

User guide

Generator JYD 760



The main feature of this generator is the use of full-bridge digital pulse drive. Compared to the half-bridge drive control circuit, it has the advantages of small size, simple peripheral circuits, stable ultrasonic effects, and high conversion efficiency. And comes with frequency tuning function, to ensure that the machine is in the best working condition from beginning to end, can maximize the potential of ultrasonic transducer, but also has a perfect over-current protection, output short circuit protection.

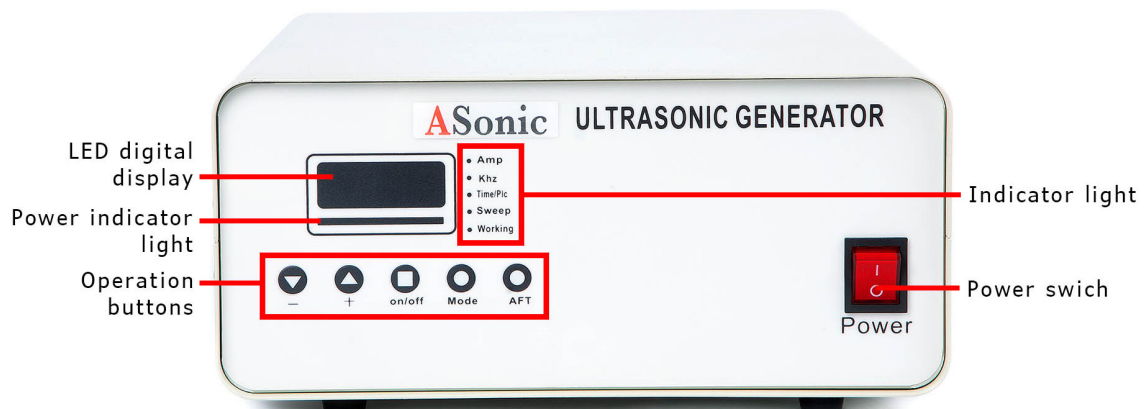
Integrated digital display ampere meter, frequency, time control and PLC remote control, light bar indicating power and other functions. Based on the above functions, new functions such as frequency lock, current lock, frequency sweep mode selection, automatic frequency follow-up, 485 communication (optional), and one-key degassing (optional) are added.

Model JYD-760-II Technical information

Driving power	1500W-2100W
Power control	10-100%
Working frequency	20KHz-40KHz
Working voltage	220V±10%; 50Hz/60Hz
Maximum output current	6A
Ambient temperature	0-40°C

SPECIFICATION ON PANEL FUNCTIONS AND OPERATION:

Use an external screen for cleaning settings. Use the generator screen only when needed!



LEGEND:

Power switch	0/I switch for generator power. Switch it on I when you wish to work.
Indicator light	It refers to state indicator for current operation of the generator. There are 5 indicators including current display, frequency display, time/PLC display, mode of sweep display and display of working state.
● Mode	Mode button, in order to switch the LED digital display mode, can display the whole working current, ultrasonic working frequency, timing time/PLC, or sweep mode.
■ On/off	On/off button is the ultrasonic start/stop switch that can turn on or off the ultrasound.
▲ +	With this button, you can add current or time. When indicator light and LED digital display is on current mode, you can add current, this time the light bar will increase with the current increase; a current mode has a total of 16 files. When indicator light and LED digital display is on time mode, you can increase the time of the ultrasonic work. The ultrasonic time is 0-59min59s.
▼ --	Whit this button, you can reduce the current or time. When indicator light and LED digital display is on current mode, you can reduce current. At this time, the light bar will decrease with the current; the current reduction mode will decrease by 0.1A per time. When indicator light and LED digital display is on time mode, the ultrasonic operation timing can be reduced.
● AFT	The AFT button can automatically track the frequency. When this button is pressed for 2 seconds, the generator enters the auto-frequency tuning mode.

After booting, press the Mode key for control on LED digital display modes which are able to display overall working current and ultrasonic working frequency respectively, it is for mode of time/PLC or sweep.



Mode of current display (fig. 1)



Mode of working frequency display (fig. 2)



Mode of time/PLC display (fig. 3)



Mode of sweep display (fig. 4)

Lighting position	Display mode on LED digital display	Panel function specification
● Amp	Mode of current display	LED digital tube will display working current of the whole machine (unit: Amp (Ampere)) as shown in Figure 1.
● KHz	Mode of working frequency display	LED digital tube will display working currenncy of the ultrasonic generator as shown in Figure 2.

<ul style="list-style-type: none"> • Time/PLC 	Time/PLC mode display	<p>LED digital tube will display the set time of the ultrasonic generator while Time/PLC indicator will be on as shown in Figure 3. In the Time/PLC display mode, keys of ▼, ▲ and ■ will work. In other display modes, the three keys will not work. The maximum time of the timer is 59 minutes 59 seconds. If not intending to set time, it will be advised to set it to be ON. Press the ■ ON/OFF key and it will stop working. Press the ▼ key and the time set will decrease to OFF at minimum. Press it once and it will decrease 1 second. Long press it and the time set will decrease continuously. Press the ▲ key and the time set will increase to ON at maximum (mode of boot and continuous working). Press it once and it will increase 1 second. Long press it and the time set will continuously increase. After setting the time, press the ■ ON/OFF key and the timer will start timing. When it is time set, the machine will turn off the ultrasonic and call in originally set ultrasonic time.</p> <p>After booting, access the Ultrasonic Generator through PLC control. If it is Time/PLC display mode after pressing the Mode key, LED digital tube will display PLC when the timing function will not be effective. Whether the ultrasonic of the whole machine will be fully controlled by PLC.</p> <p>Note: if the timing function is not used, please turn the time display to the state of time display!</p>
<ul style="list-style-type: none"> • Sweep 	Mode of sweep display	There are four modes of sweep display of SP01, SP02, SP03 and SP04 as shown in Figure 4. Each mode of sweep display is different in width of sweep display, which is applied to different cleaning objects, making the ultrasonic generator reach the best cleaning effects.
<ul style="list-style-type: none"> • Working 	Working state	It indicates that the generator is in working state.

SPECIFICATION ON CONNECTION PORT



Note: control port (optional RS485 control port 1,A, 2: B, 3: GND, 4-5:PLC)