



Registration Certificate No: 20160013

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Battery operated medical drill user manual

Product description



The revision date:2020/02

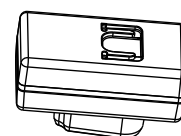
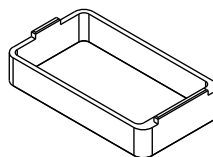
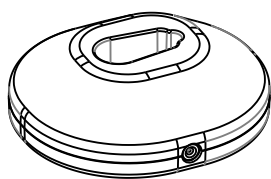
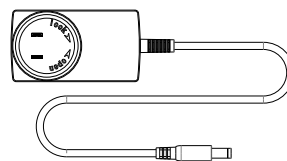
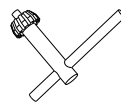
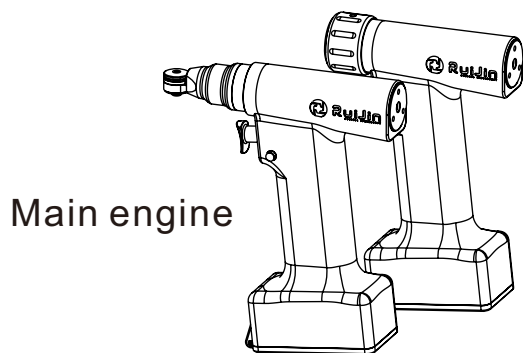
1. Product name. Model and specifications

Name: Medical Electric Saw Drill

Model: RJ-MP, RJ-PS

2. The main components and accessories

Includes: Host, charger, battery, battery case, saw blade and drill bit. The host is completely enclosed. Charger is not used as medical electronics.



Sterilization channel

Battery

3. Application

Our products are used for trauma, spine, joint, chest and cranial surgery.

4. Performance indicators and parameters

1. Host part

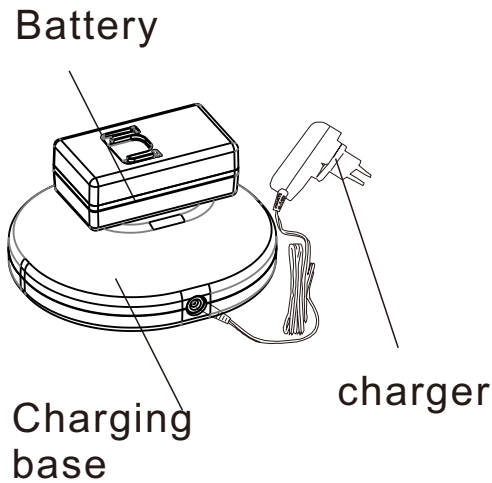
parameter Category		No-load speed	frequency	Maximum Torque	5 Minutes Temperat	Noise
		rpm	Hz	N.m	°C	dB
RJ-MP	1:1 Bone drill adapter	0-1100		≥ 3	≤ 25	≤ 75
	Saw adapter		0-16000		≤ 25	≤ 75
	Oscillating aw adapter	0-1100		≥ 3	≤ 25	≤ 75
RJ-PS	Saw		0-16000		≤ 25	≤ 75

2. Battery charger

Charger	Input voltage	100V~240V
	Input power	50Hz~60Hz
	Input current	0.5A (max)
	Output voltage	7.2V~14.4V
	Output current	2.0A (max)
Standard battery	Voltage	7.4V
	Battery capacity	16.28Wh
	Charging time	≈ 2.5 H
	Discharge time/1A	≥ 10 min

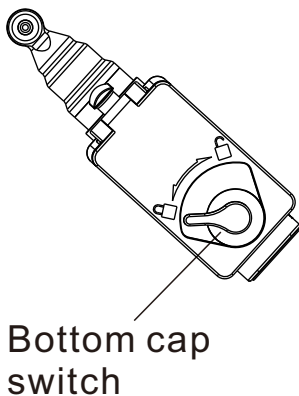
5. Installation and use insrruction

1. Battery charging



Plug the DC interface of the charger end into the DC port of the charging seat and plug the battery into the charging seat to charge. When the charger is connected to the power source, the red light flashes detection and lights out when there is no load. When the battery is connected, the red light indicates the charging state, and light off indicates the full state, and the red light flashing indicates the error.

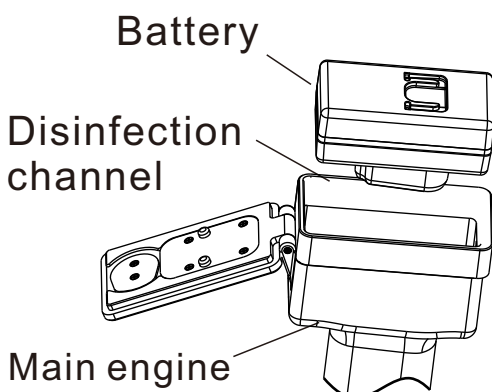
2. The opening and closing of the bottom cover



When you open the bottom cover, rotate the button to theunlocking position, then pull up the bottom cover.

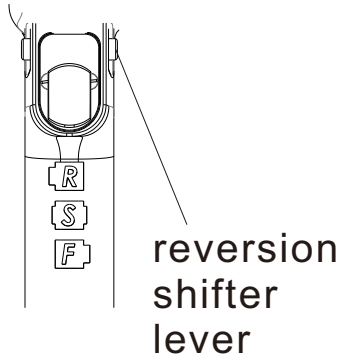
When you close the bottom cover, and put thecover into the handpiece, rotate the button to thelocking position to ensure the cover is closed.

3. Battery installation



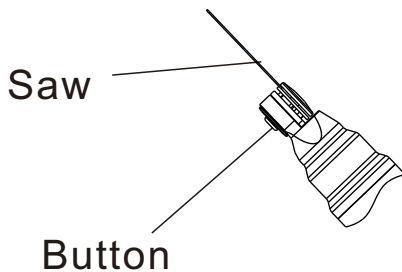
Battery can not be connected with the host directly to prevent pollution. When installing the battery, we have to put the disinfection channel on the handle firstly, then battery could be inserted to the handle by disinfection channel and pressed into place.

4. Mode adjustment



When a forward turn is required, the reversing lever is pushed to the corresponding F position. When you need to reverse, use the same method to rotate the tag to the R tag. Push the lever to S position when installing or disassembling the joint and when not in use.

5. Saw blade installation








Press the button first, then Put the saw blade into the saw blade interface, Quasi-position, the blade hole falls into the blade connection In the cylinder of the mouth, and then release the button, The blade is locked.

★The above picture is only for illustration purpose ★

Attention: This product is a professional medical device and the user must be a medical technician with appropriate skills or with appropriate training.

This product must be disinfected before use and should be used in accordance with instructions and test firstly before operation. if the host or component abnormalities, please stop using immediately and contact with the manufacturer or distributor to send it back to the factory for repair.

6. Product labels use symbols, graphics, abbreviations, etc

Icons	description	Icons	description	Icons	description
	short time working		lock	F	Forward
	II type equipment		unlock	R	Reverse
	B type equipment			S	Stop

7、 Attention

1. Check the drill bits to ensure they are running straight before procedure. If there is any movement away from the center of the drill, the bits should be replaced. Check the drill bits are sharp, if not they should be burnished. The drilling should be fixed firmly and hand can not shake according to conventional.
2. The drill bits should be fixed tightly and securely. A special chuck key can help to lock the drill bits into place to avoid accidents happen. Drill saw and accessories should be placed in dry condition to avoid getting rusty.
3. The battery can not be sterilized by high temperature, high pressure and can not be left in the handpiece of extended periods of time. If the handpiece loses power during the operation and stops running, replace the battery immediately.
4. If there is abnormal noises during use, stop the use of the product and contact the manufacturer for maintenance.
5. This product is a medical instrument, and must only be operated by a competent person with a relevant technical experience and training.

Use risk analysis and preventive measures:

1. The cutting tool is not installed in place: strictly follow the steps of the operation manual.
2. Battery failure: check the battery regularly.
3. Uncharged battery: charge the battery before surgery.
4. Insufficient battery: check whether the battery is sufficient before surgery.

8、 Disinfection and sterilization

P.S battery can not be sterilized.

This product must be cleaned after operations and have to be sterilized before using.

Cleaning method: manual cleaning

Disinfection method: rinse--washing--rinse--dry

Disinfection method:

This medical power tool can be sterilized in the following manner.

Disinfection method	temperature	time	Dry time
Flash no cloth	129°C~134°C	10min	8min
Pre-vacuum wrap	129°C~134°C	4min	8min
100% ethylene oxide cloth	49°C~57°C	150min	ventilating 8h
270F steam cloth bag	129°C~134°C	35min	8min
270F steam double covered cloth	121°C~123°C	50min	8min

Drying method;

Use the drying equipment for drying. The residual moisture inside the bureaucratic cavity can be dried with a pressurized air gun. This product should not be dried by natural drying method.

Sterilization method:

Equipment type	Item category	set temperature	shortest sterilization time	Pressure reference range
Under the exhaust	Implants and instruments	121°C	20min	102.8kpa~122.9kpa
Pre-vacuum	Implants and instruments	132°C	4min	184.4kpa~210.7kpa
		134°C		201.7kpa~229.3kpa

9、 After sales

P.s the device shall not be demolished by non-professionals. If any problem, please contact with us for after sales service.

10、 Production date

Production date and batch number could be found at the product certification label

11、 Transportation

Transport and storage conditions	Ambient temperature range	-10°C ~ +40°C
	Relative humidity range	≤90%
	Atmospheric pressure range	500hPa ~ 1060hPa
Equipment operating conditions	Ambient temperature range	5°C ~ 40°C
	Relative humidity range	≤70%
	Atmospheric pressure range	860hPa ~ 1060hPa
	Charger power supply	100-240V ; 50-60Hz
	The host power supply (DC)	5.76 ~ 17.28V