

JTL FIRMWARE VARIATIONS		LACI
VERSION	DESCRIPTION	DATE
v0.00.0	Development release.	Dec 2007
v0.00.1	External PEV override setting added for use with the plant fault input. Service log error corrected. Choice added for 7 bar transducer on item 175. Bitswitch defaults changed from ice cream to Frozen food for non CO2 use. Refrigerant choice for R404, R408 and R507 operation corrected.	Apr 2008
v0.00.2	Incomplete external PEV shutdown operation completed.	July 2008
v0.00.3	Control temperature can be selected as air off or cabinet on item 275. Fixed superheat control strategy added, selectable using item 188. Setpoint reuses item 189. Deadband added for temperature control when working with fixed and limited superheat control.	July 2008
v0.00.4	Override freezes control integral. PI output modified when on fixed superheat control when superheat less than setpoint. Integral term output displayed on item 276.	July 2008
v0.00.5	Pressure transducer fault ranges now depend on transducer selection. Proportional term displayed on item 277. On fixed superheat control a fixed deadband added above the setpoint where the integral is frozen.	July 2008
v0.00.6	Dependencies corrected on items 204, 276 and 277.	July 2008
v0.00.7	Display changed to backlit LCD13 only.	Oct 2008
v0.00.8	Error in factory settings range handling corrected. Error affected all versions. Did not cause any functional problems.	Oct 2008
v0.00.9	Door functions removed. Man trapped alarm added on input 2. (Permanently enabled) Plant fault (external PEV override) moved to input 1. Plant fault alarm added. Plant fault input added to comms. Not cooling mode added. Temperature control error added on item 278. Supports broadcast and multicast timer options	Sept 2009
v0.01.0	Range for Superheat set point extended to 12°C. Pressure transducer range allowed to ±20 psi on LT evaporators.	Oct 2009
v0.01.1	Real time defrost choice added for electric and off cycle defrosts on each defrost time. Door open input reinstated on input 2. Item 138 selects the function of input 2. Refrigerant types R422D & R422A added to choices on item 157. Minor adjustments to R404A, R407A and R507A pressure temperature tables. Communications debug feature added on item 967 to display latest unit polled zone. Virtual bitswitch operation added on item 966. Plant data format extended to 13 bit word from 8 bit byte. Circuit number range for plant data increased from 7 to 15 Electrical distribution number added for plant data on item 210 Phase colour info on MU amended. Error in comms depending on item 208 corrected. Parameters download facility added using items 963-965 & 959. MU in use override facility added. Multicast and broadcast flags suppressed from MU when not in use.	June 2011
v0.01.2	Fan control selection allows fans to run during off cycle defrost. Co-ordinated defrost request inhibited during defrost recovery. Network latency used to adjust co-ordinated defrost request.	July 2011

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v0.01.3	Predict operation disabled when transducer readings are faulty. In this situation the defrost initiation defaults to co-ordinated. Network latency calculations adjusted to improve accuracy. Termination sensor fault alarm added. Benign error in MU plugged in protocol corrected. Minor adjustments in refrigerant tables for R407B, R408A, R422 and R502. Download parameter fail status error corrected.	Sept 2011
v0.01.4	Distribution panels reduced to maximum of 7. Electrical circuits increased to maximum of 31.	Dec 2011
v0.01.5	PREDICT 3 added for fixed superheat strategy. PREDICT backup operation for "two temperature" control strategy or invalid superheat, now reverts correctly to co-ordinated defrost.	Feb 2012
v0.01.6	ADC readings added items 560-568 Open and short circuit sensor fault indication added on items 428 & 429 PREDICT 3 volatility calculations amended to allow higher volatility conditions and time between defrosts beyond 64 hours. V to F temperature conversion interrupt handling modified. Items 133-135 available on MU under all circumstances. Previously only available when on network initiated defrost. Password of the day uses daylight time. Minor adjustment to graph interpolation routine. Network plant fault function enhanced to operate with real time defrost strategy. Defrost timer initialisation amended for shut down and fans only operation. PEV pulse width modulation code improved. Plant fault can be selected to inhibit defrost using item 134. Defrost recovery mode on MU display corrected where refrigeration mode is off.	Aug 2017