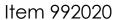# Instruction Manual

e-pill® MedTime Plus

Locked Automatic Pill Dispenser

US Patent 9,027,787 B2

Item 992020

Item 992030

Carefully review and save this setup guide

e-pill® MedTime Plus
Locked Automatic Pill Dispenser

Introduction

The e-pill® MedTime Plus locked automatic pill dispenser is designed to remind and dispense pills according to the patient's dosing schedule, reminding by means of auditory alarm and flashing light. MedTime Plus will make the correct dose available at the correct time, keeping all other pills secure via a locked lid plus an additional Secure Mode feature. MedTime Plus can store up to 24 alarms, all alarms will automatically repeat every day.

We recommend that you always keep your e-pill MedTime Plus locked. Two keys are included - one key for the caregiver and one key as a backup. Although MedTime Plus does lock, it is not tamperproof and therefore should not be used to administer pain medications or Schedule II/III drugs.

How it Works

At dose time the alarm will sound, and the internal tray will rotate, making the correct dose available. Turn the dispenser over as seen in the photo above to dispense - this will release the correct dose and silence the alarm.

Components

Locked Automatic Pill Dispenser (1)
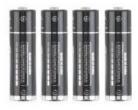**Item 992020 (clear lid)/992030 (solid lid)**

Medication Tray (2)
Item 992040

Keys (2)
Item 991022

Dosage Template Set (1)
Item 991038

AA Batteries (4)

SETUP - STEP 1

Turning On and Opening e-pill MedTime Plus
1. Turn the pill dispenser upside down and remove the battery door.
2. Remove the battery insulator strip to power on the dispenser.
3. e-pill MedTime Plus is now on.
4. Replace the battery door and turn the dispenser right-side up.
5. Open the lid by placing a finger on top of the clear dispensing window and your thumb on the front catch. Press with your thumb and lift up.

Setup Menu A: Carefully Go Through All of Menu A for Proper Setup
Menu A Settings: Clock, Date, Doses, Alarms.

CLOCK:
1. Tap button 1 until 'CLOCK' is displayed.
2. Tap button 2 (decrease) or 3 (increase) to set the correct time.

DATE:
1. Tap button 1 until 'DATE' is displayed.
2. Tap button 2 (decrease) or 3 (increase) to set the correct YEAR.
3. Tap button 1 to move to the month 'MM.'
4. Tap button 2 (decrease) or 3 (increase) to set the correct MONTH.
5. Tap button 1 to move to the month 'DD.
6. Tap button 2 (decrease) or 3 (increase) to set the correct DAY.

DOSES: The number of alarms needed per day.
1. Tap button 1 until 'DOSES' is displayed.
2. Tap button 2 (decrease) or 3 (increase) to set the number of alarms.

ALARMS: Alarms need to be set in order, starting with the earliest alarm first.
1. Tap button 1 until 'ALARMS' is displayed.
2. Set the earliest alarm first ('1'):
    a. Tap button 2 (decrease) or 3 (increase) the time.
3. Tap button 1 to save and to move to the next alarm, then tap buttons 2 or 3 to set the next alarm time.

SAVE and EXIT Menu A:
1. Tap and <u>hold</u> button 1 for 5 seconds to save and exit Menu A.
2. The display will cycle between the current time and the current date.

Setup Menu B: Carefully Go Through All of Menu B for Proper Setup
To access Menu B: Press and hold button 3 until 'BEFORE' is displayed.
Menu B Settings: Before, After, Sound, Light, Filled, Batt, Secure, Hours, DLS, Start, Stop, Record.

BEFORE: Allows dispensing of medication before the set alarm time. This setting can be set from 5 minutes to 5 hours and is useful if needing to take a dose earlier than scheduled in order to not miss important appointments or events that may take you away from your dispenser. Note: Do not use this function with someone who may get confused by its use.
Turn off: If this function is not required set to 00:00.
1. When in menu B, tap button 3 until 'BEFORE' is displayed.
2. Tap button 2 (decrease) or 3 (increase) to set length of BEFORE time.
3. How to Use: When the patient is within the set of number minutes prior to alarm time, turn the dispenser upside down (past 180°) and then upright, 2 times in succession. The dispenser will then rotate, and the next dose will become available. If a dose is taken early, the dispenser will not activate again until the following medication is due.

AFTER: Alarm duration.
1. When in menu B, tap button 1 until 'AFTER' is displayed.
2. Tap button 2 (decrease) or 3 (increase) to set the alarm's duration.

SOUND: Alarm melody.
1. When in menu B, tap button 1 until 'SOUND' is displayed.
2. Tap button 2 (decrease) or 3 (increase) to set the alarm's melody:
    a. 00 for silent (visual alarm only), 01 – 04 for different melodies.

LIGHT: Visual alarm via a blinking red light.
1. When in menu B, tap button 1 until 'LIGHT' is displayed.
2. Tap button 2 to turn off, button 3 to turn on.

FILLED: Displays number of doses left in the tray as 'DOSES LEFT.'
1. When in menu B, tap button 1 until 'FILLED' is displayed.
2. Tap button 2 (decrease) or 3 (increase) to set the exact number of compartments filled in the medication tray.
3. When no doses remain '- - - -' is displayed.
BATT: Set the type of battery in the dispenser for optimal battery life.

1. When in menu B, tap button 1 until 'BATT' is displayed.
2. Tap button 2 or 3 to set battery type to either:
    a. 'ALC' for alkaline/non-rechargeable (most common).
    b. 'NIMH' for rechargeable (uncommon).

SECURE: Auto-locking dispensing window.
ON: The dispensing window in the front of the lid is locked except when the alarm is sounding. The window will lock again 2 minutes after dispensing.
OFF: The clear dispensing window in the front of the lid is never locked.
1. When in menu B, tap button 1 until 'SECURE' is displayed.
2. Tap button 2 to turn on, button 3 to turn off.

HOURS: Use either a 12-hour clock (AM/PM) or 24-hour clock.
The dispenser's default uses the 24-hour clock.
1. When in menu B, tap button 1 until 'HOURS' is displayed.
2. tap button 2 or 3 to set to:
    a. 12 hour – 'AM' or 'PM' will be displayed next to the time.
    b. 24 hour – 'AM' or 'PM' will not be displayed next to the time.

DLS: Set the dispenser to automatically adjust for daylight saving.
1. When in menu B, tap button 1 until 'DLS' is displayed.
2. Tap button 2 or 3 to set to:
    a. 'OFF' to disable.
    b. 'EU' for European Daylight Savings.
    c. 'US' for United States Daylight Saving.

START: Set the date and time at which the dispenser will start to operate.
Useful if the dispenser is being filled off-site and is not being delivered to the patient until a later date.
1. When in menu B, tap button 1 until 'START' is displayed.
2. If you do not need to use the START function, tap button 1 until you reach STOP.
3. If you do need to use the START function, set the Year (YY), Month (MM), Date (DD) and Hour (HH) to when you want the dispenser to wake up. Tap button 2 (decrease) or 3 (increase) and button 1 to move to the next setting.

STOP: Set the date and time at which the dispenser will stop to operate. 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.

1. When in menu B, tap button 1 until 'STOP' is displayed.
2. If you do not need to use the STOP function, tap button 1 until you reach RECORD.
3. If you do need to use the STOP function:
    a. Set the Year (YY), Month (MM), Date (DD) and Hour (HH) to when you want the dispenser to go to sleep. Tap button 2 (decrease) or 3 (increase) and button 1 to move to the next setting.

RECORD: Will show the time at which the previous 28 doses were dispensed

1. When in menu B, tap button 1 until 'RECORD' is displayed.
2. Tap button 2 (decrease) or 3 (increase) the previous dispensing times:
    a. '1' is the latest dispense time which occurred.
    b. '2' is the second latest dispense time which occurred.
    c. '3' is the third latest dispense time which occurred etc.

SAVE and EXIT Menu B:

1. Press and <u>hold</u> button 1 for a few seconds to save and exit Menu B.
2. The display will cycle between the current time and the current date.

SETUP - STEP 2

Filling the Tray

1. With the lid still open, remove the tray that is inside the dispenser. This makes filling the tray easier.
2. e-pill MedTime Plus comes with three different dosing templates. The template identifies the number of alarms per day and, very importantly, the time of the day that you are filling the tray. The blank disc is used for 5 - 24 alarms per day. This disk has been intentionally left blank so it can be tailored to align with the exact number of alarms set. Place the correct template based on your needs on the tray, with the current day of week and time placed directly at 6 o'clock.
3. Fill compartments counterclockwise with pills using the dosing template as a guide. Note: If you take medications three (3) times per day, the last compartment will be left empty.

Begin to Use
1. Align the tray in the dispenser: The first dose that will dispense will be in the compartment immediately to the right of the one placed (directly) at 6 o'clock.
2. If 'SECURE' mode is set to ON:
    a. Press and <u>hold</u> button 2 until 'TRAY Z' is displayed.
    b. The tray will then move clockwise (forward) ½ a compartment to the correct position. The dividers between the tray's compartments is what locks the dispenser's clear dispensing window.
3. If 'SECURE' mode is set to OFF, move to step 4.
4. Close the lid.
5. Turn the dispenser over and lock the dispenser. WARNING: When locking/unlocking the cover do not turn the key more than ¼ of a turn.

Congratulations
All of SETUP – STEP 1 and all of SETUP – STEP 2 is complete.
Your e-pill MedTime Plus is now 100% setup.

Refilling the Tray

Resetting 'DOSES LEFT' Count After Refilling the Tray
The FILLED function will reduce 'DOSES LEFT' by 1 each time medications are dispensed. Every time after the tray is refilled, it is required to set the FILLED setting to the exact number of doses placed into the medication tray.
1. Tap and <u>hold</u> button 3 until 'BEFORE' is displayed.
2. Tap button 1 until 'FILLED' is displayed.
3. Tap button 2 (decrease) or 3 (increase) to set the exact number of compartments filled in the medication tray.
4. The number of 'DOSES LEFT' displayed will now be the same as the number entered in 'FILLED.' When zero doses remain '- - - -' is displayed.

General Information

Dashboard

Enables the patient, caregivers, and family members to make a visual check on the status of the dispenser without having to open it.

1. When the dispenser is at rest the display cycles between showing the time and date.
    a. When doses remaining reaches 4 or less, the number of doses remaining 'DOS ##' will appear in the cycle.
    b. When the battery level reaches 20% or less, 'LOW BATT' will appear in the cycle.
2. When the dispenser is tilted continuously at 20 degrees (lock must touch the surface of the table) the display cycles between showing the time of the next dose, doses left, battery level and date.

Secure Mode: Additional Details

When operating in secure mode the clear dispensing window in the lid of the e-pill MedTime Plus only unlocks when the alarm is going off. This window automatically locks again 2 minutes after the dose has been dispensed.
Note: The dividers between the tray's compartments is what locks the dispenser's clear dispensing window.

Diagnostic Test

The rotation, light and sound functions can be tested and demonstrated by pressing and <u>holding</u> all three buttons down until 'TEST' is displayed.

1. Tap button 1 to test the light.
2. Tap button 3 to start a whole alarm-sequence test:
    a. 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.
    b. 'TAKE MED' will be displayed for 20 seconds.
    c. 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 ½ a section to the closed position.
        i. If the dispenser is not picked up after 20 seconds 'CLOSE' will be displayed and the tray will move forward ½ a section to the closed position.
3. Press and <u>hold</u> button 1 for 5 seconds to leave the Test function.

Low Battery

When the battery capacity is less than 20% the display will show 'LOWBATT' in sequence with the date and time.

Changing batteries:

1. After changing the batteries all of your settings will be saved EXCEPT the current time.
2. To set the current time:
   a. Tap button 1 until 'CLOCK' is displayed.
   b. Tap button 2 (decrease) or 3 (increase) to set the correct time.
   c. Press and <u>hold</u> button 1 for a few seconds to save and exit.

Error Handling

ERROR 01 or ERROR 04 or ERROR 08:

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. If an obstruction exists, it needs to be cleared immediately. Once the error has been resolved the error message can be deleted by tapping button 3.

ERROR 10:

A battery level of 0%. All the batteries need to be replaced and the clock reset.

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 rotate until the dispenser is turned upright. If more than one alarm time has passed while the dispenser has been upside down, the dispenser will only make available the current dose.

Medication

Pills that should not be exposed to the air 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 medication tray. Do not load the tray with nitroglycerine, liquid, injectable or patch medications.

Battery Types

Recommended: 4 AA Alkaline batteries are supplied with the dispenser and will last up to 1 year. Replace all 4 AA at 'LOW BATT' warning.

Uncommon: If using rechargeable AA batteries, set BATT in menu B to 'NIMH.'

Cleaning
Wipe with a damp cloth. The tray may be washed (after being removed from the dispenser) in warm water or in a dish washer at maximum 158 degrees Fahrenheit (70 C).

Transport
If the dispenser is sent by mail or carried onto an airplane it is important that all the batteries are removed from the dispenser.

Assessment and Observations
1. The e-pill MedTime Plus is a medication reminder and is not suitable for everyone, patient assessment is important.
2. Users who wilfully try to get at their medication by force will damage the dispenser. If problems occur due to misuse/interference MedTime Plus may not be suitable for the patient.
3. e-pill MedTime Plus is locked but it is not tamperproof, therefore it should not be used to administer pain medications, Schedule II/III drugs or any medications where the patient may try to get to them by force.
4. The dispenser's lock should only be turned ¼ of a turn. Over-turning with a heavy hand can cause the lock or case to break.
5. Always lift up the tray when aligning or replacing it. Forcing the tray around while it is in the dispenser will damage the dispenser.

Technical Information
Dimensions: Length 7.5 inches/Width 7.1 inches/Height 2.2 inches
Weight: 1.08 lbs with batteries
Compartment volume: 18 aspirins sized tablets
Power: 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

Medication Reminders

Follow us on:

e-pill, LLC
49 Walnut Street, Bldg. 4
Wellesley, MA 02481, USA

United States: 1-800-549-0095
International: +1-781-239-2941
www.epill.com