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INTELLIGENT HANDSET RELEASE V1.6
SOFTWARE UPGRADE from V1.4

The firmware release contains DATABASE and LIST functions. A replacement memory chip must be fitted into the Intelligent Handset. Additionally the optional DATABASE needs a second chip to be fitted.

The whole presentation of the menus has changed with this release. A single sheet summary page is attached. Basically the OBJECT (GOTO) menu has been brought out to the top level, as has the CALIBRATION menu. They are both accessed by using the 'M' button. The other changes are:
- PARK is the new name for SHDN. When calibrated the telescope will GOTO the PARK position and the display will turn off when it gets there and the motors will stop driving.
- COORD is the new name for GOTO
- SETPK is a new function for the Park position. When the telescope is calibrated press 'E' to enter the position
- INFO is the new name for STATUS in the USER menu. It retains the name STATUS in the FACTORY menu.
- PREV accesses previously entered coordinates and is available in GOTO, CAL1, CAL2.
- HORIZ enters a local horizon value that you cannot reach with GOTO's because of local restrictions you may have - such as an observatory.
- MAXDEC in the FACTORY - USTEP menu allows you to enter a maximum declination that your mount will withstand. If it is not set to +/-90 then the telescope will not operate over the poles. You may need to set it to 89 degrees or lower if you have a FORK mount and you do not want to swing under the fork. GOTO's will then operate the long way round always. Make sure the default setting is 90.
- MAX-HA in the FACTORY – USTEP menu allows you to enter the Maximum Hour Angle for GOTO's to operate. Make sure this is set to 12h 00m 00s for GOTO's to work properly. Restrict the range if your mount requires it.
- CAT is for database with a whole list of menus and functions which require the Database chip to be fitted before it can be accessed.

LIST
The list function works by storing in non-volatile memory the coordinates entered from the following sources -
- By direct entry in the COORD, CAL1, CAL2 screens.
- By point and click GOTO operation with the HOST computer connected.
- By computer SYNC on an object (does a remote CAL1)
- By ADDing an object from within the Database menus.
Retrieval is by pressing PREV in the menus where coordinates can be entered. The last 16 coordinates are stored and you can recall any one of these by successively pressing PREV. There is an entry number that comes up but every time you enter a coordinate manually the list shifts down by 1. By using a previously stored value it will not get added to the list.

A suggested mode of use is to enter all the coordinates needed for that planned evenings activity, including the calibration stars. This can be done away from the telescope entering manually or by computer (AWR has the required cables / power supplies etc). You will have to put a name tag against each coordinate to remember what each one is.

In practise it makes two star calibration very easy in that you can zip from star to star very quickly now that you only have to enter the coordinates once! Select first star do CAL1 with coord from list. GOTO second cal star, do CAL2 with coord from list. If result means you need to move the mount, do this, re-acquire the cal2 star and do a CAL1. GOTO the first star you had and call it CAL2. Etc.

INSTALLATION
The mechanical instructions for replacing the firmware are included in the Intelligent Handset manual.

After putting the unit together, the first time you power it up hold down 'E' as you connect the power. This will reset the LIST function.

Then power down straight away and then power up normally. It is a good idea to check the values for RATIO (RA and DEC) and XTAL as these have fundamental importance on the accuracy of the handset..

Finally check / enter values for MAXDEC MAX-HA and HORIZ

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