e-pill® MedTime PLUS

Locked Automatic Pill Dispenser

Instruction Manual

SKU 992030 UPC 837066000411

US Patent 9,027,787 B2

Note: When opening for the first time, the lid is unlocked.
The keys (2) and battery case securing screw can be found inside the dispenser.

e-pill® MedTime PLUS
AUTOMATIC PILL DISPENSER

Introduction:

The e-pill® MedTime PLUS Automatic Pill Dispenser (SKU 992030/UPC 837066000411) is designed to remind and dispense pills (medications and vitamins) in accordance with your dosage schedule. It reminds the user by means of an alarm and flashing light when to take their medication. It will make the correct dose available at the correct time of day or night, whilst keeping secure all other pills. Medication is dispensed from an internal tray containing 28 sections. You may set more than 1 alarm for the same time to increase "pill capacity". Maximum number of daily alarm settings - 24.

The dispenser incorporates a number of important new features which are designed to help both the user remain compliant with their medication regime and further support their family members, caregivers and pharmacists.

SECURITY – When operating in 'SECURE' mode a self-locking shutter over the lid opening prevents access to the medication tray except at the time that medication is programmed to be available. **US Patent: 9,027,787 B2 dated May 12 2015 applies.**

When the dispenser lid is closed the shutter locks making the medication tray inaccessible. At the dosage time the tray will advance clockwise a half section releasing the shutter. The alarm sounds and the light flashes to alert the user.

The medication can be accessed by turning the dispenser over and pouring the pills into the hand or suitable container (medicine cup). The shutter will swing open as the dispenser is tilted allowing the medication to fall out. When the dispenser 'beeps' (at approximatley 135°) the alarm will be cancelled and the dispenser can be returned to the upright position.

Introduction (Contd)

SECURITY (Contd)

When operating in 'SECURE' mode the shutter in the lid of the e-pill MedTime PLUS dispenser is always locked except at the dosage time and subsequent 'AFTER' time (i.e. the time set for the alarm to continue).

The dispenser detects when the medication has been dispensed and locks the shutter two (2) minutes after dispensing by rotating a further half section thereby preventing access to the tray.

The shutter will also lock if medication is NOT dispensed within the programmed alarm time set by the 'AFTER' time. This time can be set from 5 minutes to 5 hours. This function eliminates the possibility of the user taking two doses within a short time.

> Note: The user has the option of switching the SECURE function 'OFF' if preferred.

PATIENT INFO DISPLAY
The LCD display is visible though the lid allowing the user and carer to view:

- the date and time
- the time that the next dose is due
- number of doses remaining
- the battery level

When the dispenser is horizontal the display shows the **Date** and the **Time** in sequence.

At the alarm time '**TAKE MED'** is displayed.

When tilted forward slightly (between 15 and 40 degrees) the display will show in sequence:

NEXT DOSE   4:30 PM MON || DOSES LEFT   9 || B *(battery level)* **75% || DATE: 26 MAR 2014** (the values shown above are examples only).

When only 4 doses remain the horizontal display will additionally show **DOS 04**. After this dose has been dispensed **DOS 03, DOS 02, DOS 01 and finally DOS 00** will be displayed in sequence with the **DATE and CLOCK.**

When the battery capacity is less than 20% the horizontal display will show **LOWBATT** in sequence with the **DATE** and **CLOCK.**

This LCD display feature enables the user, carers and family members to make a visual check on the status of the dispenser without having to open it.

USING YOUR DISPENSER FOR THE FIRST TIME

1. Open the lid as illustrated – place an index finger in the lid opening and press in the catch with a thumb. Lift the lid.

   The key and battery case securing screw can be found in one of the pill compartments.

Figure 1.

2. Open the lid to the battery box beneath the dispenser and activate the dispenser by removing the battery isolating strip. **(note the correct battery polarity + / -)**

To avoid excessive battery drain it is important that the clock is set soon after either the isolating strip is removed, or the batteries are replaced.

DISPENSER SETTINGS

Figure 2.

The dispenser is set using the three buttons:
Button 1 is used for moving to the next function
Buttons 2 and **3** are used to change the settings in each function
There are two setting menus :-

| **Menu A:-** | *To access press Button 1* |
| | **Functions: CLOCK   DATE DOSES   ALARMS** |

Menu B:-	*To access press and hold Button 3 until 'BEFORE' is displayed*
	Functions: BEFORE AFTER SOUND LIGHT FILLED BATT
	SECURE HOURS DLS START STOP RECORD

After completion of settings in Menu A or B **press button 1 and hold down for three seconds** to restore to normal operation.
If there is no programming activity in Menu A the display will automatically return to normal after 25 seconds.
If there is no programming activity in Menu B the display will return to normal after 5 minutes.

Menu A (accessed through Button 1)

**Note: To ensure correct operation it is most important that both the 'Clock' and the 'Date' are
        set before the dispenser is used. When the dispenser is activated the display will prompt
        the setting of the Clock and then the Date.**

CLOCK:
> Press Button 1 until 'CLOCK' is visible on the display.
> Set the correct time by pressing Buttons 2 or 3. You can fast forward or reverse the time by
> pressing and holding down these buttons.

DATE:
> Press Button 1 again - 'DATE' is visible on the display.
> Wait a few seconds. YY will displayed.
> Using buttons 2 and 3: Set the Year (YY) then press 1
> Using buttons 2 and 3: Set the Month (MM) then press 1
> Using buttons 2 and 3: Set the Date (DD) then press 1

DOSES:
> 'DOSES' will be displayed
> Wait a few seconds and then adjust the number of doses per day using buttons 2 and 3.
> Press button 1

ALARMS:
> 'ALARMS' will be displayed.
> Set the 1st (1) alarm time using buttons 2 or 3.
> Press Button 1 again for the 2nd (2) alarm time and repeat the procedure for all subsequent
> alarm times required (Maximum 24 daily).

 Press and hold down button 1 for a few seconds to exit the menu and revert to normal operation.

Contact e-pill Medication Reminders at 1-800-549-0095
(or +1-781-239-2941) if you encounter any problems with your
e-pill MedTime PLUS unit.
We are here to help you M-F from 8:30-5:00 PM Eastern Time.

MENU B (Accessed through Button 3)
To access the functions in this Menu press and hold down button 3 until 'BEFORE' is displayed on the screen. The individual functions in this menu can then be accessed by pressing button 1 repeatedly.

BEFORE (Early Dose) - Taking medication before the pre-set alarm time
It is possible to allow medication to be taken up to 5 hours before the normal pre-set alarm time. To set this function go to 'BEFORE'. (Do not use this function with someone with confusion).
Press Buttons 2 or 3 to set the time required.
If this function has been set the user may access their medication in advance by turning the dispenser upside down (through 180°) and then upright **twice (2 times)** in succession. The dispenser will then rotate one step and the next dose will become available.
Note: If medication is taken before the normal time (Early Dose), the dispenser will not activate again until the following medication is due.
If this function is not required set at 00.00

AFTER (Alarm Duration)
The length of time the alarm will sound / light will flash can be adjusted by the 'AFTER' function. This also controls the time that the shutter will remain unlocked.
Press Button 1 until 'AFTER' is displayed.
Select the required alarm duration by pressing Buttons 2 and 3 (minimum 5 minutes / maximum 5 hours = 300 minutes).
The alarm will sound and light flash every 5 seconds for the first minute, every 8 seconds up to 1 hour and thereafter sound every minute and light every 16 seconds until either the medication is dispensed or the AFTER limit is reached, maximum 5 hours.

SOUND (Alarm Melody)
There are four (4) alarm sounds available. To choose the alarm sound:
Press Button 1 repeatedly until 'SOUND' is displayed.
Choose your preferred sound 01 02 03 or 04 by pressing Buttons 2 or 3.
Should no sound be required set at 00 (00=Silent).

LIGHT (Visual Indicator)
Press Button 1 repeatedly until 'LIGHT' is displayed.
If the light is not required press button 2 once – 'OFF' will be displayed
If the light is required press button 3 once – 'ON' will be displayed.

FILLED (Number of doses placed in the medication tray when filled)
This function is enables the display warning 'DOSES LEFT'
Press button 1 until 'FILLED' is displayed
Set the number of doses placed in the medication tray when filled using buttons 2 and 3.
When no doses remain the display will show ' - - - - '.

BATT (Battery type)
It is possible to use both Alkaline and rechargeable NiMH batteries.
Press Button 1 repeatedly until 'BATT' is displayed.
Using buttons 2 and 3 set at either ALC for Alkaline and NIMH for rechargeable NIMH batteries.

SECURE (Auto-Lock Dispensing Door)

The e-pill MedTime PLUS Dispenser can be set to operate in two modes:

Secure On: Press Button 2.

The shutter in the lid of the dispenser is always locked except at the programmed alarm time and subsequent 'AFTER' time (i.e. the time set for the alarm to continue).

The shutter will lock again Two (2) Minutes after medication has been dispensed.

The shutter will also lock when the 'AFTER' time has expired, thus preventing the possibility of the user taking this dose a short time before the next dose is due.

Secure Off: Press Button 3.

In this mode the shutter does not lock. The medication tray will move one complete position at each alarm time.

HOURS (Clock AM/PM or Military Time)
24hr / AM-PM clock settings

The dispenser is pre-set to display the time with the 24 hour clock.

To change this to 12 hour AM/PM setting:

Press Button 1 repeatedly until 'HOURS' is displayed.

Choose AM/PM or 24hrs by pressing buttons 2 or 3.

DLS (Daylight Saving)

To enable the dispenser to automatically adjust for daylight saving press Button 1 until DLS is displayed.

Using Buttons 2 and 3 set at 'EU' for European Daylight Saving or 'US' for American Daylight Saving.

Set at 'OFF' to disable this function.

START DELAY (Start Time & Date)

It is possible to delay the time at which the dispenser will start to operate.

This function is useful if the dispenser is being filled, for example, by a pharmacy and is not being delivered to the user until a later date.

To activate this function press Button 1 until 'START' is displayed.

Set the Year (YY) Month (MM) Date (DD) and Hour (HH) that you wish the dispenser to activate following the same procedure as for setting the DATE (see Menu 1 above). The time (HH) should be in advance of the first dose to be dispensed for the user. **If the function is not required do not set**.

STOP (Stop Time & Date)

It is possible to stop the dispenser's operation at a future date and time. This function is useful if two or more dispensers are being used by a user in sequence and ensures that only one dispenser is active at one time.

To activate this function press Button 1 until 'STOP' is displayed.

Set the Year (YY) Month (MM) Date (DD) and Hour (HH) that you wish the dispenser to stop operating following the same procedure as for setting the 'DATE' (see Menu 1 above).

The time (HH) should be set after the last dose to be dispensed for the user.

If this function is not required set the year (YY) to 99

RECORD (Dispensing Log History File)

The dispenser will record the actual times the previous 28 medications were dispensed.

Press Button 1 until 'RECORD' is displayed – the time that the last medication was taken is displayed. Press Buttons 2 or 3 for the previous medication times to be shown.

FILLING THE DISPENSER

1. Time Discs (Index Rings)

Three day / time discs are supplied which comprise:
Two printed discs for 1 up to 4 medication prompts per day (use either side) and one blank disc for more than 4 medication prompts per day.
The blank discs should be completed by hand indicating the medication times.
Place the appropriate disc for the dosage in question on top of the tray. Locating pins are provided on the medication tray with corresponding holes in the time discs for accurate positioning.

2. Medication (also see note on page 10 under 'Medication')

Remove the tray from the dispenser.
Place the correct dosage in each section of the tray. *Note: if a pill is inadvertently dropped in the incorrect compartment, a pair of tweezers can be helpful to easily remove the pill.*

3. Replace the tray in the dispenser

After filling, place the tray in the dispenser positioned so that the compartment with the **first dose** to be taken by the user (in this example, Monday evening) is positioned to the right of the opening (see figure 3).
If the dispenser is set to operate in 'SECURE' mode, press Button 2 until 'TRAY Z' is displayed. The tray will then move forward one half section to the correct position. Close the lid.

First dose

Figure 3.

RE-SETTING THE 'DOSES LEFT' DISPLAY

Each time medication is dispensed the number of 'DOSES LEFT' displayed will reduce by one (see page 3) .

When the tray is re-filled it is important to reset the 'DOSES LEFT' to the actual number of doses placed in the medication tray (see FILLED above).

Replace the tray in the dispenser in the correct position (see figure 3 above) and press Button 2 until 'TRAY Z' is displayed. If the dispenser is operating in SECURE mode the tray will move forward one half section.

Close the lid.

The number of 'DOSES LEFT' displayed will now be the same as the number entered in 'FILLED' .

LOCK

The dispenser can be locked with the key supplied. Two (2) Keys are included.

Lock: Turn the key a quarter of a turn clockwise to lock

Un-Lock: Turn counter-clockwise a quarter turn to unlock.

Please note that the lock is a simple device intended as an additional barrier only and is not tamper proof or tamper resistant.

Figure 6.

BATTERY COVER SCREW (to help prevent "playing with the batteries")

A screw is provided to prevent inappropriate access to the batteries (should this be necessary). Place the screw in the hole in the battery cover securing clip and tighten. The screw must be removed when the batteries need replacing. It should then be replaced.

GENERAL INFORMATION

Diagnostic Test (Test function / Demonstration Function)
The rotation, light and sound functions can be tested and demonstrated by pressing and holding all three buttons until TEST is displayed.
Press button 1 to test the light.
Press button 3 to start a whole alarm-sequence:
1. The display will show 'DEMO', the tray will move one half section to the open position, the alarm will sound and the light will flash.
2. 'TAKE MED' will be displayed for 20 seconds
3. Pick the dispenser up and turn it over to demonstrate dispensing the medication after which 'CLOSE' will then be displayed and the tray will move forward one half section to the closed position.
4. If the dispenser is not picked up, after 20 seconds 'CLOSE' will be displayed and the tray will again move forward one half section to the closed position.

Press and hold button 1 to leave the TEST function.

Dispenser left upside down:
If the dispenser is upside down when the alarm occurs, the alarm will sound as normal but the internal tray will not move until the dispenser is turned upright. If more than one alarm time has passed whilst the dispenser has been upside down the dispenser will present the correct medication for that time.

For example: Daily Doses 4 / Alarm Times: 8AM   Noon   5PM   9PM

The dispenser is left upside at 0805AM and placed upright at 4:30PM. At Noon the alarm will sound but the tray will not rotate. At the 5PM alarm time the tray will rotate two (2) positions and present the 5 PM medication (the Noon medication will move around out of sight and be inaccessible).

Fault handling:
The alarm will sound continuously in the event of the dispenser failing to rotate properly. This might be caused by an obstruction between the body of the dispenser and the internal tray.   In this event the display will show 'ERROR 01' or 'ERROR 04' or 'ERROR 08'. This can be cleared by pressing Button 3. Any obstruction should be removed.

Medication:
There are some pills that should not be exposed to the air and therefore should not be used in the dispenser. If in doubt please check with your pharmacist. NOTE: Only tablets or capsules suitable for swallowing should be placed in the MedSmart Dispensing Unit.

DO NOT load the medication tray with nitroglycerine, liquid, injectable or patch medications.

Batteries:

Batteries (4 x AA Alkaline) are supplied with the dispenser when new. AA Batteries
will last up to 12 months in normal use.
**To avoid excessive battery drain it is important that the clock is set soon after either the isolating
strip is removed, or the batteries are replaced.**
Battery life can be checked by tilting the dispenser forward (see page 3 above – DISPLAY):
3. At full charge a reading of 100% will be shown.
4. At a reading of less than 20% the battery warning indicator 'LOWBATT' will initiate
5. At a reading of 0% the unit will not operate. 'ERROR 10' will be shown on the display.
Rechargeable batteries may be used – ensure that the BATT function in Menu B is set to NIMH.
Remember when changing batteries to insert them to correct way around. (See figure 2 and the
guide marked in the battery case.)

Cleaning: Dispenser - wipe with a damp cloth. **Internal tray** – may be washed in
warm water or in a dish washer at maximum 158 degrees Fahrenheit (70 C)

Transport: If for any reason the dispenser is sent by mail, or carried on an airplane it is important
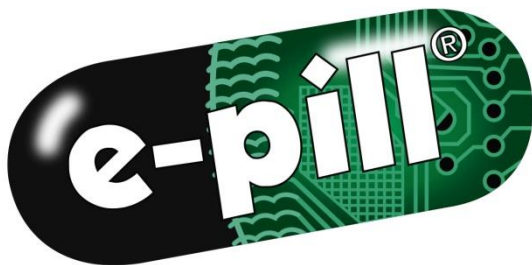that **all batteries** are removed from your dispenser.

Technical data:
Dimensions   **-** Length 190mm Width 180mm Height 56mm
Weight   - 390g excl. batteries   490g incl. batteries
Compartment volume -   18 aspirins sized tablets (11 ml per compartment)
Power supply   - 6V - 4 x AA Alkaline or 4 x AA NiMH batteries
Battery life   - up to 1 year

US Patent: 9,027,787 B2 dated May 12 2015 applies

Assessment and Observations:

- **The e-pill MedTime PLUS Automatic Pill Dispenser is a medication reminder and is not
  suitable for everyone; assessment is very important.**

- Users who wilfully tray to get at their medication by force will eventually damage the unit.
  Most problems occur due to misuse/interference in which case the user may not be suitable for
  the dispenser. This automatic pill dispenser should not be used for Class II medications
  (narcotics) or any medications where the patient may try to get to them by force before the
  scheduled time.

- The lock is a simple device and should only be turned gently ¼ turn. Over-turning with a heavy
  hand can cause the lock to break or the case to crack around it.

- Where it is thought necessary keep the battery cover screw in place to prevent access to the
  batteries.

- When replacing the tray in the dispenser do not 'click' the tray around, always lift up and
  replace in correct position.

e-pill® Medication Reminders
epill.com 1.800.549.0095

Disclaimer:

This e-pill Medication Reminder (e-pill MedTime PLUS / Careousel Advance) is only a supplement to any memory system that you currently use to remind yourself to take medications. The user maintains full responsibility to administer medication at the appropriate times. e-pill, LLC assumes no responsibility for any incidental or consequential damages, including but without limitation, damages or injuries resulting from malfunction of the product. e-pill, LLC's liability shall in no circumstances exceed the amounts paid by the user for the e-pill MedTime PLUS.

SKU 992030 UPC 837066000411

Spare Parts, Keys, Trays, Index Rings etc. are available for purchase by calling 1-800-549-0095 or visiting us on-line at www.epill.com

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