

# INSTRUCTIONS

**Wixey**™

## Crown Molding and Trim Protractor

*Used to cut trim lying flat*

MODEL CJ4000

Measures and calculates the compound miter and bevel angles for cutting crown molding and trim.

Features:

- Rugged ABS and stainless steel construction
- Uses 2 small pieces of the trim from the project to get accurate measurements
- Simple design using 4 function buttons
- Easy to view backlit display
- Display shows the proper position and angles for cutting each piece
- Uses 2 AAA batteries (not included)
- Keeps calibrated setting even when turned off

### A. Attach the trim pieces to the protractor

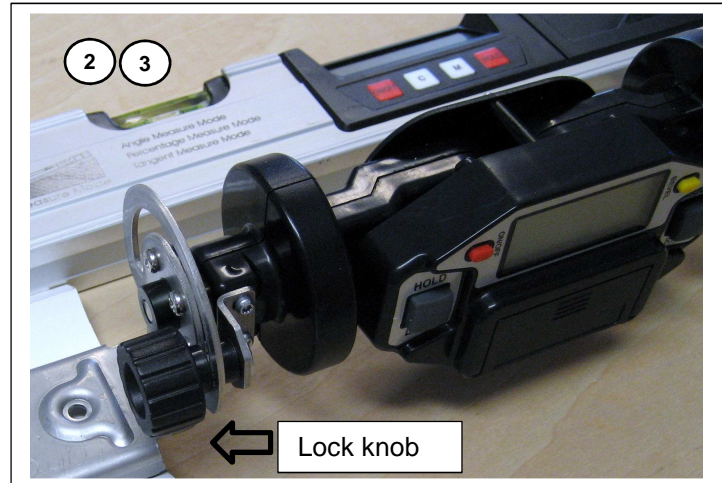
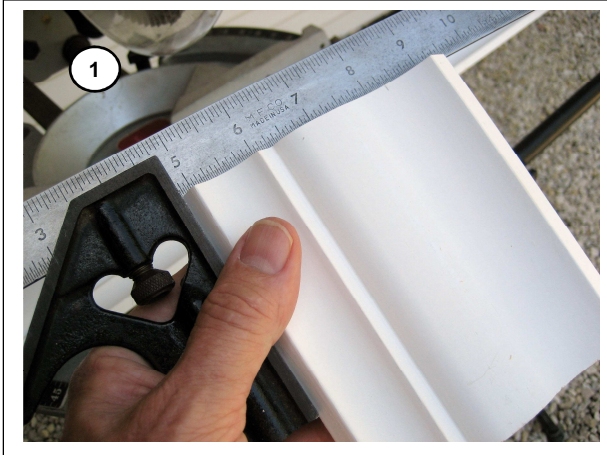
1. Cut 2 small pieces of trim about 5" long. Be sure the ends are square.

NOTE:

They can be longer or shorter but if they are too long it can limit the size of the corners you can measure.

2. Loosen the lock knobs and align the protractor so display is generally vertical with the LCD at the top.

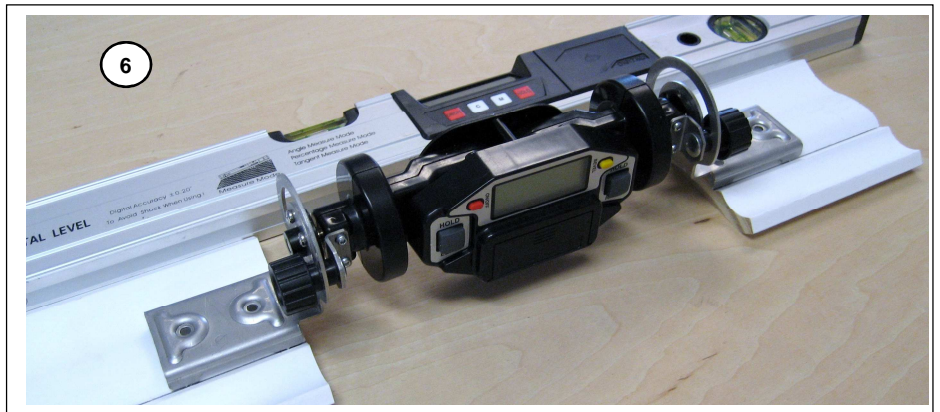
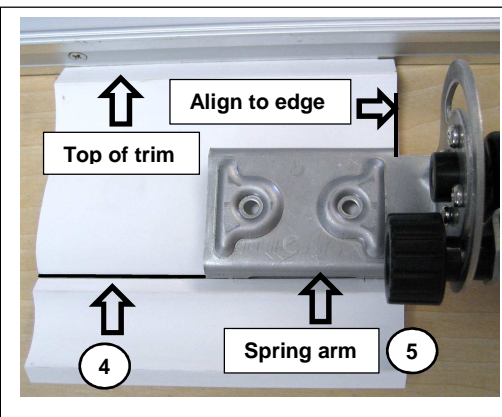
3. Re-tighten the lock knobs



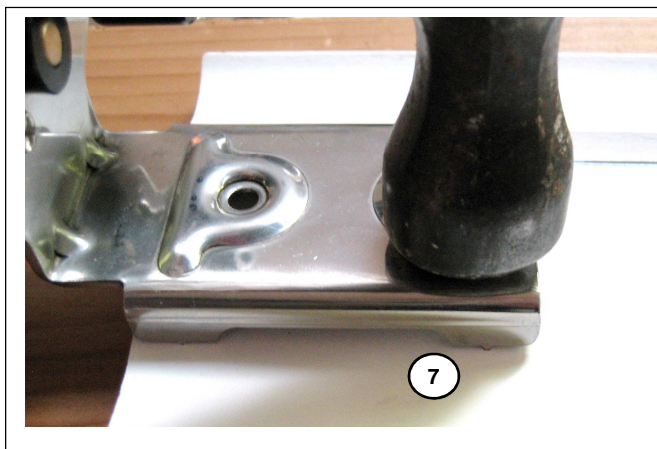
4. Draw a parallel line to the edge of the trim or use a groove to align the spring arm.

5. Align the spring arm on the trim as shown.

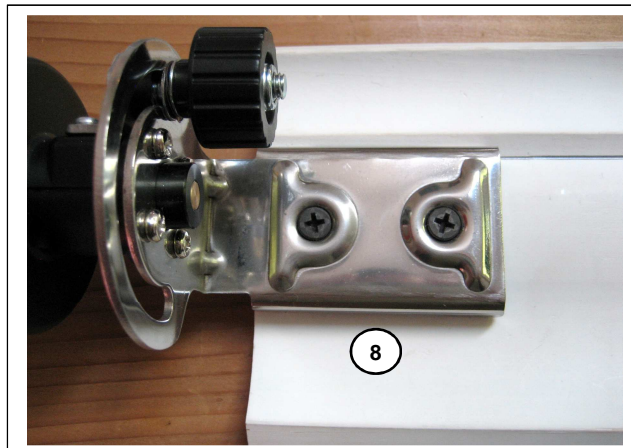
6. Use a straight edge to keep both pieces of trim parallel to each other. The top of the trim is against the straight edge.



7. Gently tap the spring arms so the 4 points on the bottom of the arms are fully seated in the trim



8. Fasten each spring arm to the trim with user supplied screws. Be sure they don't go all the way through.



## B. Function and Calibration

### Button functions:

#### ON/OFF:

- Press to turn on.
- Press and hold to turn off.

#### HOLD-LEFT:

- Press to hold the calculated miter and bevel angle and display the cut orientation for the left piece of trim.



Press and hold both to remove from hold and return to measuring mode

#### BEVEL-CAL:

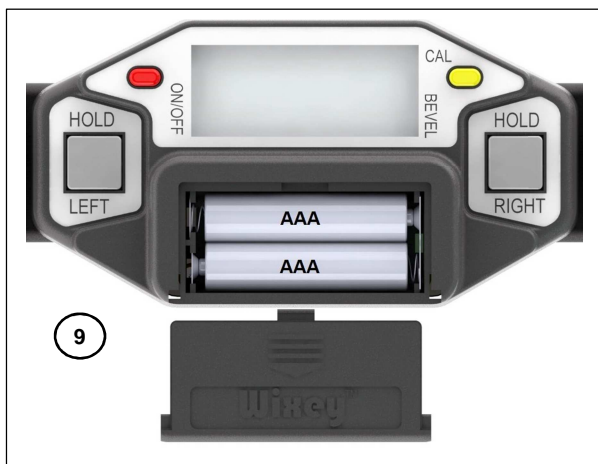
- Press to toggle between DUAL BEVEL and BEVEL LEFT only
- Press and hold to calibrate.

#### HOLD-RIGHT:

- Press to hold the calculated miter and bevel angle and display the cut orientation for the right piece of trim.

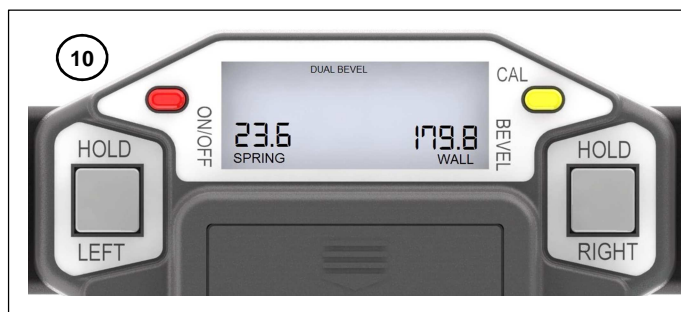
### Installing batteries and turning on:

9. Install 2 AAA batteries (not included) as shown below:



10. Press the ON/OFF button to turn on the display and enter the measuring mode.

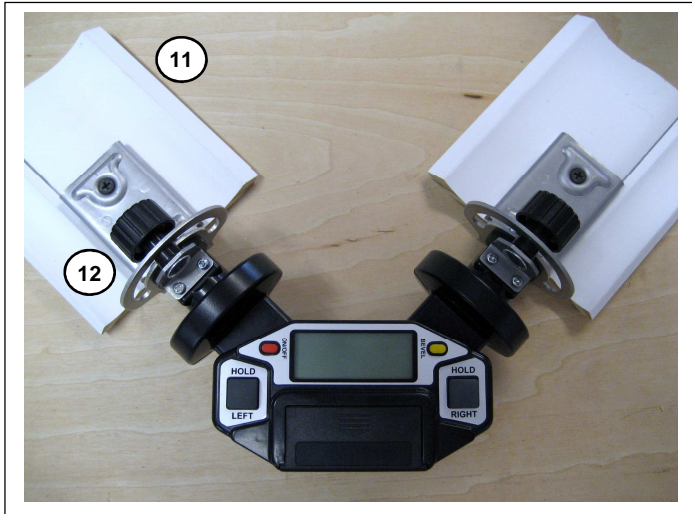
- The WALL and SPRING angles will be displayed
- When new batteries are installed the display will come on automatically.
- If the display is not in the measuring mode press and hold both the HOLD LEFT and HOLD RIGHT buttons to switch to measuring mode.



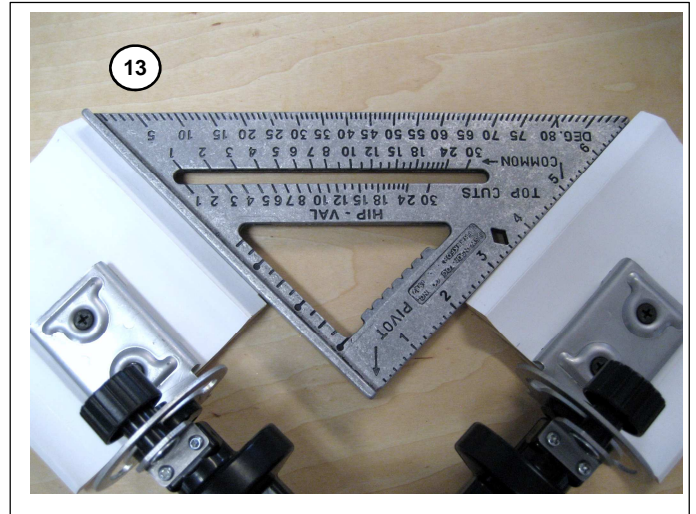


## Calibration:

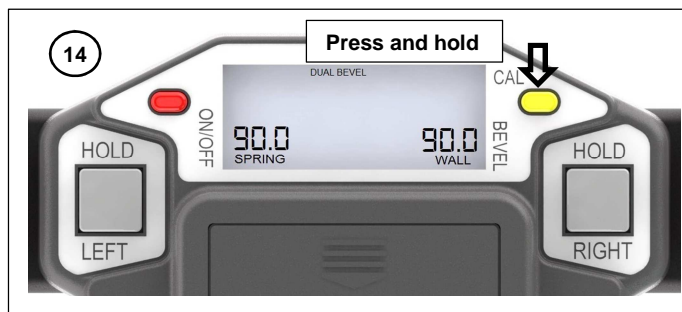
11. Loosen the lock knobs and rotate the protractor so the display is facing up and the arms are angled as shown. Place it on a flat surface and make sure the backs of the trim pieces are lying flat.
12. Re-tighten the lock knobs.



13. Using a square, carefully align the top edges of the trim so that they are at a 90° angle to each other.



14. Keeping the trim pieces flat and at 90° to each other, press and hold the CAL button to set the display values to 90.0° SPRING angle and 90.0° WALL angle.



## BEVEL function:

There are 2 types of compound miter saws. Dual Bevel saws will tilt both to the left and to the right. Single Bevel saws will tilt only to the left. Selecting DUAL BEVEL will have the graphics display show the cut orientation used for tilting the saw both directions while selecting BEVEL LEFT will show the orientation used for tilting the saw only to the left. You can toggle this setting back and forth anytime without affecting any of the other settings. The actual bevel angles and miter angles displayed will not change and are the same values for both methods.

15. Press to toggle between DUAL BEVEL and BEVEL LEFT



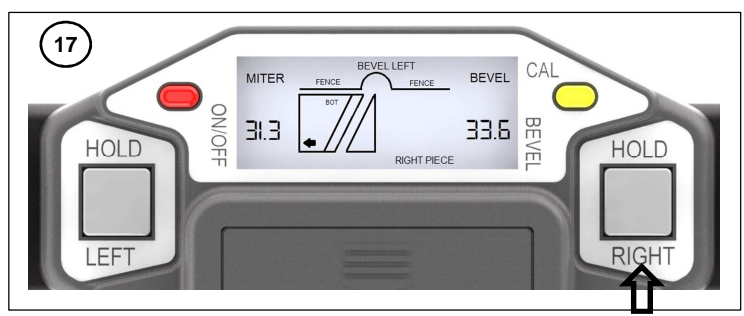
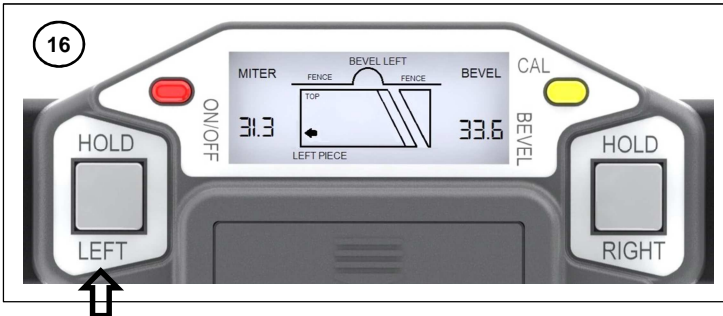
**HOLD LEFT and HOLD RIGHT function:**

Pressing either the HOLD LEFT or the HOLD RIGHT buttons will:

- Exit the measuring mode
- Calculate the proper bevel angle and miter angle for your saw
- Hold that reading
- Show a graphic representation of the cutting orientation for the trim

16. Press the HOLD LEFT button to calculate the miter and bevel angles to set your saw for cutting the trim. A graphic illustration of how to place the left piece of trim on your saw is shown.

17. Press the HOLD RIGHT button to calculate the miter and bevel angles to set your saw for cutting the trim. A graphic illustration of how to place the right piece of trim on your saw is shown.



*Note: you can press either of these buttons as many times as you want to switch the graphic from the left piece to the right piece. You can move the protractor arms to any position without losing the values. These values are held until you return to the measuring mode.*

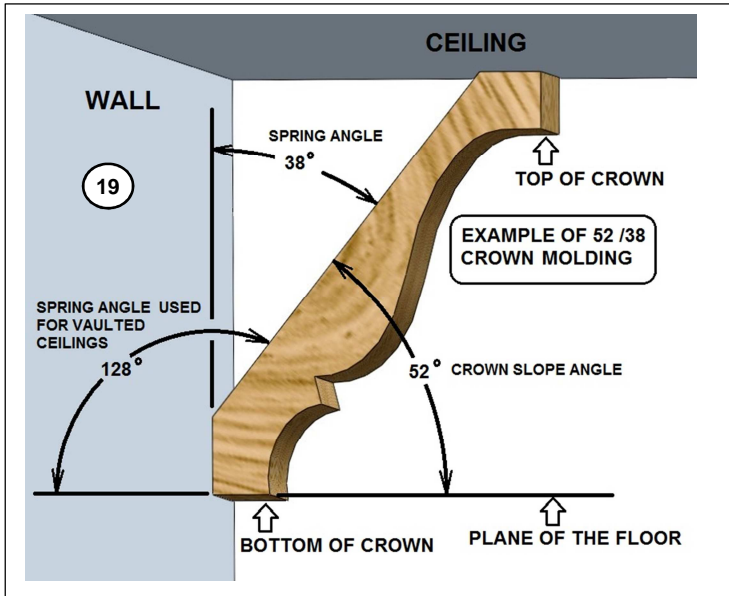
18. Press and hold both the HOLD LEFT and HOLD RIGHT buttons to return to the measuring mode.



## C. Using the CJ4000

### Setting up to measure horizontal ceilings:

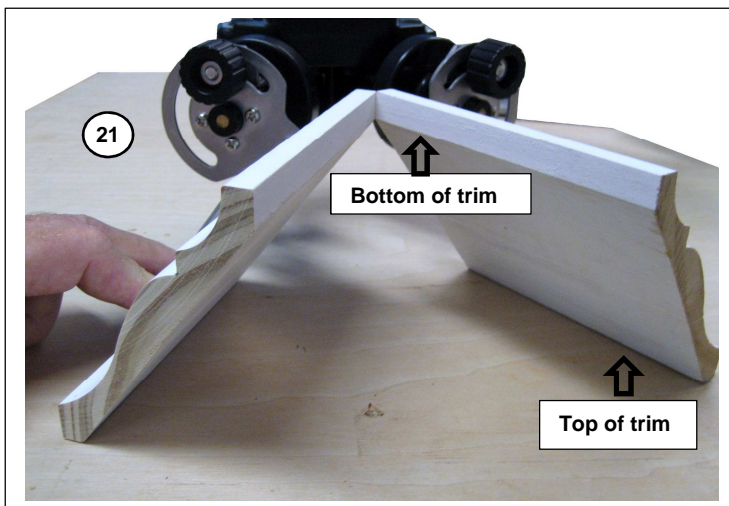
19. There several common styles of crown molding and many custom options possible. The example below is 52°/38° crown molding.



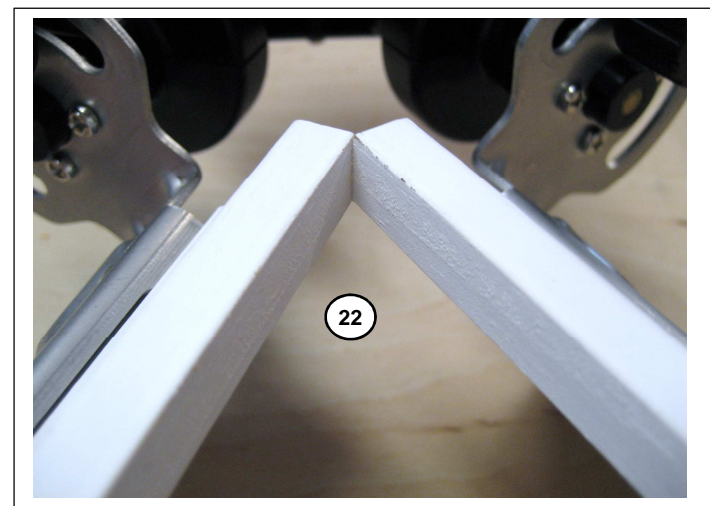
20. Loosen the lock knobs and rotate the trim pieces to fit properly in the corners. To measure corners of walls and horizontal ceilings set the gauge as shown below:



21. Check for proper the alignment of the trim on a flat surface.



22. Make sure that both pieces of trim align parallel with each other and lock the arms in place.



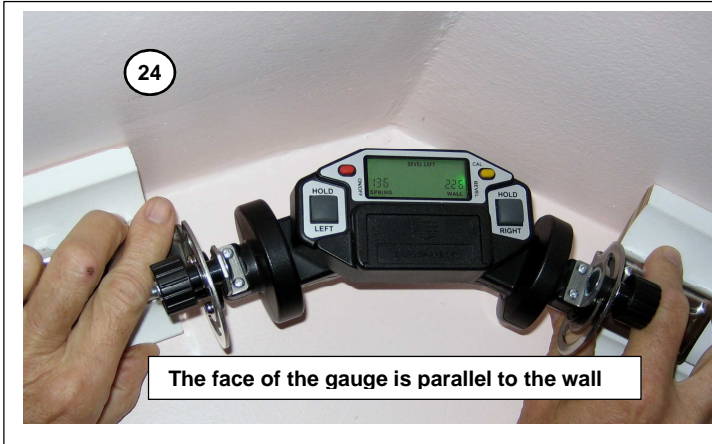
23. For 52°/38° crown molding the spring angle on the display should read close to 38°



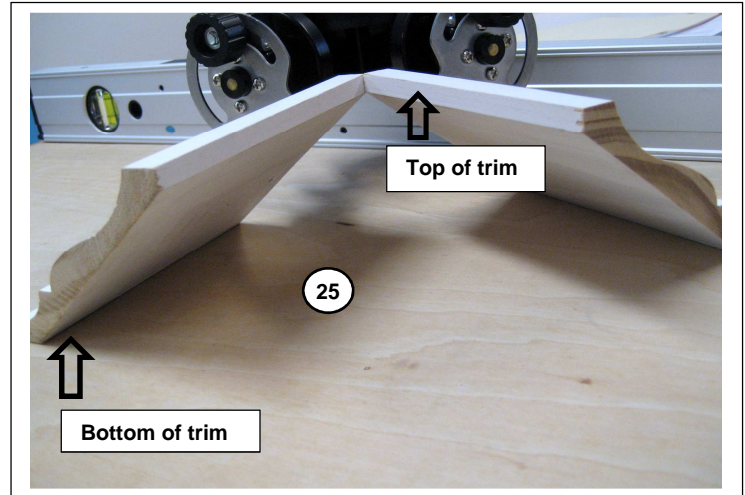


## Setting up to measure vaulted or Cathedral ceilings:

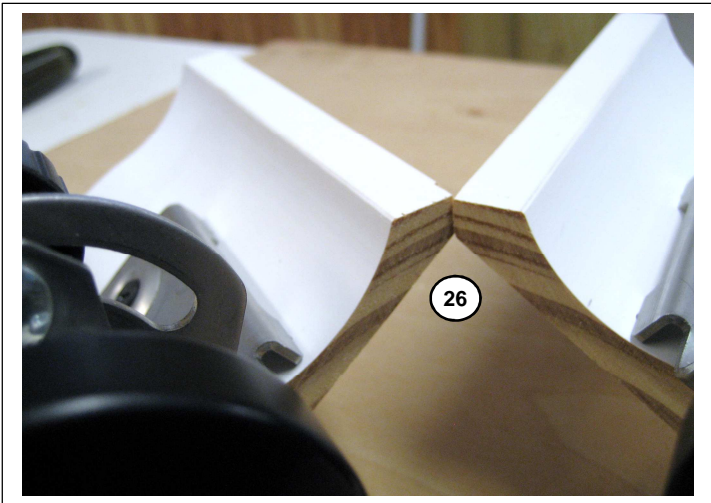
24. Loosen the lock knobs and rotate the trim pieces to fit properly in the corners. To measure corners of walls and vaulted ceilings set the gauge as shown below:



25. Check for proper the alignment of the trim on a flat surface.



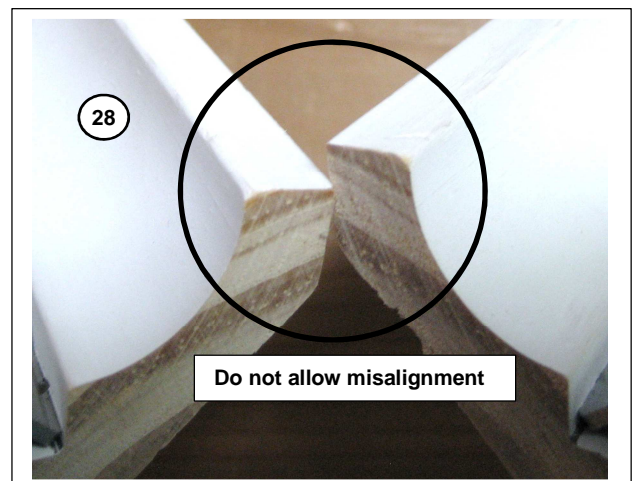
26. Make sure that both pieces of trim align parallel with each other and lock the arms in place.



27. For 52°/38° crown molding the spring angle on the display should read close to 128°



28. You can adjust the spring angle to fit odd wall to ceiling corners. Just be sure that the trim pieces remain parallel and the joints still match.

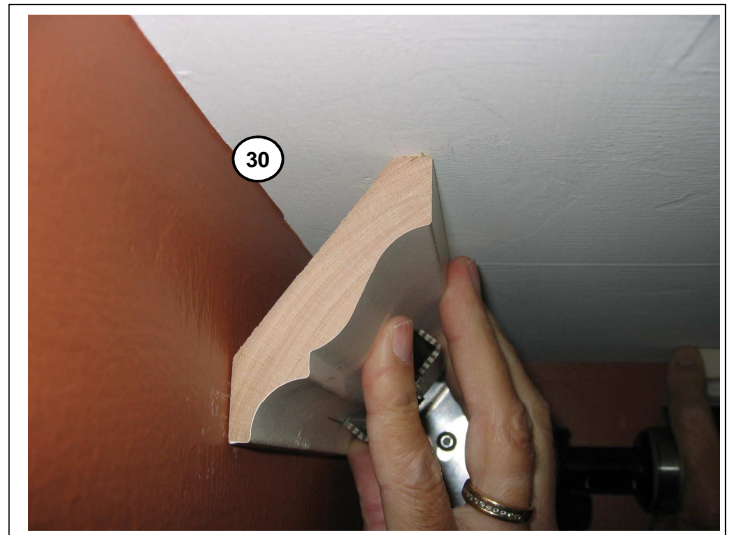


**Measuring and cutting:**

29. With the CJ4000 set in measuring mode fit it into the corner making sure both the left and right sides fit properly.

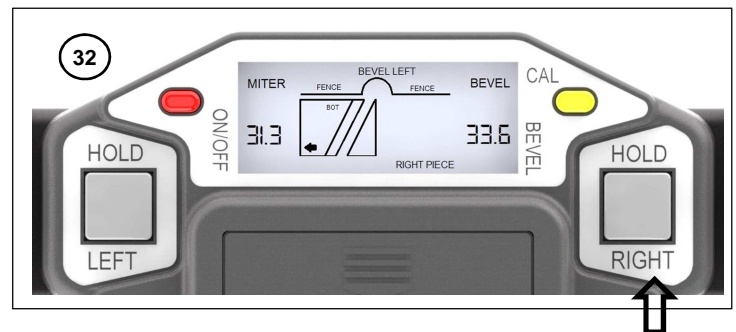


30. Both pieces of molding should contact both the ceiling and wall along their entire length.

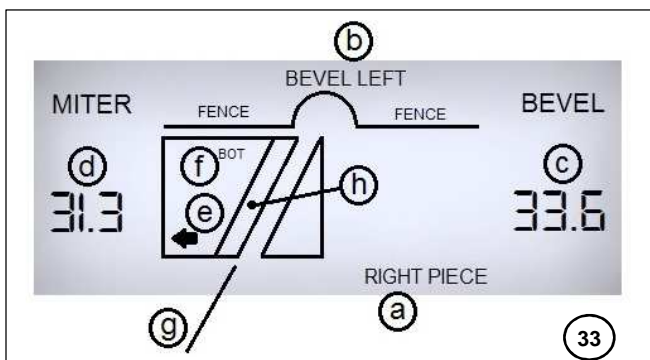


31. For an inside wall corner angle of  $90.7^\circ$  and using a  $38^\circ$  spring angle the display will look like this.

32. Holding the CJ4000 in position, press the HOLD LEFT or HOLD RIGHT button. Pressing the HOLD RIGHT button will show a display similar this.

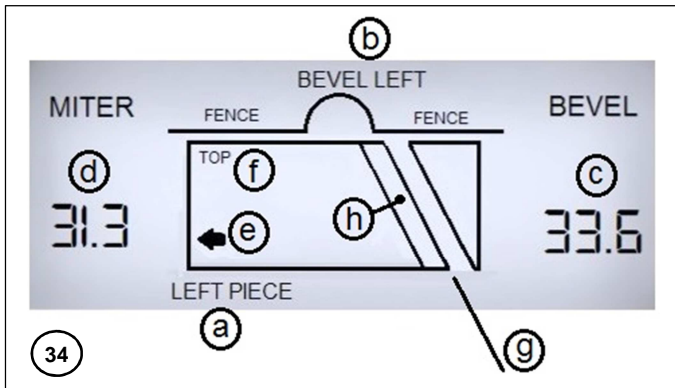


33. The display in 32. illustrates the following:



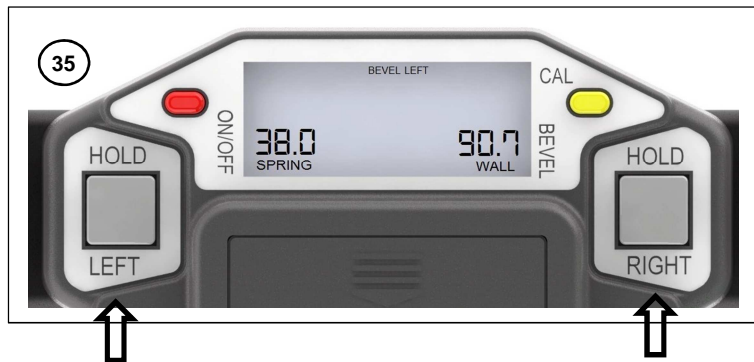
- a. Displays cutting the right piece of trim
- b. The display is set to show only bevel left
- c. The bevel angle will be set to  $33.6^\circ$
- d. The miter angle will be set to  $31.3^\circ$
- e. The trim to keep is to the left of the blade
- f. The bottom of the trim is against the fence
- g. The saw is mitered to the left
- h. The saw is beveled to the left

34. Pressing the HOLD LEFT button will show the cut orientation for the left piece of trim:



- a. Displays cutting the left piece of trim
- b. The display is set to show only bevel left
- c. The bevel angle will be set to  $33.6^\circ$
- d. The miter angle will be set to  $31.3^\circ$
- e. The trim to keep is to the left of the blade
- f. The top of the trim is against the fence
- g. The saw is mitered to the right
- h. The saw is beveled to the left

35. Press and hold both the HOLD LEFT and HOLD RIGHT buttons to return to the measuring mode.



For questions, comments, and application examples go to: [www.wixey.com](http://www.wixey.com)