

Command:RTIME (RT)

General Usage

On Tiger

Shortcut	RT
Format	[Addr#]RT [X=report_time] [Y=pulse_length in ms] [Z=delay_time in ms] [F=num_aves]
Type	Card-Addressed
Remembered	Using [Addr#]SS Z

On MS2000 and RM2000

Shortcut	RT
Format	RT [X=report_time] [Y=pulse_length in ms] [Z=delay_time] [F=num_aves]
Remembered	Using SS Z

The X argument sets the time interval between report events when using IN0_mode = 5, TTL triggered serial interface asynchronous reporting. The report_time value has an acceptable range from 20 to 32700 milliseconds. The default value is 200ms.

The Y argument sets the length of the TTL output pulse in ms when using any OUT0_mode that triggers a TTL pulse. (The Y arguments command has a slightly different usage on a TGLED card. Refer to TGLED card user guide for more details.)

The Z argument sets the post-move delay time in ms for sequenced arrays, and/or the delay between ring buffer moves when RB X is set to autoplay (mode 2 or 3). Note that for ring buffer moves the delay time specifies the interval between attempted moves, whereas for sequenced arrays the delay specifies the time between arriving at the desired position and initiating movement to the next position. For ring buffer if the delay time is set to be 0 then the actual time between moves will be the axis loop time (generally 0.25ms times the number of axes, e.g. 1ms for a four axis card).

The F argument sets num_aves, the power-of-two exponent for the number of samples to be averaged. Used with the CRISP system.

On Tiger with Micro-mirror for SPIM

Shortcut	RT
Format	RT [F=scan duration] [R=laser duration] [T=camera duration]
Remembered	Using SS Z

Sets the duration of output pulses from the Micro-mirror card while the SPIM state machine is running. All units in milliseconds and are currently rounded to the nearest 0.25ms. Scan duration specified is one-way time (in v3.13 and earlier the value from SAF was used instead).

On Tiger with MicroMirror and Phototargeting

Shortcut	RT
Format	[Addr#]RTIME [Y=laser_duration] [Z=delay_time]
Units	Milliseconds
Type	Card-Addressed
Remembered	Using [Addr#]SS Z

The **Y** parameter `laser_duration` sets the time that the laser is turned on in milliseconds, essentially the same as TTL pulse length as described in the main TG-1000 programming manual. The setting applies to both moves initiated by [AIJ](#) as well as to ring buffer moves. Normal moves using [MOVE](#) or [MOVREL](#) commands will not turn on the laser. Its value should be between 1 and 65000. The **Z** parameter `delay_time` remains exactly as described in the main TG-1000 programming manual: the delay between ring buffer moves. If `delay_time` is less than (`laser_duration` + `settle_delay`) then the ring buffer behavior is unspecified. Its value should be between 1 and 16000

On Tiger with TGLED

Shortcut	RT
Format	[Addr#]RT Y=[LED ON time on TTL trigger in ms]
Units	Time in millisec between 1 to 65000
Type	Card-Addressed
Remembered	Using [Addr#]SS Z

The RT command's Y argument is "recycled" for a different purpose for the TGLED cards. Here it is used to set the duration the LEDs stay on after a TTL trigger.

Other Behavior and function of RT command have been left unchanged. Refer to the TG-1000 programming manual for more info.

On Tiger with TGPMT

Shortcut	RT
Format	[Addr#]RT Y=[PMT overload reset pulse duration]
Units	Time in millisec between 1 to 65000
Type	Card-Addressed
Remembered	Using [Addr#]SS Z

The RT command's Y argument is "recycled" for a different purpose for the TGPMT cards. Here it is used to set the duration the Reset pulse to clear the PMT from Overload state. Overload reset pulse is generated when [LOCK](#) command is issued.

Example

Assuming TGPMT card address is **7**

```
7rt y=100
:A
```

```
7rt y?
```

```
:A Y=100.000000
```

On Phototrack systems

Shortcut	RT
Format	RT [X=report_time]
Remembered	Using SS Z

Sets the time interval between report events when using [TTL X=5](#) TTL triggered serial interface asynchronous reporting. The report_time value has an acceptable range from 20 to 32700 milliseconds. The default value is 200ms.

To turn ON/OFF serial position logging first set the ttl_function to serial logging using [TTL X=5](#). Then either RM command without any arguments, or a TTL pulse on the INPUT BNC will toggle the serial reporting function ON or OFF. To change the reporting time interval use [RT X=report_time](#). Save any changes you wish to keep using [SS Z](#).

With SERVOLOCK_TTL Function

Shortcut	RT
Format	RT [R= duration threshold]
Remembered	Using SS Z

Sets the trigger duration threshold for the SERVOLOCK_TTL functionality (pulses longer than the threshold are considered “long” = negative move and shorter are considered “short” = positive move. Restricted to units of 0.25 milliseconds. Defaults to 0.75 ms.

[commands](#), [led](#), [tiger](#), [ms2000](#), [tgled](#), [crisp](#), [ttl](#), [micromirror](#), [Phototargeting](#), [tgpmt](#), [spim](#)

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