2019-07-11

Beginning with version 10.3.9, Commander responds to directives conveyed via TCP/IP messages.

To ensure that all commands are accepted, be sure you are running the current version of Commander.

TCP/IP Port

DXLab applications that respond to directives conveyed via TCP/IP messages utilize a block of adjacent ports. By default, port 52000 is the base of this block. DXKeeper responds to messages received via the second port in the block (default: 52001); Commander responds to messages received via the third port in the block (default:52002).

To specify a different block of ports,

1. Click the **Net Serv** button in the Radio panel on Commander's Configuration window
2. In the **Network Service** window that appears, specify the **Base Port** of the desired block of ports, and click the **Restart** button

Message Format

Messages are conveyed using ADIF field syntax, e.g.

<FieldName:FieldLength>FieldValue

Every message specifies two fields: the first conveying a command, and the second conveying all parameters

<CommandField><ParameterFields>

<Parameterfields> conveys 0 or more parameters.

Parameters are also conveyed using ADIF field syntax, e.g.

```
<parameters:33><xcvrfreq:5>14080<xcvrmode:4>RTTY
```

but frequencies are conveyed using the locally-defined decimal separator.

Messages accepted by Commander

1. Set RX frequency and mode in a manner that works with all supported xcvrs, e.g.

```
<command:14>CmdSetFreqMode<parameters:56><xcvrfreq:5>14080<xcvrmode:4>RTTY<preservesplita
nddual:1>N
```

Valid modes are (AM, CW, CW-R, DATA-L, DATA-U, FM, LSB, USB, RTTY, RTTY-R, WBFM)

`<preservesplitanddual:1>N`	means reset Split and reset Dual (default if `<preservesplitanddual:1> is n`ot present)
`<preservesplitanddual:1>Y`	means leave Split and Dual unchanged

Commander's QSXMode state variable is set to the specified mode

2. Set TX frequency and set Split and set Dual in a manner that works with all supported xcvrs, e.g.

```
<command:11>CmdQSXSplit<parameters:57><xcvrfreq:5>14085<SuppressDual:1>N<SuppressModeChan
ge:1>N
```

`<SuppressDual:1>N` means set Dual if the transceiver supports it and Commander is configured to accept "Dual Rcv On"

`<SuppressDual:1>Y` means don't set Dual

<SuppressModeChange:1>N means set the TX Mode to the mode specified by Commander's QSXMode state variable (default if `<SuppressModeChange:1>` is not present

<SuppressModeChange:1>Y means leave the TX Mode unchanged

3. Set RX frequency, e.g.

```
<command:10>CmdSetFreq<parameters:17><xcvrfreq:5>21230
```

The currently-selected VFO's frequency is set to the specified value.

4. Set TX frequency, e.g.

```
<command:12>CmdSetTXFreq<parameters:17><xcvrfreq:5>21231
```

If split is disabled, the currently-selected VFO's frequency is set to the specified value. If split is enabled, the not-currently-selected VFO's frequency is set to the specified value.

5. Set Mode, e.g.

```
<command:10>CmdSetMode<parameters:7><1:2>CW
```

Valid modes are (AM, CW, CW-R, DATA-L, DATA-U, FM, LSB, USB, RTTY, RTTY-R, WBFM)

6. Set Split, e.g.

```
<command:8>CmdSplit<parameters:7><1:2>on

<command:8>CmdSplit<parameters:8><1:3>off
```

7. Transmit, e.g.

```
<command:5>CmdTX<parameters:0>
```

9. Receive, e.g.

```
<command:5>CmdRX<parameters:0>
```

10. Report RX frequency using comma and period as thousands and decimal separator characters respectively, e.g.

```
<command:10>CmdGetFreq<parameters:0>
```

returns a single field in ADIF syntax specifying the RX frequency in kilohertz, e.g.

```
<CmdFreq:10>14,010.500
```

If the transceiver is not split, the RX frequency is also the TX frequency.

If the transceiver has not reported its RX frequency, the response will be

```
<CmdFreq:4>.000
```

11. Report TX frequency using comma and period as thousands and decimal separator characters respectively, e.g.

```
<command:12>CmdGetTXFreq<parameters:0>
```

returns a single field in ADIF syntax specifying the TX frequency in kilohertz, e.g.

```
<CmdTXFreq:10>14,011.500
```

If the transceiver is not split, the RX frequency is also the TX frequency.

If the transceiver has not reported its TX frequency, the response will be

```
<CmdTXFreq:4>.000
```

12. Report RX frequency using the current locale’s thousands and decimal separator characters, e.g.

```
<command:11>CmdSendFreq<parameters:0>
```

returns a single field in ADIF syntax specifying the RX frequency in kilohertz, e.g.

```
<CmdFreq:10>14,010.500
```

If the transceiver is not split, the RX frequency is also the TX frequency.

If the transceiver has not reported its RX frequency, the response will be

```
<CmdFreq:4>.000
```

13. Report TX frequency using the current locale’s thousands and decimal separator characters, e.g.

```
<command:13>CmdSendTXFreq<parameters:0>
```

returns a single field in ADIF syntax specifying the TX frequency in kilohertz, e.g.

```
<CmdTXFreq:10>14,011.500
```

If the transceiver is not split, the RX frequency is also the TX frequency.

If the transceiver has not reported its TX frequency, the response will be

```
<CmdTXFreq:4>.000
```

14. Report mode, e.g.

<command:11>CmdSendMode<parameters:0>

returns a single field in ADIF syntax specifying the radio's mode, e.g.

<CmdMode:2>CW

Valid modes are (AM, CW, CW-R, DATA-L, DATA-U, FM, LSB, USB, RTTY, RTTY-R, WBFM)

If the transceiver has not reported its mode, the response will be

<CmdMode:0>

15. Report split, e.g.

<command:12>CmdSendSplit<parameters:0>

returns a single field in ADIF syntax specifying the state of the transceiver's split, e.g.

<CmdSplit:3>OFF

or

<CmdSplit:2>ON

16. Report transmit status, e.g.

<command:9>CmdSendTX<parameters:0>

returns a single field in ADIF syntax specifying whether the transceiver is transmitting, e.g.

<CmdTX:3>OFF

or

<CmdTX:2>ON

Not all transceivers respond to this directive.

17. Direct an Icom transceiver to synchronize its transceiver frequencies

<command:11>CmdSyncIcom<parameters:0>

18. Direct Commander to execute a specified user-defined command sequence by index

<command:8>seqindex<parameters:6><1:1>0 – executes user-defined command sequence #1

<command:8>seqindex<parameters:7><1:2>31 – executes user-defined command sequence #32

19. Direct Commander to execute a specified user-defined command sequence by name

<command:8>seqname<parameters:7><1:2>NR – executes the user-defined command sequence named NR

20. Direct the primary transceiver to transmit specified text in CW

```
<command:7>cwchars<parameters:16>testing de aa6yq
```