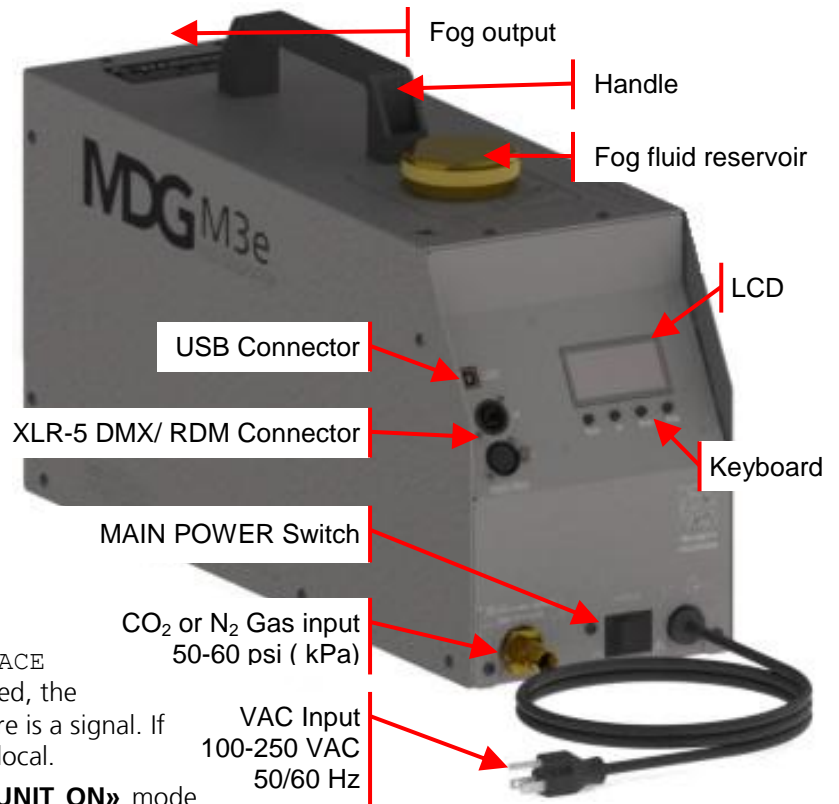# M3e

Installation

- Connect the gas inlet to a gas bottle equipped with a regulator. The gas inlet is an Oxygen Adaptor (9/16-18 R.H).
- Connect the data wiring (Male XLR-5 connector for DMX/RDM) if you are using a DMX or RDM controller.
- Connect the power cord 100-250 VAC, 50/60 Hz, 715W.
- Open the gas bottle (CO_2 or N_2 industrial grade, over 99% of purity), and **set the regulator pressure between 50 and 60 psi** (3.5 and 4.1 bar, or 350 and 410 kPa).
- Fill the reservoir with **MDG Neutral Fog Fluid.**

*Power on the MDG **M3e**.*

Fog output

Handle

Fog fluid reservoir

LCD

USB Connector

XLR-5 DMX/ RDM Connector

Keyboard

MAIN POWER Switch

CO_2 or N_2 Gas input 50-60 psi (kPa)

VAC Input 100-250 VAC 50/60 Hz

Working with the keyboard (LOCAL Mode)

- Verify the communication mode in the «INTERFACE ▶COMM. ». When the «AUTO» mode is activated, the MDG **M3e** is then controlled by DMX, only if there is a signal. If the DMX wire is unplugged, the control remains local.
- When the generator is manually switched to **«UNIT ON»** mode («CONTROL ▶ UNIT ▶ ON»), the program starts the heating cycle for approximately 8 minutes («STATUS ▶ STATE = % HEAT»).

  When the temperature reaches operating level, the Automatic Purging System™ (APS™) will be initiated («STATUS ▶ STATE = PURGE»).

  After the first purging cycle is completed (1 min), the generator is ready to produce fog («STATUS ▶ STATE = READY»).
- To produce Fog, switch the generator to **«FOG ON»** mode («CONTROL ▶ FOG ▶ ON»).

  The MDG **M3e** will start to produce fog right away.

  Fog emission can be controlled by adjusting the working pressure of the internal reservoir («CONTROL ▶ PRESSURE»).

The MDG **M3e** will produce fog as long as the control parameters are within specifications, the fog fluid reservoir filled and the gas bottles pressurized.

If a critical problem occurs, the fog generator <u>automatically shuts down</u>, and displays an error message in the **Status Menu.**

The most common errors are (check the manual for more details):

- ERROR = P. LOW   Gas bottle is probably closed, empty or not connected. Check also the regulator pressure.
- ERROR = P. HIGH   The input gas pressure is too high (Pressure between 50-60 psi / 3.5-4.1 bar / 350-410 kPa).
- ERROR = HEATER   Check the AC voltage.
- ERROR = PCB HIGH   Move the generator to a colder location.

Working with DMX/RDM Control (DMX Mode)

- Connect a DMX line to DMX In connector (Male XLR-5 connector).

- Select the communication mode in the «INTERFACE ▶ COMM. ». When the «AUTO» mode is activated, the MDG *M3e* is then controlled by DMX, only if there is a DMX signal.

- Set the DMX Start Address in the Interface Menu («INTERFACE ▶ COMM. ▶ DMX ADDR»), and choose any value between 1 and 510 (512, last DMX channel).

  The DMX Start Address can be reassigned via a RDM control.

The generator uses two (2) or three (3) DMX channels, depending on its personality:

Personality M3e
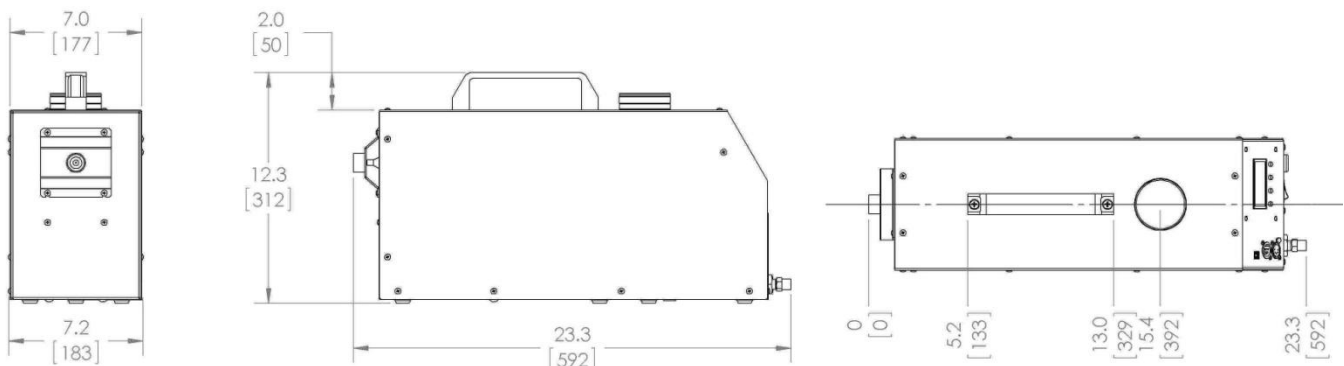
- Channel 1   **0 (0%)**   < UNIT OFF   ≤ **128 (50%)**   < UNIT ON   ≤ **255 (100%)**
- Channel 2   **0 (0%) – 255 (100%)**, FOG OUTPUT (from minimum to maximum)
- Channel 3   **0 (0%)**   < FOG OFF   ≤ **128 (50%)**   < FOG ON   ≤ **255 (100%)**

Personality MAX 3000

- Channel 1   **0 (0%)**   < UNIT OFF   ≤ **128 (50%)**   < UNIT ON   ≤ **255 (100%)**
- Channel 2   **0 (0%)**   < FOG OFF   ≤ **128 (50%)**   < FOG ON   ≤ **255 (100%)**

Technical Specifications

Total Running Time:	1.3 hours at 2.76 bar / 40 psi 2.5 hours at 1.38 bar / 20 psi
Fluid consumption:	1.9 l (53.1 oz / 0.475 US gal) per hour at 2.76 bar / 40 psi 1.0 l (29.5 oz / 0.264 US gal) per hour at 1.38 bar / 20 psi
Fluid type:	MDG **Neutral^{TM} Fog Fluid** ONLY M.S.D.S. available on request
Fluid reservoir:	2.5 l (0.66 US gal) bottle
Gas type:	Industrial Grade CO_2 or N_2
Gas pressure input:	4.15 bar / 60 psi max
Gas consumption:	1.6 kg (3.53 lb) per hour at 2.76 bar / 40 psi 0.96 kg (2.12 lb) per hour at 1.38 bar / 20 psi
Operating voltage:	100-250 VAC, 50/60Hz, 1 phase, 715 W Ground / Earth connection **REQUIRED**
Operating temperature:	0 °C to 50 °C (32 °F to 122 °F)
Operating humidity:	90 % relative humidity @ 50 °C (122 °F), non-condensing
Storage temperature:	-40 °C (-40 °F) to 60 °C (140 °F)
Storage humidity:	80% relative humidity @ 60° C (140 °F)
Approval	CE, CSA and UL pending
Dimensions	30 cm (12") H x 18 cm (7") W x 61 cm (24") L
Weight:	15.6 kg (35 lb)

*… For further details, please read the **User Guide.***