

TRAULSEN TECHNICAL BULLETIN

PRODUCT SERVICE DEPARTMENT

FORT WORTH, TX 76106

G-SERIES CONTROL RELEASE 2017

Introduction:

This technical bulletin is intended to aid the field in using the G series control head. This technical bulletin may not cover all situations that may arise in the field and final diagnosis of field based equipment is the sole responsibility of the technician contracted to perform any work required.

Display overview

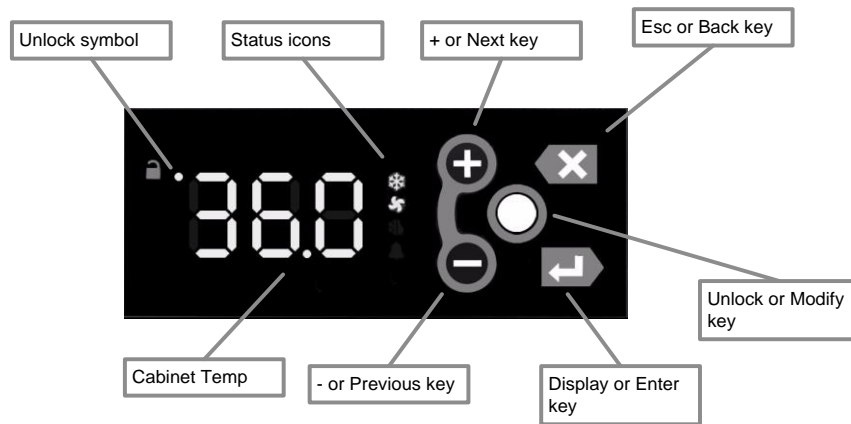









Figure 1




Control button legend:

	UNLOCK OR MODIFY KEY
	PLUS/NEXT KEY
	MINUS/PREVIOUS KEY
	EXIT/BACK KEY
	DISPLAY/ENTER KEY




Unlocking the Keypad:

<u>Press</u>		<u>Display</u>	<u>Press</u>
Tap two times			


Turning the display on and off:

<u>Press</u>	<u>Display</u>	<u>Display State</u>
Hold 5 sec		NO DISPLAY
		NORMAL DISPLAY

Adjusting temperature set point:

1. Unlock Keypad
2. Use  or  to adjust Set Point
3. Press 


















Initiate manual defrost:

<u>Press</u>	<u>Display</u>
 & 	
Hold for 5 Seconds	

Service Menu:

The Service Menu contains 3 sub menus:

- **SEN** (Sensor) – Enables a technician to view various control & sensor statuses.
- **SET** (Set) – Allows a technician to change various control parameters.
- **AL** (Alarm) – Enables a technician to view various alarm states.

ACCESS CODE 555		
<u>Press</u>	<u>Display</u>	<u>Press</u>
Tap two times 		
	SEN	
	900	
	990	
	555	
	H	
See Table 1 for a list of SEN parameters		
To navigate to the SET		
<u>Press</u>	<u>Display</u>	<u>Press</u>
	SEN	
	SET	
See Table 2 for a list of SET parameters		
To navigate to the AL		
<u>Press</u>	<u>Display</u>	<u>Press</u>
	SET	
	AL	
See Table 3 for a list of AL parameters		

Parameter Tables:



1. To view Parameter press 







2. Press  to return to Parameter list

Mnemonic	Parameter	Description
tI	Time Set	Local Time Set
rct	RH Snr Reset	Reset Count RH Sensor
Lc	Light Status	Cabinet Light Off/On
Aidc	Aux. Device Status	Auxiliary Device Status
LG	Light	Status Of Lights
doc	Door Open Count	Number Of Times Door Is Opened Since Defrost
dar	Door Switch	Closed/Open
dhc	DH Duty Cycle	Door Heater Duty Cycle
dhc	Door Heater Cmd	Door Heater Status
dFc	Def. Device Status	Defrost Device Status
tdE	Cab. Tmp At Def.	Cabinet Temperature At Time Of Defrost
cFc	Cond. Fan Status	Condenser Fan Status
Fnc	Cab Fan Status	Evap Fan/Blower Off/On
coc	Compd cmd	Compressor Off/On
cur	Total Amps	Total Amps
rHc	RH Snr Status	Relative Humidity Status
dP	Dew Point	Dew Point
rh	Relative Humidity	Relative Humidity
db	Dry Bulb/Rm Temp	Dry Bulb
tAu	Aux Temp	Auxiliary Temperature
tL	Liquid Line Temp	Liquid Line Temperature
tE	Evap Coil Temp	Evaporator Line Temperature
tC	Temp Cab Average	Average Cabinet Temperature

Table 1

Parameter Tables (Cont):



1. To access Parameter press 
2. Press  to unlock parameter
3. Use  or  to adjust Parameter
4. Press  to save settings
5. Press  to return to Parameter list

Mnemonic	Parameter	Description
SP	Temp Cab SP	Temp Set point
dSt	Daylight Savings	Daylight Savings time
tzn	Time Zone	Time Zone
tun	Temp Units	Temperature Units
VER	Software Version	Software Version
SER	Serial Number	Serial Number
dhd	Door Heater Relay	Door Heater Delay In Optimize Mode
dho	Door Heater Mode	Door Heater Control Mode
dF6	Defrost Time 6	Defrost Time 6
dF5	Defrost Time 5	Defrost Time 5
dF4	Defrost Time 4	Defrost Time 4
dF3	Defrost Time 3	Defrost Time 3
dF2	Defrost Time 2	Defrost Time 2
dF1	Defrost Time 1	Defrost Time 1
dI	Defrost Interval	Interval Between Defrost
dFo	Defrost Mode	Defrost Mode
dSP	Defrost Setpoint	Defrost Set Point
FnA	Fan Op. Door Open	Cabinet Fan Action When Door Opened
Fno	Cab Fan Mode	Fan Mode
ASd	Aux. SP Diff	Auxiliary Set Point Differential
ASP	Aux. Set Point	Auxiliary Set Point
SPd	Temp Cab SP Diff	Cabinet Temperature Differential

Table 2

Parameter Tables (Cont):



AL		
1. To view Parameter press  2. Press  to return to Parameter list		
Mnemonic	Parameter	Description
ECU	Temp Cab At Power Up	Cabinet Temp at power up
ECA	Temp Cab Alarm	Cabinet Temp Alarm Status
ELA	Temp Liq Line Alarm	Liq Line Temp Alarm Status
LLS	Liq Line SD Alarm	Liq Line Shutdown Status

Table 3

Error Codes:

Communication Error



Corrective Actions

- Press the reset button on the Main Board or power cycle the unit
- Replace the cable between the Main Board and the Display
- Replace the Display
- Replace the Main Board

Error 1



Corrective Actions

- Replace Main Board

Error 2



Corrective Actions

- Press the reset button on the Main Board or power cycle the unit
- If it continues, replace the Main Board

Control board overview:

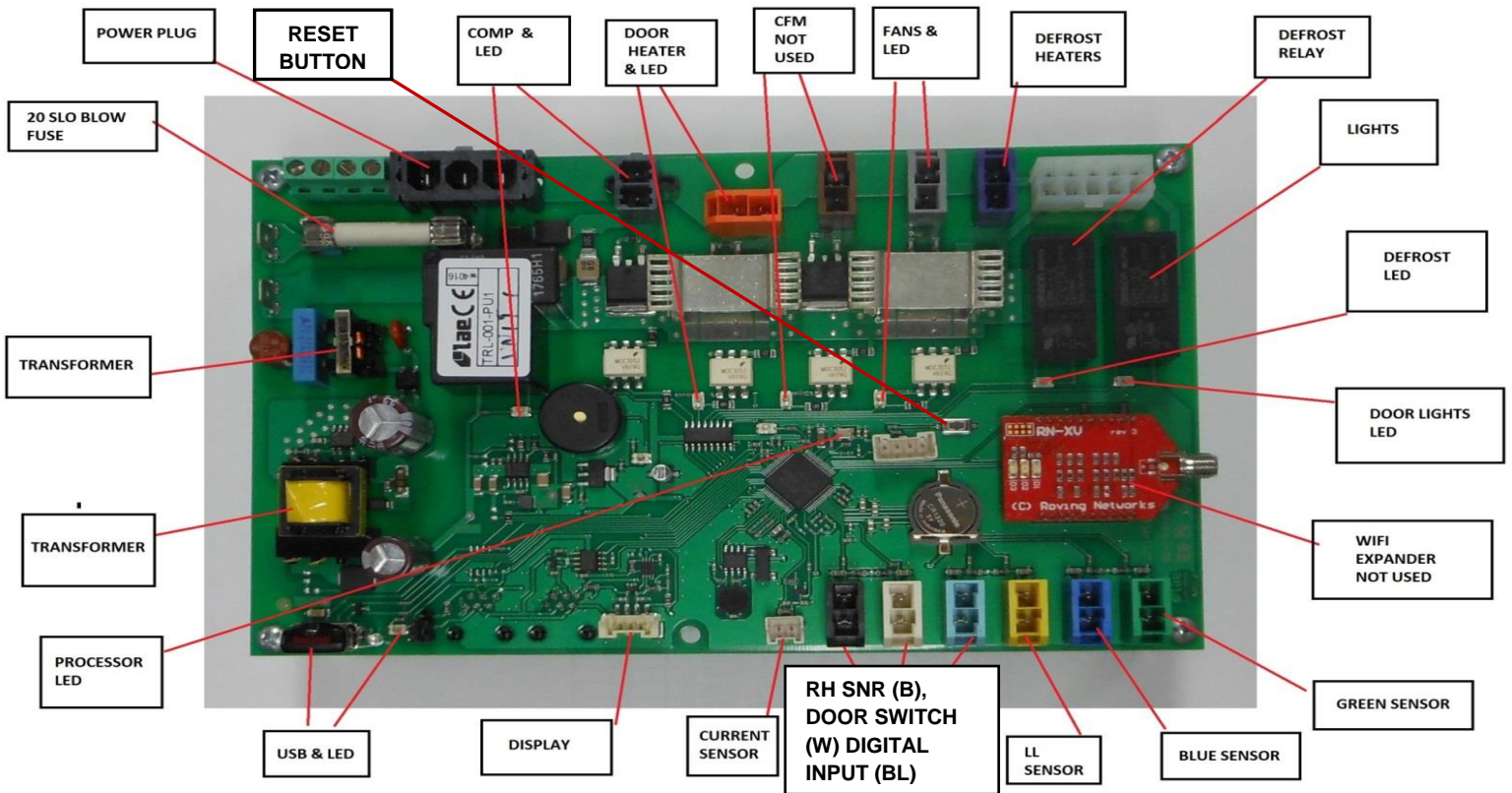


Figure 2

Control board Troubleshooting:

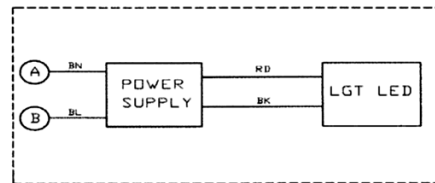
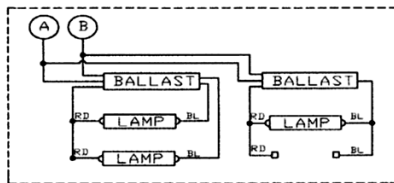
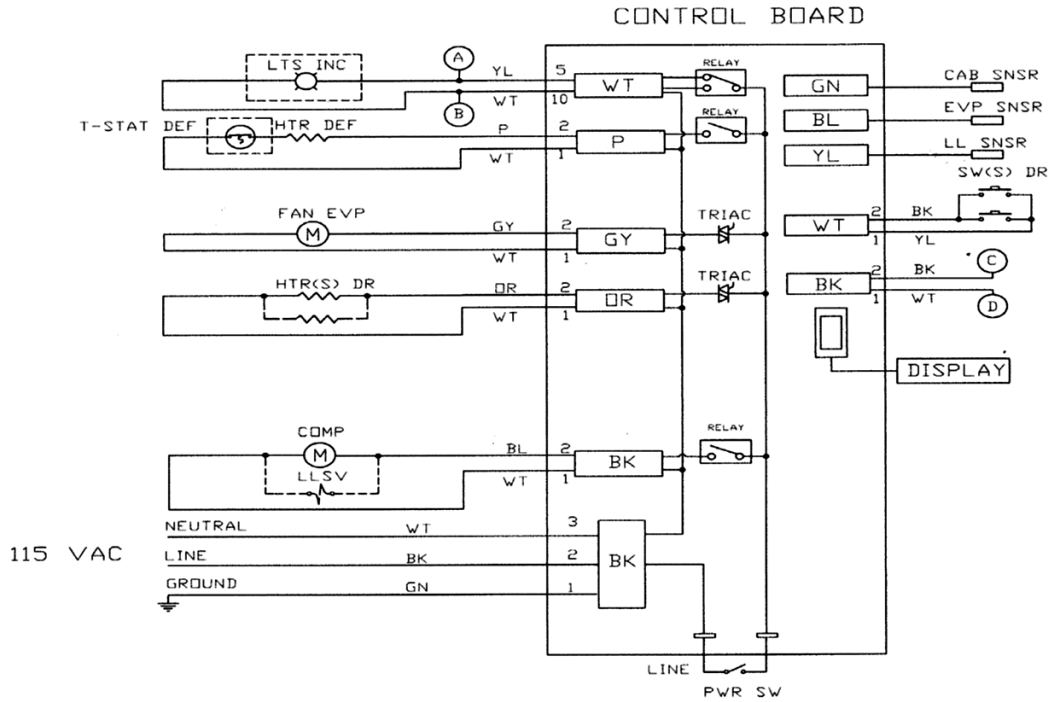
Note: All components may be tested with direct power ONLY when disconnected from the board. DO NOT jumper power at the board.

LED indicators will illuminate when the control is calling for an output to be energized. See Figure 2.

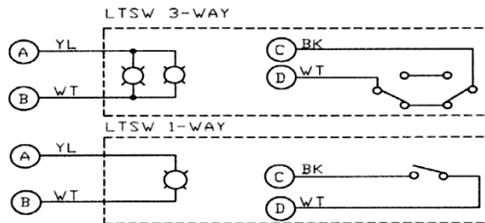
Control Board Specifications:

Fuse	325/326 Series Lead-Free 3AB, Slo-Blo 20A fuse
Reset	To reboot the board press the reset button (See Figure 2) for 5 seconds or until all the LED lights flash, shut off and then come back on again.
Toggle Switch	Toggle switch disconnects power to all controls and components. When you turn on toggle switch there is a 5 second time delay before start up.
Door Switch	12VDC to Door Switch. When you open door there is a 1 second delay before the light comes on.
Data Logging	8 GB SanDisk USB drive logs data every 10 secs for up to 10 years
High Voltage Outputs	All high voltage component outputs can be isolated from the rest of the circuit by disconnecting their respective 2 pin connector form the board. All components may be tested with direct power ONLY when disconnected from the board. DO NOT jumper power at the board.

Wire Diagram:



BK	BLACK
BL	BLUE
BN	BROWN
GN	GREEN
GY	GREY
OR	ORANGE
P	PURPLE
RD	RED
WT	WHITE
YL	YELLOW
---	OPTION



Contact Traulsen Technical Service:

If further assistance is needed feel free to contact Traulsen Technical Service at 800-825-8220 between the hours of 7:30am – 11:30am CST & 12:30pm – 4:30pm CST.