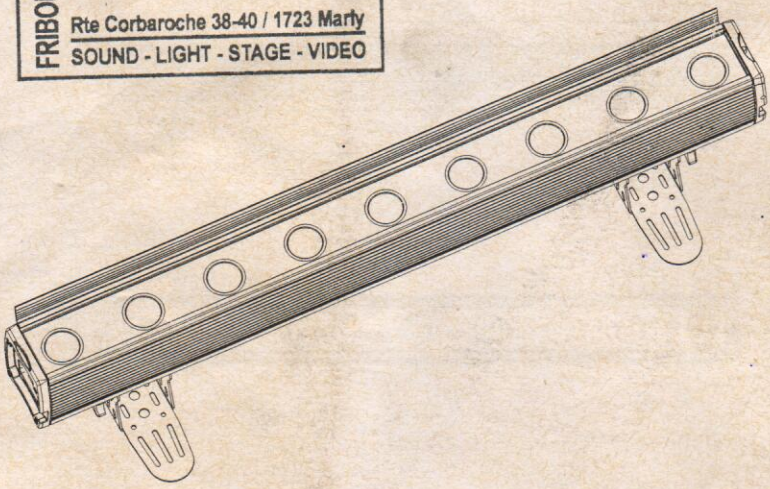
Spectral

CYC-2500

USER MANUAL



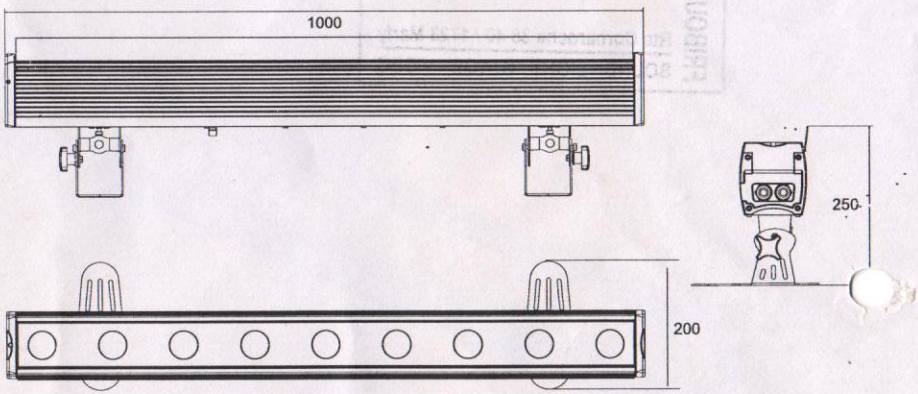
Showtec

1 PRODUCT (GENERAL)

1.1 TECHNICAL SPECIFICATIONS

LED MODULE

Type	Model	Voltage	Operation Temperature	Weight	Dimensions 2 (mm)	Power (W)	IP
I	RGBW:10Wx9	AC100~240V 50/60Hz	-20~40	10.8	1000x200x250	190	2X
II	RGBW:10Wx9						66



1.2 SAFETY WARNING

IMPORTANT:

- This product must be installed by a qualified professional.
- All maintenance must be carried out by a qualified electrician.
- A minimum distance of 0.5m must be maintained between the equipment and a combustible surface.
- The product must always be operated in a well ventilated area.
- DO NOT stare directly into the LED light source.
- Always disconnect the power before carrying out any maintenance.
- The earth must always be connected to the ground.
- Ensure that all parts of the equipment are kept clean and free of dust.

2 INSTALLATION

2.1 MOUNTING

HANGING

The fixture can be mounted in a hanging position using the supporting bracket. The bracket should be secured to the mounting truss or structure using a standard mounting clamp. Please note that when hanging the unit a safety cable should also be used.

UPRIGHT

The fixture can be mounted in an upright or sitting position using the supporting brackets.

NOTE	**The LED MODULE can be mounted at any angle and in any position. It is possible to further adjust the angle of the LED MODULE using the two adjustment knobs located on the side of the fixture.**

2.2 POWER CONNECTIONS

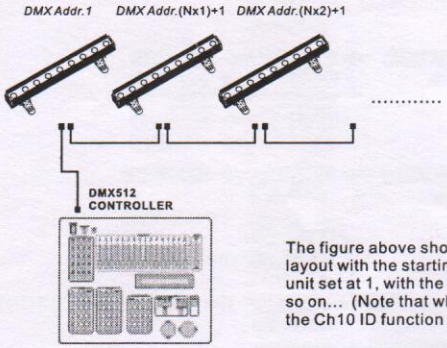
@ 220V: 8 units may be connected in series

@120V: 4 units may be connected in series

2.3 SETTING UP WITH A DMX512 CONTROLLER

- Connect the DMX512 controller to the units in series.
- Each unit has N DMX channels so the DMX Addresses should increase by increments of 1, (Nx1)+1, (Nx2)+1, (Nx3)+1, ···。
- The ID address has not been set so therefore when using the controller CH 10 must be inactive (CH10=0).
- It is also possible to deactivate ID address selecting 【***ID OFF***】 from the 【***Settings***】 menu. on the fixture
- Each DMX Address may be used as many times as required.
- Any DMX address in the range from 001 to 512 may be used.

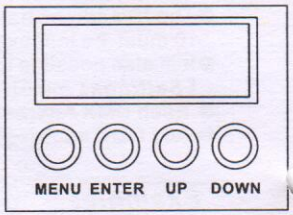
Example:



The figure above shows a simple DMX512 layout with the starting address of the first unit set at 1, with the second set at (Nx1)+1and so on... (Note that when used in this way, the Ch10 ID function must be inactive (CH10=0))

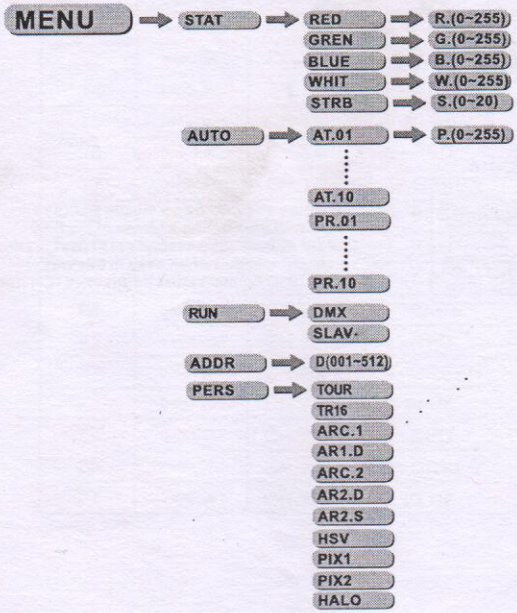
3 DISPLAY PANEL OPERATION

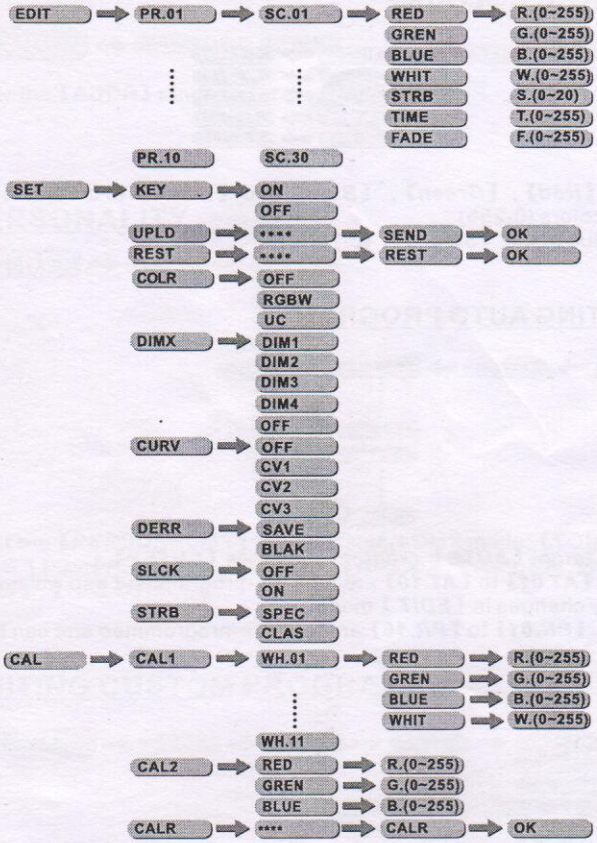
3.1 DISPLAY OPERATION



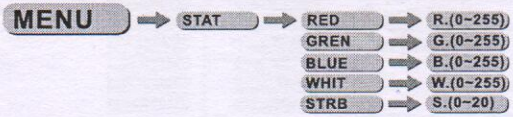
[MENU] return to the previous menu.
[ENTER] enter the currently selected menu.
[UP] scroll down through the current menu list or decrease the value of the current function.
[DOWN] scroll up through the current menu list or Increase the value of the current function.

3.2 MENU MAP



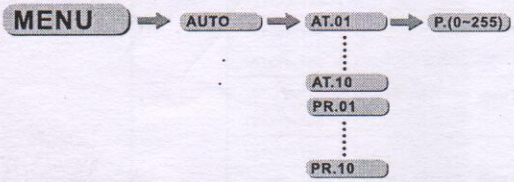

EDIT
PR.01
SC.01
RED
GREN
BLUE
WHIT
STRB
TIME
FADE
R.(0~255)
G.(0~255)
B.(0~255)
W.(0~255)
S.(0~20)
T.(0~255)
F.(0~255)
PR.10
SC.30
SET
KEY
ON
OFF
UPLD
••••
SEND
OK
REST
••••
REST
OK
COLR
OFF
RGBW
UC
DIMX
DIM1
DIM2
DIM3
DIM4
OFF
CURV
OFF
CV1
CV2
CV3
DERR
SAVE
BLAK
SLCK
OFF
ON
STRB
SPEC
CLAS
CAL
CAL1
WH.01
RED
GREN
BLUE
WHIT
R.(0~255)
G.(0~255)
B.(0~255)
W.(0~255)
WH.11
CAL2
RED
GREN
BLUE
R.(0~255)
G.(0~255)
B.(0~255)
CALR
••••
CALR
OK

3.3 EDIT STATIC COLOUR



- Combine 【*Red*】, 【*Green*】, 【*Blue*】 and 【*White*】 to create an infinite range of colors (0-255)
- Set the value of the 【*Strobe*】 (0-20Hz)

3.4 ACTIVATING AUTO PROGRAMS



- Select the target 【*AUTO*】 program and press 【*ENTER*】.
- Programs 【*AT.01*】 to 【*AT.10*】 are fully pre-programmed and will not be altered by changes in 【*EDIT*】 mode.
- Programs 【*PR.01*】 to 【*PR.10*】 are fully pre-programmed and can be edited in 【*EDIT*】 mode.

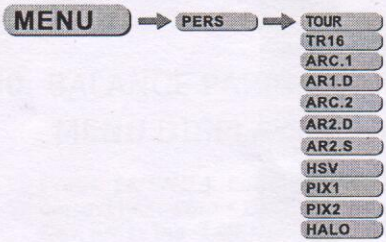
3.5 RUN MODE

- Enter the 【*RUN*】 mode to set working mode.
- 【*DMX*】 mode is for using the DMX512 controller to control the fixtures.
- 【*SLAV*】 mode is for Master -- Slave operation.

3.6 DMX512 SETTINGS

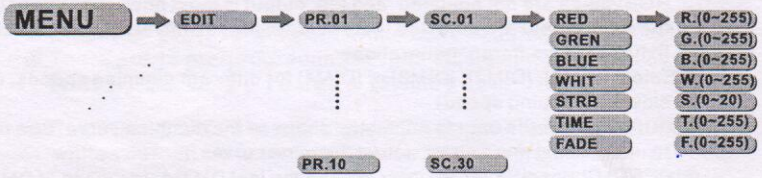
- Enter the 【**ADDR**】 mode to set the DMX ADDRESS.

3.7 PERSONALITY



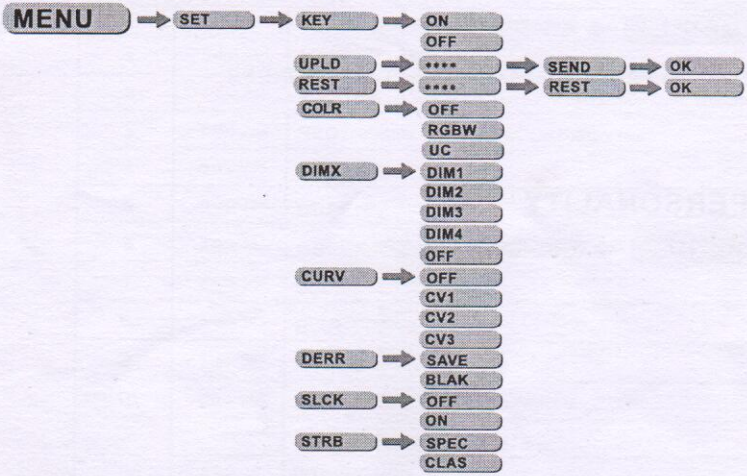
- Enter the 【***PERSONALITY***】 mode to select DMX mode: 【**TOUR**】 【**TR16**】, 【**ARC.1**】, 【**AR1.D**】, 【**ARC.2**】 【**AR2.D**】, 【**AR2.S**】, 【**HSV**】, 【**PIX1**】, 【**PIX2**】, 【**HALO**】.

3.8 EDITING CUSTOM PROGRAMS



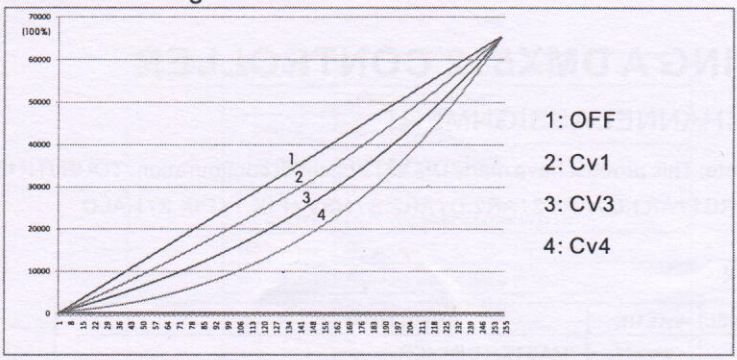
- Enter the 【***EDIT***】 mode to edit the custom programs 【***PR.01***】 to 【***PR.10***】.
- Each custom program has 30 steps that can be edited.
- Each step allows the creation of a scene using RED 【***Red***】, GREEN 【***Green***】, BLUE 【***Blue***】, WHITE 【***White***】, ***STRB*** 【***Strb***】, TIME 【***Time***】 & FADE 【***Fade***】.

3.9 SPECIAL SETTINGS



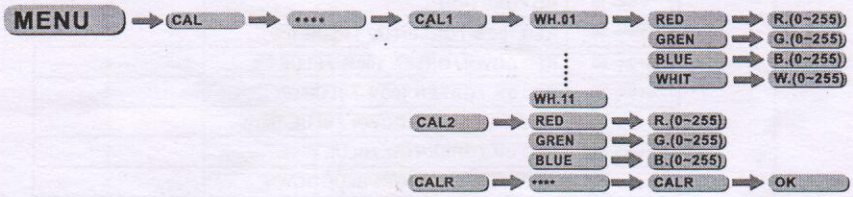
- [SET]...this menu allows the user to adjust key operation settings for this fixture. [KEY]...select [ON] for automatic lock-out. Password to re-enter the display is <UP> + <DOWN> + <UP> + <DOWN>.
- Select[*UPLD*] to upload the custom programs from the current MASTER unit to the SLAVE units.
- In order to reset custom modes to default values select [*REST*] .
- [*COLR*] is for activate/unactivate the color calibration functions. When [*RGBW*] is selected, on RGB = 255,255,255, the color is displayed as calibrated in CAL2 -- RGBW. When[*COLR*] is set [*OFF*] , on RGB = 255,255,255, the RGBvalues are not adjusted and the output is most powerful.When [*UC*] is selected, the RGB output are adjusted to a standard preset universal color which balances fixtures from different generations.
- Select [DIM1], [DIM2], [DIM3] or [DIM4] for different dimming speeds. ([DIM4]is the slowest dimming speed)
- [CURV] allows the user to adjust the shape of the dimming curve. See the CURV chart to understand more about actual dimming curves.
- [*DERR*] Choose[Save] in order to save the last DMX data incase of DMX signal error. Choose[Black] in order to blackout in case of DMX signal error.
- [SLCK] is used to lock the settings menu. When [SLCK] is set to [ON] then user must insert passcode (UP+DOWN+UP+DOWN) in order to access the settings menu.
- [STRB]This fixture allows for two different strobe personality settings, [CLAS] strobe or [SPEC] strobe. The [STRB] settings are only valid in the DMX personalities [TOUR], [AR2.S] and [Tr16]

CURV dimming



3.10 BALANCE PARAMETERS AND CORRECTION MENU DISPLAY

Press 【***MENU***】 button to enter the password confirmation, to enter the correct password < UP + DOWN + UP + DOWN >
Key, press the 【***MENU***】 in, the correct password will enter show submenu



- Enter the 【*CAL1*】 to select white color of different color temperature.
- There are 11 pre-programmed White colors can be edited by using 【*Red*】, 【*Green*】, 【*Blue*】 & 【*White*】 .

- Enter the 【*CAL2*】 to adjust the RGB parameter to make different whites default color temperature for 【RGBW】 color mixing is 5600K.

- When the new setting is activated, the DMX controller choose RGB = 255,255,255 the white color will be made by the actual RGB values on the 【*CAL2*】.

4 USING A DMX512 CONTROLLER

4.1 CHANNEL ASSIGNMENT

- Note: This product have many DMX512 channel configuration: TOUR /TR16/ ARC1 / AR1.D / ARC2 / AR2.D / AR2.S / HSV / PIX.1 / PIX.2 / HALO

TOUR

CHANNEL	VALUE	FUNCTION
1	0⇔255	MASTER DIMMER
2	0⇔255	RED (CH8SELECT CUSTOM 01-10, CH2 CONTROL TIME)
3	0⇔255	GREEN (CH8 SELECT CUSTOM 01-10, CH3 CONTROL FADE)
4	0⇔255	BLUE
5	0⇔255	WHITE
6		COLOR MACRO & WHITE
	0⇔10	NO FUNCTION
	11⇔30	RED 100% / GREEN UP / BLUE 0%
	31⇔50	RED DOWN / GREEN 100% / BLUE 0%
	51⇔70	RED 0% / GREEN 100% / BLUE UP
	71⇔90	RED 0% / GREEN DOWN / BLUE 100%
	91⇔110	RED UP / GREEN 0% / BLUE 100%
	111⇔130	RED 100% /GREEN 0%/BLUE DOWN
	131⇔150	RED 100%/GREEN UP/BLUE UP
	151⇔170	RED DOWN/GREEN DOWN/BLUE 100%
	171⇔200	RED 100%GREEN 100%/BLUE 100%WHITE 100%
		USE WHITE 1WHITE 11 FROM MENU CAL 1 TO MAKE UP WHITE COLOR
	201⇔205	WHITE1: 3200K
	206⇔210	WHITE2: 3400K
	211⇔215	WHITE3: 4200K
	216⇔220	WHITE4: 4900K
	221⇔225	WHITE5: 5600K
	226⇔230	WHITE6: 5900K
	231⇔235	WHITE7: 6500K
	236⇔240	WHITE8: 7200K
	241⇔245	WHITE9: 8000K
	246⇔250	WHITE10: 8500K
	251⇔255	WHITE11: 10000K

CHANNEL	VALUE	FUNCTION
7		SPECIAL STROBE
	0⇔9	No strobe
	10⇔99	Strobe (slow to fast)
	100⇔109	No strobe
	110⇔179	Lightning strobe (slow to fast)
	180⇔189	No strobe
	190⇔255	Random strobe (slow to fast)
		CLASSIC STROBE
	0⇔9	0
	10⇔19	1
	20⇔29	2
	30⇔39	3
	40⇔49	4
	50⇔59	5
	60⇔69	6
	70⇔79	7
	80⇔89	8
	90⇔99	9
	100⇔109	10
	110⇔119	11
	120⇔129	12
	130⇔139	13
	140⇔149	14
	150⇔159	15
	160⇔169	16
	170⇔179	17
	180⇔189	18
	190⇔199	19
	200⇔255	20

CHANNEL	VALUE	FUNCTION
8		AUTO
	0<=> 40	NO FUNCTION
	41<=> 50	AUTO01
	51<=> 60	AUTO02
	61<=> 70	AUTO03
	71<=> 80	AUTO04
	81<=> 90	AUTO05
	91<=> 100	AUTO06
	101<=> 110	AUTO07
	111<=> 120	AUTO08
	121<=> 130	AUTO09
	131<=> 140	AUTO10
	141<=> 150	CUSTOM01
	151<=> 160	CUSTOM02
	161<=> 170	CUSTOM03
	171<=> 180	CUSTOM04
	181<=> 190	CUSTOM05
	191<=> 200	CUSTOM06
	201<=> 210	CUSTOM07
	211<=> 220	CUSTOM08
	221<=> 230	CUSTOM09
	231<=> 255	CUSTOM10
9		AUTO SPEED
	0<=> 255	Since the walking speed (slow to fast)
10		DIMMER SPEED
	0<=> 9	RETURN SETTINGS
	10<=> 29	NORMAL
	30<=> 69	DIM 1
	70<=> 129	DIM 2
	130<=> 189	DIM 3
	190<=> 255	DIM 4

CHANNEL	VALUE	FUNCTION
11		PIXEL SELECTION
	0 ⇔ 9	PIX 1,2,3,4,5,6,7,8,9 (STATIC)
	10 ⇔ 19	PIX 1
	20 ⇔ 29	PIX 2
	30 ⇔ 39	PIX 3
	40 ⇔ 49	PIX 4
	50 ⇔ 59	PIX 5
	60 ⇔ 69	PIX 6
	70 ⇔ 79	PIX 7
	80 ⇔ 89	PIX 8
	90 ⇔ 99	PIX 9
	100 ⇔ 109	PIX 1,2,3 (STATIC)
	110 ⇔ 119	PIX 4,5,6 (STATIC)
	120 ⇔ 129	PIX 7,8,9 (STATIC)
	130 ⇔ 139	PIX 1,2,3,7,8,9 (STATIC)
	140 ⇔ 149	PIX 1,2,3,4,5,6 (STATIC)
	150 ⇔ 159	PIX 4,5,6,7,8,9 (STATIC)
	160 ⇔ 169	PIX 1,3,5,7,9 (STATIC)
	170 ⇔ 179	PIX 2,4,6,8 (STATIC)
	180 ⇔ 189	CHASE LEFT-TO-RIGHT
	190 ⇔ 199	CHASE RIGHT-TO-LEFT
	200 ⇔ 219	CHASE LEFT-RIGHT-LEFT
	220 ⇔ 239	RANDOM
	240 ⇔ 255	PIX 1,2,3,4,5,6,7,8,9 (STATIC)

TR16

CHANNEL	VALUE	FUNCTION
1	0⇔255	MASTER DIMMER
2	0⇔255	MASTER DIMMER FINE (CH13SELECT CUSTOM 01-10, CH2 CONTROL TIME)
3	0⇔255	RED (CH13 SELECT CUSTOM 01-10, CH3 CONTROL FADE)
4	0⇔255	RED FINE
5	0⇔255	GREEN
6	0⇔255	GREEN FINE
7	0⇔255	BLUE
8	0⇔255	BLUE FINE
9	0⇔255	WHITE.
10	0⇔255	WHITE FINE
11		COLOR MACRO & WHITE
	0⇔10	NO FUNCTION
	11⇔30	RED 100% / GREEN UP / BLUE 0%
	31⇔50	RED DOWN / GREEN 100% / BLUE 0%
	51⇔70	RED 0% / GREEN 100% / BLUE UP
	71⇔90	RED 0% / GREEN DOWN / BLUE 100%
	91⇔110	RED UP / GREEN 0% / BLUE 100%
	111⇔130	RED 100% /GREEN 0%/BLUE DOWN
	131⇔150	RED 100%/GREEN UP/BLUE UP
	151⇔170	RED DOWN/GREEN DOWN/BLUE 100%
	171⇔200	RED 100%GREEN 100%/BLUE 100%WHITE 100%
		USE WHITE 1WHITE 11 FROM MENU CAL 1 TO MAKE UP WHITE COLOR
	201⇔205	WHITE1: 3200K
	206⇔210	WHITE2: 3400K
	211⇔215	WHITE3: 4200K
	216⇔220	WHITE4: 4900K
	221⇔225	WHITE5: 5600K
	226⇔230	WHITE6: 5900K
	231⇔235	WHITE7: 6500K
	236⇔240	WHITE8: 7200K
	241⇔245	WHITE9: 8000K
	246⇔250	WHITE10: 8500K
	251⇔255	WHITE11: 10000K

CHANNEL	VALUE	FUNCTION
12		SPECIAL STROBE
	0⇔9	No strobe
	10⇔99	Strobe (slow to fast)
	100⇔109	No strobe
	110⇔179	Lightning strobe (slow to fast)
	180⇔189	No strobe
	190⇔255	Random strobe (slow to fast)
		CLASSIC STROBE
	0⇔9	0
	10⇔19	1
	20⇔29	2
	30⇔39	3
	40⇔49	4
	50⇔59	5
	60⇔69	6
	70⇔79	7
	80⇔89	8
	90⇔99	9
	100⇔109	10
	110⇔119	11
	120⇔129	12
	130⇔139	13
	140⇔149	14
	150⇔159	15
	160⇔169	16
	170⇔179	17
	180⇔189	18
	190⇔199	19
	200⇔255	20

CHANNEL	VALUE	FUNCTION
13		AUTO
	0⇔40	NO FUNCTION
	41⇔50	AUTO01
	51⇔60	AUTO02
	61⇔70	AUTO03
	71⇔80	AUTO04
	81⇔90	AUTO05
	91⇔100	AUTO06
	101⇔110	AUTO07
	111⇔120	AUTO08
	121⇔130	AUTO09
	131⇔140	AUTO10
	141⇔150	CUSTOM01
	151⇔160	CUSTOM02
	161⇔170	CUSTOM03
	171⇔180	CUSTOM04
	181⇔190	CUSTOM05
	191⇔200	CUSTOM06
	201⇔210	CUSTOM07
	211⇔220	CUSTOM08
	221⇔230	CUSTOM09
	231⇔255	CUSTOM10
14		AUTO SPEED
	0⇔255	Since the walking speed (slow to fast)
15		DIMMER SPEED
	0⇔9	RETURN SETTINGS
	10⇔29	NORMAL
	30⇔69	DIM 1
	70⇔129	DIM 2
	130⇔189	DIM 3
	190⇔255	DIM 4

CHANNEL	VALUE	FUNCTION
16		PIXEL SELECTION
	0⇔9	PIX 1,2,3,4,5,6,7,8,9 (STATIC)
	10⇔19	PIX 1
	20⇔29	PIX 2
	30⇔39	PIX 3
	40⇔49	PIX 4
	50⇔59	PIX 5
	60⇔69	PIX 6
	70⇔79	PIX 7
	80⇔89	PIX 8
	90⇔99	PIX 9
	100⇔109	PIX 1,2,3 (STATIC)
	110⇔119	PIX 4,5,6 (STATIC)
	120⇔129	PIX 7,8,9 (STATIC)
	130⇔139	PIX 1,2,3,7,8,9 (STATIC)
	140⇔149	PIX 1,2,3,4,5,6 (STATIC)
	150⇔159	PIX 4,5,6,7,8,9 (STATIC)
	160⇔169	PIX 1,3,5,7,9 (STATIC)
	170⇔179	PIX 2,4,6,8 (STATIC)
	180⇔189	CHASE LEFT-TO-RIGHT
	190⇔199	CHASE RIGHT-TO-LEFT
	200⇔219	CHASE LEFT-RIGHT-LEFT
	220⇔239	RANDOM
	240⇔255	PIX 1,2,3,4,5,6,7,8,9 (STATIC)

PIX1

CHANNEL	VALUE	FUNCTION
1	0⇔255	CH.1PIXEL 1 - RED
2	0⇔255	CH.2PIXEL 1 - GREEN
3	0⇔255	CH.3PIXEL 1 BLUE
4	0⇔255	CH.4PIXEL 2 - RED
5	0⇔255	CH.5PIXEL 2 - GREEN
6	0⇔255	CH.6PIXEL 2 - BLUE
7	0⇔255	CH.7PIXEL 3 - RED
8	0⇔255	CH.8PIXEL 3 - GREEN
9	0⇔255	CH.9PIXEL 3 - BLUE
10	0⇔255	CH.10PIXEL 4 - RED
11	0⇔255	CH.11PIXEL 4 - GREEN
12	0⇔255	CH.12PIXEL 4 BLUE
13	0⇔255	CH.13PIXEL 5 - RED
14	0⇔255	CH.14PIXEL 5 - GREEN
15	0⇔255	CH.15PIXEL 5 BLUE
16	0⇔255	CH.16PIXEL 6 - RED
17	0⇔255	CH.17PIXEL 6 - GREEN
18	0⇔255	CH.18PIXEL 6 - BLUE
19	0⇔255	CH.19PIXEL 7 - RED
20	0⇔255	CH.20PIXEL 7 - GREEN
21	0⇔255	CH.21PIXEL 7 - BLUE
22	0⇔255	CH.22PIXEL 8 - RED
23	0⇔255	CH.23PIXEL 8 - GREEN
24	0⇔255	CH.24PIXEL 8 BLUE
25	0⇔255	CH.25PIXEL 9 - RED
26	0⇔255	CH.26PIXEL 9 - GREEN
27	0⇔255	CH.27PIXEL 9 BLUE

PIX2

CHANNEL	VALUE	FUNCTION
1	0⇔255	CH.1PIXEL 1 - RED
2	0⇔255	CH.2PIXEL 1 - GREEN
3	0⇔255	CH.3PIXEL 1 - BLUE
4	0⇔255	CH.4PIXEL 1 - WHITE
5	0⇔255	CH.5PIXEL 2 - RED
6	0⇔255	CH.6PIXEL 2 - GREEN
7	0⇔255	CH.7PIXEL 2 - BLUE
8	0⇔255	CH.8PIXEL 2 - WHITE
9	0⇔255	CH.9PIXEL 3 - RED
10	0⇔255	CH.10PIXEL 3 - GREEN
11	0⇔255	CH.11PIXEL 3 - BLUE
12	0⇔255	CH.12PIXEL 3 - WHITE
13	0⇔255	CH.13PIXEL 4 - RED
14	0⇔255	CH.14PIXEL 4 - GREEN
15	0⇔255	CH.15PIXEL 4 - BLUE
16	0⇔255	CH.16PIXEL 4 - WHITE
17	0⇔255	CH.17PIXEL 5 - RED
18	0⇔255	CH.18PIXEL 5 - GREEN
19	0⇔255	CH.19PIXEL 5 - BLUE
20	0⇔255	CH.20PIXEL 5 - WHITE
21	0⇔255	CH.21PIXEL 6 - RED
22	0⇔255	CH.22PIXEL 6 - GREEN
23	0⇔255	CH.23PIXEL 6 - BLUE
24	0⇔255	CH.24PIXEL 6 - WHITE
25	0⇔255	CH.25PIXEL 7 - RED
26	0⇔255	CH.26PIXEL 7 - GREEN
27	0⇔255	CH.27PIXEL 7 - BLUE
28	0⇔255	CH.28PIXEL 7 - WHITE
29	0⇔255	CH.29PIXEL 8 - RED
30	0⇔255	CH.30PIXEL 8 - GREEN
31	0⇔255	CH.31PIXEL 8 - BLUE
32	0⇔255	CH.32PIXEL 8 - WHITE
33	0⇔255	CH.33PIXEL 9 - RED
34	0⇔255	CH.34PIXEL 9 - GREEN
35	0⇔255	CH.35PIXEL 9 - BLUE
36	0⇔255	CH.36PIXEL 9 - WHITE

ARC1

CHANNEL	VALUE	FUNCTION
1	0⇔255	RED
2	0⇔255	GREEN
3	0⇔255	BLUE

AR1.D

CHANNEL	VALUE	FUNCTION
1	0⇔255	DIMMER
2	0⇔255	RED
3	0⇔255	GREEN
4	0⇔255	BLUE

ARC2

CHANNEL	VALUE	FUNCTION
1	0⇔255	RED
2	0⇔255	GREEN
3	0⇔255	BLUE
4	0⇔255	WHITE

AR2.D

CHANNEL	VALUE	FUNCTION
1	0⇔255	DIMMER
2	0⇔255	RED
3	0⇔255	GREEN
4	0⇔255	BLUE
5	0⇔255	WHITE

AR2.S

CHANNEL	VALUE	FUNCTION
1	0⇔255	DIMMER
2	0⇔255	RED
3	0⇔255	GREEN
4	0⇔255	BLUE
5	0⇔255	WHITE
6	0⇔255	STROBE 2

HSV

CHANNEL	VALUE	FUNCTION
1	0⇔255	HUE
2	0⇔255	SATURATION
3	0⇔255	VALUE

HALO

CHANNEL	VALUE	FUNCTION
1	0⇔255	PIXEL 1 DIMMER 2700K
2	0⇔255	PIXEL 2 DIMMER 2700K
3	0⇔255	PIXEL 3 DIMMER 2700K
4	0⇔255	PIXEL 4 DIMMER 2700K
5	0⇔255	PIXEL 5 DIMMER 2700K
6	0⇔255	PIXEL 6 DIMMER 2700K
7	0⇔255	PIXEL 7DIMMER 2700K
8	0⇔255	PIXEL 8 DIMMER 2700K
9	0⇔255	PIXEL 9 DIMMER 2700K