

American DJ® Tempest™ 575H



User Instructions

American DJ®
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Tempest 575H™

General Information

Unpacking: Thank you for purchasing the Tempest 575H™ by American DJ®. Every Tempest 575H™ has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all equipment necessary to operate the unit has arrived intact. In the event damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Please do not return this unit to your dealer without first contacting customer support.

Customer Support: American DJ® provides a toll free customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.americandj.com for any comments or suggestions. Service Hours are Monday through Friday 9:00 a.m. to 5:00 p.m. Pacific Standard Time.

Voice: (800) 322-6337

Fax: (323) 582-2610

E-mail: support@americandj.com

To purchase parts online visit <http://parts.americandj.com>

Tempest 575H™

Product Registration

The Tempest 575H™ carries a one year limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain a R.A. number by contacting our customer support team on our toll free customer support number. All packages returned to the service department not displaying a R.A. number on the outside of the package will be returned to the shipper.

Introduction: This unit is a one channel, intelligent DMX centerpiece effect. The Tempest 575H™ has a low profile design for clubs with low ceilings, producing 6 dichroic colors plus white. Using 18 motors it creates solid and moonflower type beams that rotate and sweep across a room. The Tempest 575H™ comes with several built-in programs that will randomly be activated by the low frequencies of an audio source. This unit can run as a stand-alone sound activated unit, or in a Master/Slave configuration. The optional MINI/C controller will operate the blackout function. *For best results use fog or special effects smoke to enhance the beams projections.*

General Instructions: To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit, for future reference.

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 American DJ® Customer Support.

- Quality Stepping Motors for Smooth Transitions
- DMX-512 Protocol Compatible (Uses One DMX Channel)
- 6 Dichroic Colors Plus White
- Master/Slave Operation
- Internal Microphone with Volume Sensitivity Knob
- Several Built-In Programs
- Built-In Safety Breaker
- Optional MINI/C Remote Controller

- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
- Do not spill water or other liquids into or on to your unit.
- Be sure that the local power outlet match that of the required voltage for your unit.
- Do not attempt to operate this unit if the power cord has been frayed or broken.
- Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Disconnect from main power before making any type of connection.
- Do not remove the cover under any conditions. There are no user serviceable parts inside.
- Never operate this unit when it's cover is removed.
- Never plug this unit in to a dimmer pack
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- Do not attempt to operate this unit, if it becomes damaged.
- This unit is intended for indoor use only, use of this product outdoors voids all warranties.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles, and the point where they exit from the appliance.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 11 for cleaning details.
- Heat -The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged.
 - B. Objects have fallen on, or liquid has been spilled into the appliance.
 - C. The appliance has been exposed to rain or water.
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance.

Power Supply: Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your American DJ® Tempest 575H.™ The American DJ® Tempest 575H™ is available in a 120v and 220v version. Because line voltage may vary from venue to venue, you should be sure your unit voltages matches the wall outlet voltage before attempting to operate you fixture.

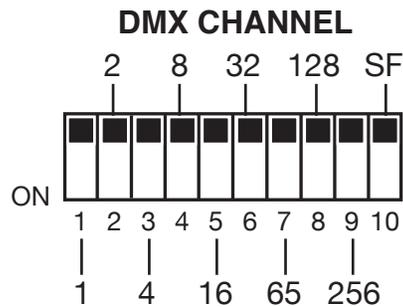
DMX-512: DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “OUT” XLR terminals located on all DMX fixtures (most controllers only have a DATA “OUT” terminal).

DMX Linking: DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. *To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.*

Dipswitches in DMX mode: This unit uses dipswitches to assign a DMX address. Each dipswitch represents a binary value.

- Dipswitch 1 address equals 1
- Dipswitch 2 address equals 2
- Dipswitch 3 address equals 4
- Dipswitch 4 address equals 8
- Dipswitch 5 address equals 16
- Dipswitch 6 address equals 32
- Dipswitch 7 address equals 64
- Dipswitch 8 address equals 128
- Dipswitch 9 address equals 254

Dipswitch 10 - Some units omit dipswitch 10. When a unit does include dipswitch #10, it is usually used for special functions such as



sound activation.

Assigning DMX Address: Each dipswitch has a preset value. A specific DMX address is set by combining the dipswitches that sum your desired value. For example: To achieve a DMX address of 21, combine dipswitches 1, 3, and 5. Since dipswitch 1 has a value of 1, dipswitch 3 has a value of 4, and dipswitch 5 has a value of 16, the combination of the three create a DMX value of 21.

Set DMX address 21:
 Dip-switches # 1 = 1
 3 = 4
 5 = 16
 = 21

Set DMX address 201:
 Dip-switches # 1 = 1
 4 = 8
 7 = 64
 8 = 128
 = 201

Data Cable (DMX Cable) Requirements (For DMX and Master/Slave Operation): The Tempest 575H™ can be controlled via DMX-512 protocol. The Tempest 575H™ is a one channel DMX unit. The DMX address is set on the side panel of the Tempest 575H.™ Your unit and your DMX controller require a standard 3-pin XLR connector for data input and data output (Figure 1). If you are making your own cables, be sure to use standard two conductor shielded cable (This cable may be purchased at almost all pro sound and lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and can not be split.



Figure 1

Notice: Be sure to follow figures two and three when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable’s shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR’s outer casing. Grounding the shield could cause a short circuit and erratic behavior.

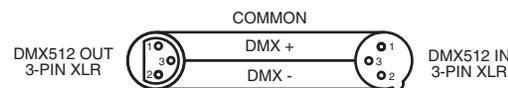


Figure 2

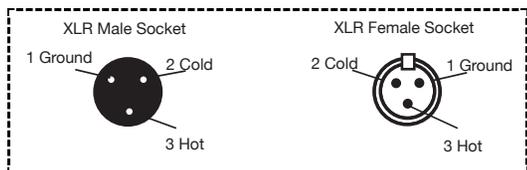


Figure 3

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

Special Note: Line Termination. When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 90-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will decrease the possibilities of erratic behavior.



Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

Figure 4

5-Pin XLR DMX Connectors. Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The chart below details a proper cable conversion.

| 3-Pin XLR to 5-Pin XLR Conversion | | |
|-----------------------------------|------------------------|---------------------|
| Conductor | 3-Pin XLR Female (Out) | 5-Pin XLR Male (In) |
| Ground/Shield | Pin 1 | Pin 1 |
| Data Compliment (- signal) | Pin 2 | Pin 2 |
| Data True (+ signal) | Pin 3 | Pin 3 |
| Not Used | | Pin 4 - Do Not Use |
| Not Used | | Pin 5 - Do Not Use |

Operating Modes:

Universal DMX Control: This mode allows you to use a universal DMX-512 controller such as the American DJ® DMX Operator™ or Show Designer.™

1. To control your fixture in DMX mode, follow the set-up procedures on pages 6 - 8 as well as the set-up procedures included with your DMX controller.
2. For longer cable runs (more than a 100 feet) use a terminator on the last fixture.
3. Assign a DMX address to the unit by following the dipswitch chart on page 14.
4. The Tempest 575H™ uses one DMX channel to access the different programs. See page 13 for detailed description of the DMX traits. Use your DMX controller to activate the various built-in programs.
5. For help operating in DMX mode consult the manual included with your DMX controller.

Stand-Alone Operation (Sound Active): This mode allows a single unit to run to the beat of the music. Only use this mode when running a single unit, or when running several units as individuals.

1. Set dipswitch #10 to the “ON” position to activate Stand-Alone.
2. The unit will react to the low frequencies of music via the internal microphone.
3. Use the audio sensitivity knob on the side of the unit to make the unit more or less sensitive to sound. Turning the sensitivity knob in the clockwise direction will increase the sensitivity, turning the knob in the counter-clockwise direction will decrease the fixture’s sensitivity to sound.
4. The optional *MINI/C Controller* may be used with this mode to control a blackout function.

Master-Slave Operation (Sound Active): This mode will allow you to link up to 16 units together and operate without a controller. In Master-Slave mode, the units will react to sound. In Master-Slave operation one unit will act as the controlling unit and the others will react to the controlling units programs. Any unit can act as a Master or as a Slave.

1. Using standard XLR microphone cables, daisy chain your units together via the XLR connector on the rear of the units. Remember the Male XLR connector is the input and the Female XLR connector is the output. For longer cable runs we suggest a terminator at the last fixture.
2. Choose a unit to function as the Master and set dipswitch #10 to the "ON" position. Then simply daisy chain the units together using XLR cables.
3. Turn all dipswitches to the "OFF" position on the SLAVE units, and they will react the same as the MASTER.
4. Use the sensitivity knob on the side of the master unit to make it more or less sensitive to sound.
5. The optional *MINI/C Controller* may be used to control a black-out function.

Fixture Cleaning: Due to fog residue, smoke, and dust cleaning the internal and external optical lenses and mirror should be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates (I.e. smoke, fog residue, dust, dew). In heavy club use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Use a brush to wipe down the cooling vents and fan grill.
3. Clean the external optics and mirror with glass cleaner and a soft cloth every 20 days.
4. Clean the internal optics with glass cleaner and a soft cloth every 30-60 days.
5. Always be sure to dry all parts completely before plugging the unit back in.

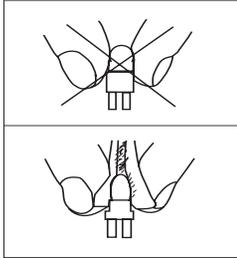
Trouble Shooting: Listed below are a few common problems that you may encounter, with solutions.

No light output from the unit;

1. Be sure you have connected your unit into a standard 120v wall outlet.
2. Be sure the external breaker has not blown. The breaker is located on the side panel of the unit, next to the AC Cable.
3. Remove the lamp cover and be sure the lamp is seated in its socket properly. Occasionally lamps become loose during shipping, be sure the lamp is push in to its socket all the way.

Unit does not respond to sound;

1. Low frequencies (bass) should cause the unit to react to sound. Tapping on the microphone, quiet or high pitched sounds may not activate the unit.
2. Be sure the sensitivity knob is not set to the minimum position (full counter-clockwise).



This fixture is fitted with a halogen lamp which are highly susceptible to damage if improperly handled. Never touch the lamps with your bare fingers as the oil from your hands will shorten lamp life. Also, never move the fixture until the lamps have had ample time to cool. Remember, lamps are not covered under warranty conditions.

Caution: Always replace with the exact same type lamp, unless otherwise specified by an authorized American DJ® service technician. Replacing with anything other than the specified part can damage your unit and will void your manufactures warranty.

Warning: If you continue to blow lamps or the breaker, STOP using the unit. Contact customer support for further instructions, you may have to return the unit for servicing. Continuing to use the unit may cause serious damage.

Lamp Replacement: Caution! Never attempt to change the lamp while the fixture is plugged in. Always disconnect the main power and allow the unit ample time to cool before attempting to replace the lamp. Lamp replacement has been made simple by incorporating the use of a removable front cover that is retained by thumb screws.

1. Be sure to follow the proper handling procedures.
2. Remove the thumb screws on the replacement cover loctated on the front of the unit.
3. After removing the thumb screws, remove the top cover to expose the lamp socket assembly.
4. Carefully remove the old lamp.
5. Replace the lamp with an exact match and reassemble in reverse order.

This unit is equipped with a built-in safety breaker. This breaker is designed to close the power circuit in the event of an internal short or power surge. This will reduce the risk of electrical shock or fire and protect the circuitry. To reset the breaker, push the breaker button in until you hear it “pop” back in to place. If the breaker continues to pop, stop using the unit and contact our customer support team, the unit may need to be returned for service.

DMX Traits

| Value | Result |
|---------|-----------------|
| 0-13 | Blackout |
| 14-27 | Program 1 |
| 28-41 | Program 2 |
| 42-55 | Program 3 |
| 56-69 | Program 4 |
| 70-83 | Program 5 |
| 84-97 | Program 6 |
| 98-111 | Program 7 |
| 112-125 | Program 8 |
| 126-139 | Program 9 |
| 140-153 | Program 10 |
| 154-167 | Program 11 |
| 168-181 | Program 12 |
| 182-195 | Program 13 |
| 196-209 | Program 14 |
| 210-223 | Program 15 |
| 224-237 | Program 16 |
| 238-251 | Program 17 |
| 252-254 | Random Programs |
| 255 | Sound Active |

| | |
|--------------------------|---------------------------|
| Model: | Tempest 575H™ |
| Voltage*: | 120v/60Hz or 220v/50Hz |
| Lamp: | ZB-GLC |
| Dimensions: | 27.5" x 27.5" x 9.5" |
| Colors: | 6 Plus White |
| Weight: | 44Lbs./22kgs. |
| Breaker: | 10A (120v) / 5A (220v) |
| Duty Cycle: | None |
| DMX: | 1 Channel |
| Sound Active: | Yes |
| Working Position: | Any Safe, Secure Position |
| Warranty: | 1 Year |

*Voltage is preset at the factory and is not user selectable

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

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