Summary of Converting from the M17 Protocol to a later version of the M17 Protocol

1. Transfer the latest version of the openrtx_cs7000.dfu program to the radio using the DfuSeDemo program.

Converting from the M17 Protocol to a later version of the M17 Protocol



Picture showing where the keys are

You need the following programs and hardware:

CS7000 M17 radio

Programming cable

DfuSeDemo program

openrtx_cs7000.dfu program

If you have not already done it, install the DFuSeDemo Program on your PC. If done properly you should have the following shortcut on your PC.



1. Attach one end of the programming cable to the radio and the other end to the USB port of the computer.

2. Run the DFuSeDemo program and you should get the following Screen:

Available DFU Devices Supports Upload Manifes Supports Download Acceler Can Detach Enter DFU mode/HID detach Lear Actions	Application Mode: DFU Mode: station tolerant rated Upload (ST) version: Version:
Upload Action File: Choose Upload	Available Sectors (Double Click for more) Upgrade or Verify Action File: Vendor ID: Targets in file: Procuet ID:
Transferred data size 0 KB(0 Bytes) of 0 KB(0 Bytes) Operation duration 00:00:00	Version: Verify after download Optimize Upgrade duration (Remove some FFs) Choose Upgrade Verify Quit

3. Press the SK1 button and while it is pressed turn on the radio and the screen is shown as follows:

	FU Mode		•	Vendor ID:	Vendor ID:	0483
 Supports Upload Manifestation tolerant Supports Download Accelerated Upload (ST) Can Detach 			Procuct ID: Version:	Procuct ID: Version:	DF11 2200	
ctions	The dotdon		Di O mode			
Select Target(s):	Target Id	Name		Available Se	ctors (Double Click	for more)
	00	Internal FI	ash	12 sectors		
	01	Option By	tes	1 sectors		
	02	OTP Mem	iory	2 sectors		
	03	Device Fe	eature	1 sectors		
Upload Action File:			Upgrade or V File:	erify Action		
			Vendor ID:	Targets	in file:	
Choose	U	pload	Procuct ID:			
Transferred data	size		Version:			
0 KB(0 Bytes) of 0 KB(0 Bytes)		🔲 Verify afte	er download			
Operation duratio			📃 Optimize	Upgrade duration (R	emove some FFs)	
00:00:00		Choose	Upgra	ade	Verify	
ι						

4. Press the choose button and you get the following screen.

i Open	A MARINA MAR			x
M17 Updates 🕨 M17 Firm	ware 🗸	Search M17	Firmware	٩
Organize 🔻 New folder			····	0
★ Favorites	Name	Date modified	Туре	
 Downloads Recent Places Desktop OneDrive - Personal 	openrtx_cs7000.dfu	7/16/2024 2:37 PM	DFU File	
 ➢ Libraries ➢ Documents ➢ Music ➢ Pictures ➢ Videos 				
🔣 Homegroup				
📲 Computer 👸 OS (C:)				
File name: *.dfu	< [✓ Dfu Files (*.df Open	u) Cancel	•

5. Find your file and highlight it as follows and then press the Open button.

i Open				x
🔾 🗸 🖓 🕨 M17 Updates 🕨 M17 Firmw	vare	• 🔸 Search M17 F	irmware	9
Organize 🔻 New folder			= •	0
★ Favorites	Name	Date modified	Туре	
🐌 Downloads	openrtx_cs7000.dfu	7/16/2024 2:37 PM	DFU File	
E Recent Places				
 OneDrive - Personal 				
 □ Libraries □ Documents □ Music □ Pictures □ Videos Wideos 				
IIII Computer ãu OS (C:) ← HHD (E:)	< III			4
File name: openrtx_cs70	00.dfu	Dfu Files (*.dfu Open) Cancel	•

6. You get the screen below.

STM Device in DF Supports Uploa Supports Down Can Detach Enter DFU mode/ Actions	U Mode ad Manifesta Iload Accelera HID detach Leave	▼ ation tolerant ted Upload (ST) e DFU mode	Application Mode: Vendor ID: Procuct ID: Version:	DFU Mode: Vendor ID: 0483 Procuct ID: DF11 Version: 2200
Select Target(s):	Target Id Name 00 Internal F 01 Option By 02 OTP Men 03 Device F	lash hory eature □Upgrade or V	Available Sector 12 sectors 1 sectors 2 sectors 1 sectors 1 sectors	ors (Double Click for more)
File: Choose Transferred data : 0 KB(0 Bytes) of (Operation duration	D KB(0 Bytes)	File: Vendor ID: Procuct ID: Version: Verify aft Optimize	openrtx_cs7000.dfu 0483 Targets in DF11 00 5 0000 er download Upgrade duration (Ren	n file: ST nove some FFs)
	F	ile correctly	loaded.	

7. Now highlight the Internal Flash as shown below and press the Upgrade button.

IfuSe Demo (v3.	0.6)	-		
Available DFU Devi STM Device in DFI Supports Uploa Supports Down Can Detach Enter DFU mode/I	ices U Mode id Manifesta iload Accelerati HID detach Leave	← tion tolerant ed Upload (ST) DFU mode	Application Mode: Vendor ID: Procuct ID: Version:	DFU Mode: Vendor ID: 0483 Procuct ID: DF11 Version: 2200
Select Target(s):	Target IdName00Internal Fill01Option Byt02OTP Mem03Device Fell	ash tes ory eature	Available Sector 12 sectors 1 sectors 2 sectors 1 sectors	s (Double Click for more)
Upload Action File: Choose Transferred data s 0 KB(0 Bytes) of 0 Operation duration 01	Upload size D KB(0 Bytes) n 0:00:00	Upgrade or V File: Vendor ID: Procuct ID: Version: Verify aft Optimize Choose.	/erify Action openrtx_cs7000.dfu 0483 Targets in f 00 ST 0000 er download Upgrade duration (Remo	ille: ive some FFs)
	Fi	le correctly	loaded.	
Abort				Quit

8. You will get the following warning.



9. Press the Yes button and you will get the following:

wailable DFU Dev	ices			
STM Device in DF	U Mode	v	Application Mode:	DFU Mode:
Supports Upload Manifestation tolerant Supports Download (ST)			Vendor ID:	Vendor ID: 0483 Procuct ID: DF11
Can Detach			Vereien:	Version: 2200
Enter DFU mode/	'HID detach Leave	DFU mode	Y CISION.	Version. 2200
ctions				
Select Target(s):	Target Id Name		Available Secto	ors (Double Click for more)
	00 Internal Fl	ash	12 sectors	
	01 Option Byl	tes	1 sectors	
	02 OTP Mem	югу	2 sectors	
	03 Device Fe	eature	1 sectors	
Upload Action		⊂ Upgrade or V	erify Action	
File:		File:	openrtx_cs7000.dfu	
		Vendor ID:	0483 Targets in	file:
Choose	. Upload	Procuct ID:	DF11 00 S	Т
Transferred data	size	Version:	0000	
UKB(0 Bytes) of 2 Bytes)	206 KB(211792	🔲 Verify afte	r download	
0		🔲 Optimize I	Upgrade duration (Rem	iove some FFs)
Operation duratio	n 10:00:00	Choose	Upgrade	e Verify
	Target 00: Up	ograding - Er	ase Phase (66%)	

10. After a few seconds you will get the following screen:

DfuSe Demo (v3	.0.6)				
Available DFU Dev STM Device in DF Supports Uploa Supports Dowr Can Detach Enter DFU mode/ Actions	ices U Mode ad Manifestal nload Accelerate HID detach Leave	← tion tolerant ed Upload (ST) DFU mode	Applica Vendor Procuct Versi	ation Mode: ID: tID: on:	DFU Mode: Vendor ID: 0483 Procuct ID: DF11 Version: 2200
Select Target(s):	Target Id Name 00 Internal Fla 01 Option Byt 02 OTP Mem 03 Device Fe	ash es ory ature	A 12 1 2 1	vailable Secto 2 sectors sectors sectors sectors	rs (Double Click for more)
Upload Action File: Choose Transferred data :	Upload	Upgrade or V File: Vendor ID: Procuct ID: Version:	/erify Actio openrtx_ 0483 DF11 0000	n cs7000.dfu Targets in 00 S	file: T
206 KB(211792 E KB(211792 Bytes Operation duration 0	lytes) of 206) n 0:00:13	Verify aft	er downloa Upgrade a	ad duration (Rem Upgrade	ove some FFs)
	Target ()0: Upgrade	succe:	ssful !	

You are now finished. Turn off the radio and turn it on again.