## **Instructions for KIT 6**

## 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.

## v. Press PRG 60, press ENTER

- vi. Shows Job No1. Press ENTER
- vii. Instrument reads: **IMEM**

# EXMEM SERIAL

- viii. Ignore, press ENTER (Yes).
  - ix. Prism in centre of circle (or 8m point), focus on prism, press A/M.
  - x. Wait for measurement (approx. 6 sec.), press **REG**.

- xi. User ='0', press back space '←', enter circle radius (1.25 for discus, 1.0675 for hammer/shot, 8.0 for javelin), press ENTER (Yes).
- xii. User = (blank), enter '1', press ENTER (Yes). (this is round number)
- xiii. Entrant = (blank), enter User No. **'1'**, press **ENTER** (**Yes**). (this is entrant number)
- xiv. Place prism on inner edge of circle or arc, focus on prism, press A/M.
- xv. Wait for measurement (approx. 6 sec.), press **REG**. Record this measurement (should read '0').
- xvi. To get back to next measurement press No to store.
- xvii. 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 User No. '1', press ENTER (Yes).
- ii. Enter Entrant 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.