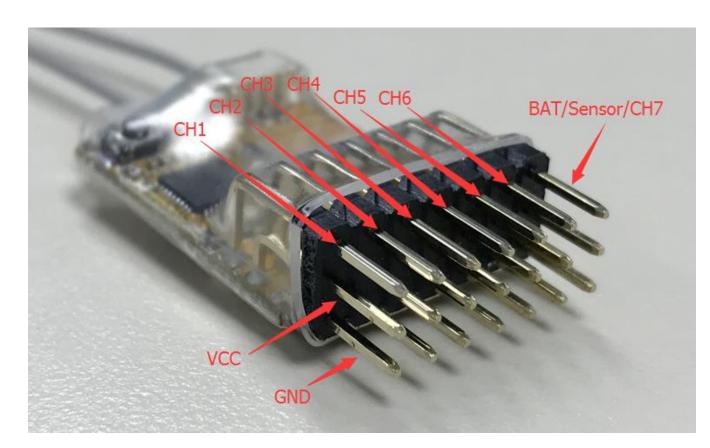
# GliderScore with Pandora

By Robust 2019/11/29

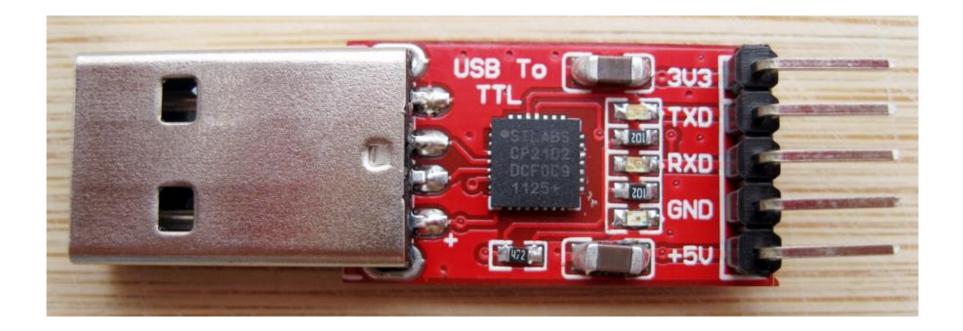
#### Need to use an universal 2.4G device

- It could act as a 7ch RC 2.4G receiver
- It could also act as a 2.4G transmitter too!
- CH5/CH6 could act as UART
- VCC/GND never inverse



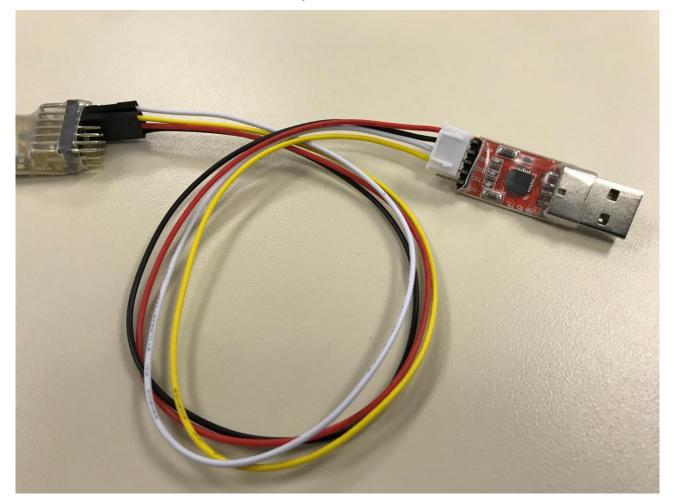
### To work with GliderScore

- Needing a USB→UART(TTL) convertor
  - CP2012 module is recommended
  - Connect with GliderScore very well and supply the 5V DC power



#### Connect with universal 2.4G device

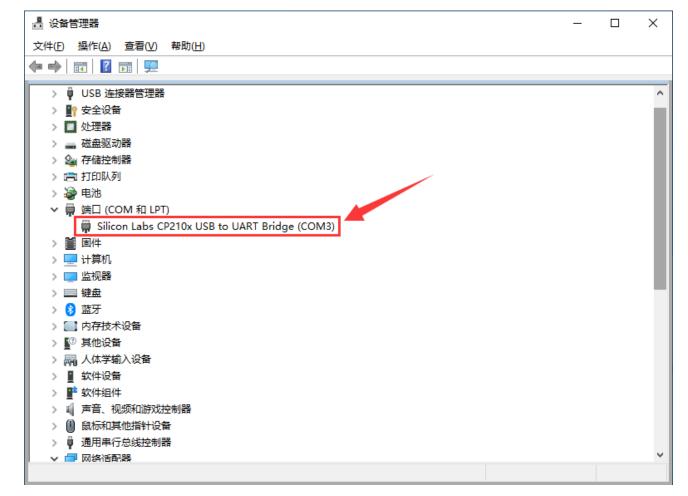
• Please refer to the picture and the table



Universal 2.4G	CP2012 module	Color
CH5	TXD	Yellow
CH6	RXD	White
VCC	5V	RED
GND	GND	BLACK

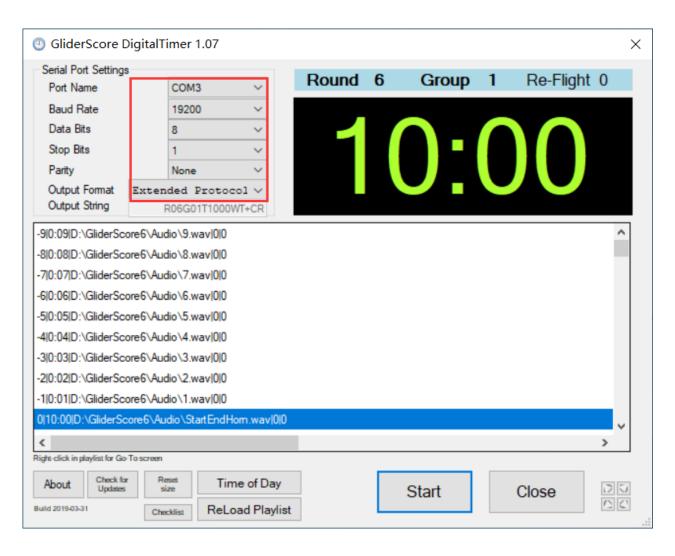
### GS timer setting: step 1

- Find out the COM port # of your CP2012 module
  - For this PC is COM3



# GS timer setting: step 2

- Set the parameter as high light
  - Baud Rate: 19200
  - Data Bits: 8
  - Stop Bits: 1
  - Parity: None



# Tips for GS timer event setting

- Try to keep the timing window running even in Sleep Time
  - For example: after F3K working time there will be landing time. If add the event high light as below will help a lot of the Pandora timing window info displaying. Otherwise Pandora will lost the signal for 10 seconds!

	Timer Name F3B-Distance				Timer Time	Displayed Time	On New Round	Announcement	Announcement File Name	Beep Frequency (Hz)	Beep Duration (mSecs)	Play	Stop	Browse for file	
	F3B-Duration				592	0:08		8	8.wav	0	0	$\triangleright$		Browse	
	F3B-Speed				593	0:07		7	7.wav	0	0	$\triangleright$		Browse	
	F3J/F5JTimer-2m10m				594	0:06		6	6.wav	0	0	$\triangleright$		Browse	
	F3J/F5JTimer-5m10m				595	0:05		5	5.wav	0	0	$\triangleright$		Browse	
	F3JTimer-5m15m	$\sim$			596	0:04		4	4.wav	0	0	$\triangleright$		Browse	
	F3K-1m3m30s				597	0:03		3	3.wav	0	0	$\triangleright$		Browse	
•	F3K-3m10m30s		N		598	0:02		2	2.wav	0	0	$\triangleright$		Browse	
	F3K-3m3m30s				599	0:01		1	1.wav	0	0	$\triangleright$		Browse	
	F3K-3m7m30s			X	600	0:00		End hom	StartEndHorn.wav	0	0	$\triangleright$		Browse	
	Thermal-5m12m				601	0:29		29 seconds remaining		0	0	$\triangleright$		Browse	
					610	0:20		20 seconds remaining	Remaining-20Secs.wav	0	0	$\triangleright$		Browse	
					620	0:10		10 seconds	10Secs.wav	0	0	$\triangleright$		Browse	
					621	0:09		9	9.wav	0	0	$\triangleright$		Browse	
					622	0:08		8	8.wav	0	0	$\triangleright$		Browse	
					623	0:07		7	7.wav	0	0	$\triangleright$		Browse	
					624	0:06		6	6.wav	0	0	$\triangleright$		Browse	
A	dd Timer Ex	port			Add Timer Ev	ent		1		·					

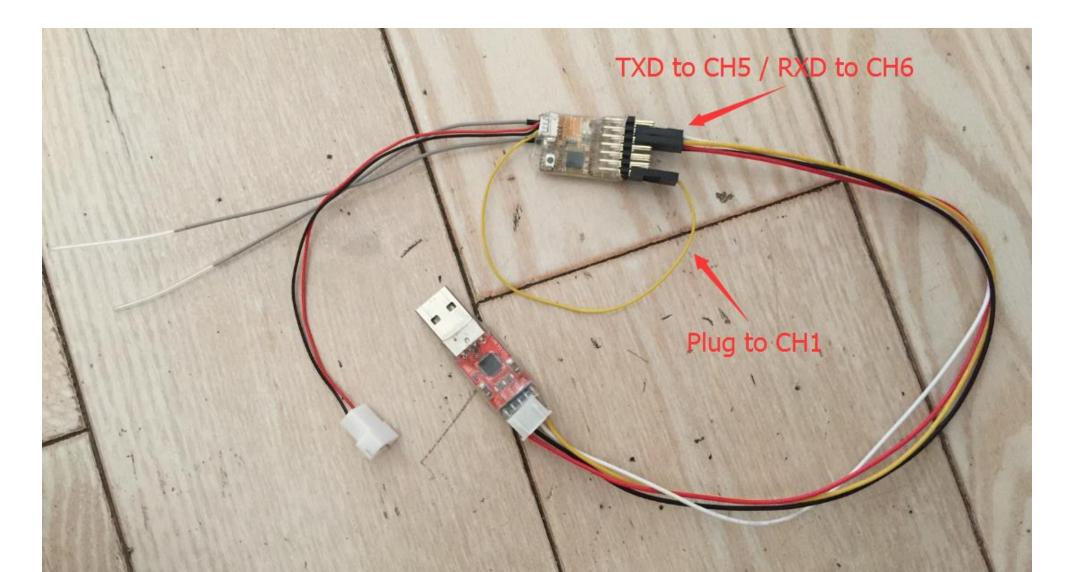
How to upgrade the firmware of the 2.4G device

### Software tools preparation

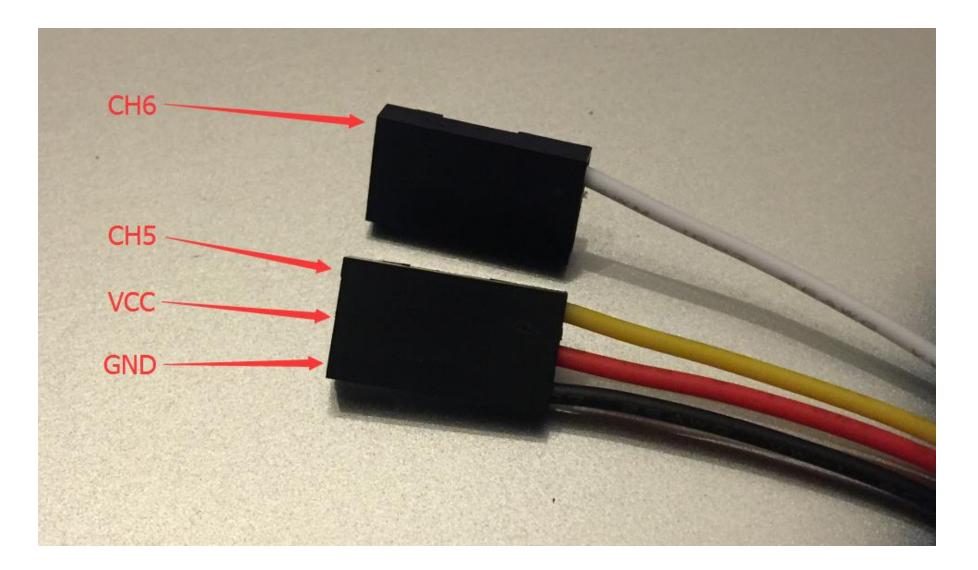
- ST Flash Loder
- CP210x USB UART driver

Flash Loa	ader Demonst	rator		
ST	Microe	lectronic	s	
Select th next to o		on port and set n.		en click
Port Nam		▼ Parity		<u> </u>
Baud Rat	e 115200	Echo	Disable	ed 💌
Data Bit	.s  8	🗾 Timeou	t(s  10	<u> </u>
	Back	Next	Cancel	<u>C</u> lose

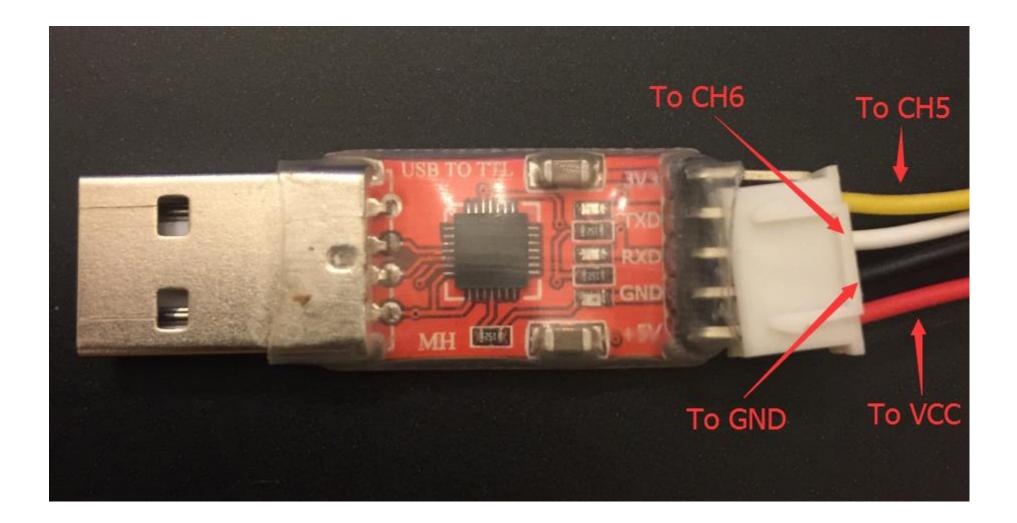
#### 6CH Receiver upgrade connection



#### Connector to 6CH receiver



### The USB-UART dongle



### Check the USB-UART dongle

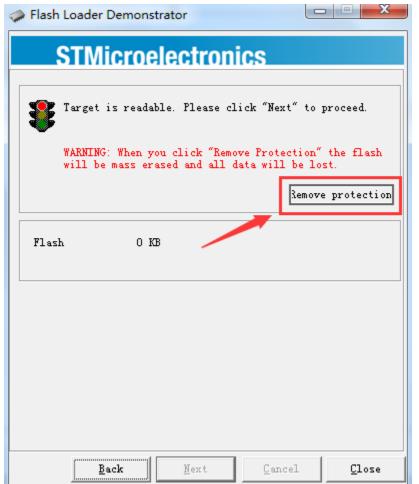
• Make sure the com port is the one of your USB-UART dongle



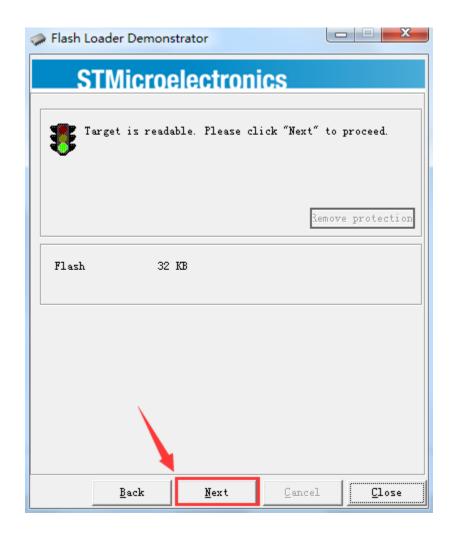
> Flash Loader Demonstrator						
ST	Nicroele	ctr	onics			
	communication j n connection.	port	and set sett	ings, then click		
-Common for	all families-					
• UART						
Port Name	COM2	•	Parity	Even 💌		
Baud Rate	115200	•	Echo	Disabled 💌		
Data Bits	8	$\overline{\mathbf{v}}$	Timeout (s	10 💌		
	Back	Next	<u>C</u> a	ncel		

#### Remove the protection

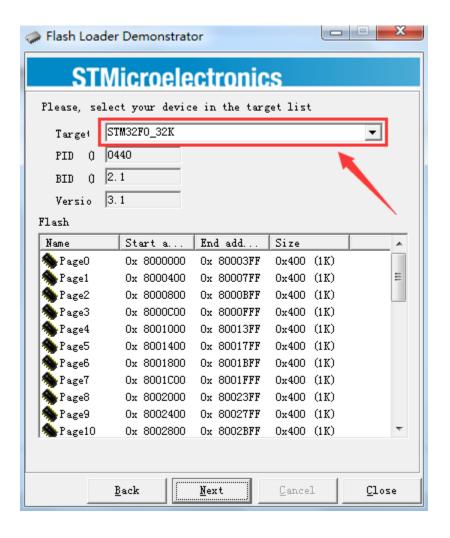
• Remove the protection, the MCU would be rest !!!



#### Next !



### Make sure is the right target



### Load the HEX file

Flash Loader Demonstrator							
OThis was a los durantica							
STMicroelectronics							
C Erase							
All     O Selection							
Download to device Download from file							
DownLoad from file C:\Users\yinghz\Desktop\2C_FW\debug\6ch\JR_Receiver							
🙃 Erase necessary pag 🔿 No Erase 🔿 Global Eras							
@ 8000000 V Jump to the user progr:							
▼ Optimize (Remove some FFs) ▼ Verify after download							
Apply option by							
C Upload from device							
Upload to file							
C							
ENABLE TREAD PROTECTION							
Back Next Cancel Close							



### Next and finish the firmware download!

STMicro Erase								
€ All	C Select	ion						
Download to devia     Download from :     Download from :	file							
-	z\Desktop\2C_FW\debu sarv paz O No Er:							
<ul> <li>● Erase necessary pag</li> <li>○ No Erase</li> <li>○ Global Eras</li> <li>@ 8000000</li> <li>✓ Jump to the user progr:</li> <li>✓ Optimize (Remove some FFs)</li> <li>✓ Verify after download</li> </ul>								
☑ Optimize (R	emove some FFs) 🔽	-	download					
- 10000000	emove some FFs) 🔽 n by1	-						
♥ Optimize (R ♠ Apply option ♥ Upload from devia ♥ Upload to file	emove some FFs) 🔽 n by1	-	download					
♥ Optimize (R. ♥ Apply option ♥ Upload from devia	emove some FFs) 🔽 n by1	Verify after	download					

Flash Load	Flash Loader Demonstrator							
ет	Micro	electron	ice					
	MILUIU		60					
Target	STM32F0_3	2K						
Map	STM32F0_3	2K. STmap						
Operatio	DOWNLOAD							
File	C:\Users\y VD_6\MDK-	yinghz\Desktop\ ARM\JR_Receiver	2C_FW\debug\6c V1_0\TR_Recei	h\JR_Receiv ver V1 bev				
File	18 74 KB	(19192 bytes)						
Status		(19192 bytes) o (19192 bytes) o	f 18.74 KB (19	192 bytes)				
Time	00:00:06		/					
De	wolood o	neration finial	ad aucoaccf	.lls.				
Du	wilload U	peration finist	icu successi	uiy				
	Back	Next	Cancel	<u>C</u> lose				
	<u>B</u> ack	Next	Lancel	<u> </u>				

### Back and enable the READ PROTECTION!

🧼 Flash Load	der Demonstrator
ST	Microelectronics
Target	STM32F0_32K
Map	STM32F0_32K. STmap
Operatio	DOWNLOAD
File	C:\Users\yinghz\Desktop\2C_FW\debug\6ch\JR_Receiv
	VO.6\MDK-ARM\JR_Receiver VI.0\JR_Receiver V1.hex
File	18.74 KB (19192 bytes)
Status	
Time	00:00:06
	wnload operation finished successfully
	Back Next Cancel Close
	Dack Vex. Caucer Close

Flash Loader Demonstrator							
STMicroelect	ronics						
C Erase							
C All	C Selection						
C Download to device Download from file							
	C_FW\debug\6ch\JR_Receiver						
Erase necessary pag     8000000	C No Erase C Global Eras						
,	FFs) 🔽 Verify after download						
Apply option by							
C Upload from device Upload to file							
ENABLE READ PROTECTION							
<u>B</u> ack <u>N</u> ex	t <u>C</u> ancel <u>C</u> lose						

### Yes and done !

