20-00642

HYDROFOILER SL3

BOOTLOADER RELEASE NOTES

Introduction

This document communicates the latest features and changes in the SL3 bootloader software.

Software part numbers 006370B and 006370D.

This software operates within the ECS (006370B) and the Display -Throttle Unit (006370D) of the SL3 hydrofoil bike.

Latest Release Version	V1.05 (22/09/2023)
New and improved	▪ Combines ECS and Display-Throttle bootloaders ▪ For display bootloader adds a download progress bar ▪ Allows the SL3 PC app to read the version numbers
Fixes	▪ Older versions do not report its version number.

Release Version	V1.04
New and improved	None
Fixes	▪ Solved issues regarding crc error, ECS stuck in bootloader ▪ Does not disable the flash upgrade for the application.

Release Version	V1.00 – V1.03
New and improved	• Initial release of new bootloader. • Validates new upgrade application code following download using checksum. • Requires application codes to have a signature, so will not program un-signed files. • Erases all of code space to ensure no 'zombie' code fragments are left above the new application. • If power fails during code download to external memory, then on power up the bootloader will run the current application software version, • If power fails during programming, then on power up the bootloader will program the version stored in external memory and then run that application version. • Disables the flash programming ability when outside of the bootloader, so crashed application cannot overwrite code memory.

Fixes	▪ Power up crashes caused bootloader and/or application to become corrupted.
	
	    Lack of checksums over application code.
	    Any file could be loaded into bike (e.g excel spreadsheet)