



**User Instructions** 

American Dys 4295 Charter Street Los Angeles CA. 90058 www.americandi.com

### Tempest 575H™

#### **General Information**

**Unpacking:** Thank you for purchasing the Tempest 575H<sup>™</sup> by American DJ<sub>®</sub>. Every Tempest 575H<sup>™</sup> 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<sup>TM</sup> 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.

# Tempest 575H™

**Features** 

- 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

Tempest 575H™

- 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.

sound activation.

Tempest 575H™

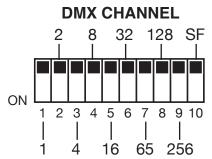
**Power Supply:** Before plugging your unit in, be sure the source voltage in your area matches the required voltage for your American DJ<sub>®</sub> Tempest 575H.™ The American DJ<sub>®</sub> Tempest 575H™ is available in a 120v and 220v version. Because line voltage may vary from venue to venue, you 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

**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	s 21:	Set DMX address 201:			
Dip-switches #	1 = 1	Dip-switches #	1 = 1		
•	3 = 4	·	4 = 8		
	5 = 16		7 = 64		
	= 21		8 = 128		
			= 201		

Data Cable (DMX Cable) Requirements (For DMX and Master/Slave Operation): The Tempest 575H<sup>™</sup> can be controlled via DMX-512 protocol. The Tempest 575H<sup>™</sup> is a one channel DMX unit. The DMX address is set on the side panel of the Tempest 575H.<sup>™</sup> 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.

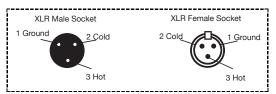


Figure 1

**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



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

Figure 3

**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								

Tempest 575H™ Operation

# **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" positon 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.

- 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.
- 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 sensative to sound.
- 5. The optional *MINI/C Controller* may be used to control a black-out function.

# Tempest 575H™ Cleaning

**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.

#### Tempest 575H™

**Trouble Shooting** 

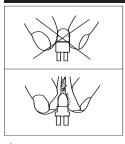
**Trouble Shooting:** Listed below are a few common problems that you may encounter, with solutions.

# 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.

# Tempest 575H™

**Breaker Reset** 

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.

	DAAV Tueil	
_	DMX Trait	S
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

255

This chart list the DMX dipswitch setting for DMX address 1 through 511. Follow the instructions below to configure fixture dipswitches with your desired DMX address.

#### DMX Address Quick Reference Chart

DIP SWITCHES — Dip Switch Position																							
						#9	Х	Х	Х	Х	Х	Х	X	Х	0	0	0	0	0	0	0	0	ı
DMX DIP Switch Settings				#9	X	X	X	X	0	0	0	0	X	X	X	Х	0	0	0	0	ı		
X =OFF				#7	X	X	0	0	X	Х	0	0	X	X	0	0	X	Х	0	0	ı		
	O =ON					#6	X	0	X	0	X	0	X	Ō	X	0	X	0	X	0	X	0	ı
$\vdash$	#1	#2	#3	#4	#5																	$\overline{}$	ı
	Х	Χ	Х	Х	Χ			32	64	96	128	160	192	224	256	288	320	352	384	416	448	480	ı
	0	Χ	Х	Х	Χ		1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481	ı
	Х	0	Х	Х	Χ		2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482	
	0	0	Х	Х	Χ		3	35	67	99	131	163	195	227	259		323		387	419	451	483	
	Х	Х	0	Х	X		4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484	
	0	Χ	0	Х	Χ		5	37	69	101	133	165	197	229	261	293	325	357	389	421	453		
	Х	0	0	Х	X		6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486	
	0	0	0	Χ	Χ		7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487	
	Χ	Χ	Х	0	Χ		8	40	72	104	136	168	200		264						456	_	
	0	Χ	Х	0	Χ		9	41	73	105	137	169	201	233	265	297	329	361	393		457	489	
	Х	0	Х	0	Х		10	42	74	106	138	170	202	_	266		330		394	_	458		
□	0	0	Х	0	Χ		11	43	75	107	139	171	203		267			363			459		
Position	Х	Х	0	0	Х		12	44	76	108	140	172	204		268		332	364	396		460		l.,
. <u></u>	0	Х	0	0	Х		13	45	77	109	141	173	205		269		333		397		461		SS
0	Х	0	0	0	Χ		14	46	78	110	142	174	206		270	302	334	366	398		462		ē
	0	0	0	0	Χ		15	47	79	111	143	175	207	239	271	303	335	367	399	_	463		Addre
Switch	Х	Х	Х	Χ	0		16	48	80	112	144	176	208	_	272					432	464		
- ≥	0	Χ	Х	Х	0		17	49	81	113	145	177	209		273	305	337	369	401	433	465		×
	Х	0	Х	Х	0		18	50	82	114	146	178	210	_	274	306	338		402		466		
Бi	0	0	Х	Х	0		19	51	83	115	147	179	211	243	275	307	339	_	403		467	499	ľ
	X	Х	0	Х	0		20	52	84	116	148	180	212		276	308	340	_	404		468		
	0	Х	0	Х	0		21	53	85	117	149	181	213	_	277	309		373	405	_	469		
	Х	0	0	Х	0		22	54	86	118	150	182	214	_	278			_		438	470		
	0	0	0	Х	0		23	55	87	119	151	183	215		279		343		407	439	471	503	
	Х	Х	Х	0	0		24	56	88	120	152	184	216		280	312	344	376	408		472		
	0	Χ	Х	0	0		25	57	89	121	153	185	217	249	281	313	345	_	409		473		
	X	0	Х	0	0		26	58	90	122	154		218		282	-	346		410		474		
	0	0	Х	0	0		27	59	91	123	155	187	219	_	283		347	379	411	443	475		
	X	Х	0	0	0		28	60	92	124	156	188	220	_	284	-	348		412	_	476		1
	0	X	0	0	0		29	61	93	125	157	189	221	253	285	-	349	381	413		477	509	
	X	0	0	0	0		30	62	94	126	158	190	222		286		350	382	414	446		510	1
	0	0	0	0	0		31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511	

DMX Address

The center numbers of this chart (1-511) represent a DMX address. The "X"'s and "O"'s along the top and side of the chart represent dip switch poistion ("X" for off and "O" for on). Find your desired DMX address from the center chart. Identify the position for dip switches 1-5 from the chart on the left and dip switches 6-9 from the chart on the top. Adjust the dip switches on your fixture to match the position settings of the chart. For fixtures with 10 dip switches; dip switch 10 is reserved for special functions.

#### 1-YEAR LIMITED WARRANTY

Tempest 575H™

- A. American DJ® hereby warrants, to the original purchaser, American DJ® products to be free of manufacturing defects in material and workmanship for a period of 1 Year (365 days) from the date of purchase. This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, send the product only to the American DJ® factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, American DJ® will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, American DJ® shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which American DJ® concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the American DJ® factory unless prior written authorization was issued to purchaser by American DJ®; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up. During the period specified above, American DJ® will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of American DJ® under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of American DJ®. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.
- E. American DJ® reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by American DJ® in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall American DJ® be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.
- G. This warranty is the only written warranty applicable to American DJ® Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.
- H. Lamps are not covered under this or any other warranty, either written or implied.
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Tempest 575H™ Specifications

Model: Tempest 575H™

**Voltage\*:** 120v/60Hz or 220v/50Hz

Lamp: ZB-GLC

**Dimensions:** 27.5" x 27.5" x 9.5"

Colors:6 Plus WhiteWeight:44Lbs./22kgs.

**Breaker:** 10A (120v) / 5A (220v)

Duty Cycle:NoneDMX: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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