



Firmware Release Notes

ControlLogix Drive Module

(Cat. No. 1756-DMD30)

These release notes correspond to major revision 1, minor revision 16 of the ControlLogix Drive Module firmware. Use this firmware release with:

Software Product:	Compatible Version:
RSLogix 5000 programming software	8.02.00
RSLinx software	2.30
RSNetWorx for ControlNet software	3.00
DriveExecutive programming software	1.01

Enhancements

- Automatic Acceptance of RSLogix Configuration changes - when you make changes to the module's power properties, using RSLogix 5000, and download them to the controller, the Drive Module accepts and stores the new configuration and then resets itself.
- Fiber-optic Loop Back Test - this revision provides a fiber-optic loop back test for Drive Comm. You can enable the test by setting bit 16 [Drv Fbr Tst] in parameter 168 [Drive I/O Ctr].
- DPS Operating System Loader - this revision contains improvements to the DPS Operating System loader.
- Flash Checking - this revision contains improvements to the CRC checker for Flash checking.

Corrected Anomalies

- Velocity Limiter - this revision contains a correction to the velocity limiter. It now works in all modes. It previously worked only in the point to point mode.

Corrected Anomalies (continued)

- Controller Ownership - this revision contains corrections that prevent a second controller from obtaining ownership of the Drive Module, without disturbing the connection to the first controller.
- Backplane Tab on Module Properties Window - this revision contains a correction that enables the Backplane Tab in the Module Properties window to correctly display chassis information.
- ICP Transmit Retry Limit - this revision contains corrections that allow you to set an ICP Transmit Retry Limit.
- Initializing the EEPROM - this revision contains corrections that allow you to initialize the EEPROM to factory defaults.
- Analog Tachometer Scaling - this revision contains corrections for analog tachometer scaling.
- Transitions from Torque Mode to Speed Mode - this revision contains corrections that allows the Drive Module to smoothly transition from Torque Mode to Speed Mode, without perturbations in motor current.
- Drive Module-PMI Messaging - this revision contains corrections that improve the reliability of Drive Module to PMI messaging.

Restrictions

- 12-pulse Configurations - this revision does not support synchronization of multiple 1756-DMD30/PMI configurations, required for 12-pulse operation.
- SynchLink communication is *not* available. It will be available in a future version. Parameters and configuration windows, related to SynchLink, will be visible but not functional.
- The SynchLink documentation in the *Drive Module System User Manual*, publication 1756-UM522A-EN-P, does not apply at this time.
- The algorithm that calculates parameter 240 [Anlg Tach Spd FB] produces a value that is twice the actual motor speed. Work around this anomaly, by doubling the normal scaling value for parameter 2208 [Anlg Tach Volts]. For example, your tachometer produces 5V at your maximum speed of 2000 RPM. You should put a value of 2000 in parameter 2181 [Anlg Tach RPM]. If you put a value of 5.0 in parameter 2208, parameter 240 will display a value of 4000 RPM when the motor is turning at 2000 RPM. But if you put a value of 10.0 in parameter 2208, parameter 240 will display a value of 2000 RPM when the motor is turning at 2000 RPM.

Changes

- Parameter Names, File-Group-Elements - This revision changes several parameter names in the online database. It also changes the file-group-element structure. The functions of these parameters remain unchanged. The new names and groupings are consistent with those used in PowerFlex products. Users should refer to names in online programming tools (RSLogix 5000, DriveExecutive, and DriveTools 2000).

Changes (continued)

- Parameter #129 - This revision removes parameter #129 [Atune Torq Ref]. This parameter was non-functional in previous releases.
- Parameter #210 - This revision changes the minimum value of Parameter #210 [Load Estimate] to -8.0.
- Parameter #223 - This revision removes Parameter #223 [Mtr Fdbl Alt Sel] . This parameter was non-functional in previous releases.
- Parameter #224 - This revision removes Parameter #224 [Aux Spd Fdbk In]. This parameter was non-functional in previous releases.
- Parameter #225 - This revision removes Parameter 225 [Aux Posit Fdbk]. This parameter was non-functional in previous releases.
- Parameter #231 - This revision adds Parameter #231[Resolver PositFB].
- Parameter #307 - This revision changes the the minimum value of Parameter #307 [Output Voltage] to -1350 and the maximum value to +1350.
- Parameter #308 - This revision changes the minimum value of Parameter #308 [Output Current] to -6000 and the maximum value to +6000.
- Parameter #757- This revision removes Parameter #757[Xos Latch].
- Parameter #1010 - This revision changes the minimum and maximum values of Parameter #1010 [Rx Comm Frmt] to “0 - 0A, 0D, 0B”.
- Parameter #1020 - This revision changes the minimum and maximum values of Parameter #1020 [Tx Comm Frmt] to “0 - 0A, 0D, 0B”.
- Parameter #2126 - This revision changes the maximum value of Parameter #2126 [AC Ln Volt] to 1000.
- Parameter #2131 - This revision minimum value of Parameter #2131[FML Feedback] to -4095 and the maximum value to +4095.
- Parameter #2137 - This revision minimum value of Parameter #2137[Arm Volt FB Cnts] to -4095 and the maximum value to +4095.
- Parameter #2162 - This revision changes the default value of Parameter #2162 [Res Balance] to 40.

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