



**Stephen P. Wales Ltd**

The Old Brewery Works, Lr Ellacombe Church Rd,  
Torquay. UK. TQ1 1JH  
Tel: 01803 295430 Fax: 01803 212819  
email: sales@stephenwales.co.uk

# 'TIM3100' MANUAL

FOR SETTINGS AND CONFIGURATION

Issue 2.0

For Meter Software Ver 6.3



Printed on Recycled Paper

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# The LT3100

## What's New in Software Version 6.3?

Software version 6.3 supersedes version 6.1. (Version 6.2 was never released for production models).

Additional features of 6.3: -

- 1) The 'Clear Credit' function now clears the Pre-Start time. See 'Clear Credit Remaining' for full details.
- 2) When the 'Pre-start' is enabled, the display will now show the accumulated credit for 4 seconds after the insertion of a valid coin/token, before displaying the Pre-Start countdown. Subsequent coins/tokens entered during the Pre-Start period will also show the accumulated credit before returning to the Pre-start countdown.
- 3) When the 'Start Button' is enabled, credit added whilst the Run-On period is in operation will now be held (waiting for the Start button to be pressed) while the Run-On period continues to run.

## What is the LT3100?

The LT3100 is an updated 'Leisuretime' meter and will be known as the LT3100.

The stock number of this meter will be 'LT3100' as opposed to just '3100' for the existing Leisuretime. (3100K becomes LT3100K etc.)

All the functions of the 'Leisuretime' meter are still present, although some will be achieved in a different manner.

## LT3100 Software

Features available with 6.x software: -

- 1) **Pre time** (Optional)  
An extra timed period that runs before the start of main session. This gives the customers time to prepare before using a shower, sunbed, etc.
- 2) **Remote Start / Stop button** (Optional)  
A separate unit equipped with two buttons which can be connected to the meter to give remote start and emergency stop functions.
- 3) **View ST.03 & St.04 with coin box in**(Optional)  
Push button operation on the front of the meter allows ST.03 & St.04 to be viewed without removing the coin box.
- 4) **Clear Credit Remaining** (Optional)  
Any remaining credit will be cleared when the meter is powered off and on again and after an emergency stop via the Remote Start/Stop buttons.

- 5) **'Add credit' push button** (Optional)  
Allows the meter to be used as a control timer. Press a button on the front of the meter to load one credit per coin value into the credit remaining register.
- 6) **Start button** (Optional)  
Holds countdown when credit is first entered until pressed. Also allows any remaining pre-time to be cancelled.
- 7) **Token validation on either opto.**  
Prevents hardware modification currently required on some tokens models.
- 8) **Flexible Relay configuration**  
Allows either relay to operate during any period.
- 9) **View Run-On period** (Optional)  
Allows display of the Run-On countdown.
- 10) **N.C. override key switch** (Optional)  
Select if a N.C. (Normally Closed) key switch is used.
- 11) **Setting lockout** (Optional)  
The setting lockout feature can now be selected with any mode of operation, not just Run-Thro fan.
- 12) **Improved memory saving**  
Improved memory saving routines prevents credit used returning to the meter if the meter fails to store during powerdown due to interference.
- 13) **Improved setting operation**  
Display full value and flashes digit to change.
- 14) **Additional display messages**  
New messages to indicate Totalise amount required, Pre-start, Run-on etc. (See TEXT MESSAGES for full details)

## **Hardware/mechanical**

- 1) **New PSU board**  
To accept remote start/stop button input.
- 2) **New Fascia design**  
Customised label to sit under the fascia to give better appearance and durability.
- 3) **New Rating label**  
Model number no longer shown. LT3100 numbers to start from 10,000



## Settings 1 to 10

There are 10 settings to be configured, as follows: -

St 1	CPC1	Credit per coin, £ opto.	HH.MM.SS <sup>1</sup>
St 2	CPC2	Credit per coin, 20p opto.	HH.MM.SS <sup>1</sup>
St 3	TM	Total money entered since installation.	££££.pp
St 4	TC	Total credit given since installation.	HHHH.MM <sup>2</sup>
St 5	Pre-start	Pre-start period value.	MM.SS
St 6	Run-on	Run-on period value.	MM.SS
St 7	Pre-end	Pre-end time period value.	MM.SS
St 8	Max Credit	Maximum credit value.	HH.MM.SS <sup>1</sup>
St 9	Totalise Due	Amount due before credit given. (Tot mode)	££.pp
St 10	Totalise CPS	Credit per session in Totalise mode.	HH.MM.SS <sup>1</sup>

See the relevant section for further details: -

St.01, 02, 09 & 10	Digit 2 - Coin Acceptance Modes
St.03	St.03 - Total Money
St.04	St.04 - Total Credit
St.05, 06 & 07	Digit 3, 4 & 5 - Relay Control
St.08	St.08 - Maximum Credit

### To change the Setting values: -

- Remove the coin box.
- Press and release button B until the display shows the required setting (St.xx).
- Press and release button A to show current value.
- Press and release A to select digit to alter (selected digit flashes).
- Press and release B to alter the value of selected digit.
- Repeat d and e until required setting is obtained.

### To exit

- Press and release A until no digits are selected.
  - Press and release B to return to St.xx.
  - Press and release B proceed to next St.xx.
- or**
- Insert coin box.

Note: The new value is not stored in the memory until the coin box is inserted.

## Configuration Settings

The basic operating modes of the meter are enabled or disabled using the configuration numbers. There are eight digits arranged into two groups of four. Digits 1 to 4 are set in configuration number 1 (CFG1) and digits 5 to 8 are set in configuration number 2 (CFG2). Each digit controls several modes of operation. The value of each digit is calculated by adding together the values of the features required in that digit. Use the Configuration chart to find the value of the feature(s) required.

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<sup>1</sup> HH.MM or MM.SS depending upon Min/Sec setting.

<sup>2</sup> Shown in HH.MM if value < 100 Hours, HHHH if value => 100Hrs.

**To change the configuration values: -**

- a) Remove the coin box.
- b) Press and release button B until the display shows the software version number (Pr.6.x).
- c) Press and release button A four times until display shows CFG.x
- d) Press and release button B to toggle between CFG.1 and CFG.2.
- e) Press and release button A to show the current CFG.x value
- f) Press and release A to select digit to alter (selected digit flashes).
- g) Press and release B to alter the value of selected digit.
- h) Repeat f and g until required setting is obtained.

**To exit**

- i) Press and release A until no digits are selected.
- j) Press and release B to return to CFG.x.
- k) Press both buttons together (i.e. Press one and hold while pressing the other) to continue proceed to St.01.

**or**

- l) Insert coin box.

Note: The new value is not stored in the memory until the coin box is inserted.

**Digit 1 - Coins/Tokens Selection**

Enter the relevant value in configuration digit 1 for one of the following: -

<b>Value</b>	<b>Coin/Token</b>
1	£1 only
2	20p only
3	£1 & 20p
4	10p only
5	£1 & 10p
8	Token

**Digit 2 - Coin Acceptance Modes**

Single coin mode  
Totalise mode  
Totalise + Top Up  
Push Button Credit

**Single Coin Mode**

In this mode each a value is added to the CR (Credit remaining) register each time a coin/token is entered.

Single coin mode is enabled by: -

- 1) Entering a '1' in digit 2 of the configuration number.
- 2) Setting St.01 with the amount of credit given for the £1 coin, all but L1 tokens.
- 3) Setting St.02 with the amount of credit given for the 10p, 20p coin L1 token.

Note:

When the meter is configured for token operation the unused setting (St.01 or St.02) must be set to zero to prevent the validation of other coins or tokens.

## **Totalise Mode**

Totalise mode is used when a sum of money is required to be collected prior to giving any credit on the meter. E.g. £1.20

Totalise is enabled by: -

- 1) Entering a '2' in digit 2 of the configuration number.
- 2) Setting St.09 with the amount of money required before any credit is given.
- 3) Setting St.10 with the amount of credit given when the correct amount of money has been inserted.

The meter will display the amount of money required and intermittently show 'FEE'. This value will be reduced as money is entered. Once the correct amount of money has been entered the display will add credit to the credit remaining registers and the session will begin. If the value is exceeded, e.g. entering two £1 coins when the required amount is £1.80, the balance (20p in this example) will be held towards the next session. When the credit remaining reaches zero this balance is cleared.

The full value of all coins inserted will be added to the Money Counter and the Total Money (St.03) registers regardless of whether any credit is given. The Credit Remaining and Total Credit (St.04) registers will only be added to each time a sufficient amount of money is entered.

Note: In Totalise mode (but not Totalise + top up) St.01 and St.02 are unused.

## **Totalise + Top Up**

Totalise + Top Up mode operates in a similar manner to Totalise mode but allows single coins to give credit once the meter is in credit.

Totalise + Top Up is enabled by: -

- 1) Entering a '4' in digit 2 of the configuration number.
- 2) Setting St.09 with the amount of money required before any credit is given.
- 3) Setting St.10 with the amount of credit given when the correct amount of money has been inserted.
- 4) Setting St.01 & St.02 with the required amount of credit given once the meter is in credit. (St.01 gives credit for the £1 coin and St.02 gives credit for a 20p or 10p coin.)

The meter will display the amount of money required and intermittently show 'FEE'. This value will be reduced as money is entered. Once the correct amount of money has been entered the display will add credit to the credit remaining registers and the session will begin. If the value of the coin entered exceeds the value required, then the overpayment also adds credit according to the value set in St.02.

E.g. If the meter is configured to initially take £1.60 (St.09) and two £1 coins are entered. The 40p overpayment will give four times the value of St.02 with a '£1 & 10p' meter and two times the value of St.02 with a '£1 & 20p' meter.

Any invalid setting will generate an Error Message (See Error Messages). E.g. Setting the amount required (St.09) to £1.60 on a £1 only meter.



### **Push Button Credit**

This optional feature allows a value to be added to the Credit Remaining register each time button 'B' is pressed.

Push Button Credit is enabled by: -

- 1) Entering an '8' in digit 2 of the configuration number.
- 2) Setting St.01 with the amount of credit given each time button 'B' is pressed.

Each time button 'B' is pressed the value set in St.01 is added to the Credit remaining register.

The Maximum Credit facility can be used with this feature to limit the amount of credit accumulated. (See Maximum Credit for further details)

Note: No coin or token operation is possible whilst this feature is enabled.

### **Digit 3, 4, & 5 Relay Control**

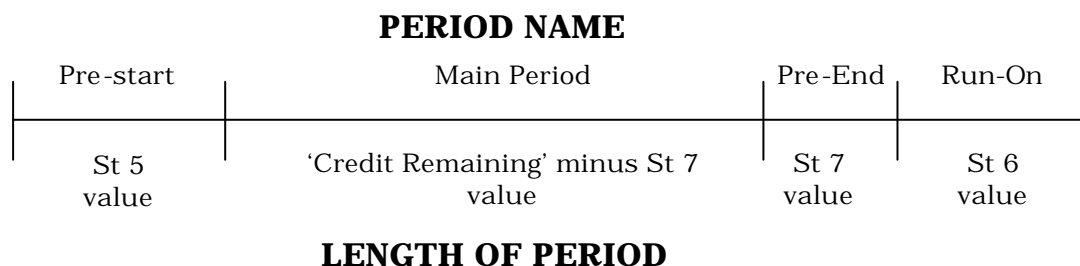
Digit 3 - Main relay on during 'Pre-start', Main or Pre-end period

Digit 4 - Auxiliary relay on during 'Pre-start', Main or Pre-end period

Digit 5 - Main/Auxiliary relay on during Run-on and display 'run-on time'.

The time periods of the meter are divided into 4 sections. Pre-Start period, Main period, Pre-end period and Run-on period. Use the Configuration chart to find the value of the option(s) required and enter the relevant value in digits 3, 4 or 5 of the configuration number, both relays can be configured to be on or off during any or all of these 4 period.

The 4 time periods are determined by various St setting as follows: -



Pre-start, Pre-end and Run-on are all optional.

### **Main period**

This time period will always run unless the Credit Remaining fails to exceed the pre-end period value. In which case the whole of the Credit Remaining will run in the Pre-end period.

The length of the Main period is dependent upon the amount of Credit Remaining on the meter and the setting of the Pre-end period

### **Pre-start Period**

This time period runs prior to the Main period allowing the customer time to prepare for the session. E.g. changing prior to using a shower or sunbed.

Entering the required time in the 'Pre-start' setting, St.05, enables this feature. The value is entered in Minutes and Seconds. Entering zero disables this feature. When the Fascia Start Button is enabled, pressing the start button cancels the remainder of the Pre-start period and initiates the Main period.

During the 'Pre-start' period the relays are switched on in accordance with the configuration number setting.

**Note:** When a valid coin/token is inserted the display will show the accumulated credit for 4 seconds before returning to the Pre-Start countdown display.

### **Pre-end period**

This time period replaces the end of the Main period. For example, if the pre-end period is set to 5 minutes when the Credit Remaining equals 5 minutes the Main period ends and the pre-end period takes over and runs for 5 minutes. At the change over an audible warning is given (if beep is enabled) and a change in relay status may take place depending upon the configuration setting.

Entering the required time in the Pre-end setting, St.07, enables this feature. The value is entered in Minutes and Seconds. Entering zero disables this feature.

### **Run-on period**

This time period runs after the Main period (or Pre-end if enabled) and allows an auxiliary function to take place after the credit has expired. For example, to run the cooling fans on a sunbed.

Entering the required time in the Run-on setting, St.06, enables this feature. The value is entered in Minutes and Seconds. Entering zero disables this feature. During the Pre-end period the relays are switched on in accordance with the configuration number setting.

Select 'Display Run-On' in digit 5 of the configuration number to display a countdown of the Run-On period.

- Notes:**
- a) When enabled the Run-On period will run when the credit save is activated but even when enabled the Run-on display is not shown.
  - b) With the Start button is enabled, after inserting a valid coin/token during the Run-On period, the display will show the credit accumulated even if the Run-On display is enabled.

### **WARNING:**

When the Run-On period is running and credit is added the Pre-Start, if enabled, will operate. Therefore if the Run-On period controls a vital part of the system e.g. fans on a sunbed, then the Pre-Start period must be configured to control the fans as well. If not then when credit is added during the Run-On period the fans will switch off.

## **Digit 6, 7 & 8**

Minutes and seconds mode.  
Credit save. (Not available with PB credit)  
Clear Credit Remaining.  
View St.03 and St.04 with coin box in.  
Fascia Start button.  
Remote Start/Stop.  
Audible indicator (beep).  
Normally closed override switch.  
Setting lockout (with override switch).

### **Minutes and Seconds Mode**

Use the Configuration chart to find the value of the option(s) required and include this feature when calculating the value of digit 6. If no other configuration changes are required add 1 to digit 6 to enable, or subtract 1 to disable this feature.

When enabled ST.01, 02, 08 and 10 are displayed and set as MM:SS instead of HH:MM. The flashing Mins/Secs dot on the display indicates this.

When changing from HH:MM to MM:SS the value set in the Hours register will be zeroed. When changing back to HH:MM the value set in the Seconds register will be zeroed.

### **Credit Save**

Use the Configuration chart to find the value of the option(s) required and include this feature when calculating the value of digit 6. If no other configuration changes are required add 2 to digit 6 to enable, or subtract 2 to disable this feature.

When enabled this feature allows the credit remaining value to be held during the Main and Pre-end periods.

To activate credit save press button 'B'. This will hold the remaining credit and switch off both relays. An intermittent 'HELD' message will be displayed whilst credit save is active.

To return to normal countdown press button 'A' (Fascia Start Button). This will restart the countdown, clear the 'HELD' message and reactivate the Main or Pre-end period relay status.

Note:

If the Run-On period is enabled this will run when the credit save is activated during which time the relays configured for the Run-On period will be active.

### **Clear Credit on Power-up/after Emergency Stop**

Use the Configuration chart to find the value of the option(s) required and include this feature when calculating the value of digit 6. If no other configuration changes are required add 4 to digit 6 to enable, or subtract 4 to disable this feature.

This feature: -

- a) When enabled clears all Credit Remaining when the meter is powered up. If disabled then any Credit Remaining left on the meter when it was powered down will be restored. This feature is useful when the meter is connected via

a time clock that prevents use of a facility after a certain time. In this type of application the remaining credit is not normally required when the time clock switches back on.

- b) Clears the Credit remaining when the emergency stop is released. If disabled then any Credit Remaining left on the meter when the emergency stop was activated will be restored.

### **View St.03 & St.04 with coin box in**

Use the Configuration chart to find the value of the option(s) required and include this feature when calculating the value of digit 7. If no other configuration changes are required add 1 to digit 7 to enable, or subtract 1 to disable this feature.

When enabled this feature allows the values of the Total Money register (St.03) and Total Credit register (St.04) to be viewed without removing the coin box as follows: -

- 1) Press both 'A' and 'B' together (i.e. press and hold one button while pressing the other). 'St.03' will be displayed.
- 2) Press button 'A' to view the current value of St.03.
- 3) Press button 'B'. 'St.03' will be displayed again.
- 4) Press button 'B' again. 'St.04' will be displayed
- 5) Press button 'A' to view the current value of St.04.
- 6) Press button 'B' to return to the Credit Remaining display.

Ignore the relevant button 'A' press if it is not required to view that value.

### **Fascia Start Button**

Use the Configuration chart to find the value of the option(s) required and include this feature when calculating the value of digit 7. If no other configuration changes are required add 2 to digit 7 to enable, or subtract 2 to disable this feature.

When enabled, the start button function is different if Pre -start is also enabled.

Start Button **without** Pre-start

(For the purpose of this example 'Single coin mode' is assumed.)

- 1) Credit remaining equals to zero.
- 2) Coin(s) entered.
- 3) Credit added to Credit Remaining.
- 4) Countdown held and Credit Remaining shown on the display.
- 5) Pressing the 'Start Button' starts the 'Main period' and countdown begins.

Start Button **with** Pre-start

(For the purpose of this example 'Single coin mode' is assumed.)

- 1) Credit remaining equal to zero.
- 2) Coin(s) entered.
- 3) Credit added to Credit Remaining.
- 4) Pre-start countdown begins
- 5) Pressing 'Start Button' cancels remaining Pre -start value and starts the 'Main period'.

Note: When 'Maximum Credit' is enabled, the start button is operational regardless of the 'Fascia Start Button' configuration. (For details see Maximum Credit)

## **Remote Start / Stop**

Use the Configuration chart to find the value of the option(s) required and include this feature when calculating the value of digit 7. If no other configuration changes are required add 4 to digit 7 to enable, or subtract 4 to disable this feature.

When enabled the meter will respond to the Remote Button Unit. This unit normally consists of 2 buttons, a green start button and a red stop button.

### **Green Start Button**

The green start button functions in exactly the same way as the Fascia Start Button. (See Fascia Start Button for further details)

### **Red Stop Button**

The red stop button is intended for use as an emergency stop button. When pressed the meter: -

- 1) Switches the relays to the Run-On configuration status (even if Run-On is not enabled). The relays will be held in this state until the alarm condition is removed.
- 2) Sounds an audible alarm to summon help. (even if audible indicator is disabled)
- 3) Flashes a 'CALL HELP' message.

The alarm status cannot be cleared with the Remote Button Unit and must be cleared using button 'A' on the fascia as follows: -

- 1) Press button 'A'. This stops the audible alarm but maintains the rest of the alarm condition.
- 2) Press button 'A' again to total clear the alarm condition and resume normal operation.  
If the Clear Credit feature is enabled then the remaining credit will be cleared.

Note:

As the two buttons on the Remote Button Unit are wired in parallel both buttons effectively have the same function. Their individual operation is only achieved by the status of the meter when the button is pressed. Therefore the emergency function is not available between adding credit to the meter and the start of the Main period.

## **Audible indicator (Beep)**

Use the Configuration chart to find the value of the option(s) required and include this feature when calculating the value of digit 8. If no other configuration changes are required add 1 to digit 8 to enable, or subtract 1 to disable this feature.

When enabled an audible indication is given when: -

- 1) A button is pressed.
- 2) The Pre-end period starts.
- 3) The Main period finishes.
- 4) A coin or token is entered and validated.

## **Normally closed override switch**

Use the Configuration chart to find the value of the option(s) required and include this feature when calculating the value of digit 8. If no other configuration changes are required add 2 to digit 8 to enable, or subtract 2 to disable this feature.

When enabled this feature allows a normally closed key switch to give the same function as a normally open key switch.

### **Setting lockout**

Use the Configuration chart to find the value of the option(s) required and include this feature when calculating the value of digit 8. If no other configuration changes are required add 4 to digit 8 to enable, or subtract 4 to disable this feature.

When enabled this feature prevents the settings (St.01 to St.10) being changed whilst the optional key operated switch is in the locked position.

Note:

The Override facility is not available whilst this feature is active.

### **Money Counter (££££.pp)**

The money counter is displayed automatically when the coin box is removed. This display shows the amount of money entered since the coin box was last inserted/emptied.

As the display can only show 4 digits of this 6 digit register the value is shown in one of the following formats: -

<b>Format</b>	<b>Example value</b> ££££.pp	<b>Displayed as</b>
££.pp	0012.40	12.40
££££	0234.60	0234 (No centre dot indicates whole Pounds only)

The display switches from ££.pp to ££££ format automatically when the value of Pounds exceeds 99. When the ££££ format is displayed pressing and holding button 'A' will change the display to ££.pp format to allow the Pence value to be displayed.

Tokens are always displayed in 4 digits 0000 to 9999. Therefore 10 tokens would be displayed as 0010.

When the coin box is inserted the money counter is automatically reset to zero. To prevent the counter being reset press and hold push button B while inserting the box.

### **St.03 - Total Money (££££.pp)**

The Total Money register (St.03) shows the total accumulated amount of money or tokens entered since the meter was manufactured or received a factory reset.

This register stores a value up to £9999.90. When this value is exceeded the register rolls over. E.g. £9999.00 plus £5 would result in a value of £0004.00 (£4) being stored.

As the display can only show 4 digits of this 6 digit register the value is shown in one of the following formats: -

<b>Format</b>	<b>Example value</b> ££££.pp	<b>Displayed as</b>
££.pp	0012.40	12.40

££££            0234.60            0234 (No centre dot indicates whole Pounds only)

The display switches from ££.pp to ££££ format automatically when the value of accumulated Pounds exceeds 99. When the ££££ format is displayed pressing and holding button 'A' will change the display to ££.pp format to allow the Pence value to be displayed.

Tokens are always displayed on 4 digits 0000 to 9999. Therefore 10 tokens would be displayed as 0010.

## **St.04 - Total Credit (HHHH:MM)**

The Total Credit register (St.04) shows the total accumulated credit since the meter was manufactured or received a factory reset.

This register stores a value up to 9999:59 (9999 Hours 59 Minutes). When this value is exceeded the register rolls over. E.g. 9999:00 plus 5 Hours would result in a value of 0004:00 (4 Hours) being stored.

As the display can only show 4 digits, the value is shown in one of the following formats depending upon its value: -

<b>Format</b>	<b>Example value</b> HHHH:MM	<b>Displayed as</b>
HH:MM	0005:45	05.45
HHHH	0107:54	0107 (No centre dot indicates whole hours only)

The display switches from HH:MM to HHHH format automatically when the value of accumulated hours exceeds 99. When the HHHH format is displayed pressing and holding button 'A' will change the display to HH:MM format to allow the Minutes value to be displayed.

This register is updated at the same time as the Credit Remaining register, therefore any credit cleared from the Credit Remaining value using the Clear Credit facility will still be included in the Total Credit reading.

When the Maximum Credit feature is operational (see Maximum Credit for details) the Total Credit register is only added to when the full Credit per Coin value is added to the Credit Remaining register.

For example with: -

The meter set for single coin operation.

The Maximum Credit value (St.08) set to 7 Minutes.

The Credit per Coin/Session (St.01, or 02) set to 3 Minutes.

- 1) When the first coin is entered 3 Minutes is added to the Credit Remaining register and the Total Credit register.
- 2) When the second coin is entered 3 Minutes is added to the Credit Remaining register and the Total Credit register.
- 3) When the third coin is entered 1 Minutes is added to the Credit Remaining register (as the maximum credit has been reached) but nothing is added to the Total Credit register.

Therefore the Maximum Credit setting should be a multiple of the Credit per Coin setting for meaningful Total Credit values.



## **St.08 - Maximum Credit (HH:MM or MM:SS)**

The 'Maximum Credit' feature prevents credit being accumulated above a pre-set time limit.

Entering the required time limit in the 'Maximum Credit' setting, St.08, enables this feature. The value is entered in Hours and Minutes (or Minutes and Seconds<sup>3</sup>). Entering zero disables this feature.

Maximum Credit operation: -

(For the purpose of the example 'Single coin mode' without Pre-start is assumed.)

- 1) Credit Remaining equal to zero.
- 2) Coin(s) entered.
- 3) Credit added to Credit Remaining.
- 4) Countdown held and Credit Remaining shown on the display.
- 5) Pressing the 'Start Button' starts the 'Main period' and countdown begins.

If Pre-start is enabled then the Pre-start countdown will commence as soon as the first coin is entered.

Note:

Unless the 'Remote Start/Stop' is enabled in the configuration settings the 'Fascia Start Button' is enabled automatically when 'Maximum Credit' is used, but the 'Fascia Start Button' cannot be used to skip the remaining Pre-Start period unless it is also enabled in the configuration setting.

The automatic enabling of the 'Fascia Start Button' is prevented if the 'Remote Start/Stop' feature is enabled. This is to prevent undesired starting of the session on the meter. If starting is required from both the 'Remote Button Unit' and the 'Fascia start Button' then both must be enabled in the configuration.

## **Override**

The override allows free use of the facility controlled by the meter for servicing or match play.

Turning the optional key operated switch to the on position will: -

- 1) Clear any Credit Remaining.
- 2) Switch the relays to the Run-On configuration status.
- 3) Show 'FrEE' on the display.

When the override is switched off the Run-On period will run (if enabled).

Note:

This feature is not available when the Setting Lockout feature is enabled.

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<sup>3</sup> If Minutes and Seconds operation is selected in the configuration. (See Minutes and Seconds Mode for details)

## Clear Credit Remaining

The Credit Remaining can be cleared in one of three ways: -

- 1) On power up with Clear CR option set. (See 'Clear Credit On Power-up/after Emergency Stop' for further details)
- 2) By using the Override feature. ( See Override for further details)
- 3) By using the Clear Credit option in the service mode (Coin box removed)

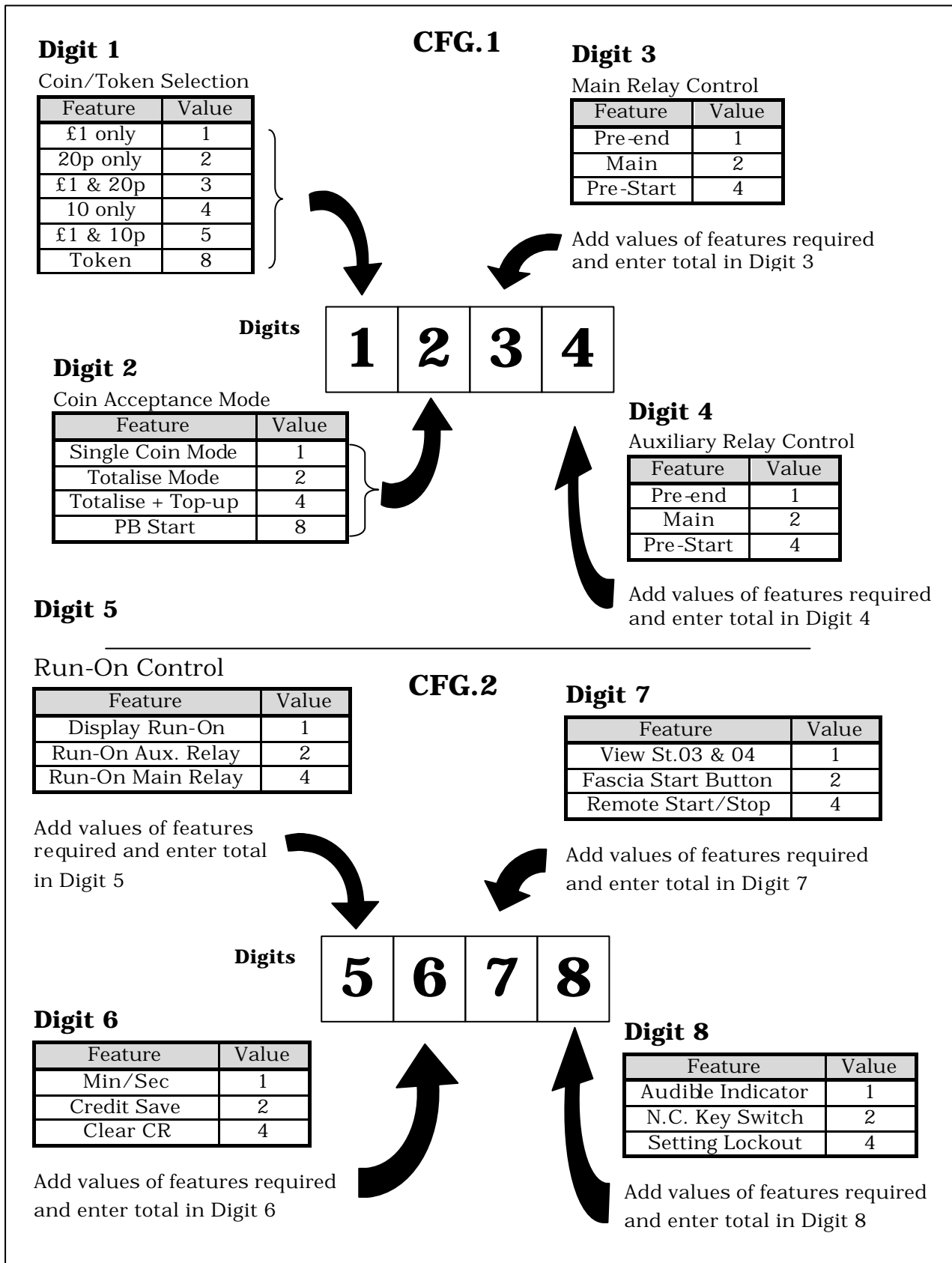
Whilst the Main period is running: -

- a) Remove the coin box
- b) Press button 'B'. Display will show 'CLr'.
- c) Press both buttons together (i.e. press and hold one button while pressing the other). This clears the Credit Remaining.
- d) If enabled the Run-On period will run.
- e) If required press both buttons again to clear the Run-On.

**Note:** Option 3 only clears the period that is currently running, therefore using the clear function during the: -

- a) Pre-Start period will clear the balance of the Pre-Start and the Main period will commence.
- b) Main period will clear the remaining credit and the Run-On period will commence.
- c) Run-On period will clear the balance of the Run-On period.

# Configuration Chart



# Text Messages

## One second messages

<b>Message</b>	<b>Description</b>
CrEd	Token validated and accepted.
1Pd	£1 coin validated and accepted.
20P	20p coin validated and accepted.
10p	10p coin validated and accepted.
StOP	Coin or Token validated but maximum credit limit has been reached and no credit has been given.
Er.xx	Where 'xx' is the error number (See 'Error Messages' for further details)
SynC	See 'Error Messages'
Pr.x.x	Program/Software version installed, where 'x.x' is the version number.

## Flashing Messages

<b>Message</b>	<b>Description</b>
FEE	The value shown on the display is the amount due for the session, Value is shown as ££.pp.
PrE	The current countdown is the Pre -start period.
End	The current countdown is the Run-On period.
HELD	The Credit Save has been activated. The countdown has stopped.
CALL,HELP	Emergency stop - The red button on the Remote Button Unit has been pressed

## Static Messages

<b>Message</b>	<b>Description</b>
FrEE	The optional key operated switch has been activated. (See Override for further details)
COLL	The coin box is full or the validation sensor has been obstructed

### Static Service Mode Messages

CLr	Clear credit remaining. (See 'Clear Credit' for further details)
Pr.x.x	Program/Software version installed, where 'x.x' is the version number.
CFG.x	Configuration number location, where 'x' is the configuration number 1 or 2.
St.xx	Setting number location, where 'x' is the setting number 1 to 10.

# Error Messages

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

SynC Formerly Er.04 – Software re-synchronising with the 50Hz signal.