

TTC

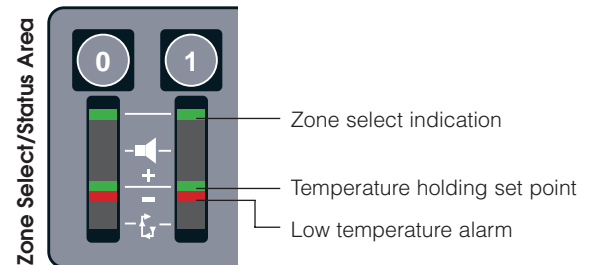
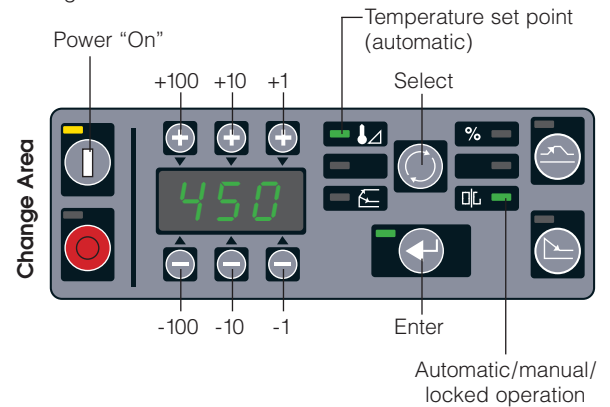
International Interface

Basic Operation



TTC Start Up Procedure

- 1 Dry cycle mold, apply full tonnage, 3-4 times (pinch any wires in advance of operation)
- 2 Turn "On" main disconnect
- 3 Select "All" group.
Change area – select temperature set point.
Enter set point. Press enter.
All zones will be set
- 4 Select "All" group.
Change area – select automatic/manual/locked operation.
Enter "0" for automatic. Press enter.
All zones will be set to automatic
- 5 Select "All" group. Press power "On". Press enter.
Apply power to manifolds first if required by manifold supplier
- 6 Zones will read a low temperature alarm.
Zones are close or holding set point when the green temperature holding set point light is illuminated



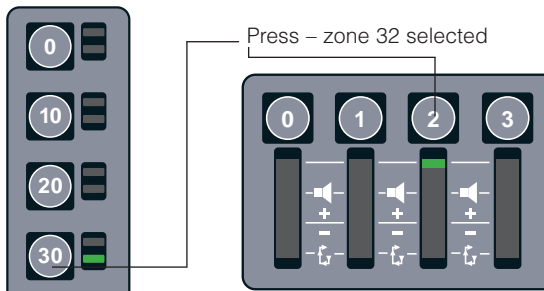
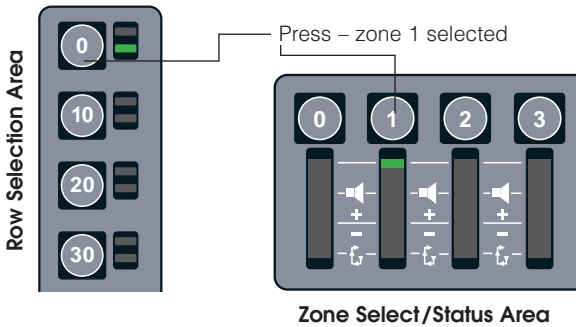
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Sterling, VA USA Tel. +1-(703) 471-5050
 Wiesbaden, Germany Tel. +49-(0)-611-973430
 Ube, Japan Tel. +81-(836) 54-4369
www.gammaflux.com; www.gammaflux.de

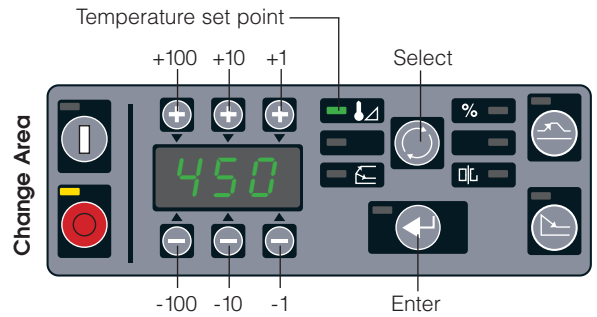
How to Select a Zone



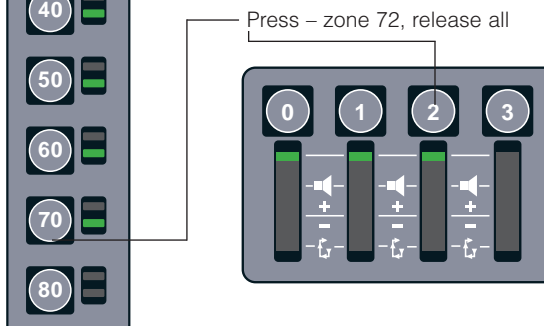
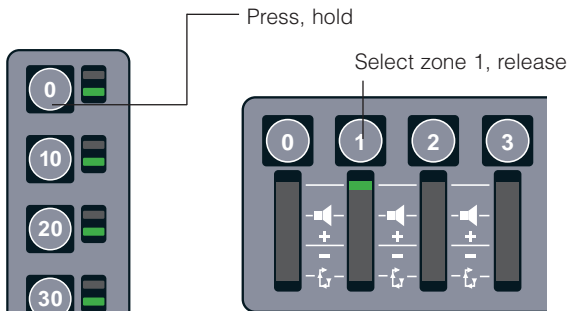
How to Enter a Set Point

Enter Automatic Temperature Set Point

- 1 Select zone(s)
- 2 Select temperature set point (automatic)
- 3 Enter temperature set point
- 4 Press enter to confirm



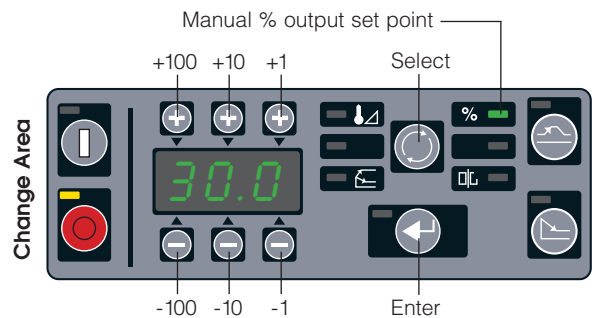
How to Select a Group of Zones



Zones 1 - 72 selected
Make any change to 1 - 72

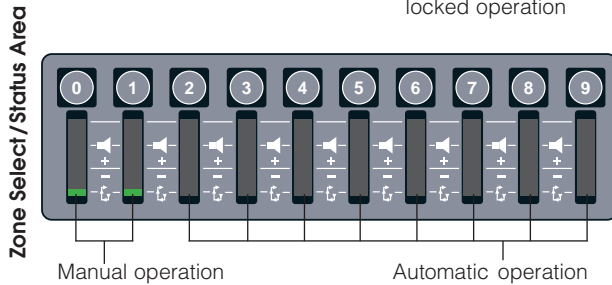
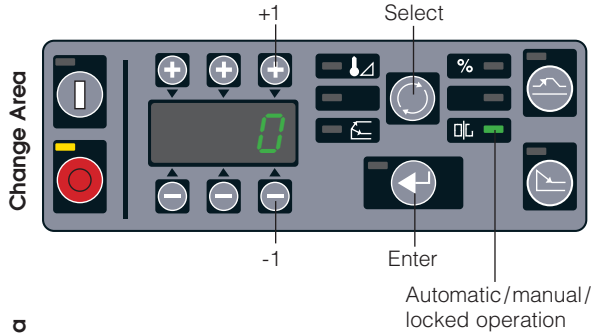
Enter Manual % Output Set Point

- 1 Select zone(s)
- 2 Select manual % output set point
- 3 Enter manual % set point (0-100%)
- 4 Press enter to confirm



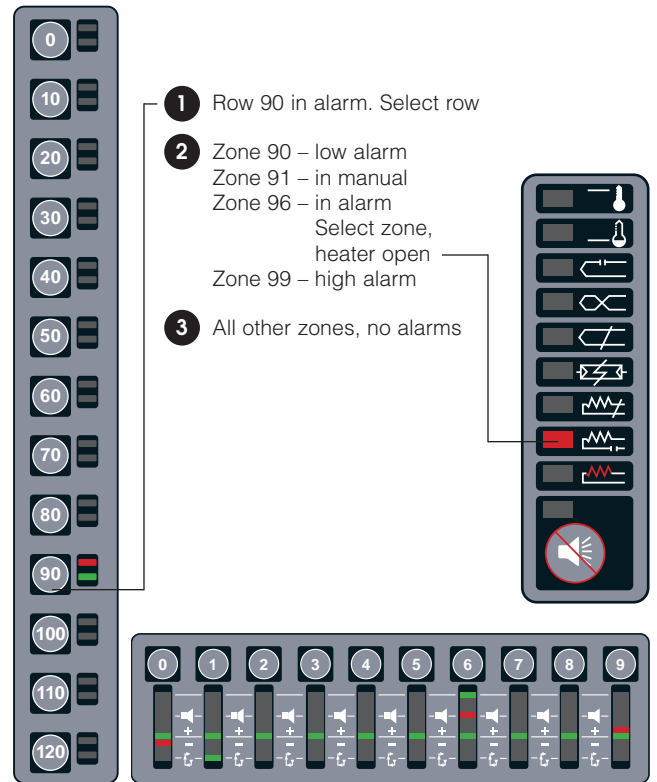
How to Select Automatic or Manual

- 1 Select zone(s)
- 2 Select automatic/manual/locked operation
- 3 Enter "0" for automatic or closed loop control
Enter "1" for manual or open loop control
Enter "2" to lock the zone "Off"
- 4 Press enter to confirm



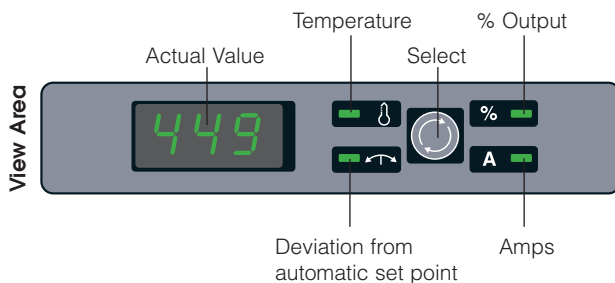
How to View All Zones Quickly

- 1 Row 90 in alarm. Select row
- 2 Zone 90 – low alarm
Zone 91 – in manual
Zone 96 – in alarm
Select zone, heater open
Zone 99 – high alarm
- 3 All other zones, no alarms



How to View the Process Details

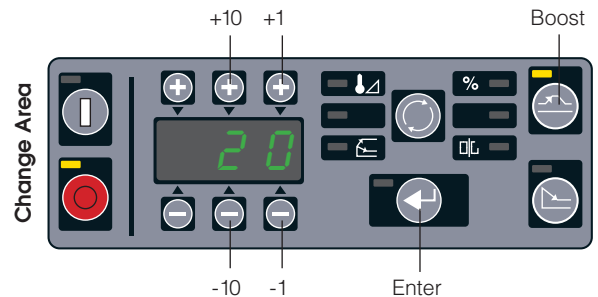
- 1 Select zone to view
- 2 Select item to view



Why Boost? How to Boost

Boost temporarily raises a zone or a group of zones temperature (typically tips) to clear a cold slug on start up

- 1 Select zone(s)
- 2 Press boost. Enter boost amount. Press enter.
- 3 Zone(s) will boost 20°F/11°C (default) for one minute (default)



(To cancel boost, press boost)

Row Selection Area

0 Row selected

10

20 Row in alarm

30

View Area

Temperature

% Output

Actual value

Select

23.2

Deviation from automatic set point

Degree C if lit, Degree F if dark

Amps

Group Selection Area

"All Group" – Selects all zones in the system

"Custom Group" – Stores user zone group. Select zones to save, press custom group button until flashes (5 seconds)

Change Area

Power "On" (Lit when all unlocked zones are "On")

Automatic temperature set point change/view

Manual % output set point, change/view

+100 +10 +1

Select

%

Amps

-100 -10 -1

Enter

Boost – Temporary increase to zone(s) selected. Temperature and time limit adjustable in advanced setup (To cancel boost, press boost)

Standby – (selected zones) Change automatic set point to temperature in advanced setup (220°F/104°C default); cut manual % set point in half. May indicate material protection/standby remote input, see advanced set up. (To cancel standby, press standby)

Power "Off" (Lit when all zones are "Off")

Trim – Permanent, automatic set point change for zone(s) selected, ($\pm 20^\circ\text{F}/11^\circ\text{C}$ default). Select zone(s), enter change amount, all selected zone(s) will change

Automatic/manual/locked operation, change/view

Zone Select/Status Area

Zone selected when lit

0 1 2 3

Alarm for zone when lit. Select zone, check alarm area

High temperature alarm ($+20^\circ\text{F}/11^\circ\text{C}$ default) selectable in advanced setup

Temperature holding set point (automatic) or zone "On" (manual)

Low temperature alarm ($-20^\circ\text{F}/11^\circ\text{C}$ default) selectable in advanced setup

Manual or % operation when lit

Alarm Area

High temperature ($+20^\circ\text{F}/11^\circ\text{C}$ default)

Low temperature ($-20^\circ\text{F}/11^\circ\text{C}$ default)

Thermocouple (T/C) Open – The T/C connection is broken

Thermocouple Reversed – The T/C connection is wired + to - at some point

Thermocouple Pinched – The T/C is pinched or the controller thinks it is pinched. (Default: 100% output, must see $+20^\circ\text{F}/11^\circ\text{C}$ in 5 minutes). True Pinch – Temperature reading too far away to control – runaway. False Pinch – Heater is too small to heat the zone

Open Fuse – Fuse on module bad

Shorted Heater – The heater is shorted or exceeds the maximum rating of the module

Open Heater – The heater connection is broken

Uncontrolled Output – The module has an unregulated output. All zones on module shut "off" automatically

Clear Alarm, turn off light/relay