User manual

PASSAT 120 DMX

CONTENTS

**If the supply cord is damaged, it must be replaced
by the manufacturer, its service agent or similarly
qualified persons in order to avoid a hazard.**

Instructional icons

🔲i	Read the manual
⌂	Indoor use only
⊠	This symbol indicating separate collection for electrical and electronic equipment
⚠	**Warning:** situations that could cause injury to yourself or others
①	**Caution:** situations that could cause damage to your machine or other equipment
📝	**Note:** notes, usage tips, or additional information

Thank you for selecting our PASSAT serials DMX Effect Fan, you already own the high-tech, professional DMX Effect Fan! Better read the manual thoroughly before operation, follow instruction will help you have a smooth handling with PASSAT serials DMX Effect Fan to achieve the most satisfactory effect, it will also assist unit to further prolong life time as a whole.

Warning! *Like all electronic products, PASSAT 120 DMX Fan must be used with safety precautions in mind.*

- Use only appropriate, grounded electric power supply for your unit. See your product specification label for appropriate power supply. This appliance must be earthed.
- Disconnect from electric mains power supply when not in use, cleaning, servicing, changing a fuse or storing.
- The machine is for indoor use only, away from the liquid, do not use the machine in rain or in a humid environment;
- Keep unit dry. If moisture or liquids enter the machine case, immediately disconnect power supply. Contact a service technician to determine safety for use.
- Without user-serviceable parts in the package, please contact your local agent or qualified technician for servicing.

- Without changeable structure by non-qualified user, please do not open the cover or have any change at will, otherwise, it may cause accident!
- Machine is for adult use. Keep out of reach of children. Never leave the unit running unattended.
- Keep case closed while operating. Put machine in drafty place. Do not insert objects into air vents. Allow 20cm space or above around the machine for proper ventilation.
- Do not put hands or foreign objects into the fan.
- Keep machine away from flames and flammable items.
- If any abnormal running occurs, stop it immediately, and bring the done up unit (recommend original box) to your agent or dealer for servicing.
- Read user manual instructions thoroughly before operating. Follow the instruction. Never remove warning or informative labels from the unit.

IMPORTANT SAFEGUARDS
- Read all instruction
- Products for indoor use only. Keep away from liquids. Never operate in rain or in damp conditions.
- Unit must be grounded.
- Don not open unit, risk of electric shock.
- Keep machine in flat position, never put it in tilted place.
- Do not immerse in any liquid
- Save these instructions.

Caution!
There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact your local dealer.

Particular Warning :
Please install the product correctly according to the instruction of the user manual. To avoid any accident, it is not allowed to install the product with any way not instructed on the user manual. If accident happens because users do not install the product according to the instruction of the user manual, the manufacturer will not take any responsibility.

Please note:
Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

Important
The wires in this mains lead are colored in accordance with the following code.

230V, 240V ....

Green and Yellow – Earthed (E)
Blue – Neutral (N)
Brown – Live (L)
Warning: This appliance must be earthed.

100V, 120V ....
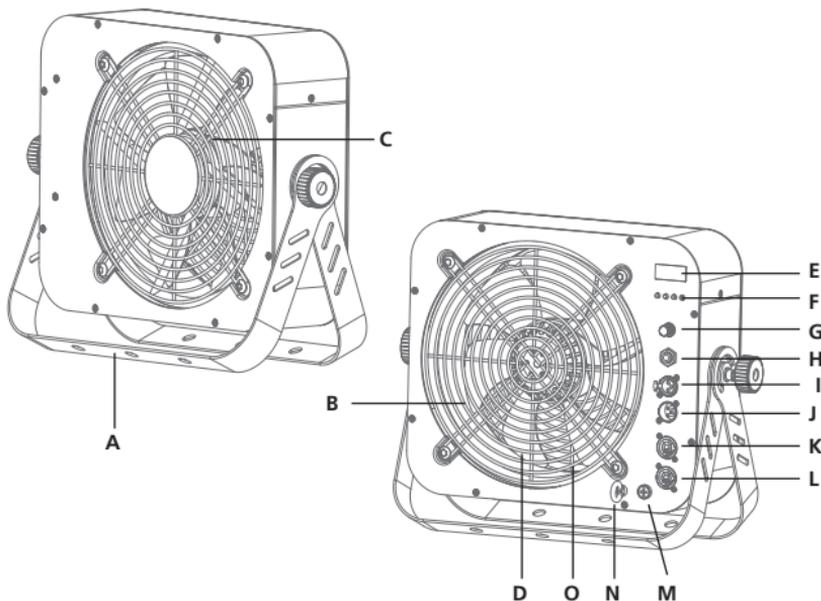
Green and Yellow – Earthed (E)
White – Neutral (N)
Black – Live (L)
Warning: This appliance must be earthed.

Figure1 PASSAT 120 DMX Fan Functions

- **A.** Hanging Bracket with handle screw (used as a tripod)
- **B.** Inlet
- **C.** Outlet
- **D.** Metal Fan Blades
- **E.** Blue LCD screen
- **F.** 4 Function Buttons
- **G.** Air Volume Adjustment Knob
- **H.** Control Socket Connection
- **I.** DMX 3 pin XLR Output
- **J.** DMX 3 pin XLR Input
- **K.** Electric Power Output
- **L.** Electric Power Input
- **M.** Fuse Holder
- **N.** Safety Ring
- **O.** Fan Net

Description

1. 0-100% stepless fan speed adjustment.
2. Quiet and smooth fan let the smoke spread out perfectly.
   100% high fan speed let the smoke be thin and even, and expand more quickly throughout the location.
3. 120W fan, the use of high-strength metal fan, powerful and low noise.
4. Fan angle adjustable 0-360 degrees.
5. Professional auxiliary equipment can be used with a variety of auxiliary smoke machine, snow machine, bubble machine use, so that a variety of special effects machine can get better results.
6. 1CH or 2CH DMX on board, operate by any additional DMX controller.
7. Could be used with the VT-1 controller (optional) control.
   Simple and user-friendly design makes PASSAT 120 DMX easier to use.
8. Hanging bracket could be done as a tripod, and do a variety of angles setting.
9. The streamline housing could be hanging, side hanging, suspension, easy to set in various occasions
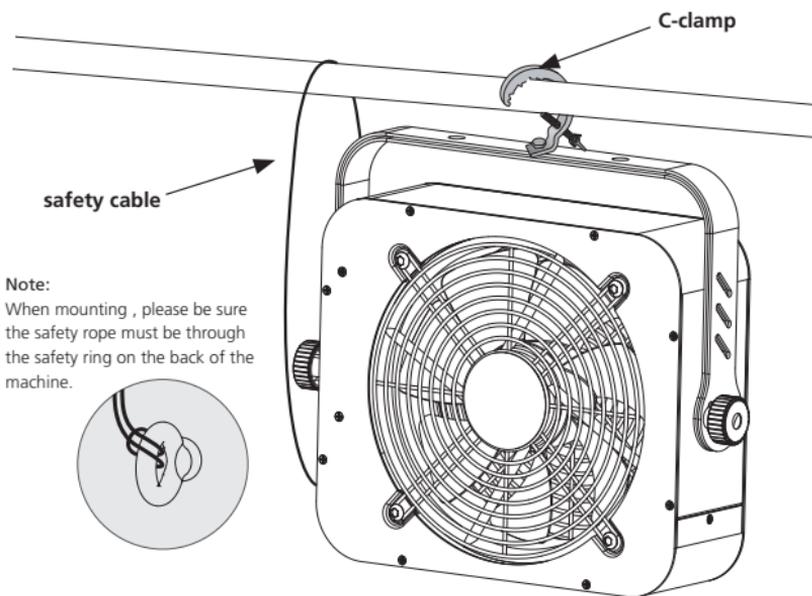
Getting Ready

All products are thoroughly tested at the factory and shipped in perfect condition. If damage has occurred during shipping, or if components are missing, please contact your local dealer immediately.

Your package should include:

1. One PASSAT 120 DMX Fan
2. One powerCON cable
3. One product user manual

Mounting

PASSAT 120 DMX Fan shipped complete, ready to use. The bracket is installed before shipping, the unit can be hung in any position. Fasten the effect fan onto firm trussing (Use a 15-kg rated or stronger C-clamp bolted onto the bracket, enhancing safety necessarily with safety cables). Allow enough space (around 20cm) on all sides for proper cooling.

C-clamp

safety cable

Note:
When mounting , please be sure the safety rope must be through the safety ring on the back of the machine.
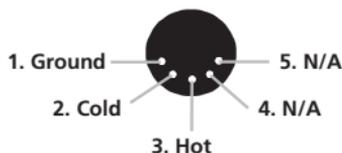
Set Up

1. Open the shipping carton and carefully remove the unit from the shipping carton;

2. Be sure to remove packing material from around the machine, especially outlet and inlet;

3. Set the machine on a dry, flat surface;

4. Plug mains power cord from the machine into appropriate power supply socket;

5. Use LCD display and function buttons for operating control, or connect DMX controller for setting;

6. Or firmly attach the remote control mechanism to socket (Figure1-H) on the back of the unit for simple operating.
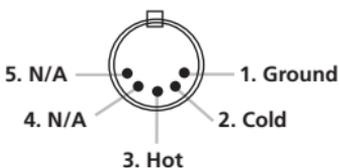
DMX Connector Pin Assignment

The machine provides a 3- or 5-pin XLR connector for DMX connection. The diagram below indicates pin assignment information.

5 pin XLR

XLR Male Socket

1. Ground
2. Cold
3. Hot
4. N/A
5. N/A

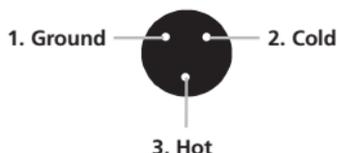**XLR Female Socket**

5. N/A
4. N/A
3. Hot
2. Cold
1. Ground

XLR Pin Configuration
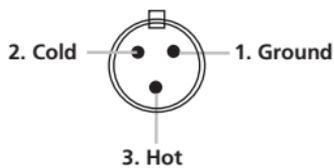Pin 1= Ground
Pin 2= Data Compliment
      (negative)
Pin 3= Data True (positive)
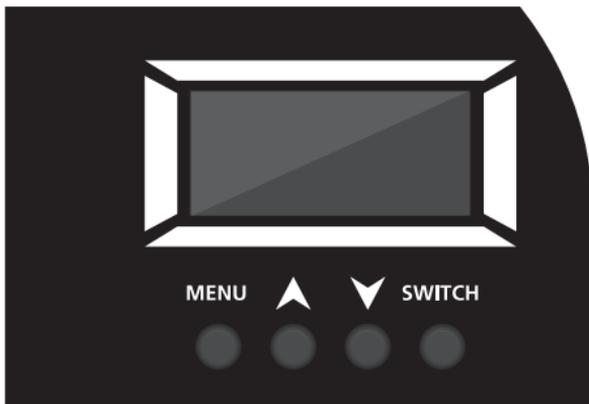Pin 4= No use
Pin 5= No use

3 pin XLR

XLR Male Socket

1. Ground
2. Cold
3. Hot

XLR Female Socket

2. Cold
1. Ground
3. Hot

XLR Pin Configuration
Pin 1= Ground
Pin 2= Data Compliment
      (negative)
Pin 3= Data True (positive)

Functions of the buttons

1. MENU: Function switching button; then have the numerical value
     changed by using UP (▲) and DOWN (▼) buttons.
   • DMX Mode: DMX mode selection. Single channel and 2 channel
     mode can be selected.
   • DMX ADDR:Setting of DMX address. Range of address value:
     address=001~512.
     Press "UP" (▲) or "Down"(▼) 1.5 seconds can change value
     continuously and fast, pressed UP (▲) / DOWN (▼) at the same
     time, value back to 1.
   • Display Backlight Setting: There are two modes. Long pressing of
     the MENU can interchange these two backlight modes.
     A. Lighted mode: display appears "——VX20 ——".
     B. Power saving mode: display appears "—VX20— ".
        Backlight lights up only when pressed. Few minutes later light
        off automatically.
2. ▲: Button for increasing numerical value.
3. ▼: Button for decreasing numerical value.
4. SWITCH: Fan turns ON/OFF button.

Operation

Plug mains power cord from the machine into appropriate power supply socket;

| – –VX20– – |
| OFF VX |

Regardless of the machine in which mode, the main display information as shown on the left:
ON / OFF: to show the state of fan, as shown in figure OFF that the fan is not in the rotation state.
Vx: to show the current setting of air volume, as shown in figure V0 is the air volume is 0.

Control priority order:

DMX control≧ Remote control > Panel knob control

• The remote control operation must take precedence over the panel knob operation;
• DMX operation can be operated simultaneously using the panel knob, which value changes in which priority;
• DMX operation can be operated simultaneously using the remote control, which value changes in which priority;
• When the remote control is operated, the panel knob operation is completely disabled and cannot be used at the same time.

Panel Knob Operation ....

Panel Knob control, when the external controller or DMX signal is not connected.
1. Press the SWITCH button (Figure 1-F) to turn on the fan;
2. Manually rotate the air volume adjustment knob (Figure 1-G) to control the volume;
3. Air volume adjustment knob clockwise adjustment air volume increases, counterclockwise to adjust the air volume reduction;
4. Press the SWITCH button again (Figure 1-F) to turn the fan off.

Remote Control Operation...

For best result, use VT-1 wired controller.

1. Firmly attach the remote control mechanism to socket (Figure1-H) on the back of the unit;
2. Plug mains power cord from the machine into appropriate power supply socket;
3. The air volume adjustment knob on the controller is with the switch;
4. Turn the knob counterclockwise to the end to switch off, the fan is off;
5. Air volume adjustment knob clockwise adjustment air volume increases, counterclockwise adjustment air volume reduction.

A- 1/4" stereo jack
B- Knob
C- Green LED (Air volume output)
D- Red LED (power)

Controller power cord length: 3 m;
Connector: 1/4 "stereo jack;
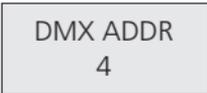**Function:** Air volume adjustment & ON/OFF.

Model	VT-1
Cable Length	3m
Effective Distance	N/A
Connector	1/4" stereo jack
Function	• ON/OFF • Air Volume adjustment
Dimension (LxWxH)	90 x 50 x 39 mm
Weight	0.257 kg

DMX Control Operation ....

1. Connect the DMX 512 controller cable to the input socket (Figure 1-J) of the machine unit. Make sure the signal cable polarity is correct. When DMX socket receives effective DMX signals, the machine enter DMX control mode automatically;

2. Use the menu button under the LCD display on the machine to set the DMX mode and DMX address (Figure 1-E & F). There are 2 DMX modes for choice; 1CH & 2CH, press Up/Down button to switch it;

3.
```
DMX Mode
  2 CH
```
Press Menu button, select the DMX mode as shown in the previous figure, 1CH for the single channel mode, 2CH for the 2 channel mode, use Up/Down button to switch it, set and then press the MENU button again to save;

4.
```
DMX ADDR
   4
```
Press Menu button, select the DMX address as shown in the previous figure, press the Up/Down button to increase or decrease the DMX address value. After setting the desired address, press the Menu button again to save the DMX address.

5. If desired, connect another machine: Plug one end of another signal cable in to the output socket (Figure 1-I) on the back of the first PASSAT; plug the other end of the signal cable to the input socket (Figure 1-J) on the back of the second PASSAT. Follow the same procedure to link more machines, if desired; whole link is daisy chain.

6. Down. Refer to DMX channel chart in Figure 2 make related settings. Now start operating PASSAT 120 DMX with DMX console.
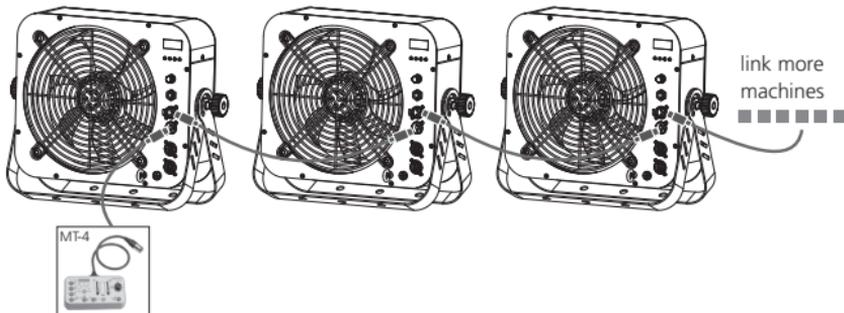

link more machines
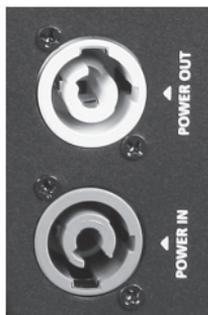
MT-4

Figure 2 DMX Chart

1CH

CH1	
DMX Value	Volume
255	100%
1	1%
0	OFF

2CH

CH1		CH2	
DMX Value	Volume	DMX Value	ON/OFF
0-255	0-100%	128-255	ON
		0-127	OFF

Power Output Function

The PASSAT 120 DMX is equipped with a powerCON power supply that allows the effect fans to be used in series with each other or with other special effects products without occupying additional electrical outlets.

📝 **Important:** The maximum load current at this power supply output cannot exceed 10 amperes (10A)

Troubleshooting

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps. If the problem persists, refer servicing to a qualified technician.

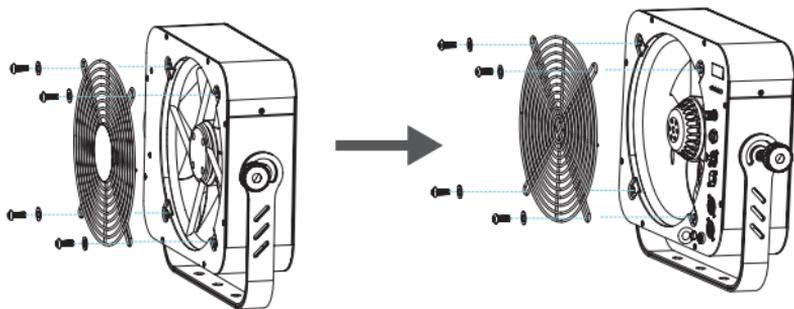**Power connected but fan does not work:**

1. Check the power supply. Plug the unit into grounded electric power supply socket with proper voltage.

2. Disconnect machine from electric power supply. Replace fuse with one of the same type.

3. The control panel operation is correct.

4. Check your controller if in correct connection.

5. Make sure the signal cable polarity is correct and good connection.

6. Check your DMX address setting.

Maintenance

Before doing maintenance, please make sure that the power is cut, the power cord is unplugged, and the machine itself has cooled down.
The maintenance must be done by qualified person.

1. For a long time use, the inlet may accumulate dust, please regularly clean the inlet;

2. For a long time use, the outlet may be the accumulation of dust, please regularly clean up the outlet, keep the outlet unobstructed;

3. For a long time use, the fan may accumulate dust and oil, please regularly clean the fan;

4. Clean the housing with dry cloth.

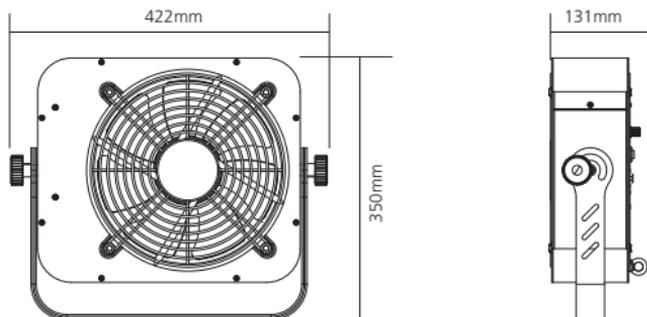| Clean the front net	Clean the behind net
Tool: Standard 4mm Allen wrench	Tool: Standard 4mm Allen wrench
Loosen 4 screws of the front net.	Loosen 4 screws of the behind net.

Note: the cleaning fan net needs unilateral disassembly, cleaning and installation, and then cleaning the other side, the two sides are not allowed to disassembly and clean at the same time.

Product Specifications

Name	PASSAT 120 DMX Fan
Item No.	PASSAT 120 DMX
Fan Motor Power	96W (100V), 120W (120V, 230V)
Consumption	Avg.106W (100V), Avg.130W (120V, 230V) Max.125W (100V), Max.170W (120V), Max.230W (230V)
Fuse (100V, 120V)	T3A/250V
Fuse (230V, 240V)	T2A/250V
DMX512 CH.	1CH , 2CH
Built-in Function	Air volume adjustment knob
Fan angle	0-360°
Fan Speed Adjusment	0%~100%
Max. Fan volume (m³/min)	30
Fan Speed Range	500-2600 rpm--50Hz; 500-3000 rpm--60Hz
Display	Blue LCD Screen
Date Connection	3P XLR
Controller Connection	1/4" Jack
Power Output (Max. load)	10A, powerCON
Bracket	Yes
Voltage	100V 50/60Hz; 120V/60Hz; 230V,240V/50Hz
Dimensions/mm (LxWxH w/o bracket)	350 x 422 x 131mm
Weight (kg)	8.56kg
Controller included	NO
Controller optional	VT-1

* Voltage is preset at the factory and may not be changed.

PASSAT 120 DMX

Save this instruction properly
All the information is subject to change without prior notice