Setup and Operation

Thank you for selecting the Nordson EFD Equalizer™ 2K dispensing tool. The Equalizer is specifically designed for use with 2K 1:1 ratio (P/Ns 7015724, 7362026, 7702619, and 7702621), 2:1 ratio (P/Ns 7702692, 7702895, and 7702627), and 4:1 ratio (P/Ns 7702896 and 7702898) 50mL Side x Side cartridges and EFD electro-pneumatic dispensers to provide precise, repeatable application of two-component materials.

Step #1: Selecting the Piston Plunger Size

The Equalizer is factory fitted with piston plungers sized for 1:1 ratio cartridges. If the tool is used with 2:1 or 4:1 ratio cartridges, one of the plungers must be replaced with the smaller plunger included in the package. If the smaller plunger is misplaced or lost, order a replacement piston plunger kit (P/N 7015873).

To replace a piston plunger:

- Extend the piston plunger rods by supplying low level air pressure (0.3 bar /5 psi max.) to the quick-connect fitting. To prevent injury, make sure the piston plungers are pointed away from you and that your fingers are away from pinch points.
- Disconnect the air supply when the plunger rods are extended.
- If you are using a 1:1 ratio cartridge, proceed to Step #2. If you are using a 2:1 or 4:1 ratio cartridge, continue with step d.
- Use a 2.5 mm Allen wrench to loosen and remove the socket cap screw and piston plunger from one of the rods.
- Locate the smaller 2:1 or 4:1 ratio piston plunger included in the Equalizer package.
- Align the 2:1 or 4:1 ratio plunger with the line scribed across the face with the corresponding line on the pressure plate, making sure the widest section of the piston plunger faces outward. The recommended setting is infinitely adjustable with other manufacturer’s cartridges and only serves as a baseline.
- Install the piston plunger on the plunger rod and tighten the socket cap screw with the same Allen wrench. Do not over-tighten.
- Slide the adapter ring over the 2:1 or 4:1 50mL Side x Side cartridge with the raised tabs facing inward, making sure that the larger hole corresponds with the larger cylinder and that the smaller hole corresponds with the smaller cylinder.
- Insert and align the cartridge assembly to the dispenser tool against the pressure plate with the larger cylinder aligned to the 1:1 piston and the smaller cylinder to the 2:1 or 4:1 piston before locking.
Step #2: Retracting the Plunger
The piston plungers must be retracted before a cartridge can be installed.

To retract the piston plungers:

a. Disconnect the air supply.
b. Push the piston rods axially into cylinder body.
c. Check that both piston plungers are fully retracted into air body cylinder and are fully flush with pressure the plate.

Step #3: Installing the Cartridge
No special tools are required for this task, but the cartridge type (1:1, 2:1, or 4:1) should be confirmed before proceeding.

NOTE: The Nordson EFD Equalizer was designed to be used with 2K 1:1, 2:1, and 4:1 ratio cartridges. Other manufacturer’s cartridges may still fit into the Equalizer but could be a hazard or safety concern, as well as potentially compromising performance. Please check with your local Nordson EFD Product Application Specialist if you are unsure of the cartridge type and manufacturer.

To install a cartridge:

a. Make sure that the plunger rods are fully retracted into the air body cylinder (see Step #2).
   
   NOTE: If using a 2:1 or 4:1 cartridge, position the adapter ring so that each cartridge opening lines up with the correct plunger (see Step #1, sub-steps h and i).

b. Rotate the adapter head until the arrows are aligned and the head clicks into the unlock position.
c. Slide the adapter ring over the 50mL Side x Side cartridge with the raised tabs facing inwards.
d. Align the tabs with the corresponding alignment slots in the pressure plate and insert the cartridge assembly until it is flush with the back of the adapter ring and is seated perpendicular against the pressure plate.
e. Rotate the adapter head either way until the arrows are aligned and the head clicks into the unlock position.

CAUTION: Do not twist the cartridge as this can damage the Equalizer. Instead, rotate the adapter head only.
Step #4: Selecting / Installing Static Mixers and Dispensing Tips

To order cartridges, static mixers, and dispensing tips, contact your local Nordson EFD Product Application Specialist or distributor. Additional contact information is available at www.nordsonefd.com and on the last page of this manual.

To install a static mixer and dispensing tip:

a. Remove the tip cap from the cartridge.

b. Position the static mixer on the cartridge and twist the mixer 90° clockwise to secure it.

c. If using a dispensing tip with the static mixer, place a blue hub adapter (P/N 7700943) on the end of the mixer and carefully rotate the adapter until it is secured (approximately 1/8 turn).

   **NOTE:** Always begin with the largest possible Nordson EFD polypropylene tapered tip. Tapered tips have less back pressure resistance compared to general purpose stainless steel tips and will allow easier fluid flow.

d. Thread the dispensing tip into the hub adapter. Rotate the adapter head either way until the arrows are aligned and the head clicks into the unlock position.

Step #5: Connecting the Equalizer to a Nordson EFD Dispenser

The Nordson EFD Equalizer was designed to work with Nordson EFD electro-pneumatic precision fluid dispensers. The male quick-connect fitting on the Equalizer will only mate with the female quick-connect fittings found on Nordson EFD dispensers.

**NOTE:** Failure to use the Equalizer with a Nordson EFD Ultimus™ or Performus™ electro-pneumatic dispenser may cause an unsafe condition, jeopardize performance, and possibly cause a safety concern.

a. Locate the male quick-connect at the end of the 4 mm hose attached to the Equalizer.

b. Insert the male quick-connect into the female quick-connect on the dispenser and twist clockwise to secure.

c. Make sure the quick-connects are securely attached before proceeding to dispenser setup.

Optional stand mount (P/N 7015875)