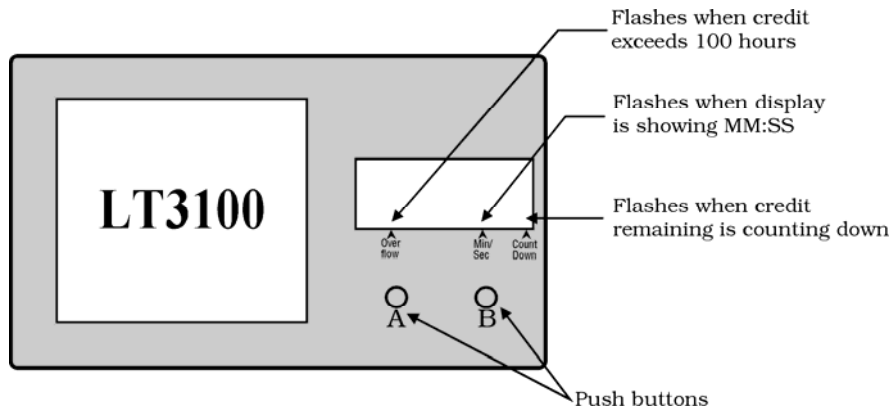


# LT3100 Operating Sheet – Issue 5

This meter is a coin/token operated electronic timer for the control of leisure based electrical appliances, e.g. lighting, solarium.



## Switch on power

On power up the meter will briefly show 'Pxx.x' then the credit remaining on the meter.

## To operate meter

Insert coin/token. The display will briefly show 'Coin'. The display will then show the remaining credit. If the credit is greater than one hour it will be displayed in hours & minutes, e.g.; 2 hours will be displayed as '02:00'. If the credit is less than one hour it will be displayed in minutes & seconds, e.g.; 40 minutes will be displayed as '40:00' and an indicator will flash on the display to show this.

## Collector functions

### Resettable Money (Token) Counter

When the coin box becomes full, the message 'COLL' (collect) is displayed.

Upon removal of the coin box the display will automatically show the resettable money counter. This will show how much money has been inserted into the meter since the last collection.

When the coin box is reinserted, the money counter will automatically zero before displaying the remaining credit.

Note: To prevent the money counter from zeroing, insert the coin box with 'B' pressed.

## Service Mode

To access service mode remove the coin box, press and release switch 'B' until the display changes to 'St.01'.

The service mode consists of 10 settings.

01	Credit per coin/token	(HH.MM.SS)
02	Credit per coin/token	(HH.MM.SS)
03	Total money	(Read only)
04	Total credit	(Read only)
05	Pre-start	(MM.SS)
06	Run-on	(MM.SS)
07	Pre-end	(MM.SS)
08	Maximum Credit	(HH.MM.SS)
09	Totalise value	(£'s & Pence)
10	Totalise credit value	(HH:MM)

Press and release 'B' to step to the desired setting number.

When the required number is showing on the display press and release 'A' to display the current setting. Press and release 'A' to select the digit to be changed then press and release 'B' to alter that digit.

- 01      Credit Per Coin 1  
Sets the amount of credit given by a 1 pound coin or token (except L1 token). Set in HH.MM or MM.SS  
(When the meter is set in single coin or Totalise + Top Up mode).
- 02      Credit Per Coin 2  
Sets the amount of credit given by a 1€, 50c, 10p, 20p coin or L1 token. Set in HH.MM or MM.SS  
(When the meter is set in single coin or Totalise + Top Up mode)
- 03      Total Money  
Displays the total amount of money/tokens inserted since the last factory reset.  
This is a read only display and cannot be changed.
- 04      Total Credit  
Displays the total amount of credit given since the last factory reset.  
This is a read only display and cannot be changed.
- 05      Pre-start  
Sets the amount of time given before main session begins (entering zero disables this feature). Set in MM.SS
- 06      Run-on  
Sets the amount of time the meter operates after session has finished (entering zero disables this feature). Set in MM.SS
- 07      Pre-end  
Sets the time in which a warning is given before the session ends (entering zero disables this feature). Set in MM.SS
- 08      Maximum Credit  
Sets the maximum amount of credit to be given at any one session (activated by pressing the start button 'A'). Set in HH.MM or MM.SS depending on the configuration number (entering zero disables this feature).
- 09      Totalise Value  
Sets the amount of money which needs to be inserted before any credit is given, e.g. £1:20.
- 10      Totalise Credit Value  
Sets the amount of credit given when the correct amount of money is inserted

### **To Clear Credit Remaining**

Remove coin box. Display will show re-settable money counter.

Press and release switch B, display will show 'Clr'. Press 'A' & 'B' together and credit will be cleared.

Note: If already in service mode, the display must be returned to show 'Clr' before this feature can be used (Press and release 'B' until 'Clr' is shown).

### **Credit Save LT3100S only**

Credit save is activated by the customer by pressing switch 'STOP'. This will suspend the credit countdown and turn off the output to the load. The word 'HELD' will be displayed. To resume the countdown and reconnect the load, press switch 'START'.

### **Override or Settings Disable Key Switch LT3100K only**

Option A: When the override key is inserted and turned, the load will switch on and the word 'FrEE' will be displayed. This action will also clear any remaining credit from the meter.

Option B: The internal settings, St.01 to St.10 can only be changed when the key switch is operated.  
This prevents unauthorised access to the meter settings.

## Error Messages

<b>Error (Er.xx)</b>	<b>Description</b>
01	Opto 1 (£1) detected an object not conforming to the required parameters. <sup>1</sup>
02	Opto 2 (20p) detected an object not conforming to the required parameters. <sup>2</sup>
03	IIC communication error talking to the non-volatile memory. <sup>3</sup>
04	Not used – Now replaced with ‘Sync’ message. See below. <sup>4</sup>
05	Opto 1 validated but meter is configured as a 10p or 20p only. <sup>5</sup>
06	Opto 2 validated but meter is configured as a £1 only. <sup>6</sup>
07	Opto 1 validated but St.01 is zero. <sup>7</sup>
08	Opto 2 validated but St.02 is zero. <sup>8</sup>
09	Configuration number 1 (CFG.1), digit 2 is zero. <sup>9</sup>
10	Meter configured in Totalise or Totalise + Top Up mode but St.09 is zero. <sup>10</sup>
11	Totalise + Top Up on £1 only (or token) meter but St.09 has pence value. <sup>11</sup>
12	St.09 set with odd 10p on 20p meter. E.g. set to £1.50. <sup>12</sup>

**If any of the error messages 13 – 19 are encountered please contact the LCS technical department.**

13	System Error – Mode routine entered with invalid ‘mode’ value.
14	System Error – Temp_mode routine entered with invalid ‘Temp_mode’ value.
15	System Error - ‘_Add_Mc’ entered with zero ‘Coin Value’.
16	System Error – IIC routines internal error.
17	Network circuitry not responding.
18	Unable to communicate with the RTC
19	Unable to communicate with the Card Interface
24	Incorrect meter ID.ie Wrong card for meter
25	Unknown card Type
26	Set-up card entered but meter not PS disabled.
27	Card out of date.

SynC Formerly Er.04 – Software re-synchronising with the 50Hz signal.<sup>4</sup>

### Notes:

- 1 Opto 1 is the coin sensor used to validate £1 coins, L2 & L4 tokens. If the sensor detects that the coin is the wrong size it will show the error message.
- 2 Opto 2 is the coin sensor used to validate 20p, 10p, €1 & 50c coins or L1 tokens. If the sensor detects that the coin is the wrong size it will show the error message.
- 3 This is usually caused by a faulty component (IC4).
- 4 The meter has sensed that the mains supply has been switched off/on. This message is only normally displayed for a second as the meter is switched on or off. If the message is being displayed intermittently there may be a loose connection around the PSU PCB area of the meter.
- 5 Use CFG.1 – digit 1 to set the meter up for the correct coinage.
- 6 Use CFG.1 – digit 1 to set the meter up for the correct coinage.
- 7 Set a value in St.01.
- 8 Set a value in St.02.
- 9 Digit 2 of CFG.1 must contain a value.
- 10 Set a value in St.09.
- 11 Change St.09 to show whole pounds (or tokens) e.g; 02.00.
- 12 Change St.09 to an even number, e.g; 01.60.
- 24 Need correct card to ‘top-up’ PS credit.
- 25 Wrong type of card or damage to card or card reader – may need to contact supplier.
- 26 Wrong card inserted, Set-up card instead of PS Credit card.
- 27 Card needs more credit added (credit expired) or meter has been updated with credit by a newer card.

This page is intentionally left blank