

SMARTTOOL™

FIG. 1



CONTROLS (see fig. 1)

- 1 **ON/OFF** - If left idle for 6 minutes, SMARTTOOL™ will automatically shut off.
- 2 **HOLD** - Push to "freeze" and "unfreeze" display readings.
- 3 **▲) DIRECTIONAL LISTEN & LEVEL AUDIO** - Push to activate and de-activate the beeper. Directional Beep rate increases as 0°, 90°, or the copied angle is approached and changes tone when the angle is passed.
- 4 **CALIBRATE** (see Calibration Procedures)
- 5 **° % in/ft** - Push to change the display units: Degrees (°), Slope (%), Pitch (in/ft).

25.5° 47.7% 5 3/4

Pitch readings are in 1/8 in/ft increments.

Note: The ° % in/ft button 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 3/4 in/ft roof pitch measurement can be converted to 25.5° for setting up cuts on a chop saw.

LCD DISPLAY

Display reads right side up when SMARTTOOL™ is upside down!

- 6 **UP/ DOWN ARROWS** - Left and right indicators point toward level or plumb (whichever is closer). Indicators get shorter as SMARTTOOL™ gets closer to level (0°) or plumb (90°) or copied angle.
- 7 **LOW BATTERY** - Low 9V battery indicator. Replace battery within 24 hours.
- 8 **DIGITAL DISPLAY** - Display readout of current measurement.

9 ▲) DIRECTIONAL LISTEN & LEVEL AUDIO

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

11 ALTERNATE ZERO

ALTERNATE ZERO

Alt zero allows you to set any angle as a 0° reference point from which to take measurements. Set the new 0° by pressing "Hold" then "Cal/Alt 0". The display shows "Alt" then "-0-" then the new 0°. A dot flashes above the decimal point while in "Alt 0" mode. Discontinue "Alt 0" mode by pressing "Hold/Copy" or "Cal/Alt 0". Beep, °, %, and in/ft continue to function as normal.

ANGLE COPY

To copy angles, place unit on angle to be copied. Press the **Hold/Copy** button. Push the ▲) Listen and Level Audio button. Level will begin beeping. The "copy" angle will remain frozen on the display. A beep will sound when the unit is returned to this exact angle.

To remove the unit from the angle copy mode, push the **Hold/Copy** button or the ▲) Listen and Level Audio button. This operation will return the unit to the regular mode.

BATTERY INSTALLATION

(Battery included)

Remove back cover (see illustration). Attach 9-volt battery to terminals and replace the cover. (see fig. 2) Use only 9-volt alkaline batteries.

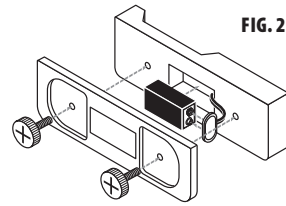


FIG. 2

CALIBRATION PROCEDURES

To read accurately, SMARTTOOL™ must be calibrated through all eight calibration steps. If the CALIBRATE button is pushed when SMARTTOOL™ is not near level or plumb, the display will show "----" and SMARTTOOL™ will ignore the calibration attempt. If CAL ALL appears on the display, SMARTTOOL™ needs to be calibrated through all eight calibration steps.

Note: We recommend checking calibration daily, after a rough fall, or if the temperature has changed by more than 20° F (11° C) since the previous calibration. To check calibration, follow the following procedures without depressing the CALIBRATE button. If the readings vary by more than 0.1 deg. then SMARTTOOL™ should be recalibrated.

Step 1: Place SMARTTOOL™ on a flat surface with the display facing you. Turn it on and wait 10 seconds. Push and hold the CALIBRATE button for 2 seconds until CAL1 appears on the display.



Step 2: Rotate SMARTTOOL™ end-for-end on the flat surface with the display now facing away from you. Wait 10 seconds. (see fig. 3)



FIG. 3

Push and hold the CALIBRATE button for 2 seconds until CAL2 appears on the display.



Step 3: Place SMARTTOOL™ upside down facing you. Wait 10 seconds. Push and hold the CALIBRATE button for 2 seconds until CAL1 appears on the display.

Step 4: Rotate SMARTTOOL™, still upside down, end-for-end on the flat surface with the display now facing away from you. Wait 10 seconds. Push and hold the CALIBRATE button for 2 seconds until CAL2 appears on the display. (see fig. 4)



FIG. 4

Step 5: Place SMARTTOOL™ against a flat vertical surface with the LCD display at the bottom and away from the surface. Wait 10 seconds. Push the CALIBRATE button for 2 seconds until CAL1 appears on the display.

Step 6: Turn SMARTTOOL™ with the display facing away from you, along its long axis (the LCD display is still at the bottom, but is now against the flat vertical surface.) Wait 10 seconds. Push the CALIBRATE button for 2 seconds until CAL2 appears on the display. (see fig. 5)

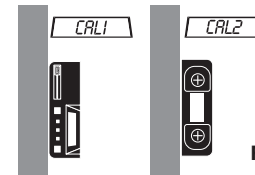


FIG. 5

Step 7: Place SMARTTOOL™ against the flat vertical surface with the LCD display at the top facing you. Wait 10 seconds. Push the CALIBRATE button for 2 seconds until CAL1 appears on the display.

Step 8: Turn SMARTTOOL™ along its long axis, with the LCD display at the top but now facing away from you. Wait 10 seconds. Push the CALIBRATE button for 2 seconds until CAL2 appears on the display.

MAINTENANCE

The following tips will ensure that your SMARTTOOL™ is kept in top condition.

- The SMARTTOOL™ is weather and water resistant. Should SMARTTOOL™ be splashed with mortar or other construction site residue, simply wipe clean with a damp cloth. Do not immerse the SMARTTOOL™ in water.
- ABS polymer surfaces should be cleaned with a mild liquid soap and water.
- We advise you to store SMARTTOOL™ away from

extreme temperatures below 20°F (-4°C) or higher than 140°F (60°C).

ONE YEAR LIMITED WARRANTY

If within one year from the date of original purchase, the SMARTTOOL™ fails to function because of defects in materials or workmanship, M-D will, at its option, either repair or replace such components provided the original purchaser:

1. Call 1-405-528-4411 for a Return Authorization Number.
2. Returns the SMARTTOOL™ postage paid and insured to M-D at the address set forth below. M-D is not responsible for any damage incurred to the components while in transit to M-D;
3. Includes a brief explanation describing why the SMARTTOOL™ is inoperable, or how the component was damaged;
4. Sends the materials to:
M-D Building Products, Inc.
Service Center Authorization
4411 N. Santa Fe
Oklahoma City, OK 73118

This warranty does not cover damage resulting from accident, misuse or abuse, water, tampering, servicing performed or attempted by unauthorized agencies, or units that have been modified in any fashion. If the components do not perform as warranted herein, the original purchaser's sole remedy will be the repair or replacement of the components as provided above. In no event will M-D be liable for damages, lost revenue, lost wages, lost savings or any other incidental or consequential damages, domestic or international, rising from the purchase and use or inability to use the components, even if M-D has been advised of the possibility of such damages. Except as provided herein, M-D makes no warranties, express or implied, including without limitation, the implied warranties of merchantability and fitness for a particular purpose, with respect to the components. All warranties for the components, express or implied, are limited to the warranty period set forth above. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights, as indicated above, which vary from state to state.