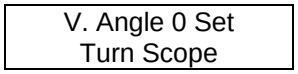
CLOCK SET and
ELECTRONIC CALIBRATION *FIELD* PROCEDURES
FOR THE ATS SERIES ETS *(Version 1.0)*

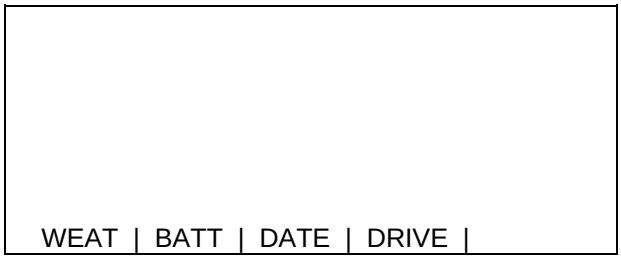
CALENDER / CLOCK SETTING

1. Press POWER key.

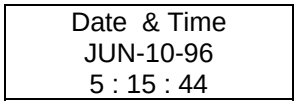


2. Turn telescope to 0 SET the vertical angle.

3. Press the S key. Function key (F1-F5) designation will change to:



4. Press F3 (Date) to view Date and Time.



4a If correct press ENT to return to standard mode.
4b If incorrect enter the following password to change:
17784293

5. Use the Function Keys to make any necessary changes (the item which is blinking will be changed)-

F1	←	Move to the previous item.
F2	→	Move to the next item.
F3	+	Increase value
F4	-	Decrease value

6. Press F5 (SETUP) to store the changes.

7. Press the ENT key to return to standard mode.

COLLIMATION AND COMPENSATORS

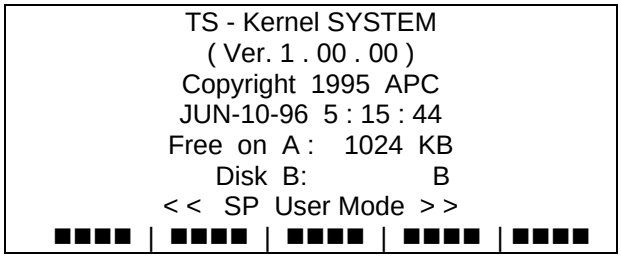
NOTE: ***The following mechanical adjustments must be checked (and corrected if necessary) prior to the electronic adjustment adjustment of any axis.***

- ***Perpendicularity of Plate Vial to Vertical Axis***
- ***Perpendicularity of Line of Sight to Horizontal Axis***

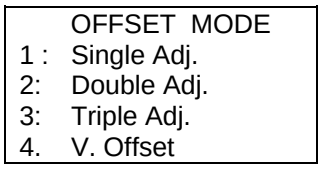
Entering Super User mode and the Offset menu

A. Press POWER key.

B. Immediately press and hold the S key until the “TS-Kernel SYSTEM” screen appears with “SP User Mode” blinking.



C. Press and hold the [POWER] key, press the [F1] key and then release both keys. (This must be done while this screen is shown - if the screen goes to “V. Angle 0 set” then start over)
The OFFSET MODE screen will appear.



D. Perform the “2: Double Adj”.

2 DOUBLE ADJUST (Also does single adjust and vertical offset)
[Vertical 0 point offset, X axis compensator, Y axis compensator]

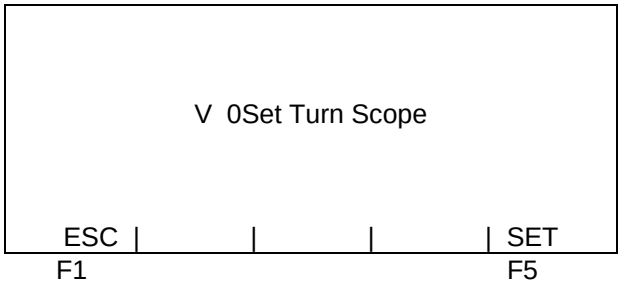
NOTE: ***The instrument must NOT be in direct sun light (cloud cover or under umbrella is OK).***
Atmospheric conditions must be very good (no heat waves etc.)

2.A This procedure requires a point which can be sighted to with an accuracy of 1". It needs to be near a vertical angle of 90°.

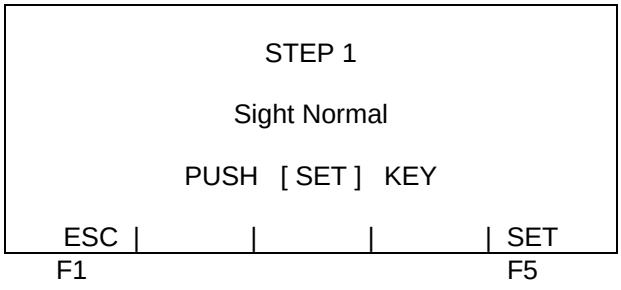
2.B Procedure start.

2.B1 Press [2] to highlight "Double Adj."

2.B2 Press [ENT]



2.B3 Turn telescope up and down.

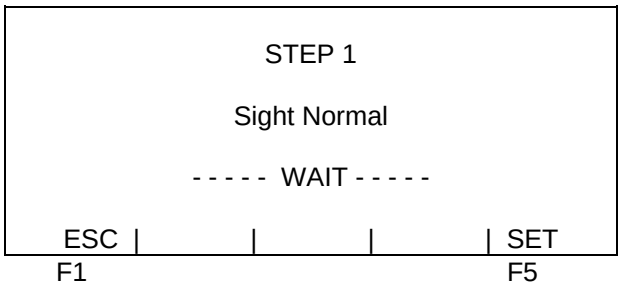


WARNING: Lower horizontal lock (ATS-102 and 105) must be secure.

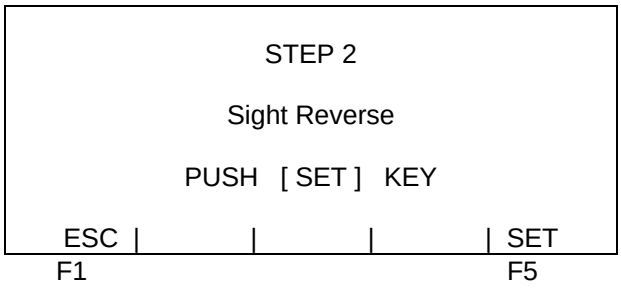
2.C Align the reticle (horizontally) on the target with the telescope in the normal position.

NOTE: Reticle alignment must be precise.

Wait 5 seconds and press the [SET] key.

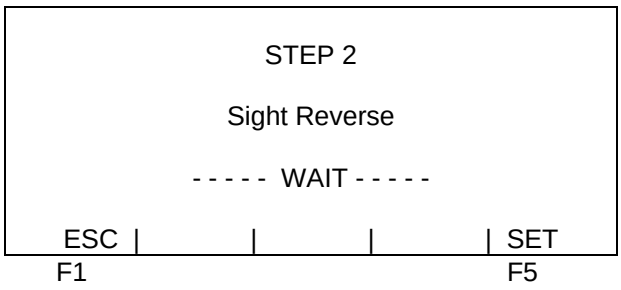


WARNING: Do not touch the instrument while "waiting".



2.D Release the upper horizontal tangent assembly and rotate the alidade 180°. Release the vertical tangent asembly and rotate the telescope 180°. Align the reticle on the target.

Wait 5 seconds and press the [SET] key.



Offset values will display.

Example values -

H. AXI	-	0° 00’ 01.7”
S. AXI		0° 00’ 00.6”
V. TIL	-	0° 00’ 02.5”
E. TIL	-	0° 00’ 17.1”
V. OFF		2° 06’ 37.9”

ESC | | | | SET

F1 F5

2.E Press [ENT] to store values.