



## SETTING OF TIMER FUNCTIONS :

| Time range                                                                                                  |                                                      | Default : 999.9 sec |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------|
|                                                                                                             | <b>Time ranges :</b><br>99.99sec, 999.9sec, 9999sec, |                     |
|                                                                                                             | 99:59min:sec ,<br>999.9min, 9999min,                 |                     |
|                                                                                                             | 99:59hr:min,<br>999.9hr, 9999hr.                     |                     |
|                                                                                                             |                                                      |                     |
| <b>Relay1 operating mode :</b><br>ON Delay / Interval /<br>Cyclic ON first /<br>Cyclic OFF first.           |                                                      |                     |
| <b>NOTE :</b><br>Refer waveforms<br>for details.                                                            |                                                      |                     |
| <b>Relay2 operating mode:</b><br>ON Delay / Interval /<br>Cyclic ON first /<br>Cyclic OFF first /<br>Batch. |                                                      |                     |
| <b>NOTE :</b><br>Refer waveforms<br>for details.                                                            |                                                      |                     |

|                                                                                                                                                                   |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Front panel batch reset :</b> Yes / No.<br><b>Yes :</b> Batch value can be reset from front panel.<br><b>No :</b> Batch value cannot be reset from front panel |  |
| <b>Batch reset :</b> Yes and No.<br><b>Yes :</b> Batch value is reset immediately.<br><b>No :</b> Batch value is not reset.                                       |  |
| <b>Front panel reset :</b> Yes / No.<br><b>Yes :</b> Unit can be reset from the front panel.<br><b>No :</b> Unit cannot be reset from the front panel.            |  |
| <b>Power on reset ranges :</b> Yes / No.<br><b>Yes :</b> Unit is reset on power interruption.<br><b>No :</b> Unit is not reset on power interruption.             |  |
| <b>Reset all parameters to default :</b> Yes / No<br><b>Yes :</b> All parameters are set to factory set values. All set points are set to 0.                      |  |

## PROGRAMMING - TIMER

→ **Temporary display :**  
 Lower display shows parameter name for 1sec. and then its value.

Enter programming as per the given procedure.  
**To program set points :**  
 Press to select the digit.  
 The selected digit blinks. Press key to change its value. Press key to go to the next parameter (if applicable). If the edited parameter is the last parameter, the unit will quit programming.

## To select lower display options :

Press key to select particular option and then press key to quit programming.

## To select reset option :

Press key to select particular option and then press key for 1.5 sec to quit programming.

## 1. Programming for Set point1 :

|                                                                      |                                                                     |
|----------------------------------------------------------------------|---------------------------------------------------------------------|
| for 1.5 sec to Enter Set1 programming. (Auto program out after 2min) | Applicable when Relay1 in On delay / Interval mode.                 |
|                                                                      | Set point 1<br>                                                     |
|                                                                      | Applicable when Relay1 in Cyclic mode.                              |
| Default : 10sec.                                                     | Start Time  ON Time  OFF Time<br>* * * Exit Set point 1 programming |

## 2. Programming for Set point2 :

|                                                                      |                                                                     |
|----------------------------------------------------------------------|---------------------------------------------------------------------|
| for 1.5 sec to Enter Set2 programming. (Auto program out after 2min) | Applicable when Relay2 in On delay / Interval mode.                 |
|                                                                      | Set point 2<br>                                                     |
|                                                                      | Applicable when Set2 in Cyclic mode.                                |
| Default : 9sec.                                                      | Start Time  ON Time  OFF Time<br>* * * Exit Set point 2 programming |
|                                                                      | Applicable when Set2 in Batch mode.                                 |
|                                                                      | Set point 2<br>                                                     |

## 3. Programming for Lower display options :

|                                                                                          |                                              |
|------------------------------------------------------------------------------------------|----------------------------------------------|
| for 1.5 sec to Enter programming for Lower display options (Auto program out after 2min) | Batch  Set point 1<br>* * * Exit programming |
|------------------------------------------------------------------------------------------|----------------------------------------------|

## 4. Programming for Reset :

|                                                   |                    |
|---------------------------------------------------|--------------------|
| for 1.5sec. to Enter / Exit programming for reset | Reset  Batch reset |
|---------------------------------------------------|--------------------|

**NOTE :** \* sign indicates that the display blinks.

## Read Function

→ **Temporary display :**  
 Lower display shows parameter name for 1sec and then its value.

## 1. Reading of set1 parameters

|                                                                                                             |                                                   |
|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| momentarily each time to read set 1 value. Auto exit from Read function if key is not pressed within 3 sec. | Applicable when Set1 in On delay / Interval mode. |
|                                                                                                             | Set point 1<br>                                   |
|                                                                                                             | Applicable when Set1 in Cyclic mode.              |
|                                                                                                             | Start time  ON time  OFF time<br>* * *            |

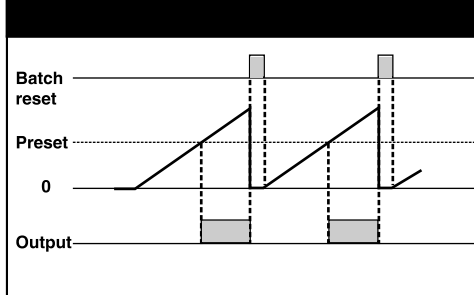
## 2. Reading of set2 parameters

|                                                                                                             |                                                   |
|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| momentarily each time to read set 2 value. Auto exit from Read function if key is not pressed within 3 sec. | Applicable when Set2 in On delay / Interval mode. |
|                                                                                                             | Set point 2<br>                                   |
|                                                                                                             | Applicable when Set2 in Cyclic mode.              |
|                                                                                                             | Start time  ON time  OFF time<br>* * *            |
|                                                                                                             | Applicable when Set2 in Batch mode.               |
|                                                                                                             | Set point 2<br>                                   |

## 3. Reading Batch

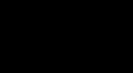
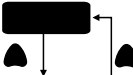
|                                                                                                   |                                                            |
|---------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| momentarily to read batch value. Auto exit from Read function if key is not pressed within 3 sec. | 4 digit Batch  6 digit Batch                               |
|                                                                                                   | 6 digit batch can be read with 2MSDs on the upper display. |

**NOTE :** When viewing 6 digit batch value, lower display LSD dp blinks and batch value is displayed for 3 sec.  
 If lower display is selected as batch and batch value exceeds 4 digits, the lower display LSD dp is on continuously indicating that the batch value has exceeded 4 digits.



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                       |
| ↓                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                       |
| <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>Scale factor</b><br><b>Exponent :</b><br>0 / 1 / 2 / -3 / -2 / -1. |
| ↓                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                       |
| <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div>                      | <b>Resolution :</b><br>1 / 0.1 / 0.01 / 0.001.                        |
| ↓                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                       |
| <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; width: 100px; margin-bottom: 5px; text-align: center;">*</div> | <b>Speed :</b><br>3Hz / 30Hz / 5KHz.                                  |

|  |                                                                                                                                                                                                                                         |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>Direction :</b><br/>Up and Down</p> <p><b>Up :</b> Counting starts from 0 and proceeds towards set point.</p> <p><b>Down :</b> Counting starts from set point and proceeds down to 0.</p>                                         |
|  | <p><b>Relay1 operating mode :</b><br/>ON delay / Interval.</p> <p><b>NOTE :</b><br/>Refer waveforms for details.</p>                                                                                                                    |
|  | <p><b>Relay2 mode ranges :</b><br/>ON delay / Interval / Batch.</p>                                                                                                                                                                     |
|  | <p><b>Run mode ranges :</b><br/>Overrun / Non overrun.</p> <p><b>Overrun :</b> Counter continues counting above the set point.</p> <p><b>Non Overrun :</b> Counter does not count any pulses received after reaching the set point.</p> |
|  | <p><b>Operating mode ranges:</b><br/>Delay / Auto reset / Time pulse repeat.</p> <p><b>NOTE :</b><br/>Refer waveforms for details.</p>                                                                                                  |

|                                                                                     |                                                                                     |                                                                                                                                                                              |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  | <p><b>Front panel batch reset :</b> Yes / No.<br/> <b>Yes :</b> Batch value can be reset from front panel.<br/> <b>No :</b> Batch value cannot be reset from front panel</p> |
|  |  | <p><b>Batch reset :</b> Yes and No.<br/> <b>Yes :</b> Batch value is reset immediately<br/> <b>No :</b> Batch value not is reset</p>                                         |
|  |  | <p><b>Front panel reset :</b> Yes / No.<br/> <b>Yes :</b> Unit can be reset from the front panel<br/> <b>No :</b> Unit cannot be reset from the front panel</p>              |
|  |  | <p><b>Power on reset ranges :</b> Yes / No.<br/> <b>Yes :</b> unit is reset at power ON.<br/> <b>No :</b> Unit is not reset at power ON.</p>                                 |
|  |  | <p><b>Reset all parameters to default :</b> Yes &amp; No<br/> <b>Yes :</b> All parameters are set to factory set values. All set points are set to 0.</p>                    |

**NOTE :** \* sign indicates that the display blinks.

## PROGRAMMING - COUNTER

**Temporary display :**  
Lower display shows parameter name for 1sec. and then its value.

Enter programming as per the given procedure.

### To program set points :

Press **[Enter]** to select the digit. The selected digit blinks.  
Press **[Up]** / **[Down]** key to change its value. Press **[Enter]** key to go to the next parameter (if applicable). If the edited parameter is the last parameter, the unit will quit programming.

### To select lower display options :

Press **[Up]** / **[Down]** key to select particular option and then press **[Enter]** key to quit programming.

### To select reset option :

Press **[Up]** / **[Down]** key to select particular option and then press **[Enter]** key for 1.5 sec to quit programming.

## 1. Programming for Set point 1 :

|                                                                                                                                                            |                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>[Enter]</b> for 1.5 sec to Enter / Exit online programming for Set1.<br>(Auto program out after 2min)<br><br><b>Default : 100 AR / TPR time = 10sec</b> | Applicable when Set1 in On delay / Interval mode.                     |
|                                                                                                                                                            |                                                                       |
|                                                                                                                                                            | Applicable when Set1 in On delay / Interval mode + Auto reset mode.   |
|                                                                                                                                                            |                                                                       |
| <b>Default : 100 AR / TPR time = 10sec</b>                                                                                                                 | Applicable when Set1 in On delay / Interval mode + Time Pulse Repeat. |
|                                                                                                                                                            |                                                                       |

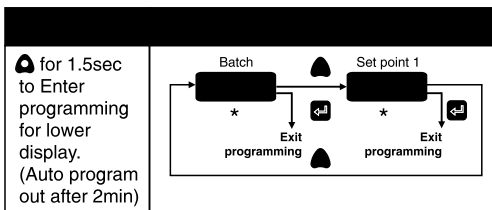
## 2. Programming for Set point 2 :

**Note :** Set2 should always be less than Set1, except when Set 2 is in Batch mode.

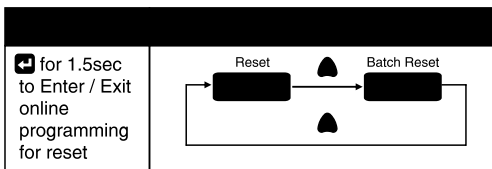
|                                                                                                                                      |                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>[Enter]</b> for 1.5 sec to Enter / Exit online programming for Set2.<br>(Auto program out after 2min)<br><br><b>Default : 90.</b> | Applicable when Set2 in On delay / Interval mode. |
|                                                                                                                                      |                                                   |
|                                                                                                                                      | Applicable when Set2 in Batch mode.               |
| <b>Default : 90.</b>                                                                                                                 |                                                   |

**NOTE :** \* sign indicates that the display blinks.

## 3. Programming for Lower display options.



## 4. Programming for Reset.



## Read Function

**Temporary display :**  
Lower display shows parameter name for 1sec and then its value

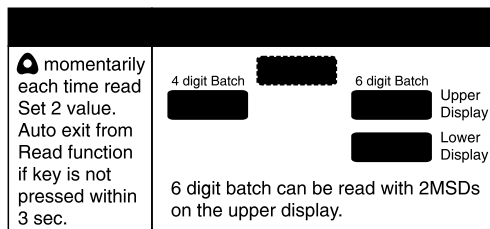
## 1. Reading of set1 parameters

|                                                                                                                                  |                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>[Enter]</b> momentarily each time to read Set1 value.<br><br>Auto exit from Read function if key is not pressed within 3 sec. | Applicable when Set1 in On delay / Interval mode.                     |
|                                                                                                                                  |                                                                       |
|                                                                                                                                  | Applicable when Set1 in On delay / Interval mode + Autoreset mode.    |
|                                                                                                                                  |                                                                       |
| <b>Default : 100 AR / TPR time = 10sec</b>                                                                                       | Applicable when Set1 in On delay / Interval mode + Time Pulse Repeat. |
|                                                                                                                                  |                                                                       |

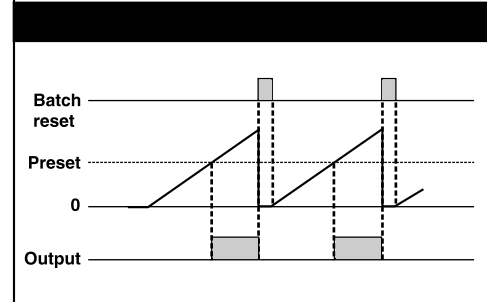
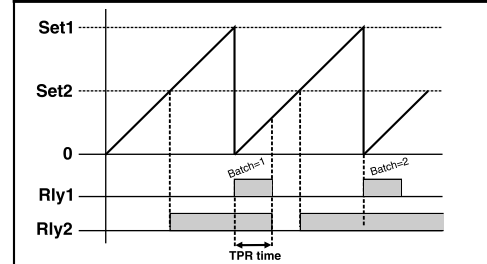
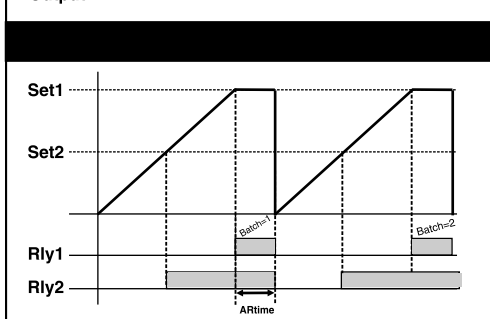
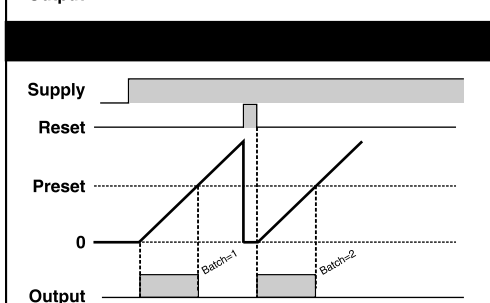
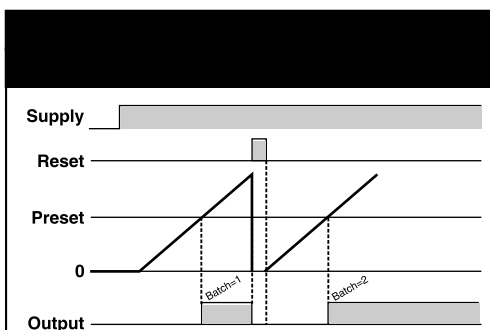
## 2. Reading of set2 parameters

|                                                                                                                               |                                                   |
|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <b>[Enter]</b> momentarily each time to read Set 2 value.<br>Auto exit from Read function if key is not pressed within 3 sec. | Applicable when Set2 in On delay / Interval mode. |
|                                                                                                                               |                                                   |

## 3. Reading Batch



**NOTE :** When viewing 6 digit batch value, lower display LSD dp blinks and batch value is displayed for 3 sec. If lower display is selected as batch, and batch value exceeds 4 digits, the lower display LSD dp is on continuously indicating that the batch value has exceeded 4 digits.



(Specifications subject to change as development is a continuous process.)

## Selec Controls Pvt. Ltd., India

**Factory Address :**  
EL-27/1, Electronic Zone, TTC Industrial Area,  
MIDC, Mahape, Navi Mumbai - 400 710, INDIA.  
Tel. No. : +91-22-28476443 / 1882  
Fax No. : +91-22-28471733 | Toll free : 1800 227 353  
Website: [www.selec.com](http://www.selec.com) | Email: [sales@selec.com](mailto:sales@selec.com)

Disclaimer : "This product is strictly for industrial use and for sale in non European countries only"