

# Ultimus™ I-II High Precision Fluid Dispensers

## Quick Start Guide

Electronic pdf files of Nordson EFD manuals are also available at [www.nordsonefd.com](http://www.nordsonefd.com)



### Easy 13-Step Setup

Follow these steps to get your Ultimus ready for operation.

#### Unpack the Unit / Warranty

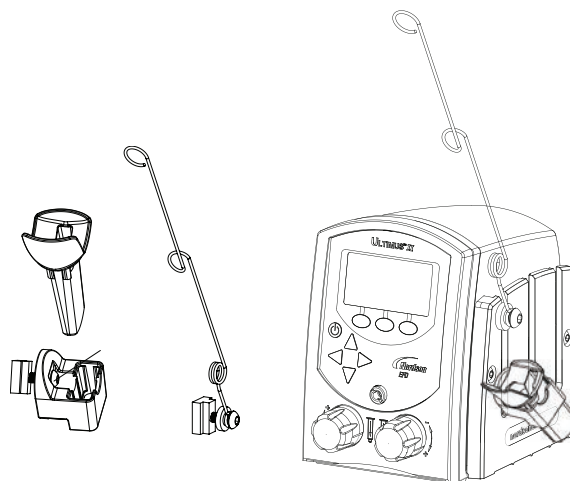
# 1

- Unpack the unit.
- Now is a good time to activate your extended Ten Year No-Fault Warranty. Register the warranty online at <http://www.nordsonefd.com/warranty/dispensers/ten/>.

#### Install Barrel Holder

# 2

- Remove barrel holder sleeve from holder.
- Loosen the 6 mm screw from T-nut.
- Slide T-nut into left or right panel of workstation slot, positioning as shown.
- Tighten 6 mm screw, securing holder to workstation panel.
- Insert barrel holder sleeve.
- Loosen screw from wire hose holder T-nut.
- Slide T-nut into any workstation slot.
- Tighten screw to secure wire hose holder to workstation.



#### Connect Power

# 3

- Connect the power plug to the power pack. The unit is shipped with a USA-compatible plug and three international plugs. Attach the correct plug to match local power outlets.
- Connect the power cord to the back of the Ultimus.
- Connect the power cord to your local power source.
- Press the power button on the front panel.

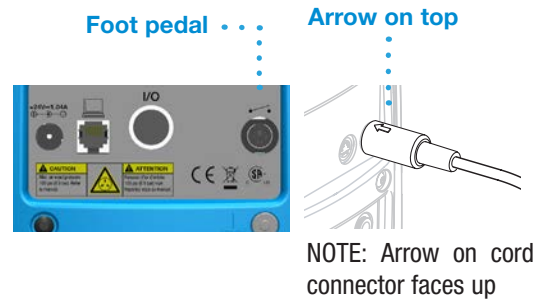


## Connect Foot Pedal

# 4

The Ultimus is normally operated using the foot pedal provided.

- Plug the foot pedal into the back of the Ultimus.



## Connect Air Input

# 5

**NOTE:** Clean, dry, filtered factory air is required to meet warranty. If your air supply is not filtered, order the 5-micron filter regulator (P/N 7002002).

- Push one end of the air input hose into the input fitting on the back of the Ultimus.
- Connect the other end of the air input hose to your plant air supply.

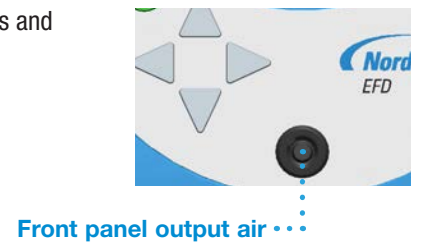
For all Ultimus units: Set plant air supply within 5.5 to 7.0 bar (80 to 100 psi).



## Connect Air Output

# 6

- Push in the EFD adapter assembly provided into the front of the Ultimus and twist to lock.



## Attach Syringe Barrel & Tip

# 7

- Secure an EFD syringe barrel filled with your fluid to the adapter assembly.
- Replace tip cap with an EFD precision dispense tip.

**TIP** See the Operating Manual for syringe barrel filling techniques.



## Select Timed Mode

# 8

When powered on for the first time, the Ultimux Home screen displays in TIMED mode. Otherwise, it displays in the mode last used.







- You can verify what mode you are in by checking the top left corner of the display screen. It will be TIMED, TEACH, STEADY, or MEMORY.
- If needed, return to the Home screen from TEACH or STEADY mode by pressing TIMED in the bottom right corner of the display.
- Return to the Home screen from MEMORY mode by pressing MENU, then selecting TIMED.

### Timed Mode



### Menu ...

See the **Ultimux Icon Guide**, included with your dispensing system, if you are working in Chinese, Japanese, or Korean. Sample icons:

... (Timed)    (Steady)    (Teach)    (Menu)    (Select)    (Home)

## Select Display Settings

# 9

The Ultimux is shipped with default settings for the display of language (in English), air pressure (psi), and vacuum (inH<sub>2</sub>O). Skip to step #10 if these display settings are acceptable.

Otherwise, follow these steps to change the display settings:

- From the Home screen, press MENU.
- Press the down arrow to highlight Units of Pressure, Units of Vacuum, or Language.
- Press SELECT.
- Press the down arrow to highlight your choice.
- Press SELECT again to make the change and return to the Home screen.



## Set Dispense Time

# 10

The Ultimux is shipped with all values set to zero. To set dispense time, follow these steps:

- Begin in TIMED mode.
- Press the left / right arrows to select a single number in the time row.
- Press the up / down arrows to set the time.



## Set Air Pressure

# 11

Set air pressure by turning the air pressure regulator (bottom left knob).

- Pull the air pressure regulator knob out to unlock it.
- Turn the knob clockwise to increase the pressure or counterclockwise to decrease the pressure.
- Push the air pressure regulator knob in to lock the setting.



• • • Air pressure knob

## Set Vacuum

# 12

During initial testing and setup we recommend that you keep the vacuum setting at 0.0 inH<sub>2</sub>O. After initial testing, set vacuum by turning the vacuum regulator (bottom right knob).

- Pull the vacuum regulator knob out to unlock it.
- Turn the regulator knob clockwise to reach the correct vacuum setting.
- Push the vacuum regulator knob in to lock the setting.



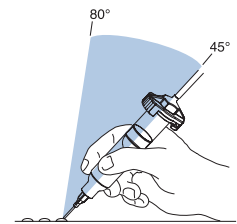
Vacuum knob • • •

## Dispense

# 13

- Purge the dispense tip. From STEADY mode, press the foot pedal until material flows from the tip.
- Return to TIMED mode.
- Press the foot pedal once to begin your next dispense cycle.

**TIP** Hold the tip at a 45° angle to the work surface.



## Helpful Hints

- There are three core variables to the Ultimix: dispense time, pressure, and vacuum. Adjust just one of these at a time, in small increments, to achieve your ideal deposit.
- Another important variable is tip size. Choose the right tip for the deposit type. Remember, smaller tips require more pressure and more time. Try different tips without changing the time or pressure settings and observe the results.
- Tapered tips reduce the amount of air pressure needed to dispense thick materials. They also help prevent drooling at the end of a dispense cycle.
- Use EFD SmoothFlow™ pistons to prevent oozing. Pistons also make barrel loading, dispensing, and fluid handling cleaner, safer, and more accurate.
- Avoid high pressure (example: 5.5 bar / 80 psi) with very short time settings (less than 0.00100 seconds). The ideal setup matches air pressure and tip size to produce a “workable” flow rate — no splashing but with a time setting that is not extremely low.
- Longer dispense time settings generally provide the highest accuracy.



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### Global

East Providence, RI USA  
800-556-3484; +1-401-431-7000  
[info@nordsonefd.com](mailto:info@nordsonefd.com)

### Europe

Dunstable, Bedfordshire, UK  
0800 585733; +44 (0) 1582 666334  
[europe@nordsonefd.com](mailto:europe@nordsonefd.com)

### Asia

China: +86 (21) 3866 9006; [china@nordsonefd.com](mailto:china@nordsonefd.com)  
India: +91 80 4021 3600; [india@nordsonefd.com](mailto:india@nordsonefd.com)  
Japan: +81 03 5762 2760; [japan@nordsonefd.com](mailto:japan@nordsonefd.com)  
Korea: +82-31-736-8321; [korea@nordsonefd.com](mailto:korea@nordsonefd.com)  
SEAsia: +65 6796 9522; [sin-mal@nordsonefd.com](mailto:sin-mal@nordsonefd.com)

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