ROS HELP
Part 1
By Jesus CO2DC
Normally the size and complexity of a communications program
requires several people, in the case of ROS is the work of a single
person, so far not been possible to have a page
for help. Where possible we have helped in some Jose Alberto EA5HVK
program development issues, particularly with regard to
tests in the air, and now we hope this helps clarify issues
operational program that will arise to all amateur and beginning
has had to learn by doing, asking those who have more
time using the program. In this way we believe we fill a void
to existing time. In this first part we try to analyze the issues
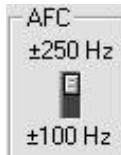elementary to use the program.

The switches

This button is used to adjust the transmitter, when activated immediately
emits an audio tone of 1500 Hz (similar to the test tone equipment
SSB) allows us to adjust the power or check the stationary. It
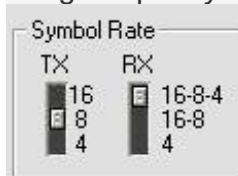off by putting off.

The antijam intended to reduce the effect of certain types of interference as
produced by carriers and telegraph signals. Very useful in this ROS500
such situations. For ROS2000 practice is not necessarily
due to the intrinsic robustness of the way, unless it has a large number
telegraphic signal of great power. Under normal conditions this control
it is better to disable it to reduce CPU load.

The alarm button has the function to tell us when the team at reception
detected ROS signal and entered in sync is useful when
there is little activity in the band and we are waiting for someone to call.
Usually it works through the PC speaker (except for Windows
7). You can also play an audio file as an alarm, using the
default sound card in Windows. The process is set in the menu
alarm / sounds.

AFC selector lets you choose the range of frequency deviation
signal can be received, or how far from the frequency of our
receiver is the other station transmitting. Normally the
Radio amateurs use ROS are within 100Hz so
rarely need to use the range of 250Hz. In the bands 6m, 2m
or 70cm if you may need to set it at 250Hz. By using 250Hz
implies a higher CPU usage so in general terms is
recommended to use 100Hz, especially when we do not have PC
a high capacity CPU.

The switch that governs the speed of transmission and reception has a large
importance and knowledge of their use is essential for operating on ROS. In
the
We left the "TX" and three positions corresponding to the three
ROS possible speeds, osease, 08/04/16 Baud. The use of speed
ROS are not always well understood, as may be unaware that each
increase the speed while we are losing twice 3dB. It
both across the Atlantic with a modest station is recommended to use 8
Baud. The 16 baud dexterity and speed typing thing
that not all hams are also a major cause interference
If there is another QSO in progress in the channel, while the 8 baud
just would interfere with other users of ROS. So to work the DX
8 Baud are more appropriate as they have 3 dB gain compared to
16Baud and, above all, greater resistance to fadding. The 8 baud allow
greater comfort while typing and fix an error in writing as
transmission is usually several words behind the writing and you
have time to edit and write what you think. The 4Baud have 3 dB
gain over the 8 Baud and the 16Baud 6dB. This speed
was initially created to cross the Pacific from America in the band
40m, where there are many drawbacks to a digital link as
There is multipath, fading and interference depth of all kinds, is a
speed is slow while the program is safe and allows degrees of
interference rather high. The ROS4 JT65 is even higher in terms of
distances achievable with a given level, and the big difference is that you can
maintain a coherent conversation and not a simple exchange of data
elementary, because the system is far more efficient in terms of
power, which gives us a way to weak signals without
forced to use marginal information rates, and of the mode
JT65HF or WSPR. Also does not require synchronization via Internet or
GPS, and can send beacons with the text you want.
The part of "RX" receive fixed rate, or rates for
which the recipient is eligible for. 8.4.16 The position allows you to receive

any speed, the only drawback of this position is the increased use
the CPU.
In the 16-8 position excludes the reception of signals of 4 Baud and saves
part of the CPU capacity.
4 Baud position signals received only a speed of 4
Baud exclusion of all others, it also has a capacity savings
the CPU and prevents the reception of signals from other undesired speeds.

Waterfall Selector allows to view or remove the signs in
time and frequency, its main function is to remove the Waterfall in case the
CPU capacity issues have to remove it because we are lightening
load considerably. The Waterfall does not give a good idea of the intensity
signals because it has automatic level control very strong, but if
gives comparative information on the level of the noise signal and
interference.

The beacon selector (or beacon) is switched on or off depending
Beacon.
This button is linked to the "Beacon" we have in the
top of the screen, with which we can choose between three possibilities.
BRM Mode emits a text can be edited at will and whose time
Repetition is set by the "Beacon timer" between 1 and 10 minutes. Once
receives a signal from another station calling CQ report is issued for that
station with its indicative, if not possible to capture the calls are
replaced by QRZ. This beacon does not work when stations are
in traffic which continuously samples the channel and is reset once
after 3 minutes of the last signal received. This is done to
avoid causing interference to stations in QSO. The beacon also reports
whenever called by its index. Very useful for testing aerials or
know our report with different powers calling repeatedly.
In the position BOM (Beacon Mode Only), is emitted beacon signal but
without reporting, also features the 3 minute timer to prevent
interference. As in the BRM, the output text is the one we
have written in the transmission window. If we have not written anything on
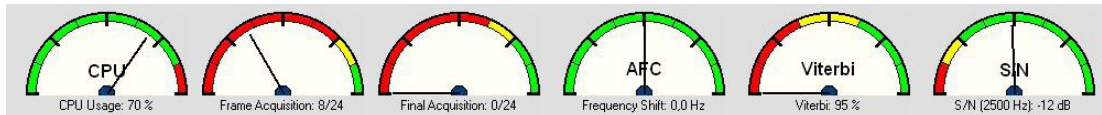program places a standard text by default, but you can change and
write anything.
The third type of beacon is ROM Mode (Report Only Mode) and only respond,
or
either when it detects a ringing call CQ or Dred to the mark,
issues a report with the index and S / N of the signal reported.
WATCHES

CPU Usage: 70 %   Frame Acquisition: 8/24   Final Acquisition: 0/24   Frequency Shift: 0,0 Hz   Viterbi: 95 %   S/N (2500 Hz): -12 dB

The watches are designed to give an instant reading of the
conditions under which we are receiving the signal
The CPU shows the CPU usage level. His reading depends on the
degree of use of the different functions of the program over any other
program is in use at that time, we should not allow
operating in the red zone as this has the consequence of not
decoding the message.
The second clock gives us an idea of the number of frames that are
receiving, as the next clock but in this case an average
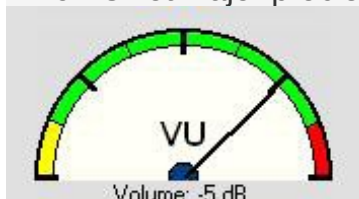final readings in the first.
The fourth clock gives a reading of the frequency difference between the
signal
we are receiving and tuning the receiver, if
large differences can select the AFC at 250 and even a re
vfo tuning of the receiver, if that occurs very rarely. It should
mind that the re-tuning during reception of a signal makes this
lose synchronism. We should never turn the wheel of the frequency
while receiving a message.
The fifth clock gives us an idea of the quality of decoding or the
number of errors being detected and corrected by the system
correction of errors. Obviously this metro marginal signals will
in the yellow or red and mistakes will be made in writing. In green
all errors are corrected.
The sixth clock gives an instant readout of the signal to noise ratio and has
a close relationship with the level of signal being received.
Finally, the volume meter lets you know if the audio level that will
we are injecting the PC from the receiver's right. Throughout
time to be worked in the green zone but it is inevitable that
momentary interference presence of this level can rise to the red zone, it
which is not major problem.

Volume: -5 dB

BUTTONS
The red button PTT which at times becomes yellow
WAIT by pressing twice the PTT is the most important.

If you press it once it started airing that
write in the output tray and continue the transmission of a
uninterrupted. Once we finished what we want to transmit,

to press the PTT button and WAIT transformed into yellow. This will transmission be all that remains in the outbox. In the
moment that all the text is transmitted automatically stops transmission.
However, if we keep the red button never ending transmission,
the system expects you to continue writing. If you are using macros
We can double-click directly. And as a general rule we use
lowercase letters as well as faster transmission. If we
the letter is larger we can change the Menu "Preferences".
It often happens that beginners leave the PTT pressed a single
After bringing the transmitter still in the air without transmitting information and without
give change indefinitely. This is a mistake that all youth
paid for.
Please note that all macros to be carried tray
Output will be deleted when it is transmitted, except for CQ calls.
So if you want to repeat the last transmission to press the button
RPT to put back on display the latest broadcast.

The clear button as the name suggests is used to erase what is in
drive tray before or during transmission.

The set of buttons on the frequency

Allows you to choose a frequency depending on which band we are,
clicking on each box. We can also click on the boxes
frequency appear in the spots to go directly to the menu either
Frequencies where we have the entire list. All frequencies
ROS are upper sideband (USB). When other hams
roseras are in a given QSO QRG should never call CQ or
to get us through until the completion of the contact or give us step. To
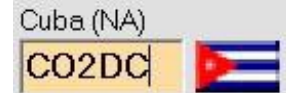CQ call have other QRG's within the same band.
It is important that the frequency of ROS match the frequency of
station, as there QRG's that use different bandwidth, 500 Hz, or
100Hz in the case of the modes for LF, MF or EME. Therefore, it
The use of CAT interface in this mode as a click of a mouse
can jump from one QRG another with ease. At some stations
the CAT interface also allows us to use other big news in this way
system such as automatic power control that regulates the power
minimum necessary for each QSO.
The Clear button allows us to pass heart what is on screen or
permanently deleted.
The clock does not need further explanation, just have to remember that not

The local time UTC or GMT but, like the time is recorded in
each movement of the log.
The indicator window and a country flag give us
information (country, continent, flag) indicative of the station that
We are also working to give us information on the azimuth and links
QRZ and Voacap direct.

Cuba (NA)

CO2DC

The callsign you selected is located in this place by placing the cursor on the
indicative chosen and click, but you can also insert
manually.
Finally the button "ADIF" when pressed brings us to a questionnaire Patallo
on the characteristics of the station you are contacting that
usually taken automatically from the database of the ROS.

ADIF

We imported by 4 options:
Export to a file. Adi.
This file can be loaded in any logbook, with which we
upload contacts that we have done in ROS. Furthermore, through this
file we worked indicators appear as underscores, or the
Countries in red (non working) and filled the country statistics
(Statistics menu). The file path must explicitly link the
on the "File:" trying not to delete the file because if we lose
the contacts. Also this file is what we have to send the
ROS European Club for the diplomas of countries, making it
always important to keep contacts.
Export to eQSL.cc
Clicking on this option, the QSO is sent to eQSL.cc through internet.
We introduce our data in the user menu previemente
eQSL.cc
Export to HAMLOG.EU
To send a HAMLOG.EU. As before, we introduce
our password in the corresponding menu
Export to HRDLOG.net
The same, but with HRDLog. In this case we introduce the Upload
Code sent to us when we checked.
Jesus CO2DC