What's New in Version 2.10

Update Type

V2-10T1U2-10T1-X.stf contains the following upgrade details.

1. Controller Firmware V2.10
2. HMI Touchscreen 2.10 (User Interface)
3. Profile Export Text pro-forma.

This update includes all the patches applied to previous versions.

IMPORTANT: known bug…

In Beta testing one of the testers experienced a database error – this error is caused by an uninitialized part of memory now being used. The area of memory should be defaulted to all zero's however in his case (and highly likely some of you) it was not. As it turns out this was the same cause in version 2.00 of some people requiring a fix, however the fix was simple and general, but not so in this case. There is no way to resolve the error without a fix file script, as I cannot build it into the firmware as I don't know the memory state on your machine (headache). Along with the software upgrade I will include a general fix script file (fix.sts) however again this may not work and if not you will need to contact me for a machine specific script file, for this you will need to contact me (peter@supertrickler.com.au) with your serial number found on the about screen.

Purpose

Version 2.10 had been driven by our own to do list, previous requests, and user feedback. Some of this work also includes preparation for future versions.

Future

The next version will again continue this work with our users to refine operational needs as we learn from our user experiences. The laser cup monitoring system remains high on the priority list, as does the external (robotic) interface that now needs to be aligned with the previous Version 2.00 changes.

Install

1. With the SuperTrickler **powered on** and in any menu, remove the Micro SD card (tweezers are a great help).
2. Copy the V2-10T1U2-10T1-X.stf file on the root (top level) directory of the Micro SD card.
3. Reinsert the card back into the SuperTrickler.
4. The system should automatically take you to the Upgrade screen. (System – Setup - System Core – Firmware Update)
5. Press & Hold the Start button for several seconds until the process starts.

Changes are from the previous Version 2.00 firmware

Removed

- Profile Text Export, suitable for support personnel only. This was removed to make way for the entirely new import export system feature.

New

- Weight Logging; this feature allows the user to use the SuperTrickler to weigh and log a collection of object such as bullets or primers etc. The weight can be direct or in a cup or container where the cup weight is removed from the logged data. The data is logged in a file called \log\weight.csv

- Profile data as text export added; this feature allows the user to share a profile as clear and simple text, to other including support. This is supported by a profile pro-forma file stored in the system folder \sys\profile.pf
- Profile Import Export; profiles can be exported shared and imported, this is a small & efficient binary file system that is fully cycling redundancy checked prevent transfer corruption (should it occur) from having a negative impact during importing.
- Empty Hopper Screen; a few users reported that they had had trouble empting the hopper without touching the screen and activation an operation or flicking thought menus and settings etc. This feature has been added to the Main Menu for convenient access. The button must be help for about 1 second to activate and from there the system will display a Empty Hopper screen with a reminder to remove the cup. This screen must be constantly touched for around 3 seconds to deactivate it, returning you the Main Menu.

 A dark green color was chosen for the button so as to not distact the operators eyes from main stream functionality.

- Ability to disable the power to the scale (system deep settings), this will turn off the ability of the SuperTrickler to supply power to the scales and enables the use of the scales own PSU without a confilct of power sourcing. **NOTE/CAUTION: The Scales and SuperTrickler PSU use the same size jack, but have DIFFERENT POLARITY. IT IS IMPORTANT TO NOT MIX THEM UP!**
- Ability to disable the inflight tracking – this was added for testing and highlevel fine tuning, and should not be left turned off. The Inflight Tracking is a part of the AIO orchastrator dynamics (not self learning) however its control was placed in the profiles self-learning screen for intuative conveniance.

Changes & Improvements

- The naming convention of the upgrade (sft) files has been changed for reasons of clarity.
- With the increased capability of the upgrade system the possible error codes have been increased to support these new features.
- Deep System Settings factory restore added to the factory restore menu. This option enables the operator to recover the deep settings in an event that an upgrade fails to do. This can happen to a new discovered problem that the memory on the machines should be supplied with every address set to zero. ON some machines this is not the case causing some issues. This button may resolve some of these problems. Note: this will not rectify any database memory errors that may occur.
- In the event the scales fail to receive and data from the charge screen, the information and clarity of the error has been dramatically improved and now required a user acknowledgment.
- The external control (robot) button has been disables until further notice and operation changed to prevent accidental activate when reactivation occurs. Many users were accidentally operating this control (with systems that are not fully operational) causing there machine to stop charging. In the future this system will be completed and tested before an option to reactivate it, is made available.
- On several screens where a small hour glass was shown to depict the system is busy. has now been animated.
- The profile clipboard can now be used in the default profile settings. This allows you to find a good general profile and save it as the default.

Bug Fixes

- When the profile clipboard was Recalled, the profile relationship (powder or preset) as also carried through. This has now been resolved.
- When a charge was aborted by wither the system or by user intervention the animated Icon for that instrument would continue to run. This has now been resolved.
- A problem that when the default profile was altered would also reset the active profile has been resolved.
- Failed communication from the scales would give the appearance of communications on the systems peripherals scales screen due to example not being overwritten, has now been resolve.

Technical System Changes

- The entire charge screen messaging fixed text has been moved to the HMI for speed and a reduction of controller board memory requirements.
- The entire upgrade error messaging has now been moved to the HMI to save memory space.
- The entire self-testing messaging has now been moved to the HMI to save memory space.
- Downgrade from 2.10 will not be possible due to memory reallocation and reconfiguration into potentially uninitialized memory.
- The upgrade file system is now capable of caring an extra undefined file.
- Beta tester quick reset of the log files from the charging screen.
- Beta version made clearer on the splash screen.