EDM Set up Instructions

SET-UP AND OPERATION OF EDM

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

Assembly and Levelling:

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).

Hang the battery on tripod leg then fit instrument, making sure securing screw is tight and base cannot move.

Turn the instrument so that the keyboard is over two foot screws.

Connect external batteries .
Turn power on.

Check level on display - adjust on tribrach foot screws to centre both index marks. The 2 screws under the keyboard act on the bottom line (adjust both out or both in- the mark will move in the direction of your left thumb. Use your right hand for the other screw without turning the instrument. The mark will follow the direction of your fingers.

Prolonged adjustment will turn the instrument off.

When adjusted press **YES**

The instrument will rotate through 200 grads (180°) bleep and rotate through 200grads (180°) again.

Enter approx. temperature, press **ENTER (Yes)**

Enter approx. atmospheric pressure, press **ENTER (Yes)**

Enter prism constant (Zero for our prisms), press **ENTER (Yes)**

Enter horizontal component , press **ENTER (Yes)**.

Now turn to event set up pages

THROWS

Press the program button **PRG -** Enter '**60**', press **ENTER (Yes)**
Enter Job No. '**1**', press **ENTER (Yes)**.
Instrument reads: **XMEM OFF SERIAL OFF**
Ignore, press **ENTER (Yes)**.

Prism in centre of circle (or 8m point), focus on prism, press **A/M**. pause then press **REG**.

Display shows **User ='0'**, press back space '←', enter circle radius (**1.25** for discus, **1.0675** for hammer/shot, **8.0** for javelin), press **ENTER (Yes)**.

Display shows **User** = '**1**', press **ENTER (Yes)**.

Display shows **User**= (blank), enter round No., press **ENTER (Yes)**.

Place prism on inner edge of circle or arc, focus on prism, press **A/M**. pause then press **REG**. (should read '**0**').

To get back to next measurement press **No** to store.

Enter User No.' **1**', press **ENTER (Yes)**.
Enter Round No. , press **ENTER (Yes)**.

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 at end of the competition.

Taking Measurements:

1) When cross hairs locked on prism, press **A/M** then press **REG**.
2) Record distance measured and signal clearly to prism handler to remove prism.
3) Display shows ' Store?', press '**NO**'.
4) Enter User No.' **1**', press **ENTER (Yes)**.
5) Enter Round No. '**(-)**', press **ENTER (Yes)**.

Horizontal Jumps

Press the program button **PRG**
Enter '**24**', press **ENTER(Yes)**
Enter Job No. '**1**', press **ENTER(Yes)**.
Instrument reads: **XMEM OFF**
SERIAL OFF
Ignore, press **ENTER(Yes)**.

Screen shows: **1 Known Line**
2. Unknown Line
Select 2
Screen shows **STN = 1** - **press YES**
Screen shows **HT measure?** - **press YES**
Screen shows **Ih = 0** - **press YES**
Screen shows Ref. line point A
Pno = (enter 1) - **press YES**
Screen shows **SH = 0.000** - **press YES**
Screen shows **STD**
HA
VA
Focus on prism on the far side end of take off board - **Press A/M**
Instrument shows "measuring", when finished - **Press Reg**
Screen shows Ref. line point B
Pno = (enter 2) - **press YES**
Screen shows **SH = 0.000** - **press YES**
Screen shows **STD**
HA
VA
Focus on prism on near end of take off board - **Press A/M**
Instrument shows "measuring", when finished - **Press Reg**
Screen shows **1. Measure**
2. Setout
3. Exit - **Select 1**

Screen shows **Slope =** *xx.xxxx* - **Press YES**

Screen shows **SH = 0.000** - **Press YES**

Screen shows **STD**
HA
VA

Set-up is finished.

Taking Measurements.

For a measurement, focus on the prism.

Press A/M

Screen shows
?????????? = ……
??????????= ……
RT of s = ……
?????????? = ……

Read RT of s - This is the distance and may show as negative.

For the next jump just focus on the prism and press A/M again and so on.

Immediately before and after the competition, confirm the instrument accuracy on two pre-measured check marks at either end of the pit and at the centre of the take-off board (this last one should of course read zero)

Helpful hint: - Refocus on the centre of the pit between jumps to minimise change when measuring.

Vertical Jumps

Location: Must give a clear view of the bar. For the PV centre of runway is best, and HJ centre behind fan.

Press **PRG 0,** then enter.

Enter approx. temperature, press **ENTER (Yes)**

Enter approx. atmospheric pressure, press **ENTER (Yes)**

Enter prism constant (0), press **ENTER (Yes)**
Enter horizontal component (0), press **ENTER (Yes)**.

Set prism at the back of the box for pole vault, or on the ground under the centre of the bar for high jump.

Sight on the prism, take the measurement by pressing **A/M.**

Leave the instrument locked in position and only vertical direction from now on.

Press Enter key until screen shows HA:,HD:,VD:.

Sight on the ground, back of the box or under the middle of the high jump to set the zero height.

Press MNU key, Then Press 1 SET, Then Press 2 PRESET, Then Press 2 ROE.

Enter ROE of 0.000 and press ENTER.

To check the height sight on the top of the bar vertically above the point on the ground. Do not attempt any adjustments of the instrument in a horizontal direction and do not attempt to take any measurements.

Use the VD reading as height measurement.