

Command:LOCK (LK)

This command has different usage when its a CRISP system, Phototrack , then when its a TGPMT card.

CRISP usage

Tiger Syntax

Shortcut	LK
Format	[Addr#]LK [X] [Y] [Z=lock_offset] [F=code]
Type	Card-Addressed
Remembered	Using [Addr#]SS Z

MS2000 and RM2000 Syntax

Shortcut	LK
Format	LK [X] [Y] [Z=lock_offset] [F=code]
Remembered	Using SS Z

The LOCK command without any arguments X, Y, or Z advances to the next focus state just as would a short-press of the @ button.

LK X? returns the single character indicating the current focus state as described in the table on page 2 of this manual.

LK Y? returns the present value of the focus error which is also shown on the LCD display.

LK Z? returns the present value of the focus error lock_offset. The offset is automatically determined during calibration and is modified when the command wheel on the controller is used to focus a locked system. The offset is also reset with a >10 sec. press of the @ button. A particular value of lock_offset may be set using LK Z= lock_offset.

LK F=code will unconditionally set the focus state. code is the ASCII decimal equivalent for the 'state' character that is displayed on the LCD. For example, to unconditionally enter the 'B' state the command would be LK F=66. Not all states are best entered directly. See the [CRISP system state table](#) for the appropriate ASCII code to enter a particular state gracefully.

```
LK X?
:A W
```

Shows the system is in the WAIT state.

TGPMT usage

Shortcut	LK
Format	[Addr#]LK [X] [Y] or [Addr#]LK [X?] [Y?]
Type	Card-Addressed
Remembered	Using [Addr#]SS Z

This command has a different function on a TGPMT card. Here its used to check the status of PMT (overloaded or not). Then if it is overloaded, issue a reset pulse to clear the overload. Duration of the reset pulse is set with the [RT Y command](#)

[addr#] LK X? , Query **PMT0**'s status. Controller return a **0** if Overloaded , and **1** if not overloaded.

[addr#] LK Y? , Query **PMT1**'s status. Controller return a **0** if Overloaded , and **1** if not overloaded.

[addr#] LK X , Issue a reset pulse to **PMT0**.

[addr#] LK Y , Issue a reset pulse to **PMT1**.

Alternately , the status of the PMTs is also indicated by the LEDs on the TGPMT card (Green is ok , Red is overloaded). And the reset button can be pressed to clear the overload state.

Example

```
7\lock x?
:A 0
```

Query the status of **PMT0** on TGPMT card at address **7** for status. **0** is returned, indication PMT0 is overloaded

```
7\lock x
:A
```

Issue reset pulse to PMT0 on TGPMT card at address 7.

```
7\lock x?
:A 1
```

Overloaded was cleared, Query the status of **PMT0** on TGPMT card at address 7 for status again. **1** is returned, indication PMT0 is NOT overloaded

On Phototrack systems

Shortcut	LK
Format	LK [X] [Y] [Z=sum_min] [F=quad_order]
Remembered	Using SS Z

LK with no argument performs same action as “@” short press.

LK X performs same action as “@” long press.

LK Y performs same action as “HOME” very long press.

Use *sum_min* to set the minimum sum-signal level required for tracking the sample. If the sum signal is less than *sum_min*, tracking will PAUSE.

The *quad_order* is the relative orientation of the PMT assembly and is normally set during

calibration.

[commands](#), [tiger](#), [ms2000](#), [crisp](#), [tgpmt](#), [phototrack](#)

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