

QUICK USER GUIDE

NITRO-DISPENSER FOR ESPRESSO MARTINI - MODEL: ND-20-01-02 DI

SET UP

1. SCOPE OF SUPPLY

- 1 x Nitro Dispenser
- 2 x Plastic canisters of 5l (170 oz) each
(1 x CPC valved, 1 x closed lid)

Accessories Box parts

- 1 x Drip Tray
- 1 x Tap and handle
- 1 x Combi Tap & Filer key
- 1 x Intake hose with CPC couplers
- 1 x Jar of ONE-PRO cleaner 566 g (20 oz)
- 1 x Power cord



2. PLACE THE DISPENSER

- Place unit on a level and dry surface
- Leave a gap of at least 3cm on either side, to allow air ventilation
- Place drip tray in front of the dispenser



3. TAP SETUP - STEP ONE

- Attach the tap and tighten the connection with the key
- Insert the tap valve into the shank and turn nut clockwise to tighten



4. TAP SETUP - STEP TWO

- Attach the handle
- Fix handle position with the counter screw nut



5. ADJUST TEMP TO MODERATE

- Turn the thermostat dial to 4. This is a moderate target temperature of 5°C / 41°F
- During flushing and cleaning, the dispenser can freeze if the temperature is set colder as the liquid doesn't contain alcohol



6. PREPARE CANISTER WITH WATER

- Put 2.5 l (85 oz) of water into the canister
- Shake it a few times
- Connect the CPC coupler to the canister and the inlet at the dispenser



7. FLUSH THE DISPENSER

- Connect the power plug
- Switch the toggle switch of the air compressor ON
- Start flushing dispenser with water by pulling tap handle down towards you



8. PREPARE ESPRESSO MARTINI

- Prepare your Espresso Martini according to your recipe.
- It is very important that the coffee (or the coffee concentrate) used has been filtered with 100 µm or finer!**
- Connect the CPC coupler



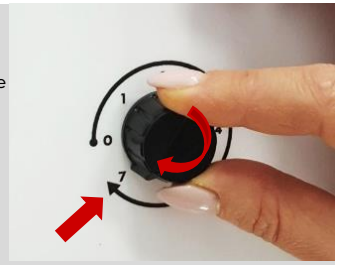
9. FILL DISPENSER WITH PRODUCT

- Put the nitro switch on "NITRO ON"
- Pull tap handle down until product is pouring out of the tap



10. ADJUST TEMP TO COLD

- Turn the thermostat dial to 7. This is a coldest target temperature of the dispenser.
- Make sure your Espresso Martini mix is in the dispenser. Nonalcoholic beverages will freeze at this temperature



11. READY TO SERVE

- The Nitro-Dispenser is now ready to serve excellent Espresso Martinis.

CHEERS!



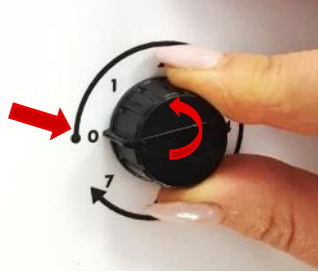
QUICK USER GUIDE

NITRO-DISPENSER FOR ESPRESSO MARTINI - ND-20-01-02 DI

WEEKLY CLEANING

1. SWITCH OFF COOLING

- Turn the thermostat dial to 0 (Off)
This will stop the unit from cooling
- Cleaning is more efficient without cooling, as warm water is used
- As well the detergent solution might freeze with cooling left on
- **Freezing the unit might damage the pump or burst hoses !!!**



2. PREPARE CANISTER WITH WATER

- Take the canister, rinse it with water, fill with 2.5l (85 oz) of water
- Before connecting to the dispenser, shake it to ensure that all internal surfaces have water contact
- Connect the canister to the CPC coupler



3. FLUSH THE DISPENSER WITH WATER

- Pull tap handle towards you and flush 1.5l (50 oz) of water through the dispenser



4. CHECK INTAKE FILTER

- Take the filter key and open the intake filter. A small amount of water will spill out
- Take out the filter screen, rinse and remove any sediment



5. CHECK TAP NOZZLE

- Unscrew the tap nozzle
- Check the inlet for particles. No particles should be there.
- Rinse and use brush if required



6. PREPARE SOLUTION WITH URNEX ONE-PRO

- **We recommend wearing gloves and safety glasses when using chemicals**
- Prepare solution with 2.5 l (85 oz) warm water (40°C/104°F) and two tea spoons of ONE-PRO (11g / 0.4 z)
- Shake it
- Connect canister to the CPC coupler



7. FLUSH THE DISPENSER WITH CLEANUNG SOLUTION

- Open the tap and flush 2.0l (68 oz) of the solution through the dispenser
- Wait 10 min
- Clean drip-tray meanwhile
- Flush the remaining solution through the dispenser



8. PREPARE CANISTER WITH WATER

- Take the canister, rinse it with water and fill it with 2l (68 oz) of water
- Shake it
- Connect the canister to the CPC coupler



9. RINSE WITH WATER

If you want to continue with product dispense:

- Tap 1.5 l (50 oz) of water through the dispenser.
- Now connect back to your dispensing product
- Switch on cooling again

If you want to take the dispenser out of service:

- Keep tap open until canister is empty and air is coming through the tap nozzle



10. CANISTER VACUUM VALVE

- Take out the white canister vacuum valve and rinse it with warm water to prevent the valve from sticking over time.



NITRO-DISPENSER - TROUBLESHOOTING GUIDE



<https://youtu.be/R2wHw6kXgUU>



Nitro-Dispenser Service:
Troubleshooting 1-Tap | Ketel1 | 115V

Helping the operator to identify and resolve problems

| Technical problems, fixable through the operator | | | | | Operator experience ID | | | | | | | |
|--------------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------|---------------------------------|-----------------------------|---------------------------------|----------------------------|---------|---------------------------------|--------|
| | | | | | E1 | E2 | E3 | E4 | E5 | E6 | E7 | E8 |
| Problem ID | Problem | Effect | toDO | Verification | Too much foam during dispense | Not enough foam during dispense | Liquid flowrate is too slow | No liquid is coming out anymore | Drinks are not cold enough | Leaking | Bad taste / Collapsing canister | Others |
| CP1 | Pressure toggle switch OFF | No power built-up of the pneumatic circuit. -> No dispense happens, as the pumps runs on pneumatic pressure. | Switch pressure toggle switch in ON position | Dispensing becomes possible | | | | X | | | | |
| CP2 | No electrical power | Without electrical power no cooling and no air compressor runs. -> No dispensing, no cooling | Check if power cord properly is plugged in. Check if any fuse trapped. Check whether the dispenser makes any noise. | You should hear some noises when opening the tap. (e.g. pump, air-compressor, cooling-compressor) | | | | X | | | | |
| CP3 | Dispenser frozen | If temperature was not reduced during cleaning or dispense of non-alcoholic drinks, freezing can occur. | Disconnect from electrical power and let it sit to let the internal ice melt down. This can take up to 8 hours. | Dispensing is possible | | | | X | | | | |
| CP4 | CPC adapter not connected | The CPC adapter of the intake line is not properly connected to the socket of the dispenser or canister. | Check the socket connections of intake line and reestablish connection. | Visual check if intake line socket connections are ok. | | | | X | | | | |
| CP5 | Thermostat setup | The thermostat dial is not in its coldest setup position. | The thermostat dial in the dispenser front must be turned clockwise to 7. | When cooling compressor switches off, the second glass of 200 ml should be around 0 - 3°C | | | | | X | | | |
| CP6 | High volume dispense | If there is high volume dispense in peak moments, the cooling compressor cannot cool down fast enough. | The canister connected to the dispenser must be pre cooled in a fridge. This reduces the required cooling energy for the dispenser. | In high volume nonstop dispense the cooling effect is only around 7°C between input and output. | | | | | X | | | |
| CP7 | Intake filter clogged | Liquid flowrate too slow -> Mismatch of gas and liquid stream | Open and check intake filter | Target flowrate: 0.6 l/min (+/- 10%) | X | | X | X | | | | |
| CP8 | Tap outlet nozzle clogged | Liquid flowrate too slow -> Mismatch of gas and liquid stream | Open and check nozzle. Try to tap without nozzle. | Target flowrate: 0.6 l/min (+/- 10%) | X | | X | X | | | | |

| Technical problems, fixable through the operator | | | | | Operator experience ID | | | | | | | |
|------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------|---------------------------------|-----------------------------|---------------------------------|----------------------------|---------|---------------------------------|--------|
| | | | | | E1 | E2 | E3 | E4 | E5 | E6 | E7 | E8 |
| Problem ID | Problem | Effect | toDO | Verification | Too much foam during dispense | Not enough foam during dispense | Liquid flowrate is too slow | No liquid is coming out anymore | Drinks are not cold enough | Leaking | Bad taste / Collapsing canister | Others |
| CP9 | Smaller air leak at intake line | Together with the liquid, air is sucked into the dispenser through a leak in intake line or canister lid. -> Mismatch of gas and liquid stream | Check all connections at intake line and in canister lid. | Visible check: There must not be any air bubbles sucked into the dispenser during dispense. | X | | X | X | | | | |
| CP10 | Big air leak at intake line | Due to a loose connection at the intake line or canister lid, ambient air is sucked into the dispenser instead of product out of the canister. | Check all connections at intake line and in canister lid. | Visible check: There must not be any air bubbles sucked into the dispenser during dispense. | | | | X | | | | |
| CP11 | Wrong setup at nitro rotary switch | The gas setup at the rotary switch is not ok any more. -> Mismatch of gas and liquid stream | Close rotary switch clockwise. Locknut has to be released. Then open carefully in small steps and check dispensing | Good dispensing result | | | | | | | | |
| Note: Problem is not applicable on dispensers with Nitro toggle switch | | | | | | | | | | | | |
| CP12 | Recipe or glass issue | Ingredient based foam instability or detergent traces at glass border. | Instructions as in manual Chapter 3.4 | Reference liquid could be used | | X | | | | | | |
| CP13 | Recipe issue | Beverages with CO2 | Instructions as in manual Chapter 3.4 | Reference liquid could be used | X | | | | | | | |
| CP14 | Tap valve not screwed in entirely | The valve is not in the end position. -> Liquid will spill out although tap is closed | Tighten tap valve to its end position. | No liquid must spill out when tap is closed. | | | | | | X | | |
| CP15 | Leaking in terms of liquid spilling or dropping out. | Leaking from intake hose are probably due to a bad hose connection. Leaking at the coupler are probably caused through a damaged O-ring. Leaking from inside the machine require service technician. | Reestablish connections at the intake hoses. Check the O-ring from CPC couplers at intake line. A bad O-ring at a coupler can be the problem. | No leaking from intake hose or coupler must occur. | | | | | | X | | |
| CP16 | No cleaning | Without regular cleaning, the quality of the drinks will suffer. The canister can collapse if the venting valve in the lid is not cleaned. | Apply cleaning procedure as described in manual chapter 5.4 | After cleaning check smell / taste with pure water. There must NOT be any OFF taste. | | | | | | | X | |
| CP17 | Canister venting valve blocked | Canister is collapsing as venting valve does not open when liquid is sucked out through the dispenser. | Regular cleaning of venting valve in canister lid is required to avoid this. See cleaning procedure in operation manual chapter 5.5 | When venting valve is cleaned it will open when product is sucked from canister. | | | | | | | X | |
| CP18 | Part damaged or broken | If parts are damaged those can be ordered through the website below. | | | | | | | | | | X |

If the problem is different from the listed ones, the root cause is inside the dispenser. Please get in touch with our service partner

Service Partner: **Duke Service Company**
e-Mail NITRO@dukeservices.com

Service Hotline: +1 (800) 896-8237