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# **HAZEMAX™**

## **Operating Instructions**

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**P/N 100021 (120 VAC w/DMX)**

**P/N 100026 (230 VAC w/DMX)**

## **Thank you for purchasing this HAZEMAX™**

- **As you will notice from the table of contents, the manual for your new product is quite extensive.**
- **To guarantee perfect and successful work with this machine, please take some time to read the manual carefully.**
- **And finally, we believe you will enjoy years of great haze effects if you care for and maintain your HAZEMAX™.**

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# 1. Set of Equipment Supplied

- 1 HazeMax™ w/DMX (w/5-pin XLR in/out)
- 1 Remote Cycle-Timer Controller w/5-pin XLR in/out (P/N 600381)
- 1 Bracket for hanging (P/N 600258)
- Operating Instructions Booklet
- Reset tool (P/N TBA)

# 2. Accessories and Parts

- CITC Water Vapor Haze™ P/N 150570
- C-Clamp w/Safety Cable P/N 250110
- HazeMax™ Road Case P/N 250211
- C-Clamp w/eyebolt & hanging harness for 5 gal. (19 liter) Cubitainer (P/N 250076)

The following miscellaneous parts are available for the HazeMax™

|        |                                    |
|--------|------------------------------------|
| 600301 | Bracket Hardware with Knobs        |
| 600302 | Bracket                            |
| 600304 | Switch                             |
| 600307 | Remote Cycle-Timer with Phone Plug |
| 600308 | Circuit Board                      |
| 600309 | Intake Filter for Compressor       |
| 600311 | High Temperature Hose              |
| 600312 | Hose Clamps                        |
| 600314 | Electrical Receptical with Fuses   |
| 600330 | Compressor Pump 120 VAC            |
| 600331 | Brass Fittings                     |
| 600332 | 5 Amp x 20 mm Fuse                 |
| 600333 | Tank                               |
| 600334 | Silicon high temperature hose      |
| 600335 | Fuse Breaker                       |
| 600336 | Fan                                |
| 600337 | Rubber Feet (ea.)                  |
| 600303 | 230 VAC Compressor Pump            |

Please check whether all the products you ordered are supplied.

### 3. Description of the HazeMax™

The HazeMax™ w/DMX is CITC's latest hazing system. No other comparable machine delivers a thicker, whiter output of 30,000 cfm of digitally controlled haze. New and improved, the HazeMax™ can produce longer on high than the stiffest competition. Accurate temp control makes shut down history. It now has a quieter pump with a 1500 watt heating head, a 1-channel DMX on board, remote control cycle-timer and hanging bracket. Best bet for professional haze. Uses water-based CITC hazing fluid. The extra dry haze leaves no mess, no residue and can be fully controlled with DMX (included).

The following sequence produces haze:

- a) The haze generator is preheated for 4 – 8 minutes.
- b) The pump is controlled from 0 – 100% output by the Remote Cycle-Timer Controller or by DMX.
- c) The preferred setting is at 50% for best even haze.

NOTE:

- At 100% output (3 o'clock on Volume Control or 80% on DMX control) the unit will produce heavy haze continuously without delay. Pulsating may be observed at high output. This is normal.
- At highest output or Blast, the unit will produce a heavy haze for up to 30 minutes without delays. After 10 minutes haze generator is again warmed up and again ready to produce haze. Again, pulsating output may be observed.

### 4. Safety Instructions

**WARNING: Read and understand all labels and operating instructions before attempting installation.**

- Never open the machine without disconnecting power lead first!  
**Risk of electrical shock-** This device is supplied with a grounding conductor. To reduce risk of electrical shock, connect only to properly grounded, grounding type receptacles. Never remove the third prong from the plug.
- This machine requires a well-grounded 120 VAC circuit for operation. The HazeMax™ draws approximately 15 amps at 120 VAC (8 amps for the 230VAC model). During HazeMax™ operation this circuit should be dedicated to the HazeMax™. If you have any doubts about the capacity or grounding of your existing circuits, consult a qualified electrician.
- Be sure area around hazer is dry before applying electrical power.
- Make sure that your unit is pointed in a direction that leaves a 10ft (3m) open area out in front. Place the front of the machine away from direct contact with electrical instruments and people. Close output is very hot and wet.
- Never operate the pump without fluid passing through the tube. This could cause the pump to overheat and damage the piston. Operating the pump without fluid is not covered under warranty.
- Fluid is very slippery when spilled. Care in keeping any drips or spills cleaned up is necessary.
- Do not store HazeMax™ in freezing conditions.

## 5. Operating the HAZEMAX™

### 5.1 Selecting the Location

Secure a good location for the machine to rest solidly on the floor or suspended so that the output of the machine will not be restricted. Make sure that your unit is pointed in a direction that leaves an open area out in front and can travel 10ft (3m) without restriction. Place the front of the machine away from direct contact with electrical instruments and people. Close output is very hot and wet. Always allow plenty of air circulation to allow the haze to expand, separate and enlarge.

### 5.2 Electrical Power Requirements

This machine requires a well-grounded 120 VAC (or 230VAC) circuit for operation. The HazeMax™ draws approximately 15 amps at 120 VAC. (The 230VAC model draws approximately 8 amps.) During HazeMax™ operation this circuit should be dedicated to the HazeMax™. If you have any doubts about the capacity or grounding of your existing circuits, consult a qualified electrician. Do not add other equipment on this circuit.

### 5.3 Hooking things up

Plug the 5-pin XLR of the Remote Control to the inlet marked "Remote Control". Fill the bottle with CITC's Water Vapor Haze™ fluid. Place the filter end of the tube inside the bottom of the bottle and tighten cap. Be sure the vent hole in the cap is not blocked.

### 5.4 Operating the machine

1. While turning on the power switch on the hazer, check to see the red light in the switch and the red LED on the Remote both come on. Wait approximately 7-8 minutes for the green "ready " light located on the remote control to come on.
2. Using the "vary output" button, you may adjust the output volume with the volume control. Using the timer button, you may adjust the "on" and "off" knobs for timing the haze and the Volume Control knob. The amount of haze can be adjusted by using the volume "output" knob. **NOTE:** Do not depress "vary output" when using timer. When using the manual control (blast), you will not have timer, adjuster, and volume output control. The "blast" button is only full blast smoke as long as you hold the button down.

### 5.5 DMX Control

With DMX control, you will be able to adjust the haze levels on/off, from 0 – 100%. When depressing the manual haze button located on the machine, it is operating at its highest level only and will override the DMX control for testing. (See section 5.9).

## 5.6 Rest Period

Continuous operation of this machine can be accomplished when volume is set at the 3 o'clock position. If dial is set for full output or blast, 30 minutes is the maximum time of haze ability before a 3-minute rest period for reheating is necessary. If you wait a full 10 minutes, you will be able to haze again for at least 30 minutes on full.

## 5.7 Shut down

When finished with the machine, clean the tube and pump by operating the unit while running a pint of 5% vinegar/distilled water mix through the pump and then rinse with a pint of distilled water. This will keep the piston in the pump from becoming stuck and not working. When finished, water should remain in the line for storage. Do not drain or empty the tube of water.

## 5.8 Troubleshooting

### 1. If the pump does not draw fluid

If the pump does not draw fluid into the hazing unit, be sure the unit is warm and ready to operate. Then check to see that the tubing is in the fluid, not above the fluid. Check electrical power to the machine. Hold up tubing, remove filter and push, blow or use a turkey baster to force the fluid inside the pump. Try again to see if it will pump now. Check to hear any sound coming from the pump side (nearest the top). A slight vibrating sound should be heard if the pump is pumping fluid. A loud knocking sound will be heard if only air is in the line and fluid has not come in yet. Force fluid through the line to get it started. This is called "priming" and the line needs to be full of fluid for the haze mechanism to work. **Note: Do not run the pump without fluid passing through the tube. This will cause the pump to become hot and could damage the piston. This is not covered under warranty.**

### 2. If Ready Light Does Not Come On

If you are not a factory-authorized dealer, this is the only owner-permitted troubleshooting step that will not void the warranty. If the green ready light does not come on after warm-up, this may possibly indicate the unit has overheated. This may happen if there is not enough air circulation or if it is in a closed area. The machine needs to be air cooled if this occurs. If the green ready light stays off, this indicates the heat safety breaker has released. It will not reset until the unit has cooled to 169°F (76°C) Then when you reset, it will be ready to use again. Plug in the unit and warm it up again. The green ready light should come on after 10 minutes. Call your dealer if this does not solve the problem.

## 5.9 Notes on DMX operation

Each DMXed unit will occupy a unique DMX address on the DMX chain. By adjusting the dip switches on the side of the machine near the DMX cable plug-ins, the user may assign one address to the machine, giving you on/off and volume control with one DMX channel (there is no timer on this DMX).

Step 1). Attach the DMX cable to the upper "in" female connector located on the back of the hazer.

Step 2). The DMX address is configured by adding the dip switch numbers together to total the number required. For example, DipSwitch 1 + 6 = 33. Your DMX channel would be 33.

|            |   |   |   |   |    |    |    |     |     |
|------------|---|---|---|---|----|----|----|-----|-----|
| Dip Switch | 1 | 2 | 3 | 4 | 5  | 6  | 7  | 8   | 9   |
| Channel #  | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 |

### When you move the slide control or digital control;

|           |                        |
|-----------|------------------------|
| 0 – 5%    | = Off                  |
| 5– 80%    | = Volume Control       |
| 80 – 100% | = Maximum Blast Output |

"Input" and "Output" designations on the DMX plugs are arbitrary (i.e., you can use the input plug for output and visa-versa). It is not necessary to attempt converting your DMX line's connector to female/male to match the appropriate socket on the plug. As long as it is looped in/out, it will work.

Once your hazer is warm and the green ready lite is on, you may control the haze output from the control booth.

## 6. Service and Maintenance

**Care of your HazeMax™ will give you years of service. Note: cleaning your unit is going to pay off in constant good performance.**

1. Dry all areas on the exterior of the machine once it is cool. Clean with a soft cloth to remove any flog fluid from inside the fluid compartment or outside area.
2. Do not store with haze fluid inside. When finished with the machine, clean the tube and pump by operating the unit while running a pint of 5% vinegar/distilled water mix through the pump and then rinse with a pint of distilled water. This will keep the piston in the pump from becoming stuck and not working. When finished, water should remain in the line for storage. Do not drain or empty the tube of water unless a freezing condition exists. Do not run the pump without fluid passing through the tube. This will cause the pump to become hot and could damage the piston. This is not covered under warranty.
3. Do not transport or ship with haze fluid inside the machine.

## 7. Technical Data

|  |   |
|--|---|
| HazeMax™ Technical Data P/N 100021 (230V P/N 100026) |   |
| Dimensions:  | 22" x 9" x 11" (56cm x 23cm x 28cm)   |
| Weight:  | 27 lbs (13 kg)  |
| Shipping Weight                                      | 32 lbs (14.5 kg)  |
| Shipping Dimensions                                  | 26 x 16 x 13 (66cm x 40.6cm x 33cm)   |
| Electrical Requirements:                             | 120VAC, 15A or 230VAC, 8A   |
| Fluid Consumption:                                   | @ 50 - 100% output 30 - 51 oz (1 - 1.5 liters) per hour   |
| Fluid Type:  | Water Vapor Haze™ (Regular only)  |
| DMX  | 1 channel full volume + on/off  |
| Remote Timer Included:                               | 0-100% output control for continuous<br>0-100% output on cycle-timer<br>100% output on manual momentary button<br>Cycle-timer = 1-11 seconds. "on",<br>0.2 - 5 minutes. "off" |
| Breaker  | 120VAC: 15A ; 230VAC: 7A  |
| Limited Warranty                                     | One year  |
| Rev: 6/1/05  |   |

## 8. Limited Warranty Conditions

This limited warranty guarantees to the original purchaser that this product shall be free of defects in material and workmanship, under normal use, for a period of one year from the date of purchase shown on the sales receipt. This warranty covers parts and labor providing the product is returned to CITC in the original shipping carton and packaging. The warranty for electrical is a (90) NINETY DAY limited warranty.

Damage resulting from shipping, accidents, misuse, negligence, unauthorized repairs or modification is not covered by this warranty. Using any fluid other than what is recommended for this machine will void warranty. No liability is accepted for injury or for loss, damage or expense resulting from any interruption whatsoever in the operation of the product or from any consequential loss arising there from. No liability is accepted for normal wear and tear.

We wish to satisfy YOU, our customer, and have implemented many measures to prevent problems and assure customer satisfaction. However, should you need a missing part or have a functional problem with your product, please call (888) 786-CITC from 7:30 am – 4:00 pm (Pacific Time) Monday – Friday, except for holidays. Our customer service department will respond to your problems immediately.

Please have the following information available when you call:

Model and Serial Number

Where and when the product was purchased

Nature of the problem

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Subject to the following conditions, CITC will repair any defect or fault in the unit if it is caused by a proven factory defect within one year of delivery to the end user.

Insignificant deviations of the regular product quality does not guarantee replacement rights, nor do faults or defects caused by water, by generally abnormal environment conditions or Force Majeure:

1. Faulty parts will be repaired or replaced (manufacturer's choice) with correct parts. Faulty units must be shipped to CITC at customer's expense. An RMA# must come with the unit.
2. The customer loses all rights for limited warranty services, if any repairs or adjustments are done to the units by unauthorized persons and/or if spare parts are used, which are not approved by CITC. The right of limited warranty service is also lost if a fluid other than appropriate CITC fluid has been used or if units are sent to in with full fluid bottles.
3. Freight costs to and from CITC when under the limited warranty services are the responsibility of the customer. Customer must place appropriate insurance on return of product. However, if product is returned due to factory defect within the first 30 days of receipt, CITC will cover the cost of returning the repaired unit to the customer.

4. Limited warranty services do not cause an extension of the limited warranty time or the start of a new limited warranty time. The warranty of replaced parts ends with the limited warranty time of the whole unit.
5. If a defect/fault can not be repaired by us in a satisfactory time, we will, within 30 days after sale of the unit, either:  
  
Replace the whole unit for free or take back the whole unit and refund the purchase price.
6. Further claims, especially for damages, losses etc. outside the unit are excluded.
7. Your limited warranty coverage is based on completion of the warranty card and returning it with your proof of purchase within 30 days of purchase.

**Your limited warranty coverage is based on completion of the warranty card and returning it with your proof of purchase within 30 days of purchase. If you should send the unit for service, do not forget to remove any liquid from the fluid bottle, and place unit in original box. Obtain your RMA# by calling CITC. Payment arrangements for repair must be made before receiving RMA # in case unit is not covered under Limited Warranty.**

**Send unit to:**

**CITC  
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