# FT-991(A) Memory by F6ECN

## **Storing stations quickly**

Version II for Windows 7, 8, 8.1, 10/32 and 64 bits

- **<u>1. Selecting the COM port & connection</u>**
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VFO-A	EM IFT-991 <b>MEN</b>	1 : 1 R7 F5Z	BP Mont-Poupet	RX	CAT 19:09	METER	IPO AMP1	C4FM
FM-N	-76 dBm	RX	15 7	75 (		WIDE	AGC	FM
TONE 67.0Hz	DCS 023 DG		57	120		NAR	FAST	AM
AMP1 ATT	INR <b>NB</b> DNF	RPT[-1 V	ЕО-В		- 000		PROC	USB
	DIA/D FIA/							
QM OFF TO	NE/DCS OFF	<u>N 9</u> К Е	M-N TX	145 17	<b>000</b>	VOX	MIC-EQ	LSB
QM OFF TO	PWR 5W NE/DCS OFF	N 9K F	M-N <b>TX</b>	145 173 mBAL/AVT	SAT & DIV		MIC-EQ	LSB CW-USB
QM OFF TO	PWR 5W NE/DCS OFF	N 9K F	M-N TX	m BAL/AVT	SAT & DIV	VOX DNF NB	MIC-EQ SYNC A>M	LSB CW-USB CW-LSB
QM OFF TO VHF / UHF	PWR 5W NE/DCS OFF /HF & UHF 10 R6 F1ZDK	N 9K F	M-N <b>TX</b>	m         BAL / AVT           F5ZJW C4	SAT & DIV	VOX DNF NB DNR	MIC-EO SYNC A>M A>B	LSB CW-USB CW-LSB DATA-FM
QM OFF TO VHF / UHF R7 F5ZBP F1ZCA	PWR 5W NE/DCS OFF /HF & UHF 10 R6 F1ZDK TELECOM	N 9K F 0 / 20 m 40 m R5 HB9G Uv BESSEY	M-N <b>TX</b> 60 / 80 F6IKY TR F6IKY RV	m BAL / AVT F5ZJW C4 F5ZJW FM	SAT & DIV F5ZBP C4 F5ZHB C4	VOX DNF DNR DNR REV	MIC-EQ SYNC A> M A> B B> A	LSB CW-USB CW-LSB DATA-FM DATA-USB



#### Menu 31 of FT-991(A) : 38400bps

#### 1. Selecting the COM port & connection:

Using the virtual COM port created during USB connection of the FT-991 transceiver, two ports are created.

1. Silicon Labs Dual CP210x USB to UART Bridge: Enhanced COM Port (COM xx) (It's the good one)

2. Silicon Labs Dual CP210x USB to UART Bridge: Standard COM Port (COM xx)





**SETUP button** select the corresponding **COM** port:

#### Silicon Labs Dual CP210x USB to UART Bridge: Enhanced COM Port (COM xx)

If an "HRI200 or SCU-17" is installed, there are several Silicon Labs com ports, choose the one corresponding to the FT-991 and click the **C** button, the connection is established with the FT-991 and the **CAT** icon on the main screen turns green indicating that the connection is OK.

The connection is subsequently automatic at the start of the application.

2. Titling memory group buttons :



#### 3. Storing the frequency on a button :

126 memories organized in 7 groups of 18 buttons Storing frequencies VFO-A, VFO-B, MODE, SPLIT, SHIFT, LEVEL SQUELCH, CTCSS, TONE, DCS, DG-ID, POWER and MIC GAIN. Store in a file and not in the FT-991!

#### Two storage modes.

Click the "QM ON" or "QM OFF" label to switch ON/OFF.

#### a. QM ON

A simple right-click on a button memorizes 12 parameters, the frequency displayed on the FT-991 becomes the indication on the button (fast for contests for example)

#### **b. QM OFF**

**Right click on a button** memorizes 12 parameters, a window opens and allows to name the button with a comment or possibly erase the memory.

Backup channel 5 X	VEO-A MEN	VFO-A MEN
Name of Button Comment	C4FM	C4FM
F32JW C4	TONE 67.0Hz	TONE 67.0Hz
OK Cancel Delete	QM OFF TON	QM ON TON

Right clicking a button already memorized is replaced by the new frequency.

#### 4. Sorting buttons (SWAP)

Click on the first button to swap, press CTRL + S, the area flashes, select the second button, both buttons are inverted.

The SWAP can be carried out in different groups.

VHF / UHF VHF & UHF Band 20m Band 40m Band 80m BAL / AVT SAT & DIV						
R7 F5ZBP	R6 F1ZDK	R5 HB9G	TR FC	2 F5ZJW C4	F5ZBP C4	
<b>F1ZCA</b>	TELES	BESSEY	F1ZFG C4	F5ZJW FM	SAUSSY C4	
144 180 CW	144 300 000	144 320 000	APRS	ARISS	ISS APRS	
MOX	MOX < V/M SCAN > MONI MUTE SCOPE MENUS SETUP 🎘 🕻					

#### Enter frequency VFO A, VFO B, Mode ... VFO - A Shift VFO - B Mode TONE/DCS TONE/DCS OFF ○ FM ○ FM-N O Simplex 439825000 430425000 CTCSS ENC/DEC ● C4FM ○ DATA-FM Moins CTCSS ENC <u>9</u> 7 <u>8</u> 7 8 <u>9</u> O LSB O DATA-LSB O Plus O DCS ENC/DEC O USB O DATA-USB <u>5</u> <u>6</u> 4 <u>5</u> <u>6</u> 4 O DCS ENC SPLIT O AM O AM-N <u>2</u> <u>3</u> <u>2</u> <u>3</u> CTCSS TONE 1 1 Squelch ○ CW-L ○ RTTY-LSB 94.8Hz $\sim$ <u>0</u> 00 000 <u>0</u> 00 000 5 $\sim$ ○ CW-U ○ RTTY-USB DCS C <u>C</u> 032 $\sim$ MIC GAIN POWER DG-ID 075 800 Key N et Num . = 000 $\sim$ $\sim$ Shift 28MHz 0,100 MHz Shift VHF 0,600 MHz 00 $\sim$ Cancel Send to FT-991 Shift 50MHz 1,000 MHz Shift UHF 9,400 MHz

# Entering and storing parameters on a button



Entering parameters from the window or directly from the FT-991



### 5. Input of frequency VFO-A, VFO-B, mode, split, shift, CTCSS, DCS ...

💃 Enter frequency VFO /	A, VFO B, Mod	e					×
Mode FM FM-N C4FM DATA-FM LSB DATA-LSB USB DATA-USB AM AM-N CW-L RTTY-LSB CW-U RTTY-USB	Shift Simplex Moins Plus SPLIT Squelch 5 ~	VFO - A 43982 7 8 4 5 1 2 0 00	5000 9 <u>6</u> <u>3</u> 000	- VFO - 43 2 4 1 0	- B 0425 <u>8</u> 5 2 00	000 9 6 3 000	TONE/DCS  TONE/DCS OFF CTCSS ENC/DEC CTCSS ENC/DEC DCS ENC CTCSS TONE 94.8Hz CCS
MIC GAIN 075 ~ Cancel Send to	POWER 008 ~ FT-991	C Key N et N Shift 28MHz Shift 50MHz	Num . = 000 : 0,100 MHz : 1,000 MHz	C Shift Shift	VHF 0,6 UHF 9,4	00 MHz 00 MHz	032 ∨ DG-ID 00 ∨

Left click on main display VFO-A or VFO-B opens an input window.

#### Frequency VFO-A Frequency VFO-B Mode (FM, C4FM, LSB, USB, AM, CW-L, CW-U ...) for VFO-A and VFO-B) Shift (Simplex, Less, More) Split for non-standard shift modes. TONE/DCS OFF CTCSS ENC/DEC (Choice of frequency on the drop-down menu TONE) CTCSS ENC DCS ENC/DEC (Choice of the code on the drop-down menu DCS) DCS ENC/DEC (Choice of the code on the drop-down menu DCS) DCS ENC DG-ID POWER MIC GAIN For the input of frequencie one can use either the numeric keypad of the computer ( N and . = 000) Either the keyboards in the window for VFO-A and VFO-B.

**OK** validates data that is transmitted to the FT-991 but not stored. For storage see **chapter 3 Cancel** to exit without changing.

#### 6. Changing the frequency of the VFO-A with the mouse wheel.



#### 7. Storing in the memory of the FT-991 (A)

<u>On the application</u>, choose the button to be memorized, click the **A**>**M** button , the name of the button appears in the window below «editable up to 12 characters», this will be the channel label on the FT-991 (A), choose the number of memories and click OK, the frequency, mode shift, and so on are memorized, it's finished for simplex, shift less and more modes.

For the modes with **SPLIT** it is necessary more on the application in the order click on **A** / **B** then **SPLIT** "to transfer the frequency TX on the VFO-A and mode NORMAL".

On the **transceiver** briefly press the key **A> M**, then quickly in the order press and hold the **PTT** key of the microphone and the key **A> M** to the **double beep** of the FT-991 (A).





8. Saving / Restoring the SETUP MENU and memory of the FT-991 (A)

SEND TO	FT-991	GE	T FROM FT-99	1		SAVE
DISPLAY	FM/RPT	WIRES-X / GM	SSB CW	AM	RTTY	DATA
DISPLA HOME F	Y 004-009 UNCTION	115-118 DIMMER TFT	SCP DISPL	AY MODE	SCP STAF	T CYCLE
SCOPE	• ~	10 韋	SPECTRU	<b>M</b> * ∼	OFF*	~
MY CAL	L INDIC	BAR MTR PEAK	ASC DIAL	SPEED	SPC SPAN	FREQ
2 sec	~	2.0 sec $\sim$	4KHz/sec*	~	50KHz	~
DIMMER	LED	TUNER SELECT	BEEP LEVE	EL	тхт тот	
2*	$\sim$	${\rm INTERNAL}^{\star}  \sim $	60	* *	3 min	~
Mem	Group				Send	to FT-991
lemory th ile loaded	e FT-991 : MEMFT	991.mem				
	•	GE	T FROM FT-99	)1	•	Save

Before:

"GET FROM FT-991" then "SAVE", import of the SETUP from the transceiver.

The parameters can be modified from the menu: Send to FT-991 for each category "tabs", then SAVE to save to the file ...

#### a. Backup SETUP MENU :

Click the **MENU S** button Click the **From FT-991** button (downloading data from the FT-991 (A)). Then click on the **Save** button (file name = unique identification number in case there are several FT-991 (A)).

#### **b. Restoration SETUP MENU :**

After an update of the FT-991 (A) or a reset, Menu 31: 38400bps Launch the FT-991 Memory application and click the **MENU S** button When the window opens, the backup file is automatically loaded. Then click on **TO FT-991** the file is transferred to the FT-991!

#### c. Memory backup of the FT-991 (A):

Click the **From FT-991** button (downloading data from the FT-991 (A)). Then click the **Save** button (file name = MEMFT991.mem).

#### d. Restoring FT-991 (A) memory:

If a backup was performed the file is automatically loaded. Click the button **TO FT-991** the memory file is transferred to the FT-991 (A)!

For memories with **SPLIT** you must enter the **VFO B** frequency manually (as in Chapter 7)

#### 9. Display of measurements dBm and point S (experimental):

Click **dBm** to start the measurement



Frq < à 60 MHz S9 = -73 dBm Frq > à 60 mHz S9 = -93 dBm

#### **10. Button SETUP:**

**Info Bubbles checked:** display of bubble info. **At the top checked:** the FT-991 Memory window is always displayed at the top. **Choosing the COM Port** button to connect and search COM port.

#### 11. Memories of FT991(A) :



< M - , VFO / MEM , SCAN et M + > (FT991 (A) internal memories)

#### Some useful commands from the FT-991:

### The keys with underlined text on a menu with right click

METER	(COMP, ALC, PO, SWR, IDD, VDD)
IPO	IPO, AMP1, AMP2
WIDE/NAR	Selecting the bandwidth
AGC	FAST, MID, SLOW, AUTO
ATT	ON/OFF
PROC	ON/OFF
VOX	ON/OFF
MIC-EQ	ON/OFF
DNF	ON/OFF Digital Notch Filter
A>M	VFO-A in memories
NB	ON/OFF FI noise suppressor
<u>DNR</u>	ON/OFF Digital Noise Reduction (1 to 15)
$\mathbf{A} > \mathbf{B}$	VFO A in VFO B
REV	Reverse for shift relays (less more)
<b>B</b> > <b>A</b>	VFO B in VFO A
SPLIT	ON / OFF
A/B	VFO A <> VFO B exchange for split modes
MOX	TX RX
V / M	VFO / memoirs
SCAN	Scanning of memories of the FT-991
<and></and>	Memories FT-991 more or less
MONI	monitor ON/OFF
MUTE	Audio ON / OFF

TX mode <b>CW</b> for tuning antenna <b>5 watts</b>
1 spectrum scan after 3 seconds each time a memory button is pressed
only for FT-991 the FT-991A has a real-time analyzer. Disable in SETUP.

#### **Important for installation:**

**Program written in C # tested on Windows 7, 8, 8.1, 10 without problems on brand computers different, does not work under XP !** 

The framework must be up to date !