

## Industrial dosing pump TDN-3

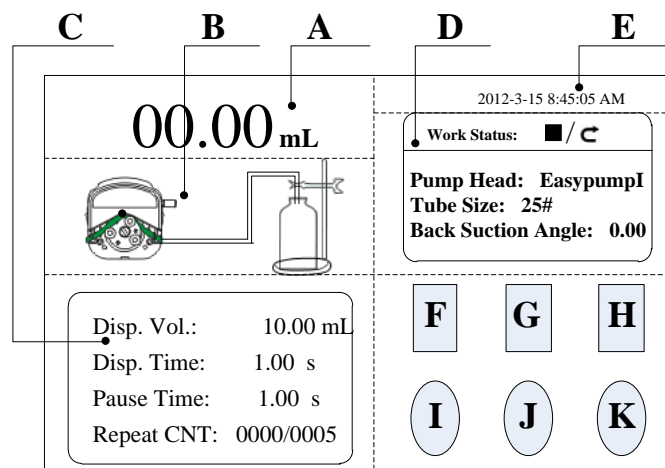
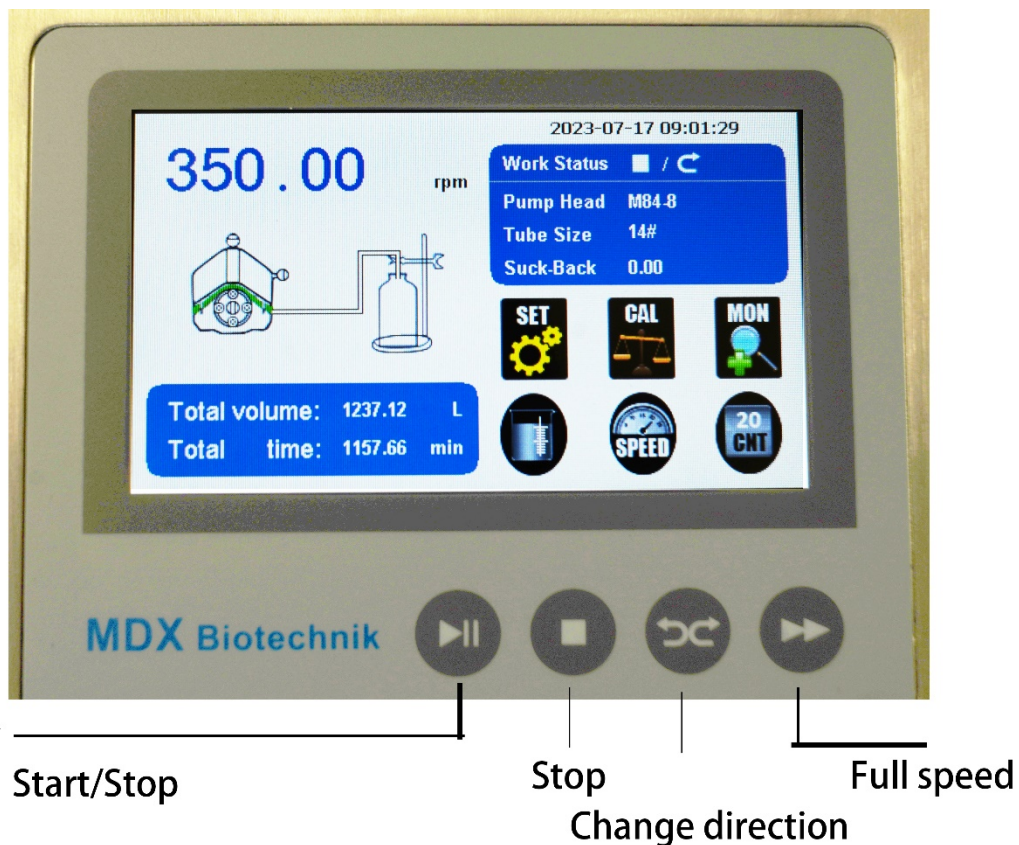


The MDX TDN-3 is an industrial peristaltic pump for dosing with high accuracy, encased in a stainless-steel housing. Its sophisticated design and LCD-Display, showing the pumps status in real time, and makes handling very easy.

Various parameters can be adjusted with this calibratable pump: Dosage volume, dosage time, pause time, back-suction angle and rpm.

Depending on pump head and tubing diameter, the pump has a flow rate range from 0.03-1750ml/min per channel, while the servo-motor is capable of 0.1-350 rpm in continuous transfer mode. A maximum of 4 channels are possible.

This allows to fulfil a wide range of requirements when it comes to transporting and dispensing liquids, from laboratory use to industrial manufacturing.



- A. **Real-time Display Volume:** In system settings interface, choose working mode and display data. In transferring mode, display motor speed or flow rate, can change motor speed or flow rate when click A area. In dispensing mode, if it is **volume dispensing**, display filling volume or total filling numbers, and it will display the current value in real time when it starts working. If it is **speed dispensing**, display the current motor speed or total filling numbers.
- B. **Real-time Dynamic Display:** Display the dispensing and transferring state, animation shows monitor result. Click pump head can display the SN code and system version of this pump.
- C. **Real-time Parameter Display**

- (1) **In dispensing mode:** Display dispensing volume (Dis. Volume mode) or dispensing speed (Dis. Speed mode), current dispensing time count down, current pause time count down, copy numbers.
- (2) **In transferring mode:** Display the current transferring total volume, and current working time. The maximum transmission volume is measured to 9999l. The current working time maximum is 9999 hours. Each one of it reach the limit, both data will back to zero. Also it can set the data back to zero in the system settings.
- D. Setting Parameter Display:** This area displays current working state, pump head, tubing size and other parameters.
- E. Date and Time Display:** Display the current date and time, click “E” can revise it.
- F. System Settings Button:** Press this button enter system settings interface, including: basic configuration, mode setting, communication setting, back suction angle, common mode.
- G. Flow Calibration Button:** Press this button enter calibration interface.
- H. Real-time Monitor Button:** Press this button enter monitor interface, you can check the current setting flow rate, motor speed and dispensing efficiency here. The speed dispensing in dispensing mode, it is forbidden to use the monitor function.
- I. Volume Dispensing Button:** Press this button, enter volume setting interface, If in transferring mode, it is forbidden to use the function.
- J. Speed Dispensing Button:** Press this button, enter dispensing speed interface, If in transferring mode, it is forbidden to use the function.
- K. Copy Numbers Button:** Press this button, the numerical keyboard comes out, input the copy numbers. If input ‘0’, the copy number is unlimited. In transferring mode, it is forbidden to use the function.

## Technical specification

- Speed range: 0.1-350 rpm at 0.1 increments
- Speed Precision: 0.01r/min
- Dosing volume interval: 0.1 - 9999.99 ml
- Resolution of dosing volume: 0.01 ml
- Dosing time: 0.1 - 9999.99 sec
- Pause time: 0.1 - 9999.99 sec
- Time resolution: 0.01 sec.
- Accuracy of filling: 0.5-1.0%
- Flow rate: 0.1- 1750ml/min, depending on pump head and tubing diameter
- Easy tubing change
- Tubing pressure adjustable
- Applicable tubing sizes:  
0,8x1,6; 1,6x1,6; 2,4x1,6; 3,2x1,6; 4,8x1,6; 6,4x1,6; 8,0x1,6
- Display: 4.3” LCD
- Dispensing: volume dispensing or speed dispensing
- Control: Membrane keyboard for start-/stop, stop, full speed, and CW/CCW button.
- External control: Start/stop, speed (optional 0-5V, 0-10V, 4-20mA, RS485, RS232, MODBUS Protocol), passive (e.g. a foot pedal) and active switch signal (5V, 12V, 24V).

- Output interface: status of the motor (Open-Collector-Output)
- Power supply: AC 220V +10%; 50/60Hz (standard),  
AC 110 +10%; 50/60Hz (optional)
- Power consumption: < 50W
- Dimensions (one channel): 213 x 152 x 243 mm (LxWxH)
- Ambient temperature: 0-40°C
- Relative humidity: < 80%
- IP-rating: IP31
- Weight: 5.2kg