SMARTTOOL™ Builder's Angle Finder

FIG. 1

CONTROLS: *(see fig. 1)*

❶ **ON/OFF** - If left idle for 6 minutes, **SMART**TOOL™ will automatically shut off.

❷ **HOLD** - Push to "freeze" and "unfreeze" display readings.

❸ **LISTEN & LEVEL AUDIO** - Push to activate and de-activate the beeper. Beeper will sound at level and plumb.

❹ **CALIBRATE** *(see Calibration Procedures)*

❺ **° % IN/FT** - Push to change the display units: Degrees (°), Slope (%), Pitch (in/ft).

Pitch readings are in 1/8 in/ft increments. Plus and minus signs indicate when the pitch is slightly more (+) or slightly less (-) than the pitch shown on the display.
Note: The % IN/FT button ❺ can be used even when the display is in HOLD. This feature is a convenient way to convert angles from one unit to another. For example a 5 in/ft roof pitch measurement can be converted to 22.6° for setting up cuts on a chop saw.

LCD DISPLAY:

*Display reads right side up when **SMART**TOOL™ is upside down!*

❻ **UP/DOWN ARROWS** - Left and right indicators point toward level or plumb (whichever is closer). Indicators get shorter as **SMART**TOOL™ gets closer to level (0°) or plumb (90°).

❼ **LOW BATTERY** - Low 9V battery indicator. Replace battery within 24 hours.

❽ **DIGITAL DISPLAY** - Display readout of current measurement.

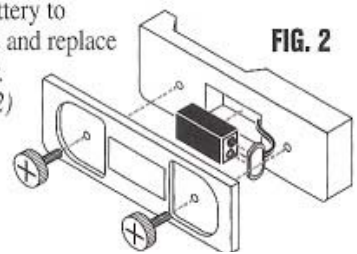
❾ **LISTEN & LEVEL AUDIO**

❿ **° % IN/FT MODES** - Indicates measurement "mode": Degrees (°), Slope (%), Pitch (in/ft).

BATTERY INSTALLATION:

(Battery included but not connected)
Remove back cover (see illustration). Attach 9-volt battery to terminals and replace the cover. *(see fig. 2)*

FIG. 2



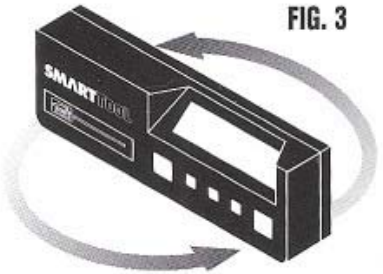
CALIBRATION PROCEDURES:

PROCEDURE FOR LEVEL:

To calibrate, place **SMART**TOOL™ on a flat surface. Wait 10 seconds. Push and hold the CALIBRATE button for 2 seconds. (CAL1) will appear briefly on the display.

Rotate **SMART**TOOL™ end-for-end. Wait 10 seconds. *(see fig. 3)*

FIG. 3



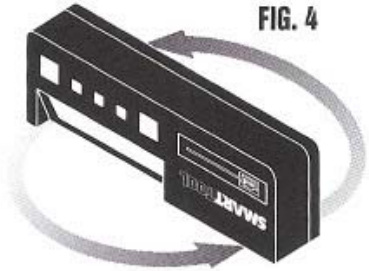
Push the CALIBRATE button again. (CAL2) will appear briefly on the display.

SMARTTOOL™ has now been calibrated for level.

OVERHEAD MEASURING FOR LEVEL:

If you need to read the display upside down, you must calibrate the top surface of the angle finder.
Repeat the steps described above except the **SMART**TOOL™ should be upside down. *(See fig. 4)*

FIG. 4



PROCEDURE FOR PLUMB:

Place **SMART**TOOL™ against a flat vertical surface with the LCD display at the bottom, and away from the surface. Wait 10 seconds. Push the CALIBRATE button. (CAL1) will appear briefly on the display.
Rotate **SMART**TOOL™ edge-for-edge along its long axis (i.e. LCD display is still at the bottom, but is now against the flat vertical surface.). The display should face away from you. Wait 10 seconds. Push the CALIBRATE button again. (CAL2) will appear briefly on the display. *(see fig. 5)*

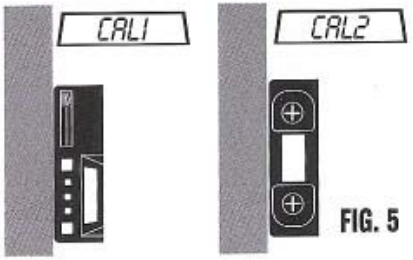


FIG. 5

Repeat the steps for plumb above except with the LCD display at the top. Now the **SMART**TOOL™ is calibrated for plumb.
*Note: If the CALIBRATE button is pushed when **SMART**TOOL™ is not near level or plumb, the display will show - - - and **SMART**TOOL™ will ignore the calibration attempt. Note: We recommend checking calibration daily, after a rough fall or if there has been a significant temperature change, ±20°F, since the previous calibration. To check simply follow the above procedures without depressing the CALIBRATE button. If the readings are more than .1 then the **SMART**TOOL™ should be recalibrated.*