2/23/2007

UDC 2500 Software History

Version 2507 fixes

- Make one or two displays configurable for the Limit Controller.
- CSP operation added to Limit Controller operation.
- Shed to LSP or CSP not provided in Limit Controller..
- Need to disable TC messages on front display.
- Writes to WSP via Modbus Function codes 6, 16 in Non FM Limit Controller unit not working.
- Alarm configurations TC Fail and Warn do not activate the alarm when the PV input is open.
- Input 1 Actuation PR added.

Version 6E

Date Fixed	**PAR #**	**Problem**	**Modules Modified**	**Version Number**
02/28/06	Found by evaluation	Write to parameter E4 – output value equal to low limit was rejected as out of range.	Fixed routine Ckxlims range check in Dldonemo.asm to check low limit for greater or equal as passed range check.	06E

4.2.5 Version 6D

Date Fixed	**PAR #**	**Problem**	**Modules Modified**	**Version Number**
02/27/06	Found by customer	During the period when a change is being made to a SP or configuration parameter, a communication read resulted in a BUSY exception code returned.	Modify Dldonemo.asm to permit reads during these conditions. Moved check for CFGCHGFL to write FCs 06 and 16.	06D
02/27/06	Found by evaluation	When output is configured for Current/Heat or Current/Cool duplex, communications read of output value returns 0.	Analout.asm modified at CALCO to call CNV_LIMOUT	06D

Version 6B and 6C

Date Fixed	**PAR #**	**Problem**	**Modules Modified**	**Version Number**
06/07/05	None - upgrade	Add check for PCTOOL_LANG and PCLANGUAGE out of high limit.	Ckconfig.asm modified to check and reset either if error detected.	06B

06/08/05	Customer Par	During a SPP or RAMP if in HOLD and SP1 is changed via the keyboard, the unit returns a slave busy response until the unit is placed into RUN.	Dldonemo.asm modified to check for Ramp or SPP prior to sending busy if SP1 is changed. Normal responses are sent in those circumstances.	06B
06/23/05	Found by evaluation	When an Alarm type is either Event ON or OFF reading the alarm SP value using FC06 or FC16 returns 0 or a bad value.	Fix Qalarmst.asm at CKFORA label to process Event ON or OFF as a float.	06B
06/29/05	Found by evaluation	Read of Alarm SPs when configuration is Break returns a value with x10 multiplier, want x1.	Modify Cpupdmod.asm to add check for Alarm SP types Break.	06B
06/29/05	Found by evaluation	Using FC06, Read of SP (21h) or PV (22h) returns value in EU regardless of configuration of Com Units setting using Percent.	Modify Wexty.asm, Wextpv.asm and Cpuddmod.asm to use Wexty06 and Wextpv06 to use Cexty and Cextpv to return value in units as configured.	06B
09/29/05	Found by evaluation	Input delta counts value are not scaled for 50Hz. For inputs changing from type B to type E then back to type B causes the viewed input value to change.	Modify Cal.c routine - compute_fact_k_values, to multiply all delta counts by 1.2 when 50Hz is used.	06B
01/17/06	Found by Engineering	Cooperheat special did not include using NEGATIVE burnout current. This is used with Yokogawa recorders.	Modify for Swoptions bit SPECIAL3FL set setup_inputv5.c to apply negative current and chinit.c to negate calc. for counts3	06C

Version 6A

Date Fixed	**PAR #**	**Problem**	**Modules Modified**	**Version Number**
03/14/05	268	SP Rate did not work for values > 512.	Spinit.asm modified to mask SPPFLAGS register.	06A
04/20/05	None – found by engineering	Com. FC06- PV low range using incorrect value - Fix PVRNG low pointer	DLDONEMOD	06A
04/20/05	None – found by engineering	Com FC06 RESET & RATE limits (switched)	DLDONEMOD	06A
04/21/05	None – found by engineering	Com FC06 write to mb id 0B – PV low range and 0C – PV high range cannot be written when input 1 transmitter is LINEAR. Message is rejected.	DLDONEMOD mod as range incorrect for Linear type	06A
4/29/05	None – found by engineering	Negative PV range cannot be written. Message is rejected.	DLDONEMOD mod as range for PV low is +4 from high	06A
4/29/05	None – found by engineering	Aux Scale values not range checked and may not be initialized after power up.	CKCONFIG modified to set AUX range values and to perform range checking on the scale values.	06A
5/12/05	PAR	Alarm cfg for type Event ON and End with alarm segment = to last SPP segment and SPP (end) STATE cfg for HOLD does not turn alarm when desired segment ends	Modify ALRMCTRL to use UDC3500 Event On/OFF section and remove check for SPP Enabled. SPPROG modified to add check for STATE cfg Disable and displaying Segment to switch to LSP1	06A
5/12/05	Mfg Problem	The checksum on various unit was not being updated after a configuration download.	These units exhibited a configuration error prior to the new download. This inhibited the checksum from being updated unless the STATUS group was manually sequenced thru to clear the checksum error then the new	06A

			checksum could be calculated. Modified COMPRO to clear the TESTFLAGS register following the last config. Packet and before the checksum was recalculated.	

Versions 6 AND 4B Releases

The problems fixed in 2506 and 244B firmware versions are as follows:

PAR Number	Data Fixed	Description of Problem Module fixed, problem description and fix implemented.
None – Problem found Engineering	02/03/05	Magic.asm - Was not reporting the correct SWOPTIONS bits in the Option Code and do not allow Magic to change the state of the Limit Controller. Fix was to Install bit (LIMITCTRLIN).
None – Customer reported	02/11/05	Setup_inputv5 - Prevents a shift in Input 1 TC measurement when Input 2 is disabled. Burnout selection NO FailSafe modified turn off burnout current. This modification required a change to the code contained in the Kernel. NOT IN Version 4B.
None – Problem found Engineering	02/02/05	Exec_Mgr.ams and Setports.asm - Input initialization registers cleared. This modification required a change to the code contained in the Kernel. NOT IN Version 4B.
None – Problem found Engineering	02/17/05	Exec_Mgr.asm - Prevent a shift in Input 1 TC measurement when Input 2 is disabled. Version 4B only.
None – Problem found Engineering	02/11/05	Comproc.asm, Dldonemo.asm, Symregfl.inc,h – Needed return BUSY for all reads until the display returned to normal from setup. Added APWAITFL for this.
None – Problem found Engineering	02/15/05	Comproc.asm, Dldonemo.asm, , Symregfl.inc,h - Restructured handling of command 1B90 clear slave to be processed during exec cycle (Comproc) and not during the interrupt (Dlnonemo) Added APCLRSHEDFL.
None – Problem found Engineering	02/11/05	Comproc.asm, Dldonemo.asm, Apacfgtbl.asm – FC21 id127 clear slave not implemented. Implemented to clear slave on command.
None – Customer reported	02/18/05	Phdlayer.c – V6 – Using RS485, no response messages received for writes periodically when the Txdelay value >20. Fixed to use COMMIN RAM register instead of COMTYPE EEPROM register. Reading EE before ready caused the RS485 port not to be enabled. Dldonemod – V4B – Modified to enable RS485 port instead of doing it as above so that the Kernel doesn't change.

Versions 4 and 5 Releases

The problems fixed in each firmware version are as follows:

Version	PAR Number	Description of Problem Module fixed, problem description and fix implemented.

25.05 26.05	None – Problem reported by Specview	ComintV5.c (replaced Conimt.c) – No response detected in < 5K FC03 queries. Found code error brackets missing in Compending routine. IptimeintV5.asm (replaced Iptimeint.asm) – Fixed cumbersome code, less bytes used. Cpcomitlv5 was modified to use a new byte added in SYMEEPROM that contains the product address as an integer value (COMADDRD).
25.4A and 25.05 26.4A and 26.05	None – problems found during UDC3200 development and crosschecking UDC2500 operation.	CT7201.asm – Selection for 4-20ma or 0 – 20ma was hidden when the current type was Current/Heat and Heat/Current types. CONDCURR changed in include Current/Heat and Heat/Current selections. ET7407.asm - - Modified for version 4A. FN73F0_ASCIITBL.c – PC Tool needed to show % symbol for certain parameters. % was added as character #75. FT7100_SP.c – Changed for PC Tool to show units. TEMPID added to SP Parameters. FT7103_SPRAMP.c – Changed for PC Tool to show units. TEMPID added to SP Parameters. FT7109_Inp1.c – PC Tool consistency – Deleted % symbol for RATIO. FT710A_Inp2.c – PC Tool consistency – Deleted % symbol for RATIO. FT710D_Com.c – PC Tool consistency –Deleted % symbold for RATIO. FT710B_Ctrl.c - PC Tool consistency – Added % symbol for Failsafe function. NT7300.asm – For DISPLY Group prompt Y char. Incorrect. Fix table to use correct Y char. Automankey.asm – Bang tune not disabled when auto to manual switch made. Kill Bang tuning when in manual mode entered. Alarmctrl.asm – Alarm Break did not work properly. Fix Alarm break code. Qalarmst.asm – Alarm Break did not work properly. Added check for Alarm Break. Iptimepro.asm – No problem seen. Added ck for writing to EE as a precaution. Alsp.asm – Dev range incorrect. Changed Dev range to use 0 – 9999. Bbang.asm – Duplex tuning permitted starting when RSP or CSP used. Added check to inhibit starting tuning unless SP1 and SP2 were used. Upload_Cond.c – Did not return language id in header. Fix to return lang. In header. Fact_Comr.c – Did not return language id in header. Fix to return lang. In header. Upload_enums.c– Did not return language id in header. Fix to return lang. In header. Upload_Names.c– Did not return language id in header. Fix to return lang. In header. Dldonemo.asm – Busy id incorrect. Changed Busy id from 5 to 6. Ivernum.asm – Version changed. Spfcntbl.h & Spfcbtbl.asm – Tuning parameters changeable during Bang tuning (incorrect) – move SPECADT 0^{th} element to last as 0^{th} element is not usable. Comproc.asm – LSP1 not writeable using FC16. Fix pointer to allow. Cpupdmod.asm – LSP1 not writeable using FC6. Fix pointer to allow. Ideckey.asm – Inc/dec of SPP segment not working via front panel. Fixed it. Analout.asm – No problem. - Remove SEIs & CLIs as not needed. Magic.asm – modified to write to backup SWOPTIONS byte.
25.04 26.04	None - all problems discovered testing	Dldonemo.asm - modified to add to FC06 check for write request > limit of 2 (LSP2) and return error response. Comproc.asm - fixed mfg response 7E06 to use acca for control of relay 2.

	UDC3200 and crosschecking UDC2500 operation.	ACCUKEY.asm - disabled operation as no longer used. WVALUALG.asm - Dn limit modified to work the same as UDC 3200, also CARESLIM- modified to use CHIOUTLIM instead of constant 105 and –5.
Firmware Release	**Flash CRC in HEX**	**Date of Change**
V25.03/26.03	F8DE	None, initial release.
V25.04/26.04	EAA0	9/1/2004
V25.4A/26.4A	F109	11/24/2004
V25.05/26.05	1670	1/15/2005
V25.4B/26.4B	8591	2/21/2005
V25.06/26.06	A58E	4/1/2005
V25.4C/26.4C	6FAF	5/23/2005
V25.06A/26.06A	A89E	5/23/2005
V25.06C	9F01	2/1/2006
V25.06E	**5D9D**	3/9/06