
STARHAZER™

Operating Instructions

P/N 100030 (110 VAC)

P/N 100035 (230 VAC)

Thank you for purchasing this StarHazer™

- **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 StarHazer™.**

CITC

2100 196th St. S.W., Ste. 138

Lynnwood, WA 98036

(888) 786-CITC

www.citcfx.com

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1. Set of Equipment Supplied

- **StarHazer™**
- **Remote Cycle-Timer Controller and 25' (7.6m) cord or DMX Control (optional)**
- **Bracket for hanging**
- **Power Cord**
- **Instruction booklet**
- **Extra fuse in fuse release holder**

2. Accessories

- **CITC's High Performance Fluid (oil-based) (formerly Diffusion Fluid) P/N 150660 (available in gallons (3.8 liter) and 5-gal. (19 liter) cubitainer)**
- **DMX – 1 channel w/stereo phono plug (P/N 250038)**
- **Wireless Remote Control to 100' (30m) Receiver & Sender (P/N 250010)**
- **StarHazer™ road Case (P/N 250220)**

Please check whether all the products you ordered are supplied.

3. Description of the StarHazer™

- o The STARHAZER™ by CITC has by far much longer-lasting haze effects than conventional water-based hazers or foggers, which is completely safe for people, children, and animals to breathe. There is no odor with toxin-free STARHAZER™ haze. One tiny ounce of fluid per half hour of constant operation testifies to the low amount of mineral oil being used to create such long lasting effects (2-3 hours), compared to hazers using a quart per half hour or more.
- o California Occupational Safety and Health Association tested this haze fluid to determine that "people working for 40 hours a week for 50 years would not suffer any adverse health effects". This is due to: A) the very low amount of fog fluid being used, B) the highest grade medicinal mineral oil being used, C) absolutely no heating element to create the irritation usually associated with hazing machines.
- o Haze from the StarHazer™ is completely different from any other fogger on the market. It operates without the use of a heating element (heating elements that create a heated chemical reaction for haze). The fire departments have been extremely happy to hear that this machine won't catch on fire if allowed to run empty, because it is made to operate without any type of heater or other fire causing generation.
- o Internally, the atomizer breaks up a high grade medicinal mineral proprietary formula into such tiny particles, that it produces an opaque haze that is filtered several times to remove larger size particles (over 20 microns) before it is mixed with the ambient air thrown 15' from the machine.
- o Because lights and lasers look best when fog is evenly distributed throughout the room, the hazer has a built in circulation fan that circulates the air from the room with the haze. This atmospheric effect lasts over 2-3 hours and is evenly dispersed from floor to ceiling, wall to wall.
- o In just 3 months, a STARHAZER™ owner, using High Performance Fluid (formerly called Diffusion Fluid) can regain the cost of this machine through lower costs of operation...1/16 electricity, 1/30 fluid, and no breakdowns compared to hazers half the price when used daily, year after year.
- o When the StarHazer™ timer (included) is used, you have 100% less chance of ever having residue from over-hazing (turn it on and leave). Now you can just set the timer and constantly turn on/off your unit when the timer comes on.

4. Safety instructions

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

- o **Risk of electrical shock-** Never open the machine without disconnecting power lead first! 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.
- o This machine requires a 110VAC/10 A circuit for operation (unless indicated for 230VAC). The StarHazer™ draws approximately 5 amps at 110 VAC (3 amps at 230VAC). During StarHazer™ operation this circuit should be dedicated to the

- StarHazer™. If you have any doubts about the capacity or grounding of your existing circuits, consult a qualified electrician.
- **Never use water-based fluids.** This would cause irreversible damage to the tank. Operating the pump with other than CITC Oil-based hazing fluid is not covered under warranty.
 - Be sure area around hazer is dry before applying electrical power.
 - Make sure that your unit is pointed in a direction that leaves a 12ft (4m) open area out in front. Place the front of the machine away from direct contact with electrical instruments and people. There is no heat in this unit.
 - Fluid is very slippery when spilled. Care in keeping any drips or spills cleaned up is necessary.
 - Do not store StarHazer™ in freezing conditions. Below 50° F it will not start.

5. Operating the StarHazer™

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 12ft (4m) without restriction. Place the front of the machine away from direct contact with electrical instruments and people. Always allow plenty of air circulation to allow the haze to expand, separate and enlarge. Proper circulation of the haze is important. Place the hazer at the opposite side of the room from the return air-conditioning duct to help cause the haze to circulate evenly, without curls of haze or hot spots. For large rooms, use a long-distance fan like the Director Fan™ or Director Jr. Fan™. This evens the haze for quicker balance.

5.2 Electrical Power Requirements

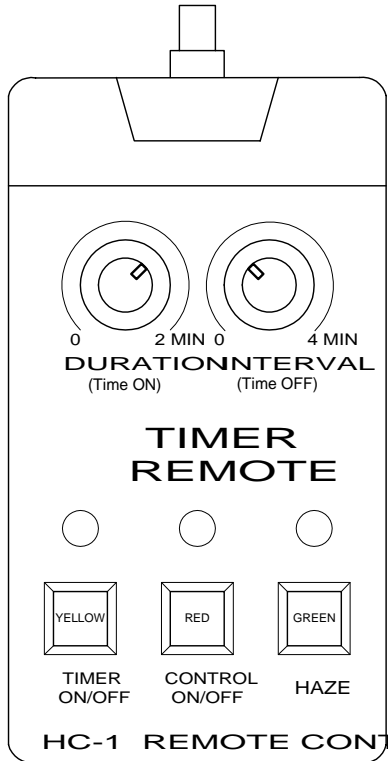
This machine requires a separate 110VAC/10A (or 230VAC/10A) circuit for operation. The StarHazer™ draws approximately 5 amps at 110 VAC and 3 amps at 230VAC. During StarHazer™ operation this circuit should be dedicated to the StarHazer™. If you have any doubts about the capacity or grounding of your existing circuits, consult a qualified electrician. Do not add other equipment on this circuit.

5.3 Hooking things up

1. Pour ½ - 1½ quarts High Performance™ hazing fluid into top fill spout. Use of any other fluids will void your warranty. **Do not overfill!** Check fill window to see that the fluid does not go past fill arrow or ½ full on window.. **Never use water based fluids.** This will clog the tubing, causing irreversible damage to the tank and possibly damaging the compressor or hoses.
2. Check for proper matching voltage outlet. Plug in cord provided. Insert remote control 1/4" phono plug into rear outlet marked "remote" on hazer.

5.4 Operating the machine

1. Allow a 12' open area around machine for circulation of haze (do not enclose).
2. When the power switch is turned on, the light on the switch will illuminate. You may use the on/off switch on the machine without the remote control plugged in. When the machine is turned on without the remote, the haze will start with the fan.



3. For cycle-timing of the haze, you must use the remote control. The red "on/off" button must be depressed for "Timer" or "Haze" functions to work. The fan comes on when the timer cycle begins and goes off when the cycle ends. The fan goes on or off each time you press haze. Haze will fill a 300-500 seat auditorium within 25-30 minutes. The absolute cleanest haze is when you keep a light haze by using the cycle timer. The haze from the StarHazer™ is recommended to be used for 10-20 minutes initially (depending on the size of the auditorium), and then "on" for up to 2 minutes every 1 – 4 minutes "off" thereafter, so as not to set off smoke alarms in laser games, night clubs, or equally sized entertainment facilities. Adjust as desired.
4. Operate for 20-30 minutes for 2-3 hours of haze. If continually left on, check fluid level every 8 hours. Caution: Over haze of facility is difficult to clear. Wait 20 minutes after each application at first to be sure of density.
5. The built-in filter continually works to provide only the smallest droplets of haze, reducing the possibility of residue. Overall use of fluid is reduced dramatically because of this feature. One ounce of fluid lasts 45-60 minutes. Approximately 1-2 oz. used per hour of operation.
6. When finished, wipe machine with a clean cloth and store covered to prevent dust and dirt from accumulating on the machine.
7. If shipping by a common carrier, **you must empty all fluid from the unit** by opening top cap, tipping upside down and moving with a slight rocking motion clockwise over a drain basin or funnel into a bottle. Reusing this fluid requires filtering through a nylon. Always check used fluid for clarity. If separation is seen, discard and fill with fresh fluid.

5.5 Troubleshooting

1. If the fuse blows

- If hazer stops working, first check fuse located under the plug. Remove the plug. With a screwdriver, slide drawer straight out (completely removing drawer), the fuse is located on the end. If blown, a replacement fuse is located inside the box next to it. Use old fuse to push out new fuse and snap into the position (5 A, 110 VAC or 3A, 230 VAC).
- Inadequate extension cords can result in low line voltage, which causes the fuse to blow. Check cords for proper size and condition (14 AWG or larger for 110 VAC; 14 AWG or larger for 230 VAC). Machine should be level to operate properly.

2. If the compressor starts to work, then stops and pops the fuse

You may have a cold unit. Below 55° F is too cold and will not start. Replace the fuse, warm the unit with a hair dryer, light bulb, or just let it sit in a warmer environment. Once it is warmed up, try again.

3. If there is no haze

- If compressor is running, but no haze is coming out, be sure you have used the correct hazing fluid. **Water-based haze fluid causes clogging of the tiny arteries and will cause the unit to stop working.** Replacement of tank may be necessary if this occurs.
- Check haze fluid level. (it should be no higher than ½ window). Overfilling causes reduced haze or residue. Be certain of fluid level. Empty if overfilled.

5.6 Notes on Optional 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 DMX control box, the user may assign one address to the machine, giving you on/off control with one DMX channel (there is no timer on this DMX).

Step 1). Attach the DMX stereo phono plug cable to the upper remote 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, the unit will turn on at approximately the 50% setting.

“Input” and “Output” designations on the DMX 5-pin XLR connectors 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.

6. Service and Maintenance

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

1. When finished, wipe machine with a clean cloth and store covered to prevent dust and dirt from accumulating on the machine.
2. Reusing this fluid requires filtering through a nylon. Always check used fluid for clarity.
3. Periodically vacuum dust from fan.
4. Do not transport or ship with flog fluid inside the machine. If shipping by a common carrier, **you must empty all fluid from the unit** by tipping upside down and moving clockwise over a drain basin. Put unit in a plastic bag to prevent dripping in box. Most carriers will return leaking units.

7. Technical Data

STARHAZER™ Technical Data P/N 100030 (230V P/N 100035)	
Type of Haze	Odorless, even, transparent, long-lasting High Performance Fluid P/N 150660
Weight	32 lb (14.5 kg)
Size	18" x 9" x 10" (44 cm x 23 cm x 25 cm)
Shipping Weight	34 lb (15.5 kg)
Shipping Box Size	23" x 14" x 15" (58.4 cm x 35.6 cm x 38.1 cm)
DMX	DMX (optional)(stereo phono conn.)
Fluid	CITC's High-Performance Fluid (oil-based) P/N 150660 (available in quarts (0.95 liter), gallons (3.8 liter), 5-gal. cubitainer (19 liter) & 55-gal. (208 liter) drum)
Fluid Consumption	1 oz (15 ml) per ½ hour or 1 qt (0.95 liter) per 16 hours
Output	50,000 cubic feet/hour (1.4M liter/hr)
Warm Up Time	None
Continuous Fog	Can run continuously – best with cycle timer
Duration	20 minutes of haze lasts 2 - 3 hours
Electrical Supply	110 VAC, 5 A, 60 Hz or 230 VAC, 3 A, 50 Hz
Fuse	110VAC: 5 A – 250 V, 5x20 mm 230VAC: 3A – 250V, 5x20 mm
Limited Warranty	Five year limited warranty on tank and compressor, 90 days on electrical components
Rev. 10/6/03	

8. Limited Warranty Conditions for the StarHazer™

- 1. Subject to the following conditions we will repair any defect or fault in the unit if it is caused by a proven factory fault and has been advised immediately after appearance and within 30 days 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.**
- 2. Limited Warranty of 5 years on the compressor and tank, 90 days on electrical will be done in the following way: Faulty parts will be repaired or replaced (our choice) with correct parts. Faulty units have to be shipped to us or sent to us at customer's expense. The RMA# has to come with the faulty unit.**
- 3. 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 us. The right of limited warranty service is also lost if a fluid other than CITC High-Performance Oil-Based Fluid™ has been used or if units are sent to us with full fluid tanks. Also non-compliance with the instructions in this manual or mistakes by incorrect handling/treating of the machine, any faults and damages caused by undue force will lead to a loss of limited warranty.**
- 4. Freight costs to CITC when under the limited warranty services are the responsibility of the customer. CITC will pay freight upon return.**
- 5. 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.**
- 6. If a defect/fault can not be repaired by us in a satisfactory time, we will, within 30 days after sale of the unit, our choice either:**
 - Replace the whole unit for free or**
 - Refund the lesser value or**
 - Take back the whole unit and refund the purchase price, but not more than the usual market price at the time of refund.**
- 7. Further claims, especially for damages, losses etc. outside the unit are excluded.**

If you should send the unit for service, do not forget to remove any liquid from the fluid tank. 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
RMA # XXXXXXX
2100 196th Street SW Suite #138
Lynnwood, WA 98036
Tel: (888) 786-CITC or (425) 776-4950
Fax: (425) 776-5129
Website: www.citcfx.com
E-mail: info@citcfx.com**



2100 196th St. SW, #138, Lynnwood, WA 98036-7083
425-776-4950 ✧ FAX: 425-776-5129
www.citcfx.com ✧ info@citcfx.com

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