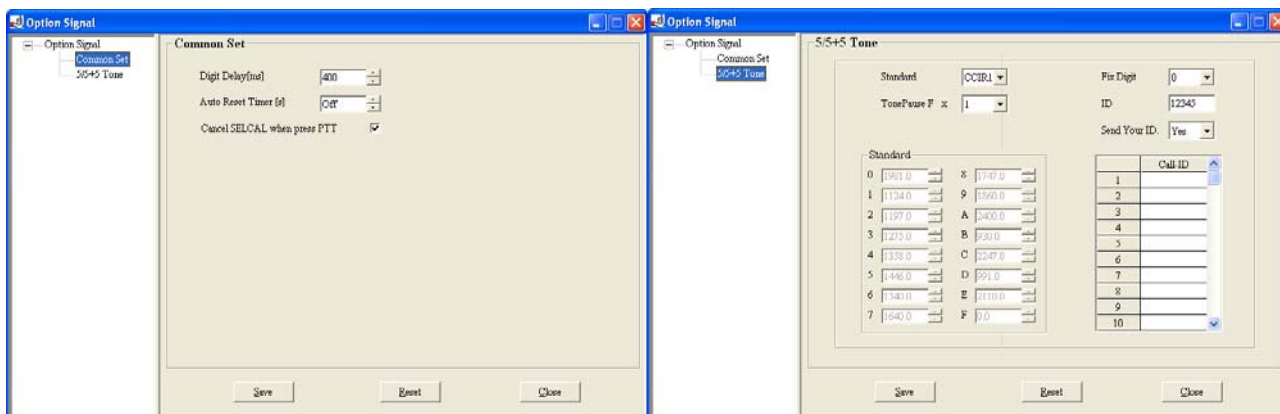
MSG: the message that you have set in **PowerOn msg** is displayed.

PowerOn Msg: you can set a message to display every time the radio is switched on.

Radio Password: if enabled, you can set your password/pin.

Password Pin: you can set your own password/pin that will be required every time the radio is turned on.

Optional Signal:



Common Set:

Digit Delay (ms): Delay time for the selective call sending.

Auto Reset Timer (s): selective call reset time.

Cancel SELCAL when press PTT: the selective call is momentarily cancelled when the PTT is pressed.

5/5+5 Tone:

Standard: to select the selective call type.

Tone Pause F x: to set a pause between 5+5, you can select a longer time 1,2,3 between the first 5 tones and the following 5.

Fix Digit: the 5 tones can be fix or variable. If you set example 1, the variable tones are 4, while in example 2 the variable tones will be 3, etc. the selective call with variable tones will be sent by pushing the backlight button **Lamp**.

ID: To set the radio identifier.

Send Your ID: you can choose whether to send your radio ID along with 5+5 or the 5 tones only.

Call-ID: to set 16 call-ID and send them by pushing the monitor button.

Once the selective call is set, you can send it by pushing **Lamp** and **Monitor**.



Lamp: to send the variable selective call.

Monitor: to send the selective call set on **Call-ID**.

In the **Embedded Message** window, you can save the file in the software to recognize it in future.

In the **Program** window you can enable the writing and reading of the radio data, **Write to Radio - Read from Radio**.

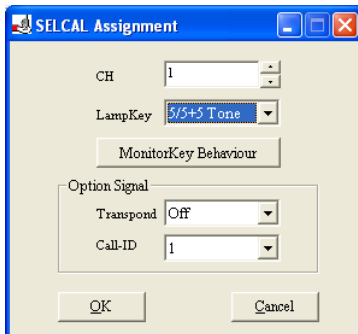
To transfer the programming data to the radio, follow these steps:

- 1) Make sure that the transceiver is switched on and correctly tuned.
- 2) Select the **Program** window and then **Write to Radio - Read from Radio**, or use the main controls displayed on the main board **Write**  or **Read** 
- 4) The programming data will be sent/read.
- 3) When the data transfer/reading is finished, disconnect the cable from the radio, then switch it off and on.
- 4) Check the data have been correctly transferred or read.

Selcal Assignment:

Under this Menu the following features can be set:

- The selective call for each programmed channel
- Repeater tones
- Monitor
- Transpond
- Call-ID sending



CH: you can match and set the selective call or any other feature to any channel.

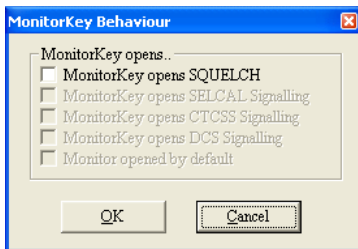
Lamp Key: Depending on what you have set, if you push this key you will send the variable selective call 5/5+5 Tones or the tones 1450Hz,1750Hz,2315Hz. Some repeaters communicate using these specific audio tones.

Transpond: this feature allows the radio, that receives a selective call, to automatically send its call-ID. The transpond is possible on any channel with selective call.

Call-ID: to select the Call-ID that can be sent by pushing the monitor button (the Call-ID is set in the **Option Signal** window).

Monitor Key Behaviour

The monitor function has some options to choose amongst.



Usually, only the "Monitor Key opens SQUELCH" can be activated but, depending on what you have previously set, you can choose amongst some options to select.

For example, if you activated a CTCSS tone on the channel, the **Monitor key opens CTCSS signalling** checkbox will be available as well. If you set a selective call, you can enable "Monitor Key opens SELCAL": when the Monitor key is pressed, the selective call will be opened and there's no need of the decoding.

It is also possible to enable "Monitor opened by default", when the radio is switched on, the selective call is opened.

The desired monitor feature can be set on any channel.

Channel Data Summary

This feature allows to overview a channel data summary including the channel parameters.

To avoid mistakes this summary can be printed (**Print**) as record for future references or steadily leave it on the screen during the programming operations.

In the main board, click on **Channel data Summary** : the summary will be shown.


CH	RX Freq	TX Freq	Decode	Encode	TX Power	Scan	BCL	Scr.No.	Name	VOX	TX Stop	Options	LampKey	MonitorKey	Traspond	Call ID
17	154.55000	154.55000	D627E	D627E	High	No	Off	7		Off	Off	Off	None			
18	154.55000	154.55000	None	None	High	No	Off	7		Off	Off	Off	1450Hz			
19	154.55000	154.55000	None	None	High	No	Off	7		Off	Off	Off	1750Hz			
20	154.55000	154.55000	None	None	High	No	Off	7		Off	Off	Off	2315Hz			
21	154.55000	154.55000	None	None	High	No	Off	7		Off	Off	Off	50+5 Tone	opens SELCAL;	Off	12300
22	154.55000	154.55000	None	None	High	No	Off	7		Off	Off	Off	50+5 Tone	opened by default,	Off	12300
23	154.55000	154.55000	None	None	High	No	Off	7		Off	Off	Off	50+5 Tone		On	12300
24	154.55000	154.55000	67.0	67.0	High	No	Off	7		Off	Off	Off	50+5 Tone	opens SELCAL; opens CTCSS;	Off	12300
25	154.55000	154.55000	D465N	D465N	High	No	Off	7		Off	Off	Off	50+5 Tone	opens DCS, opened by default,	Off	12300


To exit, push **ESC** on the keypad.


Reset

Reset function.

Other controls on the main board.

Copy:  To copy a stored channel.

Paste:  To paste the copied channel on a new one or to replace a channel.

Cancel:  Permette di eliminare un canale memorizzato.