

DONGBAO PEN (ELECTRONIC)

INSTRUCTION MANUAL

Foreword

The new Dongbao Pen, which is made by Disetronic Medical Systems AG, is an injection aid incorporating the latest advances in technology. It is easy to operate and guarantees accurate dosage. As you turn the dosage knob, you get one unit at each step. It is easy for you to preset your dose from 1 to 60 units.

In order to guarantee the safety and the best result, Dongbao Pen shall be used together with Dongbao insulin cartridges and Dongbao Penfine Needles.

Always check before each injection that the Dongbao Pen contains the correct insulin type to be injected.

Before using your Dongbao Pen please read the directions carefully from beginning to end. While reading them it is better to open out the illustration inside the front cover.

We wish you every success in using the Dongbao Pen for your insulin treatment.

1. Dosage knob
2. Tactile points
3. Display
4. Start button
5. Operating module
6. Safety lock
7. Reservoir module
8. Threaded rod
9. Rubber plunger
10. Transparent cartridge cover
11. Window with graduations
12. Insulin cartridge
13. Metal cap with rubber disc
14. Needle
15. Inner protective cap
16. Protective cap
17. Needle container

The Dongbao Pen in Detail

The Dongbao Pen consists of **two modules** (5 and 7), which are screwed and locked together after the **insulin cartridge** (12) has been inserted into the transparent **cartridge cover** (10). By pressing the **start button** (4) on the opposite side of the **display** (3), you activate the display and disengage the locked **dosage knob** (1). At the top of the **operating module** (5) is the **dosage knob** with which you can preset your insulin dose; the dose will display in clearly legible figures on the **display** (3). To inject the corresponding dose of insulin you can press the **dosage knob** (1) downwards until it “clicks”.

The **threaded rod** (8) in the **transparent cartridge cover** (10) could ensure accurate setting and delivery of the dose of insulin. The large **window with graduations** (11) could show you insulin remain in the cartridge. The **needle** (14) with the **inner protective cap** (15) is screwed on to the thread of the **reservoir module** (7).

When not in use, the Dongbao Pen should always be stored with the dosage knob in the engaged position.

Construction of the Dongbao Pen

The Dongbao Pen is fabricated from fibrous polypropylene. The threaded rod is made of metal so as to guarantee consistent accuracy of dosage. The display is powered by a small silver oxide battery in the interior of the operating module. The battery will last for the life of your Dongbao Pen. For your own safety the life of the Dongbao Pen has been limited to two years. After expiration you need to get a new Dongbao Pen. Please give it back to the distributor.

Please open out this page when reading the instructions for use

Instructions for using the Dongbao Pen

- A Preparing the Dongbao Pen for its first use
- B Removing air bubbles from the cartridge
- C Setting the dose and injecting the insulin
- D Changing the Dongbao Fine Needle
- E Changing the Dongbao insulin cartridge
- F Possible malfunctions

What you can do if ...

Maintenance and Care of the Dongbao Pen

Storage of the Dongbao Pen

Storage of Dongbao insulin cartridges

Accessories for use when away from home and in emergencies

A few words about safety

Important safety precautions

A Preparing the Dongbao Pen for its first use

1. Press the start button (4) of the Dongbao Pen
 - This will unlock the dosage knob (1). The figures “00” will appear on the display (3), and will go out in two minutes.
2. Gently pull back with your thumb the safety lock (6) and unscrew by twisting the reservoir module (7) off the operating module (5)
 - Check that the dosage knob has been twisted back completely to the left in an anticlockwise direction.
3. Insert the new Dongbao insulin cartridge (12) into the transparent cartridge cover (10)
 - Check the cartridge before injection. Do not use the insulin cartridge if it contains any damage.
 - Make sure that you insert the insulin cartridge correctly – which the metal cap toward the

front. Do not touch the rubber disk with the fingers.

4. Pull back the safety lock with your thumb and screw both modules together. If the cartridge contains middle or longer acting (cloudy) insulin, turn the pen up and down at least 10 times.
 - The glass beads in the cloudy insulin cartridges can make the insulin liquid appear uniform so that each injection will have the same dose of insulin and effect. If the insulin cartridge contains clear insulin, the tilting can be omitted.
5. Pull off the protective cap (16) from the reservoir module (7)
 - Disinfect the rubber disc with a disinfectant swab.
6. Screw a new needle (14) on to the reservoir module
 - Please adhere to the recommendations in Section D “Changing the Needle”.

B Removing any air bubbles from the cartridge

1. Pull off both protective caps (15 and 17) from the needle.
2. Slowly turn the dosage knob.
 - 1 × “click” to check that the Dongbao Pen is ready for use, 2 units for removing an air bubble; 4-8 units for removing a larger air bubble.
3. Hold the Dongbao Pen with the needle pointing upwards; then press the dosage knob (1) slowly until it clicks home.
 - The Dongbao Pen is ready for use when a few drops of insulin emerge from the point of the needle. If no insulin appears the needle may possibly be block. In that event press the start button, then screw on a new needle and repeat Procedure B 3.
4. Shake off the drop of insulin from the point of the needle.

C Setting the Dose and Injecting the Insulin

1. Press the start button (4). Slowly turn the dosage knob (1) until the desired insulin dose (units) appears on the display (3).
 - If, when pre-selecting the dose, a number sequence appears which is not valid for your Dongbao Pen, do not use the Dongbao Pen because a false dosage could result.
 - As the dosage knob is turned it gives a “click” at each dose step. The figures which appear on the display are as follows:
01 – 02 – 03 – 04 – 05 ... 60 (units)
2. Insert the needle of the Dongbao Pen through the skin and slowly press down the dosage knob (1) until it clicks home. Slowly count up to 6, then withdraw the needle from the skin.
 - To give the injection, choose a suitable area of skin, raise a skin fold by pressure between the thumb and forefinger and then puncture the needle, vertically or obliquely (45° angle between needle and the skin), in the skin.
3. Withdraw the needle from the skin and replace the two protective caps on the needle and on the Dongbao Pen.
 - The administered insulin dose remains visible on the display for a further two minutes after the injection. Please ensure that the dosage knob is always locked when the Dongbao Pen is not in use; if it has been left unlocked, proceed as in Section F 1a.

D Changing the Dongbao Penfine Needle

1. Pull off the protective cap (16).

2. Unscrew the used needle (14) together with the inner protective cap (15).
 - To avoid any risk of injury, used needles must always be inside the inner protective cap when discarded.
3. Remove the plastic film from the needle container (17) of the new needle.
4. Place the needle container of the new needle on the reservoir module (7) and screw it firmly on. Pull the needle container off and discard it.
 - The new needle (14) together with the inner protective cap (15) is now screwed on to the thread of the reservoir module.

Standard of Dongbao Penfine Needles

Standard	Length (mm)	Diameter (mm)	Remarks
31G	6	0.25	
	8	0.25	
29G	10	0.33	Specially Made
	12	0.33	

E Changing the Dongbao insulin cartridge

1. Pull off the protective cap (16) and unscrew the needle (14) together with the inner protective cap (15).
2. Gently pull back the safety lock (6) with your thumb and unscrew by twisting the reservoir module off the operating module. Remove the empty insulin cartridge from the reservoir module.
 - Empty insulin cartridges should be discarded. They must not be refilled with insulin.
3. Press the start button (4).
 - This will release the dosage knob (1) and activate the display (3). The figures “00” appear on the display.
4. Turn back the dosage knob (1) anticlockwise as far as it will go.
 - The threaded rod will now disappear inside the operating module and the display will go out. Turn the dosage knob back until you begin to feel some resistance.
Do not attempt to force it any further!
5. Put the new insulin cartridge into the transparent cartridge cover (10).
 - Please adhere to the recommendations described in procedure A 3.

F Possible malfunctions

What you can do if ...

- F1a ... if the dosage knob of the Dongbao Pen is unlocked and the display goes out before you have set the dose?
- Begin by pressing the dosage knob down until it clicks home. Then proceed as described in Section C.
- F1b In the event that “00” does not appear on the display and the display remains blank when the start button is pressed ...
- First press the dosage knob until it clicks into the locked position. Then repeat the starting procedure by pressing the start button.
- F2 ... if you unlock the dosage knob and instead of “00” the display flashed “--“?

- The guarantee of your Dongbao Pen is about to expire. The display will work for another four weeks before it shuts off for safety purpose automatically.

F3a ... if you have preset too large a dose of insulin with the dosage knob?

- Take out Dongbao Cartridge from the pen (see Cap. E), then twist dosage knob anticlockwise to get the correct dosage. Insert the cartridge into the pen.

F3b ... if the display should shut off during dosage selection ...

- Discard the selected insulin volume from the Dongbao Pen by pressing the dosage knob, Afterwards, reselect the desired amount of insulin (see Cap. C).

F4 ... if, when setting the dose, you turn the dosage knob past 60 units?

- You have exceeded the maximum dose per injection. When you turn the dosage knob further, insulin will dribble out of the needle and the figure 60 will continue to appear on the display. Press down the dosage knob and 60 units will be delivered.

F5 ... if the dosage knob comes up against a lock when you are setting the dose?

- The insulin cartridge is empty. Fit a new insulin cartridge (see Section E).

F6 ... if the dosage knob jams and you cannot screw it back when changing the insulin cartridge as described in Section E?

- Ensure that the start button is pressed. Unscrew the operating module, screw dosage knob covered by soft cloth with pliers by twisting it left (anticlockwise). Then proceed as described in Section E.

F7 ... if no insulin is delivered when you press down the dosage knob?

- a) The needle may be loose. Screw the needle on firmly (see Section D).
- b) The needle may be blocked or defective – fit a new needle (see Section D).
- c) Perhaps you have forgotten to set the insulin dose on the dosage knob. Set your insulin dose (see Section C).
- d) Perhaps you have forgotten to put in an insulin cartridge. Insert a new insulin cartridge (see Section E).

F8 ... if insulin continues to dribble out of the needle after you have injected the dose of insulin and withdrawn the needle from the skin?

- a) When giving the next injection press the dosage knob right down until it clicks home and leave the needle under the skin for a few seconds longer (see Section C).
- b) Remove any air bubble, which is in the insulin cartridge (12) (see Section B).

F9 ... if, after inserting a new insulin cartridge, you find it impossible to screw the two modules together properly?

- The threaded rod has not been completely wound back. Take the operating module (without an insulin cartridge) and turn the dosage knob back to the left, (anticlockwise) until you feel some resistance. (see Section E).

F10 ... if, “bt” flashes on the display?

- The battery is out of order. Please return the Dongbao Pen to your pharmacist and ask for a gratis replacement.

In the event of any other malfunction ...

Please consult us by toll free call 800 846 5777

Maintenance and Care of the Dongbao Pen

The Dongbao Pen requires no maintenance. It is sufficient to clean soiled parts with a cloth moistened with water. Please do not use alcohol or other solvents or cleaning lotions.

Storage of the Dongbao Pen

After each injection make sure that the dosage knob is locked when the Dongbao Pen is not in use. Dongbao Pen with cartridge inside should be covered with protective caps, when it is not using. Under ordinary conditions of use, an insulin cartridge can be left in the Dongbao Pen for up to 3 weeks. The Dongbao Pen must not be stored in a refrigerator.

Storage of Dongbao insulin cartridges

Insulin cartridges which have not yet been inserted into the Dongbao Pen should be stored in their box in a refrigerator between +2 °C and +8 °C, preferably in the vegetable compartment, They must not be allowed to freeze! Before being fitted into the Dongbao Pen the insulin cartridge should be left at room temperature for 1-2 hours.

Accessories for use when away from home and in emergencies

Any malfunctions can usually be corrected by following the instructions set out in Section F; in case of difficulty you can get help from your doctor or from the pharmacist who supplied the Dongbao Pen, or on Sundays or holidays from any pharmacist on duty.

In emergencies, you can draw up the insulin from the Dongbao Pen cartridge into a special plastic syringe and inject it. However, you must remember that the cartridge contains insulin in a concentration of 100 units/ml, and you must therefore use a plastic syringe designed for insulin of this strength.

A few words about safety

For your own safety the life of your Dongbao Pen has been limited to two years. During the last month of the guarantee time the flashing symbol “--” will appear on the display on pressing the start button. This informs you that the guarantee is about to expire and that you need a new Dongbao Pen. The display will work for another four weeks before it shuts off for safety reasons automatically.

Another safety feature is that when the insulin cartridge is empty (i.e. after 300 I.U.) the dosage knob is locked. This ensures that you cannot inadvertently turn it any further.

Important safety precautions

- Always check before each injection that the Dongbao Pen contains the correct insulin type to be injected.
- Always expel any air, with the Dongbao pen needle pointing upwards, before each injection.
- The needle should be removed immediately after each injection. If the needle is not removed, temperature changes may result in some liquid being expelled from the cartridge, which might cause a change in the insulin concentration (strength) if you use longer acting (cloudy) insulin.
- Read and follow the instructions provided with your Dongbao Pen and Dongbao insulin cartridges.

- Dongbao Pen should only be used in combination with Dongbao insulin cartridges and Dongbao Penfine Needles.
- If using longer acting (cloudy) insulin, you will need to turn the Dongbao Pen up and down at least 10 times before each injection.

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