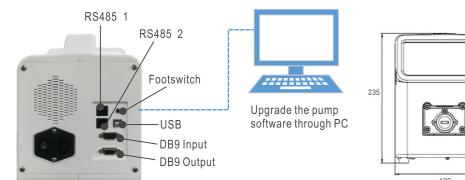
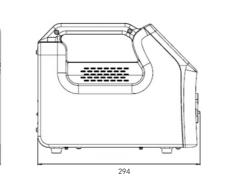
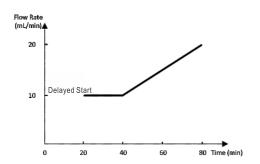
Pump can be controlled through touch screen, foot switch, analog signal and communication commands, combined with a variety of interfaces (USB, RJ11, DB9 etc.) for easy system connection



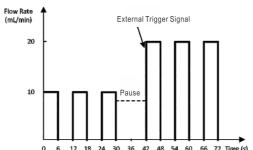


Example of Multi-step Work Process:

- Example 1: Gradient Titration (flow rate ramp up)
- Details: Start the pump, then the pump will run 20 minutes later at 10mL/min flow rate. After 20 minutes, the flow rate will ramp up from 10mL/min to 20mL/min within 40 minutes.



- Example 2: Media dispensing (different dispensing volume)
- Details: Dispense the media at 10mL/min flow rate for 6 seconds (dispensing volume is 1mL). Dispensing 3 cycles (interval time is 6 seconds), then pump pause. Waits for the external trigger signal, then dispense the media at 20mL/min flow rate for 6 seconds (dispensing volume is 2mL). Dispensing 3 cycles again (interval time is 6 seconds), then pump stops.



Pump Specification

	L100-1F	L100-1FS	L300-1F	L300-1FS	L600-1F	L600-1FS
Automatic Identification of pump head and tubing	N/A	Yes	N/A	Yes	N/A	Yes
Speed	0.1-100rpm		0.1-300rpm		0.1-600rpm	
Flow rate	0.15uL/min-500mL/min		0.15uL/min-1500mL/min		0.15uL/min-3000mL/min	
Direction	CW or CCW					
Language	Chinese or English, settable					
Control mode	Touch screen control, footswitch control, external signal control and communication control					
Communication control	USB or RS485(RJ11) interface, Modbus protocol, multiple baud rate					
Delayed start	Pump can start running at desired time					
IP rating	IP31					
Weight	5.0kg					

Multiple pump head and tubing options for a wide flow range



YZ1515x

YZ2515x



YZII15







DG-2 DG-6

DG-4 DG-8



FG25-13



DMD15-13-B

DMD15-13-D





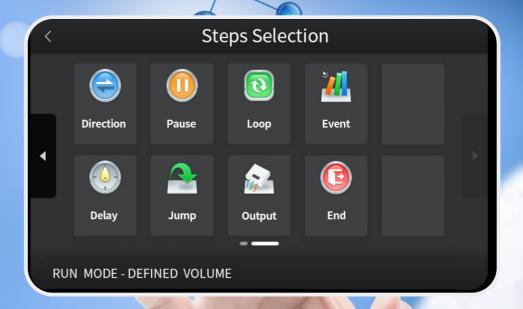
BZ15

DG15-24 DG15-28

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3rd/4th Floor, Building 6B, University Science Park Baoding National, High - Tech Industrial Development Zone Baoding, Hebei, China 071051

Tel: +86 - 312 - 3110087 Fax: +86 - 312 - 3168553 E - mail: longer@longerpump.com Http://www.longerpump.com













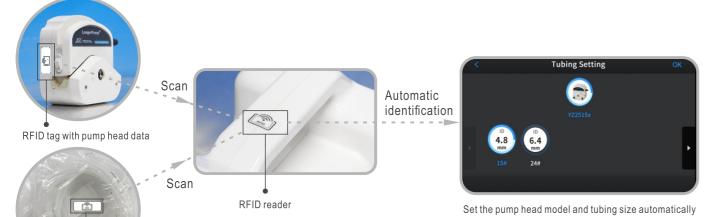


Intelligent Fluid Control ► Unparalleled Experience on Touch Screen ►

- · Intuitive graphic interface and modular programming, quickly set up your own application process
- Powerful function and flexible configuration, make it easier to run multi-step complex programs

Automatic identification of pump head and tubing, simplify the operation process and provide reliable guarantee for high-precision fluid transferring

- Place the identification tag of pump head or tubing near the identification area on the handle of the pump drive, the system will automatically identify the model of the pump head or tubing.
- Prevent manual input errors, and provide reliable guarantee for high-precision fluid transferring
 Note: automatic identification function is only available on L100-1FS, L300-1FS and L600-1FS.

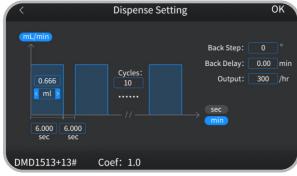


RFID tag with tubing data

7 inch color display, full touch screen and intuitive graphic interface, provide easy-to-use operations

- 7 inch color display shows more information simultaneously
- Intuitive graphic interface and full touch screen quickly set up application process





 $\label{thm:continuous} \mbox{Graphic interface, more information on the same screen, and easy parameter configuration}$



Unaffected by gloves, dust and water droplets



Easy to use icon graphics

Customize parameters by programming, and the parameter programs can be stored and easily recalled

- · Parameters are defined by programming
- 7 parameter programs of up to 10 steps can be configured and stored
- Program name can be defined by letters and numbers for identification and easy recall
- Preset external control program is for remote control through external signal





8 parameter programs for

easy store and recall

Details of the

selected program

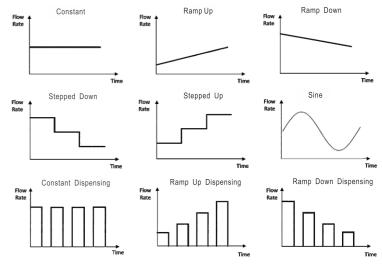
Modular programming based on workflow: arrange the function modules in sequence according to the running process.

Preset external control program for remote control through external signal

Multiple function modules and intelligent algorithms are designed for a wide variety of applications, including routine and multi-step complex applications

- 9 running control modules: constant, ramp up, ramp down, stepped up, stepped down, sine, constant dispensing, ramp up dispensing, ramp down dispensing
- 8 logic control modules: direction, delay, event trigger, status output, pause, jump, loop, stop
- Each running control module can be used independently for simple routine application
- Configure multi-step program with multiple modules for complex application

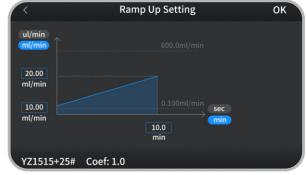




8 Logic Control Modules



9 Running Control Modules



Easy parameter configuration with graphic interface