

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

## 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 xcvs, e.g.

```
<command:14>CmdSetFreqMode<parameters:33><xcvrfreq:5>14080<xcvrmode:4>RTTY<preservesplitanddual: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
```

```
<preservesplitanddual:1>Y means leave Split and Dual unchanged
```

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

```
<command:11>CmdQSXSplit<parameters:34><xcvrfreq:5>14085<SuppressDual:1>N
```

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

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

### 3. Set RX\* frequency, e.g.

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

### 4. Set TX frequency, e.g.

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

### 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>
```

### 8. Receive, e.g.

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

### 9. Report RX frequency, 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
```

### 10. Report TX frequency, 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
```

### 11. Report mode, e.g.

<command:10>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>

### 12. 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

### 13. Direct an Icom transceiver to synchronize its transceiver frequencies

<command:11>CmdSyncIcom<parameters:0>