# ADDENDUM TO MANUAL:

# GTO KEYPAD CONTROLLER, V 4.12

03-05-05

Please note the following changes to the manual dated February 21, 2005.

# Command Language – Firmware versions C, KC, D, KD and G

We added a key to the abbreviations and modified the text of the following two commands:

## Pages 66 and 73, add this text:

# Abbreviations used:

DD or DDD	degrees or day of the month depending on the context
HH	hours
MM	minutes or month depending on the context
MM.M	minutes and tenths of minutes
S	+ or - sign , assumed to be + if omitted
SS	seconds
SS.S	seconds and tenths of seconds
YY	last two digits of the year

#### Page 66: Revised text

b) C and KC includes all commands listed below except command: :pS#

#### Page 66 and 73, revised text Command: :SG sHH# or :SG sHH:MM.M# or :SG sHH:MM:SS# Response: "1"

Sets the offset from Greenwich mean time. Command may be issued in any length format regardless of whether long format has been selected. Although any length format is acceptable, only the hours field is typically of interest. Data entered with this command will be "remembered" through a power cycle and automatically re-applied on the next powerup. The offset can be entered in unsigned 24-hour format (0-23 hours) or in signed format (-12 to +12) hours.

## Page 67 and 73: Revised text:

Command: :GG# Response: West Longitude HH:MM.M# or HH:MM:SS.S# if long format East Longitude Refer to the chart below in the section entitled "Communicating with your Mount when writing your own program".

Gets the offset from Greenwich mean time. Although typically only hours field is of interest, the return value will be in standard 24-hour format. If the value was entered in signed (-12 to +12 hour) format, and the value entered was negative (east of Greenwich), see the section below entitled "Communicating with your Mount when writing your own program".

Pages 69 & 76: Revised text:

Command:	:PO#
Response:	(none)

Park-off. This command un-parks the mount and also restores calibration. To restore proper calibration, the mount must receive date and time (:SC mm/dd/yy# and :SL hh:mm:ss#) prior to receiving the Park-off command. If park-off is received when the mount is not actually parked, calibration error will be introduced. A :CM# command can be used, however, to establish accurate calibration.

### Page 77: Command not functional in version G:

Command:	:FM#
Response:	(none)

Equatorial Fork: This command is the manufacturing default, which eliminates the meridian flip.

German Equatorial: This command is intended for software developers. It turns off the meridian flip and makes a German Equatorial mount behave like a fork mount. It is not to be used by individuals without slewing safeguards. It is mainly intended as a tool for writers of mount control software to implement slewing past the meridian during imaging, and then only with the proper limits and controls to prevent the telescope from slewing into the pier or other abnormal motions. It overrides the manufacturing default. The manufacturing default (meridian flip) is restored after a power cycle.

Note: This command produces incorrect behavior during some subsequent commands to slew. This is true whether the mount is a fork mount or equatorial mount.