



## ULTRA TEC

## The STOP INDICATOR

1510.1

This includes an instruction for Faceting Masts purchased after June 2001 (referred to as "newer machines"), as well as an instruction for Masts purchased before that (referred to as "older machines"), these latter instructions in italics and in *[Brackets]*.

### SETTING UP THE STOP INDICATOR

"Stop Indicator" is a non-romantic name--but it is descriptive. That's what it does: detects contact with the stop. At that point, you get a light signal and a buzzer signal (the buzzer being optionally-on). It is accurate, and allows you to do your faceting at a very fast pace.

#### 1.0 IN THE SHIPPING CONTAINER ARE:

- The "black box"--the main unit, which is 4"X2¼"X2¼". There is a power cord extending from it which inserts into a standard 110VAC wall socket.
- A Sensing Wire, with a jack type plug at one end (which plugs into the box), and two round terminals at the other end (which attach to the Faceting Mast).
- Also, there's a plastic envelope with two little nylon plugs (alternatively, there may be two nylon-tipped set screws)--you probably won't need them, but you might (see paragraph 2.3.1).
  - One 10-32 x ¼ button head screw

**1.1 PRE-SETUP TEST.** We did this before we shipped it, but it's so easy to repeat, you might as well do it too--it takes longer to say it than do it. It will show you what to expect after the full setup is done.

Plug the power cord into a 110VAC wall socket. Plug the Jack into the receptacle on the box. Hold the two round terminals together (don't worry--you won't feel it--there's only 12 volts flowing through). When the terminals are joined, the light goes on, and the buzzer sounds (if the buzzer doesn't sound, push the push-button on the face of the box, and that will activate it). When you separate the round terminals, the light and the buzzer become inactive. Test complete.

**2.0 INSTALLATION.** Connect the round terminals to the faceting mast. Turn the Mast around—so that the Angle Dial is looking away from you, and you are looking at the rear arm of the Yoke.



**2.1** On newer machines, looking at the rear arm of the Yoke, you will see three holes—an oblong one to the right and a size 10 to the left, and an empty size 10 to the extreme left (it may have a stainless steel button head screw preinstalled). Mount one round terminal (it doesn't matter which one) onto the Yoke, under the Button Head Screw.

*[On older machines, mount one round terminal onto the thread of the Fine Adjustment screw—it needs only the slightest contact with that screw to conduct the electrical signal].*

**2.2** The other round terminal attaches to the Angle Stop. On newer machines there is a preinstalled screw on the bottom surface of the Angle Stop—that screw holds the second round terminal. When you tighten the screw, align the tubing behind the terminal with the arm of the Angle Stop (If you set it out sideways, it will interfere with a Dial Indicator Attachment—if you don't use a Dial Indicator Attachment, then sideward mounting is OK).

*[On older machines, attach the round terminal onto the thread of the Angle Stop—again, it needs only the slightest contact with that screw to conduct the electrical signal].*

**2.3** Plug the jack into the box and the power cord into the wall socket—you've done it. Now, when you make contact between the Angle Stop and the Fine Adjustment thread, it will now function just as it did in the pre-setup test.

**2.3.1** *If you have a Dial Indicator Attachment (DIA)*, you might observe that the light and buzzer signals are reacting too soon—reacting when the Angle Stop makes contact with the lever on the DIA (because the DIA is grounded to the Yoke through the setscrews that hold it to the Yoke). That's what the two little nylon plugs are for—remove the DIA, back off the setscrews to accommodate the nylon plugs, and reinstall the DIA (if you have received two nylon-tipped set screws, use those to replace the former setscrews).

**3.0 USING IT.** When you did the "Pre-Setup Test", you saw the function—and you know that the light always works, while the buzzer operation is optional. You can control the buzzer volume to some extent by the sliding flap on the top surface. If you are interested in working very fast—listen for the buzzer—it tells you to change the index position—as you will find, it is a very fast way of working.

You can place the unit conveniently. If the Sensor cable leads are too tight, separate it into single wires for a longer length—just pull them apart.