1012 WSPR-TX_Desktop Serial API as used from sofware version 1.10

PC User config Set or Get commands

User config is sent by the PC configuration software

Description	Send	Set/Get	Data [8..]	Type of data and number of bytes	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.			
Opt Time Slot	[OTS]	S/G	Text 2 Time Slot Code 0 to 16. 0-4=10 min. schedule , 5-14=20min schedule, 15=Band coordinated Schedule, 16=No schedule			
Opt PreFix/Suffix	[OPS]	S/G	Test1 P=Use Prefix. S=Use Sufix. N=None			
Dat CallSign	[DCS]	S/G	Text 6 Callsign			
Dat Sufix	[DSF]	S/G	Text 3 Suffix code 000-125. 000-009= 0 to 9. 010-035=A to Z			Call Sign suffix code. A / will be automatically apended after the Call Sign followed by the suffix
Dat Prefix	[DPF]	S/G	Text 3 Prefix padded with leading spaces if less than three characters. A-Z and 0-9 allowed			Call Sign prefix chars. A / will be automatically added between the Prefix and the Call Sign
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. Pading with a leading zero to two characters 0-60dBm			
Dat Name	[DNM]	S/G	Text 40			
Dat Generator Freqvency	[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

Factory data is sent by the PC Factory configuration software

Description	Send	Set/Get	Data [8..]	Type of data and number of bytes	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	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 circut) the firmware will never use this as a filter
Cmd FactoryConfig Store in EEPROM	[FSE]	S				

Arduino replies for Get commands

Replies from the Arduino in respons to a Get query

Description	Return		Data	Type of data and number of bytes	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

These messages are sent whenever the Arduino thinks it's appropriate

Description	Return		Data	Type of data and number of bytes	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}		Test 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