



SER18-014
6/27/2018

Subject: APX™ Software 04.16.00 & Release Notes

Beginning in July 2018 APX software version 04.16.00 will be introduced in all X4™, Vector™ and Solara® production APX controlled Trailer & Rail units. As of the release of this bulletin, 04.16.00 is available on TransCentral™ for upgrading units in the field.

NOTE: APX software version 04.16.00 version is approved for use in all X4, Vector and Solara APX controlled units.

IMPORTANT SOFTWARE INSTALLATION INFORMATION:

ONCE ANY 04.xx.xx VERSION IS INSTALLED INTO AN APX CONTROL SYSTEM, IT WILL NO LONGER BE POSSIBLE TO LOAD ANY VERSIONS OF 00.xx.xx, 01.xx.xxx, 02.xx.xx or 03.xx.xx SOFTWARE INTO THAT CONTROL SYSTEM.

04.16.00 software can be installed using a CARRIER® USB flash drive. 04.16.00 software is available at no cost by visiting the Carrier Transicold® TransCentral™ website. This software can be loaded directly to the CARRIER USB flash drive or via the TRU-Tech™ program.

NOTE: Whenever loading software into an APX Control System, verify that the new version was actually installed by going to Advance User Mode and checking the Data List/System Information and reading the installed software version.

When upgrading from 04.07.00 or lower, it may be necessary to have the unit start/run switch in the on position, due to the large volume of upgrades included since 04.07.00.

New functionality and information for ALL models can be found in the release notes attached to this bulletin or on the TransCentral website under the same tab as the software release.

Truck/Trailer/Rail
Service Engineering
Athens, GA
TD / TU

Released Version	04.16.00
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6/27/2018

List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Rationalized high CDP alarm logic. The logic is configurable		X	X	X	X	X
2	"No Power" (Alarm 00073) there are additional options for this configuration. The options are now 1) Not Installed, 2) Alarm and Shut Down, 3) Alarm and Switch to Engine and 4) Switch to Engine. When selecting "Switch to Engine" Alarm 00073 will not be activated.					X	X
3	Dry Out mode added to Intellisets as "Remove-Moisture"		X	X			
4	Additional logic added to reduce engine bog when transitioning from heat to cool		X	X			
5	Low fuel shutdown override. Low fuel shut down is set at 10%, this feature will allow you to override this shutdown.	X	X	X		X	X
6	Low fuel alarm - You will receive an alarm at 15% fuel, with no additional alarms as the fuel level drops.	X	X	X		X	X
7	Changed the S/S shutdown current to be adjustable from 2 to 12 amps	X					
8	Changed "Minimum Off Time" range to 0 - 720 min.	X					
9	Added SMV and EVXV to Component Test Mode		X	X	X	X	X
10	Removed Alarm 02001 "Unit Shutdown by Remote Panel" the event will be recorded in the data recorder, but will not generate an alarm.		X	X	X	X	X
11	REMS3 and REMS4 can now be overridden via 3rd party telematics, similar to door switch, REMS2 and REMS3	X	X	X	X	X	X
12	Enhancements to EES alarm management			X		X	X
13	Pretrip locked out during an EES regeneration			X		X	X
14	Added LIV state to data recorder				X	X	X
15	Changed phase detection logic after a loss of power event				X	X	X

Released Version	04.15.00
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2/5/2018

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 When unit is shut down via remote panel, the unit will no longer generate Alarm 02001	X	X	X	X	X	X
2 Remote evaporator fans will run all the time in cont. run mode.						X
3 Option added to delay the door switch alarm	X	X	X	X	X	X
4 MT sensor data available during data recorder wake up MT sensor data visible via 3rd party telematics						X
5 If the file structure on thumb drive is incorrect it will no longer say "Software Matches No Update" it will tell you the thumb drive has an incorrect file structure message will be "FILE FORMAT ERROR NO UPGRADE"	X	X	X	X	X	X
6 Repaired issue with new thumb (12-00814-00) drive loading software	X	X	X	X	X	X
7 Removed Alarm 04003	X					
8 Changes to heat transition to prevent engine bogging			X			
10 eSolutions Source ID, no need for DataTrak option when using eSolutions telematics	X	X	X	X	X	X
11 Several enhancements for EES operation			X		X	X

Released Version	04.14.00
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10/3/2017

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 Repair issue with MMM -05 (-55) See SER17-027	X	X	X	X	X	X

Versions 04.12.00 and 04.13.00 were never released for full production

Released Version

04.11.00

5/1/2017

List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Lock the Language Function.	X	X	X	X	X	X
2	Additional choice for the fuel level sensor (0-5vdc).	X	X	X	X	X	X
3	Added CAN check to component test mode.	X	X	X	X	X	X
4	Default configuration for the light bar is now set to "2 Light Bar".	X	X	X	X	X	X
5	Additional choices for the Remote Temp Sensor 2(3). The additional choice is "CURB RAT", when "CURB RAT" is selected, the redundancy feature is disabled. When "CURB RAT" is selected for remote temp sensor 2(3), the Temp Control function will include "Curb Return Air" as selectable.		X	X	X	X	X

Released Version	04.10.00
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9/15/2016

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 Door Switch will not interrupt a regeneration on units with the EES option installed			X		X	X
2 "No Set Point Change" Alarms 04004,04005 and 04006 are now Configurable		X	X	X	X	X
3 New Logic for Low Suction Pressure: compressor will cycle off for 2 minutes and recheck suction pressure, if Suction Pressure is above 0 PSIG, restart the Compressor, if Suction Pressure is at or below 0 PSIG trigger Alarm 00018				X	X	X
4 The "CARRIER TRANSICOLD" logo has changed to just "CARRIER" Logo		X	X	X	X	X
5 Changed unloader timing when unit exits defrost		X	X			
6 Set Point will be "LOCKED" during defrost cycle		X	X	X	X	X
7 New Alarms 02004 "Out of Range High" and 02005 "Coil Over Temp". If Return Air increases 20°F above Set Point Trigger Alarm 02004. If Supply Air reaches 120°F Trigger Alarm 02005	X					

Versions 04.08.00 and 04.09.00 were never released for full production

Released Version	04.07.00
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6/22/2016

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 Changed unloader timing to prevent Engine Boggling		X	X			
2 Changed Alarm 00066 to a recorded event only		X	X	X	X	X

Released Version	04.05.00
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5/20/2016

List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Operate Multi-Temp as a Single Temp						X
2	Lock Set Point During Defrost		X	X	X	X	X
3	Remote Panel Lockout: This is a new function allowing the remote panel operation to be locked out from host unit. Default is NO		X	X	X	X	X
4	Multi-temp Intellisets						X
5	Increase time for Component Test Mode Glow Plug increased to 5 minutes all other components increased to 10 minutes.		X	X	X	X	X
6	Terminates defrost if SAT reaches 120°F		X	X	X	X	X
7	Static Evaporator Sensor Check		X	X	X	X	X
8	Changed low fuel alarm to a settable %. Low fuel can be set from 15 - 50%. Options are now Shutdown or Alarm Only XX%		X	X	X	X	X
9	Can update real time clock via 3rd party		X	X	X	X	X
10	Alarms Active and Inactive will show date and time of alarm		X	X	X	X	X
11	Corrections to reduce nuisance A02003 alarms		X	X	X	X	X

Versions 04.02.00, 04.03.00 and 04.04.00 were never released for full production

Released Version 04.01.00

4/28/2015

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 Required for CCB 12-00704-02 (-52 PPG) or higher				X	X	X
2 Remove SAT2 control logic						X
3 Improved USB wake up of display		X	X	X	X	X
4 2 second data recording while in "Inspect Mode"		X	X	X	X	X
5 Improved Host EXV operation						X
6 EXV flood back control				X	X	X
7 Compressor oil management						X
8 Improved alarm 02003 triggers		X	X	X	X	X

Released Version 03.07.00

1/29/2015

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 Repaired 3rd Party Door Switch Logic		X	X	X	X	X

Released Version 03.06.00

Never Released in NA EMEA ONLY						
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Released Version 03.05.00

1/23/2015

Models Affected

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 Repaired EXV Sticking Found in 03.04.01					X	
2 Repaired Battery Drain found in 03.04.00		X	X	X	X	X

Release Notes for APX™ software

Released Version		03.04.00					
12/15/2014		Models Affected					
List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Added INSPECT MODE See SER 14-028		X	X	X	X	X
2	New alarm for failed display and a BYPASS MODE. This alarm was introduced to help prevent unexpected start ups		X	X	X	X	X
3	Added probe calibration		X	X	X	X	X
4	Enhanced Split screen display						X
5	Added RAT2 logic		X	X	X	X	X
6	Added alarm 04004 when a failed set point change occurs. Alarm light will stay on until alarm is cleared.		X	X	X	X	X
7	Add 3rd party option to remote switch configuration		X	X	X	X	X

Released Version		03.03.00					
9/18/2014		Models Affected					
List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Unit will remain in low speed until suction pressure is below 63 psig for 1 minute						X
2	Unit will go to low speed, if running in high speed and suction pressure rises above 61 psig for 1 minute						X
3	Flooded start will increase the number of bump starts to 5 if suction pressure is greater than 80 psig						X
4	All Vector 8600 MT will now leave the factory with the remote evaporate configuration set to none. This will allow the unit to enter service without checking for a remote evaporator. This configuration will need to be set for proper evaporator model at installation						X

Released Version		03.01.00					
7/28/2014		Models Affected					
List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Must be used with new SVM hardware Part number 12-00703-51 and 12-00703-76		X	X	X	X	X
2	Engine Calibration via key pad					X	X
3	Change to Unloader test in Pretrip		X	X			
	Unloader will now be energized and de-energized up 3 times before giving a failed unloader alarm						
4	Option installation now available with switch in the OFF position		X	X	X	X	X
5	DC electrical test in PreTrip changed to average reading to prevent invalid alarms		X	X	X	X	X
	New hot key to override remote switches		X	X	X	X	X
6	<i>By pressing the two middle soft key the screen will go directly to the override screen, allowing the operator to override remote switches (Door Switch). The unit will remain in the override mode until the switch position changes. After the switch position changes (close the door) the unit will revert back to normal operation.</i>						
7	In high ambient (>110F) the minimum SMV setting will be 6%					X	
8	When the unit is switched off from the remote panel, the host will now display " UNIT SHUT DOWN FROM REAR PANEL"		X	X	X	X	X
9	Diesel Max Gen AMPs is now limited to a range of 21 to 23 with 22 being the default					X	
10	Added configurations for remote panel and additional COMM modules		X	X	X	X	X
11	Allow "Advance User Mode" to be entered from remote panel		X	X	X	X	X

Released Version 02.06.00

2/5/2014

Models Affected

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 Changed Kubota alarms 26104, 26105, 26106, 26109 and 26110 to only trigger when run relay in on		X	X	X	X	X
2 Added "OPEN or "CLOSED" to discrete alarms Example: SV2 Coil, SV4 Coil PSCON Coil		X	X	X	X	X
3 Added alarms for Power Enable circuit, Glow circuit, CDCON2 circuit and 1HTCON2		X	X	X	X	X

Released Version 02.05.00

1/21/2014

Models Affected

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 Changed alarm 05014 from "CHECK STARTER SOLENOIDCIRCUIT" to "CHECK STARTER CIRCUIT"		X	X	X	X	X

Released Version 02.04.00

1/20/2014

Models Affected

List of Features	SOLARA	21/2500	73/7500	8100	8500	8600
1 Repaired logic to read all CARRIER USB thumb drive		X	X	X	X	X
2 Engine coolant Temperature for S/S shut down <i>If all other conditions for S/S shutdown are meet and the unit has run for a minimum of 15 minutes, the unit will shut down regardless of engine coolant temperature. If engine coolant temperature is >68F the unit will shut down after minimum run time complete.</i>		X	X	X	X	X

Release Notes for APX™ software

Released Version		02.03.00					
12/5/2014		Models Affected					
List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Changed Vector start sequence for low ambient temperatures					X	X

Released Version		02.02.00					
11/5/2014		Models Affected					
List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Never Released for North America						

Released Version		02.01.00					
10/21/2014		Models Affected					
List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Support for remote panel		X	X	X	X	X
2	Change default "MAX DIESEL GEN AMP" to 22 with a 1.5 offset					X	

Released Version (1st official release)		02.00.00					
10/2/2013		Models Affected					
List of Features		SOLARA	21/2500	73/7500	8100	8500	8600
1	Added Vector 8100 and 8600 model numbers				X		X
2	Repaired fuel pump/heat logic		X	X		X	X
3	Repaired door switch logic		X	X	X	X	X
4	Added "CARRIER USB ONLY" logic and "UNKNOWN USB" to message display		X	X	X	X	X
5	Added "ULTRA FREEZE OFFSET" to configuration		X	X			
6	Added software revision for all boards in "TECH MODE" system information		X	X	X	X	X
7	Included AFAX solenoid test in PreTrip test 1 & 2		X	X	X	X	X
8	Added "LIGHT BAR NO ALARM" to configuration selection for light bar. This selection will bypass the light bar check in PreTrip.		X	X	X	X	X