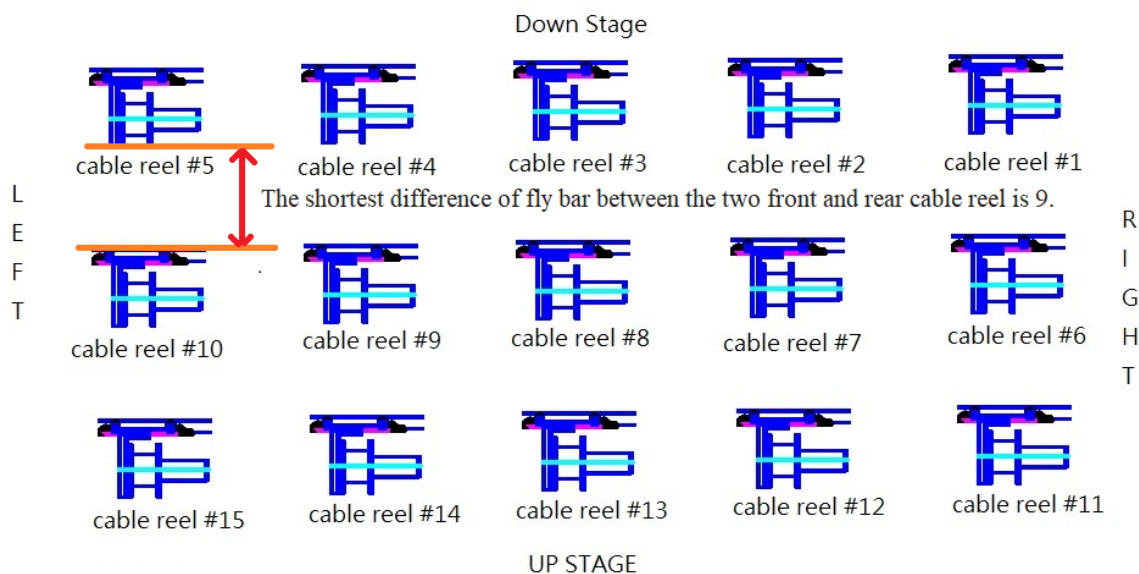


National Theater : 2-Lighting Equipment

2-1 Lighting System

Item	Brand / Type	Description
Control Console	ETC ION 2000	1. CUES / 10000, SUBMASTER / 40 , 10000 Control Channel, DMX 512*6 for sACN 2. Monitor: 2 in the Lighting Control Room, 2 on Tech Desk. 3.IPad Remote: 1
	Grand MA2 Light	4096 Parameters
Dimmer System	ADB EURODIM	619 Circuits × 2.5 KW 220V 073 Circuits × 5.0 KW 220V 144 Circuits × 2.5 KW 220V 228 Circuits × 3KW 220V Dimmer/Switch(ADB Twintech)

- Lighting protocol : sACN
- Used DMX address for Dimmer of the Venue : DMX universe 1 and 2 , DMX 3 address 1 to 100
- Available DMX :
 - ION : DMX universe 3(address 101-512) , DMX universe 4 , DMX universe 5 , DMX universe 6
 - Grand MA2 Light : DMX Universe 3 (address 101-512) , DMX Universe 4 , DMX Universe 5 , DMX Universe 6 , DMX Universe 7 , DMX Universe 8
- Notice for Using cable reel and movable lighting truss :
 - labels of fly bar which cannot hang for movable lighting truss: : 15 、 16 、 33 、 34 、 51 、 52
 - Mobile cable reel #1 to #4 can move to the limit (direction to Down Stage) : Fly bar # 3
 - Mobile cable reel #5 can move to the limit (direction to Down Stage) : Fly bar # 9
 - The shortest difference of fly bar between the two front and rear cable reel is 9.



2-2 Lighting Fixture Dispose

Position		Circuit No.	Brand/Type	Watt	Amount
F.O.H	FOLLOW SPOT ROOM/R	1 1025 3,4 (5K)			
	FOLLOW SPOT ROOM/C	7 → 24 1026,1027 5K 直通 * 2	ETC S4 5°	750 W	6
			FOLLOW SPOT Lycian 1290 XLT	2000 W	3
	FOLLOW SPOT ROOM/L	2 1028 5,6(5K)			
	UPPER DOME/UP	45 → 64 618 → 619 614 → 615 1029,1030	ETC SOURCE FOUR 10°	750 W	24
	UPPER DOME/DN	27 → 42 610 → 611 606 → 607	ETC SOURCE FOUR 10	750 W	20
	LOWER DOME	65 → 71	ETCSOURCE FOUR 10°	750 W	7
	SIDE BOOTH/R	72 → 89	ETC SOURCE FOUR 26°	750 W	12
	SIDE BOOTH/L	90 → 107	ETC SOURCE FOUR 26°	750 W	12
	LIGHTING TOWER/R	118 → 135	ETC SOURCE FOUR 26° ETC SOURCE FOUR 36°	750 W 750 W	8 7
	LIGHTING TOWER/L	136 → 153	ETCSOURCE FOUR 26° (Upper level)	750 W	8
			ETCSOURCE FOUR 36° (Lower level outside)	750 W	7
	#4.CYC.LIGHTING PIPE	297 → 312 487 → 498	Quartzcolor IRIS 4 4×1KW	1000 W	12

Position		Circuit No.	Brand/Type	Watt	Amount
OVERHEAD	SIDE LADDER/R1	1060,1061 313 → 317,383(5k)	ETC SOURCE FOUR 26°	750 W	4
	SIDE LADDER/R2	1062,1063 318 → 322,384(5K)	ETC SOURCE FOUR 26°	750 W	4
	SIDE LADDER/R3	1064,1065 353 → 357,385(5K)	ETC SOURCE FOUR 26°	750 W	4
	SIDE LADDER/R4	1066,1067 358 → 362,386(5K)	ETC SOURCE FOUR 26°	750 W	4
	SIDE LADDER/R5	1068,1069 363 → 367,387(5K)	ETC SOURCE FOUR 26°	750 W	4
	SIDE LADDER/L1	332,1070,1071 332 → 336, 427 (5K)	ETC SOURCE FOUR 26°	750 W	4
	SIDE LADDER/L2	334,1072,1073 337 → 341, 428(5K)	ETC SOURCE FOUR 26°	750 W	4
	SIDE LADDER/L3	336,1074,1075 368 → 372, 429(5K)	ETC SOURCE FOUR 26°	750 W	4
	SIDE LADDER/L4	1076,1077 373 → 377,430(5K)	ETC SOURCE FOUR 26°	750 W	4
	SIDE LADDER/L5	1078,1079 378 → 382,431(5K)	ETC SOURCE FOUR 26°	750 W	4
Protable boom lighting tower	SR Boom Tower #1	525 → 532 , 963 →966	ETC SOURCE FOUR 36°	750 W	8
	SR Boom Tower #2	533 → 540 , 967 →970	ETC SOURCE FOUR 36°	750 W	8
	SR Boom Tower #3	541 → 548 , 971→974	ETC SOURCE FOUR 36°	750 W	8
	SR Boom Tower #4	549 → 556 , 967 →970	ETC SOURCE FOUR 36°	750 W	8
	SR Boom Tower #5	557 → 564 , 967 →970	ETC SOURCE FOUR 36°	750 W	8
	SR Boom Tower #6	396 → 407 , 983 →986			
	SL Boom Tower #1	565 → 572 , 98 →990	ETC SOURCE FOUR 36°	750 W	8
	SL Boom Tower #2	573 → 580 , 991→994	ETC SOURCE FOUR 36°	750 W	8
	SL Boom Tower #3	581 → 588 , 985 →998	ETC SOURCE FOUR 36°	750 W	8
	SL Boom Tower #4	589 → 596 , 999 →1002	ETC SOURCE FOUR 36°	750 W	8
	SL Boom Tower #5	597 → 604 , 1003→1006	ETC SOURCE FOUR 36°	750 W	8
	SL Boom Tower #6	398 → 399 , 408 →413 1007→1010			
CYC	GROUND ROW	R 388 → 391(5KW) L 392 → 395(5KW)	GROUND ROW-LIGHT Quartz color ORION 4 4×1KW	1000 W	12

2-3 Lighting Equipment List

Type	Brand	Angle	Frame Size	Amount	Storage	Note
Beam light 250W	MITTRONIK		21cm×21cm	18	SIDE STAGE	
FRESNEL 2 KW	Selecon		25cm×25cm	55	SIDE STAGE	
FRESNEL 1 KW	MITTRONIK		21cm×21cm	18	SIDE STAGE	
FRESNEL 5 KW	ADB		13 ³ / ₄ " (34cm×34cm)	5	Storage	
SOURCE FOUR 750w	ETC	10°	12" (30cm×30cm)	51	F.O.H	
		19°	5" (15cm×15cm)	30	SIDE STAGE	
		26°		40	LADDER-R/L	
				16	TOWER-R/L	
				24	BOX-R/L	
		36°		70	SIDE STAGE	
80 (10 set)	Portable Lighting tower					
	14	TOWER-R/L				
	66	SIDE STAGE				
	50°		30	SIDE STAGE		
SOURCE FOUR 750w	ETC	5°	(36cm×36cm)	6	FOLLOW SPOT ROOM/C	
PAR 64 1 KW		Type: CP60 /CP61/CP62	9 ¹ / ₂ " (25cm×25cm)	100	SIDE STAGE	Can switch to desired lamp type
Follow spot 2 KW (xenon)	Lycian1290 XLT			3	FOLLOW SPOT ROOM	
CYC. 1 KW	Quartzcolor		30.5cm×40cm	12 set (1 set×4)		
			24.5cm×29cm	12 set (1 set×4)		
BORDER LIGHT 1 KW	MITTRONIK		19cm×26cm	18 set (1 set×4)		
CONTRA LIGHT 24V (Lamp 9×250W)	MITTRONIK			10		
BP-4 HMI 4 KW	PANI AUSTRIA			3		
BP-5 3200° k 5 KW	PANI AUSTRIA			2		
BP-2 3200° k 2 KW	PANI AUSTRIA			2		
HMI Daylight Fresnel 2.5 KW	Strand			3		added dimmer shutter
Warp Daylight Zoom Profile Spotlights	ADB	12°~30°	18.5cm×18.5cm	20		575W
DMX dimmable fluorescent tube (R.G.B.W)	LDDE spectraconnect t5		149cm×12cm	18		R.G.B.W
1 Circuit MR16 ministrip	Kupo		100cm×10.7cm	14		
3 Circuit MR16 ministrip	Altman		12cm×12cm	8		110V 710W
Color Changer	Seachanger Wash			22		For ETC S4
Color Changer	Seachanger Spot			8		For ETC S4
Scroller	Wybron Coloram IT 32 Colors, 8"	For ETC S4 6", PAR 64, Fresnel and 7.5" frame	19.8cm×25.4cm Color Gels	30		32 Colors list, see next table please.
LED	ETC Selador Lustr+D60			15		
Flood				50		500W

Gelstring name : NEW of 7.5" COLORAM IT 32 colors

Percentages listed for a 7049-Coloram II 7 "

0 %	RE130 - Clear	1
3 %	R119 - Light Hamburg Frost	2
6 %	L101 - Yellow	3
9 %	L102 - Light Amber	4
12 %	L103 - Straw	5
15 %	L104 - Deep Amber	6
18 %	L105 - Orange	7
21 %	L106 - Primary Red	8
24 %	L109 - Light Salmon	9
27 %	L110 - Middle Rose	10
31 %	L115 - Peacock Blue	11
34 %	L117 - Steel Blue	12
37 %	LHT119 - Dark Blue	13
40 %	R384 - Midnight Blue	14
43 %	LHT122 - Fern Green	15
46 %	LHT124 - Dark Green	16
49 %	L126 - Mauve	17
53 %	L128 - Bright Pink	18
56 %	L132 - Medium Blue	19
59 %	L136 - Pale Lavender	20
62 %	L137 - Special Lavender	21
66 %	LHT139 - Primary Green	22
69 %	L141 - Bright Blue	23
73 %	L147 - Apricot	24
76 %	L152 - Pale Gold	25
79 %	L161 - Slate Blue	26
83 %	L162 - Bastard Amber	27
86 %	LHT181 - Congo Blue	28
89 %	L201 - Full CT Blue	29
93 %	L202 - 1/2 CT Blue	30
96 %	L203 - 1/4 CT Blue	31
100 %	L205 - 1/2 CT Orange	32

2–4 Dimmer Circuit System

Position		Dimmer No.	Load	Note
F.O.H	#FOLLOW SPOT ROOM / R	01 03 (5K)→ 04(5K) 1025	2.5 KW 5.0 KW	BP4 16A×2 32A×2
	#FOLLOW SPOT ROOM / C	07 → 18 19 (5K)→ 24(5K) 1026 , 1027	2.5 KW 5.0 KW	BP4 16A×2 32A×2
	#FOLLOW SPOT ROOM / L	02 05(5K)→ 06(5K) , 1028	2.5 KW 5.0 KW	BP4 16A×2 32A×2
	#UPPER DOME / UP	45 → 64 613~620	2.5 KW 2.5 KW	
	#UPPER DOME / DN	25 → 44 605~612 , 1029 , 1030 , 1031 , 1032	2.5 KW 2.5 KW	
	#LOWER DOME/	65 → 71 , 1033	2.5 KW	
	SIDE BOOTH / R	72 → 89 108(5K) , 1034 , 1035	2.5 KW 5.0 KW	
	SIDE BOOTH / L	90 → 107 109(5K) , 1036 , 1037	2.5 KW 5.0 KW	
	SIDE BOOTH / R / 3F	681~692 Multi 6 circuit ×2	2.5 KW	
	SIDE BOOTH / L / 3F	753~764 Multi 6 circuit ×2	2.5 KW	
	1 st Balcony	1011 → 1013 (R) 1014 → 1016 (L)	5 KW 5 KW	
FRONT EDGE OF STAGE	apron	1096→1099 , 801→ 806 , 811→ 816		
Orchestra Pit		461→476 , 288(5K)		
OVERHEAD	LIGHTING TOWER / R	118 → 135 , 1042→1044 154 (5K)→ 156(5K)	2.5 KW 5.0 KW	
	LIGHTING TOWER / L	136 → 153 , 1045→1047 285(5K) → 287(5K)	2.5 KW 5.0 KW	
	LIGHTING BRIDGE/LOWER	175 → 190 , 192 , 194 , 196 157 → 174 , 191 , 193 , 195 197 → 208 , 1048 → 1053 , 209(5K) , 210(5K)	2.5 KW 5.0 KW 2.5 KW	
	# 1. Lighting Moveable Truss Dimmer Circuit is Supplied For Cable Drum , Total number is 5 . Every Cable Drum have 8 dimmer circuits,4 dimmer is normal dimmer, 4 dimmer is dimmer/switch,1 DMX line	211 → 230(2.5kw) 903→922(3 k w) (dimmer/switch) Name of DMX line : DR-DMX 02 to 06	2.5 KW 3 KW	

Position		Dimmer No.	Load	Note
	# 2. Lighting Moveable Truss Dimmer Circuit is Supplied For Cable Drum , Total number is 5 . Every Cable Drum have 8 dimmer circuits,4 dimmer is normal dimmer, 4 dimmer is dimmer/switch,1 DMX line	231 → 251(2.5kw) 923 →942 (3kw)(dimmer/switch) Name of DMX line : DR-DMX 7 to 11	2.5 KW 3 KW	
	# 3. Lighting Moveable Truss Dimmer Circuit is Supplied For Cable Drum , Total number is 5 . Every Cable Drum have 8 dimmer circuits,4 dimmer is normal dimmer, 4 dimmer is dimmer/switch,1 DMX line	252 → 271(2.5kw) 943 →962 (3kw)(dimmer/switch) Name of DMX line : DR-DMX 12 to 16	2.5 KW 3 KW	
	#4. ELEC. LIGHTING PIPE	297 → 312 , 1054→ 1059 487 → 498	2.5 KW 3 KW	
SIDE LADDER	SIDE LADDER/R1	1060,1061 313 → 317,383(5k)	2.5 KW 3 KW 5.0 KW	
	SIDE LADDER/R2	1062,1063 318 → 322,384(5K)	2.5 KW 3 KW 5.0 KW	
	SIDE LADDER/R3	1064,1065 353 → 357,385(5K)	2.5 KW 3 KW 5.0 KW	
	SIDE LADDER/R4	1066,1067 358 → 362,386(5K)	2.5 KW 3 KW 5.0 KW	
	SIDE LADDER/R5	1068,1069 363→ 367,387(5K)	2.5 KW 3 KW 5.0 KW	
	SIDE LADDER/L1	332,1070,1071 332→ 336, 427 (5K)	2.5 KW 3 KW 5.0 KW	
	SIDE LADDER/L2	334,1072,1073 337→ 341, 428(5K)	2.5 KW 3 KW 5.0 KW	
	SIDE LADDER/L3	336,1074,1075 368 → 372 ,429(5K)	2.5 KW 3 KW 5.0 KW	
	SIDE LADDER/L4	1076,1077 373 → 377,430(5K)	2.5 KW 3 KW 5.0 KW	
	SIDE LADDER/L5	1078,1079 378 → 382,431(5K)	2.5 KW 3 KW 5.0 KW	

Position		Dimmer No.	Load	Note
Position		Dimmer No.	Load	Note
STAGE FLOOR (6 SET)	SR # 1	525 → 532 , 963 →966	2.5 KW 3 KW	
	SR # 2	533 → 540 , 967 →970	2.5 KW 3 KW	
	SR # 3	541 → 548 , 971→974	2.5 KW 3 KW	
	SR # 4	549 → 556 , 967 →970	2.5 KW 3 KW	
	SR # 5	557 → 564 , 967 →970	2.5 KW 3 KW	
	SR # 6	396 → 407 , 983 →986	2.5 KW 3 KW	
	SL # 1	565 → 572 , 98 →990	2.5 KW 3 KW	
	SL # 2	573 → 580 , 991→994	2.5 KW 3 KW	
	SL # 3	581 → 588 , 985 →998	2.5 KW 3 KW	
	SL # 4	589 → 596 , 999 →1002	2.5 KW 3 KW	
	SL # 5	597 → 604 , 1003→1006	2.5 KW 3 KW	
	SL # 6	398 → 399 , 408 →413 1007→1010	2.5 KW 3 KW	
STAGE ELEVATORS	# 1.Stage elevator	445-448 , 1080 , 1081	2.5 KW 3 KW	
	# 2.Stage elevator	449-452 , 1082 , 1083	2.5 KW 3 KW	
	# 3.Stage elevator	453-456 , 1084 , 1085	2.5 KW 3 KW	
	# 4.Stage elevator	457-460 , 1086 , 1087	2.5 KW 3 KW	
GROUND ROW CIRCUIT	Ground row Circuit (USR rear stage)	388 → 391	5.0 KW	
	Ground row Circuit (USL rear stage)	392 → 395	5.0 KW	
OVERHEAD CATWALK	3F GALLERY/R	323 → 331 621 → 680 817 → 826 , 1088→ 1090 351(5K) , 243(5K) , 277(5K)→280(5K)	2.5 KW 3 KW 5.0 KW	
	2F GALLERY/R	157 → 166 1094 → 1095	2.5 KW 3 KW 5.0 KW	
	3F GALLERY/L	342 → 350 693 → 752 , 827 → 836 , 1091→ 1093 352(5K) , 276(5K) , 281(5K)→284(5K)	2.5 KW 3 KW 5.0 KW	
MAIN STAGE AREA	Down stage right	801 → 806 (Multi 6 circuit ×1) 1096 , 1097	2.5 KW 3 KW	BP4 16A×1 32A×1
	Down stage left	811 → 816 (Multi 6 circuit ×1) 1098 , 1099	2.5 KW 3 KW 5.0 KW	BP4 16A×1 32A×1
	Up stage right	807 → 808 , 388(5K)→391(5K) 1100→ 1102	2.5 KW 3 KW 5.0 KW	BP4 16A×2 32A×2

Position		Dimmer No.	Load	Note
	Up stage left	809 → 810 , 392(5K)→395(5K) 1103→ 1105	2.5 KW 3 KW 5.0 KW	BP4 16A×2 32A×2
Position		Dimmer No.	Load	Note
REAR BACK STAGE	BACK STAGE/R	499 → 500 , 837 → 842 , 1106→1109 771 → 776 (Multi 6 迴路 ×1) 765 → 770 (Multi 6 迴路 ×1) 415(5 K)	2.5 KW 3 KW 5.0 KW	
	BACK STAGE/L	501 → 502 , 795 → 800 , 783 → 788 , 1110→1113 (Multi 6 circuit×1) 789 → 794 (Multi 6 circuit×1) 426(5 K)	2.5 KW 3 KW 5.0 KW	
	BACK STAGE/REAR	414 , 1114 503 → 504 416 → 419 422 → 425 (5K Multi 4 circuit ×1) 416 → 419 (5K Multi 4 circuit ×1) 420(5K) → 421(5K)	2.5 KW 3 KW 5.0 KW	
TURN TABLE	TURNTABLE/ inner area	777 → 779	2.5 KW	
	TURNTABLE/outer area	843 → 847	2.5 KW	
AUDITORIUM LIGHTING		513 → 520	2.5 KW	
MAIN CURTAIN WARMER		521	5.0 KW	

Note :

1. BP4 means the CH socket for BP4 special effect light.
2. After dimmer number 891 is Dimmer/Switch , there are 228 circuits

2-5-1 CYC Light Circuits Chart

297	298	297	298	301	302	301	302	305	306	305	306	487	488	487	488	491	492	491	492	495	496	495	496
299	300	299	300	303	304	303	304	307	308	307	308	489	490	489	490	493	494	493	494	497	498	497	498

2-5-10 lighting Circuits Chart

See the attached files: lighting circuit plot - english (1) and (2) ,
Down load them please.

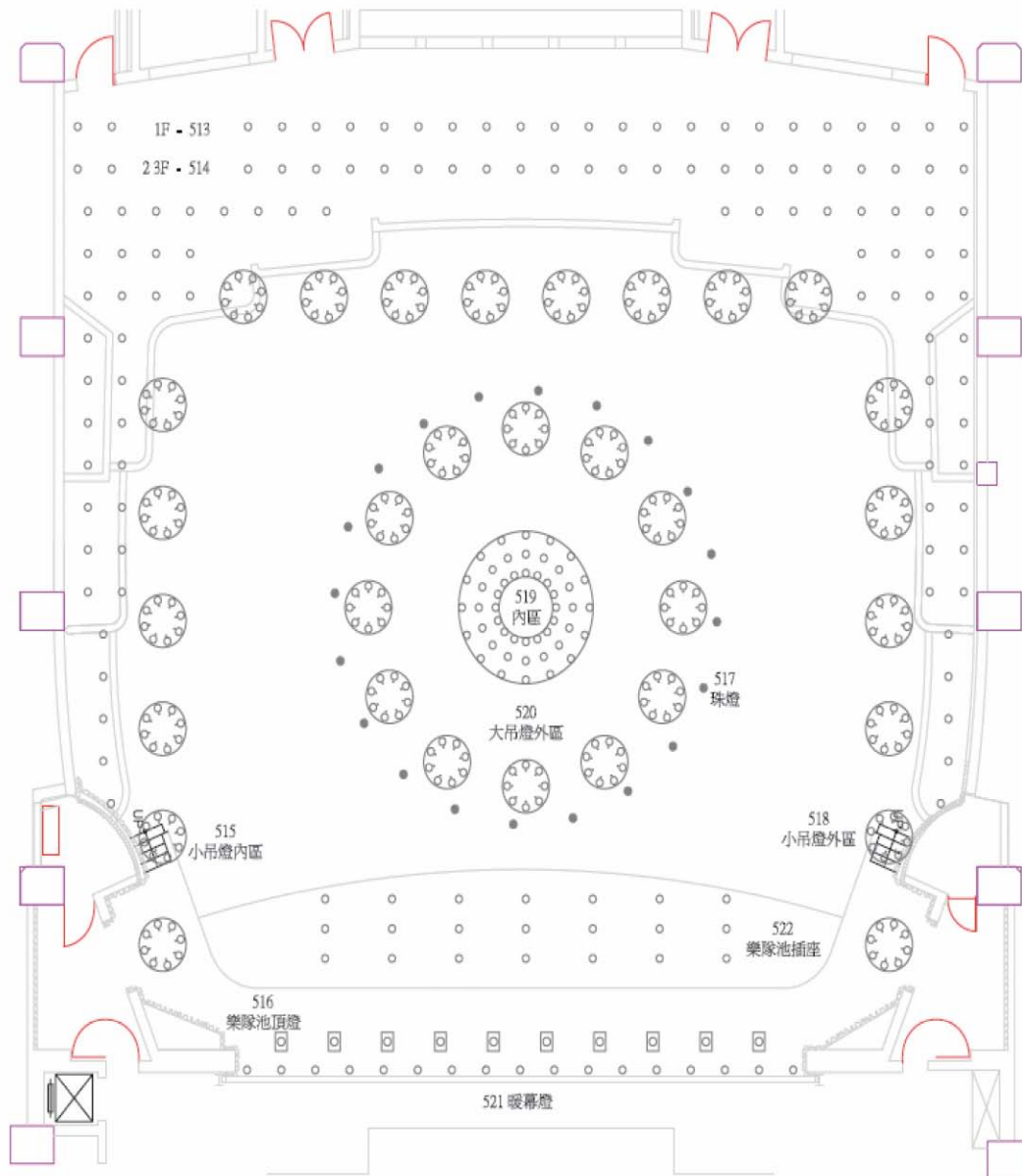
2-6 Follow Spot

Type : Lycian 1290XLT 2000W (2000 瓦 / Xenon)

Amount : 3set

2-7 Auditorium House Light

No.	Type	Amount	Channel No.
1	Small Crystal Ceiling Lamp VLM748	38	515, 518
2	Big Crystal Ceiling Lamp VLM747	1	519, 520
3	Small Bead Lamp		517
4	1st Balcony Wall Lights		513
5	2nd, 3 rd Balcony Wall Lights		514
6	Orchestra Pit Light	10	516
7	Main Curtain Top Light		521
Seats Number Lights, Stairway Lights, Exit Lights are all Dimmable circuit can be adjusted.			



2-8 Orchestra Pit Music Stand Light

Sockets Amount : 126 / Podium # 1 (78) , Podium # 2 (48)

Channel. Number : 522 (5KW)

2-9 Portable Sidelight Tower

Amount : 10 SetSize : 69.1CM(L) × 59.5CM(W) × 260CM (H)

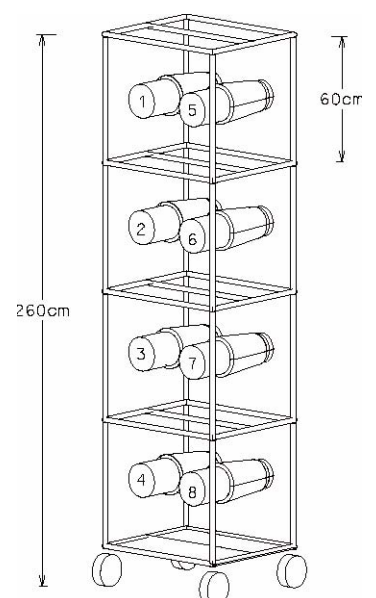
Fixture Height : 78CM 、 139CM 、 200CM 、 261CM

2-10 Lighting Extension Cables

Plug Type : CEE FORM 2.5KW 、 CEE FORM 5.0KW

Extension Cord :

5M , 16A/2P + E



10M , 16A/2P+ E
 20M , 16A/2P+ E
 5M , 32A/2P+ E
 10M , 32A/2P+ E
 20M , 32A/2P+ E
 MULTI - CABLE :
 10M , 19 pins
 20M , 19 pins
 Sockets :
 19PIN SOCAPEX (MALE) → 6 circuit / 16A/2P+E (FEMALE)
 Y- CORD : TWO-FER
 T

2–11 Lighting Fixture Accessories

GOBO HOLDER
 IRIS KIT
 2KW FRESNEL BARN DOOR 55 Set

2–12 Lighting Focus Equipment

Brand/Type	Amount	Power supply	Note
UPRIGHT UL-38	1	Chargeable (110V)	Maximum lifting distance: 32 feet (9.72M) Maximum working height: 38 feet (11.54M)
GENIE AWP-40S	1	Electric (110V)	Maximum loads: 300 pound (136 kg) Working platform size: 0.66M×0.66M

2–13 Stage Work Lights

1. White work light
 Cover area : Dome 、Booth 、Bridge 、Gallery 、Side Stage 、Back Sage 、Grid
 Controller location : Stage manager desk
2. Blue work light
 Cover area : Dome 、Booth 、Bridge 、Gallery 、Side Stage 、Back Sage 、Grid
 Controller location : Stage manager desk
3. Flood work light
 Cover area : Booth 、Elec.Light Pipe 、Bridge 、Gallery 、Side Stage 、Back Sage 、Loading Gallery
 Controller location : Stage manager desk

2–14 Auxiliary Power Supplies

No.	Location	Panel No.	Type
1	Down stage right	NTSR1051-2 PANEL	3 ¢ 4W 208 / 120V, 100A×1, 60A×3
2	Up stage right	R1491A PANEL	3 ¢ 4W 208 / 120V, 40A×1, 30A×3
3	Up stage left	R1491C PANEL	3 ¢ 4W 208 / 120V, 40A×1, 30A×3
4	Down stage left	NTSL1492 PANEL	3 ¢ 4W 208 / 120V, 500A×1
5	Rear back stage right	R1491B PANEL	3 ¢ 4W 208 / 120V, 40A×1, 30A×3
6	Rear back stage left	AP1491A PANEL	3 ¢ 4W 380 / 220V, 100A×1, 50A×1, 30A×3