JTL CABINET CONTROLLER ITEM NUMBERS						LCID
ITEM	**DESCRIPTION**	**CODE**	**CODE MEANING**	**BIT** **4321**	**RANGE**	**ITEM 9 VALUE**
0	Unit type	Lcid	Unit type			
1	Unit number				0.1 - 899.9	
2	Time of day				00:00 - 23:59	
6	Communications speed	600 4800	Baud rate Baud rate			
8	Bitswitch setting					
9	Set default values selected by Bitswitch				0 - 1	
PROCESSOR ALARMS						
10	Processor alarms (11 - 17)	0 1 - 255	No alarms Check 11 - 17			
11	Static RAM Fault	CLr rA.Ft	No fault Fault			
12	Program/counter fault	CLr PC.Ft	No fault Fault			
13	Stack pointer fault	CLr SP.Ft	No fault Fault			
14	Background loop fault	CLr bL.Ft	No fault Fault			
15	PROM checksum fault	CLr Pr.Ft	No fault Fault			
16	NVRAM fault	CLr n.Ft	No fault Fault			
17	Instruction TRAP fault	CLr tP.Ft	No fault Fault			
MISCELLANEOUS DATA						
19	Software Version number					
TEMPERATURES						
20	Estimated cabinet temperature (calculated from Air on and Air off temperatures)					
21	Air on temperature					
22	Air off temperature					
23	Evaporator temperature					
24	Suction line temperature					
25	Superheat (Evaporator temp - suction line temp)					
AVERAGE ERRORS						
26	Average cabinet temperature error					
27	Average Air off temperature error					

JTL CABINET CONTROLLER ITEM NUMBERS						LCID
ITEM	**DESCRIPTION**	**CODE**	**CODE MEANING**	**BIT** **4321**	**RANGE**	**ITEM 9 VALUE**
AUTOMATICALLY ADJUSTED SETPOINTS						
28	Current Air off temperature setpoint (calculated by controller)					
29	Current Evaporator temperature setpoint (calculated by controller)					
PRIMARY TEMPERATURE SETPOINTS						
30	Cabinet temperature setpoint (target for item 20)			xxCC xxCO xxOC xxOO	- 30 to -15 - 30 to -15 - 5 to +10 - 5 to +10	- 20 - 26 +1 +4
31	Air off setpoint (starting point and lower limit for item 28)			xxCC xxCO xxOC xxOO	- 39 to -20 - 39 to -20 - 10 to +5 - 10 to +5	- 30 - 36 - 6 - 4
32	Overtemperature alarm tolerance			xxCC xxCO xxOC xxOO	0 - 20 0 - 20 0 - 20 0 - 20	10 10 5 10
33	Cabinet temperature ratio (Item 20 calculated as value between Air off and Air on using this ratio)			xxCC xxCO xxOC xxOO	20 - 80 20 - 80 20 - 80 20 - 80	50 50 40 60
PROBE SELECTION						
36	Air on probe selection	OFF AO.En	Disabled Enabled		0 - 1	AO.En
37	Air off probe selection	OFF AF.En	Disabled Enabled		0 - 1	AF.En
38	Evaporator probe selection	OFF EP.En	Disabled Enabled		0 - 1	EP.En
39	Suction line probe selection	OFF SP.En	Disabled Enabled		0 - 1	SP.En
DEFROST INFORMATION						
40	Duration of last defrost					
41	Time since end of last defrost					
42	Duration of current defrost					
43	Time next defrost is due					
44	Power off duration					
MISCELLANEOUS SETTINGS						
47	Period over which averages are taken				00:30 - 03:00	01:00
48	Max starts/hour (Anti-shortcycling timer when using liquid valve relay to control a condensing unit)	0 10.PH 15.PH 20.PH	No limit 10 starts per hour 15 starts per hour 20 starts per hour		0 - 3	0

JTL CABINET CONTROLLER ITEM NUMBERS						LCID
ITEM	**DESCRIPTION**	**CODE**	**CODE MEANING**	**BIT** **4321**	**RANGE**	**ITEM 9 VALUE**
DEFROST SETPOINTS When a 12 hour schedule is selected (item 60) the defrosts repeat on a 12 hour cycle ie., if 08:00 is selected then a 2nd defrost occurs at 20:00 (and vice versa)						
50	Defrost termination temperature			xxCC xxCO xxOC xxOO	0 - 20 0 - 20 0 - 20 0 - 20	15 15 12 20
51	Defrost time 1	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	01:00 02:00 03:00 04:00
52	Defrost time 2	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	07:00 08:00 09:00 10:00
53	Defrost time 3	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	13:00 14:00 15:00 16:00
54	Defrost time 4	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	19:00 20:00 21:00 22:00
55	Defrost time 5	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	00:00 00:00 00:00 00:00
56	Defrost time 6	00:00 00:01 - 23:59	Defrost disabled Defrost enabled	xxCC xxCO xxOC xxOO	00:00 - 23:59 00:00 - 23:59 00:00 - 23:59 00:00 - 23:59	00:00 00:00 00:00 00:00
57	Defrost termination time limit			xxCC xxCO xxOC xxOO	00:10 - 00:40 00:10 - 00:40 00:10 - 01:00 00:10 - 01:00	00:20 00:20 00:20 00:40
59	Drain down time				00:00 - 00:10	00:05
60	Defrost schedule selection	24 hr 12 hr	24 hour schedule 12 hour schedule		0 - 1	24 hr
61	Pump down time				00:00 - 00:10	00:00

JTL CABINET CONTROLLER ITEM NUMBERS						LCID
ITEM	**DESCRIPTION**	**CODE**	**CODE MEANING**	**BIT** **4321**	**RANGE**	**ITEM 9 VALUE**
MODES, INPUTS AND OUTPUTS						
70	Operating mode	rEFr dEFr dF.rc dr.dn Li.Ho Pu.dn	Refrigeration Defrost Defrost recovery Drain down Liquid hold off Pump down			
72	Defrost relays	LCID00 only (V0.00.0 only)				
		0 d1.x.x. dx.2.x dx.x.3	All contacts open Defrost o/p 1 on Defrost o/p 2 on Defrost o/p 3 on			
73	Liquid solenoid relay	OFF LS.on	Off Demanding refrig.			
74	FANS/Heater relay	O Fn.on Hr.on	Off Fans on Heater on			
75	Defrost relays	LCID01 on (V0.00.1 on)				
		0 d1.x.x. dx.2.x dx.x.3	All contacts open Defrost o/p 1 on Defrost o/p 2 on Defrost o/p 3 on			
FORCING FUNCTIONS Forced functions remain forced if the Maintenance Unit remains plugged in. They are automatically cancelled 30 minutes after the Maintenance Unit is unplugged.						
77	Forced defrost	OFF Fd.on	Off Forced defrost on		0 - 1	
78	Forced refrigeration	OFF Fr.on	Off Forced refrigeration		0 - 1	
SYSTEM ALARMS						
80	Group alarm 81 - 88	0 1 - 255	No alarms Check 81 - 88			
81	Cabinet overtemperature	CLr C.Ht	No fault Fault			
82	Air off overtemperature	CLr A.Ht	No fault Fault			
83	Air on probe fault	CLr AO.Pr	No fault Fault			
84	Air off probe fault	CLr AF.Pr	No fault Fault			
85	Thermistor power supply fault	CLr PS.Ft	No fault Fault			
87	Unit number corrupted/not set	CLr Un.CF	No fault Fault			
88	All probes faulty, deselected or disconnected	CLr t.SEn	No fault Fault			

JTL CABINET CONTROLLER ITEM NUMBERS						LCID
ITEM	**DESCRIPTION**	**CODE**	**CODE MEANING**	**BIT** **4321**	**RANGE**	**ITEM 9 VALUE**
			MISCELLANEOUS DATA			
89	Thermistor excitation value (Factory test)		Not used			
			SYSTEM ALARMS			
90	Group alarm 91 - 98	0 1 - 255	No alarms Check 91 - 98			
91	Termination probe fault	CLr dt.Pr	No fault Fault			
92	Evaporator probe fault	CLr EP.Pr	No fault Fault			
93	Suction line probe fault	CLr SL.Pr	No fault Fault			
			UTILITY			
99	Test digital display	CLr SEt	Not active Test active		0 - 1	
			PROBE SELECTION			
102	Probe type selection	5000 2000	Tempkey ELM		0 - 1	5000
104	Auxiliary output selection	0 Fan.S Htr.S DEF.3	Output disabled Fan control Heater Defrost output 3		0 - 3	dEF.3
			LIGHTING CONTROL			
110	Select lighting control	OFF LC.on	off Lighting control function selected		0 - 1	LC.on
111	Lighting unit command	LU.Co 0	Lighting off command Clear			
112	Over ride input	OFF L.O.IP	No input Over ride input on			
113	Lights and blinds	on L.OFF	Lights on and blinds up Lights off and blinds down			
			FORCING FUNCTIONS Forced functions remain forced if the Maintenance Unit remains plugged in. They are automatically cancelled 30 minutes after the Maintenance Unit is unplugged.			
114	Force lights on	OFF L.on	Off Lights on		0 - 1	
115	Force lights off	OFF L.OFF	Off Lights off		0 - 1	

JTL CABINET CONTROLLER ITEM NUMBERS						LCID
ITEM	**DESCRIPTION**	**CODE**	**CODE MEANING**	**BIT** **4321**	**RANGE**	**ITEM 9 VALUE**
LIGHTING CONTROL						
116	Manual lights on	OFF P.on	OFF Lights on			
117	Manual lights off	OFF P.off	OFF Lights off			
118	Lighting contactor type selection (shown for lights-on state)	n.o n.c	normally open normally closed		0 - 1	n.c
120	Lighting override timer (time delay before lighting off/blinds close on network control)				00:30 - 02:00	02:00
DISPLAY PUSHBUTTONS						
121	Display pushbutton 1 Status	OFF P1.IP	OFF button pressed			
122	Display pushbutton 2 Status	OFF P2.IP	OFF button pressed			
DEFROST TERMINATION PROBES						
131	Termination probe 1 temperature					
132	Termination probe 2 temperature					
133	Termination probe 3 temperature					
137	Termination 1 probe selection	OFF t1.En	Disabled Enabled		0 - 1	t1.En
138	Termination 2 probe selection	OFF t2.En	Disabled Enabled		0 - 1	t2.En
139	Termination 3 probe selection	OFF t3.En	Disabled Enabled		0 - 1	t3.En

BITSWITCH SETTINGS

4321
xx**CC** Frozen food
xx**CO** Ice cream
xx**OC** Chiller
xx**OO** Produce

where **C** = **C**LOSED or ON
O = **O**PEN or OFF
x = Don't care

Note 1: For unmarked switches
C = dot visible
O = dot not visible
Note 2: Setting the bitswitches alone has no effect.
Use **ITEM 9** to set the default values after the switches are set.

DISPLAY DATA	LCID
NORMAL DISPLAY	
- 99^{c}	Cabinet temperature (item 20 rounded)
dEF	Defrost
dEFr	Defrost recovery
--	Display data error
ALARM TEXT (in descending priority order)	
t.SEn	All probes faulty, deselected or disconnected
Ht	High cabinet or air off temperature
OTHER TEXT	
JTL	Start-up text
LitE	Lighting status follows this text
A.on	Air on temperature follows this text
A.oFF	Air off temperature follows this text
EVAP	Evaporator temperature follows this text
Suct	Suction line temperature follows this text
T.diF	Superheat temperature follows this text
L.dEF	Time since last defrost follows this text
n.dEF	Time of next defrost follows this text
SEt.P	Cabinet temperature setpoint follows this text
tEr.1	Termination temperature 1 follows this text
tEr.2	Termination temperature 2 follows this text
tEr.3	Termination temperature 3 follows this text