Command:WRDAC (WD)

On Tiger with TGLED

Shortcut	WD *version 9.51*
Format	[Addr#]WRDAC X=[1 to 100]
Units	Percentage between 0 and 100
Type	Card-Addressed
Remembered	Using [Addr#]SS Z

This command is "recycled" for a slightly different use in TGLED than for other cards. In the context of a TGLED card this command is used to set the maximum amount of current for all the LED channels.

The Maximum amount of current a TGLED Rev A card can output on each LED channel is 1.2Amps. When the X argument is set to 75, then maximum current each channel will output is reduced to 75% of 1.2Amps i.e. 0.9Amps.

This command can be used as a quick way to adjust the brightness of all LED channels. Default is 75%, ASI recommends not exceeding this limit.

Example

```
1WRDAC X=50
:A
```

Limits the maximum current output on each channel to 50% or 0.6Amps

```
1WRDAC X?
X=50  :A
```

Queries the card for maximum current percentage.

On Tiger with TGPMT

Shortcut	WD *version 9.51*
Format	[Addr#]WRDAC X=[0 to 1000] Y=[1 to 1000]
Units	integer, between 0 and 1000
Type	Card-Addressed
Remembered	Using [Addr#]SS Z

This command is "recycled" for a slightly different use on TGPMT card than for other cards. In the context of a TGPMT card this command is used to set the PMT's control voltage or gain. When set to 0, PMT output signal drops to 0Volts, turning it off. When set to 1000, 100% of control signal (1 Volts incase of H10722) is applied to the PMT.

X sets the gain for PMT0

Y sets the gain for PMT1

This function does the same function as the Dials on TGPMT cards faceplate.

Example

```
7WRDAC X? Y?
X=500.000000 Y=0.000000 :A
```

Queries the TGPMT card at Address 7 for PMT gain settings. PMT0 is at 50% gain, PMT1 is at 0% gain and so is off.

```
7WRDAC X=505
:A
```

Sets the gain of PMT0 at 50.5% on TGPMT card at address 7.

On MS2000 and RM2000

Shortcut	WD *version 9.53*
Format	WRDAC X=[0 to 10]
Units	Voltage, 0 to 10V
Firmware Required	8.4f+, Not containing "PZ"

Lets the user set the voltage on header pin SV1-5 on WK2000 board. The voltage can be varied between 0 and 10 Volts, with an accuracy of 0.1V. Maximum Output drive current is 35mA. Input value in volts.

This command is completely disabled on piezo controllers. If using a a firmware build with **"PZ"** in the name, such as PZ_CRISP, normal commanded [move](s) of the Z axis will be scaled using the [CCA X command]. The CCA X command should only be set once to specify the maximum travel range of the piezo being used. This scaling will map the piezo physical range in normal units of 1/10um (centered around 0) to voltage on the analog 0-10V (minimum=0v, maximum=10.00v) output BNC (SV1 Pin 5).

Example

```
WRDAC X=1.1
:A
```

Voltage on PIN SV1-5 is 1.1Volts

```
WRDAC X=20
:N-4
WRDAC X=-1
:N-4
```

Parameter out of range

[commands](, [led](, [tiger](, [ms2000](, [tgled](, [tgpmt](, [dac](, [0-10v]

From:

http://asiimaging.com/docs/ - **Applied Scientific Instrumentation**

Permanent link:

http://asiimaging.com/docs/commands/wrdac

Last update: **2025/10/21 21:09**