The LCNS-USPR is a spare parts kit which is used to replace the following obsolete JTL products as a spare part:

RCGD RCCN RCAS LCGD LCCN LCED LCED

The LCNS-USPR comprises two parts:

a) LCNS controller

b) CAB40-05 7 to 5 pin display converter cable

Some rewiring is necessary when replacing the obsolete part with the LCNS affecting the network connections or the input and output connections. For full details see below.

The LCNS is a universal controller which provides defrost functionality of all the former products, as such it requires to be set up correctly to achieve the functionality desired. The attached user guide gives full details of programming information to set up the controller. Your attention is drawn in particular to item 107 which selects the appropriate defrost initiation method, and item 144 which selects the defrost termination method.

Note the LCNS is only suitable for liquid line solenoid valve control with a mechanical (thermostatic) expansion valve.

#### LCNS INPUT CONVERSION

#### **TEMPERATURES**

No rewiring is necessary, sensor connections can be directly swapped (plugged in)

### **INPUTS**

FUNCTION	LCNS (v3 on)	LCNS (V2) LCNB	LCED	LCGD LCCN	RCGD RCCN RCAS
LIGHTING OVERRIDE	12 C	11 C	IN1 C		
DEFROST INPUT	11 C	12 C			

NOTE 5: Inputs swapped on LCNS at version 3 firmware.

NOTE 6: There are no inputs on LCGD, LCCN, RCGD, RCCN or RCAS.

#### **LCNS Jnet Communications Conversion**

The LCNS and the original controllers are all fitted with 3 pin din sockets for Jnet Network connection. Thus no rewiring is necessary.

## **LCNS Display Connections**

The display connection on the LCNS uses a 7 pin connector. To convert the 5 pin display to this connection, use the CAB40-05 cable supplied with the LCNS. As the LCED has a 7 pin connection already the CAB40-05 is not required when replacing this product.

#### **Controller Setup**

To ensure compatibility when replacing the original part with an LCNS, action a factory default setting procedure (Item 9) before setting in the new data.

# LCNS OUTPUT CONVERSION

FUNCTION	LCNS	LCED (see note 1)	LCNB (See note 2)	LCGD LCCN (see note 3)	RCGD RCCN RCAS (see note 4)
CABINET LIGHTS	1 NO 1 LN	1 NO 1 LN	1 NO 1 LN		
FANS	2 NO 2 LN	2 NO 2 LN	2 NO 2 LN	2 NO 2 LN	LD2 LN2
LIQUID SOLENOID	3 NO 3 LN	3 NO 3 LN	3 NO 3 LN	3 NO 3 LN	LD4 LN4
DEFROST	4 NO 4 LN 4 NC	4 NO 4 LN 4 NC	4 NO 4 LN 4 NC	4 NO 4 LN 4 NC	LD3 LN3
AUXILIARY HEATER	5 NO 5 LN 5 NC	5 NO 5 LN 5 NC	2 NO 2 LN	1 NO 1 LN	LD1 LN1

NOTE 1: No rewiring is necessary for LCED

NOTE 2: On LCNB the FANS and HEATER output are on relay 2. This has been separated on LCNS. If the heater output is used then rewiring is necessary as shown, otherwise no rewiring is required.

NOTE 3: Rewire as shown.

NOTE 4: Rewire as shown, ensure wiring to LN is rewired to LN which requires crossover. LN must be connected to the line voltage and NO/NC to the load to ensure correct EMC

operation.

02773-LCNS-USPR.wpd Issue 3 May 2004 Doc No. 02773