



New Communications Repeater Connector



ON/OFF



Power

Antenna



Rhotheta RT-600 and inReach SE





Rhotheta RT-600

The primary difference between the Rhotheta RT-600 and the older Becker DF-517 is that the new unit will simultaneously scan all 406 MHz Distress Beacon channels as well as 121.5/243.

It can also scan Air VHF/UHF and Marine VHF frequencies.

The Becker version was limited to limited to 406 Ch-2 (406.025 MHz) only along with 121.5/243.





Rhotheta RT-600

To dim or brighten the display screen press the DIM button once and turn the Page knob



Power is wired to the avionics master but if the unit does not come on PRESS ON/OFF



Rhotheta RT-600

To listen to the RT-600 put the ADF/DF switch in the DF position and activate the ADF switch on the intercom panel.



Volume is controlled by the rotary switch here



Rhotheta RT-600

After switching on the system through the ON/OFF Push-Button in the DCU, a start screen is displayed for five seconds with the following information:

- 1.Name of the product: 'SAR-DF 517'
- 2.System Version : 'A' for Standard
- 3.Rhotheta website
- 4.Software version and electronic serial number for the antenna unit (AU)
- 5.Software version and electronic serial number for display control unit (DCU)





Rhotheta RT-600

Squelch Level< adjusts the squelch level.



Rotary switch selects pages and dims display if DIM button is pressed first

VOLUME< Rotary switch to adjust the audio output level. The volume remains stored after switching off the DCU

Rotary switch selects active freq. The selected freq is shown on the graphic display bottom right



Rhotheta RT-600



Select a frequency by turning the rotary knob.
Cycles through SCN (Marine), MEM, FIX
(121.5, 156.800 Marine Ch 16, 243.0), and
CpSAR, SCN (CpSAR)



Rhotheta RT-600



Adjust SQL until it is higher than the background noise level

Elapsed time since last signal heard

121.500 in FRQ display



Rhotheta RT-600

DECODE shows in window

SQL on automatic



121.5 in window

406.xxx in FRQ display



Rhotheta RT-600

DECODE shows in window

SQL on automatic



121.5 in window

406.xxx in FRQ display



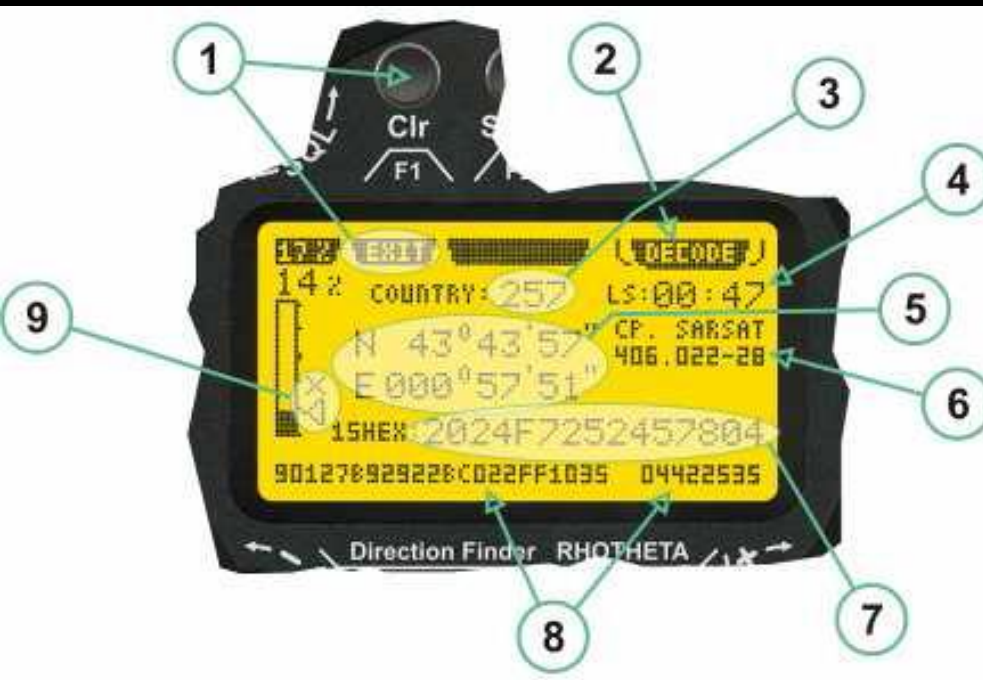
Rhotheta RT-600

Press F1 button to see the
DECODE information





Rhotheta RT-600



(1) **>Exit<** push button (F1 button) allows to leave the decode window and to go back to the COSPASSARSAT bearing mode window.

(2) **>Decode<** in the upper right corner of the display indicates that the decode function is activated.

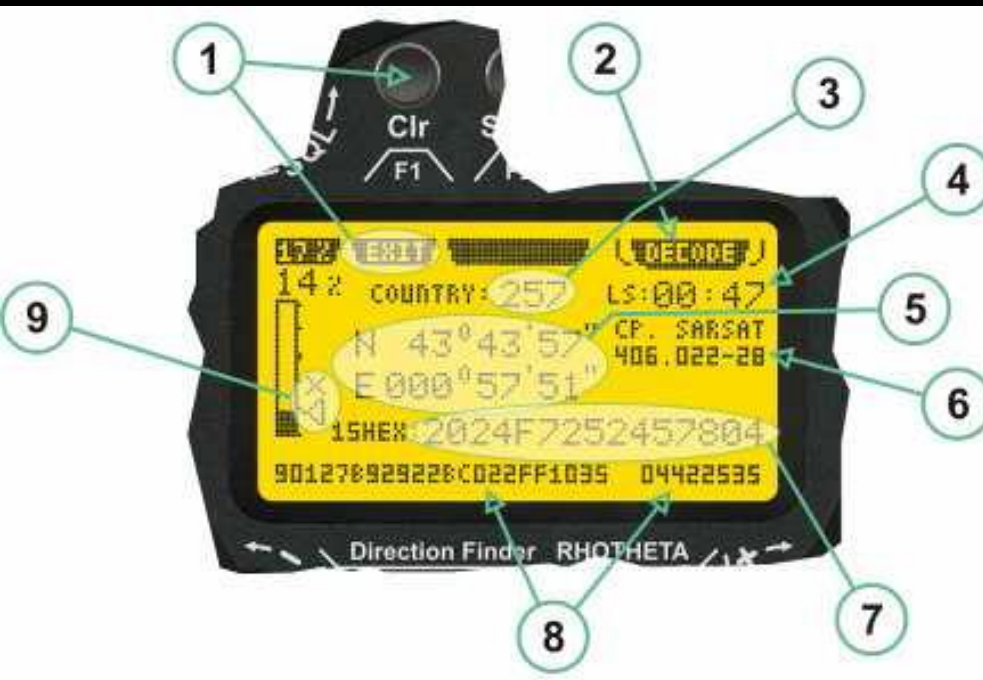
(3) **>Country<** displays the COSPAS-SARSAT Country Code coded into the received data message.

(4) **>Last Signal<** time since the last COSPAS-SARSAT message has been received in minutes:seconds format.

(5) **>Position<** field showing, in case of location protocols being used by the beacon, the encoded GNSS position data (latitude / longitude) transmitted by the beacon.



Rhotheta RT-600



(6) **>Range<** field showing the range of COSPAS-SARSAT channels covered by the actual receive frequency setting.

(7) **>15-HEX-ID<** 15-HEX-ID of the beacon in hexadecimal format.

(8) **>Data string<** of the bits 25 to 112 of the COSPAS-SARSAT data burst in case of short messages, and bits 25 to 144 in case of a long message format. The last 8 Hex Values are separated by a blank. Bit- and Frame-synchronization hex values (Bits 1 to 24) are suppressed to increase the readability of the data message.

(9) **>X<** sign to indicate that the Squelch is controlled by the antenna unit for optimum sensitivity. The user has no access to the Squelch setting.



Rhotheta RT-600

Press F2 button to swap frequencies





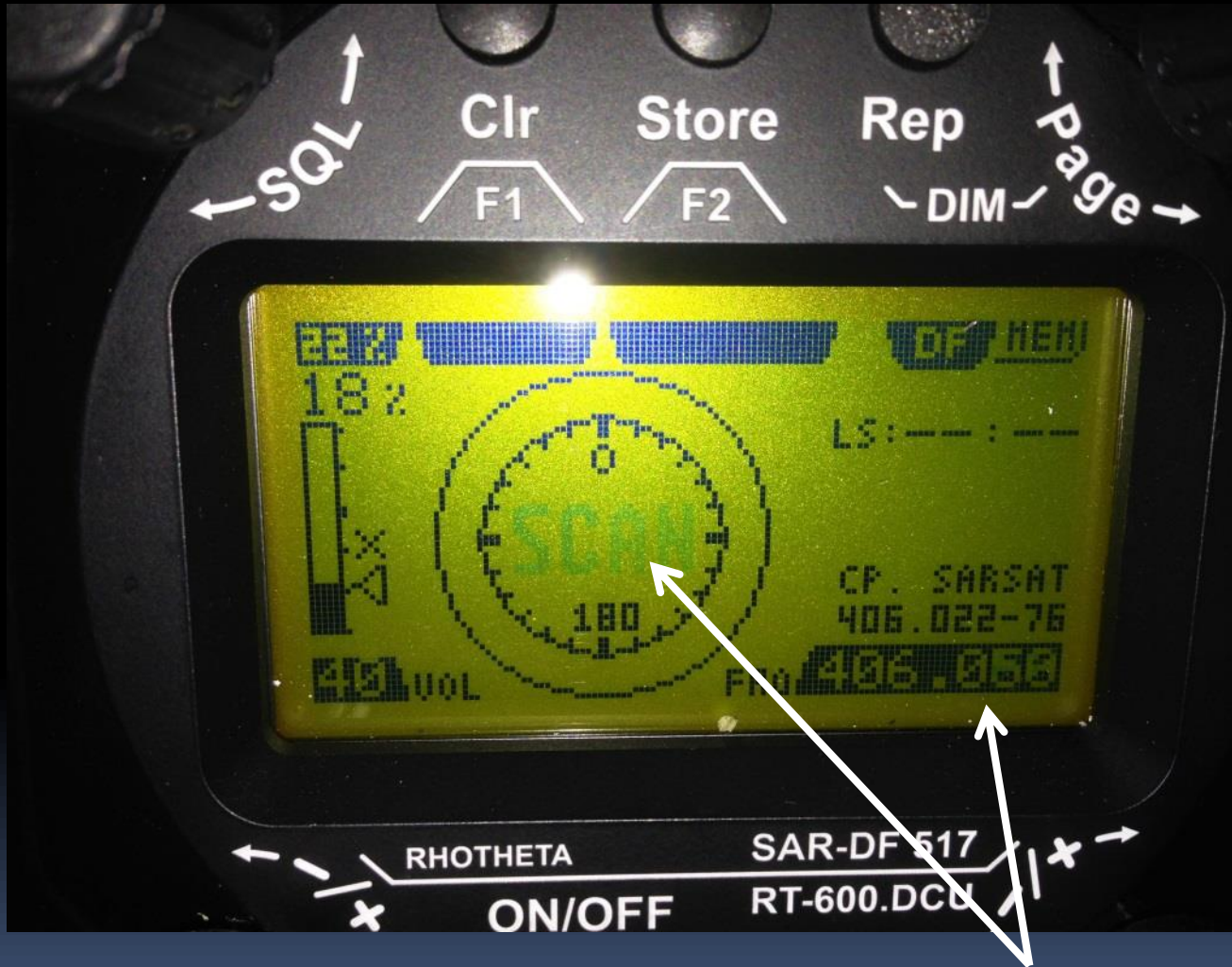
Rhotheta RT-600



To scan all 406 channels use the rotary knob to select CpSAR SCN



Rhotheta RT-600



SCAN will show in the bearing window along with the channels being scanned



Rhotheta RT-600



SCAN will show in the bearing window along with the channels being scanned



Rhotheta RT-600



To DF any frequency turn the Page rotary knob to MEM and use the two lower knobs to change the frequency in AUX



Rhotheta RT-600



- Climb to 5000'
- Listen for the 121.5 tone on both Com2 and ADF
- Watch the Rhotheta display unit for a black dot to appear showing direction to the beacon
- Note: A 406 beacon will be intermittent (every 50 seconds); a 121.5 or other frequency may or may not be intermittent .



Rhotheta RT-600

- Keep the dot on the top with the aircraft flying toward it.
- Turn as necessary.
- You could be 30 miles or more from the beacon.
- Decrease your altitude as you can but still keep the signal.
- When you can, DF on the 121.5 signal (STORE/F2); use to go back to 406 if needed.
- When the dot suddenly goes to the bottom, you have passed over the beacon.

