



## Release Notes

### ACR7000 Operating System, revision 7.51 update 1

For use with ACR7000 Drive Controller products

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#### OS Update Notes:

- ACR7000 bootloader compatibility:

Use **BOOTREV** command in terminal to query current value

ACR 7xxx OS	BootRev min	BootRev Max
7.51 u1	0.31	0.41
7.50 u1	0.31	0.40
7.48.0	0.31	0.37
7.47.0	0.31	0.37
7.46.0	0.31	0.37
7.45.0	0.31	0.37
7.43 upd 155	0.31	0.33
7.43 upd 139 thru 154	0.31	0.31
7.43 upd 123 thru 132	0.28	0.28

#### Revision 7.51 update1 (08/10/2020)

Features added:

- Support for SSI on ACR7xC. Requires use of Aries OS 3.32

Bugs fixed:

- LVDC-316 IF/THEN statement indentation fixed.
- LVDC-472 Improved stepper signal smoothness
- LVDC-473 ADC config not supported, error message added
- LVDC-478 Fixed issue with PM dead band and PM SCALE
- LVDC-479 Fixed issue with ACR7xC INTCAP getting locked.
- LVDC-480 PM VEL default value changed to 1

#### Revision 7.50 update1 (05/29/2020)

Features added:

- Support for ACR7xC and Analog Input board.
- Stepper auto standby bits changed to non-volatile.
  - BIT 15618, BIT15650, BIT15682, BIT15714
- Added DMTR (motor name) for Stepper
- Added flags to replicate CTRL-Z, CTRL-X and CTRL-Y functions
  - BIT5657-5659
- Expanded DEFINES to include numeric characters
- IP commands can be issued within programs

Bugs fixed:

- LVDC-381 Fixed issue that was causing a communication stream to lock-up while another stream was in program download mode.
- LVDC-386 Fixed. CTRL-Z would not disable drive if axis is gearing.
- LVDC-401 Fixed. JRK and MAXVEL set to non-zero values caused sharp discontinuities in commanded motion
- LVDC-402 Fixed. Programs with greater than 65000 lines could stop running due to Syntax error on invalid line number
- LVDC-416 Fixed. DIM MBUF was allocating too much memory
- LVDC-442 Fixed. PRINT with USING was not working correctly in some cases
- LVDC-426 Fixed firmware. Multiple Ethernet communications lockout after repeated disconnects.
- LVDC-432 Fixed. Print messages being interwoven.
- LVDC-435 Fixed. Commanded position in blended profiles does not appear to be correct.

## Revision 7.48 (05/16/2019)

Bugs fixed:

- LVDC-377 Fixed an issue with program LISTEN mode. If the Ethernet connection is closed, the program no longer pauses execution and cannot get stuck.
- Fixed false over temperature detection in ACR7xT (stepper drives) associated with auto-standby.

## Revision 7.47 (04/25/2019)

Bugs fixed:

- LVDC-339 Fixed PLS ON to prevent program lock up if array is not dimensioned.
- LVDC-347 Improved MALIGN for linear motor to work with any starting on Hall state.
- LVDC-349 Corrected issue with Servo where incorrect setpoint was causing motor to jumps or become unstable with DRIVE ON. Problem would occur when DRIVE ON was issued after large following error is cleared by RES command.
- LVDC-351 Corrected Reported Actual Velocity for servos. Value was doubled, leading to following error if Velocity limit parameter was exceeded.
- LVDC-355 Fixed ALIGN command to disable EXC response during process then re-enable EXC response when completed.
- LVDC-357 Fixed Stepper drive issue where Drive faults were falsely cleared with Drive Enable for some fault cases.
- LVDC-365 Fixed CIRCW/CIRCCW and SINE to eliminate jumps in commanded position



Features added:

- Added support for BiSS rotary and linear encoders.
- Expanded PLS to 16. Extra 8 status bits are first 8 bits of P4273.
- Added support for Moxa ioLogik E1212, E1213 and E1242 Ethernet/IP I/O

## **Revision 7.46 (07/12/2018)**

Bugs fixed:

- Fixed DRIVE RES for steppers to properly clear drive fault conditions.
- Fixed reporting of stepper drive error flags.
- LVDC-322. Fixed issues with INTCAP when motion direction or encoder direction was inverted

Features added:

- Improved ALIGN feature for incremental encoders.
- Added support for 1,2 and 3 axis versions of stepper drive/controller.

## **Revision 7.45 (03/08/2018)**

- This is the initial release of firmware for the ACR7000 Drive Controller product line. This revision is based on and incorporates features of IPA version 7.44. This excludes IPA features that depend on IPA specific hardware.

Bugs fixed:

- LVDC-306/IPA-272. Resolved issues with EIP scanner start-up

Features added:

- IF-ENDIF no longer requires DIM DEF