Thermal Tech & Temp

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6-Way Lowboy Console

Standard Features Are:

73FC Transformer
125 Amp 3 Phase Circuit Breaker
Primary 3-Phase Input Tapping options of 480/575v, 3ph,
60hz. Secondary Output Voltage 80 Volt
6 Channel Contactor Switching
Individual Neon Indicators per Channel
Chino Temperature Controllers
Size: 36” high x 34” deep x 24” wide
6” Heavy Duty Casters
4 Eye Hooks

Read Carefully before operating

1) Upon receipt of your new power console, visually inspect it for any damage that might have occurred during shipment. If there are any signs of damage please call EHS immediately so a damage claim can be processed.

2) The power console weighs approximately 960 pounds. Be very careful when loading and unloading using a fork-lift.

3) Never operate the power console with the sides or the top removed. Serious electrical shock can occur if care is not taken.

4) Always use a primary cable of #4 AWG minimum. Do not use anything smaller in size. The cable must be 4-Wire and the power console must be grounded at all times during use.

5) Make sure the primary input taps have been connected in the correct orientation for the voltage you will be using i.e. 440/480/575 Volts.

6) Make sure the secondary taps have been connected in the correct orientation for the heaters you will using i.e. 80 Volts.

7) If you should have any questions please call us 24 hours a day, 7 days a week, at our office # (609) 588-0900.

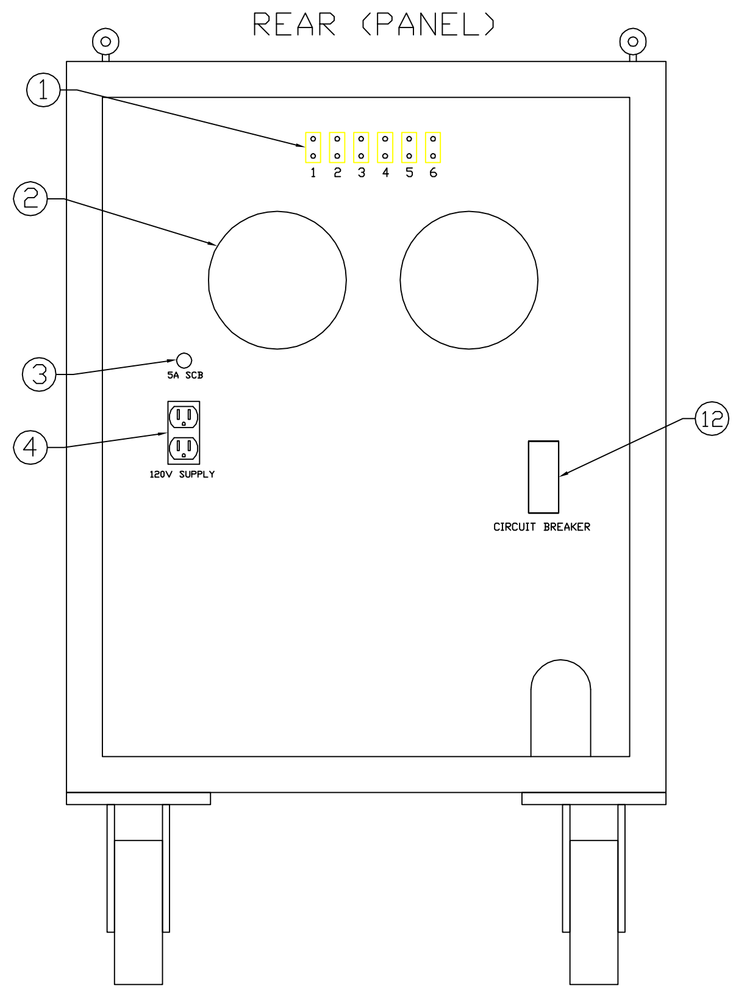
Getting Started set up Procedure

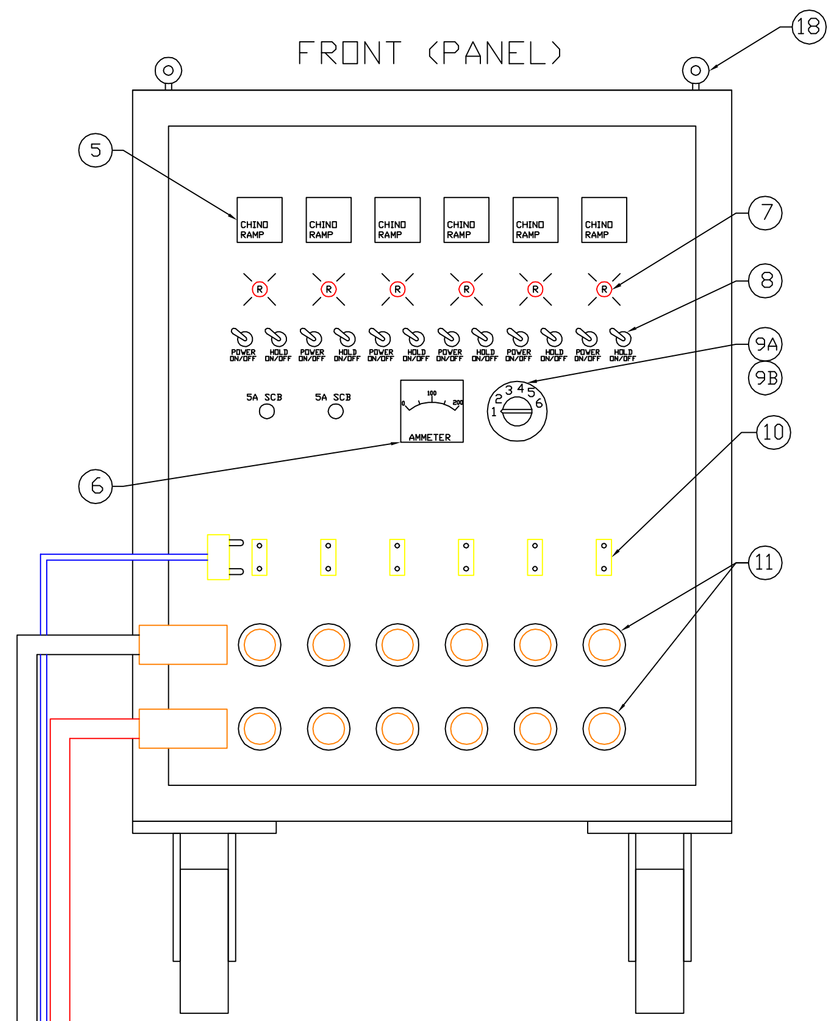
1) Make sure that all primary power connections are tightened and properly connected. Make sure that the unit is grounded and that the supply power is connected to the correct input taps.

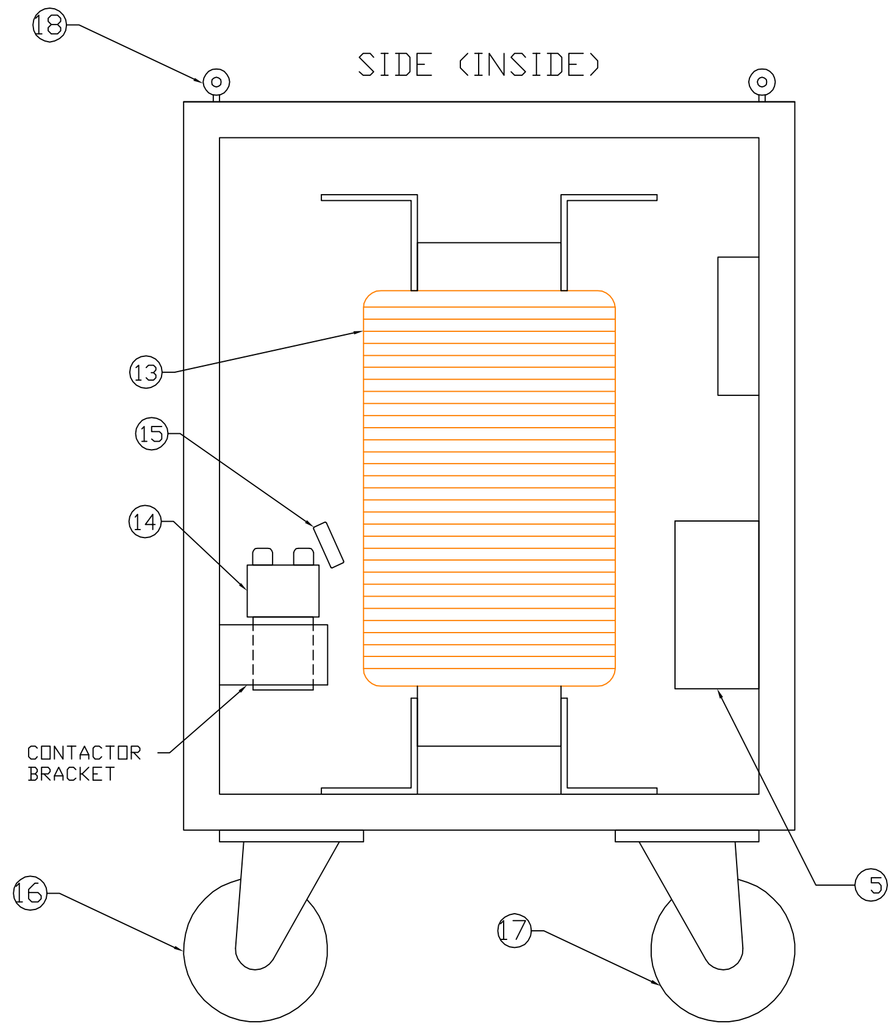
2) Connect the triple cable sets to the output camlocks. Make sure the corresponding thermocouples (T/C) are plugged into the proper T/C jacks.

NOTE !! When attaching the thermocouples to the work-piece or reattaching a broken thermocouple, it is very important to temporarily disconnect the T/C from the jack on the console and the jack on the recorder. The electrical spark of the TAU may travel through the T/C wire and cause damage to the recorder or the controller.

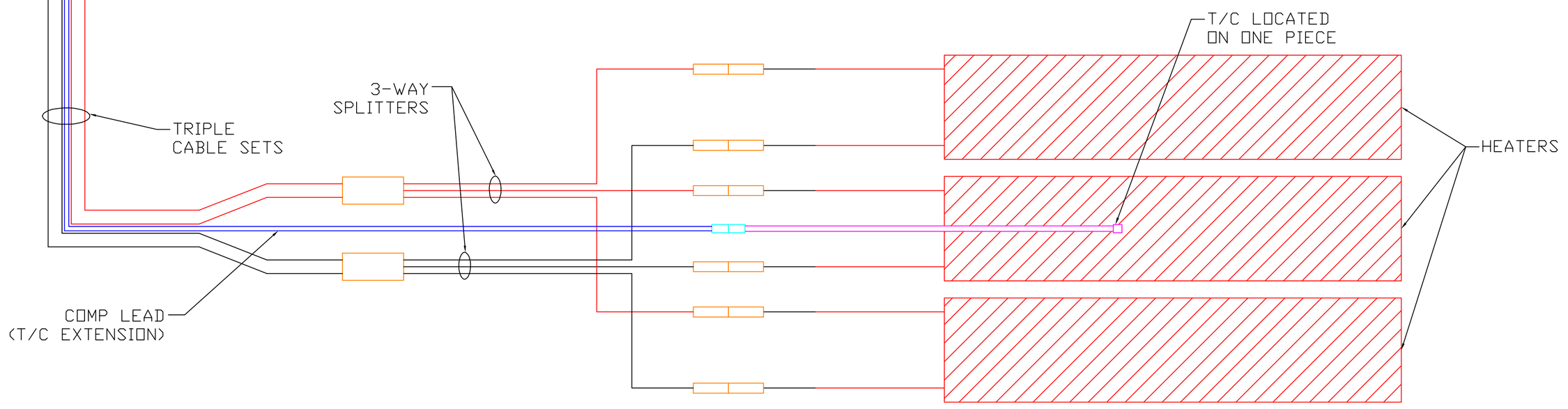
3) Turn power on to the console.







BILL OF MATERIALS			
#	QTY	P/N	DESCRIPTION
1	1	25249	REPLACEMENT T/C PANEL MOUNTED JACKS (DOUBLE)
2A	1	21334	REPLACEMENT CONSOLE 6" FAN
2B	1	21335	REPLACEMENT GUARD FOR 6" FAN
3	3	21413	SUPPLEMENTARY CIRCUIT BREAKER PANEL MOUNT
4A	1	21258	120 VOLT RECEPTACLE GFCI (OUTLET ONLY)
4B	1	21259	120 VOLT RECEPTACLE COVER GRAY
5	6	21435	CHINO RAMP CHINO CONTROLLER
6	1	21256	DIGITAL AMMETER 0-200 AMPS AC
7	6	21332	110 VOLT REPLACEMENT RED LAMP
8	13	21330	SPST ON/OFF TOGGLE SWITCH FOR CONSOLE
9A	1	21342	SIX POSITION SELECTOR SWITCH
9B	1	21344	REPLACEMENT KNOB FOR ROTARY SWITCH
10	6	21340	REPLACEMENT T/C PANEL MOUNTED JACKS (SINGLE)
11	12	24502	300 AMP FEMALE PANEL MOUNTS
12A	1	21260	125 AMP CONSOLE BREAKER
12B	1	21262	BREAKER SHUNT TRIP
13	1	CUSTOM	73FC TRANFORMER
14	6	21250	ALBRIGHT CONTACTORS SPST SW200, 250 AMP RATED
15	6	21337	CURRENT TRANSFORMER RATIO: 200:5AAC ID: 1.10"
16	2	21238S	REPLACEMENT SWIVEL 6" WHEEL
17	2	21238F	REPLACEMENT FIXED/RIGID WHEEL
18	4	21702	SHOULDER PATTERN EYE BOLT



REV.	DESCRIPTION	DR.	DATE

HEAT

SCALE N.T.S.

	BY	DATE
DRAWN	RDR	12/08/17
CHK'D.		
APP'D		
JOB NO.		

6-WAY POWER CONSOLE
CHINO RAMP CONTROLLERS
STANDARD MINI ME

SHEET 1 OF 1

DRAWING NO.

REV. 0

125 AMP
CIRCUIT BREAKER

250 AMP
ALBRIGHT CONTACTORS

CT COILS

80
190°C
80
190°C
80
190°C
N

480
575
480
575
480
575

120V

CAPACITOR

SHUNT

5A
5A

5A

CIRCUIT #1
CIRCUIT #2
CIRCUIT #3
CIRCUIT #4
CIRCUIT #5
CIRCUIT #6

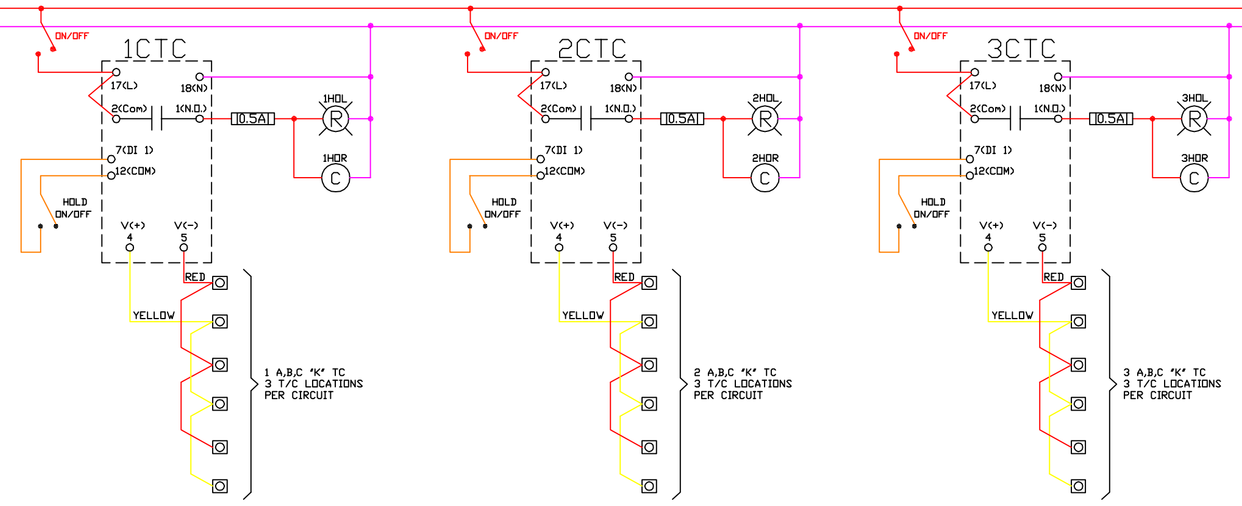
6-POINT
SWITCH

0-200
AMP
METER

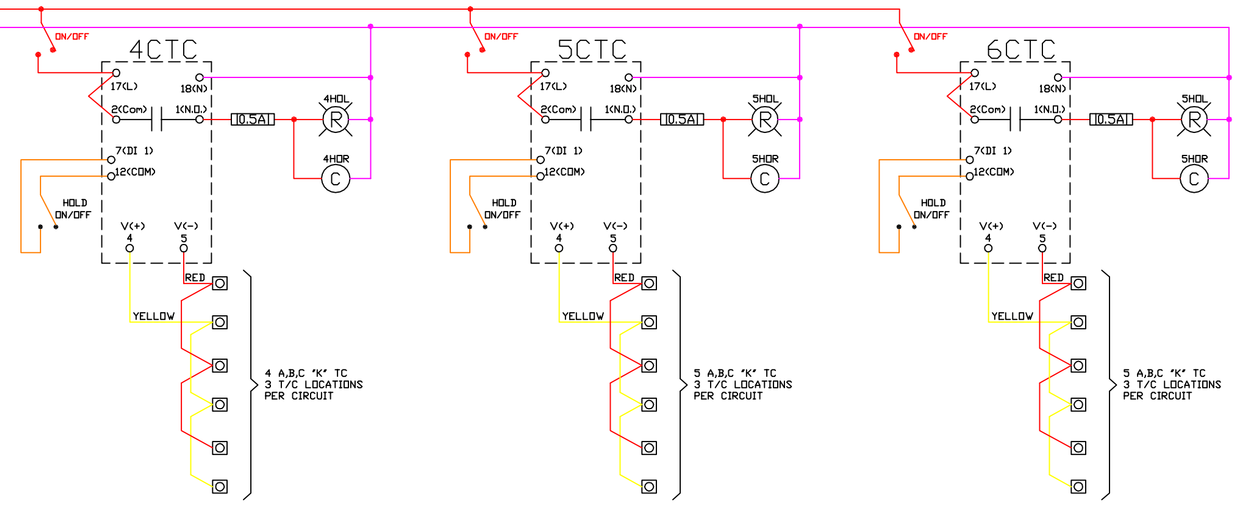
ER

ENCLOSURE
DUPLEX RECEPTACLE
120VAC

CIRCULATING
FAN
120VAC



"3216" CIRCUIT #1
"3216" CIRCUIT #2
"3216" CIRCUIT #3



"3216" CIRCUIT #4
"3216" CIRCUIT #5
"3216" CIRCUIT #6

73 kVA TRANSFORMER
PRIMARY VOLAGE: 480/575V
SECONDARY VOLTAGE: 80

REV.	DESCRIPTION	DR.	DATE
1	SHUNT WIRING	RDR	10/13/16

HEAT

SCALE N.T.S.

	BY	DATE
DRAWN	CMM	1/11/13
CHK'D.		
APP'D		

JOB NO. 1301-013A

6-WAY POWER CONSOLE
CHINO RAMP CONTROLLERS
STANDARD LOWBOY

6-LOW WIRING SCHEMATIC

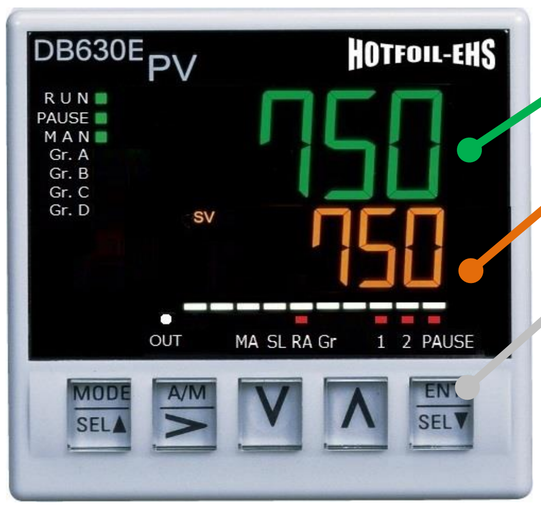
SHEET 1 OF 1
DRAWING NO.
REV. 1

DB630E-Ramp Instruction Manual

INSTRUMENTATION, CONTROL AND SYSTEMS CHINO

* This controller is designed for heat treatment market

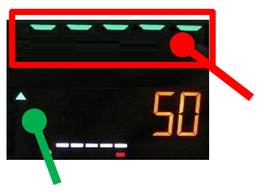
Ver. 2014/7



PV : Process Value
(Current Temperature)
SV : Set Point
(Current Target Set Point)
Percentage of Output

	Output 0%
▬▬▬	Output 50%
▬▬▬▬▬▬▬▬	Output 100%

Display	LED	Status
RUN	Solid	**RUN** the controller
PAUSE	Blink	**PAUSE** the controller
MAN	Solid	**MANUAL** output mode is ON
RA	Solid	**RAMP** Model (Stay ON)
1	Solid	Alarm **1** Active
2	Solid	Alarm **2** Active
PAUSE	Blink	**PAUSE** the controller by DI



No sensor connection
▬▬▬

The controller will begin to ramp to the set point and will be **display** this mark [▲].
If the controllers is no display [▲] then it is **not ramping!**

Key Feature : There are five keys on the face of the DB630 controller	
MODE SEL▲	Go to next parameters
MODE SEL▲ Hold	Return to HOME display
A/M >	Show under cursor for selecting the values manually.
A/M > Hold	Change to "Manual output mode"
∧ ∨	Change value and parameters
ENT SEL▼	Any parameter changes, make sure to press [ENT] Key to confirm

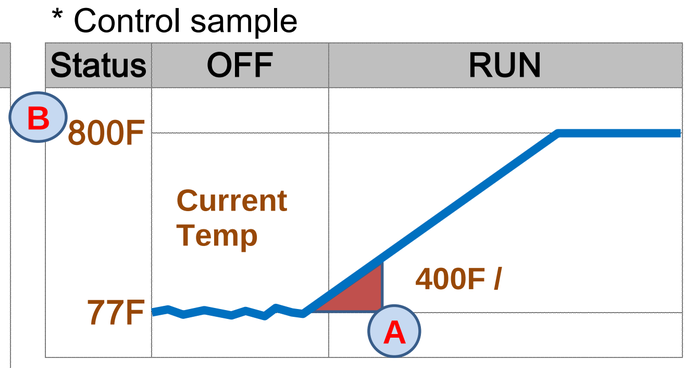
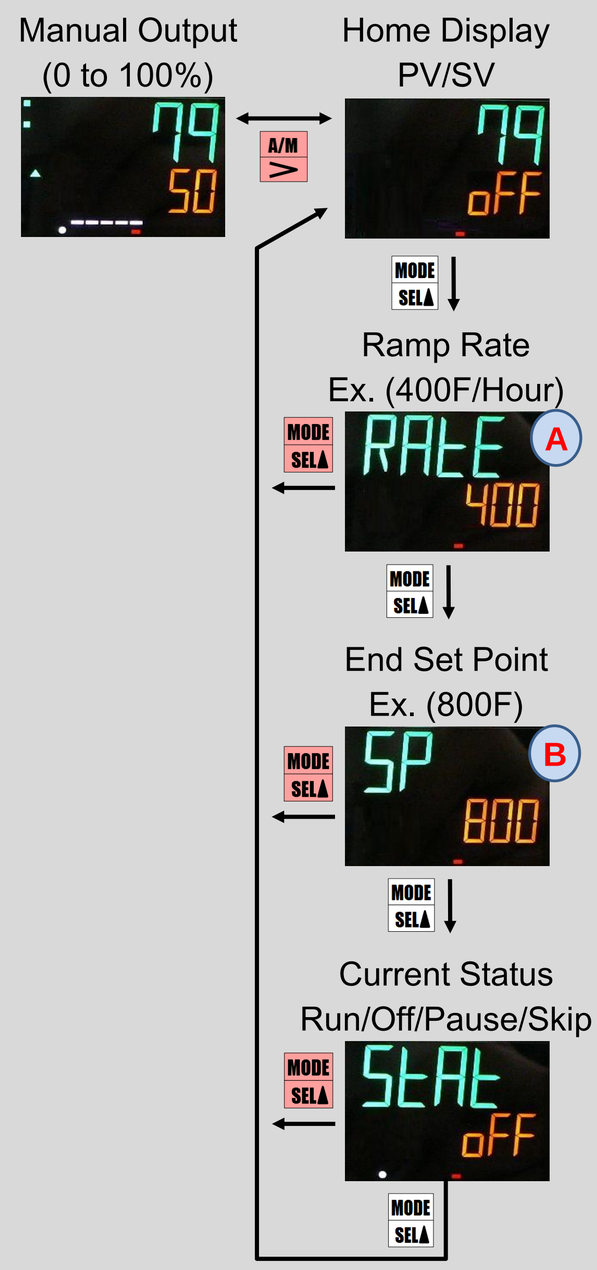
A. To run the controller

Do This	Display	Additional Notes
1. Press MODE SEL▲		* This is asking for a value **RATE** to be chosen for Ramp Rate. 1 Press [>] key to show under cursor. 2 Using [△] , [▽] keys to change the **value** to the desired Ramp Rate. Blinking the changed value. (Value/Hours) 3 Make sure to press [ENT] key to confirm. * If you want to straight to Set Point, must be set "0".
2. Press MODE SEL▲		* This is asking for a **SP** value to be chosen for the End-Set-Point. 1 Press [>] key to show under cursor. 2 Using [△] , [▽] keys to change the value to the End Set Point. 3 Blinking the changed value. Make sure to press [ENT] key to confirm.
3. Press MODE SEL▲		* When blinking "RUN" at the **status**, press [ENT] key to start ramping from the input temperature to the set point at the chosen ramp rate. * Press [MODE] key to only return to HOME display. * While the controller is running, you can use following command. "RUN" : Run the controller that is paused. "SKIP" : Skip to the End Set Point of ramping control. "PAUSE" : Pause the current set point. "OFF" : Turn the controller OFF.

B. To manual out put mode.

Do This	Display	Additional Notes
Hold 3 sec. A/M >		* This indication is "Manual Output Mode". 1 The MAN indication LED is **ON**. 2 The percentage can be changed any time using [△] , [▽] keys. 3 You can return to automatic control mode by pressing and holding [>] key for 3 seconds. * For the example if the controller percentage is set to 50% the cycle will be on and off per approximately 4 sec. If the controller percentage is set to 75% the cycle will be on for approximately 6 sec. and will be off for approximately 2 seconds.

* Control sample



Operation chart