

1012 WSPR-TX_Desktop Serial API as used from software version 0.96

PC User config Set or Get commands				Type of data and number of bytes		User config is sent by the PC configuration software
Description	Send	Set/Get	Data [8..]	Data		Comment
Cmd CurrentMode	[CCM]	S/G	Text 1 S=Sig, W=WSPR, N=None			
Cmd User Config Store in EEPROM	[CSE]	S				
Opt TX Pause	[OTP]	S/G	Text 5 0-99999 Minutes			
Opt StartMode	[OSM]	S/G	Text 1 S=Sig, W=WSPR, N=None			
Opt Band TX Enable	[OBD]	S/G	Text 2 Text 1 - Band number *, E/D E=Enable, D=Disable			
Opt Location	[OLC]	S/G	Text 1. G=GPS calculated, M=Manual (DL4 or DL6 data)			
Opt Locator Precision	[OLP]	S/G	Text 1. 4 or 6 = Number of character used in the Maidenhead report.			
Opt Power	[OPW]	S/G	Text 1. N=Normal using the DPD Power Data. A=Altitude encoded.			
Dat CallSign	[DCS]	S/G	Text 6			
Dat Locator 4	[DL4]	S/G	Text 4 Maidenhead grid with four characters			
Dat Locator 6	[DL6]	S/G	Text 6 Maidenhead grid with six characters			
Dat PowerData	[DPD]	S/G	Text 2 Power in dBm. Paded with a leading zero to two characters 0-60dBm			
Dat Name	[DNM]	S/G	Text 40			
Dat Generator Frequency	[DGF]	S/G	Text 12 Frequency in Centi Hertz. Paded with leading zeros to 12 characters			
Debug Set LP Filter	[CSL]	S	Text 1. Text1=A,B,C or D for LP bank.			LP filters are automatically set by the WSPR Beacon and Signal Gen. routines but can be temporarily overrided by this command for testing purposes

PC Factory config Set or Get commands				Type of data and number of bytes		Factory data is sent by the PC Factory configuration software
Description	Send	Set/Get	Data [8..]	Data		Comment
Factory Product model Number	[FPN]	G	Text 5 0-65534			1011=WSPR-TX_LP1, 1012=WSPR Desktop, 1017=WSPR Mini
Factory Hardware Version	[FHV]	S/G	Text 3 0-255			
Factory Hardware Revision	[FHR]	S/G	Text 3 0-255			
Factory Software Version	[FSV]	G	Text 3 0-255			
Factory Software Revision	[FSR]	G	Text 3 0-255			
Factory Reference Oscillator Frequency	[FRF]	S/G	Text 9 Frequency in Hertz. Paded with leading zeros to 9 characters			Normally 026000000
Factory Low Pass Filter installed	[FLP]	S/G	Text 1 A,B,C or D for indicating or setting bank of low pass filter A to D	Text 2 00 to 15 for band *		98=just a link between input and output - the firmware will use this if no other filter is a good match, 99=Nothing fitted (open circuit) the firmware will never use this as a filter
Cmd FactoryConfig Store in EEPROM	[FSE]	S				

Arduino replies for Get commands				Type of data and number of bytes		Replies from the Arduino in respons to a Get query
Description	Return		Data	Data		
Cmd CurrentMode	{CCM}		Text 1 S=Sig, W=WSPR, N=None			
Opt TX Pause	{OTP}		Text 5 0-99999 Minutes			
Opt StartMode	{OSM}		Text 1 S=Sig, W=WSPR, N=None			
Opt Band TX Enable	{OBD}		Text 2 Text 1. Band number *, E=Enable, D=Disable			
Opt Location	{OLC}		Text 1. G=GPS calculated, M=Manual (DL4 data)			
Dat CallSign	{DCS}		Text 6			
Dat Locator 4	{DL4}		Text 4			
Dat Locator 6	{DL6}		Text 6			
Dat PowerData	{DPD}		Text 2 (00 to 60) dBm			
Dat Name	{DNM}		Text 40			
Dat Generator Freq	{DGF}		Text 12 Frequency in Centi Hertz. Paded with leading zeros to 12 characters			

Arduino Status update messages				Type of data and number of bytes		These messages are sent whenever the Arduino thinks it's appropriate
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Description	Return	Data	Data		
Current Mode	{CCM}	Text 1 S=Sig, W=WSPR, N=None			
GPS locator 4 char Maidenhead	{GL4}	Text 4			
GPS Locator 6 char Maidenhead	{GL6}	Text 6			
GPS Time	{GTM}	Text 8 HH:MM:SS			
GPS Lock	{GLC}	Text 1 T=True F=False			
GPS Satellite data	{GSI}	Text2 Text3 Text2 Text2 - ID Az El SNR			
Transmitter Frequency	{TFQ}	Text 5-12 Frequency in centiHz, no leading zeros			
Transmitter On	{TON}	Text 1 T=True F=False			
Microcontroller Paus	{MPS}	Text 7 0-4,000,000Seconds			
Microcontroller Information	{MIN}	Text			
Low Pass filter set	{LPI}	Text 1 A-D			
MicroController VCC Voltage	{MVC}	Text 4 0-9999mV (Normally 3300)			
Transmitter Current Band	{TBN}	Text 2=Band number *			
Transmitter WSPR Symbol	{TWS}	Text 2 Text3 Band number *, WSPR symbol count 0-161			
Transmitter WSPR Band Cycle Complete	{TCC}				

* Band number definitions

00=2190m

01=630m

02=160m

03=80m

04=40m

05=30m

06=20m

07=17m

8=15m

9=12m

10=10m

11=6m

12=4m

13=2m

14=70cm

15=23cm