

Pneumatic shock wave USER GUIDE

ESWT-KP-B



Warning

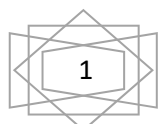
Dear user:

Thanks for using our device, to make sure a correct operation, following points must be noted:

Please read this guide in detail and keep it well for reference.

- ◆◆ Please follow the guide to assemble and operate the machine correctly.
- ◆◆ Please do not remove and change any accessories of the machine.
- ◆◆ Open the machine is not allowed except authorized or instructed by manufacturer
- ◆◆ Please contact us if there is any problem during operation.

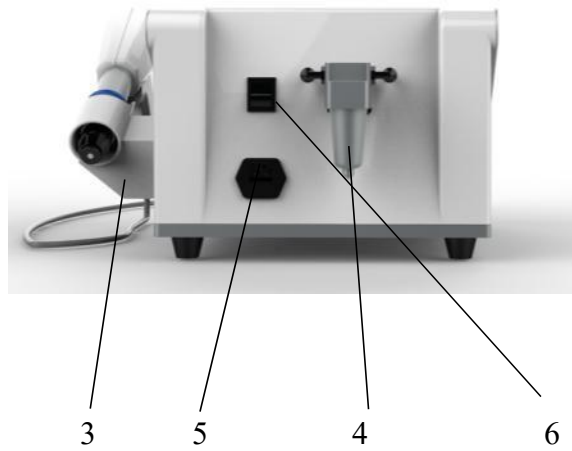
This product does not belong to medical, please don't use for disease treatment!



Parts Introduction



- 1. Touch screen
- 2. hand piece connector
- 3. hand piece supporter



- 4. Filter cup
- 5. power socket
- 6. Power switch

Accessories

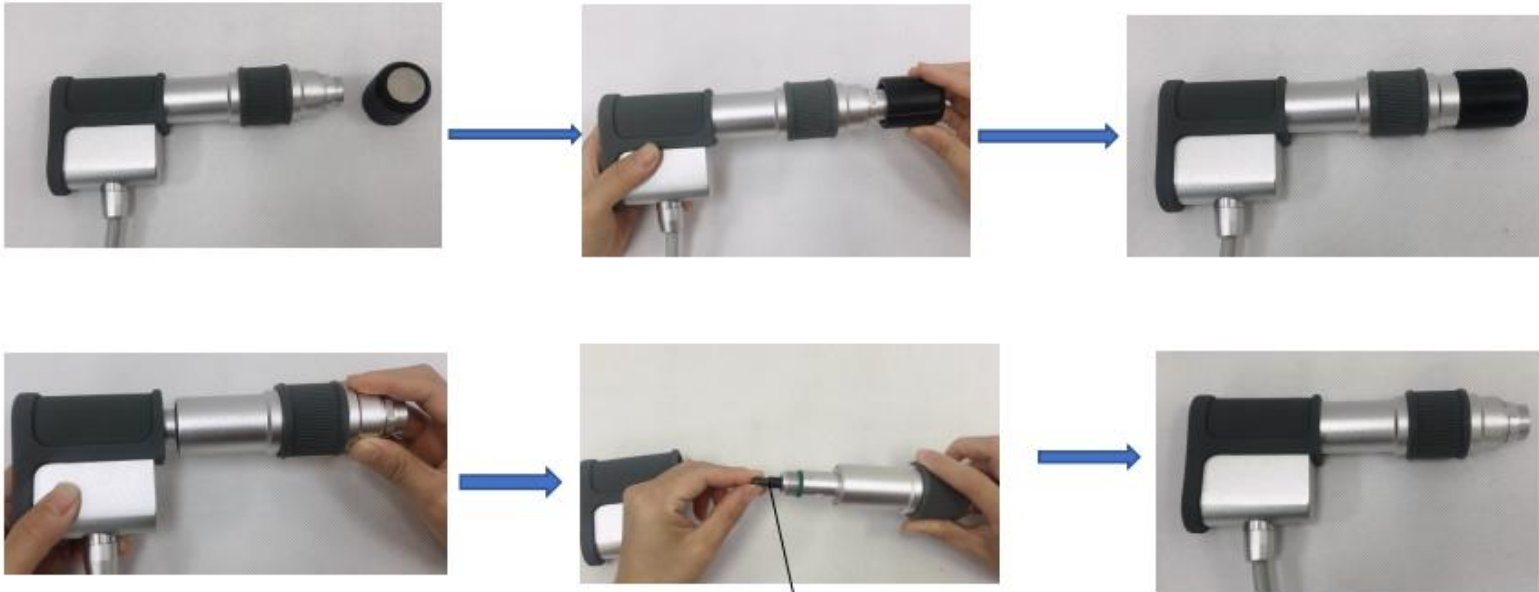


Shockwave hand piece



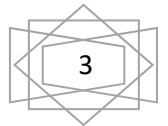
6 PCS work heads

How to change tips and bullets



Bullet iron pillar

1. To change bullet, hold the handle in one hand and the other hand use combination wrench to clockwise to tightening. please ensure the head is installed firmly. Otherwise the hand piece is easy to broke.
2. When the impacting number reach to 2 million, need to replace the bullet. Hold the handle in one hand and unscrew the front part of handle anticlockwise. Put into new bullet and install the front part.



General Introduction

The shockwave system uses the ballistic principle of shockwave generation: A pressure wave is formed via a projectile by using accelerated compressed air. The compressed air is generated by an electronically-controlled ballistic-pressure compressor. Using elastic impact, the kinetic energy of the projectile is transferred into the probe of the applicator and then into the client's body. Consequently, during the treatment, the end of the applicator must be in direct-contact with the skin and subcutaneous tissue.

Shockwave is aimed at the affected areas that are the source of chronic pain. The influence of the shockwave causes to the dissolution of calcium deposits and leads to better vascularization. The after-effects are relief from the pain.

Shockwave has the following effects:

Cellular: Increase in cell membrane transmittance by improving ionic channels activity, stimulation of cell division, stimulation of cellular cytokines production.

Reproduction of vessels in the area of tendons and muscles: Improvement of blood circulation, increase in concentration of growth factor beta 1, chemotactic and mitogenic effect on osteoblasts.

Effect on nitrogen oxide system: Bone healing and remodeling.

Improvement of macro-circulation and metabolism.

Dissolution of calcified fibroblasts.

Supports the production of collagen.

Reduction in tissue tension.

Analgesic effect.

Advantage

1. By the targeted application of the shockwave, stress to the surrounding tissues is quite insignificant.
2. The body is not burdened by pharmaceuticals, except the short-term effect of local anesthesia, if used.
3. The possibility of preventing the necessity of surgical intervention and its relevant hazards.
4. For some indications, such Tennis Elbow, there is really no other effective treatment.

operation

1.All accessories well connected

(1) Insert the plug of shockwave work handle into (2) output jack.

(2) Choose right heads. hold the work handle in one hand and unscrew the head from the work handle (anticlockwise).

screw the new head tightly (clockwise).

2.Insert the plug of power wire into (5) socket turn on power switch (6), and need to input password “888888” (Fig1), the system enter interface as (Fig 2) shows.

3.In interface as (Fig 2)

(1) Click on “Basic setting” to select language, set time and date.

NOTICE: Advanced setting is only for engineers , not for user.

4.This system include 10 different body parts.

You can click each button to enter the function

In the right column, when you click different button

the mannequin figure will show you different body check chapter

Following is the list of different position:

- (1) Hand/wrist
- (2) Elbow
- (3) Pubic symphysis
- (4) Knee
- (5) Foot/Ankle
- (6) Shoulder
- (7) Lumbar Region
- (8) Hip
- (9) Fat accumulate
- (10) ED

5. Each part is programed with two automatic modes, C mode and P mode.

C mode is comfortable mode, softer, suitable for customers with weak tolerance;

P mode is professional mode, greater intensity based on clinical recommendations.

Both modes have parameters that have been set, including the default intensity, frequency, and number of impacts.

The automatic mode can also be adjusted freely to adjust to the most suitable parameters with touch screen.

6. Each operation part is programed with 6 different Preload to choose

The system will automatic recommend preload for different body part

Also, you can choose what preload

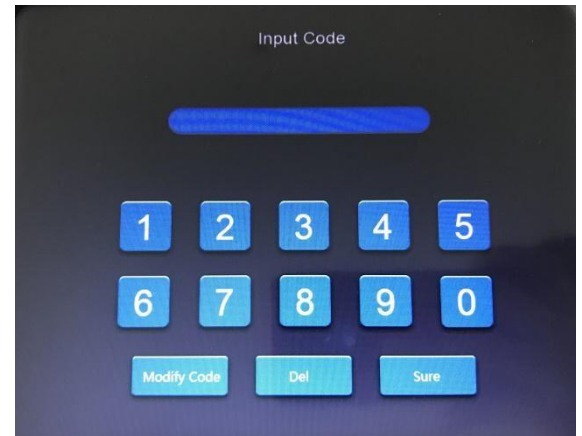


Fig 1



Fig 2

7. This User's manual use "Hand/wrist" treatment for example.

In interface as (Fig 3),

- (1). Apply gel to the treated body parts;
- (2). Click on "Hand/Wrist" The system recommends D6 and D20(including flat form focus form and radial form. choose which head depend on patient
- (3). Install the recommended tip on the handle;
- (4). Chose the mode you need, for example, select "C mode";
- (5). Click the "Start" button on the screen;
- (6). Close the handle to the body area of the treatment, click the "Start" button on the handle control panel to start working.
- (7) "Preload 600" stands for when the system works to 600 impacts every time, it will pause automatically. Please click on any key to restart.
- (8) "Impact" represents the number of shocks;
- (9) "Round" represents the number of rounds completed; (600 impacts are one round)
- (10) "Frequency 6HZ" stands for the system default work frequency is 6HZ, click on "<" and ">" to adjust. The range is :1HZ-21HZ
- (11). "Energy 2BAR" stands for the system default work frequency is 2BAR, click on "<"and ">"to adjust. The range is 0.5BAR-6BAR.
- (12). During operation, hold the work head in one hand. Target the handpiece on area/point of treatment. while impacting, can move the handle slightly in order to cover the whole area. After the pre-load impact is finished, and restart the next round.
- (13). Use warm towel to clean the work head after treatment.



Fig 3

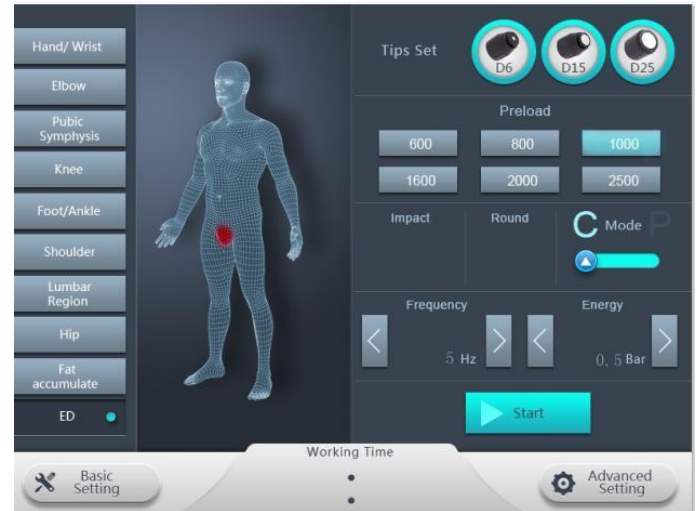
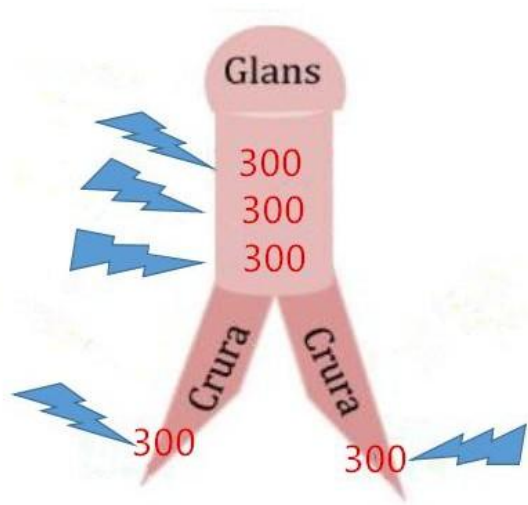


The following are some disorders that can be treated with Shock Wave Therapy:

- Tennis or Golfers elbow
- Patellar tendonitis (jumpers' knee)
- Shin pain/shin splints
- Chronic neck, shoulder and back pain
- Shoulder pain, e.g. rotator cuff tendonitis/bursitis/impingement
- Achilles tendon pain
- Heel pain
- Plantar Fasciitis
- Muscle tension caused by muscular trigger points
- Knee osteoarthritis



ED therapy protocol



1. Click on ED

The default parameter of **C mode**:

1000 impacts per time, Frequency 5HZ, Energy 0.5BAR.

The default parameter of **P mode**:

1600 impacts per time, Frequency 8HZ, Energy 1BAR.

Both of two automatic modes can be adjusted freely with handpiece or touch screen.

2. The frequency of ED treatment is 1-10HZ. The recommended frequency is 3-8HZ.

The energy of ED is 0.5-2BAR, please adjust the energy according to the customer's feeling from low to high during operation.

3. Operation guide

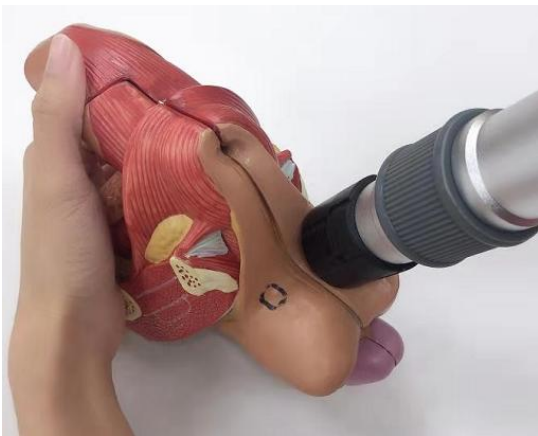
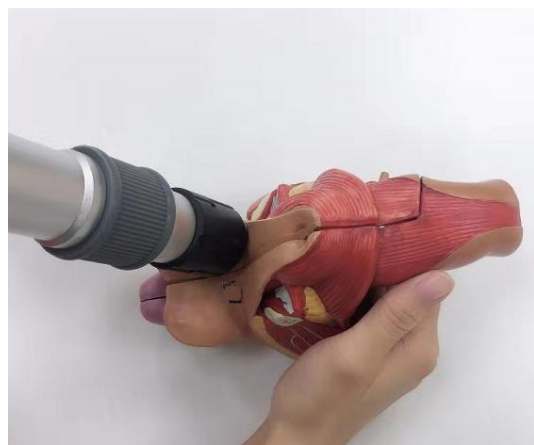
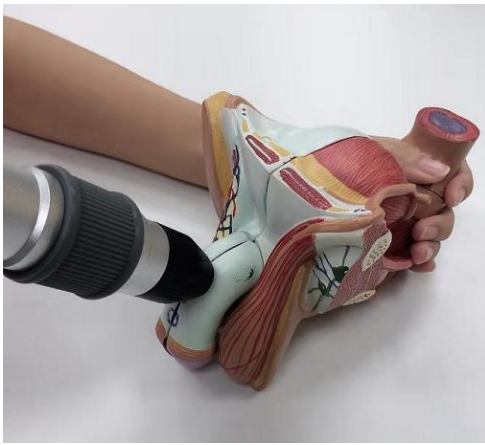
(1) Choose the D6# and D15# exclusive ED treatment work head, Along the 5 areas of the spongy tissue, 300 impacts per area, total 1500 impacts in one round, about 20 minutes.

(2) D25# head for prostate

(3) Twice a week, treat consistently for 3 weeks, then stop for 3 weeks. And start next course.

(4) Should be more impacts at the top end of penis, and Less impacts at the bottom of penis.





PS: This program is only for reference. Please follow the doctor's advice.

Following are two automatic mode parameter tables for different body parts.

Application Treatment Recommendation					
Area	C Mode	P Mode	Time	Sessions	Interval
Elbow	10HZ/3BAR	12HZ/4BAR	2000-2500	5-10	5-7 days
Hand/Wrist	6HZ/2BAR	10HZ/3BAR	2000	5-10	5-7 days
Pubic Symphysis	8HZ/3BAR	13HZ/60HZ	2000-2500	5-10	5-7 days
Knee	6HZ/2BAR	10HZ/4BAR	2000	5-10	5-7 days
Foot/Ankle	8HZ/3BAR	12HZ/3BAR	1000	5-10	5-7 days
Shoulder	12HZ/4BAR	10HZ/5BAR	2000-2500	5-10	5-7 days
Lumbar Region	10HZ/4BAR	13HZ/6BAR	2000-2500	5-10	5-7 days
Fat accumulate	10HZ/4BAR	13HZ/6BAR	2000-2500	5-10	5-7 days
Hip	12HZ/4BAR	18HZ/6BAR	2000-2500	5-10	5-7 days
ED	5HZ/0.5BAR	8HZ/1BAR	1500	2-3	twice a week

Cautions:

1. You can use gel or other lubricants on the treatment parts, and pay attention in operating In case that the lubricants get into the work head.
2. Despite high internal damping as result of the weight and design of the work head, continuous Vibrations may cause strain to the user's hand
3. The adapter is also consumable, please replace after use a period time.
4. The bullet iron pillar inside shockwave handle must replace when the service life is above two million times

Cleaning Methods:

Put some paper at the bottom of the filter cup rise the valve with your fingers let the liquid leak. Or remove it to pour out turn to left to unscrew turn to right to tightening.

Contraindications

1. Application to certain tissues, The eyes and the surrounding area, the myocardium, the Spinal cord, the gonads, the kidneys and the liver.
2. Blood disorders, coagulation problems or the use of anticoagulants.
3. Blood thinning medications.
4. Polypus in the area of treatment.
5. Pregnancy; Growing cartilage in children.
6. Tumor diseases, Thrombosis.
7. Polyneuropathy, Acute inflammation.
8. Therapy using corticoids.
9. Inapplicable on areas of the body and organs with possible gas content.
10. Inapplicable on areas in proximity to large nerve bundles blood vessels the spinal cord and the head.

Possible Side Effects

1. Erythema or swelling can temporarily occur in the treated area.
2. Loss of bodily sensation or itching can temporarily occur in the treated area.
3. Skin damage after previous corticoid therapy.
4. Shockwave application can cause undesirable heart activity.

Forbidden

1. People with heart disease or high blood pressure or configured cardiac pacemaker.
2. Patients with acute inflammation, asthma deep vein thrombosis cancer.
3. People with hemorrhagic disease, trauma or who is bleeding
4. Pregnant women
5. Medical Plastic parts, or parts with artificial in filling inside.
6. People with metal inside the body (in clue metallic tooth)
7. Patient with skin inflammation or with edema
8. People with an abnormal immune system
9. Numb or insensitive to heat.

Technical Parameters

Input voltage: AC220-230V50/60HZ AC110V50/60HHZ
Output Power: 282VA