

# SuperTrickler

When True Precision Matters



**Version 2.20 Supplementary**

**ST101 Owner's Manual**

**Referenced to V2.00 Manual**

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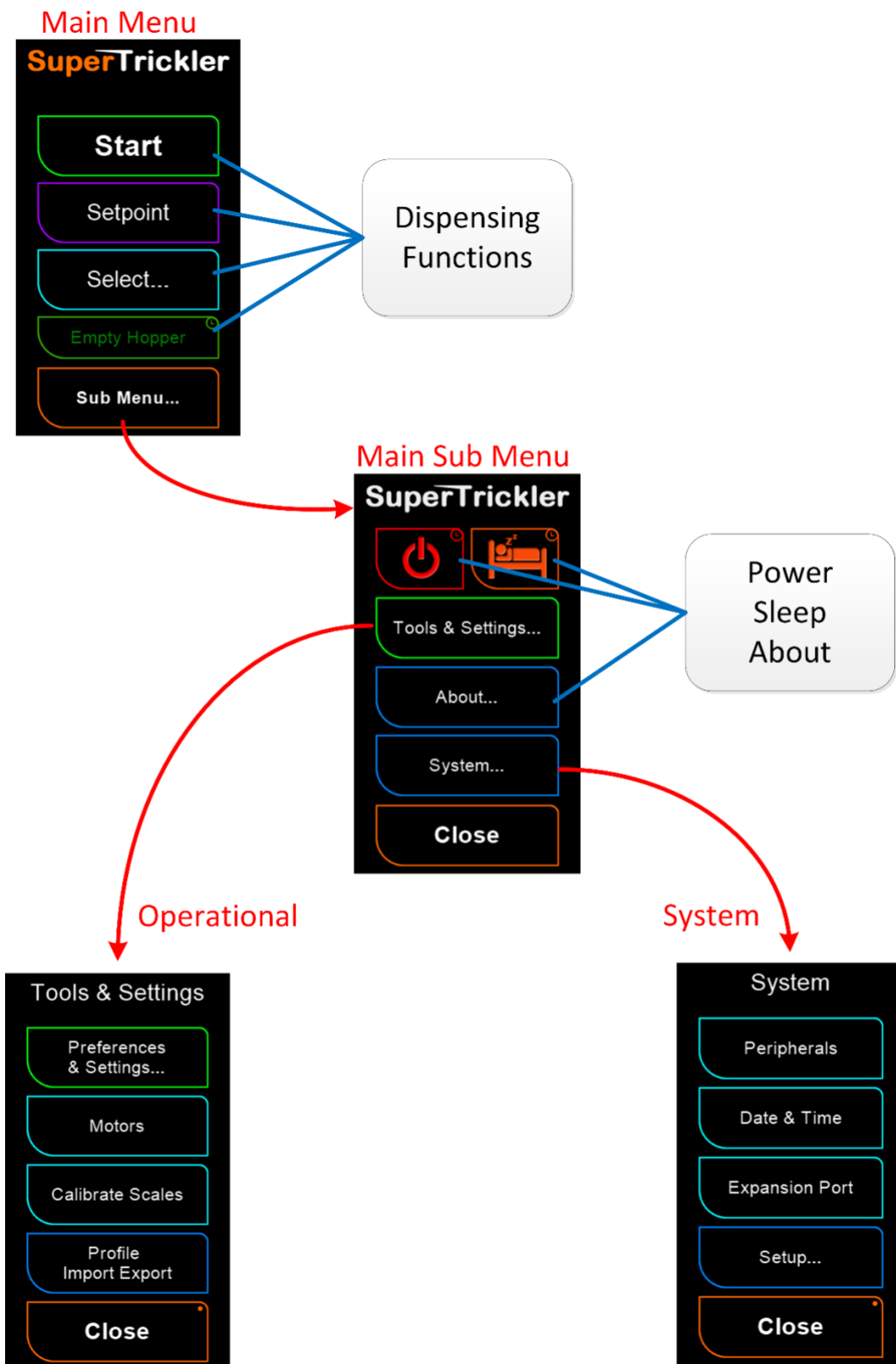
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# Changes to Operational Menu

## Menu System

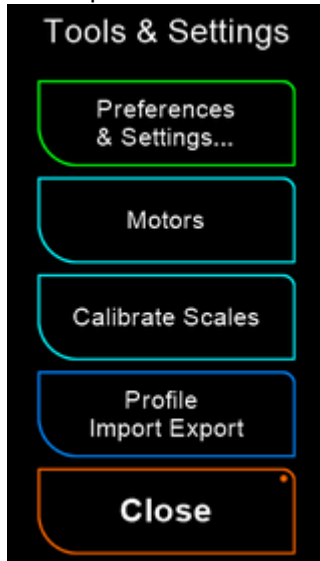
Refer to V2.00 Page: 31 for full details



## Tools & Settings

Refer to V2.00 Page: 44 for full details

'Automatic power up times' has been moved to 'Preferences & Settings' (formerly 'Options & More') menu and 'Profile Import Export' has been moved in its place. Reasoning: Import Export is more of a tool rather than a preference or setting, this location was more logical and intuitive.



## Preferences & Settings

Refer to V2.00 Page: 45 for full details

This menu was formerly known as 'Options & More' and has now been changed to 'Preferences & Settings' to better describe the majority of the accessible functionality available from this menu.

The 'Options' button has been renamed to Preferences to better describe the functionality.

'Profile Import Export' has been moved to the 'Tools & Settings' menu and 'Automatic power up times' is now located here. Reasoning: Automatic power up times are more of a setting; this location was more logical and intuitive.

'Data Logging' has been moved to this menu from the formerly Options menu to make room for some new preferences.

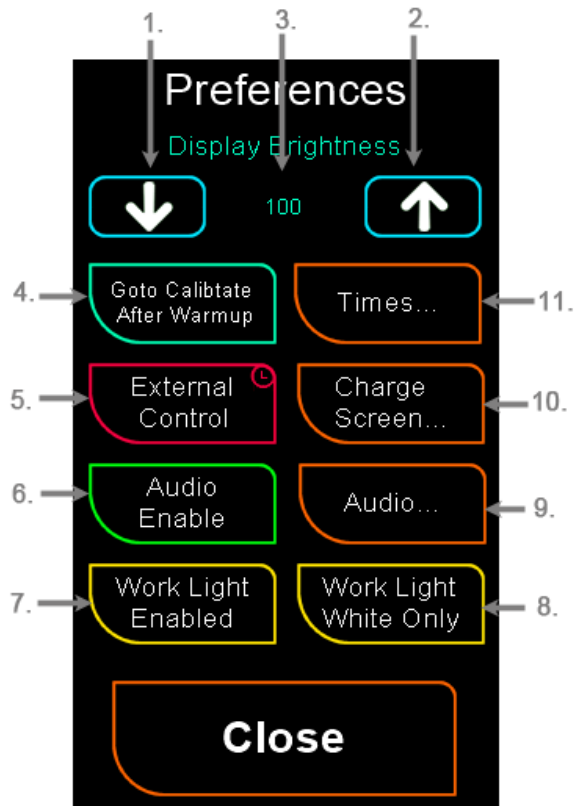


## Preferences

Refer to V2.00 Page: 46 for full details

Formaly known as 'Options'



Item 10 was 'Data Logging' that how now been moved to the 'Preferences & Settings' menu, making room for the new 'Charge Screen...' preferences.



## Charge Screen - Preferences

**NEW**

This new set of preferences allows the operator to select information display on the charging screen. There are two sections

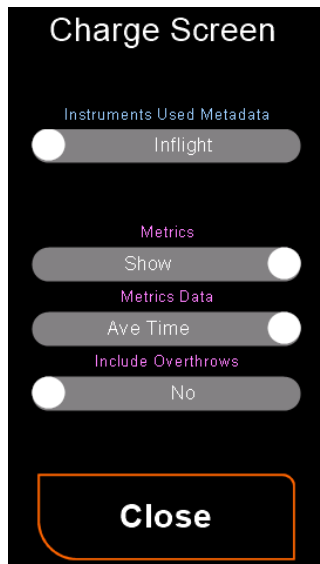
1.  Instrument Metadata
2.  Metrics

### Instrument Metadata

This selection allows you to select between the inflight measured for each instrument or the time in seconds that each instrument was used for.

### Metrics

This selection allows you to select between the Total Success and Successive counts or Average Time and Count. Either metrics will now also display the Success Rate percentage.



The Metric display can be turned On or Off with the Metrics switch. If Average time is selected with the Metrics Data Switch, a further preference will be displayed to include Overthrows in the average time calculation.

# Charge Screen

Refer to V2.00 Page: 35 for full details

Points 7, 8, 22 & 23

The charge screen has been updated and can now display a better array of metrics information.

The metrics information can be turned off if not required, all metrics display will now display a Success Rate percentage. See Charge Screen - Preferences for details.

To reset the current metrics information press and hold the Reset button for around 2 seconds. This information is session based and will reset automatically if the unit is powered down or the Preset or Powder is changed.

Points 13

The metadata display next to the instrument used can now be selected to be either inflight measured or the time the instruments was used for.

Points 21

The laser display has been revised to better display the state the laser is measuring.

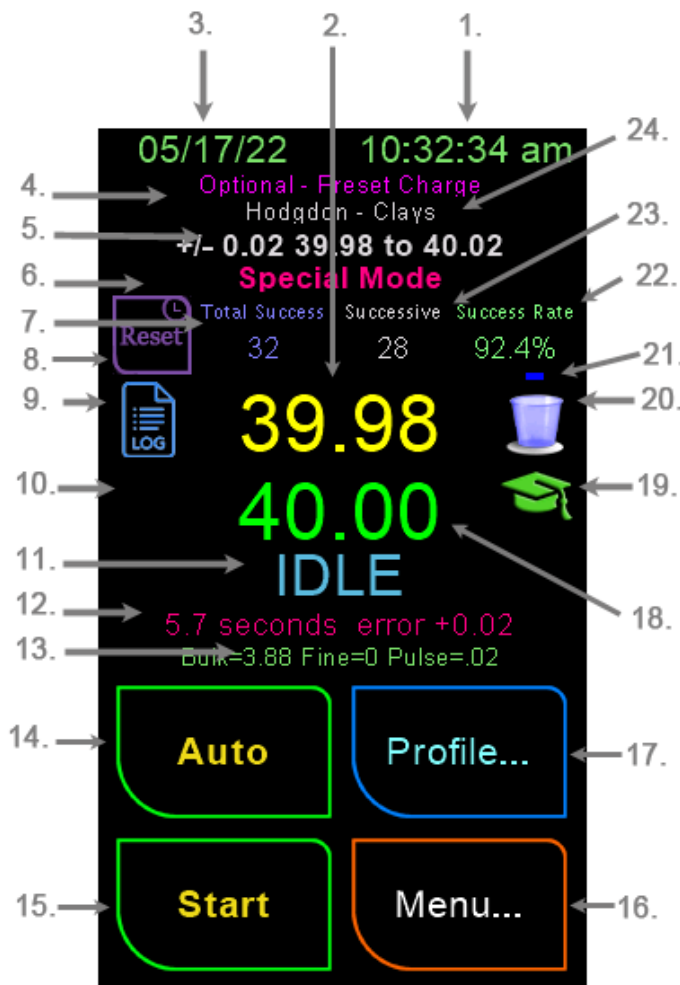
Hidden: Laser is not enabled. See System, Peripherals, Power Cup Sensor.

Blue or Grey: Laser has not established a measurement.

White: No cup detected.

Green: Empty cup detected.

Red: Cup detected with some content.



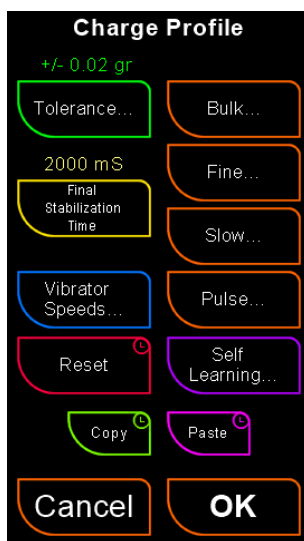
## Profile

Refer to V2.00 Page: 69 for full details

### Main screen name changes

We have renamed some of the button names to either simplify the name or to more intruatively describe the functionality.

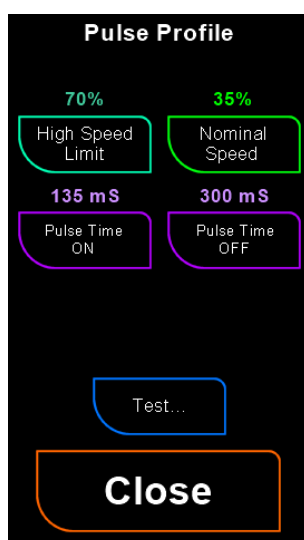
1. Reset formerly Restore Default, renamed to simplify the functionality name.
2. Copy formerly Save, renamed as people were assuming it was required to save changes to the profile. This is not the case as the button saves a COPY of the profile to the clipboard. Profile Saving occurs when you press the OK button or if the AI Self-learning has made changes.
3. Paste formerly Recall, renamed to align to the clipboard terminology standards. Paste will take the profile saved in the clipboard and paste it into the current profile.



### Pulse...

Refer to V2.00 Page: 75 for full details

We have added a new control 'High Speed Limit' and renamed 'Speed' to 'Nominal Speed'



**High Speed Limit:** This new control will limit the top speed the dithering can initiate. With some powders the dithering would pulse with a high speed value, resulting a large amount of powder movement that would often lead to an overthrow. This control can be set to limit this speed and when finely tuned will enable very fine control of the kernel drops down to a single kernel at a time.

**Nominal Speed:** Is only a name change to better explain is functionality. This sets the nominal speed that the dithering speed with jump around. Note this is not a low speed limit.

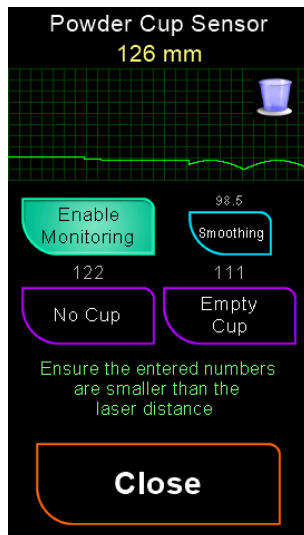


## System

### Powder Cup Sensor (laser) calibration.

Refer to V2.00 Page: 57 for full details

The laser system has now been fully intergrated into the system and will required calibration.



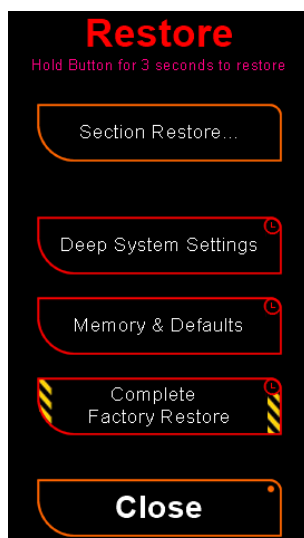
**Smoothing:** The laser beam is subject to noise and stray refections etc resulting in an unstable reading. The smoothing control is used to filter out the noise to obtain an usefull distance measurment. Too little smoothing and the distance measurement will be unstable and unreliable. Too much smoothing and the distance measurement will be slow to react and may interfeare with the smooth flow of the powder cup detection and charging operations. A value of around 98.0 is about right however if it does required changing, try very small adjustments a value of 1.0 is a large change.

To set the No Cup and Empty Cup, place the cup either on or off the scale plate and allow a small amount of settling time then set the value a few mm lower than the reading (this keypad will default to this value).

### Factory Restore

Refer to V2.00 Page: 59 for full details

The factory restore has been slip into two menus with added functionality.

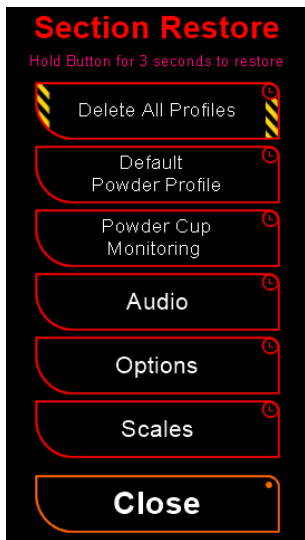


**Section Restore:** Will take you the sub menu for section only restores.

**Deep System Setting:** Will restore the deep settings to the factory desfults.

**Memory & Defaults:** Will clear the non-volitaille memory and restore all setting to the factory settings.

**Complete Factory Restore:** Will do the same as the 'Memory & Defaults' restore with the additions of clearing the profiles database. Leaving the system in the condition as from the factory.



**Delete All Profiles:** Will delete the profiles database removing all powder and presets profiles.

All other buttons are same as described in the Version 2.00 owners manual.