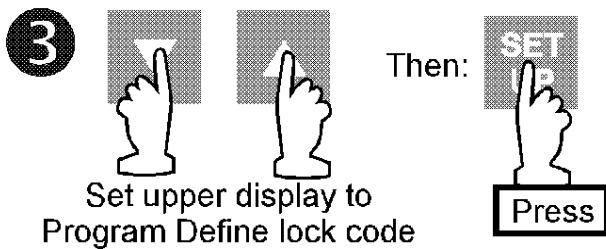
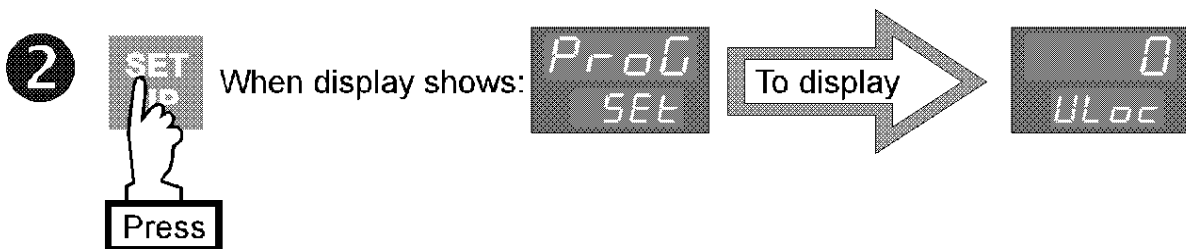
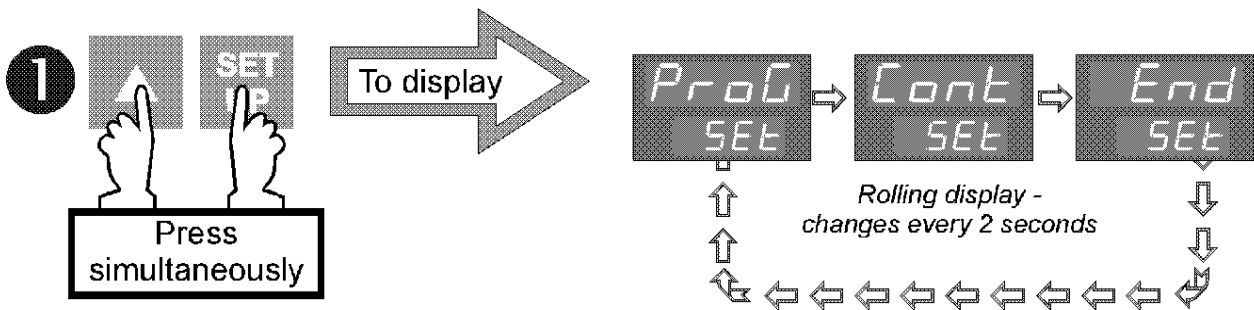


# 3 PROGRAM DEFINITION MODE - CREATING/EDITING A PROGRAM

**NOTE:** Program editing/creation is not possible whilst any program is running or held.

## 3.1 ENTRY

In Base Mode, select the required Program Number (see Subsection 1.1), then:



**NOTE:** If the Program Define Mode lock code has been set to 0, pressing the **SET UP** key in Step 2 will give direct access to Program Define Mode; no entry of lock code is required.

Upon entry into Program Define Mode, the first Segment Definition parameter for Segment 1 of the selected program will be displayed.

## **3.2 CREATING A PROGRAM**

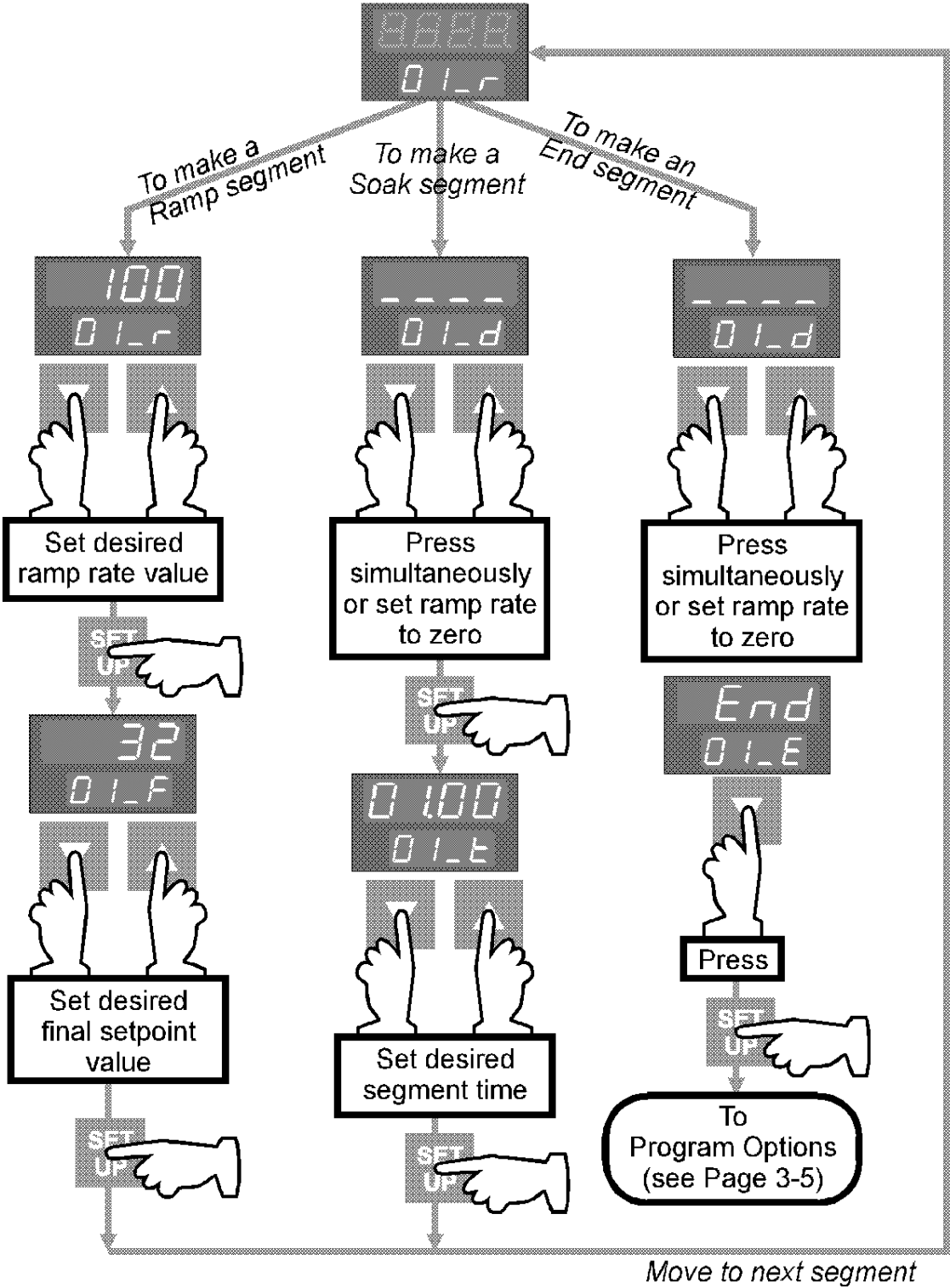
A program is created in two steps:

1. Define the segments of your program; the parameters used depend on what Program Mode has been configured - Rate Mode (see Subsection 3.2.2) or Time Mode (see Subsection 3.2.3). The segment definitions determine whether the selected segment is a Ramp Segment, a Dwell (soak) Segment or an End Segment.
2. Set the required Program Options (see Subsection 3.2.4). These determine:
  - (i) The number of cycles performed by the program,
  - (ii) The timebase to be used (hours/minutes or minutes/seconds)
  - (iii) The width of the Guaranteed Soak Band (if enabled),
  - (iv) The state of the event indicator for each segment in the program,
  - (v) The lock code to be used for subsequent entries into Program Define Mode.

### **3.2.1 Basic Guidelines**

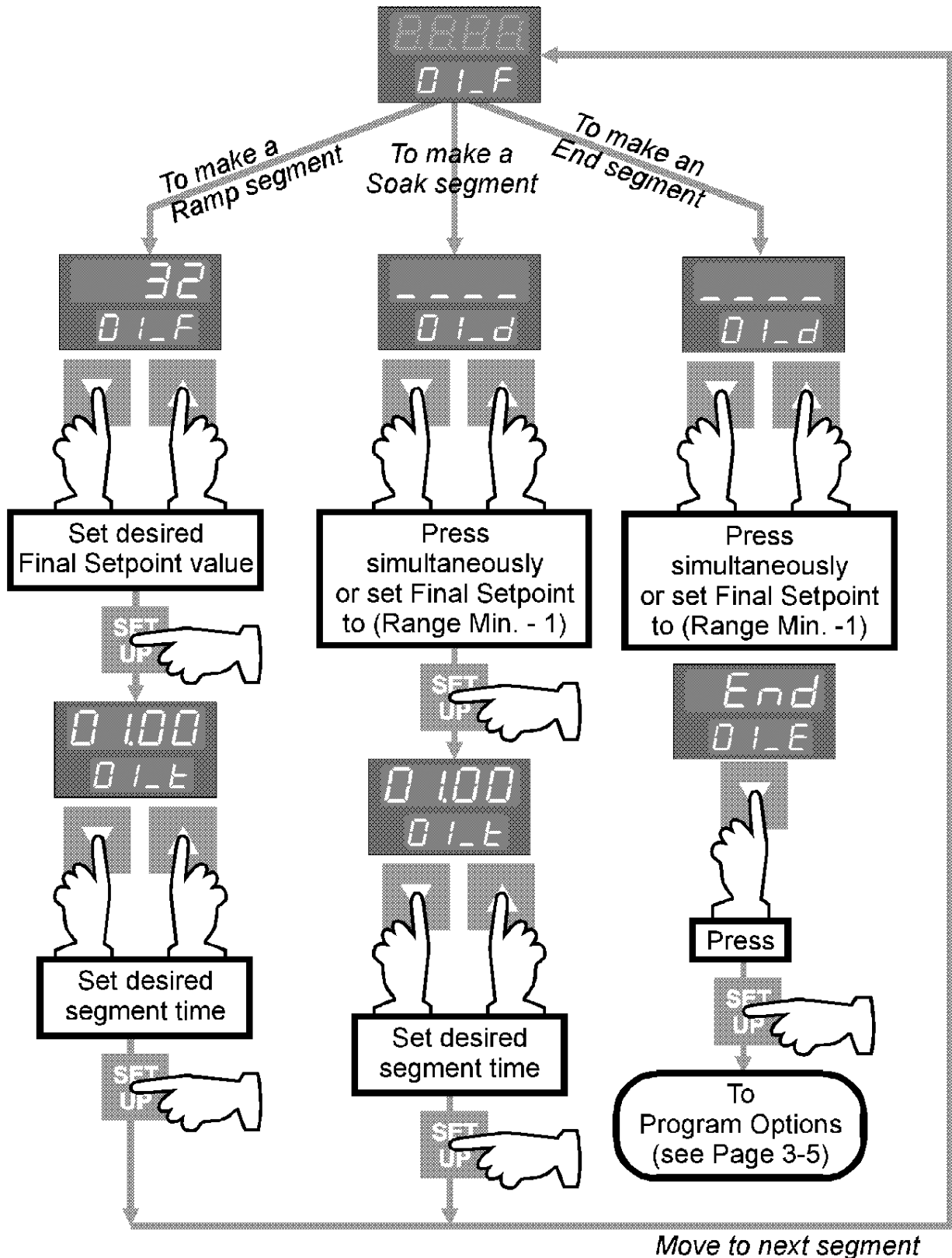
1. The Controller Programmer may contain up to four programs.
2. Each program may comprise up to 16 segments.
3. Each segment may be:
  - (a) a Ramp Segment (setpoint changing at a defined rate or between the initial value and a pre-determined final value over a defined time),
  - (b) a Dwell Segment (setpoint constant for a defined time,) or
  - (c) an End Segment (marking the end of the program).
4. A program may contain only one End Segment (the last segment in the program).
5. If the program comprises 16 segments, Segment 16 is automatically an End Segment.

### 3.2.2 Defining Segments - Rate Mode

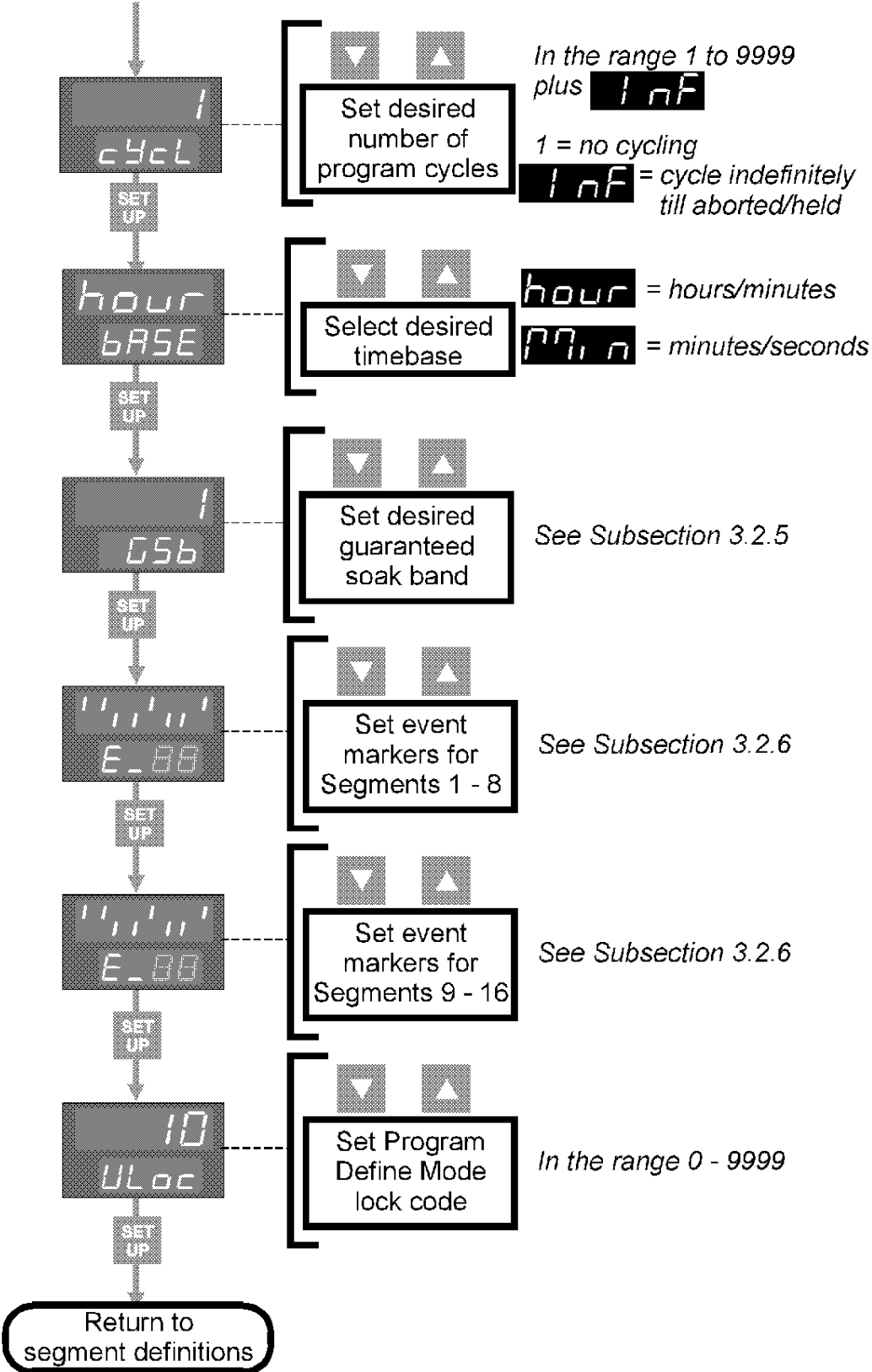


NOTE: Ramp rate is in units/hour if **BASE = hour**  
 Ramp rate is in units/minute if **BASE = min** } See Subsection 3.2.4

### 3.2.3 Defining Segments - Time Mode



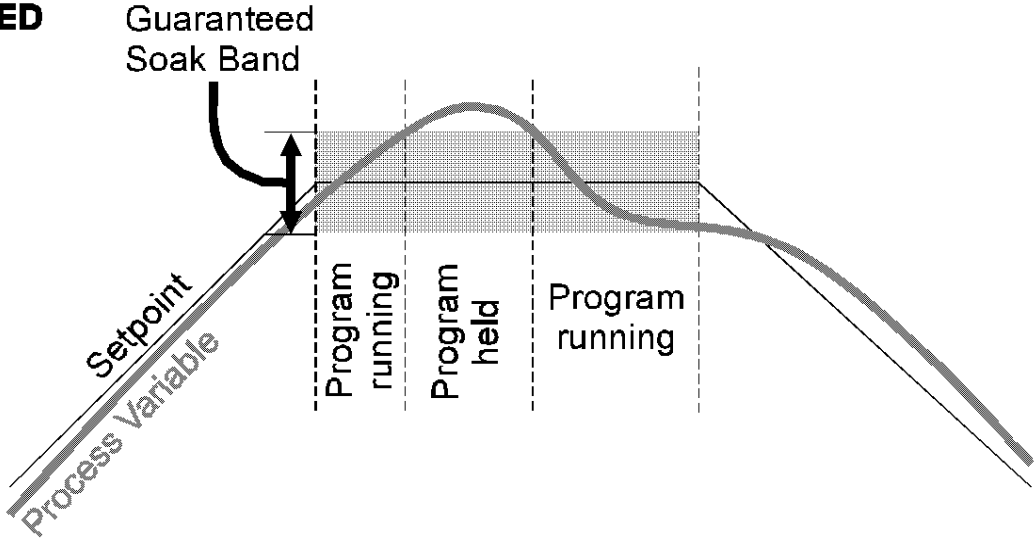
### 3.2.4 Program Options



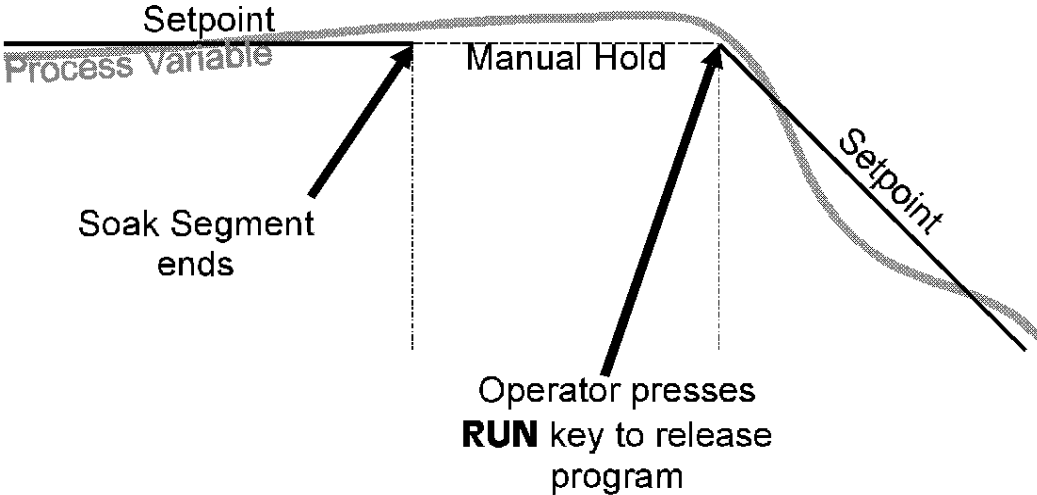
### 3.2.5 Guaranteed Soak Band

The Guaranteed Soak Band is applicable to sOAK segments only and operates as follows (depending on whether Guaranteed Soak has been enabled or Manual Guaranteed Soak has been configured):

#### **GUARANTEED SOAK ENABLED**



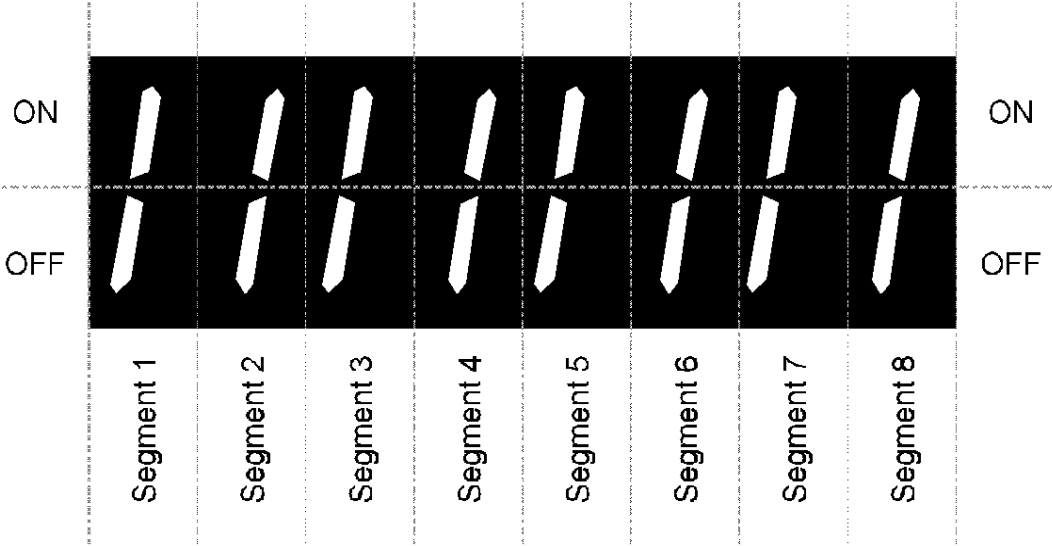
#### **MANUAL GUARANTEED SOAK**



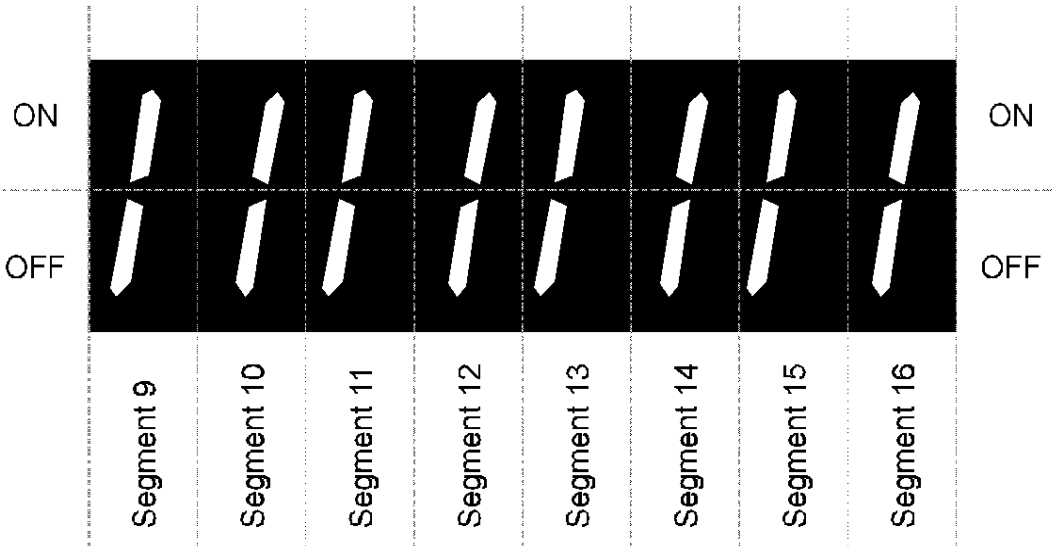
### 3.2.6 Segment Event Status

For every segment in a program there is an event indicator. This may be set ON or OFF for that segment. The status for the segments in the currently-selected program appears in the following form in the upper display:

DISPLAY 1

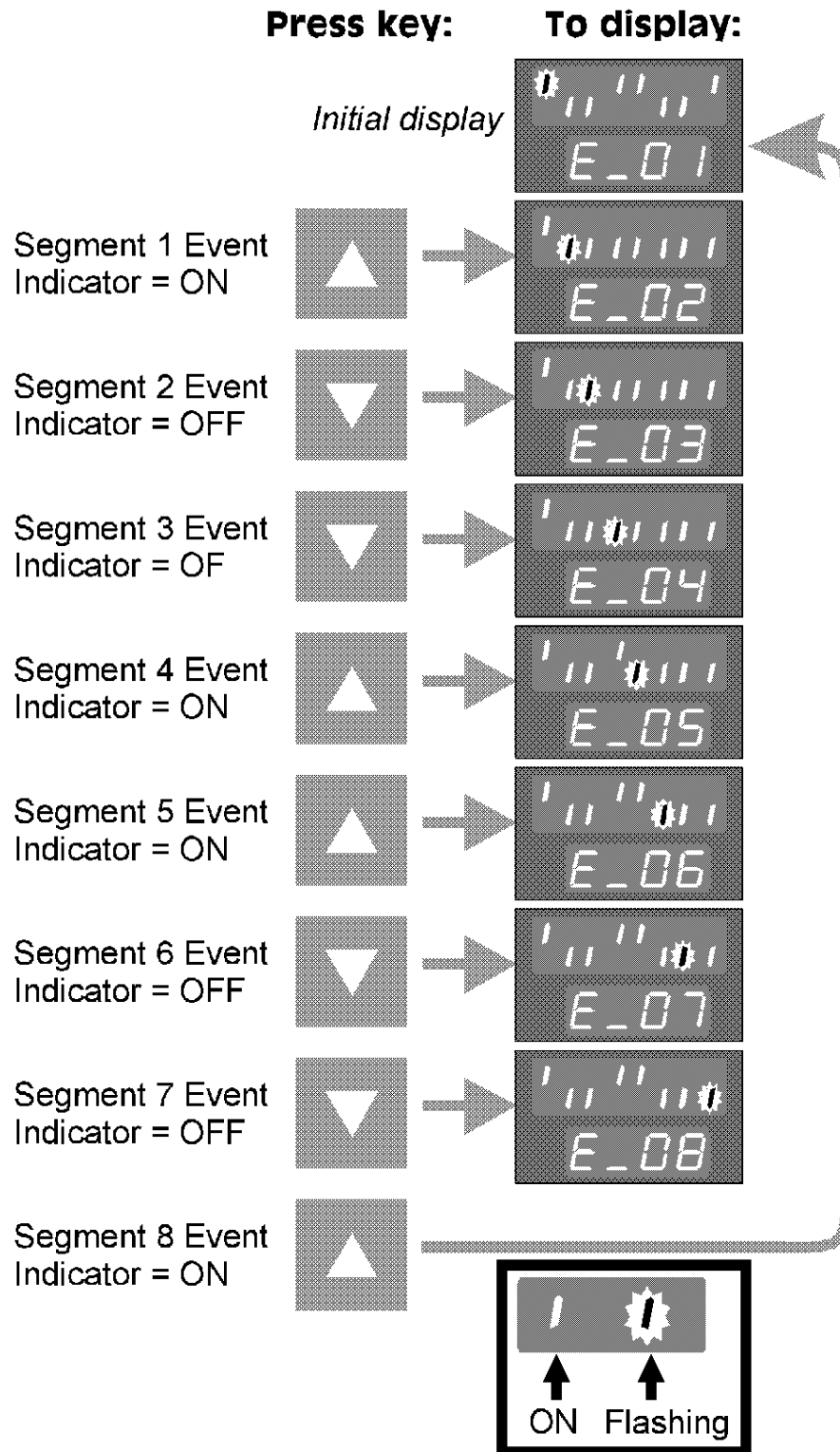


DISPLAY 2



The first display shows the current event status for Segments 1 - 8 and the second display shows the current event status for Segments 9 - 16. Each event marker may be set ON (Up key) or OFF (Down key) in order of segment number. Only the event indicators for the segments in the program are displayed. If the program has less than 16 segments (including the End Segment), the non-applicable display positions are blank; if the program has eight segments or less, the second display is not

included.. The lower display shows the current segment number. Thus, the key sequence to define the event markers for Segments 1 - 8 could be:

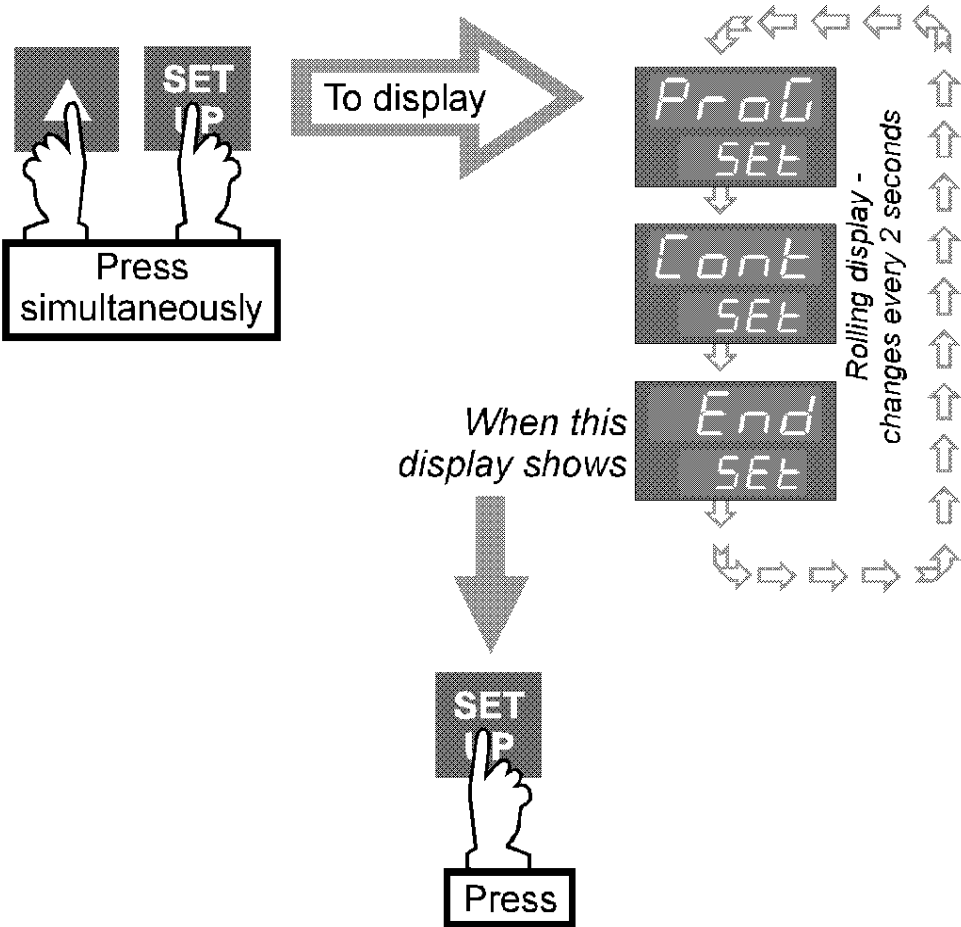


Pressing the **SET UP** key would then display the event markers for Segments 9 - 16 (as applicable), which could be defined in a similar manner.

### 3.3 DEFAULT VALUES AND ADJUSTMENT RANGES

Parameter	Range Minimum	Range Maximum	Default
Ramp Rate	0 = Soak segment -1 = End segment	9999, then INF	100
Final (End of Ramp) Setpoint	Range Minimum	Range Maximum	Range Minimum
Segment Time	00:00	99:59	01:00
Number of Cycles	1	9999 then INF	1
Guaranteed Soak Band	1	Span plus OFF	OFF

### 3.4 EXIT FROM PROGRAM DEFINE MODE



A return is then made to the normal Base Mode display.