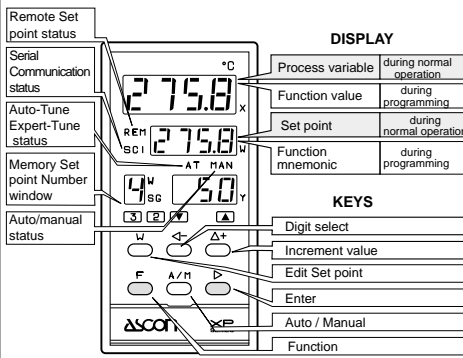
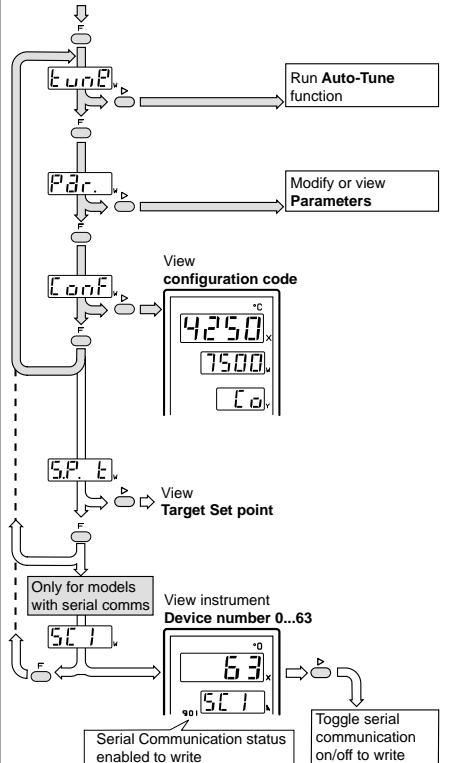


# 8 • OPERATING INSTRUCTIONS • XP SERIES CONTROLLERS

## FUNCTIONS MENU



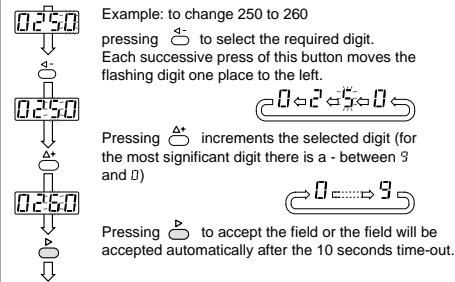
To enter function mode, press **F**



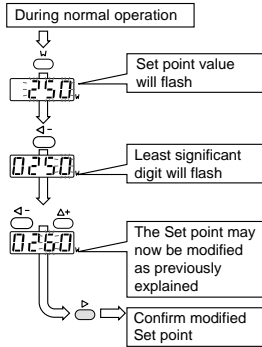
**Note:**  
1 If **F** or **P** is not pressed within 10 seconds the instrument will time-out back to the process variable

## MODIFICATION OF A NUMERIC FIELD

It is possible to modify any numeric field by changing each digit in turn.



## Modify Set Point



**Note:**  
The Set point will be automatically accepted after the 10 seconds time - out.

**Note:**  
After the Set point has been modified the new target Set point will be reached after a period of time, depending upon the values entered in the *sL.u* (Slope up) and *sL.d* (Slope down) gradient parameters.

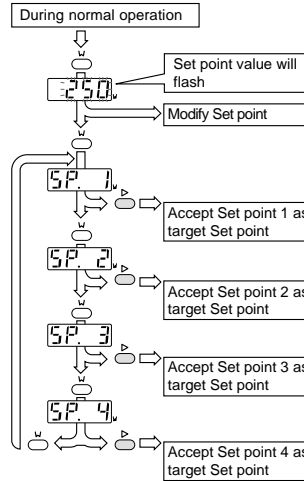
**With Remote Set point we suggest, to set *sL.u* and/or *sL.d* to 0**  
The target Set point can be viewed at any time from the function menu.

Pressing **F** → **SP**, Target Set point

If slope gradient is equal to zero there will be a step change

## SET POINT

### Procedure to recall a Set point from memory

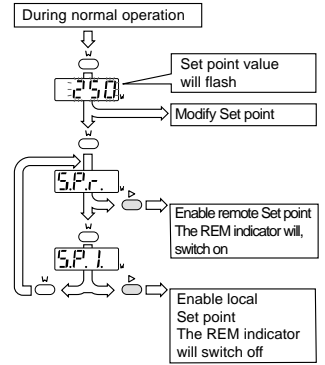


**Note:**  
The above Set points may be modified from the 4<sup>th</sup> group within the parameter menu.

The displayed Set point is only effective from when **P** is pressed.

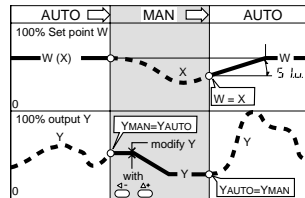
If the target Set point matches any memorised Set point then the Set point memory number will be shown in the memory Set point window.

### Local ↔ Remote

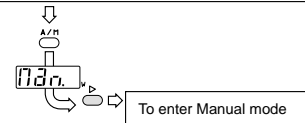


**Note:**  
If a Remote Set point is selected, the instrument will store the Local Set point value shall be re-instated if the Local Set point mode is required

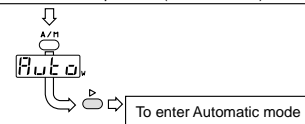
## AUTO-MAN



From normal operation (Auto mode)



From normal operation (Manual mode)



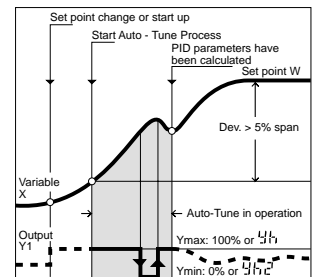
## AUTO-TUNE

Auto-tune should be used when the instrument is first installed to provide approximate values for the P.I.D algorithm. When the auto-tune cycle has been completed, the values for P.I.D will be automatically entered.

It is possible to escape from the auto-tune procedure at any time by pressing any key.

The Auto-tune function is available if the following requirements are met:

1. Parameter *Rt.u* = 1 or 3
  2. The deviation > 5% span
- Auto-tune will function correctly:**
- if the X variable has to increase or decrease
  - if the heat/cool facility is selected the Auto-tune process will calculate the PID parameters for both heat and cool.



From normal operation (Auto mode)

