

# Digital Backstop for Bandsaw



## User Manual

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# 1. Main Screen and layout details

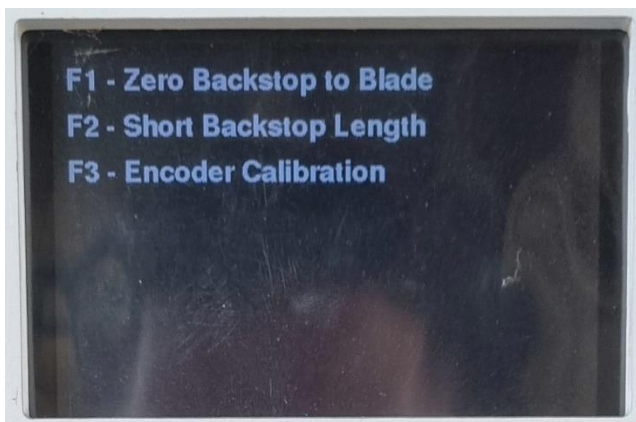


- Top White Text is the measurement from the blade to the selected backstop
- Brake: OFF or ON
  - Shows the state of the backstop brake
- Back Stop: SHORT or LONG
  - Shows if the short back stop is up or down.
- Offset: 0.0
  - This is a manually entered offset.
  - By pressing F2 on the keyboard and entering a value, you can offset the amount on the measurement.
  - This would be used if you needed to add a spacer on a backstop for small round bar or an odd shape that doesn't hit a backstop.
  - Pressing Cancel on the keyboard will remove any offset you have set.
  - The main measurement in the top left will change to RED to show the value given includes the offset value.
- Image: This just shows the state of the backstop, if it is up or down.
- Encoder count: Good for checking that the encoder wheel is skipping along the back of the backstop near the linear rail.

## 2. Entering Setup Menu



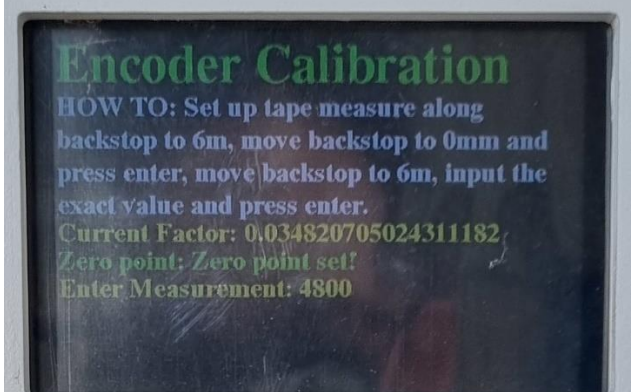
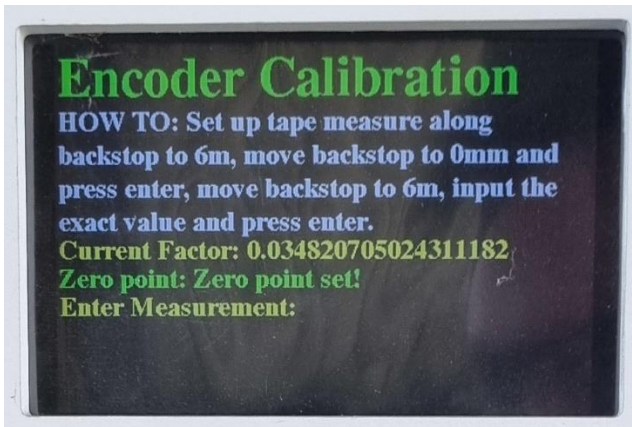
- Press F4 on the keyboard and the “Enter Setup Menu” will display.
- Enter “1234” and press Enter on the keyboard



- Pressing F1 on the keyboard will allow you to Zero the backstop to the bandsaw blade
- Pressing F2 on the keyboard will allow you to set the “Short Backstop Length”
  - This should not be needed unless the short backstop is changed.
  - The short backstop length is the length from the main backstop to the front of the short backstop
- Pressing F3 on the keyboard will allow you to re calibrate the encoder on the backstop. More details on this in the next section.



### 3. Calibration of the Encoder



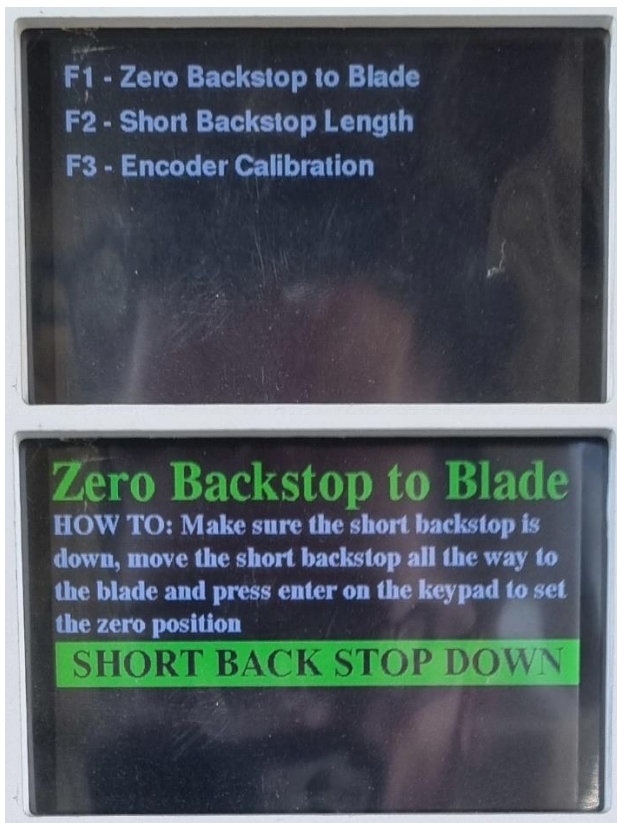
- After entering the setup menu and pressing F3 on the keyboard you will be shown this screen.

1. Move backstop closest to the bandsaw
2. Setup a tape measure along the length of the back of the conveyor, resting on the section above the bearings.
3. Use a square and place the 100mm mark of on corner of the square.
4. Press Enter on the keyboard to "Set zero point. (Do this before you move the backstop)
5. Move the backstop to the end of the conveyor
  - a. Make sure the tape measure doesn't move.
  - b. Another option would be setting up to marks that you know the exact measurement so you don't have to hold the tape when you do this process.
6. Now use the square to get the measurement on the tape, I normally just round this to the nearest 10mm.
7. With that measurement (excluding the 100mm if using that method) enter the value into the keyboard and press enter.
8. Press enter again and that will save the calibration.

#### Notes:

- You can press cancel and not save the calibration data.
- The screen shows the current calibration factor and the new calibration factor.
  - This is a good check, as this value should not change
- You should always complete a "Zero Backstop to Blade" in the setting after you do a calibration.
- Encoder calibration shouldn't need to be completed often. You may want to do a calibration between summer and winter if you have large temperature swings.

## 4. Zero Backstop to Blade



1. After entering the setup screen press F1 to get to the “Zero Backstop to Blade” menu
2. Make sure the short backstop is down and move it up against the bandsaw blade.
3. Press enter to zero out the digital backstop to the blade.

## 5. Other Features

### 1. LED Light

When the brake is off the LED is off.

When the brake has been enabled, the LED will go GREEN.

If the brake is on and the backstop is moved outside of  $\pm 1$  mm from when the brake was enabled, the LED will turn RED and flash.

### 2. Set Measurement

Pressing F1 on the main screen will give you the option of setting the measurement you want. Enter the value you want and press enter.

Once you get to that measurement the LED will turn GREEN, you still need to enable the brake once you get there.

The LED will change colour depending on if you are too far right or left of the measurement you have entered.

Pressing Cancel will remove the value set.