# Set Up Steps

1. Unpack parts.



2. Remove the black poles from the red pole. (Lift the black button spring on the red pole if needed).



3. Remove the metal rod out of 1 wheel, and half way out of the plastic base.



4. Place the red pole here, in the direction as pictured. Pass the metal rod through the red pole, and back through the wheel, to its original position.



5. Take these pieces and note that 1 end of each red pole is diagonal. With the 2 red poles, place the **diagonal ends** upon the exposed bolt holes (picture 2), then pass the long bolt through this hole and the poles (picture 3). Tighten it using the spanner and hex key.



6. Attach the bottom ends of the red poles to the plastic base, using the short bolts. Tighten with spanner and hex key. (You may need to use scissors to pierce the bolt hole, if the bolts cannot be passed through)



7. Take these pieces. The pole with 2 cable holes will be beside the 2 cables. The pole with 1 cable hole beside the 1 cable.





8. Remove the plastic film from the 2 infrared sensor bars. You can attach the cables to the ports now or later (they can be gently pulled a short distance out of the black pole).



9. Carefully pass the red pole over the black pole, aligning the bolt holes. Pass the long thin bolts (4 pictured) through the bolt holes. Tighten with spanner and thin hex key. Repeat for the 2 sensor bars. The black surfaces of the bars should be facing each other, and with access to connect the cables if you dind't do so yet.



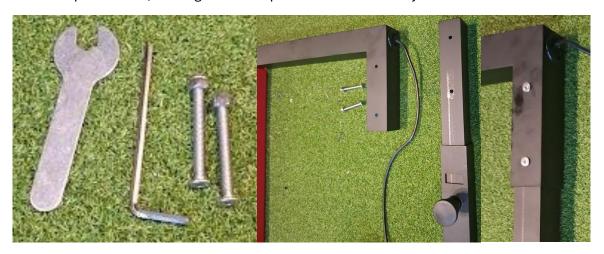
10. Finish connecting the cables to the 2 sensor bars.



11. Align the pieces **like this** (sensor bars to the left, numbers on the black pole facing up).



12. Take the 2 remaining shorter thin bolts. Note that the bolt holes will align after inserting the black pole into the black pole. Do so, then tighten with spanner and thin hex key.



13. Put the black poles into the red pole (facing away from the plastic base). Pull the black button springs if necessary. You may place a weight such a medicine ball upon the plastic base (**temporarily**, until you add some water ballast, to keep it from falling over).



14. Remove the film from the stickers of the cable clasps, with press them down here, here and here (near to the top of each segment of pole). Unwind the cable and pass it through each clamp, then giving the clamp a squeeze to lock it closed.



15. Take these pieces. Connect the 2 clasping mechanisms together via the pre-attached bolt (spin 1 piece onto the other). With the wider clasping mechanism, open it further, then insert the display. With the remaining bolt tightening mechanism, loosen it as far as possible. Carefully place it upon the red pole of the stand, then tighten it into place.



16. Connect the cable to the display, then it's ready to use (if charged). Hold the middle button to turn it on/off.



17. Pry open the stopper eg. using fingernails or screwdriver. Half fill it with water. Half full is normally enough. (If left empty, it would be at risk of falling over.)



- 18. The stand is now assembled.
- 19. **Charging:** The display is charged via a phone's USB-C cable (charging cable and adapter not included). The display will show a red light when charging. The light will turn off when fully charged.



#### 20. Adjusting Height:

**Warning:** Do not stand under the sensor bars when adjusting the height. Make sure you feel and hear the button lock fully into place, so that it will not come down on its own.



• **For 150-220cm**, you pull the button spring on the red pole and set it to its lowest position (as per image – the button will lock into place, but show no number). Then you pull the button spring on the black pole, and lift the upper black pole into position.

Warning: 220cm is the maximum setting for the black pole. Do not exceed it.

**Tip:** The spring button may need some help to lock it into place, like giving it a little spin and push when you know the spring is over the hole.

• **For 230-320cm**, you leave the top pole set to 220cm. Then you pull the spring button on the *red pole*, lift the above pole into place, then help the button to lock into place.

Warning: 320cm is the maximum setting for the red pole. Do not exceed it.

• For 330-360cm, there is no adjustment needed. The sensor bars themselves can read scores up to 360cm, when the stand is set to 320cm.

## **Display Controls**

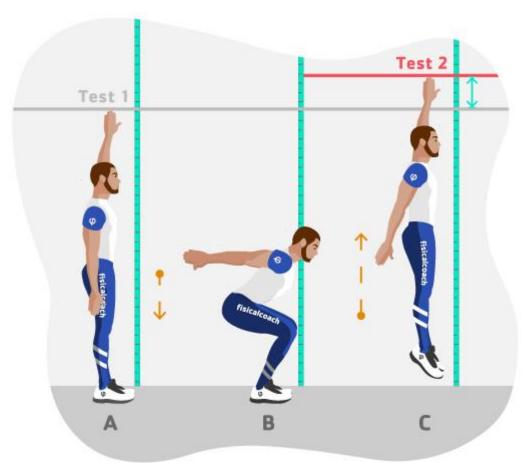


- 1. Middle Button (press): Power on.
- 2. (Once turned on)
  - a. Top Button (hold down): Voice on / off.
  - b. Middle Button (hold down): Power off.
  - c. Bottom Button (hold down): Set stand height (necessary after adjusting the stand height).
- 3. (Upon holding the bottom button to set stand height)
  - a. Top Button (press): increase by 5cm
  - b. Middle Button (press): Save setting.
  - c. Bottom Button (press): decrease by 5cm

Below shows the stand set to 220cm height, so you'd also change the height setting to 220 in the panel. Now the stand is ready to read jumps between 220-260cm.



### **Testing Procedure**



### Jump and Reach Test (with wall)

- A. Standing vertical reach.
- B. Counter Movement Jump with Arm Swing
- C. Vertical jump reach. (Measure A & C, and the difference between)
- **Procedure:** The subject stands sideways close to the wall, on the side of his dominant hand (the hand with which he will mark the jump), as can be seen in the illustration. The first thing to record is the prejump measurement (Test 1). To do this, the height of the subject with his/her feet completely flat on the ground and the arm stretched upwards as far as possible (A) must be measured. Once this first measurement has been recorded, the subject must separate from the wall by approximately 1-2 palms before proceeding with the jump. When it is time to perform the jump, the subject should slightly bend the legs (approximately 90°), swinging his/her arms (B) to jump upwards as high as possible, and make a new mark on the wall with the outstretched hand (C). The height reached will be recorded (Test 2).
- Assessment: The jump height is measured in centimetres (cm). The test result is obtained by subtracting the mark recorded prior to the jump (Test 1) from the last mark obtained (Test 2). The subject has a maximum of 3 attempts. The highest mark obtained by the subject can be recorded, as well as the mean and the median.