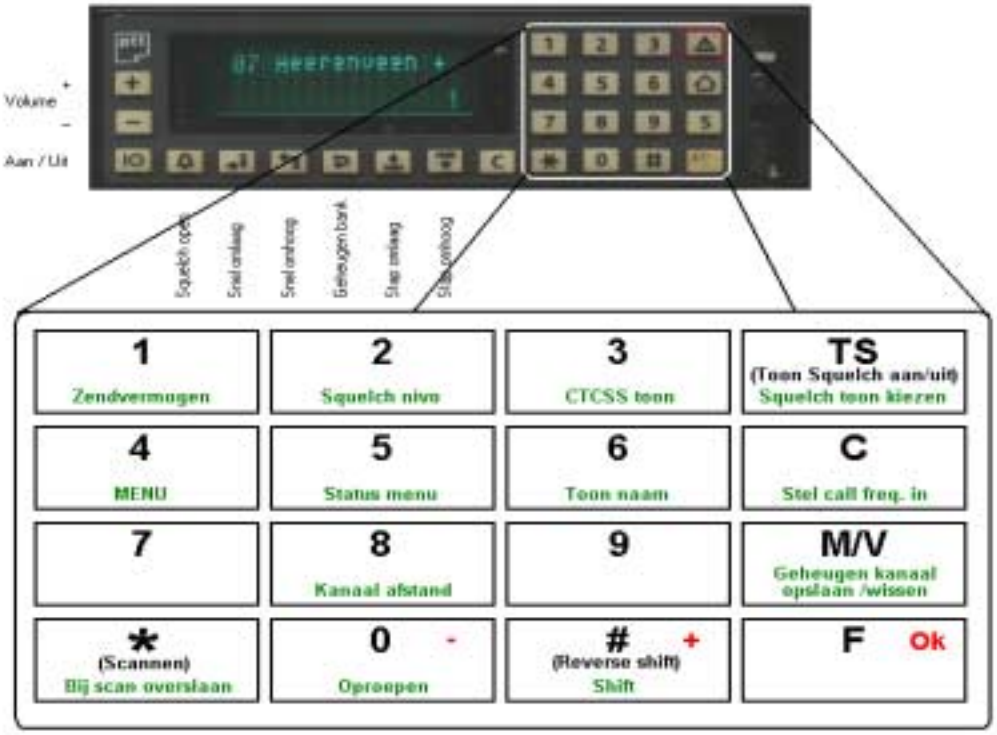
User manual

Condor 3000

Transceiver

Keypad overview:



Main functions:

Keys:	Function:
0 1 2 3 4 5 6 7 8 9	To enter a Channel, frequency or number.
*	Scan
#	Reverse shift
⇧	Go to call-channel
S	Switch between VFO and Memory
⚠	Toon squelch On/Off(DTSS / 5-toon)
☎	Choose second function of next key

Second function:

Keys:	Function:
1	Change transmitter power
2	Chanhe squelch level
3	Choose CTCSS tone (TQ)
4	Activate MENU
5	Activate status menu
6	Show name of memory channel
8	Choose channel spaceing
*	Don't scan this memory channel
0	Call with 5-TVO
#	Shift + / - / none
⚠	Choose tone-squelch code
⇧	Delete/store call channel
S	Delete/store memory channel

After switching on the transceiver, the selected frequency or channel will be shown at the upper line of the display. After receiving a 5-TVO code, the code will be printed at the second line of the display. The selected memorybank is indicated at the right of the second line.

To use the second function of the keys, press the ☎ button. The text ‘Kies funktie’ will appear on the second line of the display. Now the second function of the next key will be activated. To go back to the normal situation, press ☎ again.

1 Choose frequency

The transceiver has three frequency modes, with the **S** button can be changed from **VCO** to **Memory**. The thirth mode is the call channel, this one can be selected with the ⌂ key.

- **VCO mode**
  At VCO mode all frequencies at the choosen channel space (4) can be entered with the keypad. The transceiver will fit the frequency to a legal value. For the frequency 435.012.500, by a channelspace of 12,5kHz, you have to enter ‘501’:

435.–––.––– 1	435.0––.––– 1	435.012.500 1

  Is the channelspace in this situation 25kHz, the tranceiver will change the frequency to 435.000.000.

- **Memory mode**
  The Condor has the posibility to store 100 memory channels in one memory bank, it has 7 memory banks §5. These channels are available in the memory mode. In this mode, each channel can have its own name of max. 23 characters. If the selected channel number is empty, the Condor will generate an error beep and ignores the selected channel.

- **Callchannel mode**
  If the callchannel is programmed (§6), this frequency can be selected very quickly. The advantage of the call channel is, it can be selected by only pressing the ⌂ key.

2 Choose CTCSS tone

Some transceivers and repeaters are using CTCSS, only transmitters which send a low frequency of 67 - 250Hz trough the modulation will be heard. All others are ignored.

The frequency of this low tone can be selected as follows:

	Display:
- Press ☎	(Kies Functie)
- Press **3**	(CTCSS: **)

The lowest frequency is 67Hz en the highest 250.3Hz, between those values stands 'Geen' it means none. Select this one to switch off the CTCSS tone.

Switching on or off the CTCSS for the receiver, press the ⚠ button.

3 Tone squelch

The squelch can be closed until receiving a selected 5-tone code, and the transmitter can send a selectable 5-tone code for the opposite station.

Activate:

De tonesquelch can be activated by the⚠ key, for the receiver the yellow key will light on and for the transmitter, a **T** will appear in the display.

Selecting code:

This code can be selected as follows:

	Display:
- Press ☎	(Kies Functie)
- Press ⚠	(RX:)

Now select the tonecode for the receiver. The code must be entered with the keys 0-9, when the number are flashing, its a DTMF tone.

- Press ☎	(TX:)

Now select the tonecode for the receiver

A tone burst will be generated by pressing the squelch-open key while transmitting. The tone-burst frequency is selectable in the menu.

4 Choosen channelspace

	Display:
- Press ☎	(Kies Functie)
- Press **8**	(Raster: **)

The channelspace can be changed by pressing the keys **0** en **#**. Acknowledge with another key.

5 Storing memory channels

It is posible to store 100 channels in each bank. Store channels as follows:

	Display:
- Go to the VCO mode (key **S**).	(43*.***.***)
- Choose the frequency and, if nescesairy, select SHIFT and CTCSS.	
- Press ☎.	(Kies Functie)
- Press **S**	(Opslaan in: xx)
- Choose a number to store the channel. When an arrow appears, the choosen number is already used, the old values will be overwritten	(Opslaan in: >xx)
- Press ☎	
- If you want, give a name for this channel See for entering text §11.	(Naam:)
- Press again ☎	

See §8 to display the name when selected.

6 Memory banks.

The Condor has 7 memory banks, each memory bank has its own 100 memory channels. The advantage is that only channels in the selected bank will be scaned.

Select a higher bank:

- Press ⮌

If the selected bank contains only empty memory channels, the VCO mode will be activated, otherwise, the Condor switches over to the memory channels. ode.

7 Storing the callchannel

It may be easy to activate the most used frequency by only pressing the ⌂ button. This frequency has to be programmed as follows:

	Display:
- Go to the VCO mode (key **S**).	(43*.***.***)
- Choose the frequency and, if nescesairy select SHIFT and CTCSS.	
- Press ☎.	(Kies Functie)
- Press ⌂.	(Aanroep freq?)
- Press ☎.	
- If you want, give the call channel a name See for entering text §11.	(Naam:)
- Press ☎ again.	

See §8 to enable the channel name.

8 Enable channel-name

Every memorychannel can have its own name, the displaying of the name can be enabled or disabled as follows:

	Display:
- Press ☎	(Kies Functie)
- Press **6**	

9 Erase a memory channel

	Display:
- Go to the momory mode (key **S**)	(** ******)
- Enter the channel to be erased	
- Press ☎	(Kies functie)
- Press **S**	(Kanaal wissen?)
- Press ☎	

10 Erase the callchannel

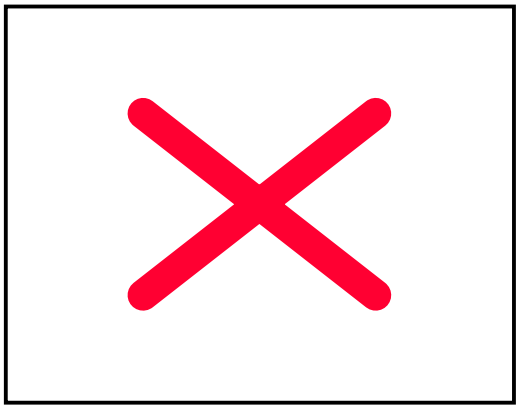
	Display:
- Go to the callchannel (key ⌂)	(A ******)
- Press ☎	(Kies functie)
- Press ⌂	(Aanroep wissen?)
- Press ☎	

11 Entering text

Text has to be entered the same way as entering text on a phone. Entering the A, B or the C, has to be done by pressing the 2 a several times.

The **C** button is for eraseing a character, the remaining characters are shifting back, just like the DEL key in a wordprocessor. The key is used to insert a space. The characters behind every key are listed below. With the arrow-keys up and down are used to step through the character group of the selected key. The cursor has to be moved by pressing the arrow-keys left and right.

Give an acknowledge by pressing the key.



12 Scanning

It's possible to scan in **VFO** mode and **Memory** mode:

Scanning all frequencies:

- Go to VFO mode with the key **S**
- Press *****

Scanning the memorychannels:

- Go to the memory mode with the key **S**
- Press *****

Press any other key to stop scanning. The red light indicates scanning.

If the transceiver has found a signal, the scanning can be continued bu pressing ***** again.n.

13 Lock out memory channels

Scanning the memory channels will scan all channels in the selected bank. With the lock-out function, each channel can be disabled for scanning.

It's posible to skip several memory channels while scanning.

Display:

- Go to the memory (key **S**) (** 43***)
- Choose the channel
- Press (Kies Functie)
- Press *****

The red light indicates the lock out function.

To undo this, repeat this.

14 Transmitter power

The output power of the transmitter depends on four conditions:

- The value selected in software
- The potentiometer on the front of the transceiver
- VSWR
- Temperature

Changing power setting in software:

Display:

- Press (Kies Functie)
- Press **1**

The power can be changed by pressing the buttons **0** and **#**.

Acknowledge with any other key.

15 Selecting repeater-shift

The value of the repeater-shift on the 70cm version in usualy 1.6MHz and for the 2m version 600kHz. This can be changed in the NEMU (See 1.9)

Switching **on** and **off** the shift:

Display:

- Press ☎ (Kies functie)
- Press **#**

It is possible to:

- Switch off the shift (43*.***.***)
- Negative shift (Transmitter 1.6MHz lower) (43*.***.*** $^{-}_{S}$)
- Shift positief (Transmitter 1.6MHz higher) (43*.***.*** $^{+}_{S}$)

16 Reverse shift

The **reverse** shift can be used to temporary listen at the transmitter frequency and transmit at the receiver frequency. With this function, the input of relais stations can be monitored.

The **reverse** shift can be switched **on** and **off** by pressing the **#** key only, without first pressing the key ☎. When reverse shift is switched on, the ‘S’ inthe display will be replaced by an ‘R’. Als de reverse shift ingeschakeld is, wordt de ‘S’ in het display

17 Changing squelch level

Display:

- Press ☎ (Kies Functie)
- Press **2**

The squelch level can be changed by pressing the keys **0** and **#**.

The squelch has four levels:

	Most sensitive
-	Squelch level is 5dB higher
- -	Squelch is normal, but the receiver less sensitive
- - -	Squelch level +5dB, less sensitive

18 The MENU

It is impossible to give every function another button, so the functions which are not used very often are placed in a MENU. In this menu, all items can be selected by pressing the keys **0** en **#**.

The items can be **changed** by pressing the ☎ button. In this situation the yellow led ☎ will light.

The menu can be selected as follows:

- Press ☎	(Kies functie)
- Press **4**	(xxxxxxx MENU)

To prevent a mess in this menu, some items are listed in sub-menus. This submenu's can be found in this main menu, press ☎ to step through this items. To end this submenu, press an unused key.

These are the menu items:	The possibilities:
- ***Shift*** This is the value of the repeater shift.	****** kHz
- ***TX bij SQ*** At '**on**mogelijk' the transmitter can't be activated when receiving a signal.	**Mogelijk** / **Onmogelijk**
- ***TX STOP*** TX-time limiter. When entering zero, the TX STOP is disabled.	**** sec
- ***Bereik*** VCO range. (For 2 meter 144-146 / 100-200)	**430-440** / **300-500**
- ***Scan mode*** This is how the Condor acts when receiving a signal while scanning. 1=Wait for silence 2=Wait a while 3=Stop at busy	**Wacht op rust**[1]/ **Wacht even** [2]/ **Scan tot busy** [3]
- ***Audio***	**Submenu** →
- ***TX mode*** This is a filter in the LF-circuit	**FM** / **PM**

- ***RX mode*** **FM /**
  This is a filter in the LF-circuit **PM**

- ***Onderdruk*** **ZVEI tonen /**
  Surpress ZVEI tones. **Nooit**

- ***Piep*** **Aan /**
  Keypad beep on / off. **Uit**

- ***Piep*** Volume: ---
  Keypad beep volume.

- ***Rogerpiep*** **Aan /**
  Transmits a beeptone before switching off the **Uit**

- ***DTMF tonen*** ******* mS
  This is the length of the DTMF tones.

- ***ZVEI tonen*** *** mS
  This is the length of the ZVEI tones.

- ***Toon burst*** *** Hz
  This is the frequency of the repeater tone burst.

- ***Gebruiker*** **Submenu →**

- ***Mijn nummer*** ***
  This is the personal 5-tone code of the user. The condor gives alarm when receiving this code.

- ***Antwoord*** ***
  At receiving the personal code, another code can be transmitted. This is the code to be returned.

- ***Beantwoord*** **Wel /**
  This is to switch on and off the 5-tone answering. **Niet**

- ***Stappen*** Versnel: **X**
  This is the accelleration of the up- and down key. The longer this key is pressed, the faster the the steps willl be.

- ***Toetsen*** **Herhalen /**
  When holding a key for a while, the can be repeated **Eenmalig**
  Autoatically.

- ***Instelling*** **Bijwerken / Vast**
  At 'bijwerken', all settings will be stored. At ‘vast’ the settings can be stored manually by the next item When switching on the condor, the last stored settings will be used.

- ***Instelling*** Opslaan
  The settings can be stored here .

- ***Instelling*** Alles wissen
  All settings can be reset, useing default settings.

- ***IF*** **21.855MHz / 20.945MHz**
  This is the first IF.

- ***LP filters*** **>20kHz raster/**
  This is the width of the LP filter for the receiver.

- ***Status*** Diagnose
  When the red error light burns, the problem can be shown here by pressing the key.

19 Select call

It is possible to store 10 names with corresponding tone code. This tone-codes can be transmitted with select call.

Select call:

	Display:
- Press ☎	(Kies Functie)
- Press **0**	(Oproepen:)
- Choose the name to call.	
- Press **#**	

Changing and storing names or codes:

	Display:
- Press ☎	(Kies Functie)
- Press **0**	(Oproepen:)
- Choose the name or code to change.	
- Press ☎	(Naam:)
- Enter or change the name, see §11	
- Press ☎ to acknowledge	(Nr.)
- Enter or change the code.	
- Press ☎ to acknowledge	

The key ☎ is used to acknowledge, any other key to cancel.