

**MDFD-4**  
Micro Drop Fog Dispenser

## Technical Specification

4-heads ultrasonic fog generator system model MDFD-4

Used best for rooms size	16' x 16' x 8' - 2048 cubic feet or 58 cubic meters
Capacity (water consumption)	1.6 to 2.4 liter/hour
Electrical specifications	100 to 240 Volts, 50/60 Hz, 6A max
Recommended water pressure	40-60 lbs./inch (275 to 415 kpa)
Water intake	½" (12.70 mm)
Fog outlet	6" (152.4 mm)
Dimensions:	Diameter: 23" (584 mm) Height: 26" (660 mm) Weight: 34lbs (15.45kg)

- 4 x EBU's (the ultrasonic fog generator unit)
- 6 x Waterproof fan
- Water Float valve
- Automatic shut off water sensor
- Electronic malfunction alarm system.
- Protection against electrical overload, complies with C.S.A. C.22.2 and U.L.998
- F.D.A. Grade (Food and Drug Approved): All components in contact with water and fog are grade F.D.A. plastic made.
- One year warranty
- Made in Quebec, Canada



### OTHER PRODUCTS:

#### Single head ultrasonic fog generator system model MDFD-1

- Used best for rooms size: 10' x 10' x 8' - 800 cubic feet or 23 cubic meter
- Capacity (water consumption): 0.4 to 0.6 liter / hour
- Electrical spec: 100 to 240 volts 50-60Hz, 1.6A max
- Recommended water pressure: 40-60lb/inch (275-415 kPa)
- Water intake: ½" (12.70 mm)
- Fog outlet: 6" (152.4 mm)
- Dimensions: Length: 28" (457 mm)  
Width: 7" (178 mm)  
Height: 14" (660 mm) without fog hose  
Weight: 7 lbs (3.175 kg)
- 1 x EBU (the ultrasonic fog generator unit)
- 1 x Waterproof fans.
- Water Float valve
- Automatic shut off water sensor
- C.S.A. - U.L.
- One year warranty
- Made in Quebec Canada.



#### 6-Heads ultrasonic fog generator system model MDFD-6

- Used best for rooms size: 22' x 22' x 8' - 3872 cubic feet or 93 cubic meter
- Capacity (water consumption): 2.4 to 3.6 liter / hour
- Electrical spec: 100 to 240 volts 50-60Hz, 6A max
- Recommended water pressure: 40-60lb/inch (275-415 kPa)
- Water intake: ½" (12.70 mm)
- Fog outlet: 6" (152.4 mm)
- Dimensions: Diameter: 23" (584 mm)  
Height: 26" (660 mm)  
Weight: 34lbs (15.45kg)
- 6 x EBU's (the ultrasonic fog generator unit)
- 6 x Waterproof fans.
- Water Float valve
- Automatic shut off water sensor
- Electronic malfunction alarm system
- C.S.A. - U.L.
- One year warranty
- Made in Quebec, Canada



#### HT2 Digital Controller Single output Bar graph display

- Day and Night temperature settings: 48°F to 104°F (9°C to 40°C)
- Day and Night humidity settings: 10% to 100%
- User can select one among five operating modes: Cooling, Cooling & Dehumidifying, Dehumidifying, Humidifying, Heating
- User-Set Low-Temperature Limit (for Cooling & dehumidifying mode only)
- Remote Sensor w/ 25-ft cable (included)
- Non-condensable sensor.
- Interchangeable sensor.
- Bar graph display
- 15 Amps Output
- Electrical specifications: maximum load: 120 volts load max 15A (50/60 hz)
- 3 years warranty
- Made in Quebec, Canada



## OWNER'S GUIDE

# 4-Heads Ultrasonic Fog Generator

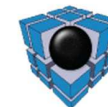
Made in Québec, Canada

**MDFD-4**  
Micro Drop Fog Dispenser

Producing water droplets smaller than 5 microns



5245 Rue des Cageux, Pierrefonds  
Quebec H9J 3C4 - CANADA  
Phone: 514-892-0246 | Fax: 514-784-0242  
Email: info@theotekgroup.com  
www.theotekgroup.com



**THEOTEK GROUPE INC.**

Read all instructions before installation.  
Save for future reference.

## INSTALLATION

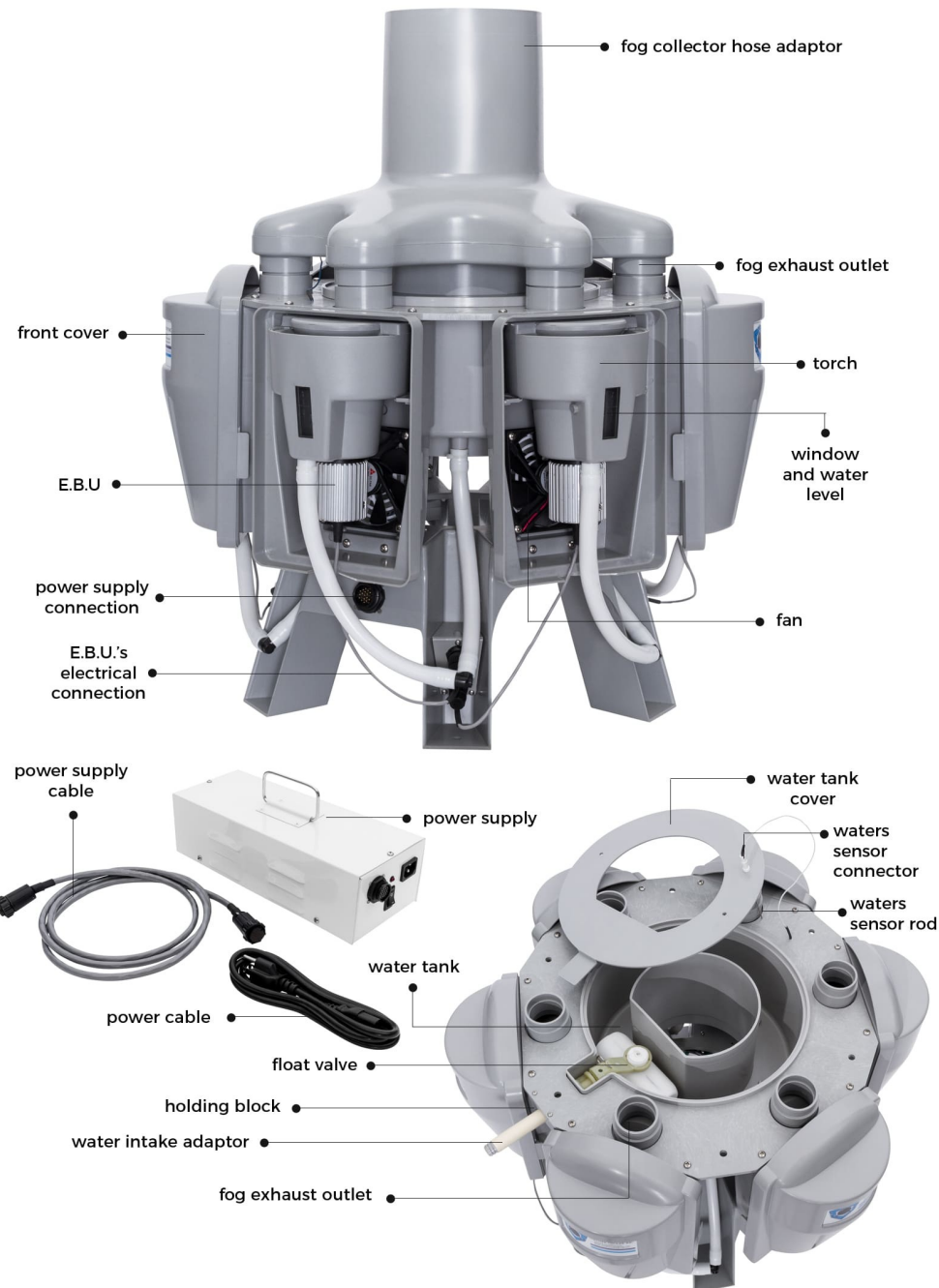
**Warning:** Do not install the Fog Generator in the same room or zone that is being fogged.

**Warning:** Always make sure the water is at the optimal level in the water tank and torches before powering the EBU's

1. Install the fog generator on a flat surface, making sure it is level.
2. Remove all 6 front covers
3. Lift and remove the fog collector hose adaptor
4. Remove the water container, cover without damaging the water sensor rod.
5. Use a 1/2" hose (12.70 mm) and hose clip to connect the water supply to the water intake located on the side of the unit. We recommend, on the main water supply line, the installation of an on/off valve, to be able to shut off the water supply during maintenance, repair or storage. Make sure, upon the water hose installation that the water valve, in the interior of the water tank did not rotate and it maintained the horizontal position.
6. Open the water supply valve. Wait until the water stops filling the water tank.
7. Check the water level on all 4 torches. Water level in all torches should be 1/4" (6 mm) higher than the window middle line. If water level is not equal in the all torches, that means the fog generator is not leveled. If water is not filling up one or more torches, evacuate the air from the system by gently squeezing the white water supply hose.
8. Close the water tank cover.
9. Connect the female connector of the power supply cable to the flange connector on the base of the fogger. Waterproof the connection by rotating the lock plastic ring attached to the power supply cable connector.
10. Connect the male connector of the power supply cable to the flange connector on the power supply unit. Waterproof the connection by rotating the lock plastic ring attached to the power supply cable connector.
11. Plug the power cable from the power supply to a power source. Switch ON the switch located on the power supply unit. When the power is connected the red led light on the power supply unit and on the fogger base will be on and all 6 fans will start working.
12. Connect the water level sensor white connector, coming from the top plate of the fogger, to the connector on the water container cover. The unit will start generating dry fog.
13. Install the fog collector hose adaptor.
14. Install all 6 front covers on the fogger.
15. We recommend the use of an extension fog hose (not included) 6" (152 mm) diameter and 6 feet (1.80 m) longer depending on each client custom installation. Connect the fog hose extension to the fog collector hose adaptor, installing it vertically or with a downward inclination to avoid water accumulation in the hose.

### WARNINGS

1. Always install the power supply as far away as possible from the fog generator.
2. Do not operate the fog generator when the temperature is below the freezing point.
3. In case of using a reverse osmosis water filtration system, it must be kept a minimum of 15 ppm (15 parts per million) of dissolved salts in the water for the automatic safety shut-off water sensor to be operational, otherwise the fog generator will not start.
4. If you attach a supplementary hose to the existing one, it must be positioned vertically or with a downward inclination to avoid water accumulation.
5. The fog generator is equipped with an automatic safety shutoff water sensor. It will immediately turn off the unit if the water level is too low, preventing it from being damaged. It will instantly start up again when water is added. The fog generator will not work if the sensor is unplugged.
6. The power supply is equipped with an alarm warning system (audio signal) when a defective EBU(s) is detected in the system.



### Limited Warranty

One (1) year from date of purchase on parts and labour with proper functioning of the unit. Repair or replacement at our discretion. Shipping and handling at customer's expenses. (Contact us for our return policy).  
**LIMITED WARRANTY ACCORDING TO SPECIFICATIONS, CONDITIONS AND RESTRICTIONS. WARRANTY VOID IF MISUSED.**



## MAINTENANCE

Maintenance, cleaning and replacing EBU's procedures

For an optimal functionality and durability of the fog generator we recommend the EBU's cleaning procedure to be done each 3-4 months, depending on the environment is used and the quality of the water source. In some cases an online water filter is required.

1. Switch OFF the switch located on the power supply unit. Unplug the power cable of the power supply from the power source. When the power is not connected the red led lights located on the power supply unit and the fogger base will be off and all 6 fans will stop working.
2. Close water supply valve.
3. Disconnect fog collector hose adaptor.
4. Remove all 6 front covers.
5. Disconnect EBU's electrical connections.
6. Empty the water from the system by removing, one at the time, the torches from their position and turning them upside down over an empty container. Wait till the water tank and torches are empty.
7. Unscrew the EBU's from the torches and remove the rubber gaskets.
8. Clean the EBU's top surface with a combination of water and vinegar or calcium remover using a soft clean tissue. This operation must be handled with care to not scratch or damage the fog generating surface.
9. Clean also the tip of the water sensor rod attached to the water tank cover.
10. If the torches need to be clean, detach the water alimentation hoses and submerge the torches on the container, in a combination of water and vinegar or calcium remover, for a half an hour, then rinse with clean water and reattached the water alimentation hoses.
11. Install the EBU's by first inserting the clean rubber gaskets and then screwing back the EBU's in the torches. Connect the EBU's electrical connections with the connectors situated at fogger base. Waterproof the connection by rotating the lock plastic rings supplied with the EBU's connectors.
12. Open the water supply valve. Wait until the water stops filling the water tank.
13. Check the water level on all 4 torches. Water level in all torches should be 1/4" (6 mm) higher than the window middle line. If water level is not equal in the all torches, that means the fog generator is not leveled. If water is not filling up a torch, evacuate the air from the system by gently squeezing the white water supply hose.
14. Close the water tank cover.
15. Connect the power cable from the power supply to a power source. Switch ON the switch located on the power supply unit. When the power is connected the red led light on the power supply unit and on the fogger base will be on and all 6 fans will start working.
16. Connect the water level sensor white connector coming from the top plate of the fog generator to the connector on the water tank cover. The unit will start generating dry fog.
17. Install the fog collector hose adaptor.
18. Install all 6 front covers on the fogger.

**WARNING:** If cleaning is not done regularly, the unit will stop working and may get damaged.

### STORAGE

If the fog generator is not used for more than a few days, the power supply should be unplugged from the power source, the water supply valve should be turned off, and water should be removed from the torches and the water tank. The EBU's and water sensor rod should be cleaned, following cleaning procedure for the future use. Protect the fog generator by covering the system in the period of non-use.

For troubleshooting instructions please consult our Customer Service page on our website [www.theotekgroup.com](http://www.theotekgroup.com) or contact our 24h Customer Service Department by phone at 514-892-0246 or email at [info@theotekgroup.com](mailto:info@theotekgroup.com)