



Ham Software for Mobira™ MD50/MD59/ME59 phones.
(Mobira seems to be a trademark of Mobira)

OH3NWQ 01.03.2000



1. ENTERING FREQUENCIES

14# Enter channel 14
500# Enter 433.400 MD50/MD59 or 1297.000 ME59
5200# Enter 435.200 MD50/MD59 or 1295.200 ME59
47325 Enter 447.325 MD50/MD59 or 1247.325 ME59 (no # at the end)

2. COMMANDS ENDING WITH

0# restore memory 0
1# restore memory 1
2# restore memory 2
3# restore memory 3
4# restore memory 4
5# restore memory 5
6# restore memory 6
7# restore memory 7
8# restore memory 8
9# restore memory 9

69# try it you'll like it
80# debug info (if the program is compiled with debug option)
81# repeater channels included in scan
82# simplex channels included in scan
83# memory channels included in scan
84# when battery operated, lights on permanently / timer controlled
85# clear all scanner rejects
86# positive/negative duplex toggle
87# repeater duplex toggle 7.6/1.6 MD50/MD59 and 28.0/6.0 ME59
88# display test (active until # is released)
89# shows the software information: the offset vco/xtal, defined repeater
 band, handset and the tx band limits (active until # is released)
90# power level 0
91# power level 1
92# power level 2
93# power level 3
94# duplex/simplex toggle
95# reject selected channel from scan
99# try it you won't like it



3. MEMORY SAVING AND SCANNING COMMANDS

To store one of the ten memories, first select the frequency in normal way E.g. 400# 4850# or 45200# (two digits # E.g 14#) is not valid for saving memories). Then press the number of the memory location you want to store and STO. The will now show STO / CL ? If you press STO the memory is included in the scan, CL will reject the memory from the memory scan.

HF	resume last scan
1 HF	repeater channel scan
2 HF	simplex channel scan
3 HF	memory channel scan
4 HF	repeater and simplex scan
7 HF	repeater and memory scan
8 HF	simplex and memory scan
9 HF	repeater simplex and memory scan
0 HF	scan with no channels included ☺
3694 HF	reset device to preset values (overwrites current memories)
123 HF	Any three number combination followed by HF will set / reset a segment in the display

4. ONE BUTTON FUNCTIONS

STO	one channel up
①	one channel down
CL	delete last number – when scanning: clear all rejects
M	PTT (squelch on SPTT version)
S	squelch (PTT on SPTT version)
*	1750 Hz repeater beep
CS	power level toggle 0/1/2/3
R	duplex/simplex toggle - when scanning: reject this channel
+	increase volume
-	decrease volume



5. DISPLAY

Repeater offset display on the right upper part of the display in handset CU59

	MD50/MD59	ME59
S	simplex	Simplex
D	- 1.6	- 6.0
D F	+ 1.6	+ 6.0
D<	- 7.6	- 28.0
D< F	+ 7.6	+ 28.0

Scanner light and other information on the left upper part - handset CU59

RST	:	R = repeater channels included in scan S = simplex channels included in scan T = memory channels included in scan : = lights on permanently (when battery operated)
←		Battery voltage has dropped below the preset limit
🔒		There are locked / rejected channels in the scan
📞		Handset is off the hook

Boot text

RST 173-EU
314 990402

RST = reset
173 = version 1.73 (fourth number used on betas and intermediate releases)
EU = European ham band (FI for Finnish ham band)
314 = modulator xtal is 31.4 MHz on MD59 / the VCO frequency on ME59
990402 = yymmdd of the software



6. KEY TO FILE NAMES

The file name in the zip file consists of many parts separated with dashes.
For example: MD50-CU53-MPTT-NORMAL-FINHAM-X314-STEP25-NOPIN.bin

MD50	ham software for 70 cm MD50 phone
MD59	ham software for 70 cm MD59 phone
ME59	ham software for 23 cm ME59 phone
CU53	with CU53 handset
CU59	with CU59 handset
MPTT	M button is PTT
SPTT	S button is PTT (available on CU59)
NORMAL	Automatic repeater shift according to Finnish repeater band
GERMAN	Automatic repeater shift according to German repeater band
FINHAM	432-438 MHz TX on MD50/MD59
EUROHAM	430-440 MHz TX on MD50/MD59, 1240-1300 MHz on ME59
USA	902-928 MHz TX on ME59
X214	offset Xtal is 21.4 MHz (MD50/MD59)
X314	offset Xtal is 31.4 MHz (MD50/MD59)
X81	offset VFO is 81 MHz (ME59)
X126	offset VFO is 126 MHz (ME59)
PIN	PIN code (3694) is asked at startup
NOPIN	No PIN code is asked at startup

Select one of each set according to your phone configuration.



Other definable parameters exist, but are not precompiled to the zip files, if you want to change for example the PIN code, you'll have to compile the binary yourself (patching the text area won't change the PIN ☺). Look for more information in the source code.

Not all versions are tested - if you find something that works in an odd way, please email me oh3nwq@nic.funet.fi but do not wait for immediate answer.

7. TODO

- Automatic repeater shift
- 12.5 kHz step for MD50/MD59

8. KNOWN BUGS

In the German version, higher repeater channels can't be set with 2 digits, because E.g. 88# is interpreted as display test command.

9. WHERE TO FIND THE LATEST VERSION

Try my ham radio page <http://www.funet.fi/~oh3nwq/oh3nwq.html>
Or OH3TR's FTP server <ftp://oh3tr.ele.tut.fi/pub/modifications/mobira/>