

Instructions for KIT 12

SET-UP AND OPERATION OF EDM

(Electromagnetic Distance Measurement)

Throws

Preliminaries: Ensure all batteries are put on charge well before the meeting.

1. For Long Throws

a) Location: Must give a clear view of the landing sector, circle centre and rim (or 8m point and arc for javelin).

b) Assembly and Levelling:

- i. Ensure tripod is set firmly into the ground at a convenient working height for all users with top plate as level as possible (use spirit level).
- ii. Fit tribrach, making sure securing screw is tight and base cannot move.
- iii. Level Tribrach, use two foot screws to centre bubble between them then adjust remaining screw to centre bubble in bubble-level.
- iv. Fit geodimeter on tribrach (power socket goes in recess), lock tribrach in place.
- v. Adjust for parallax - hand in front of telescope and check hairlines are sharp, adjust lens as necessary.
- vi. Connect external batteries or mains power source (if used).

TO POWER SOCKET ON TRIBRACH, NOT KEYPAD.

c) Setting up the Instrument:

- i. Turn power on.
- ii. Either press **YES (enter)** to continue if already set up or **NO (↵)** for machine to go to set up.
- iii. Check level on display - if necessary carefully adjust on tribrach foot screws to centre both index marks [*Prolonged adjustment will force return to c) i.*], and press **ENTER (Yes)**.
- iv. Machine will perform self checks and rotate around then rotate back again.

Note:

- v. Enter approx. temperature, press **ENTER (Yes)** (*it may be necessary to press 'ENTER' twice*).
- vi. Enter approx. atmospheric pressure, press **ENTER (Yes)** (*it may be necessary to press 'ENTER' twice*).
- vii. Enter prism constant (Zero for our prisms), press **ENTER (Yes)** (*it may be necessary to press 'ENTER' twice*).
- viii. Enter horizontal component (00.00.00), press **ENTER (Yes)**

- ix. Press **PRG 60**
- x. Shows Job No1. Press **ENTER**
- xi. Prism in centre of circle (or 8m point), focus on prism, press **A/M**.
- xii. Wait for measurement (approx. 6 sec.), press **REG**.
- xiii. Display '0' = '0', press back space '←', enter circle radius (**1.25** for discus, **1.0675** for hammer/shot, **8.0** for javelin), press **ENTER (Yes)**.
- xiv. Display '0' = (blank), enter '1', press **ENTER (Yes)**. (this is round number)
- xv. Display '0' = (blank), enter User No. '1', press **ENTER (Yes)**. (this is entrant number)
- xvi. Place prism on inner edge of circle or arc, focus on prism, press **A/M**.
- xvii. Wait for measurement (approx. 6 sec.), press **REG**. Record this measurement (should read '0').
- xviii. To get back to next measurement press **No** to store.
- xix. Take two initial check measurements at different locations in, or adjacent to, throwing area. Checks should be marked and measured using a steel tape. Record all readings and measurements. Repeat checks and edge of circle or arc at end of competition.

d) Taking Measurements:

- i. Enter Round No. '1', press **ENTER (Yes)**.
- ii. Enter User No. '1', press **ENTER (Yes)**.
- iii. Aim telescope at landing point, focus on target prism when positioned. When cross hairs locked on prism, press **A/M**.
- iv. Wait for measurement (approx. 6 sec.), press **REG**.
- v. Record distance measured and signal clearly to prism handler to remove prism (*this may be done as soon as you are sure reading is correct*).
- vi. Display shows 'Store?', press **'NO'**.
- vii. Return to d) i. and repeat for all further trials.