Version: August 2025

Instruction manual

THE FAB 2

from hazebase

www.hazebase.com

Scope of delivery

- Hazer THE FAB² incl. flight case 19" 2U
- 1 liter empty canister
- Tank cap with quick coupling
- Power cable with TrueOne plug
- Operating instructions

Please check the completeness of the delivery

THE FAB² produces very fine haze that lasts a very long time.
We achieve this with the help of a specially developed vaporizer tube and the base*V fluid.
The heater coil should be replaced regularly; we recommend replacing it after 60 operating hours at 100% output, which corresponds to the consumption of a total of 12 liters. Heating elements are consumables and are excluded from the warranty.

In applications, where the focus is not on the very fine haze, you can alternatively use the original hazebase base*B fluid without any problems. When using base*B Fluid, we recommend replacing the vaporizer tube of the FAB after 90 liters.

Contents

1. Introduction

THE FAB² is a state-of-the-art haze generator. It offers a wide range of applications to enhance your lighting effects.

THE FAB² is used to generate haze, creating the atmospheric effect necessary for an appealing light show.

Due to the adjustability of pump power, fan speed and angle of attack of the Air deflectors almost any desired vapor density can be created. A newly developed, vegan, highly concentrated fluid is used. This creates the finest droplets with maximum airborne durability.A glycol-based fluid can also be used as a second fluid option.

Its two extremely quiet and adjustable fans allow it to be used in areas where background noise is disturbing.

THE FAB² offers countless control options. In addition to direct operation via touchscreen, the haze generator can be controlled via DMX512/RDM, as well as via Ethernet (Art-Net™and sACN). A wired or wireless remote control is also available as an option.

By default, THE FAB² mounted in a 19" 2U road case. The 1 liter fluid bottle ranges from 5 hours at maximum output up to approx. 150 hours at lowest settings.

The directly heated evaporator of THE FAB² reaches operating temperature in less than 10 seconds and, despite its extremely high output, requires only 500W. Its wide-range input (100V-240V AC) allows for use worldwide.

The innovative design allows the evaporator (wear component) to be replaced in just a few minutes.

2. Safety instructions

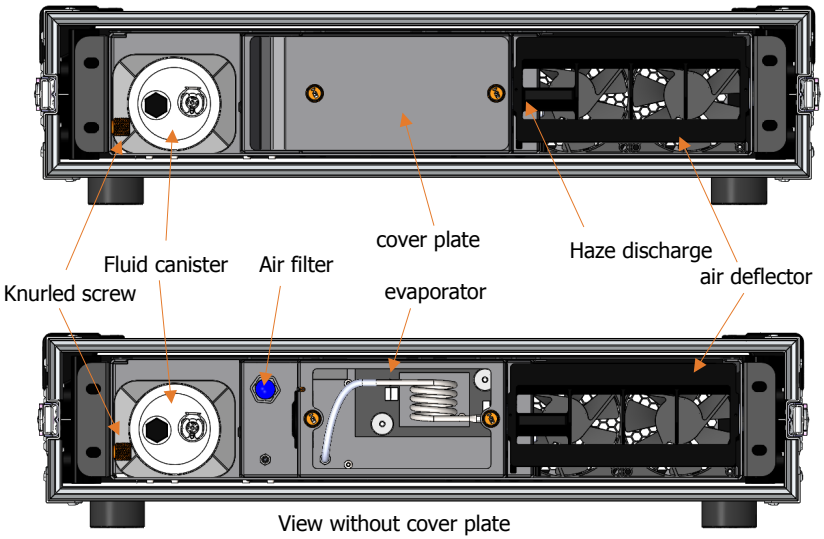
- Very hot steam comes out of the fog outlet.
  Caution: Risk of burns!
- During the fogging process, very hot fluid droplets may occasionally escape from the fog outlet. Therefore, no people or heat-sensitive objects should be within 1.5 m of the fog outlet.
- Never handle the fog outlet opening during operation or when activated.
- The device must be installed in a location that is not sensitive to heat. Maintain a minimum distance of 60 cm from flammable, combustible and heat-sensitive objects.
- The fog fluid used contains a glycol, which burns with a slightly bluish, almost invisible flame. Therefore, never fog near strong ignition sources such as open flames.
- Never open the device when connected to a power source.
- During operation, isolated hot fluid droplets may escape. Therefore, care should be taken to ensure these do not pose a danger to people. Maintain a safety distance of 3 meters from the mist outlet nozzle.
- Do not ingest the fog fluid and keep it away from children. In case of eye contact, rinse thoroughly with water. If accidentally ingested, consult a doctor.
- Spilled or splashed fluid can cause slipping. Collect fluid and dispose of properly.
- Do not allow visibility to fall below 2m. You are responsible for people moving around in the fogged room.
- The fog produced can trigger smoke detectors.
- Do not expose the device to direct sunlight or bright spotlights.

The method used here to generate artificial fog is largely safe and is used in the entertainment industry worldwide. We are not aware of any case in which a healthy person has been harmed by the use of this artificial fog.

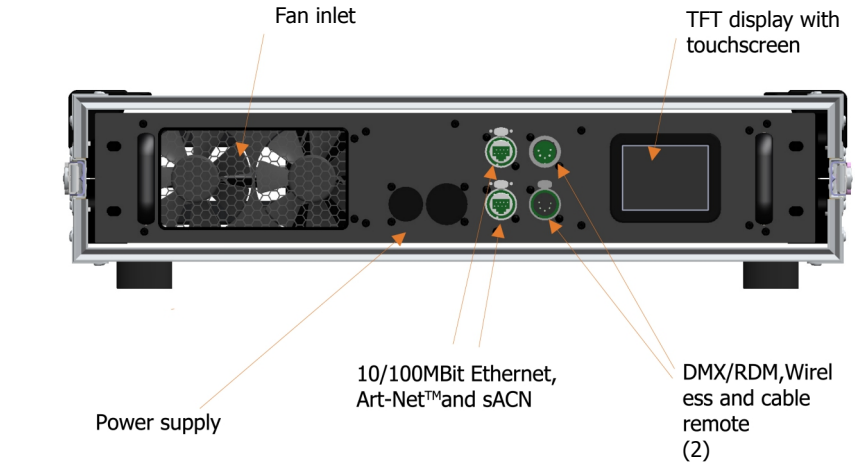
However, we recommend that sick people or people with previous respiratory problems or a tendency to allergies avoid contact withAvoid artificial fog!

3. Designation of parts

Front view



Rear view



4. Preparation

4.1 Selection of location

The location where THE FAB² must be operated

- have good ventilation, with cold and fog-free air
- be dry
- be free from vibration and shock
- consist of a non-flammable base
- be far enough away from easily flammable objects
- have an ambient temperature between 5°C and 45°C
- have a relative humidity of less than 80%.
-

4.2 Changing the canister

- Release the plug-in nozzle from the quick coupling by pressing the locking button
- Remove the orange thumbscrew on the left side of the canister compartment
- Remove the canister from the fluid compartment
- Unscrew the tank cap from the empty canister and screw it onto a new or full canister.
- Push the canister back into the fluid compartment
- Insert the plug nozzle back into the tank cap.
- Screw the orange thumbscrew back in to prevent it from falling out
- Reset the fluid indicator (see chapter 7.4)
- If the pump has run dry, hold THE FAB² with the front facing down and let it mist for a few seconds. The fluid pump will then completely refill with fluid.

5. Haze fluid

Please use for THE FAB² only the original base*V Fluid or base*B Fluid.

6. Working with THE FAB²

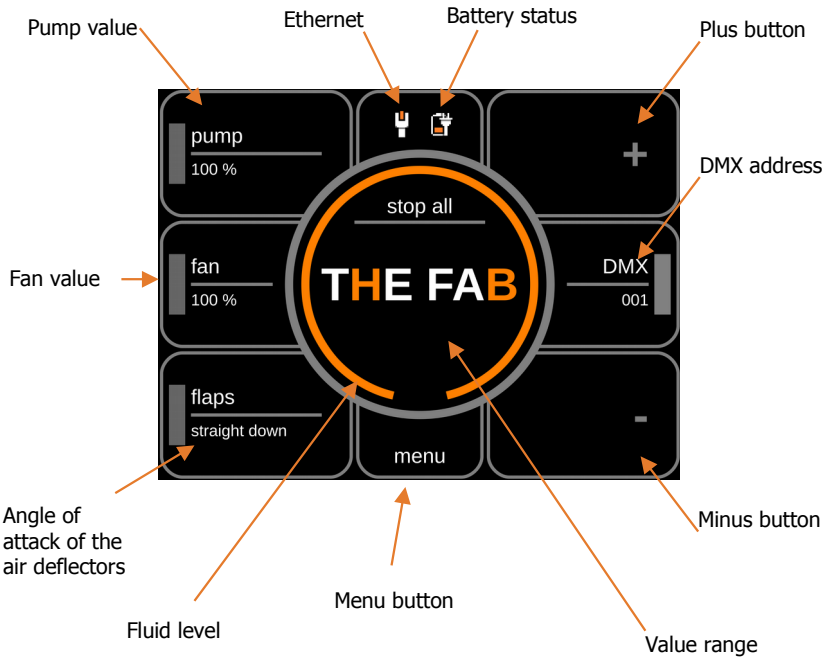
THE FAB² is a new generation haze generator. It can be used to create anything from the finest haze to a fog-like effect.

The effect can only build up slowly, so you should turn the device on some time before use.

Please ensure that no objects are placed either at the air inlet or outlet so that free circulation is possible.

After plugging in the power cord, the main menu appears. The machine doesn't heat up yet, as this takes less than ten seconds and only occurs when needed.

6.1 Control panel of THE FAB²



In the center of the screen is the value area. This always displays the current value being edited. A quick tap inside the circle starts THE FAB². This activates the heating, the pump, the fans and theasAir baffles are activated.

Another tap in the value area ends the haze process. This is always followed by a 5 minutes on going cleaning process of the evaporator. Afterwards, everything is switched off again.

There's also a fluid level indicator around this value range. As fluid is aerosolized, the orange part of the indicator steadily decreases.

At the top center of the screen are two icons. The left icon indicates a connection via Ethernet, the right icon shows whether THE FAB² is connected to the mains supply or is currently powered by the internal battery. In the case of battery operation, the battery charge level can be read here.

The plus and minus buttons are located at the top and bottom right. The current DMX address can be read in the middle between them.

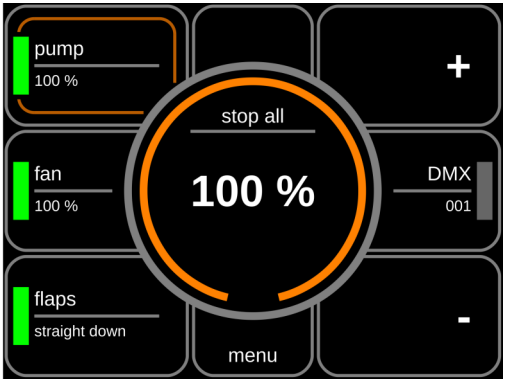
The button for advanced settings is located at the bottom center.

6.2 Operation in stand-alone mode

The simplest control mode is the stand-alone mode. For this, the pump value, the fan value and the angle of attack the air baffles are set and the haze process is started..

If the haze process is active, the bars next to the respective values are displayed in green.

The individual values can be changed by tapping the desired value (in the picture the pump value) and then changing it with the plus and minus buttons.



For the pump value and fan speed, values between 1 and 100 % can be selected.

The air baffles know six different positions:

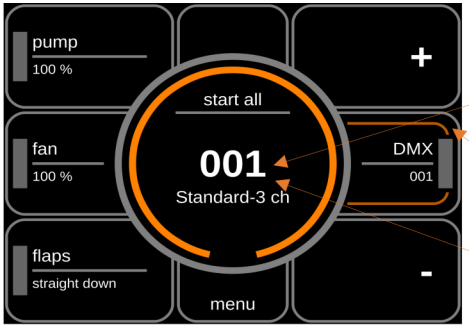
down	the blowing direction is downwards
straight down	the blowing direction always changes between down and straight
straight	the blowing direction is straight
straight up	the blowing direction always changes between top and straight
up	the blowing direction is upwards
full swing very top	the blowing direction always changes from the very bottom to the

To enter the pump value or fan speed directly, press the desired value for two seconds. This activates the numeric keypad, allowing you to enter the desired value directly.

The "Text…" then shows the current value to be changed.

6.3 Operation via DMX512/RDM

THE FAB² can be controlled via DMX512.



As shown, the current DMX address appears in the value area. Below it, you can see the selected DMX mode (2- or 3-channel mode). The address can be changed using the plus and minus buttons. Setting is also possible using the numeric keypad, as described above.

If a valid DMX signal is present, this is indicated by a green bar to the right of the DMX address.

The first channel is always intended for the pump value. The second channel controls the fan speed and the third channel teh air baffles (if 3-channel mode is active).

About RDM is THE FAB² both configurable (DMX address) and readable (errors, speeds, fluid level, etc.).

6.4 Operation via Ethernet

When operating via Ethernet, the protocols Art-Net™and sACN supported.

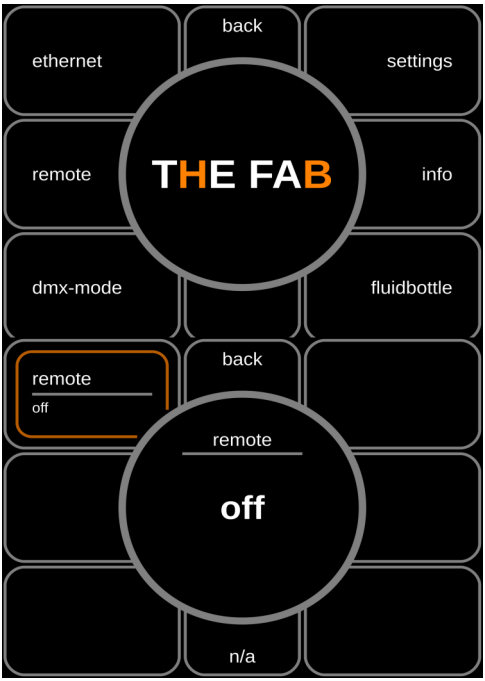
The difference to the DMX operation is that here the DMX data reach the device via an Ethernet connection. Furthermore, the DMX channels are set as described above.

The protocol relevant values are set in the additional menus.

An existing Ethernet link is displayed at the top center of the display.

6.5 Operation via cable remote control (option)

When operating via the cable remote control, the remote input must be activated.



To do this, first tap the Menu button at the bottom of the display. The menu will then appear on the right. Select "remote" here.

The remote input can now be selected. The values area shows whether the remote input is active or not. The remote input can be turned on and off by tapping in the values area.

If the remote input is activated and a wired remote control is plugged in, "analog" will now appear in the field below. Alternatively, if the wireless remote control is plugged in, "radio" will appear in this field.

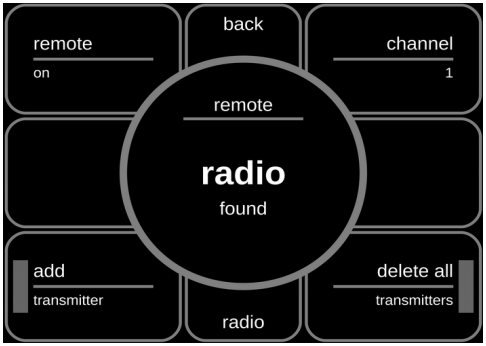
Only the pump value can be adjusted via both remote controls. The values for the fan speed and the air baffles must be adjusted manually beforehand.

6.6 Operation via radio remote control (option)

Analogous to the control with the cable remote control, THE FAB² can also be controlled with a radio remote control.

Up to 60 different handheld transmitters can be programmed into the machine. To do this, return to the remote menu.

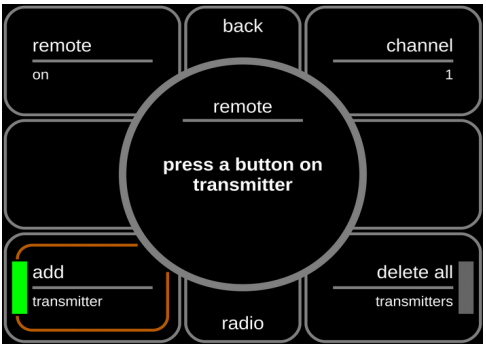
As soon as the remote input is activated and a radio receiver is plugged in, THE FAB² recognizes the radio receiver.



If the handheld transmitter and the receiver have not yet been taught to each other, this can be done in this menu.

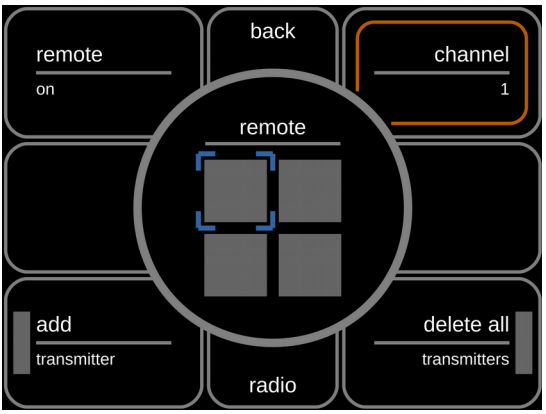
To do this, activate the teach-i n mode at the bottom left with the "add" button.

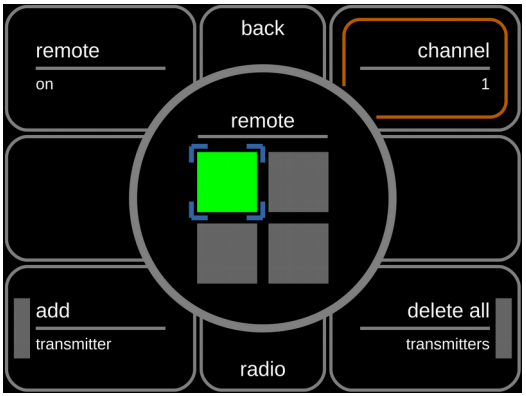
If this is activated, the bar next to add lights up green. The machine now waits for a valid radio signal. To do this, press any key on the handheld transmitter. The teach-in process is now complete.



Then they can program the keys to which THE FAB² should respond.

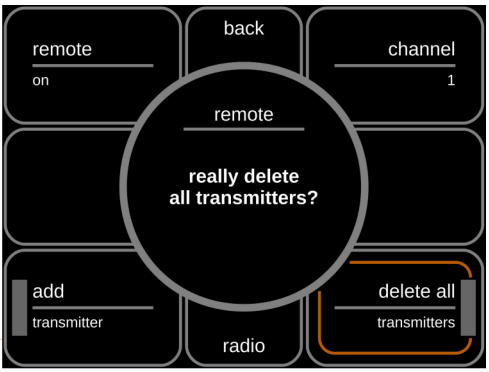
To do this, please select the "channel" button at the top right. Four possible keys (channels) are now visible in the value area. You can now tap directly in the value area on the keys to which the machine should react.





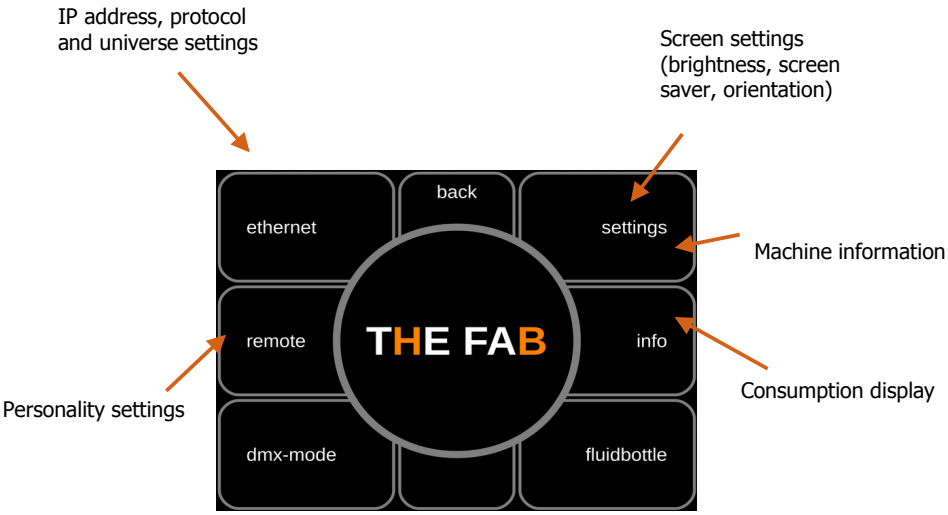
A selected key then appears with a blue outline. When the corresponding key on the handheld transmitter is pressed, the field appears in green. You can also select several keys. Repeatedly tapping the selected keys deactivates the selection again.

To delete the handheld transmitters already taught-in, select the "delete all" menu item. You must confirm the deletion of all taught-in handheld transmitters in the value range

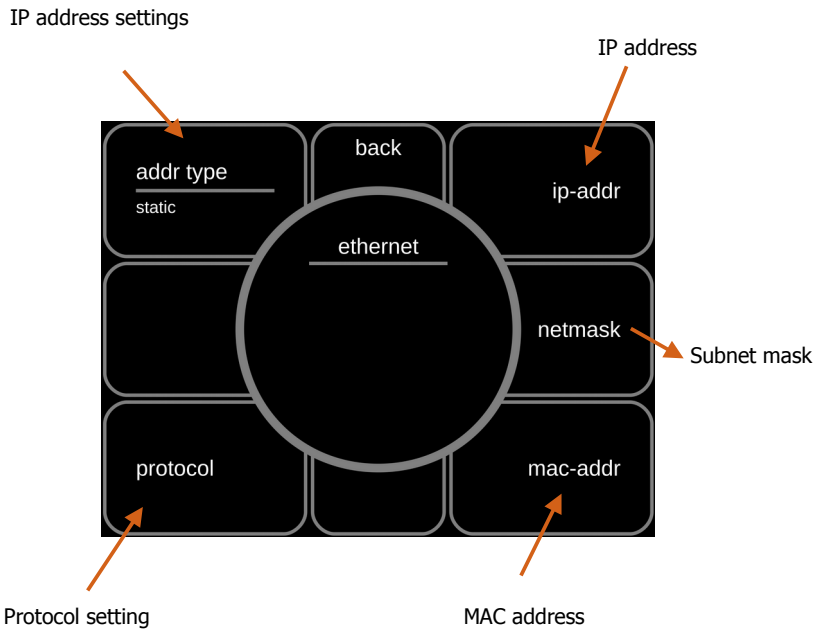


7. Settings

The menu opens after tapping the "menu" button in the bottom center of the main screen. Here the settings of the machine can be made.



7.1 Ethernet interface settings



The button in the top left corner displays the current IP address control setting. This can be changed by tapping the button.

The button at the bottom left displays the currently selected protocol. This can be changed by tapping the button.

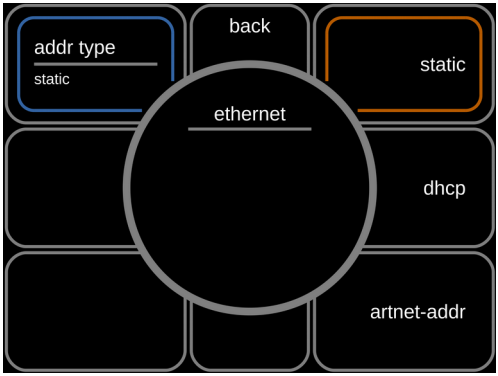
The current IP address can be changed in the top right corner. The subnet mask can be changed in the middle right corner.

The MAC address of the device can be displayed using the button at the bottom right.

7.1.1 Setting the IP address control

The IP address can be set statically, via a dhcp-server in the network or to the setting of the standard Art-Net™ address.

To do this, select the desired setting in the the right pane.

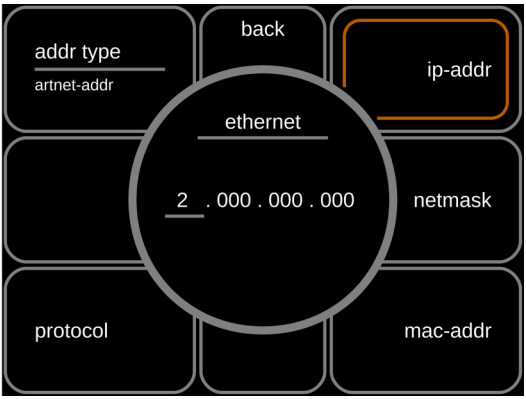


7.1.2 Setting the IP address (static)

The static IP address can be set in this menu.

Select the desired quadruple in the value area and type it in using the numeric keypad.

This allows the quadruples to be edited one after the other.



7.1.3 Setting the subnet mask

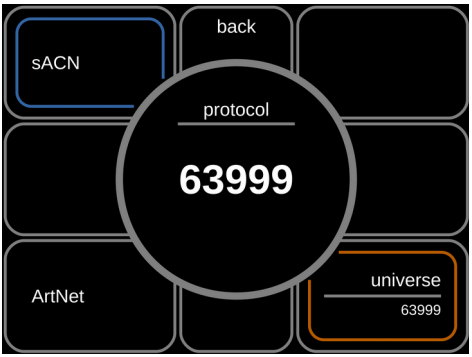
Analogous to the input of the IP address, the input of the subnet mask can be done.

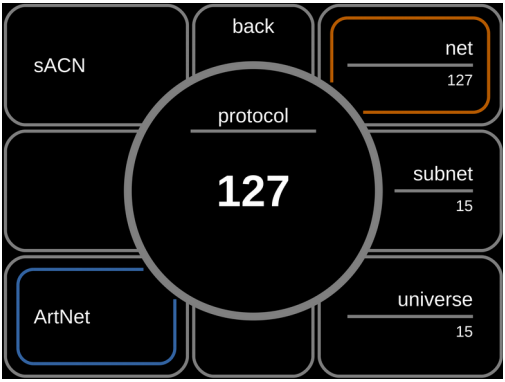
7.1.4 Selecting the protocol via Ethernet

THE FAB² can be controlled via Ethernet interface using two different protocols. Art-Net™ Protocol and the sACN protocol is available.

On the left side, select the desired protocol. On the right side the corresponding universe is then set.

This is done by tapping the value in the value range and then typing it in using the numeric keypad.





When selecting the Art-Net™ protocol is selected, the network and sub-network are set in addition to the universe.

7.2 DMX Personality

THE FAB² offers three different personality settings.

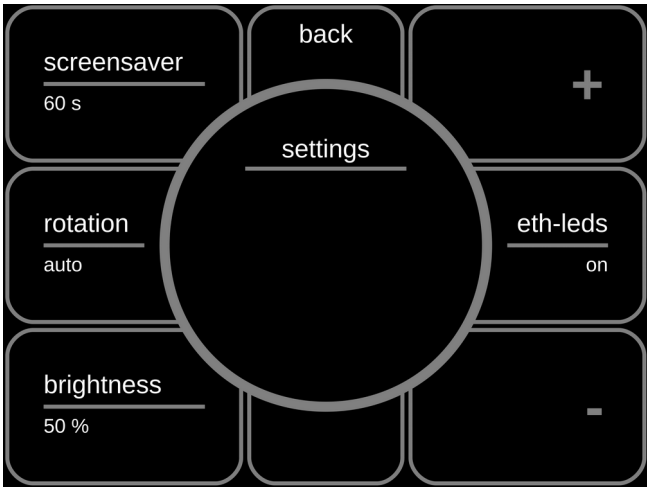
The first personality (legacy) is the Delivery3-channel variant. Here, the first DMX channel is for the pump settings, the second channel for the fan speed and the third for the position of air deflectors.

The second personality (standard) is also a 3-channel variant with the same channel assignment. It also features a full-swing mode for the air baffles.

In "Reduced Mode" the third channel is not linked to the DMX data and must be set on the device beforehand.

You can find the DMX value ranges in Chapter 11.

7.3 Screen settings



In the settings area, the behavior of the screen can be set. At the top left, the activation time of the screen saver can be set. Set the time in seconds here or "off" to deactivate the screen saver.

In the center left corner, the image can be rotated 180°. This may be necessary if the display needs to be read upside down. You can also set the rotation to "auto." This automatically adjusts the display using the internal position sensor.

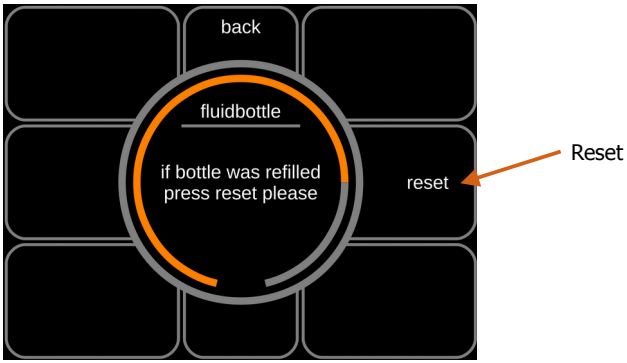
The brightness of the screen can be changed at the bottom left.

Furthermore you may deactivate the status LEDs above the Ethernet sockets. The setting is done in the center right.

7.4 Consumption display

THE FAB² has a level indicator on the main screen. Please note that this indication is not determined with the help of a sensor, but with the help of a consumption count based on the pump strokes that have occurred. This calculation method achieves an accuracy of +/- 10%. Therefore, the level indication can only be considered as a guide.

When you insert a new fluid bottle, please set this counter back to 100%.



7.5 Miscellaneous

Thanks to the batteries installed in THE FAB², the settings (DMX address, etc.) can also be made without a power cable. To do this, touch the display for 3 sec. This starts the battery operation. Now make all settings. After 10 sec. the display will be switched off again.

THE FAB also provides a web server. Type the IP address of THE FAB² into the address field of your browser. The homepage of THE FAB² is then loaded and you have the option of a firmware update via this website.

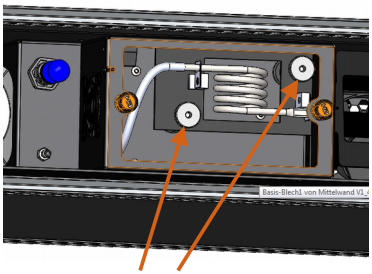
8. Changing wearing parts

8.1 Changing the evaporator

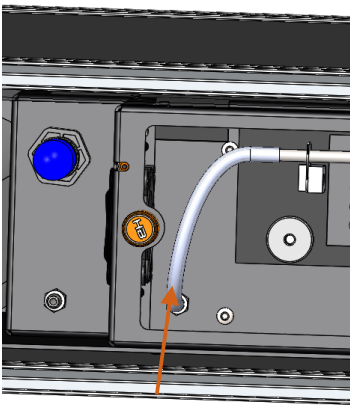
To produce the finest droplets is in THE FAB² a special developed stainless steel pipe is installed for evaporation. This pipe becomes clogged over time. Therefore the evaporator must be replaced regularly. This is done through the service hatch in the device. Usually, this can be done without tools, although a multi-tool is occasionally required.

Only change the evaporator, when the device is powerless and cooled down!

First, loosen the two knurled screws to remove the cover plate. Loosen the two knurled nuts on the evaporator. Now pull the entire evaporator board straight out. Then disconnect the hose from the hose nozzle in the device. Disconnect the ribbon cable from the evaporator.



knurled nuts



Fluid hose

The new evaporator is installed in the reverse order.

Make sure the knurled nuts are tightened. Too loose knurled nuts can cause the connection to overheat, which can cause damage to the circuit boards.

The service hatch is secured by a microswitch so that the evaporator is deenergized as soon as the hatch is opened.

In case of doubt, the evaporator tube may still be very hot!

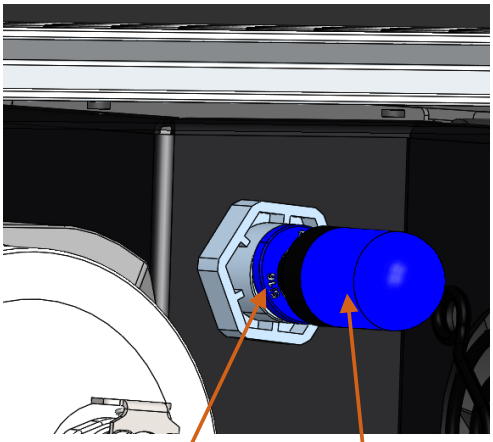
Let it cool for about 5 minutes

8.2 Change of air filter

The hazer requires a high airflow through the evaporator to operate. This air must be filtered, otherwise the dirt particles will also be heated and accelerate the clogging of the evaporator tube. Therefore, the air filter should be checked regularly and replaced if necessary.

First loosen the two knurled screws to remove the cover plate.

Slide the release towards the device and pull it at the same time remove the air filter from the holder.



You can then simply insert the new air filter into the holder.

You can then reinstall the cover plate.

9. Care and maintenance

- Avoid using THE FAB² run without fluid. Otherwise, the pump will run dry.
- Avoid overheating the device due to direct sunlight or direct spotlights. The permissible ambient temperature can be found in the technical specifications.
- Make sure the machine's ventilation slots are not clogged with dust. If necessary, clean the ventilation slots.
- Wipe up any spilled fluid immediately.
- Also wipe up all fluid in the device, paying attention to the tank shaft, the mist outlet area and, if applicable, the evaporator chamber.
- Check the intake strainer in the tank from time to time. Clean or replace it.
- If you frequently use the same fluid canister, you should rinse it thoroughly before each refill with fresh fluid. This will prevent contamination.
- The membrane in the tank cap that vents the fluid canister may also become contaminated over time. In this case, please replace the tank cap.
- If necessary, clean the surface of the device with a suitable, solvent-free cleaning agent
- Ensure that there is always enough mist-free cooling air around the machine. Otherwise, moisture damage could occur inside the machine.
- After a few hours of operation, condensate droplets may have formed in the discharge area. This does not represent an operating fault. Please clean the area only when the machine has cooled down.
- The blue air filter must always be checked for contamination (brownish color) and replace if necessary.

- The evaporator is subject to natural wear and tear in the form of clogging.It cannot be cleaned and must be replaced in this case.
- The fluid bottle must be removed from the device for filling.
- **PLEASE NOTE:**The vaporizer in our fog machines does NOT require cleaning! Commercially available cleaning fluids can damage the vaporizer! Doing so will void the warranty.

10. Troubleshooting

THE FAB² does not haze

- Check external control
- Check power source
- Check fluid quantity
- Check the connection on the fluid tank for leaks
- Check the intake strainer in the tank for contamination
- Check fluid hose and connector for leaks

THE FAB² clacks loudly when haze

- The pump is running dry. This must be avoided at all costs.
- Refill fluid
- Check hose and coupling, reengage if necessary.
- If the pump has run dry, hold THE FAB² with the front facing down and let it haze for a few seconds. The fluid pump will then completely refill with fluid.

THE FAB² shows the error message "machine too hot" on the display

- The temperature inside the device is too high. The error message will clear once it cools down.

THE FAB² shows the error message "faulty vaporizer" on the display

- There's something wrong with the evaporator. The machine is shutting down for safety reasons.

THE FAB² shows the error message "communication with vaporizer failed" on the display

- Communication between the main processor and the evaporator is malfunctioning. The machine shuts down for safety reasons.

THE FAB² shows the error message "output pressure too high" on the display

- This error message appears when the evaporator tube is clogged. In this case, the evaporator must be replaced.

THE FAB² shows the error message "vaporizer spent" on the display

- The evaporator is worn out and needs to be replaced.

THE FAB² shows the error message "vaporizer not present or broken"on the display

- The control system has detected thats the electrical values of the evaporator are outside the normal range.
- Check the electrical connections of the evaporator (knurled nuts, ribbon cable).

11. DMX sheet

Personality: legacy - 3 channels

channel	*function*	*values*	
1	pump	0 .. 255	
2	fan	0 .. 255	
3	blades	0 .. 51	down
		52 .. 103	forward – down
		104 .. 155	forward
		156 .. 207	forward - up
		208 .. 255	up

Personality: standard – 3 channels

channel	*function*	*values*	
1	pump	0 .. 255	
2	fan	0 .. 255	
3	blades	0 ..41	down
		54..83	forward – down
		84..125	forward
		126 ..167	forward - up
		168 ..209	up
		210 .. 255	full swing

Personality: reduced – 2 channels

channel	*function*	*values*
1	pump	0 .. 255
2	fan	0 .. 255

12. Technical data

Device type	Haze machine with directly heated evaporator
Performance	100-240V~, 50-60 Hz, 500 W (PowerCON TRUE1)
Heating time	approx. 8 sec.
Fluid consumption	up to4ml/min
Tank capacity	1 liter
Operation	2.8" TFT display with capacitive touch panel
Interfaces	5-pin XLR In/Out, 2x RJ45
Air volume of the fans	200 m³/h
Air deflector	motor-adjustable
Fume emissions	Adjustable 1-100% in 1% increments
Fan speed	Adjustable 1-100% in 1% increments
Supported protocols	DMX512, RDM, JT-Remote, sACN, Art-Net™
Control	DMX/RDM, wired remote control, wireless remote control, Ethernet, stand-alone
Accessories (option)	Radio remote control, cable remote control
Ethernet	10/100MBit including 2-port switch
Integrated batteries	4x NiMH batteries for configuration without power cable
Fluid types	base*V, base*B
Dimensions	19" flight case with 2U
Weight	16,8 kg

13. Warranty conditions

hazebase provides warranty for the purchased haze machine THE FAB² according to the following conditions:

1. We shall remedy free of charge in accordance with the following conditions (Nos. 2 to 6) damage or defects to the device which are demonstrably due to factory defects if they are reported to us immediately after discovery and within 24 months after delivery to the end user. A warranty obligation is not triggered by minor deviations from the nominal condition which are insignificant for the value and usability of the device, by damage from the effects of water and generally from abnormal environmental conditions or force majeure.

2. The warranty service is provided in such a way that defective parts are repaired free of charge or replaced by faultless parts at our discretion. Devices for which a warranty claim is made with reference to this warranty must be handed over to us and sent free of charge. The proof of purchase with the date of purchase and/or delivery must be presented. Replaced parts become our property.

3. The warranty claim expires if repairs or interventions are carried out by persons who are not authorized by us to do so or if our devices are equipped with supplementary or accessory parts that are not matched to our devices. Furthermore, the warranty claim expires if a fog fluid other than the original hazebase fog fluid was used. If the devices are sent to us without prior removal or emptying of the fluid canister, the warranty also expires, as well as in the case of demonstrable disregard of the operating instructions or in the case of faults due to improper handling/handling as well as in the case of damage due to the effects of violence.

4. We do not grant any performance claims for components or component groups that are subject to natural wear or normal wear. In particular, all fluid-conveying parts such as pumps and heating elements are considered to be wearing parts. A goodwill settlement will be checked in each individual case.

5. Warranty services do not cause an extension of the warranty period, nor do they start a new warranty period. The warranty period for installed spare parts ends with the warranty period for the entire device.

6. If a damage or defect cannot be remedied by us, or if the remedy is refused o r unreasonably delayed by us, within 6 months from the date of purchase/delivery, at the request of the end user either

   a. replacement delivered free of charge or

   b. the reduced value is remunerated or

   c. take back the device for a refund of the purchase price, but not more than the market price.

7. Further or other claims, in particular those for compensation for damage occurring outside the device, are excluded - unless liability is mandatory by law.

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