5. The Digital Display may be mounted in a location which allows for easy viewing by the operator. The location of all parts should also safeguard the cable from possible damage. ProScale wiring should be kept away from electrical wiring and motors. Plug the readhead into the display. See Section 4: *Digital Display Operation.*



Typical Model 150 Installations

Readhead stationary, Scale moves



Scale stationary, Readhead moves

Calibration

Once installed, ProScale can be calibrated easily and quickly. Following is an example for calibrating ProScale on an industrial wide belt sander. Other installations follow the same general procedure.

- 1. Check to be sure installation of all parts is complete, all fasteners are secure, and the readhead is plugged into the digital display.
- 2. Set-up the machine to operate as normal. Run a part through the sander.
- 3. Measure the thickness of the sanded part with the most precise measuring tool available (digital calipers if possible).
- 4. Press the zero key on the ProScale digital display then press and hold the PLUS key to scroll until the thickness measurement is displayed (The longer the PLUS key is held down, the faster the display will scroll).
- 5. When the proper reading is reached, lock the display if desired. This prevents accidentally re-zeroing of the display. See Section 4: *Lock Mode*.

If the direction of movement (+ and -) on the digital display is opposite the desired direction, the display programming should be changed. See Section 4: *Programming (Programming Parameter Pr0).*

Maintenance

Although the ProScale will operate in a dry environment of non-conductive debris such as sawdust, the system should be cleaned of excess debris when necessary. This will prevent premature damage to the scale or readhead. Should the scale become difficult to move, check to see if debris has built up under the readhead and remove if necessary. Find and remove any burrs which may have developed on the aluminum scale. Do not use any liquid lubricants on the scale assembly, as this may impede the readhead's ability to operate properly and will attract other contaminants to the scale.

The Digital Display should be cleaned periodically with compressed air to remove any dust on the lens and keys.

All mounting fasteners should be checked occasionally for tightness.

SECTION 3

PROSCALE MODEL 250



ProScale Model 250 shown with Panel Mount General Purpose LCD Display

ProScale Model 250

A General Purpose measuring system with nine standard measuring ranges from 0-300mm (12in.) up to 0-6m (20ft.).

Model 250 systems use *ABS* style scales, *ABS* style readheads, and any of the available digital displays. Neither the scale nor readhead are compatible with any Accurate Technology incremental technology measuring systems.

ProScale Model 250 is easy to install. By following the basics of good installation, reliable, error-free operation is assured. ProScale M250 can be used in many different measurement applications, and with numerous types and brands of equipment. Therefore all installations will be a little different and it is the responsibility of the installer to choose the bolts, screws, or other mounting hardware that guarantee proper installation for optimum operation.

Note: If a custom kit was ordered which contains instructions for installing ProScale on a specific product, follow those instructions rather than the general instructions here.

Installation

- 1. Note the orientation of the readhead on the scale. Be sure the arrow on the readhead points towards the "BLACK END OF SCALE". This orientation is critical for proper operation of ProScale. Be sure the mounting location for the readhead and scale will allow this orientation. Take care when sliding the readhead onto the scale so the brass "fingers" inside the readhead do not get damaged. (A slight "wiggling" motion when installing the readhead on the scale will simplify the process.)
- 2. Determine an appropriate mounting location for the system. Most applications of the Model 250 will have the scale held stationary while the readhead is moved along the scale. However, the ProScale will read correctly if the readhead is moved along the scale or if the scale is moved through the readhead.

3. When the scale is stationary and the readhead moves to measure, you should use the Guide Clip to move the readhead along the scale (see figures on next page). Mount the scale using M4 (or #8) screws. Be sure the screw heads do not protrude above the surface of the extrusion. Check that the scale is properly aligned as the readhead is moved over its length (the Guide Clip will compensate for slight misalignment). Adjust scale alignment if necessary.

For accurate measurements, the guide clip must be mounted perpendicular to the direction of travel of the readhead. The guide clip should exert some pressure over the full range of travel on the readhead so the two move as a single unit.



Guide Clip

Note: Failure to use the guide clip could void the warranty.

4. The Digital Display may be mounted in a location which allows for easy viewing by the operator. The location of all parts should also safeguard the cable from possible damage. ProScale wiring should be kept away from electrical wiring and Plug the readhead into the display. See Section 4: Digital Display motors. Operation

Note: If any other mounting method is used, observe the following:

Do not drill through the green portion of the scale at any point over which the Α. readhead will travel.

Do not mount the scale so the mounting hardware interferes with the B. movement of the readhead.

Typical Model 250 Installation





Guide Clip Pressure/Spacing (End View)