User manual for Smart Physiotherapy System

Model No.: Smart S20A

Contents

Precautions

Please read t his u ser manual be fore us ing the s ystem, a nd pa y more attention to the safety precaution in this manual.

Please keep the user manual for future reference.

If a ny que stions a bout during the us e o f the s ystem, pl ease c all our after s ales department, Tel no. +86 27 88189920.

● Important safety instructions

When using this physiotherapy s ystem, it is n ecessary to co mply w ith th e f ollowing b asic precautio**ns.**

● Danger

Absolutely prohibited to look a t t he tr eatment w indow d irectly th rough th e h andle in case of retinal damage.

● Attention

1) Do not bend or turn round the optical fiber which connects the handle and the system main body, or the optical fiber will be damaged.

2) Please put the handle on the handle holder after use of the system

3) Please do not open the system case to adjust of fix the system without our permission. Only our company after sales staff or authorized professional staff could adjust or fix the system.

4) Please turn off the key switch, turn off the emergency stop switch, unplug the power

cord if long time not use the system. Keep the system in a dry and cool environment.

5)   Clean the system with alcohol if there is dust or greasy dirt on the system case.

1．Turn on the system

1.1   Before turn on the system, please put the handle on the handle holder, and make sure the handle treatment window not towards human, and there is no blocks.

1.2   Connect the interlock (four-core aviation plug) the right position show in the follow picture.

1.3   Insert the key switch, turn the key switch clockwise to turn on the system.

1.4   Plug the power cord.

1.5   Emergency stop switch is off.

1.6   Turn on power switch, the system starts working.

Power switch

USB socket

Power socket

Interlock
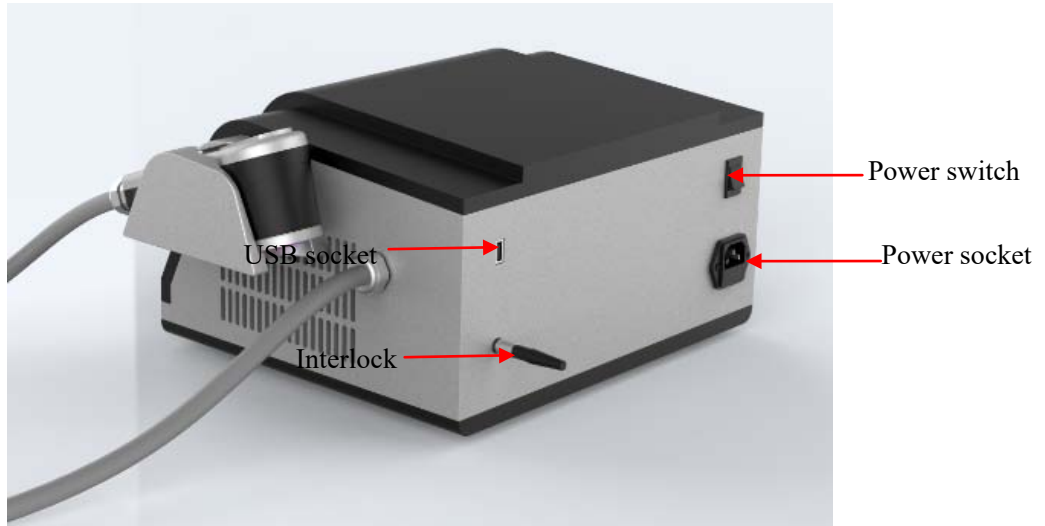
1.7   The startup interface for SMART S20A system is as follows

Key

USB

case

High Power Photo Therapy System, System Detecting, Please Wait...

2.   Main interface for SMART S20A system

When turn on the SMART S20A system, and goes to the main interface, it shows as below pictures

When the green indicator light is on, it shows the system works normally.

Energy

Power

W

Time

KJ

Minute

Save Data

Standby

3.Choose the target treatment area

Press the button "Treatment Area", enter below interface, and choose the right treatment area.
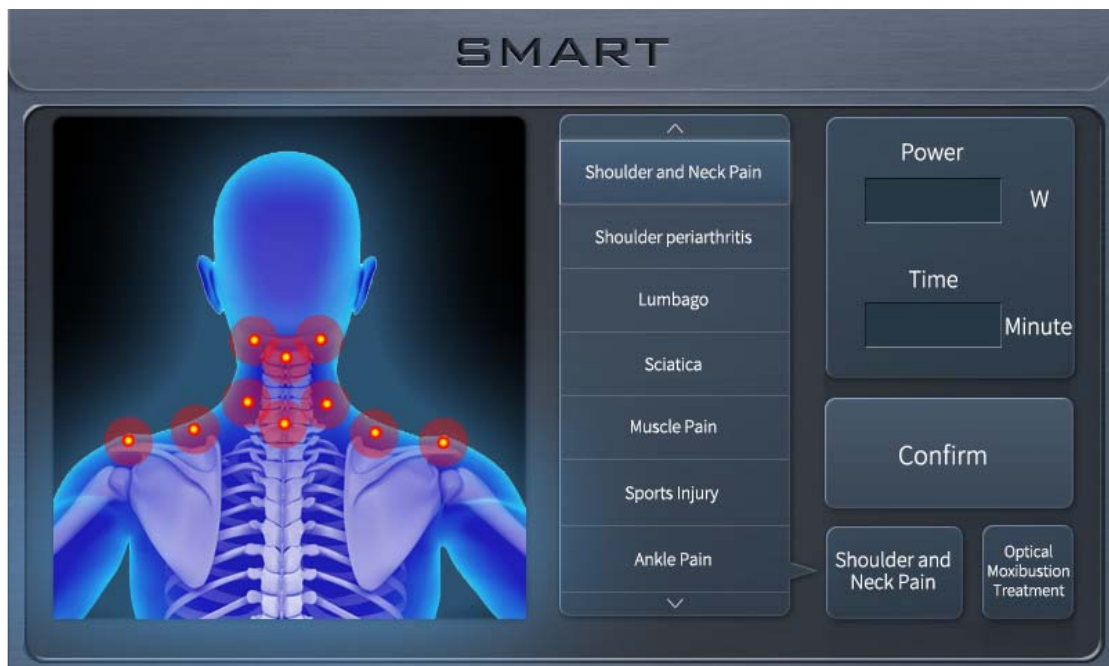

3.1 Shoulder and Neck pain treatment

3.3.1 Press the button "Shoulder and Neck pain", it shows the default treatment energy

and time on the right side of the interface. Press the button "Confirm", you can go to the

interface as below picture. You can set the treatment energy and time by yourself in this

interface, press th e b utton "Value" w hich b elow t he b utton "Energy", you can set t he energy. T he energy s hould be les s o r e qual t o 2 0. P ress "Confirm" after y ou en ter th e value. Set the treatment time with the same method.

3.3.2 After the setting, press "Confirm", go to the follow interface.

3.3.3 Press "Standby", when the button turns to "Ready", the physiotherapy system is ready for treatment. The indicator light of the treatment handle window is on, press the trigger button , it emit laser light continuously, the blue indicator light of the front panel is on meantime. There is " d i d i di " sound f rom th e s ystem. W hen the b utton ' Ready" tu rns to " S hooting", p ut the treatment h andle c lose to the tar get neck an d s houlder p ain ar ea and s tart t he treatment. T he treatment time will become l ess till zero when t he treatment finished. T he treatment power becomes higher, the final data is the total treatment energy. When the whole treatment finished, could press "Save data" to record the related date in the system. The default mode is traditional treatment mode, it moves continuously on the treatment area. Before press the button "Standby", you could also press "Light moxibustion therapy" button to enter light moxibustion therapy mode. You can have light moxibustion treatment for target area continuously. The treatment times turns to zero when treatment finished. The button "Shooting" turns to "Ready", At this time, if you press the button again, you can start the treatment twice till the treatment time turns to zero.

Handle button
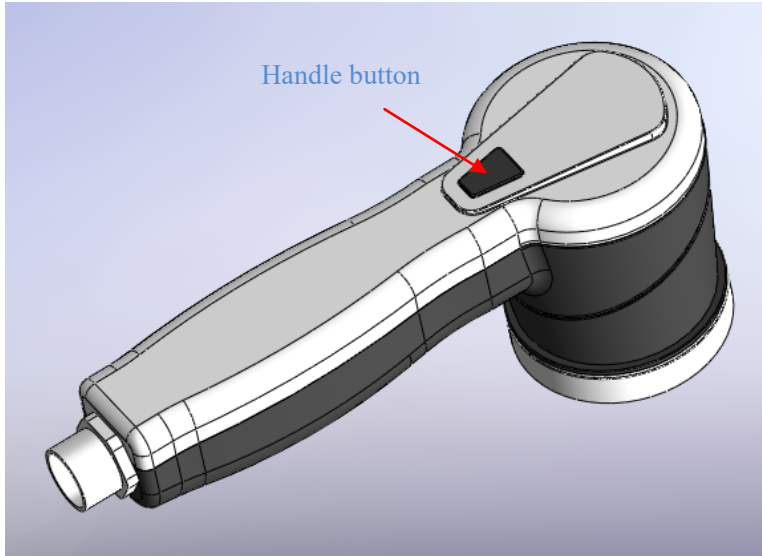
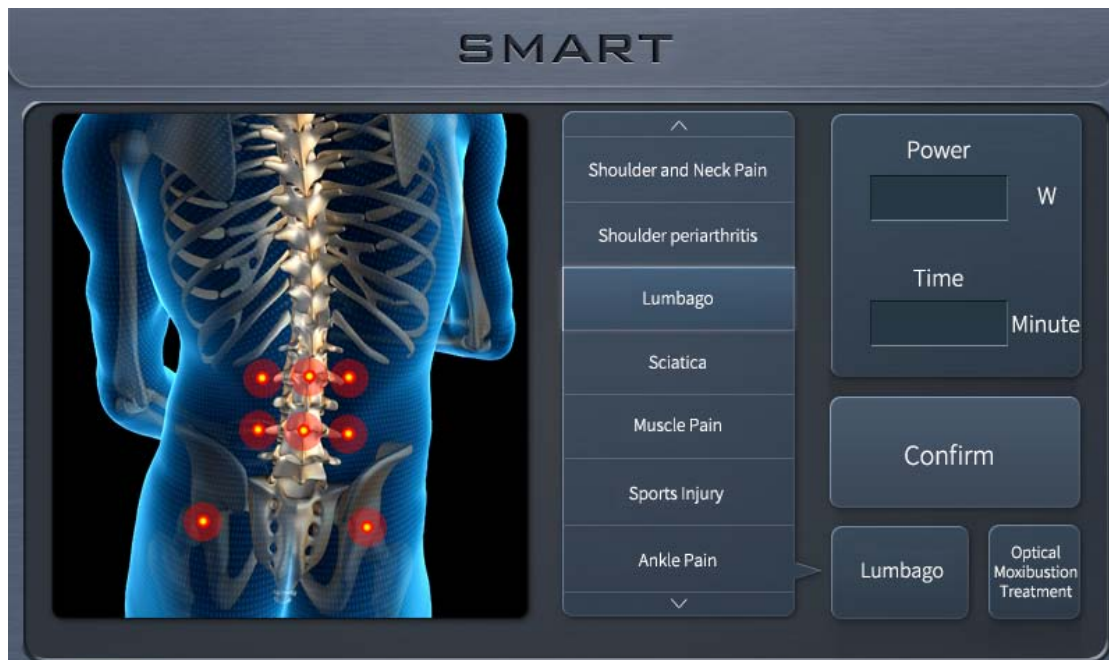**3.4** Shoulder periarthritis treatment

Press the button "Shoulder periarthritis", shows the below interface,   set the power and time
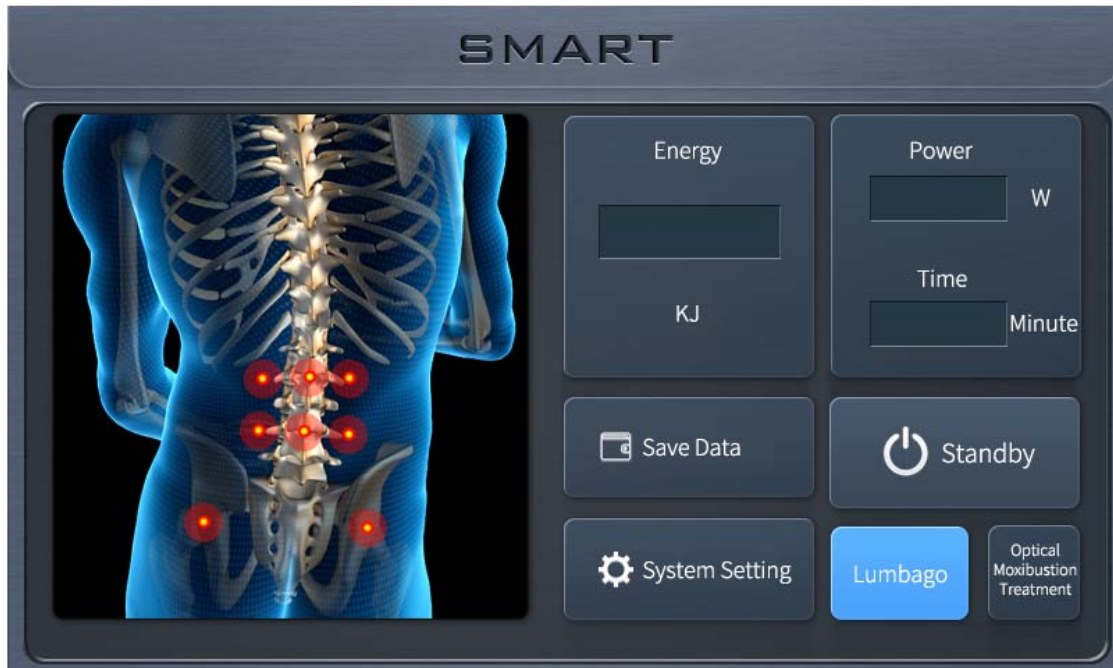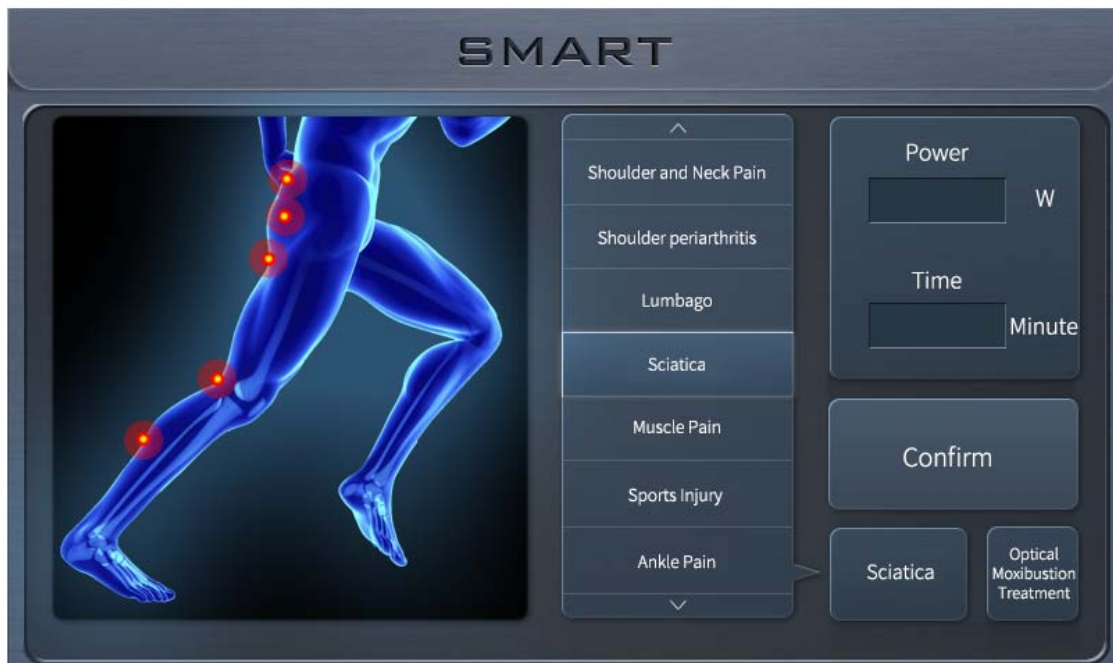
as 3.3.

3.5 Lumbago treatment

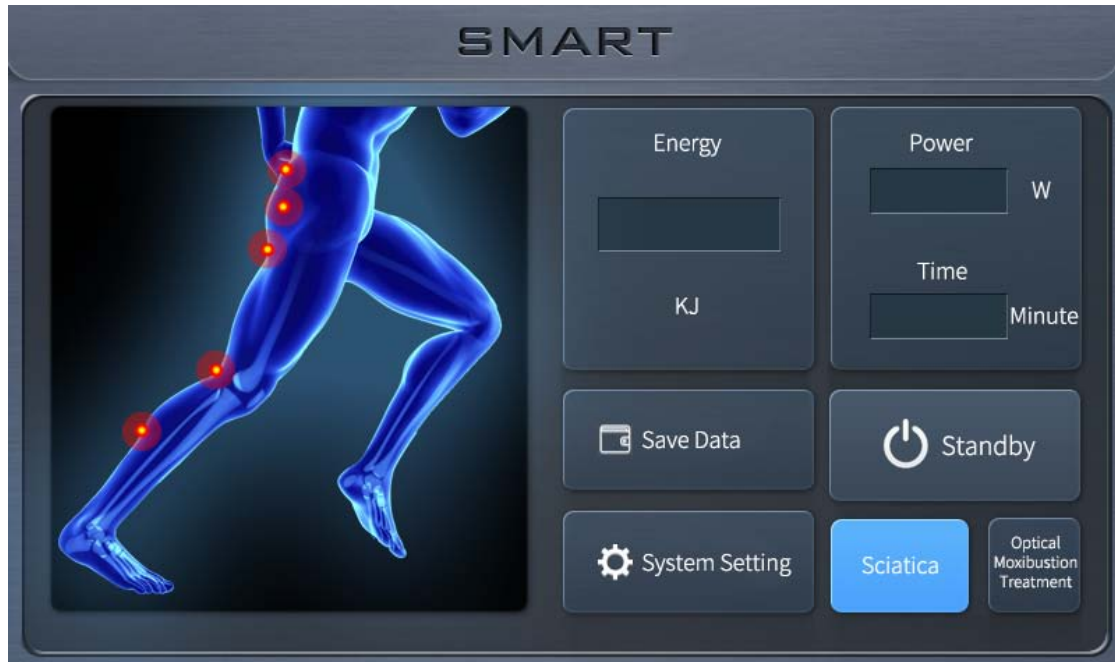Press the button "Lumbago" shows the below interface, set the power and time as 3.3.

3.6 Sciatica treatment

Press the button "Sciatica " shows the below interface, set the power and time as 3.3.
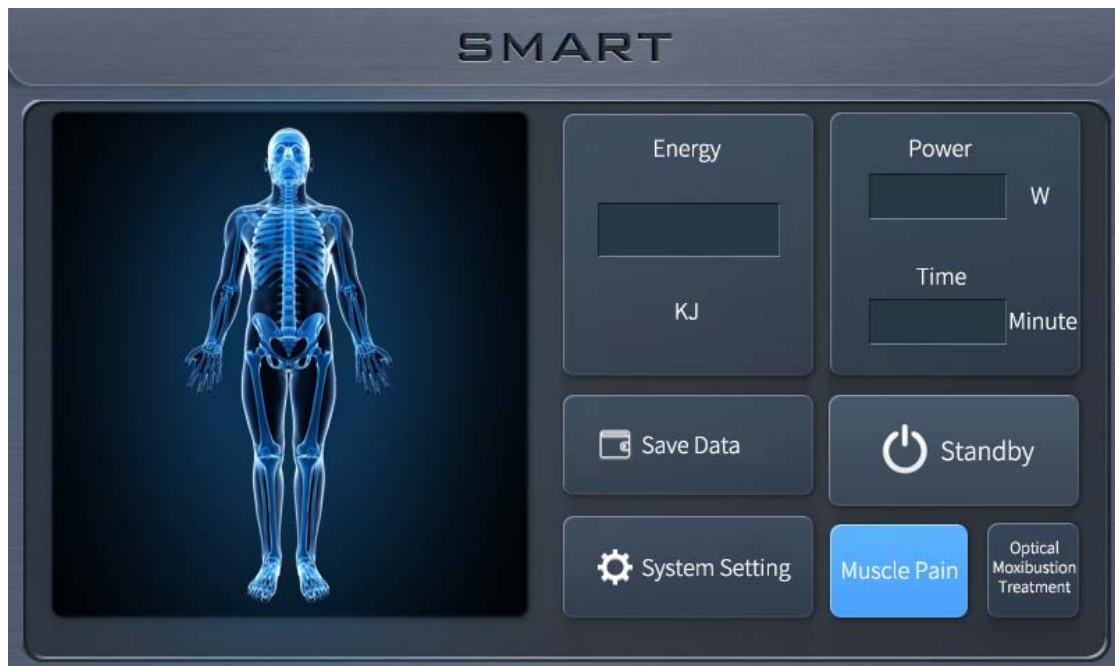
3.7 Muscle pain treatment

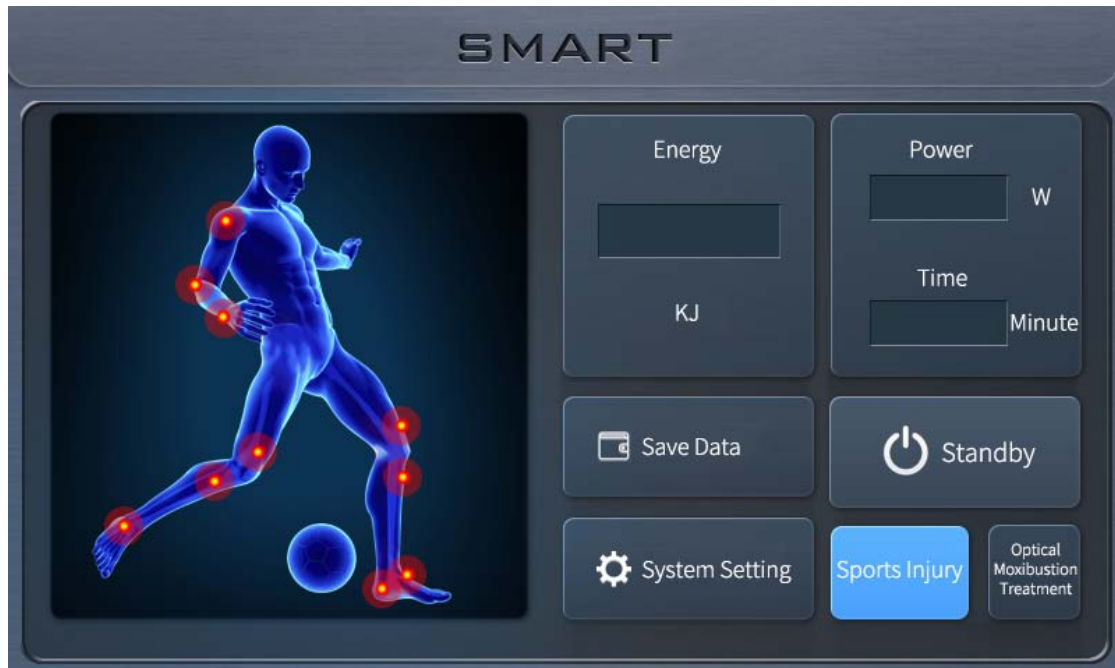Press the button "Muscle Pain " shows the below interface, set the power and time as 3.3.

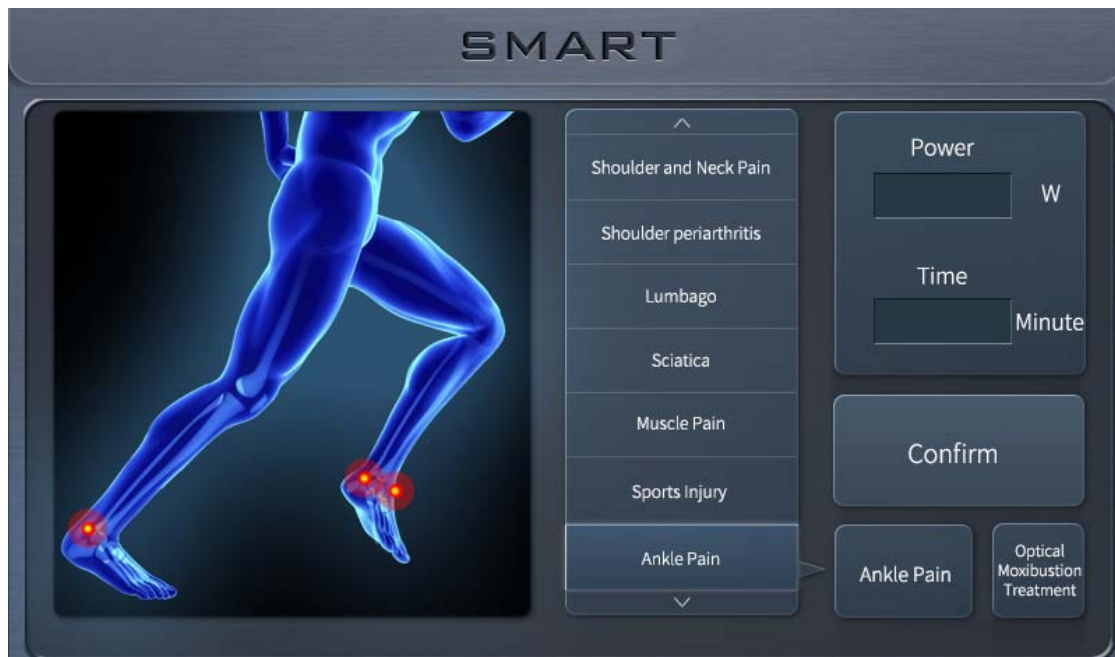**3.8** Sports injury treatment

Press the button "Sports Injury " shows the below interface, set the power and time as 3.3.
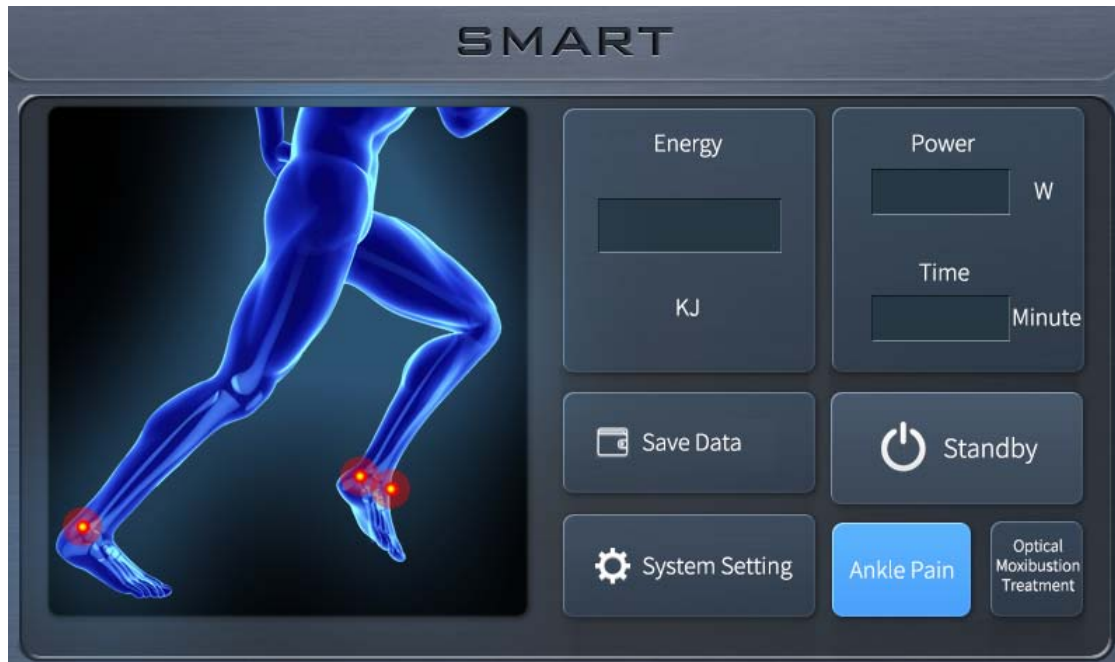
3.9 Ankle pain treatment

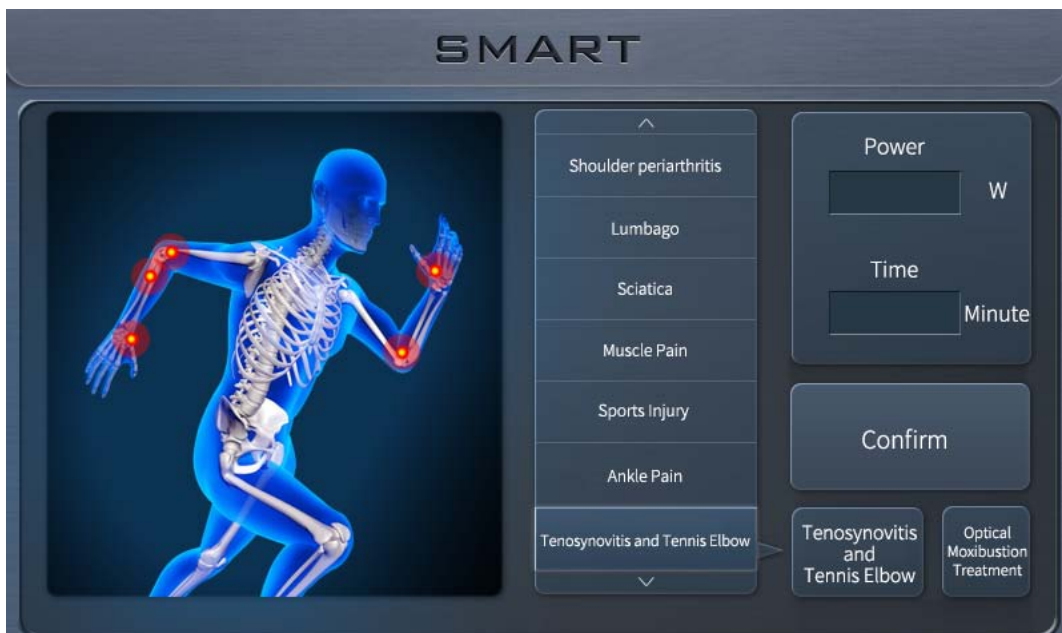Press the button "Ankle Pain " shows the below interface,   set the power and time as 3.3.

3.10 Tenosynovitis and Tennis Elbow treatment

Press t he button " Tenosynovitis and Tennis E lbow " s hows the below in terface, set t he power and time as 3.3.
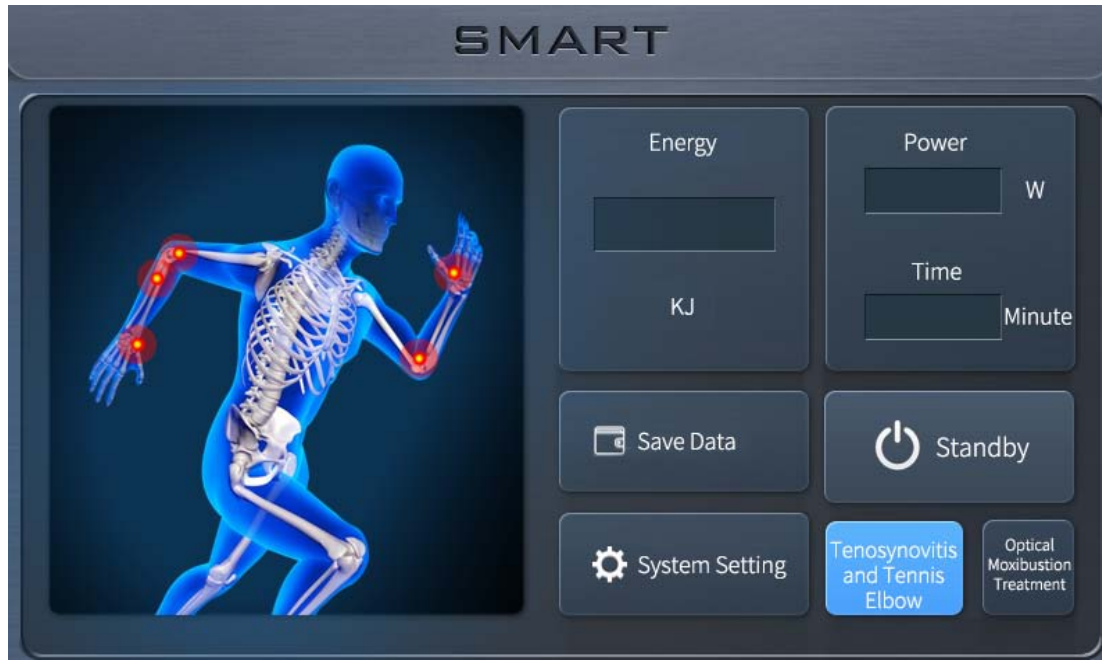
3.11 Rheumatoid arthritis treatment

Press the button "Rheumatoid Arthritis " shows the below interface, set the power and time as 3.3.
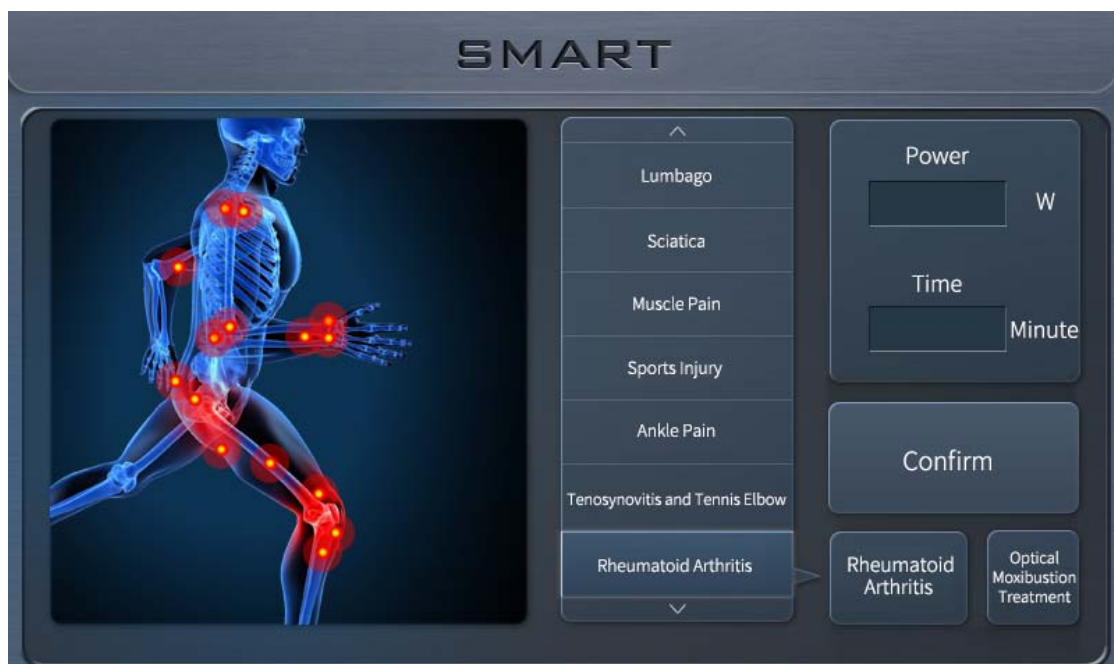
4. System setting

4.1 System setting interface

press "system Setting", it shows the system basic information on the left side of the interface,

includes the system type, software version, production date and serial number.

4.2 Swith the treatment mode

Press the button"Back", you can exit the system setting and back to the system main interface.

If you have to switch from the two treatment modes during treatment, you could press the button

"System Setting" and press "Back" to choose the treatment mode you need.

4.3 Debugging

Press the button" Debugging" you could adjust the system, this function is only used for staff

from manufacturer.

4.4 Factory Reset

Press the button "Factory Reset", all parameters will go back to the original value when leave the factory.

4.5   Turn on or off the sound

The default display is "Sound On", at the same time, the system will gives out the sound " di di di …", press "Sound On", the button turns to "sound Off", at the same time, the system will not give out any sounds during treatment.

5. Frequent malfunctions and solutions

Malfunctions	Reason	Solutions
The red indicator light is on, the lower right corner on the screen shows "stop switch disconnected, reset the stop switch"	The emergency stop switch is pressed down	Loosen the red emergency stop switch
The red indicator light is on, shows "key switch was not on, please turn on the key switch" on the screen,.	The key switch is off	Turn on the key switch
The red indicator light is on, shows "interlock not connected,	Interlock is not connected.	Connect the interlock to the right position.

please connect the interlock"		
The red indicator light is on, shows "Temperature is high, please stop for half an hour" on the screen.	Handle overheat	Use the system after half an hour.

6. Performance Parameters

Terms	Value
Type	Diode Laser
Wavelength	980nm
Peak Power	20W
Spot Size	φ30mm
Working mode	CW
Power Supply	AC200-240V /50Hz
Input Power	200W
Dimension	354mm×128mm×225mm
Weight	6kg

7. Product list

Smart physiotherapy main body

Treatment handle

Handle holder

Power cord

Key switch

Interlock (four-core aviation plug)

User manual