



QuickSilver Controls, Inc.

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QuickControl® Release Notes 09/11/08

10/25/07: QuickControl® 4.6

- SilverDust firmware Rev 34
- Comm Port:
 - Modbus Native Protocol: Allows QuickControl to download and debug programs using the standard Modbus protocol.
 - Added Stop Bits/Parity Configuration
- Faster Polling (x5 approx)
- Data Monitor: Added Add CRC and Add CS buttons. These buttons add a Modbus CRC and 9 Bit Binary Checksum respectively to the end of the custom transmit packet which make it much easier to create custom packets for these two protocols.
- Register Watch
 - High Priority: When selected for a given register watch, QuickControl disables all other background communication including all other register watches and only polls the selected register. This allows for very fast updates on one register.
 - Monitor: Allows QuickControl to monitor a communications line for any read register (i.e. RRG) commands for the selected register watches. This is useful when some other host (i.e. HMI using Modbus) is controlling the servo and you want to use QuickControl to monitor traffic. Note, Polling must be off.
- Debug
 - Temporary Breakpoint Set/Clear: Real-Time breakpoints can now be temporarily set and cleared while in Single Step mode.
 - Jump To Line: Causes program execution to jump to the selected line. This is very useful if you want to “re-do” a specific section of code or test a section of code that is hard to get to.
- Diagnostics: Added Encoder Test Button
- Program Info Toolbar: Added the following buttons:
 - Download/Restart: Downloads active QCP and Restarts.
 - Download/Run: Downloads active QCP, then LRP program 0
 - Run w/o Download: Runs active program without downloading. This is the same as Run w/o Save, which was removed from the Programs menu.

- Init Wiz
 - Custom Motor Option: A SilverDust controller can now be initialized to run a 3rd party rotary or linear stepper motor by entering the motor properties:
 - Current
 - Winding Resistance
 - Winding Inductance
 - Max Torque/Force
 - Test Encoder Optional: Instead of having to test encoders on 3rd party motors, the user can manually enter the encoder CPR.
- Select Program Line: Added "Most Used" option
- Setup Option: Removed "Edit Line Details..." option. This functionality is now on the Program Line popup menu (right click) item "Edit Details"
- New or Enhanced Commands (see Command Reference for Details)
 - PRO: DMX512 Protocol Added. DMX512 is an entertainment industry communication standard.
 - DMRM:DMX Register Map. Maps DMX512 serial data to SilverLode registers.
 - Removed Mode and Override categories and distributed their commands to the other categories.
 - EGM:Electronic Gearing Mode. A high precision electronic gearing application.
 - RSD: Registered Step & Direction. RSD now supports numerator/denominator gear ratios (i.e. 1:3, 1:27, 7:13).
 - CLX/CLD: Calculation Extended: Added 32x32 multiply and 64/32 divide.
- Support New Motors
 - QCI-A23L-1
 - QCI-A23K-3

01/28/08: QuickControl® 4.61 Release

- Edit Program Details: Added Program Index edit box to allow re-ordering of programs.
- On Download Failed error, the program and line that caused the error is now highlighted.
- Edit CTRx, CRMx: Increased number of maps from 2 to 4.
- Fixed Bug: Text was being truncated when printing QCPs.
- Fixed Bug: QuickControl error if Init Wiz opened with device manually registered and comm. port not enabled.
- Fixed Bug: Remote Inputs can now be renamed.
- Fixed Bug: If a device only had a thread 2 program running (no thread 1 program), the Device Status Monitor "PRG STP" icon was displayed. It now shows the correct icon "PRG RUN". This bug also made it hard to debug a device that only had a thread 2 program running.
- Fixed Bug: Erroneous "Program too large" error. QuickControl was sometimes incorrectly calculating how much Program Buffer was available in attached device.

03/14/08: QuickControl® 4.61 Release (auxiliary files only)

- QuickControl.exe unchanged
- Support New Motors
 - QCI-A34L-1
 - QCI-A34M-1

04/22/08: QuickControl® 4.62 Release

- Fixed QCI-A23L-1 " Invalid MCT Command Parameter MC1" bug

05/05/08: QuickControl® 4.62 Release (auxiliary files only)

- QuickControl.exe unchanged
- Support New Motors
 - QCI-M23K-3
 - QCI-M23L-1

05/16/08: QuickControl® 4.63 Release

- Init Wizard: Custom Motor
Improved algorithm: Reduced chance of getting MCT1 and MCT2 errors.

05/27/08: QuickControl® 4.63 Release (auxiliary files only)

- QuickControl.exe unchanged
- Factory Default Initialization.qcp: Changed MCT default from "Custom Motor" to "Auto" to eliminate "MCT: Failed To Download: Custom Motor option....".

07/24/08: QuickControl® 4.64 Release

- New or Enhanced Commands
 - EGM: Added Trapezoid Move option.
 - SSI: Added Mode 4 (Register 200) and Gray Code
 - ACR, ARI: Added channels Torque, Velocity, and Position Error
 - ACR: Added filter option

8/26/08: QuickControl® 4.65 Release

- Added Registers 64000+
- Increased Max Thread 2 Program Buffer to 901 words
- SSL: Fixed Bug: Disable now works.

9/11/08: QuickControl® 4.66 Release

- Add support for SilverNugget Rev 49-0C