SuperTrickler When True Precision Matters



Version 2.10 Supplementary ST101 Owner's Manual

Referenced to V2.00 Manual

Table of Contents

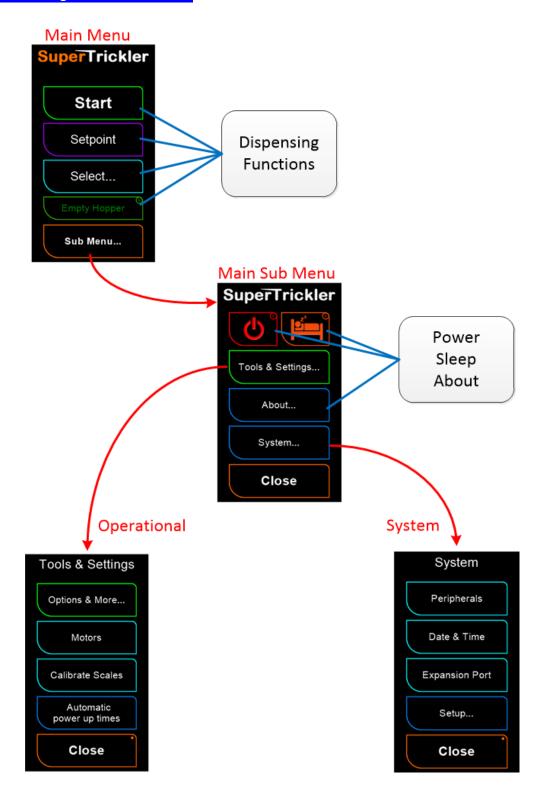
Table of Contents

Empty Hopper	3
Menu System	3
From the Main Menu	4
Empty Hopper Screen	4
Profile Import Export	5
Selecting a Powder	5
Selecting a Preset profile	5
Profile Import Export	6
Weight Logging	8
Weight Logging Mode	8
System Restore	10
Restore	10
Firmware Update	11
Update Error codes	11
Powder Profile	13
Self-Learning Parameters	13
Appendix A: Upgrade/Firmware Naming Conventions	14

Empty Hopper

Menu System

Refer to V2.00 Page: 30 for full details



From the Main Menu

Refer to V2.00 Page: 33 for full details



Empty Hopper: Use this when emptying the unit of powder. It will prevent accidental pressing of buttons on the screen.

Empty Hopper Screen

NEW

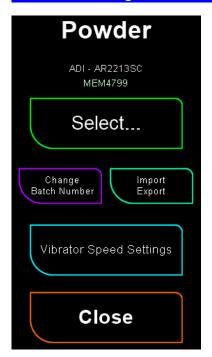
Use this button to temporarily 'lock' the screen from accidental button pushes and dispensing while emptying the SuperTrickler. The screen below will show, Press and hold for 3 seconds to return to normal operation. This is used to prevent accidentally pressing any buttons while emptying the hopper, and causing powder spillage.



Profile Import Export

Selecting a Powder

Refer to V2.00 Page: 36 for full details



<u>Import/Export</u>: Import/Export Powder profile for sharing or debugging. See <u>Import/Export section</u>

Selecting a Preset profile

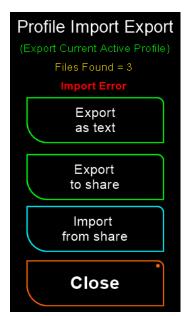
Refer to V2.00 Page: 38 for full details



<u>Import Export</u>: Allows Importing/Exporting profiles. See Import/ Export for more details and cautions.

NEW

This menu is used to import and export Powder profiles for support or sharing. The files are in the \share folder of the SD card. This feature is also available from the Powder and Preset screens as well.



Export as text: Used to export the current Powder profile in a readable text file on the SD card in the \share folder of the SD card. The file will have a name similar to the powder selected and have the extension .txt **NOTE:** A profile pro-forma file needs tobe present for this functionality. The file is in the system folder and called \sys\profile.pf if this is missing it can be downloaded from the web site.

Export to share: Exports current Powder profile in a binary shareable file to send to other users in the \share folder of the SD card. The file will have a name similar to the powder selected and have the extension .pie

<u>Import from share:</u> Imports a shared Powder profile that was placed in the \share folder of the SD card. You will be prompted to import each

file that is found. Entries in Blue are new entries, ones in Red will overwrite an existing profile with the same name.

You may export multiple powder profiles in one session. Each time you hit an export button; you will get a file exported that contains the current powder profile.

It is important to note that when using the Import function, any profiles with the SAME NAME (RED text) will be overwritten.

You will be asked for confirmation during import for each profile being imported with the following screen:



<u>Yes:</u> Import the named Profile (proceed, and auto delete the file when done.)

No: Ignore the named profile for now, will ask again next time.

<u>Delete:</u> do NOT import and DELETE the file from the SD card.

To use the Import/Export feature, follow the steps below:

Export:

- 1) Export the Preset[s] or Profile[s] you want to the SD card. You can only export the currently active Profile, so if you want to export multiple ones, just use the 'Select Preset' to active another profile.
- 2) After exporting, remove the SD card and place in your computer.
- 3) Open the SD card and look in the folder names 'share'
- 4) Find the appropriate .pie files you exported (names are like the profile/powder names they came from)
- 5) Either Copy/Move the .pie files from the SD card to your computer (if you copy, please remove the files from the SD card) or simply share them directly from the SD card (Email, FB...)
- 6) Eject the SD card from your computer and reinsert into the SuperTrickler.

Import:

- 1. Remove the SD card from the SuperTrickler.
- 2. Insert the SD card into your computer.
- 3. Copy any .pie files you want to install on the SuperTrickler into the share folder on the SD card.
- 4. Eject the SD card properly from your computer.
- 5. Insert the SD card back into the SuperTrickler.
- 6. It should bring up the Import/Export screen and prompt you to import/ignore/delete each file it finds. It will create new or overwrite the existing Powder and/or Preset. (as indicated by blue or red text as stated above.)

Weight Logging

Modes

Refer to V2.00 Page: 39 for full details

The SuperTrickler has three modes of operation.



<u>Weight Logging</u>: used to log weight of objects. Examples are to weigh and sort brass, bullets, primers etc.

Weight Logging Mode

NEW

Weight logging is designed for recording a series of weights for objects such as brass cases or bullets. The screen shows weights, counts and allows for setting some groups and other values. These are recorded to a file on the SD card named weight.csv in the \log folder.

Typical for reloaders, 'batches', Groups, or 'Boxes' of cases are weighed. You might have 3 boxes of 50 rounds of brass to weigh. You can use the Up/Down arrows to set the "Group" setting number. This Group X gets recorded in the file on each line. The larger counter is the total number of objects weighed, while the smaller one under the group name is the count in THIS group. It will reset if you press the Up/Down arrow to change the group name. (So you can record case #X in Group #Y, and also keep a total count.).

You have two different modes, direct weight, or including an offset/reference weight to deduct. If the Use Cup button is off, the actual weight of the object is shown/recorded. IF Use Cup is ON, then the system will ask you to put the reference 'cup' on, and it will subtract that reference from each weight recorded. This is used to weigh small objects, maybe bullets, or primers that would otherwise be hard to put on/off the platen of the Scales.

Make sure to press the Close button before removing the SD card.



- 1) Current Scales reading
- 2) Recorded weight
- 3) Total Item Count

Arrows are to increase/decrease the Group number. Display shows Group Number and Count within that group. The group count resets when you change the group number.

Use the Ignore Read button to throw away the current value and not record in the file.

Enable Logging toggles the logging on and off

Press and Hold the Delete button to delete the log file

Use Cup: Press this button to create an 'offset' for the cup. It will guide you through the procedure to use the cup.

Zero Scale: Allows you to zero the scale

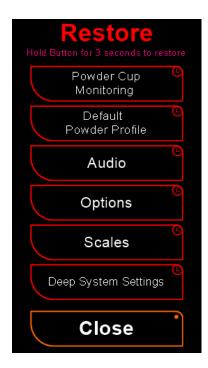
Close: End this session and record the final value in the log file.

IMPORTANT NOTE: YOU MUST use the Close button BEFORE removing the MicroSD card to record and close the log file! Not doing this could result in losing values in the log.

System Restore

Restore Menu, Submenus, System, Setup

Refer to V2.00 Page: 53 for full details



<u>Deep Systems Settings:</u> will restore the Deep System Settings back to the factory settings

Update Error codes

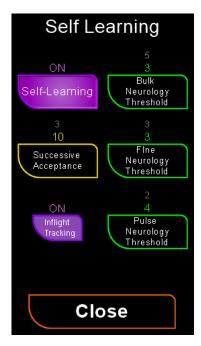
Code	Reason	Fix
E0: Undefined Error	This error is caused by undefined reasons and should not occur.	
E1: cannot open file	The .STF file cannot be opened.	Check SD disk format and reinstall the .STF file
E2: unknown format	The .STF file format is an unknown type.	Download & reinstall the .STF file
E3: descriptor size	The part of the file that has the update information is not the correct size.	This may be caused by upgrading from a very early version to a much later version.
E4: descriptor CRC	The descriptor data is corrupt	Download & reinstall the .STF file
E5: retired format	The update file is no longer supported	Download the latest or matching .STF file
E6: not valid file	The file marker STPK is not present	Download & reinstall the .STF file
E7: wrong product	The file is not suitable for your SuperTrickler product code	This is rare and is possibly caused by using a special .STF file
E8: wrong serial	The .STF is not compatible with registered serial number	
E9: CB firmware version	The controller board firmware is not compatible with HMI update.	Download the latest or matching .STF file
E10: HMI firmware version	The HMI version is not compatible with the controller firmware version.	Download the latest or matching .STF file
E11: CB hardware version	The controller board hardware (board type) is not suitable for this controller firmware	
E12: HMI hardware type	The HMI hardware (Display type) is not suitable for the HMI firmware.	
E13: creating CB file	There was a problem creating the file that the controller firmware is unpacked into.	Check SD disk format or disk space
E14: CB write size	The unpacked controller firmware file did not unpack to the correct size.	Check SD disk format or disk space
E15: CB read CRC	The data area of the .STF if corrupt.	Download & reinstall the .SFT file
E16: CB write CRC	The unpacked controller firmware file did not write correctly.	Try again
E17: CB position	The controller part of the .STF file could not be accessed	Download & reinstall the .SFT file
E18: HMI data size	The size of the HMI data in the .STF is not correct	Download & reinstall the .STF file
E19: HMI read CRC	The HMI data is corrupt	Download & reinstall the .STF file
E20: HMI baud rate	The HMI connection speed could not be established	Turn off and restart the SuperTrickler
E21: HMI file position	The position of the HMI data could not be found	Download & reinstall the .STF file
E22: Cannot downgrade	The current version does not allow for a downgraded version	
E23: extra write size	The unpacked extra file did not unpack to the correct size.	Check SD disk format or disk space

E24: extra read CRC	The data area of the .STF if corrupt.	Download & reinstall
	'	the .SFT file
E25: extra write CRC	The unpacked extra file did not write correctly.	Try again
E26: extra file position	The extra file in the .STF file could not be accessed	Download & reinstall
		the .SFT file
E27: Creating extra file	There was a problem creating the file that the extra	Check SD disk format or
	file was unpacked into.	disk space
E28: ctrl firmware failed	The controller firmware failed to load from the SD	Use a compliant SD card
to load.	card. The format of the SD card is very important.	formatted using the
(or the light does not	The max size is 32GB (FAT 32)	SuperTrickler and retry.
flash for a while)		

Powder Profile Menu, Start, Profile

Self-Learning Parameters

Refer to V2.00 Page: 70 for full details



<u>Inflight Tracking</u>: Enable/Disable the Inflight Tracking for this profile. It is highly recommended to leave this ON. Off is mostly for debugging and extreme fine tuning for experts.

Appendix A: Upgrade/Firmware Naming Conventions NEW

The firmware file names follow the naming convention listed below:

Prior to Version V1.00 to and including 2.00

Examples: SOC2-0N2-0T1.stf : SOC1-4N.stf : SOC1-5N Patch 6.stf

*bold is not optional

- S = Serial Number.
- # serial number, 0 = all machines.
- C = Controller Board Firmware Version.
- # Major Version.
- dash
- # Minor Version.
- N = User Interface (HMI), N dictated the TFT brand name.
- # Major Version.
- dash
- # Minor Version.
- T = TFT (user interface) type
- # Type number

[space]

Patch

- number

.stf

Linear layout: Serial #, Firmware Version, [UI Version & Type], [patch]

From Version V2.10

Naming convention changed for clarity and better content information.

Example: V2-10T1U2-10T1-X.stf : V2-20T1-X.stf : V2-10T1 Patch 1.stf : V2-20T1-S122090203.stf

*bold is not optional

- V = Firmware Version
- # Major Version.
- dash
- # Minor Version.
- T = Controller Board Type.
- # Type number.
- U = User Interface (HMI).
- # Major Version.
- dash.
- # Minor Version.
- T = User Interface Type.
- # type number.
- -X dash X indicates the stf file is carrying an undefined extra file.
- -S dash S, the file has been built for specified machine.
- # serial number.

Linear layout: Firmware Version & Type, [UI Version & Type], [extra file], [Serial #], [patch]