## **TELEX**i

#### TI.PARAM x

TI.PRM

reads the value of PARAM knob x; default return range is from 0 to 16383; return range can be altered by the TI.PARAM.MAP command

# TI.PARAM.QT x

TI.PRM.OT return the quantized value for PARAM knob x using the scale set by TI. PARAM. SCALE; default return range is from 0 to 16383

# TI.PARAM.N x

TI.PRM.N

return the quantized note number for PARAM knob x using the scale set by TI.PARAM.SCALE

TI.PARAM.SCALE x TI.PRM.SCALE select scale # y for PARAM knob x; scales listed in full description

TI.PARAM.MAP x y z TI.PRM.MAP maps the PARAM values for input x across the range y - z (defaults 0-16383)

#### TI.IN x

reads the value of IN jack x; default return range is from -16384 to 16383 - representing -10V to +10V; return range can be altered by the TI.IN.MAP command

#### TI.IN.QT x

return the quantized value for IN jack x using the scale set by TI.IN.SCALE; default return range is from -16384 to 16383 - representing -10V to +10V

#### TI.IN.N x

return the quantized note number for IN jack x using the scale set by TI.IN.SCALE

#### TI.IN.SCALE x

select scale # y for IN jack x; scales listed in full description

# TI.IN.MAP x y z

maps the IN values for input jack x across the range y - z (default range is -16384 to 16383 representing -10V to +10V)

#### TI.PARAM.INIT x

TI.PRM.INIT

initializes PARAM knob x back to the default boot settings and behaviors; neutralizes mapping (but not calibration)

#### TI.IN.INIT x

initializes IN jack x back to the default boot settings and behaviors; neutralizes mapping (but not calibration)

## TI.INIT d

initializes all of the PARAM and IN inputs for device number d (1-8)

TI.PARAM.CALIB x y TI.PRM.CALIB calibrates the scaling for PARAM knob x; y of 0 sets the bottom bound; y of 1 sets the top bound

## TI.IN.CALIB x y

calibrates the scaling for IN jack x; y of -1 sets the -10V point; y of 0 sets the 0V point; y of 1 sets the +10V point

#### TI.STORE d

stores the calibration data for TXi number d (1-8) to its internal flash memory

#### TI.RESET d

resets the calibration data for TXi number d (1-8) to its factory defaults (no calibration)

# **TELEXo**

# TO.TR x y

sets the TR value for output x to y (0/1)

## TO.TR.TOG x

toggles the TR value for output x

## TO.TR.PULSE x TO.TR.P

pulses the TR value for output x for the duration set by TO.TR.TIME/S/M

TO.TR.PULSE.DIV x y TO.TR.P.DIV sets the clock division factor for TR output x to

TO.TR.PULSE.MUTE x y TO.TR.P.MUTE mutes or un-mutes TR output x; y is 1 (mute) or 0 (un-mute)

# TO.TR.TIME x y

sets the time for TR.PULSE on output n; y in milliseconds

## TO.TR.TIME.S x y

sets the time for TR.PULSE on output n; y in seconds

#### TO.TR.TIME.M x y

sets the time for TR.PULSE on output n; y in minutes

#### TO.TR.WIDTH x y

sets the time for TR.PULSE on output n based on the width of its current metronomic value; y in percentage (0-100)

#### TO.TR.POL x y

sets the polarity for TR output n

## TO.TR.M.ACT x y

sets the active status for the independent metronome for output x to y (0/1); default 0 (disabled)

# TO.TR.M x y

sets the independent metronome interval for output x to y in milliseconds; default 1000

#### TO.TR.M.S x v

sets the independent metronome interval for output x to y in seconds; default 1

## TO.TR.M.M x y

sets the independent metronome interval for output x to y in minutes

#### TO.TR.M.BPM x y

sets the independent metronome interval for output x to y in Beats Per Minute

# TO.TR.M.COUNT x y

sets the number of repeats before deactivating for output x to y; default 0 (infinity)

## TO.TR.M.MUL x v

multiplies the M rate on TR output x by y; y defaults to 1 - no multiplication

## TO.TR.M.SYNC x

synchronizes the PULSE for metronome on TR output number x

#### TO.M.ACT d y

sets the active status for the 4 independent metronomes on device d (1-8) to v (0/1): default 0 (disabled)

## TO.M d y

sets the 4 independent metronome intervals for device d (1-8) to v in milliseconds: default 1000

### TO.M.S d y

sets the 4 independent metronome intervals for device d to v in seconds: default 1

#### TO.M.M d y

sets the 4 independent metronome intervals for device d to y in minutes

#### TO.M.BPM d y

sets the 4 independent metronome intervals for device d to y in Beats Per Minute

#### TO.M.COUNT d v

sets the number of repeats before deactivating for the 4 metronomes on device d to v: default 0 (infinity)

#### TO.M.SYNC d

synchronizes the 4 metronomes for device number d (1-8)

CV target output x; y values are bipolar (-16384 to +16383) and map to -10 to +10

#### TO.CV.SLEW x y

set the slew amount for output x: v in milliseconds

## TO.CV.SLEW.S x y

set the slew amount for output x; y in seconds

#### TO.CV.SLEW.M x y

set the slew amount for output x; y in minutes

# TO.CV.SET x y

set the CV for output x (ignoring SLEW); y values are bipolar (-16384 to +16383) and map to -10 to +10

#### TO.CV.OFF x y

set the CV offset for output x; y values are added at the final stage

#### TO.CV.QT x y

CV target output x; y is quantized to output's current CV.SCALE

## TO.CV.QT.SET x y

set the CV for output x (ignoring SLEW); y is quantized to output's current CV. SCALE

## TO.CV.N x y

target the CV to note y for output x; y is indexed in the output's current CV.SCALE

## TO.CV.N.SET x y

set the CV to note y for output x; y is indexed in the output's current CV . SCALE (ignoring SLEW)

#### TO.CV.SCALE x v

select scale # y for CV output x; scales listed in full description

## TO.CV.LOG x y

translates the output for CV output x to logarithmic mode y; y defaults to 0 (off); mode 1 is for 0-16384 (0V-10V), mode 2 is for 0-8192 (0V-5V), mode 3 is for 0-4096 (0V-2.5V), etc.

#### T0.0SC x v

targets oscillation for CV output x to y with the portamento rate determined by the TO.OSC.SLEW value; y is 1v/oct translated from the standard range (1-16384); a value of 0 disables oscillation; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

## TO.OSC.SET x y

set oscillation for CV output x to y (ignores CV.OSC.SLEW); y is 1v/oct translated from the standard range (1-16384); a value of 0 disables oscillation; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

## T0.0SC.QT x y

targets oscillation for CV output x to y with the portamento rate determined by the T0.0SC.SLEW value; y is 1v/oct translated from the standard range (1-16384) and guantized to current OSC. SCALE: a value of 0 disables oscillation; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

#### T0.0SC.QT.SET x y

set oscillation for CV output x to y (ignores CV. OSC. SLEW); y is 1v/oct translated from the standard range (1-16384) and quantized to current OSC. SCALE; a value of 0 disables oscillation; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

#### TO.OSC.N x y

targets oscillation for CV output x to note y with the portamento rate determined by the TO.OSC.SLEW value; see quantization scale reference for y; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

# TO.OSC.N.SET x y

sets oscillation for CV output x to note y (ignores CV.OSC.SLEW); see quantization scale reference for y; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

# T0.0SC.FQ x y

targets oscillation for CV output x to frequency y with the portamento rate determined by the TO.OSC.SLEW value; y is in Hz; a value of 0 disables oscillation; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

# T0.0SC.FQ x y

sets oscillation for CV output x to frequency y (ignores CV.OSC.SLEW); y is in Hz; a value of 0 disables oscillation; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

# T0.0SC.LF0 x y

targets oscillation for CV output x to LFO frequency y with the portamento rate determined by the TO.OSC.SLEW value; y is in mHz (millihertz: 10^-3 Hz); a value of 0 disables oscillation; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

# T0.0SC.LF0.SET x y

sets oscillation for CV output x to LFO frequency y (ignores CV. OSC. SLEW); y is in mHz (millihertz: 10^-3 Hz); a value of 0 disables oscillation; CV amplitude is used as the peak for oscillation and needs to be > 0 for it to be perceivable

# TO.OSC.CYC x y

targets the oscillator cycle length to y for CV output x with the portamento rate determined by the TO.OSC.SLEW value; y is in milliseconds

## TO.OSC.CYC.SET x v

sets the oscillator cycle length to y for CV output x (ignores CV. OSC. SLEW); y is in millisec-

## TO.OSC.CYC.S x y

targets the oscillator cycle length to y for CV output x with the portamento rate determined by the TO.OSC. SLEW value: v is in seconds

## TO.OSC.CYC.S.SET x y

sets the oscillator cycle length to y for CV output x (ignores CV.OSC.SLEW); y is in seconds

## TO.OSC.CYC.M x y

targets the oscillator cycle length to y for CV output x with the portamento rate determined by the TO.OSC.SLEW value; y is in minutes

## TO.OSC.CYC.M.SET x y

sets the oscillator cycle length to y for CV output x (ignores  ${\tt CV}$  .  ${\tt OSC}$  .  ${\tt SLEW}$ ); y is in minutes

## TO.OSC.SCALE x y

select scale # y for CV output x; scales listed in full description

#### TO.OSC.WAVE x y

set the waveform for output x to y; y values range  $\theta$ -4999; values translate to sine (0), triangle (1000), saw (2000), pulse (3000), or noise (4000); oscillator shape between values is a blend of the pure waveforms

## TO.OSC.RECT x y

rectifies the polarity of the oscillator for output x to y; range for y is -2 to 2; default is 0 (no rectification); 1 & -1 are partial rectification - omitting all values on the other side of the sign; 2 & -2 are full rectification - inverting values from the other pole

## TO.OSC.WIDTH x y

sets the width of the pulse wave on output x to y; y is a percentage of total width (0 to 100); only affects waveform 3000

#### TO.OSC.SYNC x

resets the phase of the oscillator on CV output x (relative to T0.0SC.PHASE)

### TO.OSC.PHASE x y

sets the phase offset of the oscillator on CV output x to y (0 to 16383); y is the range of one cycle

#### TO.OSC.SLEW x v

sets the frequency slew time (portamento) for the oscillator on CV output  $\boldsymbol{x}$  to  $\boldsymbol{y}$ ;  $\boldsymbol{y}$  in milliseconds

#### TO.OSC.SLEW.S x y

sets the frequency slew time (portamento) for the oscillator on CV output x to y; y in seconds

#### TO.OSC.SLEW.M x y

sets the frequency slew time (portamento) for the oscillator on CV output x to y; y in minutes

#### TO.OSC.CTR x y

centers the oscillation on CV output x to y; y values are bipolar (-16384 to +16383) and map to -10 to +10

# TO.ENV.ACT x y

activates/deactivates the AD envelope generator for the CV output x; y turns the envelope generator off (0 - default) or on (1); CV amplitude is used as the peak for the envelope and needs to be >  $\,\theta$  for the envelope to be perceivable

#### TO.ENV.TRIG x

triggers the envelope at CV output x to cycle; CV amplitude is used as the peak for the envelope and needs to be > 0 for the envelope to be perceivable

## TO.ENV.ATT x y

set the envelope attack time to y for CV output x; y in milliseconds (default 12 ms)

## TO.ENV.ATT.S x y

set the envelope attack time to y for CV output x; y in seconds

# TO.ENV.ATT.M x y

set the envelope attack time to y for CV output x; y in minutes

# TO.ENV.DEC x y

set the envelope decay time to y for CV output x; y in milliseconds (default 250 ms)

#### TO.ENV.DEC.S x y

set the envelope decay time to y for CV output x; y in seconds

# TO.ENV.DEC.M x y

set the envelope decay time to y for CV output x; y in minutes

#### TO.ENV.EOR x n

fires a PULSE at the End of Rise to the unit-local trigger output 'n' for the envelope on CV output x; n refers to trigger output 1-4 on the same TXo as CV output 'y'

## TO.ENV.EOC x n

fires a PULSE at the End of Cycle to the unitlocal trigger output 'n' for the envelope on CV output x; n refers to trigger output 1-4 on the same TXo as CV output 'y'

## TO.ENV.LOOP x y

causes the envelope on CV output x to loop for y times; a y of  $\theta$  will cause the envelope to loop infinitely; setting y to 1 (default) disables looping and (if currently looping) will cause it to finish its current cycle and cease

#### TO.TR.INIT x

initializes TR output x back to the default boot settings and behaviors; neutralizes metronomes, dividers, pulse counters, etc.

#### TO.CV.INIT x

initializes CV output x back to the default boot settings and behaviors; neutralizes off-sets, slews, envelopes, oscillation, etc.

#### TO.INIT d

initializes all of the TR and CV outputs for device number d (1-8)

#### TO.KILL d

cancels all TR pulses and CV slews for device number d (1-8)  $\,$