

The values of “PHASE CAL i/j INDEX” are as defined in the [vex 1.5 standard](#) **except**

- 0-based rather than 1-based
- Only 0 and positive integers allowed.
- They must come in numerical order

Tone number 0 is defined as first tone above 0Hz in the recorded baseband.

Examples

N.B. All the assume PHASE CAL INT set to 1

No tones written out

```
# FREQ TABLE #####!
FREQ ENTRIES:      2
FREQ (MHZ) 0:      1358.49000000
BW (MHZ) 0:         8.00000000
SIDE BAND 0:        L
NUM CHANNELS 0:    8192
CHANS TO AVG 0:    512
OVERSAMPLE FAC. 0: 1
DECIMATION FAC. 0: 1
PHASE CALS 0 OUT:  0
@
FREQ (MHZ) 1:      1358.49000000
BW (MHZ) 1:         8.00000000
SIDE BAND 1:        U
NUM CHANNELS 1:    8192
CHANS TO AVG 1:    512
OVERSAMPLE FAC. 1: 1
DECIMATION FAC. 1: 1
PHASE CALS 1 OUT:  0
```

Typical case: outer tones only

```
# FREQ TABLE #####!
FREQ ENTRIES:      2
FREQ (MHZ) 0:      1358.49000000
BW (MHZ) 0:         8.00000000
SIDE BAND 0:        L
NUM CHANNELS 0:    8192
CHANS TO AVG 0:    512
OVERSAMPLE FAC. 0: 1
DECIMATION FAC. 0: 1
PHASE CALS 0 OUT:  2
PHASE CAL 0/0 INDEX:0
PHASE CAL 0/1 INDEX:7
```

```
@
FREQ (MHZ) 1:      1358.49000000
BW (MHZ) 1:       8.00000000
SIDE BAND 1:      U
NUM CHANNELS 1:   8192
CHANS TO AVG 1:   512
OVERSAMPLE FAC. 1: 1
DECIMATION FAC. 1: 1
PHASE CALS 1 OUT: 0
PHASE CAL 1/0 INDEX:0
PHASE CAL 1/1 INDEX:7
```

First tone too close to DC:

```
# FREQ TABLE #####!
FREQ ENTRIES:      1
FREQ (MHZ) 0:     1358.99000000
BW (MHZ) 0:       8.00000000
SIDE BAND 0:      U
NUM CHANNELS 0:   8192
CHANS TO AVG 0:   512
OVERSAMPLE FAC. 0: 1
DECIMATION FAC. 0: 1
PHASE CALS 0 OUT: 2
PHASE CAL 0/0 INDEX:1
PHASE CAL 0/1 INDEX:7
```

All tones extracted

```
# FREQ TABLE #####!
FREQ ENTRIES:      1
FREQ (MHZ) 0:     1358.49000000
BW (MHZ) 0:       8.00000000
SIDE BAND 0:      U
NUM CHANNELS 0:   8192
CHANS TO AVG 0:   512
OVERSAMPLE FAC. 0: 1
DECIMATION FAC. 0: 1
PHASE CALS 0 OUT: 8
PHASE CAL 0/0 INDEX:0
PHASE CAL 0/1 INDEX:1
PHASE CAL 0/2 INDEX:2
PHASE CAL 0/3 INDEX:3
PHASE CAL 0/4 INDEX:4
PHASE CAL 0/5 INDEX:5
PHASE CAL 0/6 INDEX:6
PHASE CAL 0/7 INDEX:7
```

Band matching

```
# FREQ TABLE #####!  
FREQ ENTRIES:      4  
FREQ (MHZ) 0:      1358.49000000  
BW (MHZ) 0:        8.00000000  
SIDE BAND 0:       L  
NUM CHANNELS 0:    8192  
CHANS TO AVG 0:    512  
OVERSAMPLE FAC. 0: 1  
DECIMATION FAC. 0: 1  
PHASE CALS 0 OUT:  2  
PHASE CAL 0/0 INDEX:0  
PHASE CAL 0/1 INDEX:7  
@  
FREQ (MHZ) 1:      1358.49000000  
BW (MHZ) 1:        8.00000000  
SIDE BAND 1:       U  
NUM CHANNELS 1:    8192  
CHANS TO AVG 1:    512  
OVERSAMPLE FAC. 1: 1  
DECIMATION FAC. 1: 1  
PHASE CALS 1 OUT:  0  
PHASE CAL 1/0 INDEX:0  
@Tone below outermost tone to match with FREQ 3  
PHASE CAL 1/1 INDEX:6  
@  
@This Frequency correlates with the first two  
FREQ (MHZ) 2:      1350.49000000  
BW (MHZ) 2:       16.00000000  
SIDE BAND 2:       U  
NUM CHANNELS 2:    8192  
CHANS TO AVG 2:    512  
OVERSAMPLE FAC. 2: 1  
DECIMATION FAC. 2: 1  
PHASE CALS 2 OUT:  4  
PHASE CAL 2/0 INDEX:0  
PHASE CAL 2/1 INDEX:7  
PHASE CAL 2/2 INDEX:8  
@Tone below outermost tone to match with FREQ 3  
PHASE CAL 2/3 INDEX:14  
@  
@This frequency correlates with the first 2 with a 1MHz offset  
FREQ (MHZ) 3:      1349.49000000  
BW (MHZ) 3:       16.00000000  
SIDE BAND 3:       U  
NUM CHANNELS 3:    8192  
CHANS TO AVG 3:    512  
OVERSAMPLE FAC. 3: 1  
DECIMATION FAC. 3: 1
```

PHASE CALS 3 OUT: 4
PHASE CAL 3/0 INDEX:1
PHASE CAL 3/1 INDEX:8
PHASE CAL 3/2 INDEX:9
PHASE CAL 3/3 INDEX:15

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