Command:PR

This is a Tiger only command, that has different usage for MicroMirrors and Piezos.

MicroMirror

Shortcut	PR
Format	PR [axis]=[5 to 10] ...
Units	Integer code
Type	Axis-Specific
Remembered	Automatically
Firmware Required	v2.83+

This command is “recycled” for a different use in MicroMirror axes than for piezo. In the context of a MicroMirror axis this command is used to set the MicroMirror travel range. Settings is automatically saved into non-voltatile memory, however controller needs a system RESET or RESTART for setting to take effect.

PR[Axis Name] =	**MicroMirror Range** **in degrees**
5	5
6	6
8 (default)	8
10	10

Example

```
PR A=5
:A
```

Sets range of A axis as 5 degrees

```
PR A? B?
A=5 B=8 :A
```

Queries the range of axes

Piezo

Shortcut	PR
Format	PR [axis]=[0 to 8] ...
Units	Integer code
Type	Axis-Specific
Remembered	Automatically

PR is used to set the piezo travel range. It is an Axis specific command. Setting is automatically saved in the non-volatile memory. Will need a system RESET or RESTART for setting to take effect.

PR [Axis Name] =	Piezo Range in microns
1	50
2	100
3	150
4	200
5	300
6	350
7	500
8	70

Tunable Lens

Shortcut	PR
Format	PR [axis]=[0 to 3] ...
Units	Integer code
Type	Axis-Specific
Remembered	Automatically

PR is used to set the Tunable Lens units or user input. It is an Axis specific command. Setting is automatically saved in the non-volatile memory. Will need a system RESET or RESTART for setting to take effect. For more info refer to Units/Resolution section on TGTLC card page.

PR [Axis Name] =	Units
1 (default)	[0 to 290mA] with coordinates -32768 to +32768
2	[0 to 290mA] 1/1000 of dpt, range usually between 26000 to 7000
3	[-290mA to +290mA] with coordinates -32768 to +32768

SIGNAL_DAC for TGDAC4 / TGGALVO

Shortcut	PR
Format	PR [axis]=[0-7] ...
Units	Integer code
Type	Axis-Specific
Remembered	restart required (no SS Z required)
Firmware Required	v3.3+

For TGDAC4 card with SIGNAL_DAC firmware, the bits 0-2 of the specified code sets the output range (values 0-7 in decimal). Bits 3-7 are reserved for future use. **Controller reset or restart is needed for setting to take effect.**

For the SIGNAL_DAC firmware, the axis units are always in millivolts (0.001V), regardless of the PR setting. For example, when PR H=2, the maximum axis value of H is 10240. When PR H=0, then the maximum axis value of H is 2048.

Code (Decimal)	Code (Binary)	Output range
0	000	0V to 2.048V
1	001	0V to 4.096V
2	010	0V to 10.24V
3	011	not supported

Code (Decimal)	Code (Binary)	Output range
4	100	-1.024V to 1.024V
5	101	-2.048V to 2.048V
6	110	-5.12V to 5.12V
7	111	-10.24V to 10.24V

Example

```
PR A=2 B=7
:A
```

Puts the output A in 0-10V mode and output B in +/- 10V mode.

```
PR A? B?
:A A=2 B=7
```

Queries the mode of axes

commands, tiger, piezo, micromirror, tlens