## BB BATHROOM BUTLER

#### ENGLISH



#### Thank you for purchasing this BATHROOM BUTLER® product.

Please read these instructions carefully before using your TDC Timer.

# TDC Timer User Manual Document Version **TDC-VSA01-3.3**

#### INTRODUCTION

The TDC Timer has been specifically designed to operate exclusively with heated towel rails (HTRs). Its purpose is to reduce electricity consumption and running costs. Even though HTRs are designed to run for 24 hours a day, practically speaking, it is not necessary to do so and the TDC Timer provides an easy automatic solution. One of the benefits of Dry Element Technology (DET) is RAPID Heating, which ensures swift heat-up times – and this opens up the possibility to control the temperature of HTRs, and to switch it off and on whenever required.

#### NOTES ON USING THIS MANUAL

- 1. TIMER DISPLAY LOCK: The display has an auto lock function after 30 seconds of inactivity, the screen display will automatically lock.
- 2. PROGRAMMING: This can only be done when the timer has been unlocked, so the first step will always be to unlock the timer screen before programming can begin. For the purposes of examples in this manual, it is assumed that if the timer display is locked, it has been locked without a code. If you have used a code to lock the timer, then please follow the instructions section C4 to unlock the timer before each example.
- 3. SCREEN PICTURE ILLUSTRATIONS: The picture representation in this document may differ slightly from the actual screen, depending on the mode the timer is currently in, the current time, as well as whether it is in a heating cycle.
- 4. QUICK EXIT PROGRAM MENU: The PROGRAM menu can be exited at any time by pressing the "UP" and "DOWN" buttons simultaneously within the PROGRAM menu, instead of using the "PROG" button to toggle past each menu.
- 5. PROGRAM MENU ADVANCE DIRECTION: To advance through the PROGRAM menu, press the "PROG" button. It is only possible to move in the forward direction. If a menu is missed by pressing "PROG" too quickly, then the procedure will have to be restarted from the standard screen and you will need to hold the "PROG" button down until the display changes.
- 6. SWITCHING TO AUTO MODE: If the timer is currently in "OFF" mode and it is changed to "AUTO" mode, then there may be a delay in the programmed switch-on time that activates the heating cycle. For example, if the current time is 06:45, and the timer is in "OFF" mode and then it is switched to "AUTO" mode; and the timer has a programmed switch-on time of only 06:30, then the timer will only activate the heating cycle the following day at 06:30.

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#### **Display Information**

Clock - displays the current time.

Temperature POWER Setting displays the current power setting. Can be adjusted from 40-100%.

#### Icons

HEATING Icon – displayed when the heated towel rail is in a heating cycle, ie the heating element is on and the towel rail will get warm.

LOCK Icon – displayed when the TDC Timer screen lock is activated. The only function that will operate in this setting is QUICK RUN which is activated by pressing the MODE button. To change other settings/programs the screen must be unlocked.

QUICK RUN Icon - displayed when the TDC Timer is in QUICK RUN mode. The HEATING Icon and countdown time will be displayed along with this lcon.

AUTO Icon - displayed when the TDC Timer is in AUTO mode. The heated towel rail will be switched ON and OFF according to the programs that have been set.



#### Buttons

PROG button	<ol> <li>used to UNLOCK timer (Press &amp; hold);</li> <li>used to ACCESS menus (Press &amp; hold);</li> <li>used to advance through the different menus and confirm selections (Press).</li> </ol>
MODE button	<ol> <li>used to change the MODE (Press);</li> <li>used to toggle between selections within menus (Press);</li> <li>used to toggle between Hrs and Mins when setting programs and the clock (Press).</li> </ol>
UP button	1. used to INCREASE selected values (Press).
DOWN button	1. used to DECREASE selected values (Press).

#### **TDC Timer Functions**

The TDC Timer has the following functions available:

- 1. Switching the heated towel rail on and off automatically
- This is achieved by programming one or more of the 4 available programs. (see section D Programs on page 6 for more information) 2. Leaving the heated towel rail on 24 hours a day
- This is achieved by setting the Mode to Permanently ON. (see section B Modes on page 4 for more information) 3. Leaving the heated towel rail off
- This is achieved by setting the Mode to Permanently OFF. (see section B Modes on page 4 for more information)
- 4. Switching the heated towel rail on temporarily when you want to take a bath/shower out of your normal routine
- This is achieved by using the QUICK RUN Mode. (see section E Quick Run on page 8 for more information) 5. Adjusting the temperature of the heated towel rail
  - (see section G Power Setting on page 8 for more information)

### A. Basic Getting Started Procedure

This Basic Getting Started Procedure will allow you to UNLOCK the display, create a PROGRAM, set the CLOCK, change MODE to AUTO and ADJUST the POWER setting all in one process.

Example below: No Code Unlock Timer, Create Program P1 with ON time = 05h45 and OFF time = 08h30, Change Clock time to 15h18. Set Power to 85% and change Mode to AUTO.





STEP 2

UNLOCK

- Confirm

Press PROG

button again to confirm selection.



ACCESS MENUS Press & hold PROG button, when screen changes release PROG button.

00:00

5%



STEP 4 TOGGLE PAST LOCK MENU Press PROG button to advance past LOCK menu.



PROGRAM P1 - Create Display will flash between P1 and ON. Press UP or DOWN button start setting ON time.



PROGRAM P1 ON - HOUR SET

Display - HOUR

button to set the

to toggle to the MINUTE setting.

value flashing.

HOUR value.

STEP 6

STEP 7 PROGRAM P1 ON - MINUTE SET value flashing. button to set the MINUTE value.

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05:45

confirm P1 ON correct.



```
Step 14
CLOCK SET
Press UP or DOWN
button to start setting
the CLOCK.
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STEP 1 UNLOCK Screen By default when the TIMER is first switched

on the above screen will show. Press & hold PROG button, when screen changes release

PROG button.

1111



Step 8 PROGRAM P1 OFF - HOUR SET Display - HOUR

value flashing. Press UP or DOWN button to set the HOUR value.

Press MODE button to toggle to the MINUTE setting.



PROGRAM P1 OFF - MINUTE SET Display - MINUTE value flashing.

Press UP or DOWN button to set the MINUTE value. Press PROG button to confirm P1

OFF correct.

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Step 10 ADVANCE PAST PROGRAM P2 Press PROG button to advance past Program P2 and onto next screen

Step 11 ADVANCE PAST PROGRAM P3 Press PROG button to advance past Program P3 and onto next screen

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 $P \exists$ 

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Step 12 ADVANCE PAST PROGRAM P4 Press PROG button to advance past Program P4 and onto next screen



MODE CHANGE TO - AUTO

shown above.



Step 15 CLOCK SET - HOUR VALUE Display - HOUR value flashing.

Press UP or DOWN button to set the HOUR value.

Press MODE button to toggle to the MINUTE setting.



Step 16 CLOCK SET - MINUTE VALUE Display - MINUTE value flashing. Press UP or DOWN

button to set the MINUTE value. Press PROG button to confirm CLOCK correct. MENU

is exited.



Step 17 PROGRAMMING COMPLETE MENU is exited.

Step 18

POWER ADJUST Press UP or DOWN button to adjust the POWFR %, Allowed adjustment 40-100% in 5% increments.

15:18

85%

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Step 19

Press MODE button until AUTO icon is displayed as



Display - MINUTE Press UP or DOWN Press UP or DOWN Press MODE button Press PROG button to



#### How many Modes are there? There are four different Modes:

- 1. ON permanently when the HTR is in this mode then the heating cycle will be ON 24/7.
- 2. AUTO when the HTR is in this mode and one or more of the 4 Programs have been set, then the HTR heating cycle will switch on and off automatically.
- 3. QUICK RUN when this mode is activated, the heating cycle is switched on and the timer will countdown the displayed time and then switch off again. This mode can be activated from the locked screen in both AUTO and OFF mode.

15:5

%

4. **OFF** permanently - when the HTR is in this mode then the heating cycle will be OFF 24/7.

15:5

5%

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How are the Modes changed? First the Display must be unlocked and then the MODE button is pressed to change the mode.

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Step 1 UNLOCK Screen

By default when the

TIMER is first switched

on the above screen will show. The time in

this example is12:21.

Press & hold PROG

button, when screer changes release

PROG button.



Step 2 UNLOCK - Confirm Press PROG button again to confirm selection.  
 Step 3 Screen UNLOCKED
 MODE ON permanently

 TIMER is unlocked and other functions may now be performed.
 By default the Timer is in this mode.

 When this mode is selected the HTR heating cycle will be

When this mode is selected the HTR heating cycle will be ON permanently and therefore heating 24hrs a day.



MODE AUTO

Press MODE

button ONCE

automatically.

When one of the

programs P1 - P4

have been set then

AUTO mode must be

selected for the HTR to switch ON and OFF



MODE QUICK RUN Press MODE button ONCE.

When this mode is selected the heating cycle will switch on and the timer will countdown to zero and then switch off. This mode can also be selected when the timer screen is locked from the AUTO or OFF mode by pressing the MODE button once.



MODE OFF permanently Press MODE button ONCE.

When this mode is selected the HTR heating cycle will be OFF permanently.

### C. SCREEN LOCK / UNLOCK

What is this function? By default the screen display will automatically LOCK after 30 seconds of input inactivity. This function is to ensure that the settings on the Timer are not accidentally changed.

How is LOCK activated? LOCK is activated in two ways:

- 1. Automatically after 30 seconds of no activity.
- 2. Manually by using the LOCK Menu:
  - a. LOCK with no code
  - b. LOCK with code

How is the screen UNLOCKED? Press and hold PROG button for 2 seconds or until screen changes, Press PROG button again to confirm.

#### C1. LOCKING Procedure - No Code

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.



Step 1 ACCESS MENU The time in this example is12:21. Press & hold PROG button, when screen

changes release PROG button.



Step 2 LOCK MENU - Toggle LOC - ULOC Press MODE button once to toggle LOCKING selection.



Step 4 EXIT

Press PROG

to advance past

Step 3 LOCK MENU - LOCK No Code Press PROG button to confirm LOCK selection.

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TIMER LOCKED TIMER display is locked.

other menus. Alternative - Press UP and DOWN button simultaneously to exit quickly

button several times

### C2. LOCKING Procedure - With Code

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.

What are the possible codes? The code used is a 2 digit numeric code between 01-99. If 00 is used as the code then it is taken as a NO CODE lock.

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Example below: LOCKING the screen display with a CODE.





Step 1 ACCESS MENU The time in this example is12:21. Press & hold PROG button, when screen changes release PROG button.

The value will be between 00 and 99. Press MODE button three times to advance to CODE LOCK selection.

- Toggle LOC - ULOC

L

Step 2 LOCK MENU

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Step 4

Press PROG

EXIT

Step 3 LOCK MENU - LOCK with Code Press UP or DOWN button to set the CODE. Value between 01-99. Press PROG button to confirm LOCK selection.



TIMER LOCKED TIMER display is locked.

other menus. Alternative - Press UP and DOWN button simultaneously to exit quickly.

#### button several times to advance past

### C3. UNLOCKING Procedure - No Code

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.





Step 1 UNLOCK Screen The time in this example is12:21 Press & hold PROG button, when screen

changes release PROG button.

Step 2 UNLOCK - Confirm Press PROG button again to confirm selection.

Step 3 Screen UNLOCKED TIMER is unlocked and other functions may now be performed.

### C4. UNLOCKING Procedure - With Code

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.

What are the possible codes? The code used is the 2 digit numeric code that was used to previously lock the display.

What happens if you have forgotten your code? It is possible to unlock the timer if you have forgotten your code. Please contact Bathroom Butler or Authorised Distributor for a once off reset code.

Example below: UNLOCKING the screen display with a CODE.



Step 1 UNLOCK Screen The time in this example is12:21.

Press & hold PROG button, when screen changes release PROG button.



UNLOCK - Code & Confirm The value will be between 01 - 99. Press UP or DOWN button to set the CODE

Step 2

previously used to lock timer. Press PROG button to

confirm code to unlock



Step 3 Screen UNLOCKED TIMER is unlocked and other functions may now be performed.

### D. PROGRAMS - creating a program

What is this function? The PROGRAM function allows for 4 different programs to be created in a 24 hour period, each with individual ON and OFF times.

How long should each program run? Bathroom Butler suggests that each program run for a minimum of 3 hours, where the ON time is 30 minutes before the towel is used. This is only a suggested time and each situation will be different and affected by factors such as humidity, room temperature, towel wetness and the power setting of the heated towel rail.

#### It is possible to:

- 1. Create a program
- 2. Edit a program
- 3. Cancel a program

### D1. PROGRAMS - creating a program

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.

**Example below:** Creating Program P1 with ON time = 05h45 and OFF time = 08h30, changing Mode to AUTO.



### D2. PROGRAMS - editing a program

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.

Follow the steps in "D1 PROGRAMS - creating a program" and change the values for ON and OFF times.

### D3. PROGRAMS - cancelling a program

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.

How is this function performed? To CANCEL a program the ON and OFF time for the specific program must be set to the same value.



### E. QUICK RUN (Pt) - setting countdown time

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.

What is this function? QUICK RUN is for those out of routine showers/baths and allows the heated towel rail to be manually activated when in AUTO or OFF mode for a pre-programed COUNTDOWN TIME.

How is this function activated? QUICK RUN is activated in two ways:

- 1. When the Timer display is locked and the current mode is set to AUTO or OFF, press the MODE button ONCE.
- 2. When the timer is UNLOCKED the MODE can be changed to QUICK RUN by pressing the MODE button until the mode changes to QUICK RUN. Setting this mode from the ULOCKED display will result in the Timer reverting to OFF mode when countdown is complete.

What settings can be changed for this function? The COUNTDOWN time can be changed by following the procedure below. By default the COUNTDOWN time has been set at 3h00m.

Example below: Changing the countdown time from the default of 3h00m to 2h15m.

### E. QUICK RUN - setting countdown time continued....

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Step 2

ADVANCE TO Pt MENU

several times to

advance to the

Pt menu.

Countdown timer

Press PROG button

Screen LOCKED

displayed as above,

UNLOCK screen by following C3 or C4.

If LOCK Icon is

1111 Screen UNLOCKED

If no LOCK loon is displayed as above, then:

Step 1 Press & hold PROG button, when screen changes release PROG button.



Step 6 TOGGLE to EXIT Press PROG button to exit past this menu.

15:51

11111

Step 7 PROGRAMMING COMPLETE

Programming MENU is exited.



Step 3 Pt MENU - HOUR SET

Display - HOUR value flashing. Press UP or DOWN button to start setting HOUR value of Countdown time

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Step 4 Pt MENU - HOUR SET Display - HOUR value flashing. Press MODE button to toggle to the MINUTE setting.

MINUTE setting.



Step 5 Pt MENU - MINUTE SET Display - MINUTE value flashing.

Press UP or DOWN button to set the MINUTE value.

Press PROG button to confirm Pt Countdown time correct.

#### F. CLOCK (CL) - setting current time

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.



### G. POWER SETTING – adjusting the temperature

Some of the ICONS and Information may differ from Display shown below depending upon the MODE the Timer is in before performing these settings.

What is this function? POWER setting allows for the TEMPERATURE of the heated towel rail to be adjusted.

HOUR value of

CLOCK time.

#### How is the POWER adjusted?

changes release PROG button.

- a. The Timer has to be UNLOCKED for the POWER setting to be adjusted
- b. The UP and DOWN buttons are used to adjust the POWER setting
- c. The POWER can be adjusted between 40 100% in increments of 5%
- d. It is possible to adjust the POWER setting while in two modes:
- 1. AUTO mode 2. ON mode

#### What can affect the Temperature of the heated towel rail?

a. The room temperature and number of towels placed on the HTR will affect the temperature of the HTR.

#### Example below: Changing the power from the default of 75% to 60%.



Screen LOCKED

displayed as above,

UNLOCK screen by following C3 or C4.

If I OCK Icon is



Screen UNLOCKED If no LOCK Icon is displayed as above, then start at Step 1.

Step 1a ADJUST POWER ON mode Press UP or DOWN button, to adjust POWER % value

**БП%** 



Step 1b ADJUST POWER AUTO mode

Press UP or DOWN button, to adjust POWER % value.

MINUTE value. Press PROG button to

confirm CLOCK time correct