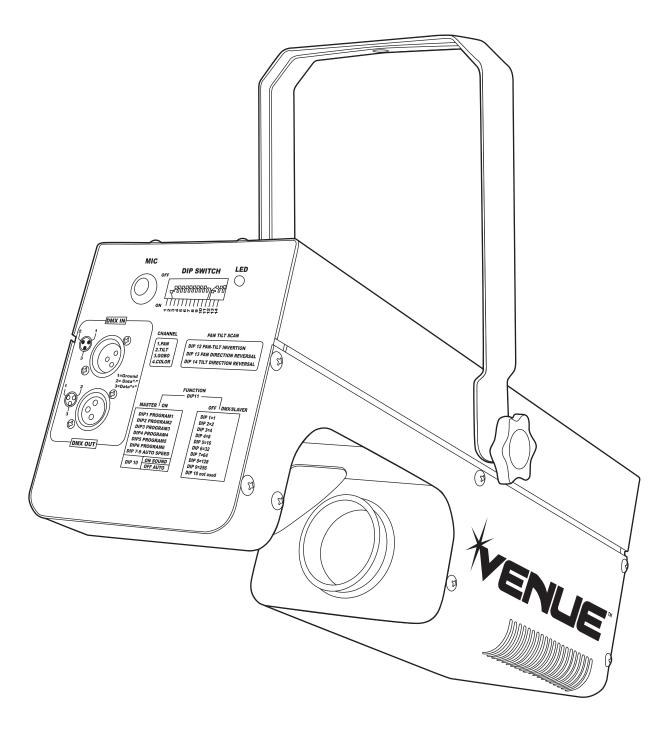


DUAL SCANNER USER MANUAL



SPECIFICATIONS

Lamp: ELC 24V 250W

Motor(s): 4 Precision micro-stepping motors 1.8/step

Gobos: 13

Color: 10 solid colors, 10 bi-color combinations plus open Modes of Operation: Stand-alone Auto, Sound Active, Master/Slave, DMX

DMX Channels: 4
Pan: 165°
Tilt: 114°
Cooling: Fan

Input Power: 120VAC 60Hz

Dimensions: L 17.7" x W 6.2" x H 6.1"

Weight: 16.5 lbs. / 7.5 kg

SAFETY INSTRUCTIONS

Read user manual before connecting or operating your dual scanner.

- Always completely disconnect the scanner and allow to cool down for 15 minutes before replacing the lamp or fuse.
- Do not use the scanner near water.
- Do not block fan or exhaust vents in area of scanner use.
- Do not install scanner anywhere near heat sources such as radiators, heat registers, stoves or other apparatus that produces heat.
- Unplug your scanner when unused for long periods of time.
- Refer all servicing to authorized service personnel.
- Room temperature when scanner is in use should not exceed 104° F.

INSTALLATION AND SET UP

To hang the fixture, install a "C" or "S" clamp to the yoke through the 1/2" hole, the head is now ready for permanent installation. Hang the unit and position it as necessary and tighten the hex bolt. When the required angle is reached, lock the fixture with the thumbscrew.

CAUTION:

- Do not mount the unit near curtains or any flammable objects.
- The scanner is for indoor use only. Using the scanner outdoors will void the warranty.
- Cables conforming to the DMX standard (USITT DMX512/1990) must be used.

REPLACING LAMP

- 1. Unplug the scanner completely from the electrical outlet and wait for the unit to cool, about 15 minutes.
- 2. Unscrew the fixing screw of the lamp window cover on the rear of the unit.
- 3. Take the lamp and socket out of the unit body gently. Do not touch the bulb with bare hands. Use gloves or handle the lamp by its base only.
- 4. Place the new lamp and socket into the unit and then fasten the lamp cover screws.

OPERATION

DIP Switch Settings:

This product utilizes a DIP switch address block to select the mode of operation, such as DMX Mode, Standalone-Auto (Master/Slave), or Sound Active (Master/Slave).



About DIP Switches:

DIP Switch #1 through #9

The DMX receipt mode: Address code

The Master/Slave mode: 1 - 6 controls setup program in the fixture.

7 - 9 controls speed

DIP Switch #10

The DMX receipt mode: No function

The Master/Slave mode: Exchange between Automatic and Sound Activates

DIP Switch #11

Exchange between DMX receipt mode and Master/Slave mode

DIP Switch #12

Exchange the assignment of Tilt Channel and Pan Channel

DIP Switch #13

Exchange the direction for Pan Channel

DIP Switch #14

Exchange the direction for Tilt Channel

HOW TO SELECT FUNCTIONS:

DMX Receipt Mode:

Flip DIP Switch #11 to "OFF", the fixture is now in DMX receipt mode. DIP Switch #1 through #9 set the DMX address of the fixture.

ADDRESS	DIP (987654321)
01	$0\ Q\ Q\ Q\ Q\ Q\ Q\ Q\ 1$
02	0 0 0 0 0 0 10
03	0 0 0 0 0 0 11
04	0 Q Q Q Q 1 00
509	1 1 1 1 1 110 1

(REMARK: I=ON $\theta=OFF$)

Auto Mode:

When using one fixture only, put DIP switch #11 "ON". This places the unit into Stand Alone Auto Mode. Flip DIP Switches #1 through #6 to the "ON" position to activate built-in programs. To adjust the speed of the program refer to the chart below and turn "ON" corresponding DIP Switch for desired speed. DIP Switches #7 through #9 are used in combinations of ON/ OFF states to adjust playback speed.

When using more than one fixture you will need to set the first fixture in the series as the Master and the subsequent ones as slaves.

IMPORTANT

Connect all fixtures to the master in a series using standard DMX 3-Pin XLR cables. Set all DIP switches properly as shown below.

You should not run Auto Modes when connected in the same data line as DMX operated fixtures as addition data sent from the Master may impede the functionality of your DMX fixtures.

To Set the Master, turn DIP switch #11 ON and #10 OFF. Turn on DIP switch #1 through #6 to run the preprogrammed sequences stored in the fixture. DIP Switches #7 through #9 are used in combinations of ON/OFF states to adjust playback speed.

To set the units to Slave, turn OFF switch #11. The SLAVE unit will then receive its control signal from the Master as long as it is connected to a properly configured Master.

SOUND ACTIVE MODE

When using one fixture only, put DIP switch #11 "ON": This places the unit into Stand Alone Sound Active Mode and select DIP Switches 1-6 to the "ON" position to activate built in programs. To adjust the speed of the program refer to the chart below and turn "ON" corresponding DIP Switch for desired speed. DIP Switches #7 through #9 are used in combinations of ON/OFF states to adjust playback speed.

When using more than one fixture you will need to set the first fixture in the series as the Master and the subsequent as slaves.

IMPORTANT

Connect all fixtures to the master in a series using standard DMX 3-Pin XLR cables.

Set all DIP switches properly as shown below.

You should not run Stand Alone Sound Active Modes when connected in the same data line as DMX operated fixtures as addition data sent from the Master may impede the functionality of your DMX fixtures. To Set the Master, turn DIP switch #11 on and #10 OFF. Turn on DIP switch #1 through #6 to run the preprogrammed sequences stored in the fixture. DIP Switches #7 through #9 are used in combinations of ON/OFF States to adjust playback speed.

To set the units to Slave, turn OFF switch #11. The Slave unit will then receive its control signal from the Master as long as it is connected to a properly configured Master.

To set the units to Slave, turn OFF switch #11. The Slave unit will then receive its control signal from the Master as long as it is connected to a properly configured Master.

SPEED CONTROL CHART

Speed No	DIP #7	DIP#8	DIP#9	Time in Seconds/Step
1 2 3 4 5 6 7 8	OFF ON OFF ON OFF ON OFF	OFF OFF ON OFF OFF ON	OFF OFF OFF ON ON ON	2 3/2 1 3/4 1/2 3/8 1/4 1/5

DIP #12 Swap Pan Tilt Channels When ON

DIP #13 Inverts Pan When ON

DIP #14 Inverts Tilt When ON

CHANNELS AND DIGITAL VALUES

CHANNEL 1 PAN (X)
CHANNEL 2 TILT(Y)
CHANNEL 3 GOBO
0-5 Black out
6-15 Dimming

16-223 Gobo Rotation and Gobo Selection

224-239 Gobo Scroll in steps

240-255 Strobe Speed (Shutter) 7 Speeds

CHANNEL 4 COLOR
0-143 Mixed Colors

144-239 Incremental Color Change

240-255 Rainbow Color Change (7 Speeds)

DMX OPERATION MODE

To set the fixtures in DMX Mode make certain all units are connected to the provided DMX controller or any standard DMX 512 controller using the provided 3-Pin XLR cable.

Turn OFF DIP switch #1 and set the binary DMX address.

DIP #12 Swap Pan Tilt Channels When ON

DIP #13 Inverts Pan When ON DIP #14 Inverts Tilt When ON

UNDERSTANDING DMX 512

No	Slave address	Slave channel	Master/slaver relation
1	01	1, 2, 3, 4	Same
2	05	5, 6, 7, 8	GOBO COLOR TILT is same
			PAN is inversion
3	09	9、10、11、12	GOBO, COLOR, is same
			TILT, PAN is inversion
4	13	13、14、15、16	GOBO COLOR PAN is same
			TILT is inversion

SOUND MODE

Master Fixture: Flip DIP Switch #11 to "ON", DIP Switch #10 to "ON" for SOUND. Then flip DIP Switch #1 through #6 to run the six built-in programs. For example, DIP Switch #2, #4, to "ON", Program Two and Four will run. To Slave fixture, turn #11 to "OFF."

NOTES:

When in Master/Slave mode, follow the table below:

TROUBLE SHOOTING

FAULT	CHECK

Fixture does not turn on	Check power line connection and fuse. If they are in working order, contact your dealer.
Output power seems low	Check to see that the mirror and front lens are clean.
Fixture does not respond to DMX signal	Check the control cable from the controller and along the chain. Check for a bad connection or a bad cable. Check that pin 1 goes to pin 1, 2 to 2 and 3 to 3. Check that the terminator plug is correctly attached at the end of the chain (100 Ohm across pins 2 & 3 of XLR connector) Check that the DMX address is set to the required channel.
Scanner loses position on one or more of its functions.	Check that the motors can move freely and are not hindered. If they seem to be working properly, contact your dealer.
The head does not respond to the music in sound or controller sound activated strobe.	Check that the unit is close enough to a mid-range sound source. Try gently tapping the built-in-microphone to see if it responds. If so, move it closer to the audio source.

IMPORTANT SAFETY INSTRUCTIONS



This symbol is intended to alert the user to the presence of non-insulated "dangerous voltage" within the products enclosure.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the unit.



Apparatus shall not be exposed to dripping or splashing. Objects filled with liquids, such as vases, shall not be placed on the apparatus.





- 1. Read all safety and operating instructions before using this product.
- 2. All safety and operating instructions should be kept for future reference.
- 3. Read and understand all warnings listed on the operating instructions.
- 4. Follow all operating instructions to operate this product.
- 5. This product should not be used near water, i.e., bathtub, sink, swimming pool, wet basement, etc.
- 6. Only use dry cloth to clean this product.
- 7. Do not block any ventilation openings, it should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
- 8. Do not install this product near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Do not break the ground pin of the power supply cord.
- 11. Only use attachments specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, exercise caution when moving.
- 13. Unplug this apparatus during lightning storms or when unused for a long period of time.
- 14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation ports or any other openings.
- 15. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way.
- 16. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- 17. When a mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

