Command:RDADC (RA)

MS2000 Syntax and Function

Shortcut	RA
Format	RDADC [X?] [Y?] [Z?] [F?] [T?] [M?]
Units	Integer
Remembered	Not Applicable

Returns the present values on the MS-2000's 4-channel ADC. The X and Y channels are used for the joystick. The Z and F channels may be used for special applications, for example Autofocus or ADC_LOCK and ADC_FOLLOW modes of controlling the stage. Special firmware is required for these applications.

X?: Returns the ADC reading of the joystick X axis.

Y?: Returns the ADC reading of the joystick Y axis.

Z?: If the system has Video Autofocus, the user can query the focus score with the Z parameter, for example RDADC Z?.

T? / M?: If the system has a temperature sensor, the user can query the temperature in 1/100 degrees Celsius with the T parameter ie RDADC T? If there are two temperature sensors present, one connected to channel-1 and the other connected to channel-2 of an ADEPT Hub (I2C breakout board), then the M parameter also becomes active, for example RDADC T? M? would answer with :A 2565 2389 meaning sensor-1 has read 25.65C and sensor-2 has read 23.89C.

Example

```
RA X Y
:A 128 128
```

Shows typical ADC values for a centered joystick.

Tiger and TGPMT Syntax and Function

Shortcut	RA
Format	[addr#]RDADC [X?] [Y?] [Z?] [F?] [T?]
Units	Integer
Type	Card-Addressed
Remembered	Not Applicable

On a TGPMT card in a Tiger Controller, this is a Read Only command. It reports PMT signal read through an ADC onboard the TGPMT card.

X?: Returns the ADC reading of PMT0

Y?: Returns the ADC reading of PMT1

Z?: Autofocus related, requires AUTOFOCUS firmware module.

T?: Temp sensor related, requires TEMP_SENSOR firmware module.

ADC Specification can be found here.

Example

If the TGPMT card address was **7**,

```
7RDADC X? Y?
:A 2 1
```

“2” is the ADC reading from PMT0, and “1” is the ADC reading from PMT1

```
7RA X? Y?
:A 2 1
```

commands, tgpmt, autofocus, tiger, ms2000