## 1012 WSPR-TX_Desktop Serial API

### PC User config Set or Get commands

User config is sent by the PC configuration software

| Description | Send | Set/Get | Data [8..] | Data | |
|---|---|---|---|---|---|
| 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+space+Text 1 . Text2=Band Enum. Text1 E/D E=Enable, D=Disable | | |
| Opt Location | [OLC] | S/G | Text 1. G=GPS calculated, M=Manual (DL4 data) | | |
| Dat CallSign | [DCS] | S/G | Text 6 | | |
| Dat Locator 4 | [DL4] | S/G | Text 4 | | |
| Dat PowerData | [DPD] | S/G | Text 2 (00 to 60) dBm | | |
| Dat Name | [DNM] | G | Text 40 | | Not implemented |
| Dat Generator Freq | [DGF] | S/G | Text 12 (000000000000 to 999999999999)Centi Hertz | | |

### PC Factory config Set or Get commands

Factory data is sent by the PC Factory configuration software

| Description | Send | Set/Get | Data [8..] | Data | |
|---|---|---|---|---|---|
| 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 (000000000 to 999999999)Hz | | Normally 026000000 |
| Factory Low Pass Filter installed | [FLP] | S/G | Text 1+space+Text 2. Text1=A,B,C or D for LP bank. Text2=00 to 15 for band. 98=just a link between input and output, 99=Nothing fitted (open circut) the firmware will never use this | | |
| Cmd FactoryConfig Store in EEPROM | [FSE] | S | | | |

### Arduino replies for Get commands

Replies from the Arduino in respons to a User config or Factory config 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 Enum band | Text 1 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 PowerData | {DPD} | | Text 2 (00 to 60) dBm | | |
| Dat Name | {DNM} | | Text 40 | | |
| Dat Generator Freq | {DGF} | | Text 12 (000000000000 to 999999999999)mHz | | |

### Arduino Status update messages (Can be sent at anytime, they are not in respons to a get command query)

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

| Description | Return | | Data | Data | |
|---|---|---|---|---|---|
| Current Mode | {CCM} | | Text 1 S=Sig, W=WSPR, N=None | | |
| GPS locator | {GL4} | | Text 4 | | |
| GPS Time | {GTM} | | Text 8 HH:MM:SS | | |
| GPS Lock | {GLC} | | Text 1 T=True F=False | | |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Transmitter Frequency | {TFQ} | | | Text 5-12 0-terminated centiHz | | | | | | | | |
| Transmitter On | {TON} | | | Text 1 T=True F=False | | | | | | | | |
| Microcontroller Paus | {MPS} | | | Text 7 0-4,000,000Seconds | | | | | | | | |
| Microcontroller Information | {MIN} | | | Text | | | | | | | | |