



National Kaohsiung  
CENTER FOR THE ARTS

WEI WU YING 衛武營

國家藝術文化中心

國家表演藝術中心 National Performing Arts Center

OPERA HOUSE

Technical Information

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Last updated : 2026/5/29

## 1 General Information

### 1-1 National Kaohsiung Center for the Arts (WEIWUYING)

CENTER FOR THE ARTS, ARTS FOR THE PEOPLE, National Kaohsiung Center for the Arts will become one of the important theatre complexes of the international art field. It includes four performance blocks, the 2,260-seat Opera House, the 2,000-seat Concert Hall, the 1,254-seat Play House and the 470-seat Recital Hall.

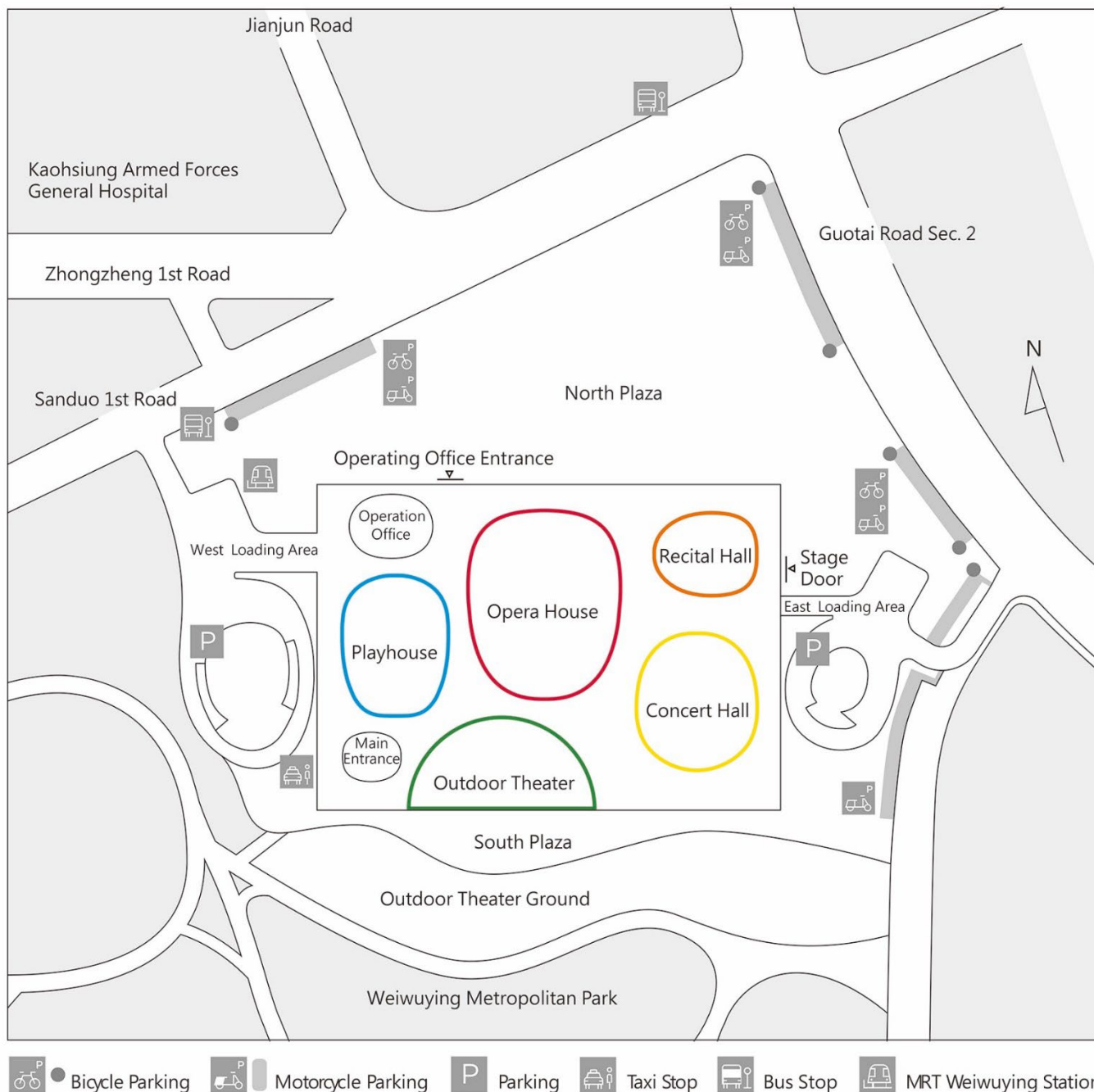


### 1-2 Opera House

The Opera House is a large-scale stage mainly used for operas, major drama productions, dances, and interdisciplinary performances. It is the largest such facility in Taiwan. The mechanical equipment of the stage is fully automated, whereas the seats are arranged in a horseshoe shape. The Opera House is the first opera house in Taiwan to have a mainframe computer aiding the operation.



### 1-3 Traffic Information



### 1-4 Contact Information

#### National Kaohsiung Center for the Arts (Weiwuying)

No.1, Sanduo 1st Rd., Fengshan Dist.,  
Kaohsiung City 83075, Taiwan

**+886 7-262-6666**

service@npac-weiwuying.org

### 1-5 Stage door

Ground floor access is from the north and east side of building. Enter from Operating office entrance on Sanduo 1st Road or Stage Door on Guotai Road.

Basement Level 1 access is from Sanduo 1st Road entrance for Opera House and Playhouse, Guotai Road entrance for Concert Hall and Recital Hall.

Working pass will be required for entry.

## 1-6 Auditorium / Seating

Seating Capacity : 2236 seats

House Seats : 1887 seats (1F/ 542 seats 、2F/ 520 seats 、3F/ 484 seats 、4F/ 341 seats)

Wheelchairs Seats : 14 seats

Companion Seats : 14 seats

Orchestra Pit Seats : 110 seats (Row P1~P4)

Control Area Seats : 16 seats (Row L~M, NO.1~8)

Reserved Seats for Tech Table : 4 seats

Reserved Seats for FOH : 6 seats

Obstructed View Seats : 111 seats ( Non-ticketing )

Partial View Seats : 74 seats ( Tickets can be sold, and "Partial View" must be marked )

Reserved Seats

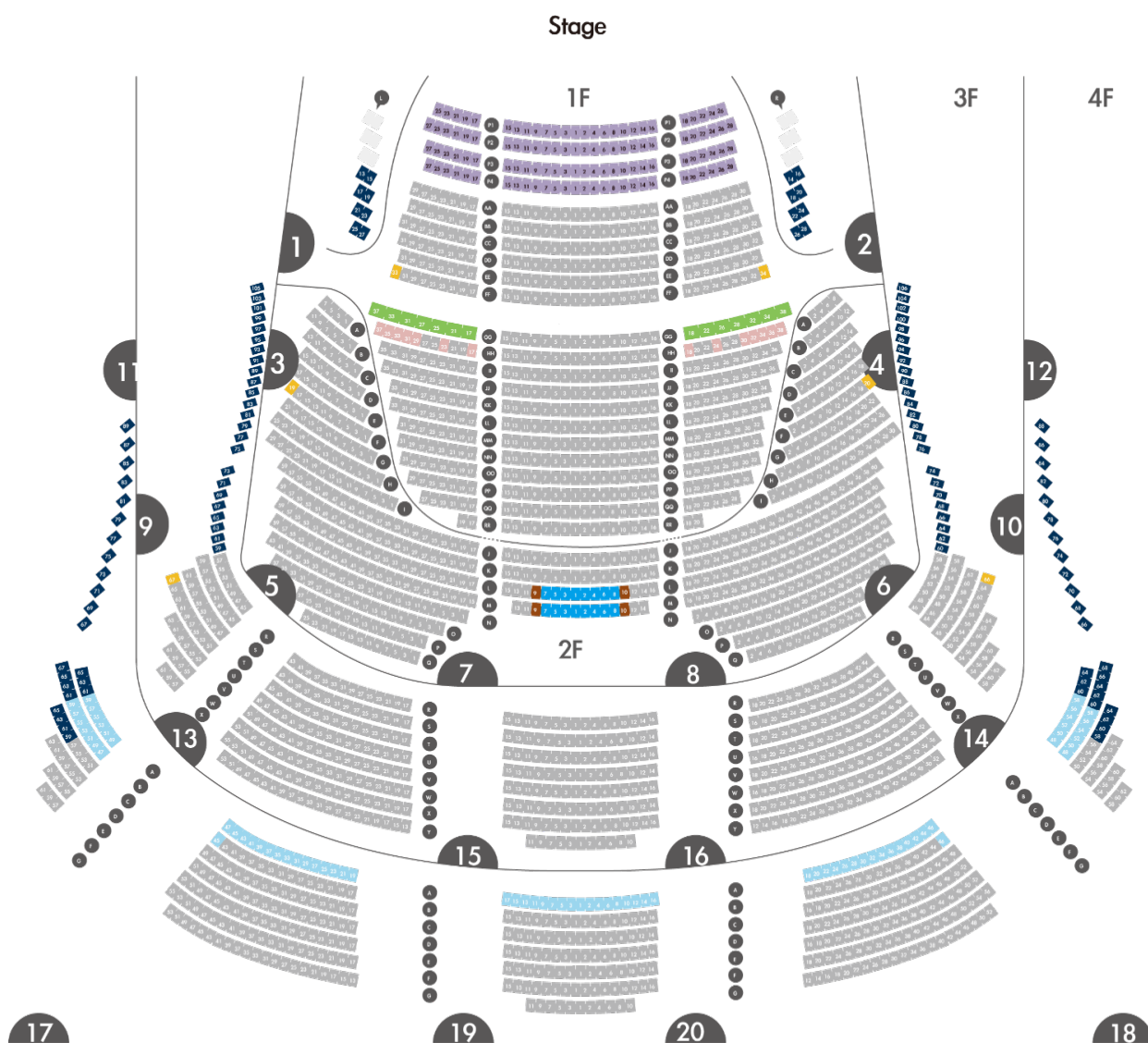


Figure 1.1- Opera House Seating plan

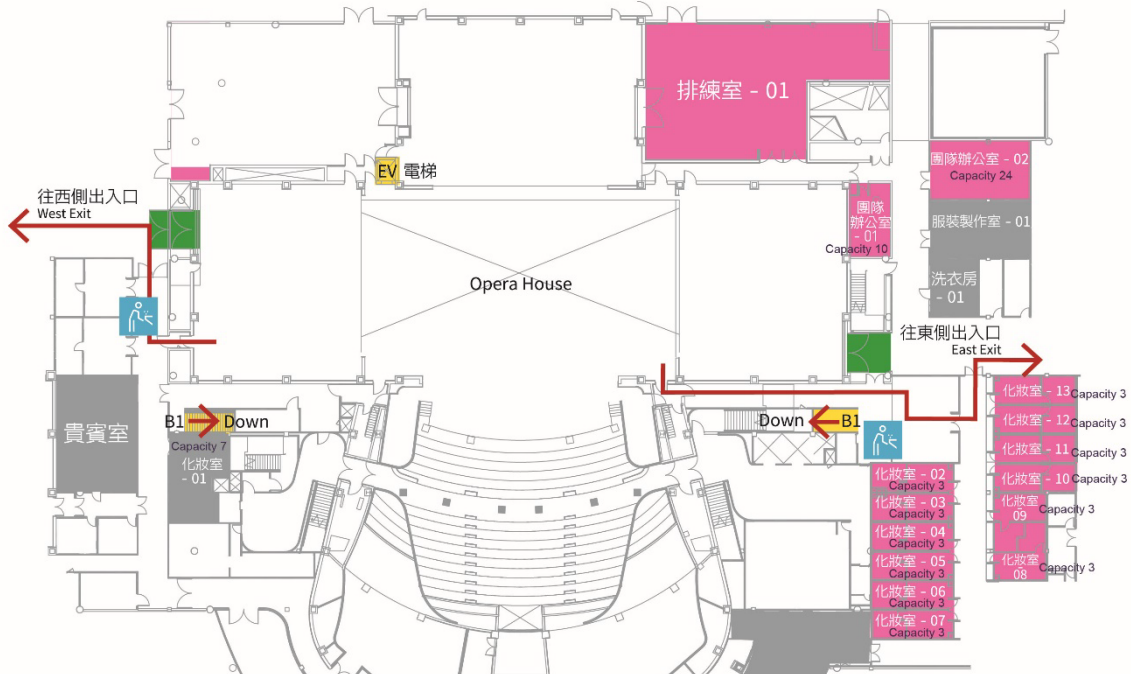
## Opera House Set Up Equipment Recommended Seat

Set Up Equipment Seat	Reserved Seat	Notes
1st Floor RR row Seat 1、2	1st Floor QQ row Seat 1、2 1st Floor RR row Seat 3、4	For Photo Shooting & Video Shooting
1st Floor RR row Seat 19	1st Floor QQ row Seat 19、21、23、25、27	For Photo Shooting & Video Shooting
1st Floor RR row Seat 20	1st Floor QQ row Seat 20、22、24、26、28	For Photo Shooting & Video Shooting
1st Floor L、R Box Seat	Not selling seats	For Photo Shooting & Video Shooting
2nd Floor A row Seat 7	2nd Floor A row Seat 5 2nd Floor B row Seat 7、9、11	For Video Shooting
2nd Floor A row Seat 8	2nd Floor A row Seat 6 2nd Floor B row Seat 8、10、12	For Video Shooting
2nd Floor M row Seat 1、2	1st Floor L row Seat 1、2 1st Floor M row Seat 3、4	For Video Shooting
Set Up Control Area	Reserved Seat	Notes
2nd Floor L row Seat 1~8 2nd Floor M row Seat 1~8	2nd Floor L row Seat 9、10 2nd Floor M row Seat 9、10	

1-7 Plan

# 歌劇院一樓化妝室位置圖

## Opera House 1F Dressing Room Map



- 1162 團隊辦公室 - 01  
Company Office - 01
- 1166 團隊辦公室 - 02  
Company Office - 02
- 1027 組裝工廠  
Scene Shop
- 1171 排練室 - 01  
Rehearsal Room - 01
- 1165 服裝製作室 - 01  
Costume Shop - 01
- 1163 洗衣房 - 01  
Laundry Room-01
- 1058 貴賓室  
VIP room

- 1062 化妝室 - 01  
Dressing Room - 01  
調撥空間
- 1112 化妝室 - 02  
Dressing Room - 02
- 1114 化妝室 - 03  
Dressing Room - 03
- 1116 化妝室 - 04  
Dressing Room - 04
- 1118 化妝室 - 05  
Dressing Room - 05
- 1120 化妝室 - 06  
Dressing Room - 06
- 1122 化妝室 - 07  
Dressing Room - 07

- 1107 交誼廳  
Weiwuying Lounge  
調撥空間
- 1124 化妝室 - 08  
Dressing Room - 08
- 1126 化妝室 - 09  
Dressing Room - 09
- 1128 化妝室 - 10  
Dressing Room - 10
- 1130 化妝室 - 11  
Dressing Room - 11
- 1132 化妝室 - 12  
Dressing Room - 12
- 1134 化妝室 - 13  
Dressing Room - 13

出入口 Entrance	飲水機 Water Dispenser	醫護室 Infirmary	洗手間 Restroom	樓梯 / 電梯 Stairs / Elevator	現在位置 You Are Here
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Figure 1.2- Opera House 1F Plan

# 歌劇院地下一樓化妝室位置圖

## Opera House B1F Dressing Room Map

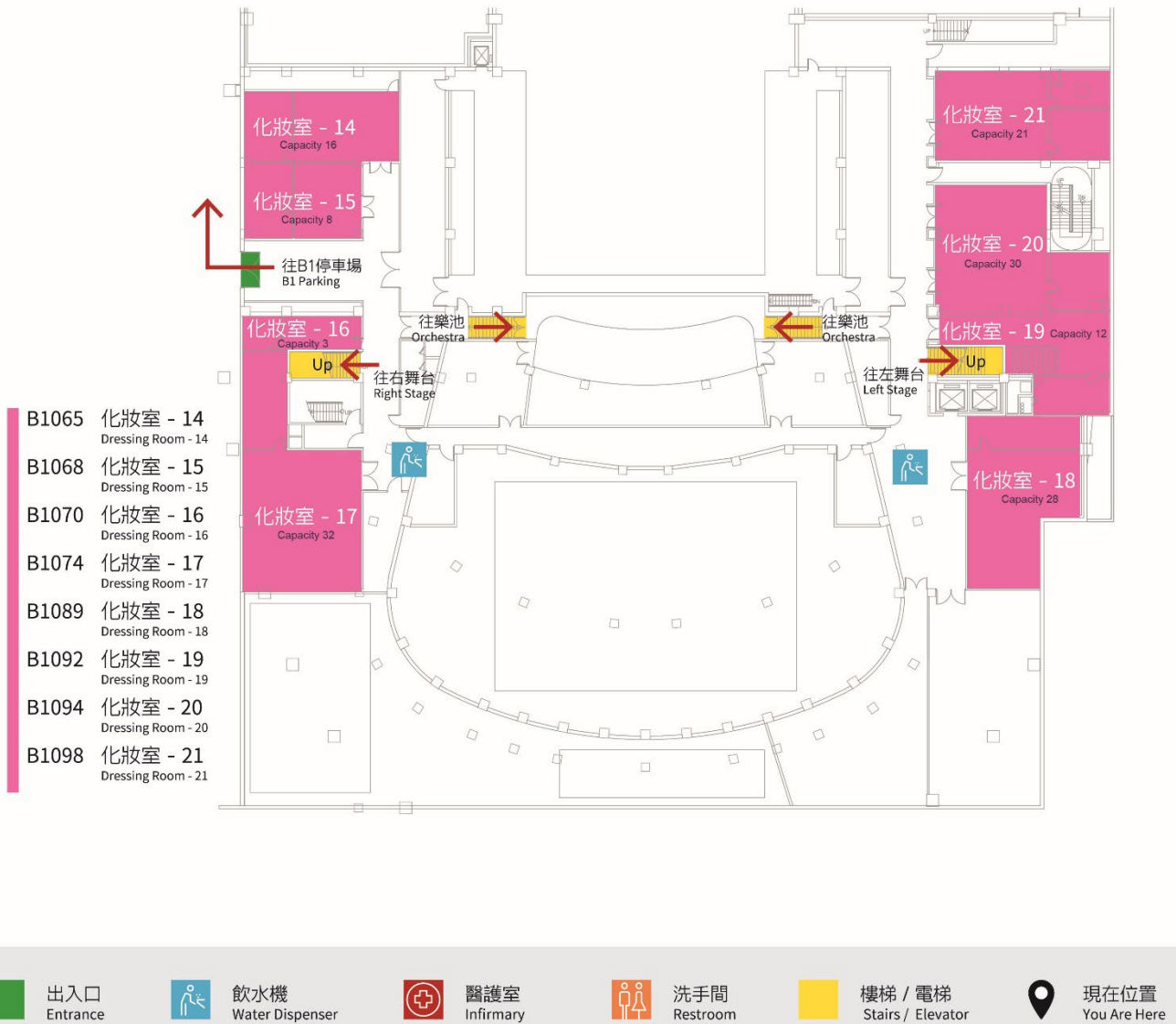


Figure 1.3- Opera House B1F Plan

1-8 Section

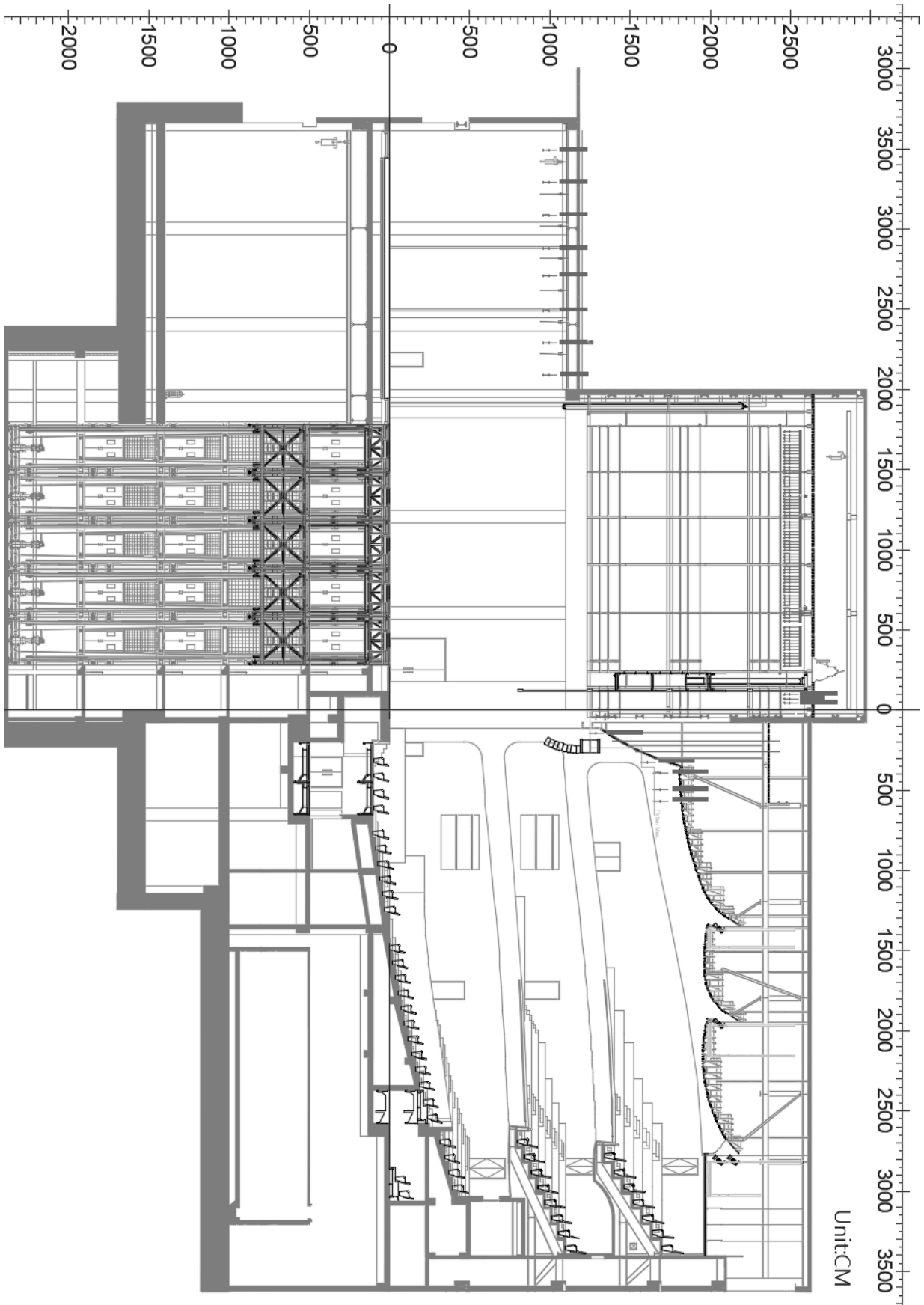


Figure 1.4 Opera House Section

## 2 Stage

### 2-1 Stage

#### 2-1-1 Floor

Black painted composite wood stage floor, the production scenery can secure to the deck by screws but no nails in part of stage area. Please contact the technical service for more detail.

#### 2-1-2 False proscenium

The False proscenium consists of movable tormentor and liftable light bridge.

Building Proscenium size: 20m (width) x 12.6m (height)

Movable tormentor opening: 12m to 20m

Lighting bridge elevation: +0.05m to +11.2m

Apron to PL: 1.2m

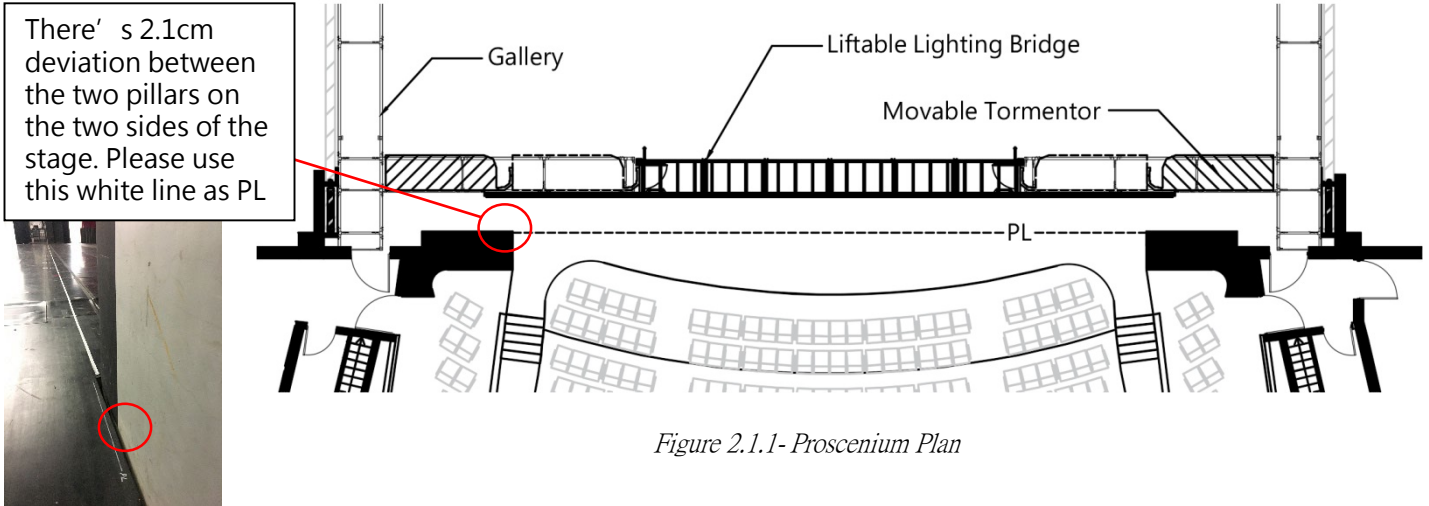


Figure 2.1.1- Proscenium Plan

#### 2-1-3 Stage Dimensions

Main stage: 31.9m (width) x 19.2m (depth) x 25.8 (height) (From stage floor to underside of grid)

Rear stage: 24m (width) x 16.5m (depth) x 11m (height)

Side stage: 17.1m (width) x 19.2m (depth) x 10.7 (height)

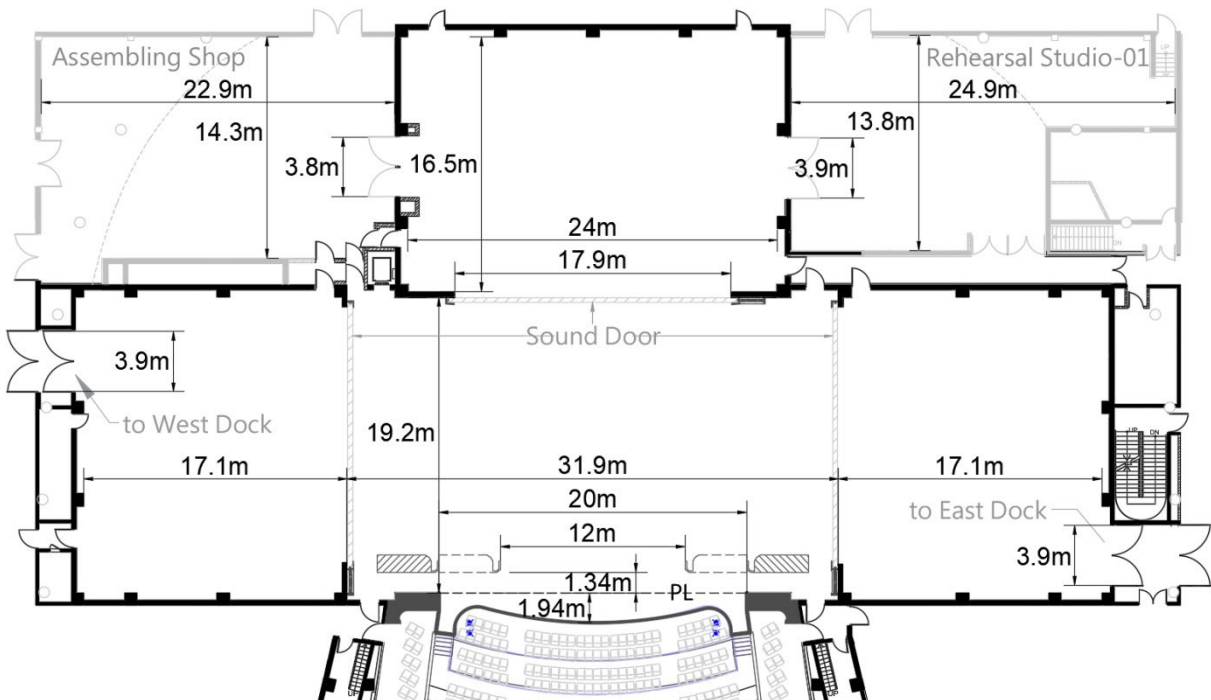


Figure 2.1.2- Stage Plan

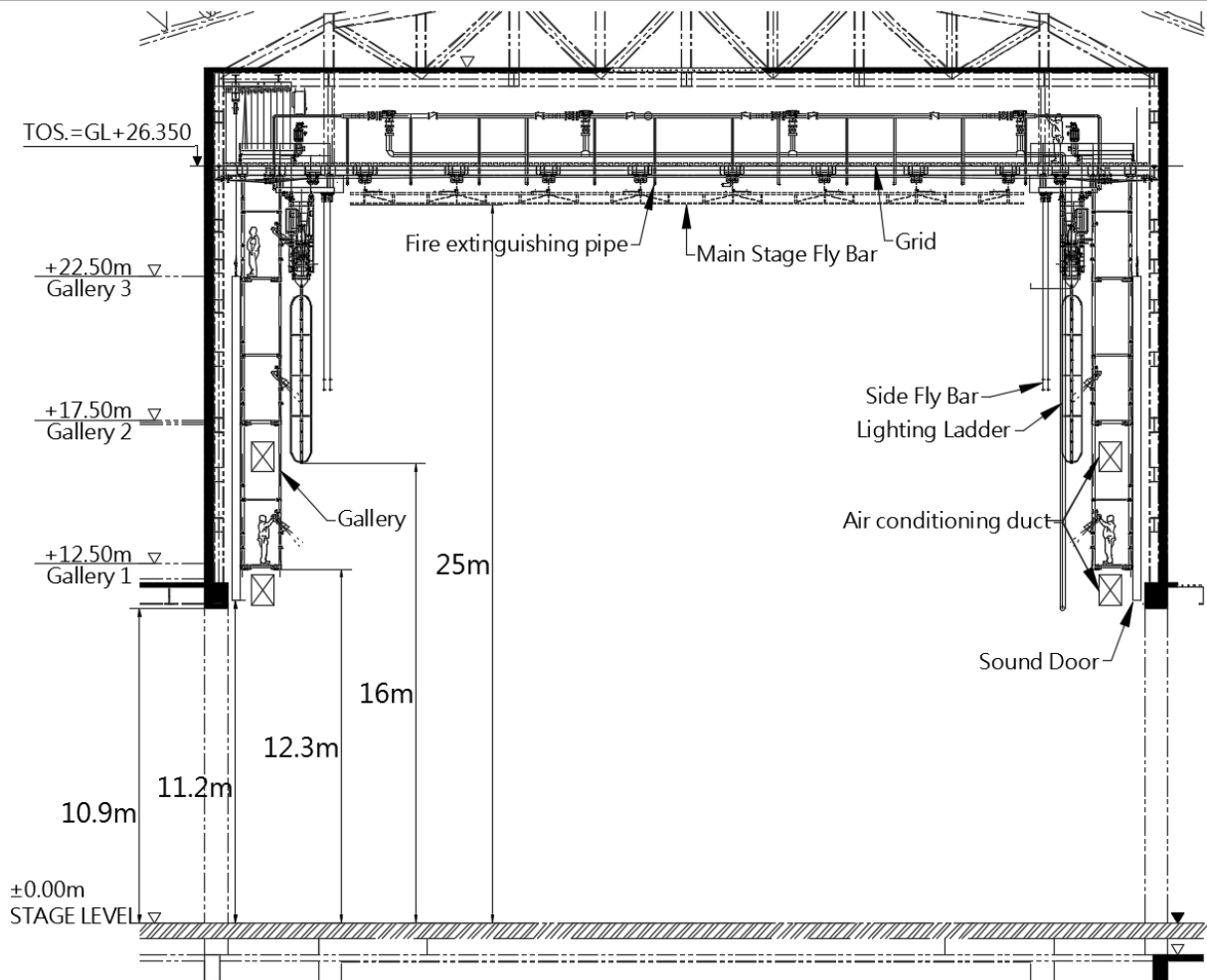


Figure 2.1.3-Stage Elevation

#### 2-1-4 Sound Door

There are three stage sound door between main stage, side stage and rear stage, which can be adjusted according to the performance requirements.

#### 2-1-5 Rehearsal studio -01

There is a separate rehearsal studio connected to the rear stage area.

Size : 24.9 m (width) x 13.8 m (depth) x 10.4 m (height)

Door size(to rear stage) : 4 m (width) x 3.4 m (height)

## 2-2 Elevation Platform

### 2-2-1 Main stage elevator (MSE)

Amount: 5 units

Size: 16 meters (width) x 2.99 meters (depth)

Speed: 0.1 m/s

Distance between Upper and Lower Decks: 5 meters

Locking positions:

Locking positions	
Stage Area	+5m
Stage Area	0m
Stage Area	-0.3m
B2F	-10m
B3F	-14m

※ It is recommended not to move the main stage elevator during performances.

Capacity: (Per set):

Static load: 500 kg/m<sup>2</sup>, 24 tons in total.

Dynamic load: 250 kg/m<sup>2</sup>, 12 tons in total.

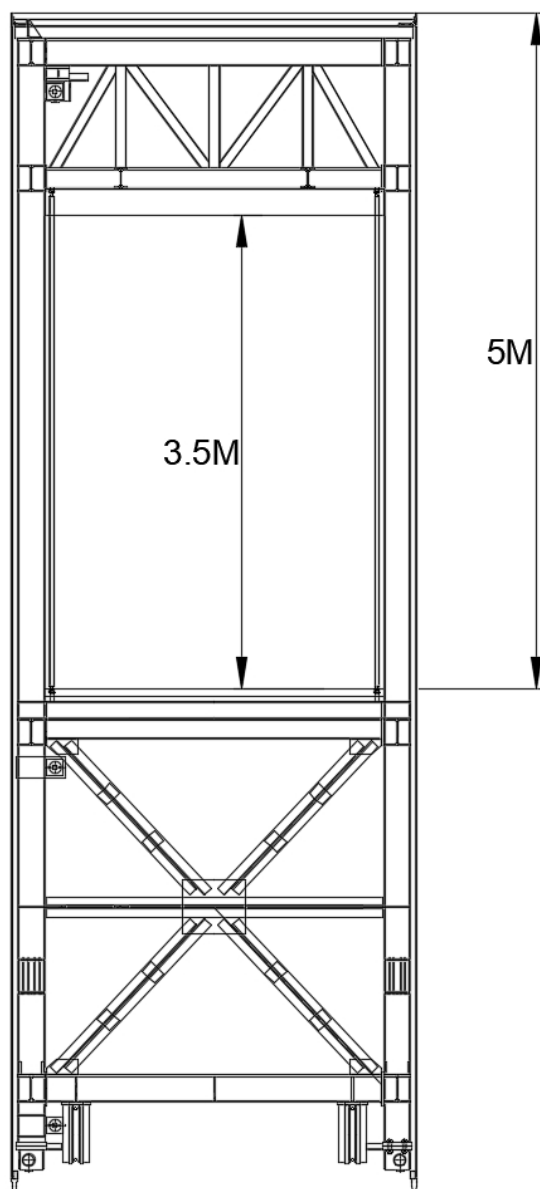


Figure 2.2.1 - Main stage elevator (MSE) (Single Set)

**2-2-2 Trap Door**

All Controlled by C.A.T. system, capable of individual or group operation.

Size: 1 meters (width) x 1 meters (depth)

Quantity: 11 panels per Main stage elevator.

**Capacity:**

Static load: 250 kg/m<sup>2</sup>

Dynamic load: 50 kg/m<sup>2</sup>

- ※ No trap lifting equipment is provided.
- ※ Actual dimensions may vary and should be measured on-site.

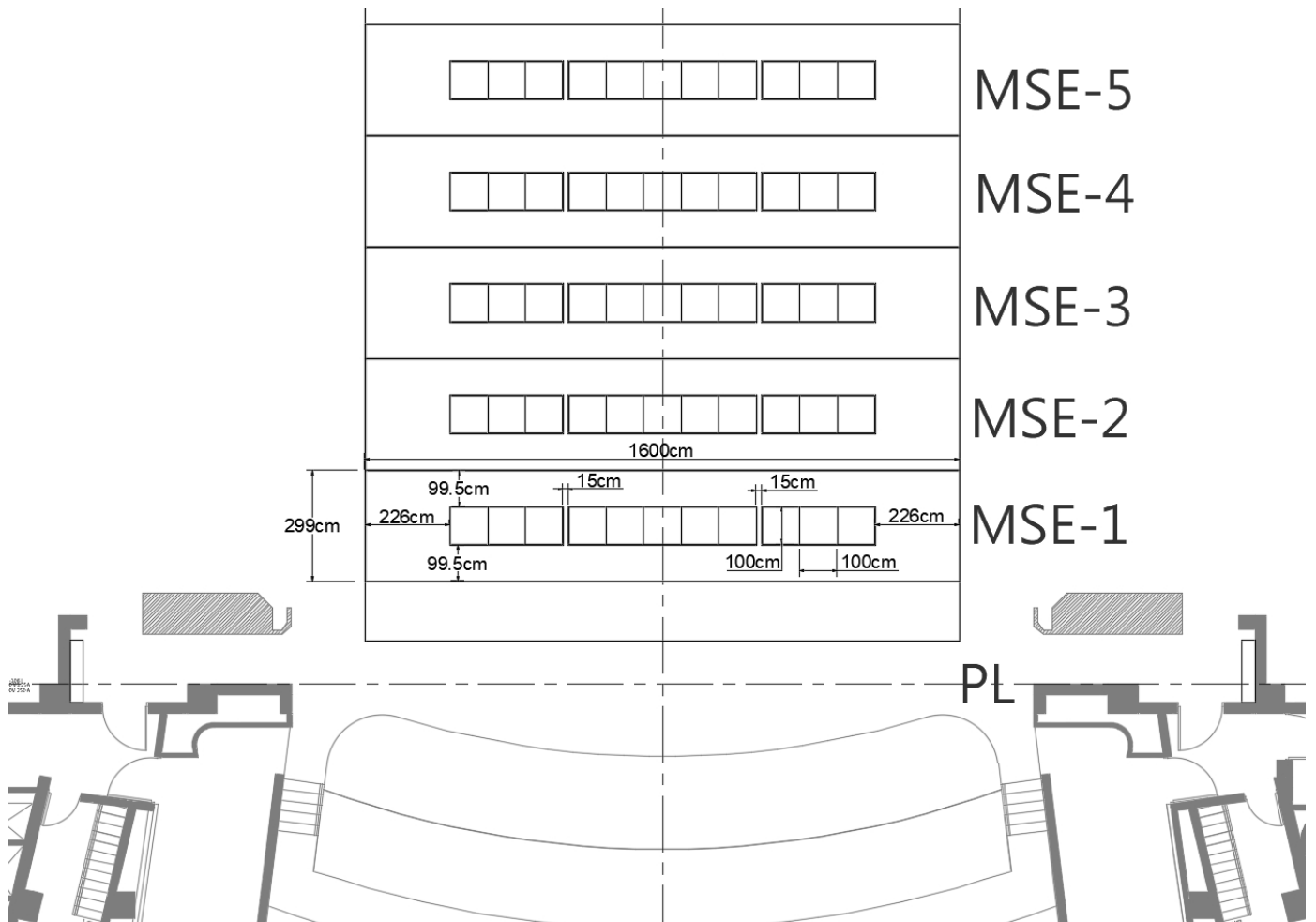


Figure 2.2.2- Trap Doors

2-2-3 Orchestra Pit

Amount: 2 sets, curve shape platform

Size: OP1, 18.6m (width) x 2.49m (depth), 43.2 m<sup>2</sup>

OP2, 18.6m (width) x 1.98m (depth), 37.5m<sup>2</sup>

Elevation: -5m to ±0m (stage level)

Capacity:

Static load: 750kg/ m<sup>2</sup>

Dynamic load: 500kg/ m<sup>2</sup>

Speed: 0.1m/ sec

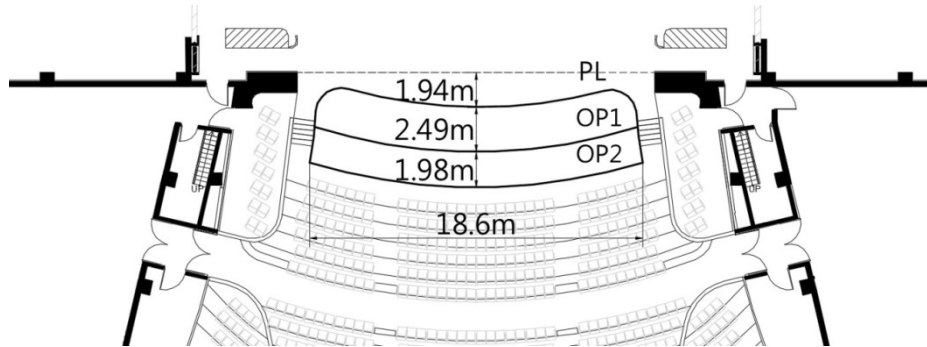


Figure 2.2.3.1- Orchestra Pit

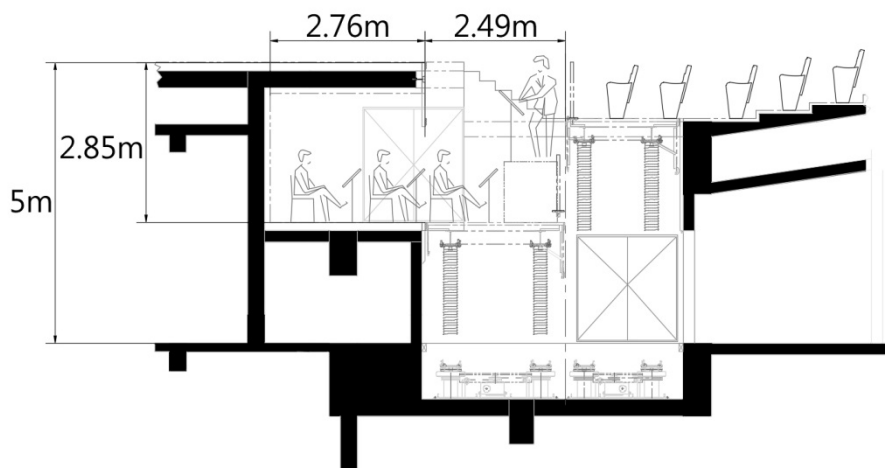


Figure 2.2.3.2- Section of Orchestra Pit

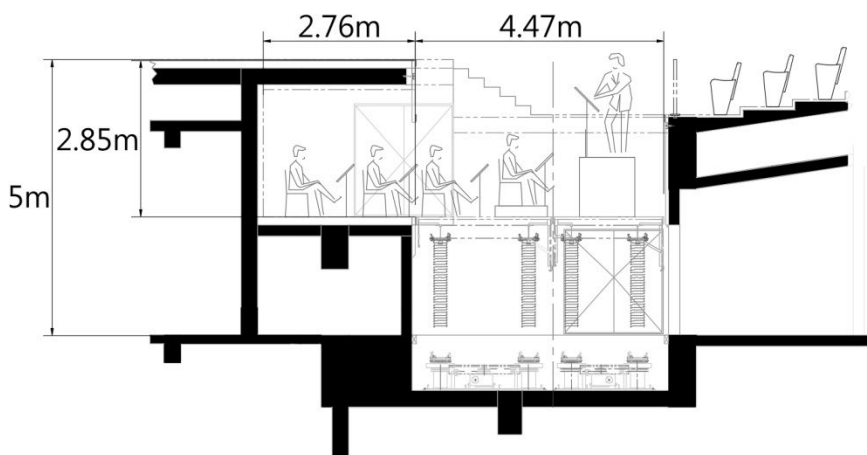


Figure 2.2.3.3- Section of Orchestra Pit

2-2-4 Auditorium Mixing Deck

Size: 4.2m (width) x 1.9m (depth), 8 m<sup>2</sup>

Elevation: -0.012m (B1) to 1.85m

Capacity

Dead load: 500kg/ m<sup>2</sup>

Static load: 250kg/ m<sup>2</sup>

Load in from stage level (1F)

Row QQ ~RR, No.1~8, 16 Seats reserved

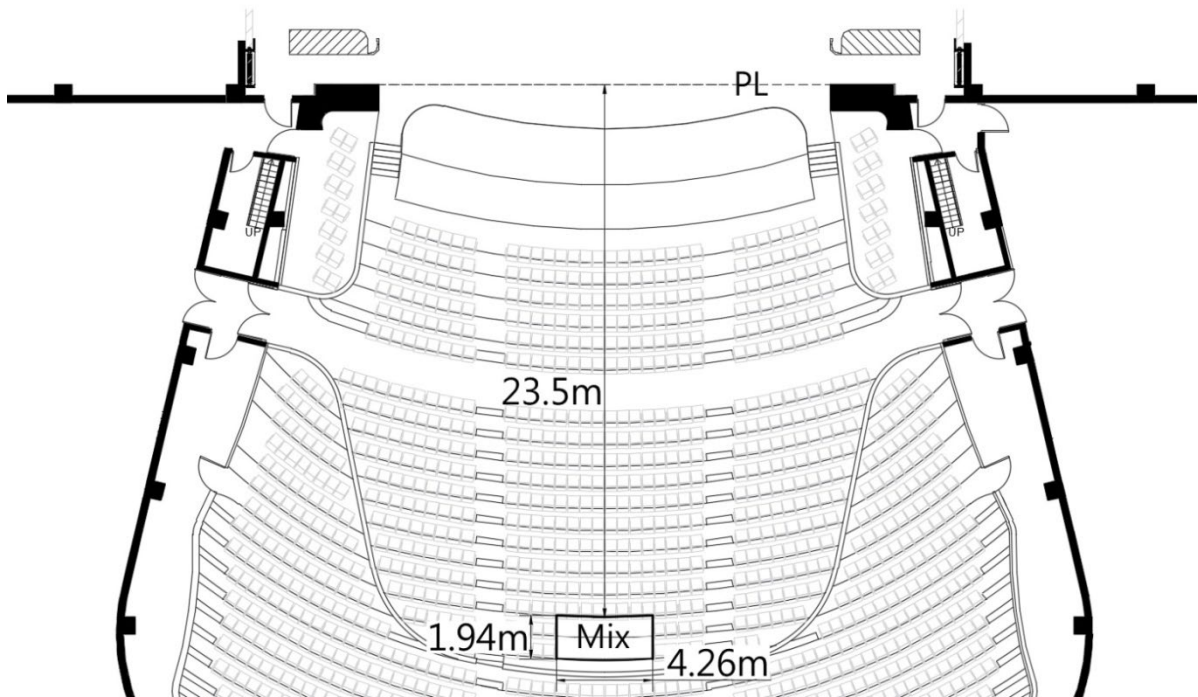


Figure 2.2.4.1- Auditorium Mixing Deck

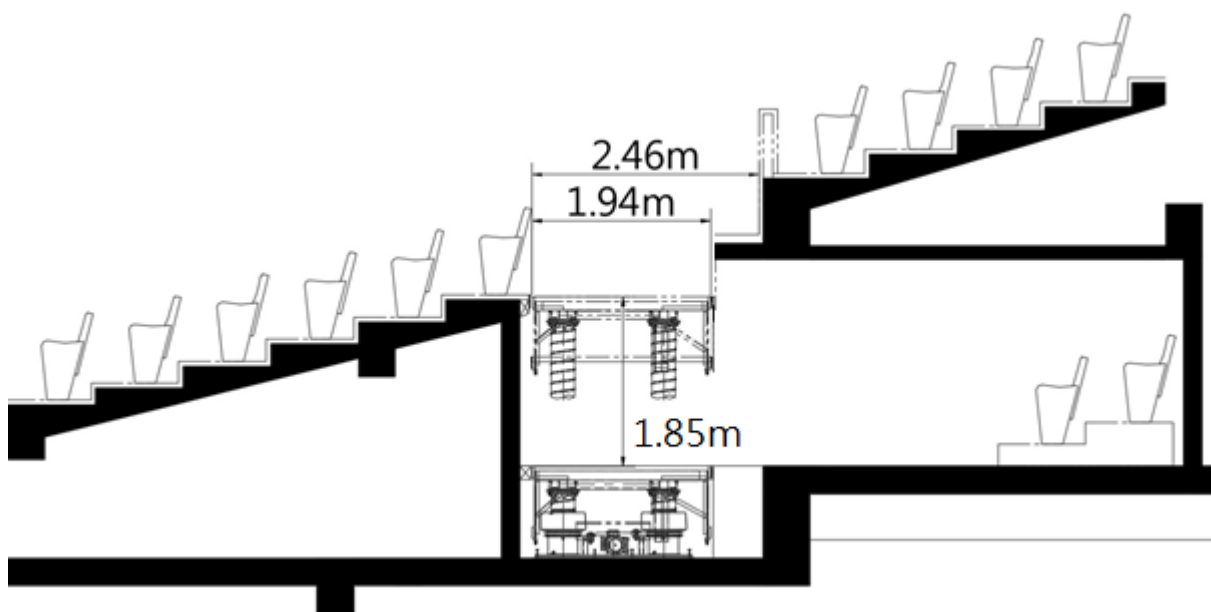


Figure 2.2.4.2- Auditorium Mixing Deck

## 2-3 Revolving Stage Wagon

### 2-3-1 Revolving Stage Wagon

Size: 16 meters (width) x 15 meters (depth), 0.3 meters (height)

Revolving Size: 14 m (diameter)

Maximum Rotation Speed: 8.2 degrees per second

Positioning: Free run, with a minimum rotation of > 1 degree

Rotation Directions: Clockwise and Reverse

Positions:

Distance to PL	
Position 1	1.14 meters
Position 2	2.74 meters
Position 3	19.45 meters

※ It is recommended not to move the whole wagon during performances.

**Note:** The compensating platform should not have any load during the lifting process.

**Capacity of the wagon:**

Static load: 500 kg/m<sup>2</sup>, 24 tons in total.

Dynamic load: 100 kg/m<sup>2</sup>, 12 tons in total.

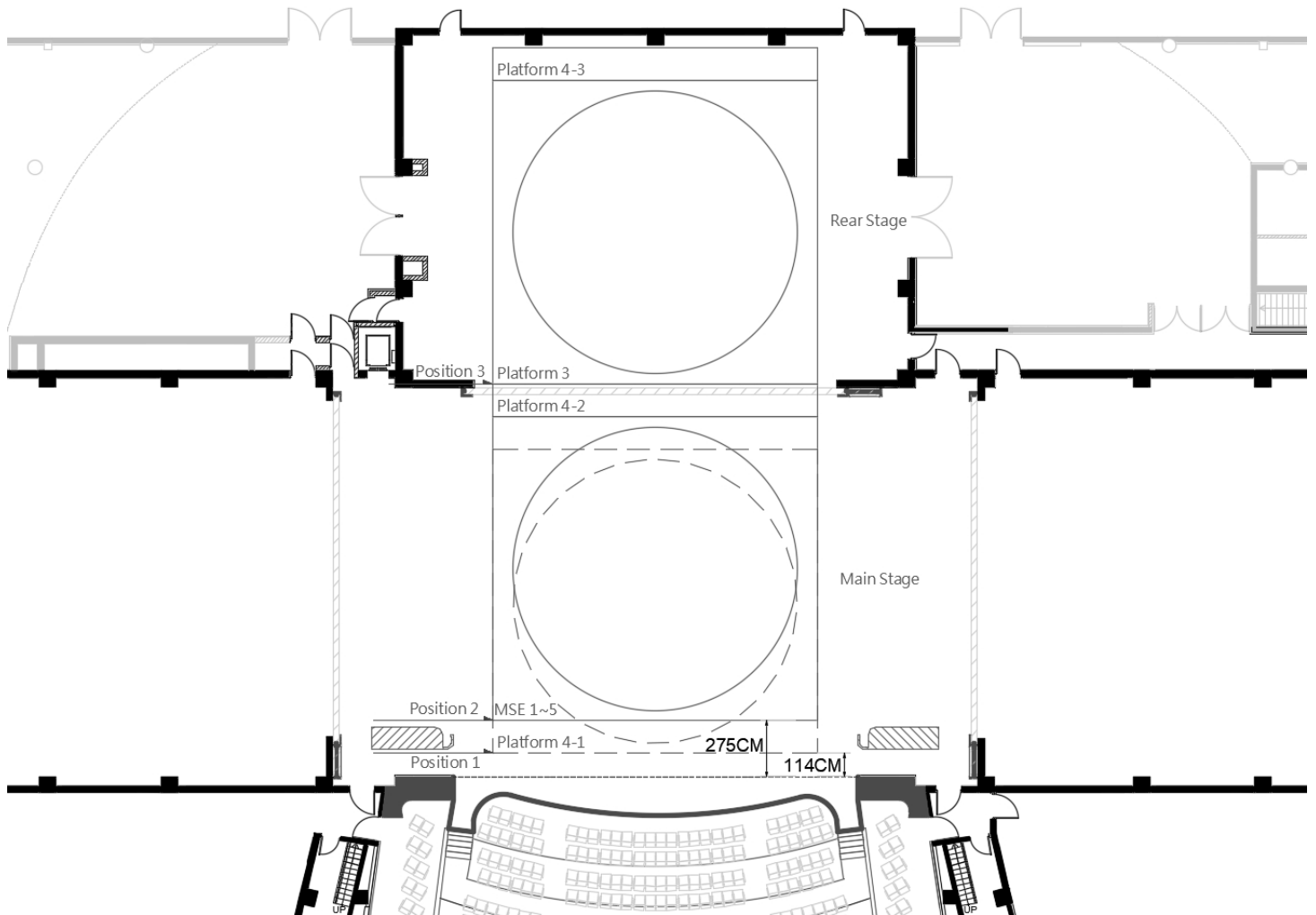


Figure 2.3.1 - Revolving Stage Wagon

## 2-4 Fly Bars

### 2-4-1 Controller

Manufactory by Waagner Biro, CAT190 x 2, CAT192 x 2, CAT120R x 2

### 2-4-2 Main Stage Fly bars

24m (length), 4.8cm (diameter), 74 sets

Fly space from +0.05m to 24.55m

**Maximum load** (in different speed)

0.5 m/s<sup>2</sup> : 750kg

1.0 m/s<sup>2</sup> : 500kg

1.8 m/s<sup>2</sup> : 350kg

### 2-4-3 House Curtain

Guillotine, 13m (height) x 12.9m (width) x2

Distance to PL: 0.6m

**Maximum load** (in different speed)

0.5 m/s<sup>2</sup> : 750kg

1.0 m/s<sup>2</sup> : 500kg

2.4 m/s<sup>2</sup> : 350kg

### 2-4-4 Side Fly Bar (2 on both side)

14.8m (length), 4.8cm (diameter), 4 sets

Fly space from +0.05m to 24.6m

Distance to CL: 12.4m and 12.6m each

**Maximum load** (in different speed)

0.5 m/s<sup>2</sup> : 750kg

1.0 m/s<sup>2</sup> : 500kg

1.8 m/s<sup>2</sup> : 350kg

### 2-4-5 Gauze Bar

27m (length), 4.8cm (diameter), 2 sets

Fly space from +0.05m to 24.6m

Distance to PL: 0.25m and 0.95m each

**Maximum load** (in different speed)

0.5 m/s<sup>2</sup> : 750kg

1.0 m/s<sup>2</sup> : 500kg

2.4 m/s<sup>2</sup> : 350kg

### 2-4-6 Rear Stage Drum Fly Bar

21m (length), 4.8cm (diameter), 8 sets

Fly space from +0.05m to 9.6m

Distance to PL: 21.05m / 23.05m / 25.05m / 27.05m / 29.05m / 31.05m / 33.05m / 35.05m

Maximum speed/load : 0.2 M/ S : 300 kg

**Rear Stage Fly Bar 02 is out of service.**

### 2-4-7 Auditorium Fly Bar

20m (length), 4.8cm (diameter), 5 sets

Fly space from

AFB01 +0.05m to 12.5m

AFB02 +0.0m to 15.7m

AFB03 +0.05m to 16.5m

AFB04 +0.05m to 16.5m

AFB05 +0.05m to 16.5m

Distance to PL: -1.40m / -3.15m / -3.95m / -4.75m / -5.55m

**Maximum load (in different speed)**

- 1 m/s<sup>2</sup> : 1,000 kg
- 1.8 m/s<sup>2</sup> : 350 kg

**2-4-8 Lighting Ladder (6 on both side stage)**

Size: 6.2m (height) x 0.69m (width) x 0.72m(depth)  
 Distance to CL: 13.4m

Maximum load : 0.2 m/s<sup>2</sup> : 750kg

**2-4-9 Bar under Lighting Bridge**

11.5 m (length), 4.8cm (diameter)  
 Fly space from +1.05m to 12.2 m  
 Capacity: Single point 45 kg, every meter 90 kg, total load 750 kg

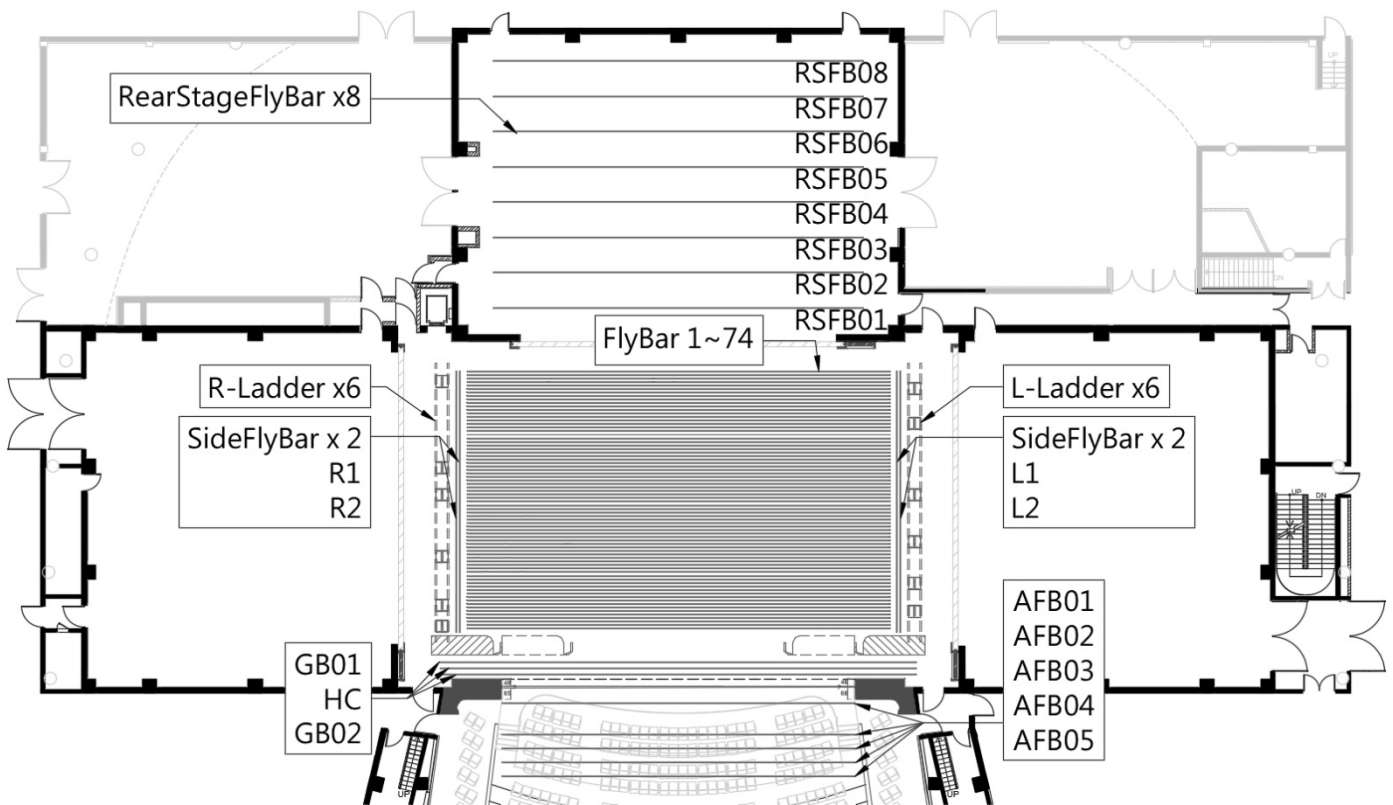


Figure 2.4.1- Rigging Plan

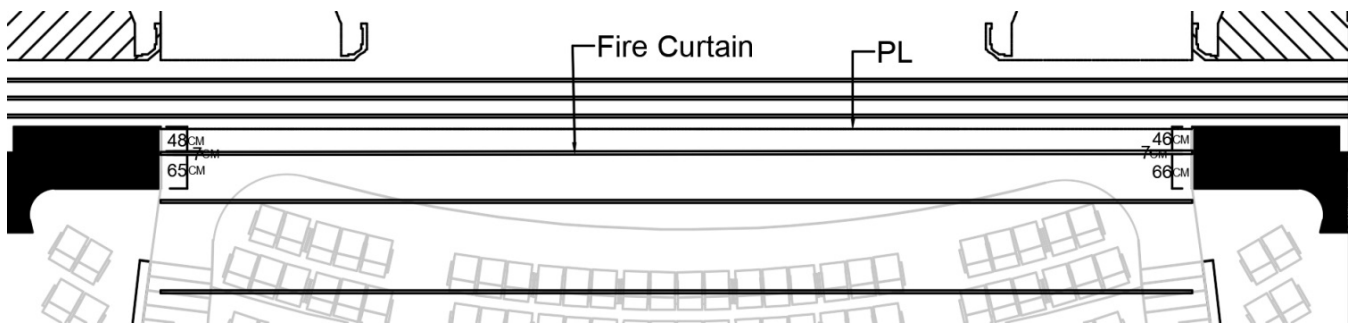


Figure 2.4.2- Fire Curtain

※ There should be no obstacles beneath the Fire Curtain

## 2-4-10 Balcony Rail

There are 2 sets of rail on the 3/F and 4/F balconies, which are 3 meters long.

Maximum load: 50kg/m

\*No riggings outside these rails.

\*Reference Figure 3.4.2.2

## 2-5 Hoist

### 2-5-1 Point Hoist

8 sets, wire length 31.2m

Maximum Load: 250 kg

Speed: 0 to 1.8m/s

Location: R2F(grid)

### 2-5-2 Chain Hoist (type C1)

Complies with safety standards BGV-C1, EN 61508, DIN 56950

Maximum Load: 1,000 kg

Speed: Fixed speed of 0.16 m/s

Location: Main stage area: 12 sets, length of chain: 30 meters, Rear Stage: 14 sets, length of chain: 10 meters

### 2-5-3 Chain Hoist (type D8 plus)

Complies with safety standards BGV-D8 Plus, EN 61508, DIN 56950

Maximum Load: 1,000 kg

Speed: Fixed speed of 0.16 m/s

Location: Stage Left/Right: 8 sets each, length of chain: 12 meters, Rear Lower Stage (B3F): 10 sets, length of chain: 10 meters

### 2-5-4 Chain Hoist (Speakers)

Complies with SGS RA/2016/90004C, RA/2016/90005C

Maximum load: 1,000 kg

Speed: Fixed speed of 0.06 m/s

Location: grid above the orchestra pit

※ Not available for general use.

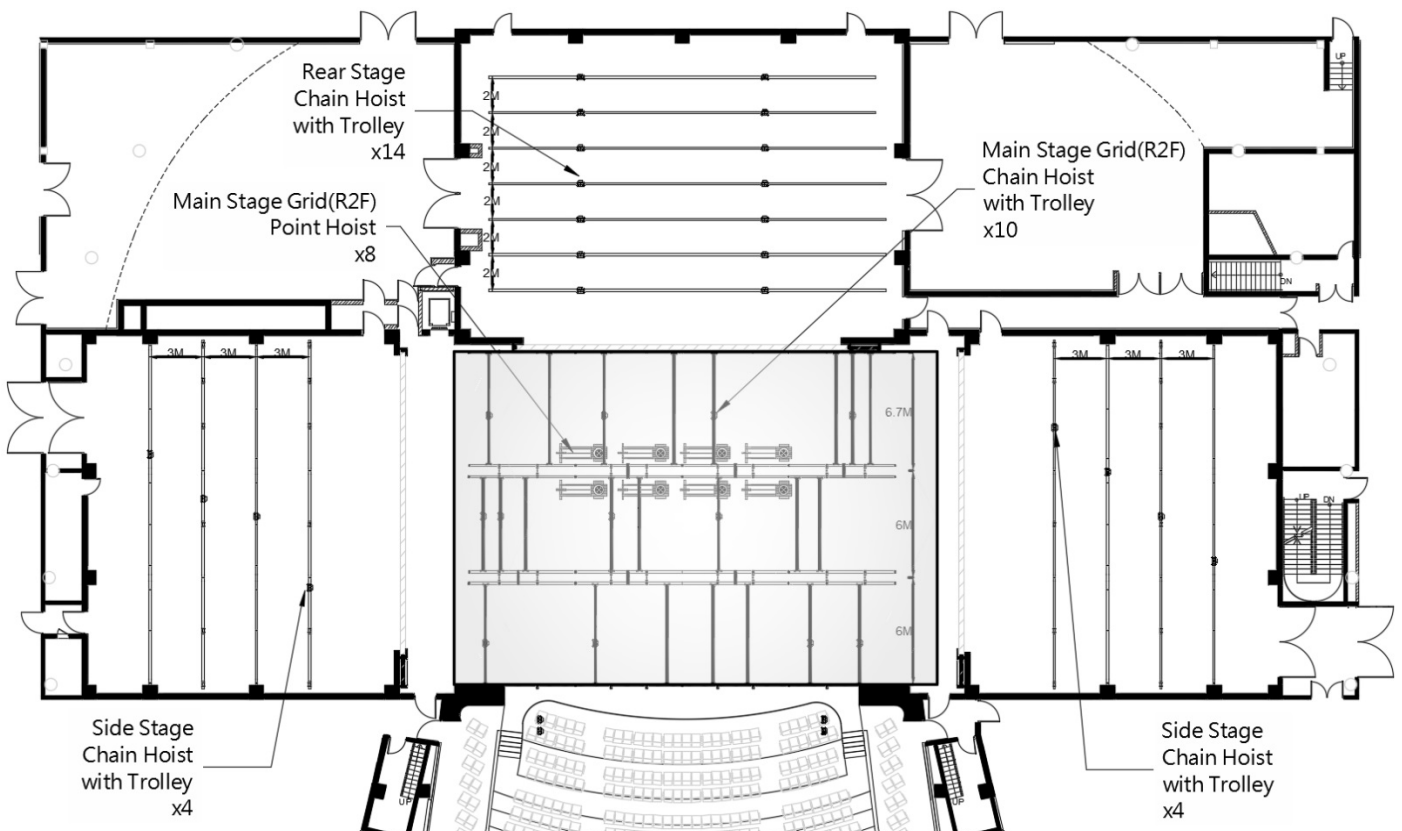


Figure 2.5.1- Hoist plan

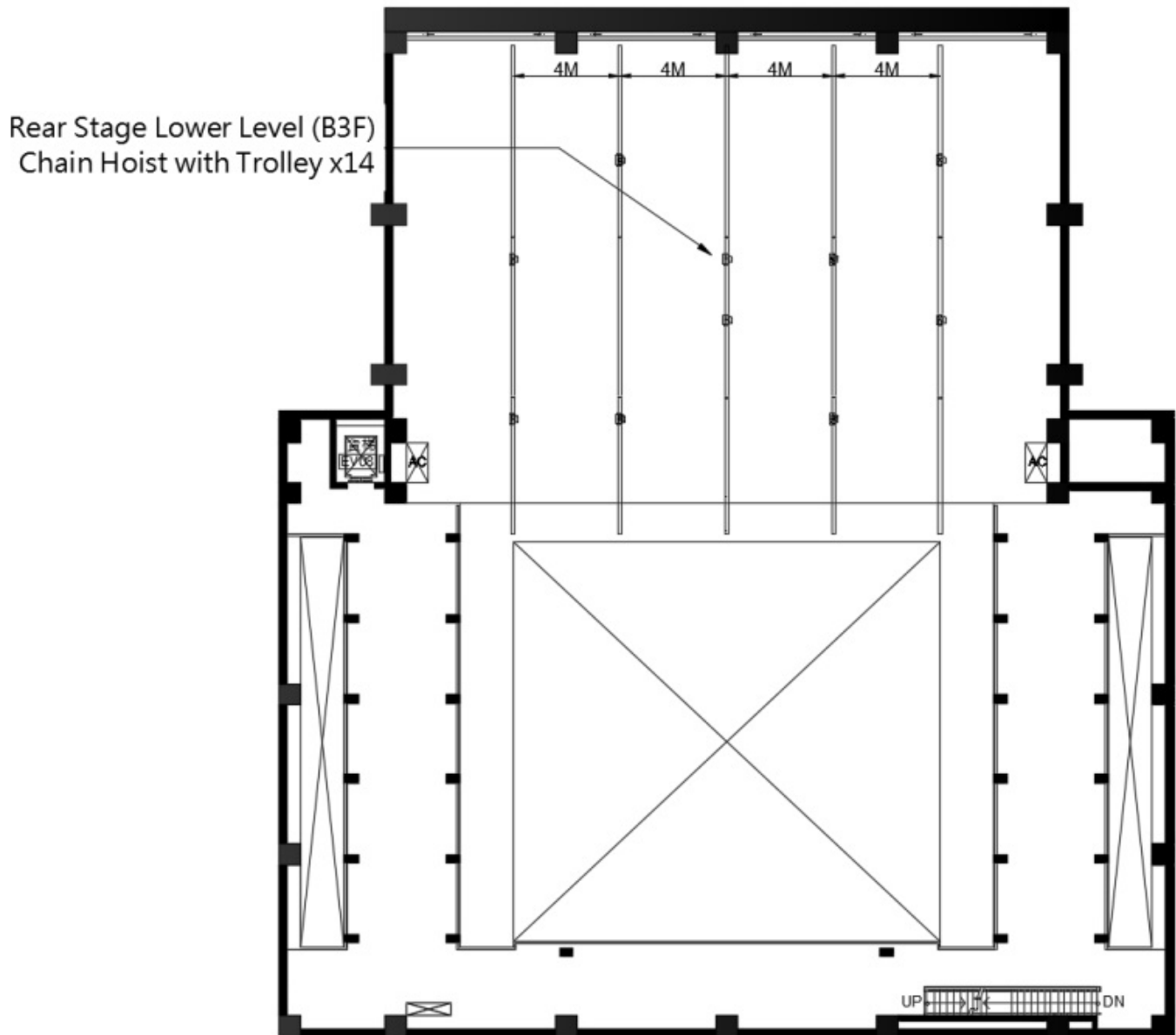


Figure 2.5.2- Hoist plan

## 2-6 Curtain and Others

Item Number	Product Name	Quantity	Notes (Unit: Meter)	Paid Item
01	House Curtain	1 pair	13 x 12.9 ShowTex –Paris CS(Black)	
02	Border	6 pcs	4.5 × 24 ShowTex –Bellini ※ basic setting: 6 pcs	
03	Border	3 pcs	3 × 24 ShowTex –Bellini	
04	Leg	22 pcs	12 × 4.5 ShowTex –Bellini ※ basic setting: 12 pcs	
05	Leg	12 pcs	12 × 3 ShowTex –Bellini	
06	Tab	10 pcs	12.3 × 3 ShowTex –Wool Serge Panne	
07	Front and Rear Projection Screen	3 pcs	3 types of screen: 10.5 x 22 Black : ShowTex- RetroScreen Black x 1 pc 11.5 x 24 Grey : ShowTex- RetroScreen Grey plus x 1 pc 12.9 x 7 Grey : Gerriets t 21240000 x 1 pc, shared with Play House	*
08	Scrim	3 pcs	10.5 x 24 ShowTex - Sharks Tooth Scrim 6 point. in White x 1 pc 10.5 x 24 ShowTex - Sharks Tooth Scrim 6 point. in Black x 1 pc 10.5 x 24 ShowTex - Sharks Tooth Scrim 8 point. in Black x 1 pc	*
09	Cotton Cyclorama	1 pc	11.5 × 24 ShowTex –Cyclo 270	
10	Black Backdrop	1 pc	12 × 22 ShowTex –Bellini	
		2 pcs	12 × 12 ShowTex –Bellini	
11	Wooden Sprung Floor 2m x 1m	152 pcs	1. Shared with Playhouse. 2. Total installation area (adjustable) 20m x 16m, built-up, portable with latch, wooden plywood with high density mitigation block, 3.9 cm (depth), point load 500kg, average shock-absorbing ability 65 %.	
12	Wooden Sprung Floor 1m x 1m	16 pcs		
13	Black Dance Floor (For Sprung Floor only)	8 rolls	Harlequin – Cascade, 20m (length) x 2m (width) x 2mm (depth), shared with Playhouse.	
14	Black and Grey Dance Floor	24 rolls	20m (length) x 1m (width) x 1.8mm (depth). Exclusive to the Opera House.	
15	Black and Gray Dance Floor	18 rolls	20m (length) x 2m (width) x 1.7mm (depth). Shared with Playhouse.	
16	Hydraulic Lift Platform (for Orchestra Pit)	1 pc	1. 1.8 m (length) x 0.9 m (width), Elevation : 1 m-1.5 m 2. .Shared with Playhouse.	*

Items with \* mark are charged items. Please refer to the rate tables on [web link](#)

[www.npac-weiwuying.org/service/venue-hire?lang=en#regulation](http://www.npac-weiwuying.org/service/venue-hire?lang=en#regulation)

## 2-7 Fly Bar List

Bar Number	Distance to PL	Content	Length ( cm )	Bar Number	Distance to PL	Content	Length ( cm )
<b>FLYBARS_AUDITORIUM / High Limitation : AFB01-12.5m 、 AFB02-15.7m 、 AFB03~5-16.5m Low Limitation : 1.25m</b>							
AFB05	-565		2000				
AFB04	-495		2000				
AFB03	-390		2000				
AFB02	-325		2000				
AFB01	-145		2000				
<b>PL</b>							
<b>GAUZE_BARS</b>							
GB02	45		2700				
HC	60	HOUSE_CURTAIN Guillotine	2700 (1300 h x 1290w *2)				
GB01	95		2700				
<b>FLYBARS_STAGE. / High Limitation : 24.6m Low Limitation : 1.25m</b>							
FB01	275		2400	FB38	1015		2400
FB02	295		2400	FB39	1035		2400
FB03	315		2400	FB40	1055		2400
FB04	335		2400	FB41	1075		2400
FB05	355		2400	FB42	1095		2400
FB06	375		2400	FB43	1115		2400
FB07	395		2400	FB44	1135		2400
FB08	415		2400	FB45	1155		2400
FB09	435		2400	FB46	1175		2400
FB10	455		2400	FB47	1195		2400
FB11	475		2400	FB48	1215		2400
FB12	495		2400	FB49	1235		2400
FB13	515		2400	FB50	1255		2400
FB14	535		2400	FB51	1275		2400
FB15	555		2400	FB52	1295		2400
FB16	575		2400	FB53	1315		2400
FB17	595		2400	FB54	1335	Out of service	2400
FB18	615		2400	FB55	1355		2400
FB19	635		2400	FB56	1375		2400
FB20	655		2400	FB57	1395		2400
FB21	675		2400	FB58	1415		2400
FB22	695		2400	FB59	1435		2400
FB23	715		2400	FB60	1455		2400
FB24	735		2400	FB61	1475		2400
FB25	755		2400	FB62	1495	Out of service	2400
FB26	775		2400	FB63	1515		2400
FB27	795		2400	FB64	1535		2400
FB28	815		2400	FB65	1555		2400
FB29	835		2400	FB66	1575		2400

FB30	855		2400	FB67	1595		2400
FB31	875		2400	FB68	1615		2400
FB32	895		2400	FB69	1635		2400
FB33	915		2400	FB70	1655		2400
FB34	935		2400	FB71	1675		2400
FB35	955		2400	FB72	1695		2400
FB36	975		2400	FB73	1715		2400
FB37	995		2400	FB74	1735		2400
<b>FLYBARS_SIDE / High Limitation : 24.6m Low Limitation : 1.25m</b>							
SFB01	1240		1480	SFB03	1240		1480
SFB02	1260		1480	SFB04	1260		1480
<b>FLYBARS_REAR / High Limitation : 12m Low Limitation : 1.25m</b>							
FBR01	2090		2100	FBR05	2875		2100
FBR02	2290	<b>Out of service</b>	2100	FBR06	3090		2100
FBR03	2490		2100	FBR07	3290		2100
FBR04	2710		2100	FBR08	3490		2100

## 3 Lighting

### 3-1 Lighting instrument

Item	Position	Model	Specifications	Quantity	Frame Size	Note	Paid Item	
Lighting Console	Control Booth	GrandMA 2 Light		1				
	Auditorium			1				
Dimmer System		State Automation Solution (Total 1056ch)	220V 3kW/Circuit	1008ch				
			220V 5kW/ Circuit	48ch				
Ellipsoidal Reflector Spotlight	Catwalk 1	Selecon SPX 5°	220V/800W	16	24.5x24.5cm			
		ETC Source Four 10°	220V/750W	20	30.5x30.5cm			
	Catwalk 2	Selecon SPX 5°	220V/800W	16	24.5x24.5cm			
		ETC Source Four 10°	220V/750W	20	30.5x30.5cm			
	Catwalk 3	Selecon SPX 5°	220V/800W	8	24.5x24.5cm			
		ETC Source Four 10°	220V/750W	20	30.5x30.5cm			
	2F Lighting Box (SL/SR)	Selecon SPX 15°-35°	220V/800W	12/12	15.8x15.8cm			
	3F Lighting Box (SL/SR)	Selecon SPX 14°	220V/800W	12/12				
	Storage		Strand Leko Lite 10°	220V/800W	10	30.5x30.5cm		
			Selecon SPX 14°		15	15.8x15.8cm		
			Selecon SPX 19°		80			
			Selecon SPX 26°		70			
Selecon SPX 36°			50					
Selecon SPX 15°-35°			5					
ETC Source Four 50°	220V/750W	20	15.9x15.9cm					
Side Tower	Selecon SPX 26°+15°-35°	220V/800W	1+1	15.8x15.8cm	10 Sets			
2KW Fresnel Spotlight 8"	Storage	Selecon Arena Theatre 8" Fresnel 7°-60°	220V/2kW	80	24.5x24.5cm			
Parabolic Aluminized Reflector Spotlight		PAR 64-Kupo PL-64LB	220V/1kW	96	25.4x25.4cm	Lamp : W x16 、 M x32 、 N x32 、 VN x16		
CYC Light		Selecon Aurora 4-Cell Linear CYC	220V/1kW	12	30.5x31.5cm			
Ground Row		Selecon Aurora 3-Cell Linear GroundRow		12				
Long Throw Follow Spot	Catwalk 3	Lycian M2 Model 2060 2.5	220V/2.5kW	3				
HMI Fresnel Spotlight 12"	Storage	ARRI D40 HMI Fresnel	220V/4kW	6	With Douser (Note 1)		*	
Strip Light		Selecon PL TR2 RGB 18 Striplights	110-220V/ 2.5A-1.3A 280W	12		If you need the manual of strip lights, please contact TC team.	*	
Fog Machine		Antari F-5D	220V/3.6A 810W	4			*	
Haze Machine		Antari HZ-500	220V/2A 480W	4			*	
Effect Fan		Antari AF-4	220V/0.48A 115W	8			*	
Kupo kupole extends		FoH	Extends from 210cm to 370cm. Max weight: 12 kg		1 set		There are 2 mini profile lights for FoH backdrop	*
Dimmable fluorescent lamp (RGBW)	Storage	LDDE SpectraConnect5 LED	100-240V/ 160W	10	With Barn doors		*	


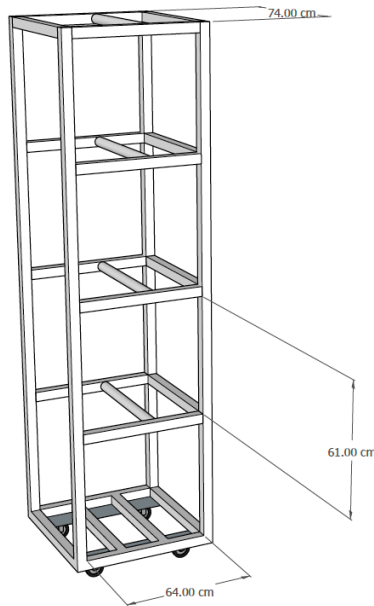
Music Light	Storage	RATstands Trio4 LED Light	100-240V	100		*
Lighting console		Grand MA3 Compact XT		2		*

Items with \* mark are paid items. Please refer to the rate tables of National Kaohsiung Center for the Arts.

Note 1\_Brand : Teclumen

Model : Lite dim DMX dia 380mm

3-2 Accessories

Item	Specifications	Size	Quantity
Barn Door	2kW Fresnel		40
Iris	For Selecon Ellipsoidal Reflector Spotlight		80
Gobo Holder	For Selecon Ellipsoidal Reflector Spotlight	B Size	100
	For ETC Source Four Ellipsoidal Reflector spotlight	A Size	30
Power Distribution Box	8CIR CEE Form Female Plug 		60
Multi-Cable	16pin Multi-Cable Harting Connector	5m	20
		10m	15
		15m	10
Ex-Cable	CEE16A	1.5m	60
		2m	55
		3m	80
		5m	70
		10m	50
		15m	45
		20m	20
Y-Cord	CEE16A Parallel Cord		80
Adapter Cable	CEE 16A(M) To Stage-Pin(F)		50
Boom Base	Boom Base & Pipe Maximum load : 40kg	Boom Base : 45cm(W)x60cm(L) Pipe:300cm	12
Portable Side Light Tower		74cm(W)x74cm(L)x280cm(H)	16

Spring-driven Power Cable Reel	Grid above Stage		32
	Grid above Orchestra Pit		8
Spring-driven DMX Cable Reel	Grid above Stage		18
	Grid above Orchestra Pit		8
DMX Extension cable Located at the grid	5 pin XLR, prepared for DMX cable reels	10 meters	15
		20 meters	10

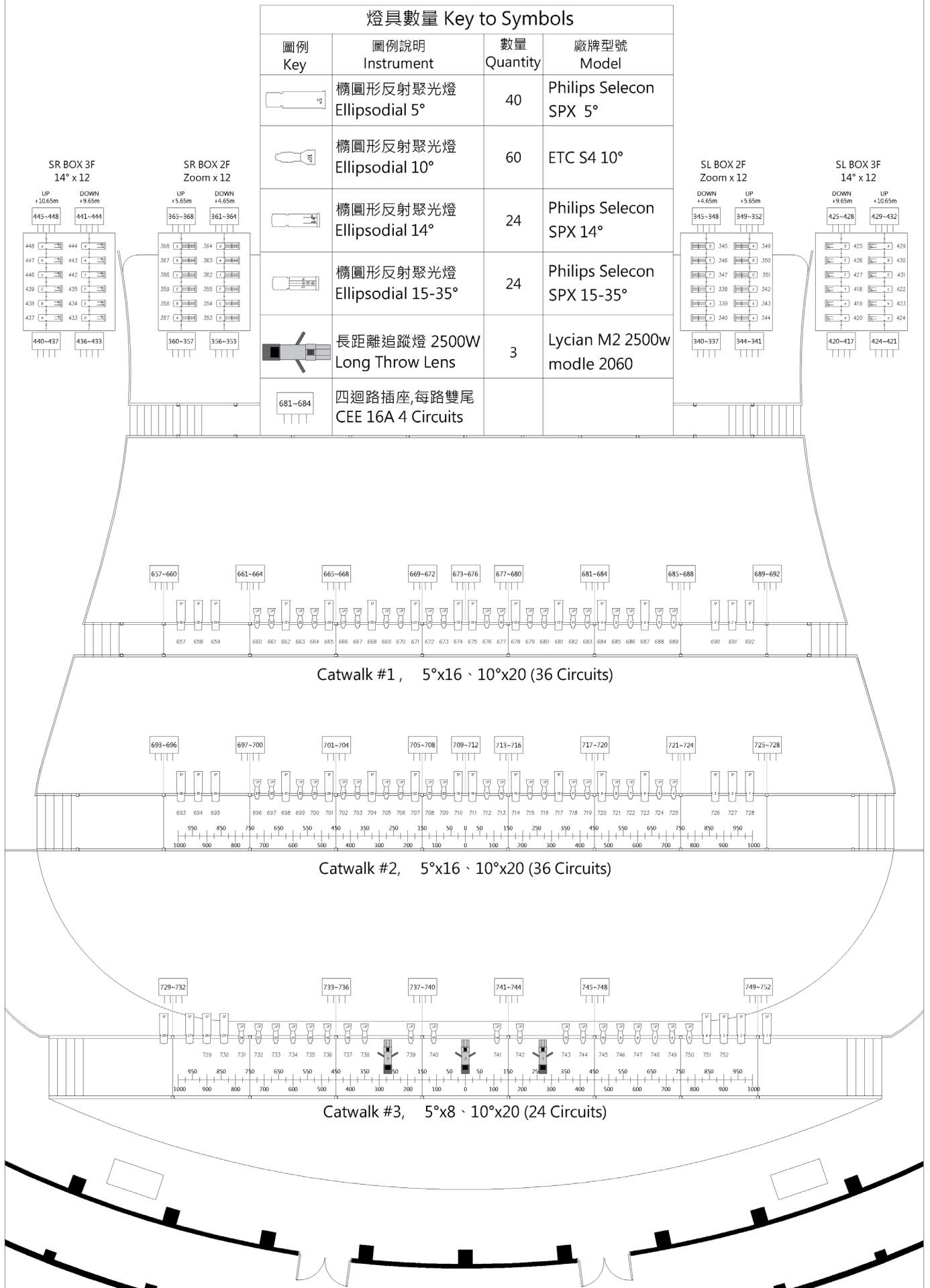


Figure3.2.1- FOH Lighting Plot

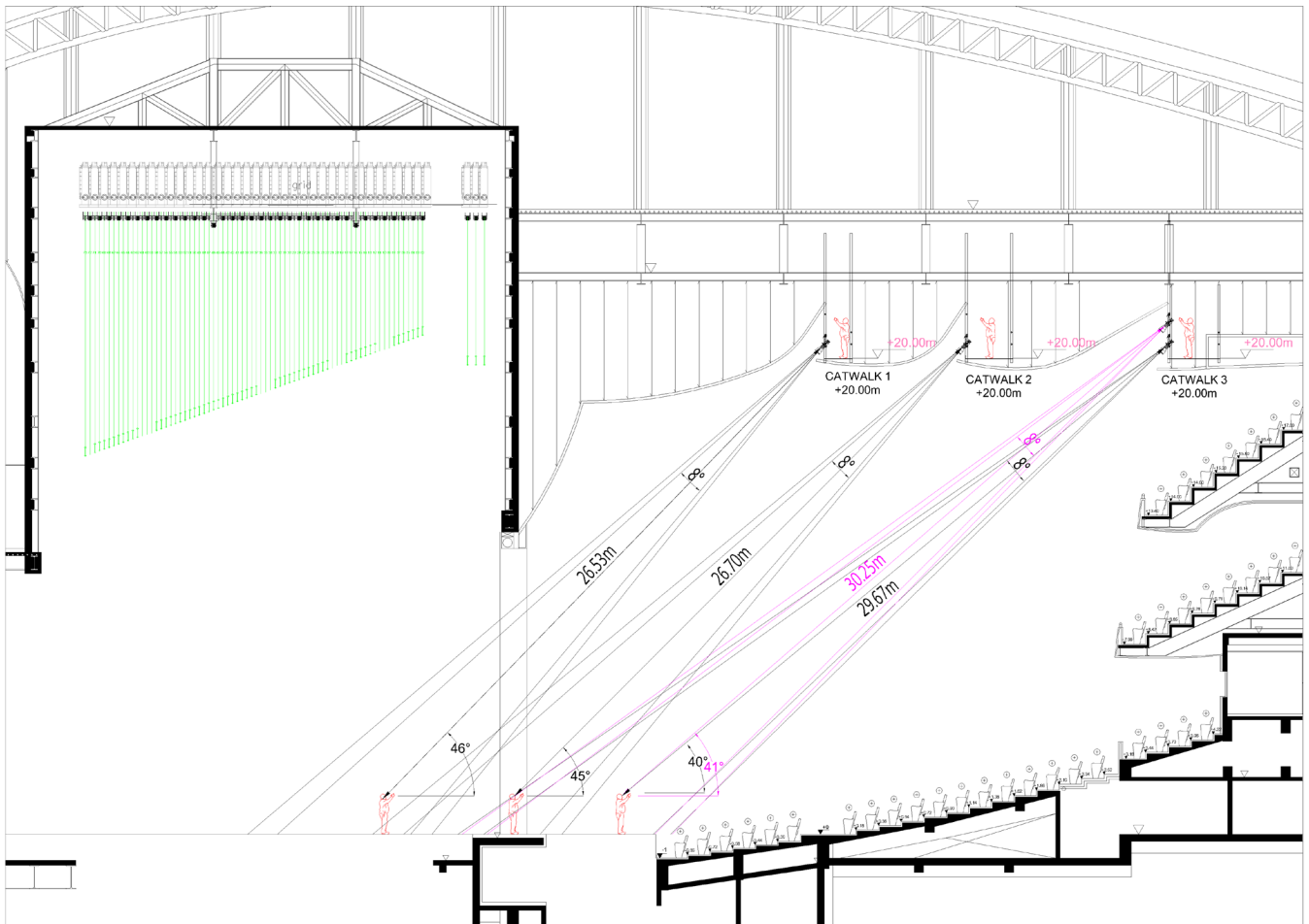


Figure 3.2.2- Lighting Section

### 3-3 Lighting DMX system

Please patch all additional fixtures from Universe 5.

Item	Position	Model	Quantity	Note	Paid Item
Node	Grid	MA3 4Port	2		
	DL Stage/DR Stage		1/1		
	Orchestra Grid	MA3 2Port	1		
	UL Stage/UR Stage		1/1		
	Portable	MA3 2Port	6		
		MA3 4Port	2		
Isolator	Grid	Chauvet RDMX Splitter8	4	All isolators are 2 in 4 out (default)	
	Orchestra Grid		1		
NPU	Control Booth	MA	1		

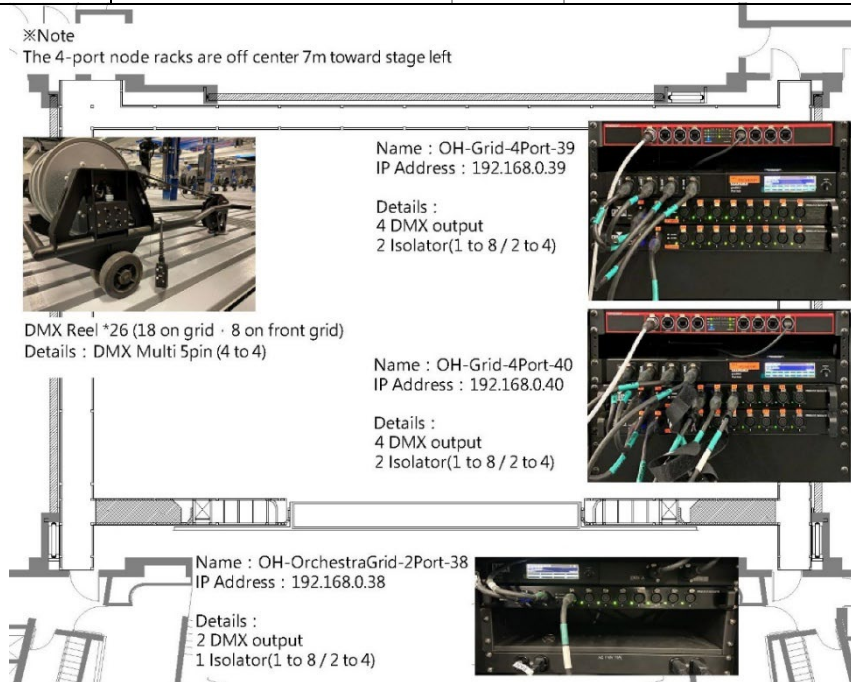


Figure 3.3.1- Grid Area Node Position Layout

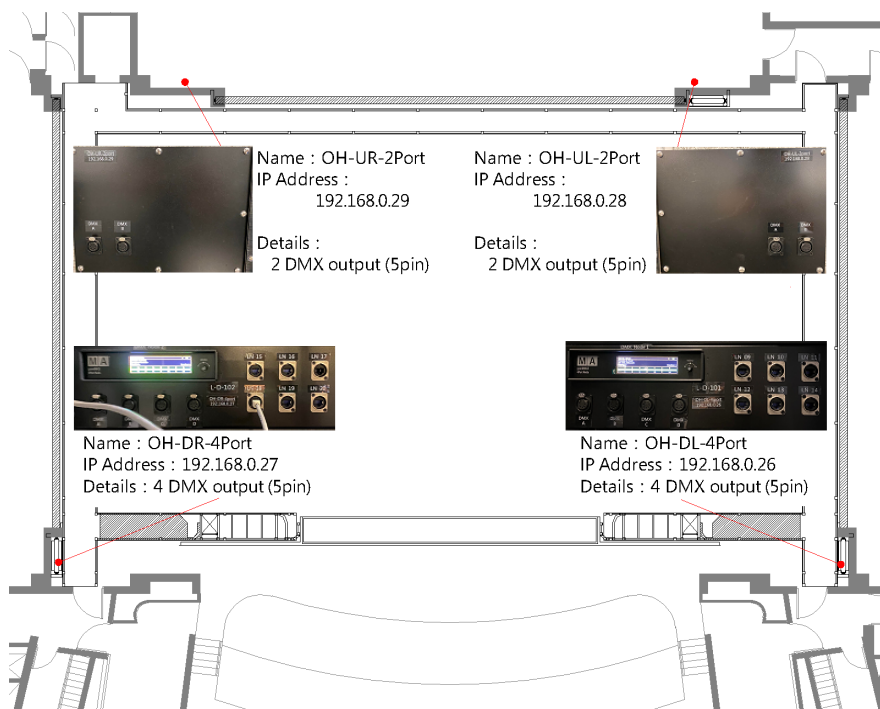


Figure 3.3.2- Stage Area Node Position Layout

### 3-4 Lighting Circuit

#### 3-4-1 Stage area

Area and Position	Connector	Dimmer Circuit No.	Load	Network Circuit No.
Orchestra Pit Lift 1	CEE 16A	001 ~ 004	3kW	LN01 ~ 02
		009 ~ 012		LN05 ~ 06
Orchestra Pit Lift 2	CEE 16A	005 ~ 008	3kW	LN03 ~ 04
		013 ~ 016		LN07 ~ 08
Down Stage/L	Harting(8 circuits)	017 ~ 024	3kW	LN09 ~ 14
		025 ~ 032		
Down Stage/R	Harting(8 circuits)	033 ~ 040	3kW	LN15 ~ 20
		041 ~ 048		
Floor/L	Harting(1~6 circuits) CEE 16A (7~8 circuits) (1 outputs/circuit)	049 ~ 056	3kW	LN21 ~ 22
		065 ~ 072		LN25 ~ 26
		081 ~ 088		LN29 ~ 30
		097 ~ 104 (104 is also use for circuit in Follow Room)		LN33 ~ 34
		113 ~ 120		LN37 ~ 38
Floor/R	Harting(1~6 circuits) CEE 16A (7~8 circuits) (1 outputs/circuit)	057 ~ 064	3kW	LN23 ~ 24
		073 ~ 080		LN27 ~ 28
		089 ~ 096		LN31 ~ 32
		105 ~ 112 (112 is also use for circuit in Follow Room)		LN35 ~ 36
		121 ~ 128		LN39 ~ 40
Stage Lift 1	Harting(8 circuits)	129 ~ 136	3kW	LN41 ~ 42
Stage Lift 2	Harting(8 circuits)	137 ~ 144	3kW	LN43 ~ 44
Stage Lift 3	Harting(8 circuits)	145 ~ 152	3kW	LN45 ~ 46
Stage Lift 4	Harting(8 circuits)	153 ~ 160	3kW	LN47 ~ 48
Stage Lift 5	Harting(8 circuits)	161 ~ 168	3kW	LN49 ~ 50
Rear Stage/L	Harting(8 circuits)	169 ~ 176	3kW	LN51 ~ 52
		177 ~ 184		
		201 ~ 208		LN55 ~ 56
		209 ~ 216		
Rear Stage/R	Harting(8 circuits)	185 ~ 192	3kW	LN53 ~ 54
		193 ~ 200		
		217 ~ 224		LN57 ~ 58
		225 ~ 232		
Above Rear Stage Cable Reel	Harting(8 circuits)	233 ~ 240	3kW	LN61 ~ 62
		241 ~ 248		LN63 ~ 64
		249 ~ 256		LN65 ~ 66
		257 ~ 264		LN67 ~ 68
		265 ~ 272		LN69 ~ 70
		273 ~ 280		LN71 ~ 72
		281 ~ 288		LN73 ~ 74
		289 ~ 296		LN75 ~ 76
Movable Tormentor Stage/L	CEE 16A (2 outputs/circuit)	297 ~ 300	3kW	LN77 ~ 78
		301 ~ 304		
		305 ~ 308		
		309 ~ 312		
Movable Tormentor Stage/R	CEE 16A (2 outputs/circuit)	313 ~ 316	3kW	LN79 ~ 80
		317 ~ 320		
		321 ~ 324		
		325 ~ 328		
Rear Stage Backwall	Harting(8 circuits)	329 ~ 336	3kW	
Up Lighting Bridge	CEE 16A (2 outputs/circuit)	369 ~ 372	3kW	LN101 ~ 104
		373 ~ 376		
		377 ~ 380		
		381 ~ 384		
		385 ~ 388		
		389 ~ 392		

Down Lighting Bridge	CEE 16A (2 outputs/circuit)	393 ~ 396	3kW			
		397 ~ 400				
		401 ~ 404		LN105 ~ 106		
		405 ~ 408				
		409 ~ 412		LN107 ~ 108		
		413 ~ 416				
3F- Gallery S.L	CEE 16A	473 ~ 476	3kW			
		477 ~ 480		LN117 ~ 118		
		481 ~ 484				
		485 ~ 488				
3F- Gallery S.R	CEE 16A	489 ~ 492	3kW			
		493 ~ 496		LN119 ~ 120		
		497 ~ 500				
		501 ~ 504				
3F- Gallery Rear Stage	CEE 16A	505 ~ 508	3kW	LN121 ~ 122		
		509 ~ 512				
4F- Gallery S.L	CEE 16A	513 ~ 516	3kW			
		517 ~ 520		LN127 ~ 128		
4F- Gallery S.R	CEE 16A	521 ~ 524	3kW			
		525 ~ 528		LN129 ~ 130		
4F- Gallery Rear Stage	CEE 16A	529 ~ 532	3kW	LN131 ~ 132		
		533 ~ 536				
Stage/L Ladder1	CEE 16A	561 ~ 568	3kW	LN139 ~ 140		
Stage/L Ladder2		569 ~ 576		LN141 ~ 142		
Stage/L Ladder3		577 ~ 584		LN143 ~ 144		
Stage/L Ladder4		585 ~ 592		LN145 ~ 146		
Stage/L Ladder5		593 ~ 600		LN147 ~ 148		
Stage/L Ladder6		601 ~ 608		LN149 ~ 150		
Stage/R Ladder1		633 ~ 640		LN151 ~ 152		
Stage/R Ladder2		641 ~ 648		LN153 ~ 154		
Stage/R Ladder3		649 ~ 656		LN155 ~ 156		
Stage/R Ladder4		609 ~ 616		LN157 ~ 158		
Stage/R Ladder5		617 ~ 624		LN159 ~ 160		
Stage/R Ladder6		625 ~ 632		LN161 ~ 162		
Cyclorama		Harting(8 circuits)		753 ~ 760	3kW	
				761 ~ 768		LN179 ~ 180
	769 ~ 776					
Stage Grid Area	Harting(8 circuits)	777 ~ 784	3kW	LN181 ~ 182		
		785 ~ 792				
		793 ~ 800		LN183 ~ 184		
		801 ~ 808				
		809 ~ 816		LN185 ~ 186		
		817 ~ 824				
		825 ~ 832		LN187 ~ 188		
		833 ~ 840				
		841 ~ 848		LN189 ~ 190		
		849 ~ 856				
		857 ~ 864		LN191 ~ 192		
		865 ~ 872				
		873 ~ 880		LN193 ~ 194		
		881 ~ 888				
		889 ~ 896		LN195 ~ 196		
		897 ~ 904				
		905 ~ 912		LN197 ~ 198		
		913 ~ 920				
		921 ~ 928		LN199 ~ 200		
		929 ~ 936				
937 ~ 944	LN201 ~ 202					
945 ~ 952						
953 ~ 960	LN203 ~ 204					

		961 ~ 968		
Auditorium Fly Bar1	Harting(8 circuits)	969 ~ 976	3kW	LN205~ 206
Auditorium Fly Bar2		977 ~ 984		LN207~ 208
Auditorium Fly Bar3		985 ~ 992		LN209~ 210
Auditorium Fly Bar4		993 ~ 1000		LN211~ 212
Auditorium Fly Bar5		1001 ~ 1008		LN213~ 214
Down Stage/L	CEE 32A	1011 ~ 1014	5kW	
Down Stage/R	CEE 32A	1017 ~ 1020	5kW	
Rear Stage/L	CEE 32A	1023 ~ 1026	5kW	
		1035 ~ 1038		
Rear Stage/R	CEE 32A	1029 ~ 1032	5kW	
		1041 ~ 1044		
Rear Stage Backwall	CEE 32A	1045 ~ 1050	5kW	LN59~ 60
Down Lighting Bridge	CEE 32A	1051 ~ 1056	5kW	
3F- Gallery S.L	CEE 32A	1009 ~ 1010	5kW	
		1021 ~ 1022		
		1033 ~ 1034		
3F- Gallery S.R	CEE 32A	1015 ~ 1016	5kW	
		1027 ~ 1028		
		1039 ~ 1040		

**Ca = CEE 16A**  
**Cb = CEE 32A**  
**H = Harting(8 circuits)**

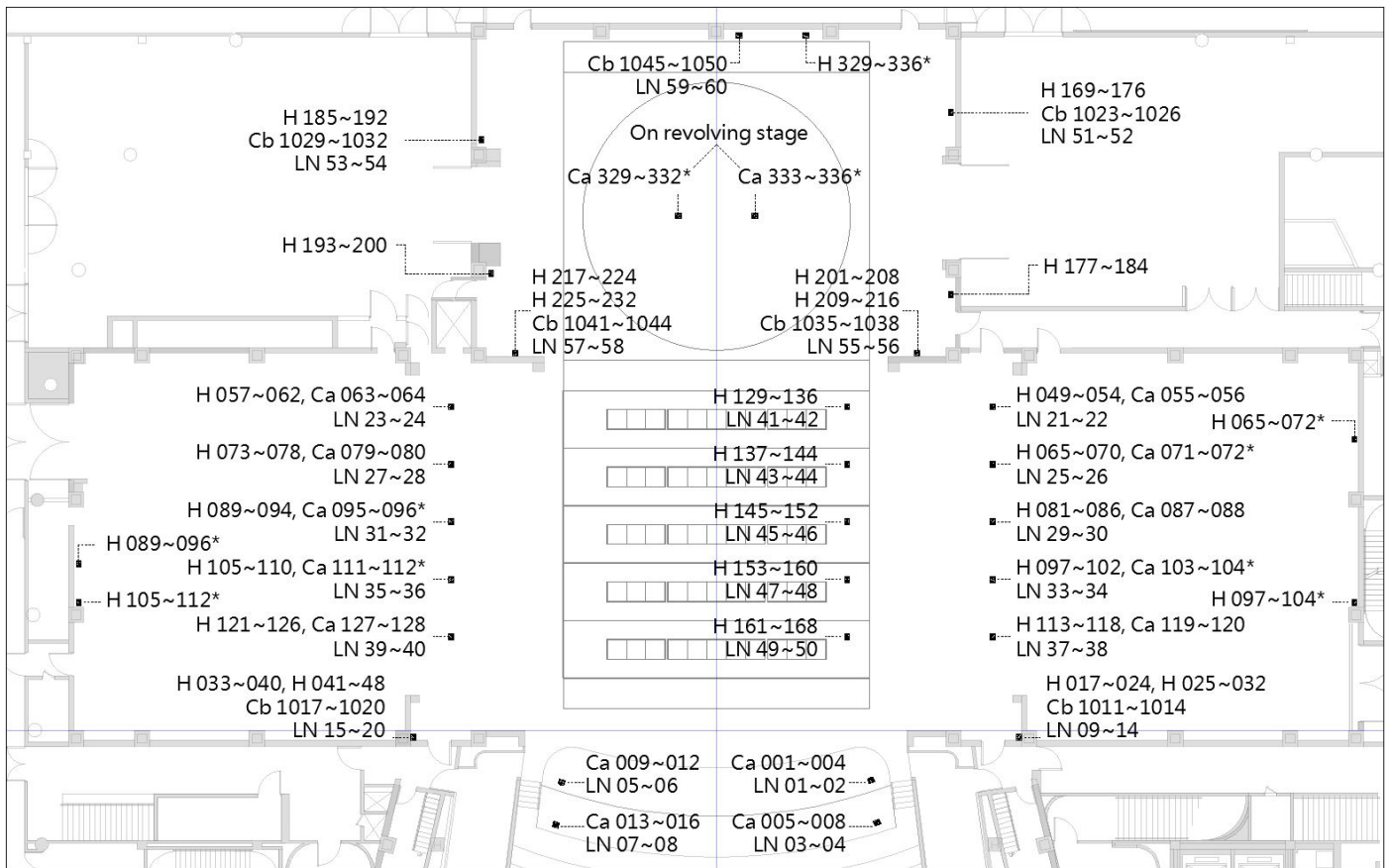


Figure 3.4.1.1- First Floor Lighting Circuit Layout



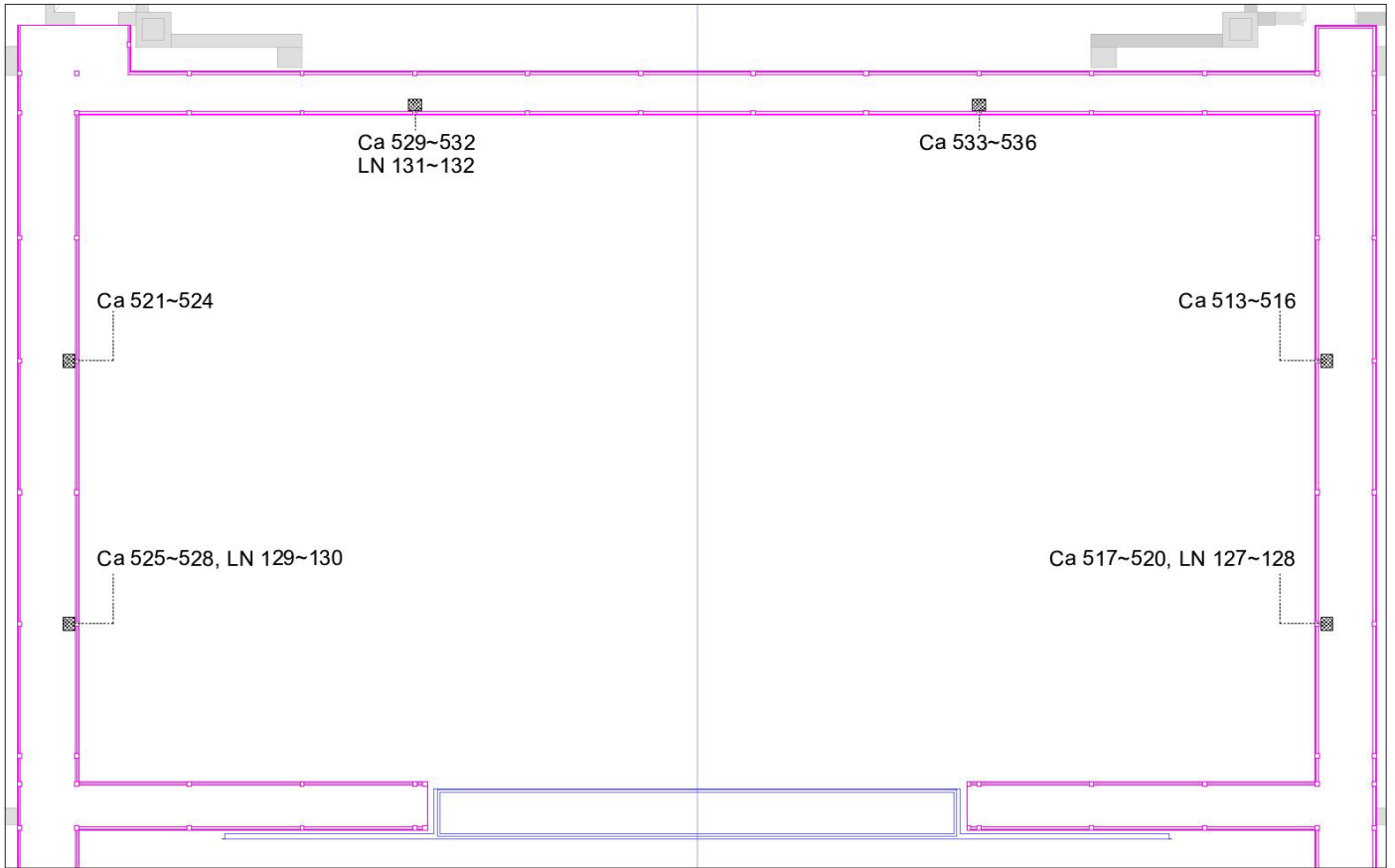


Figure 3.4.1.4- The Fourth Floor Gallery Lighting Circuit Layout

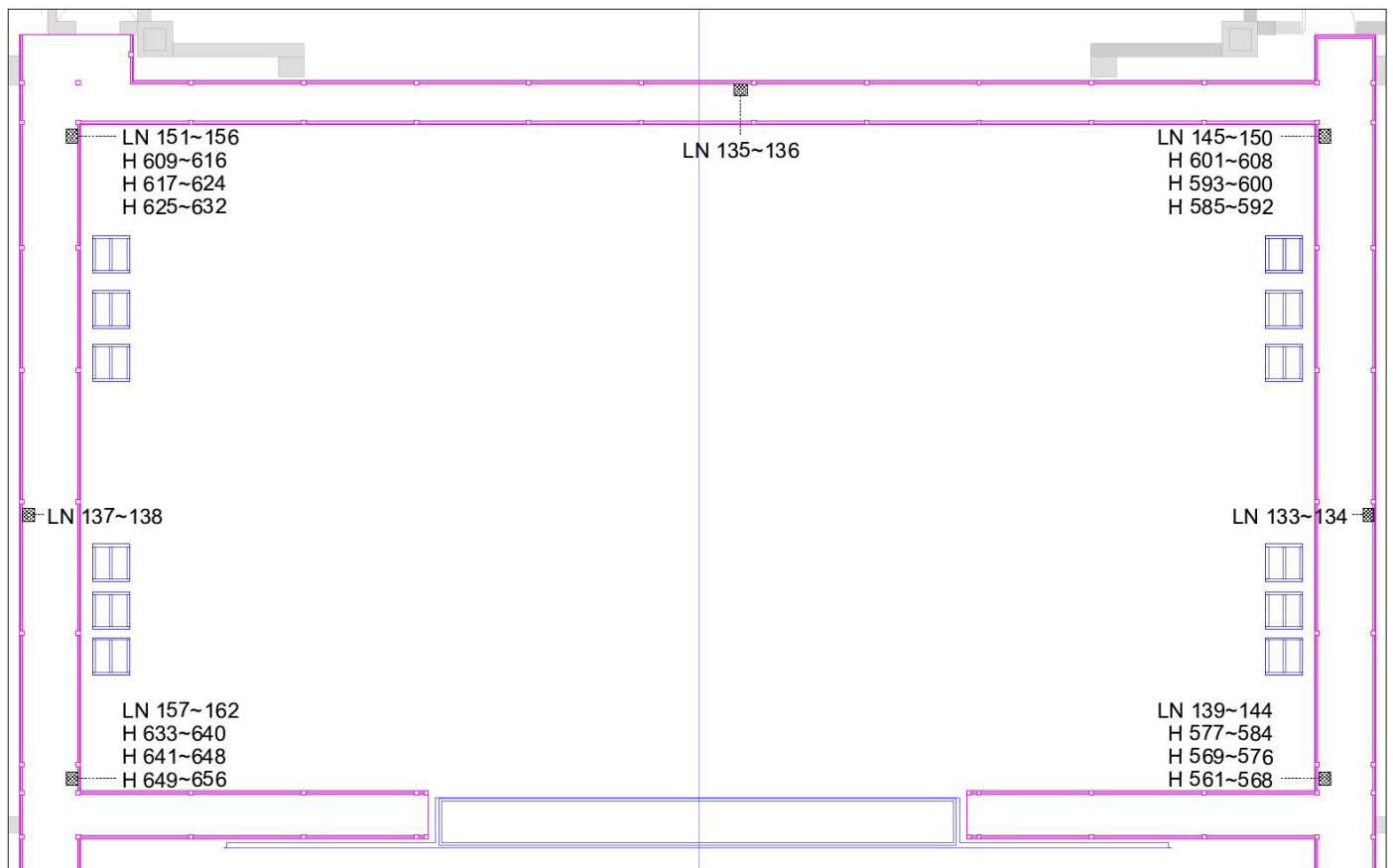


Figure 3.4.1.5- R1F Gallery (For Ladder) Lighting Circuit Layout

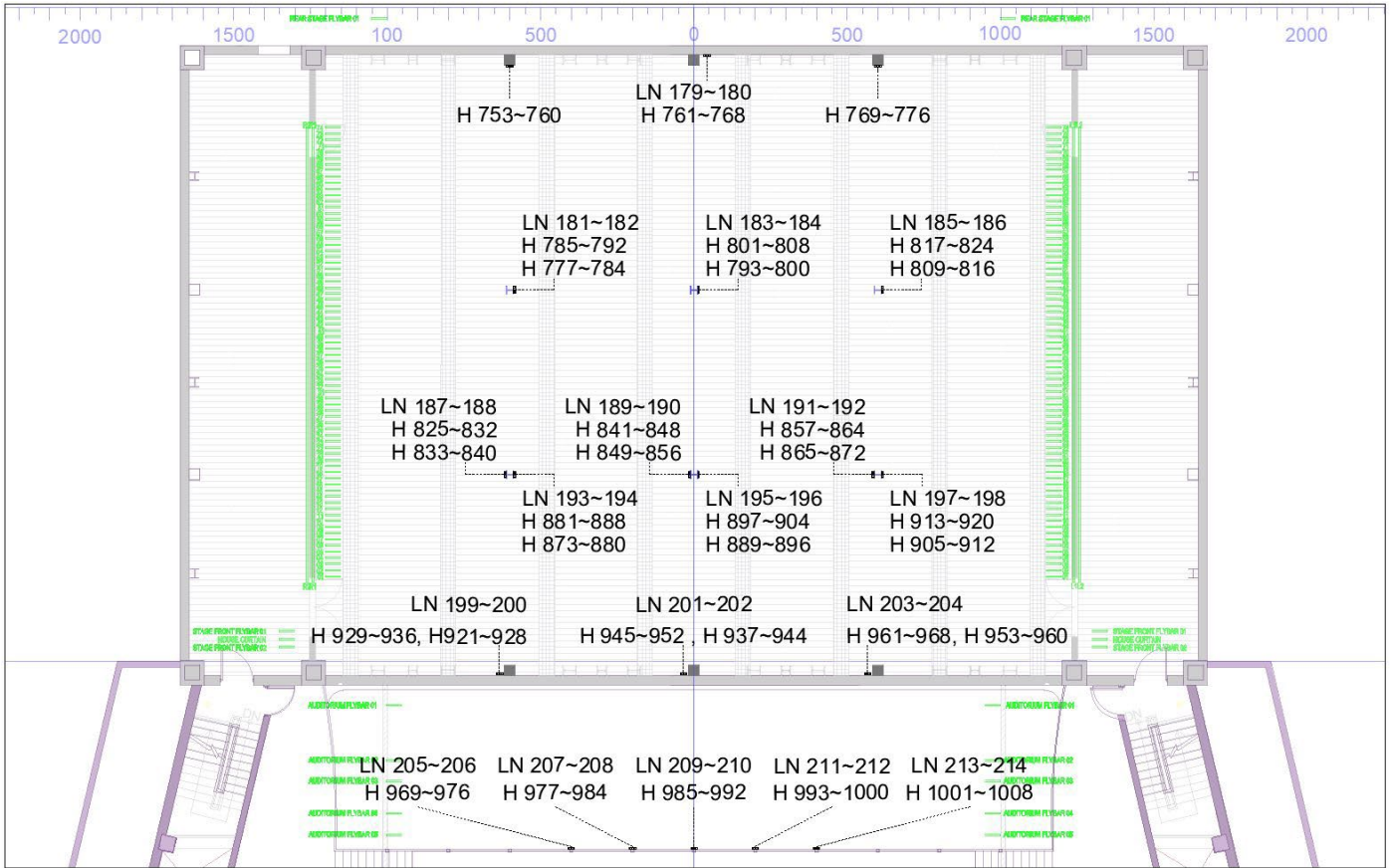


Figure 3.4.1.6- Grid Area (R1+R2) Lighting Circuit Layout

3-4-2 Front of House

Area and Position	Connector	Dimmer Circuit No.	Load	Network Circuit No.
2F-Lighting Box/L	CEE 16A (2 outputs/circuit)	337 ~ 340	3kW	LN85 ~ 86
		341 ~ 344		
		345 ~ 348		
		349 ~ 352		
2F- Lighting Box/R	CEE 16A (2 outputs/circuit)	353 ~ 356	3kW	LN87 ~ 88
		357 ~ 360		
		361 ~ 364		
		365 ~ 368		
3F- Lighting Box/L	CEE 16A (2 outputs/circuit)	417~ 420	3kW	LN109 ~ 110
		421~ 424		
		425~ 428		
		429 ~ 432		
3F- Lighting Box/R	CEE 16A (2 outputs/circuit)	433 ~ 436	3kW	LN111 ~ 112
		437 ~ 440		
		441 ~ 444		
		445 ~ 448		
3F-Balcony Rail	CEE 16A	449 ~ 451	3kW	LN115 ~ 116
		452 ~ 454		
		455 ~ 457		
		458 ~ 460		LN113 ~ 114
		461 ~ 463		
		464 ~ 466		
		467 ~ 469		
4F-Balcony Rail	CEE 16A	470 ~ 472	3kW	
		537 ~ 539		
		540 ~ 542		
		543 ~ 545		
		546 ~ 548		LN125 ~ 126

		549 ~ 551		
		552 ~ 554		
		555 ~ 557		
		558 ~ 560		LN123 ~ 124
1st. Catwalk	CEE 16A (2 outputs/circuit)	657 ~ 660	3kW	
		661 ~ 664		
		665 ~ 668		LN163 ~ 164
		669 ~ 672		
		673 ~ 676		
		677 ~ 680		
		681 ~ 684		LN165 ~ 166
		685 ~ 688		
		689 ~ 692		
2nd. Catwalk	CEE 16A (2 outputs/circuit)	693 ~ 696	3kW	
		697 ~ 700		
		701 ~ 704		LN167 ~ 168
		705 ~ 708		
		709 ~ 712		
		713 ~ 716		
		717 ~ 720		LN169 ~ 170
		721 ~ 724		
		725 ~ 728		
		729 ~ 732		
3rd. Catwalk	CEE 16A (2 outputs/circuit)	733 ~ 736	3kW	LN171 ~ 172
		737 ~ 740		
		741 ~ 744		
		745 ~ 748		LN173 ~ 174
		749 ~ 752		

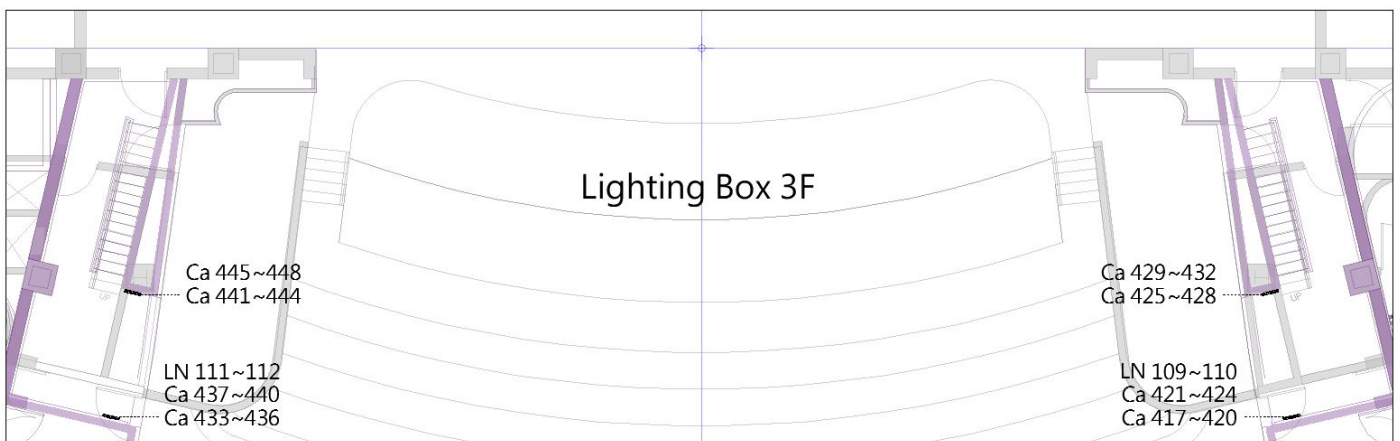
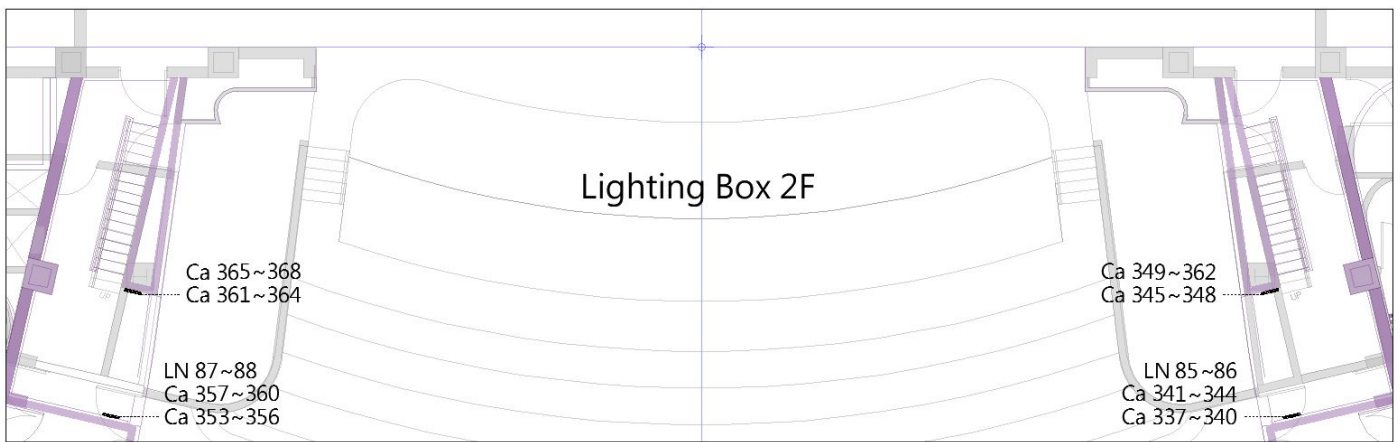


Figure 3.4.2.1- Lighting Box Lighting Circuit Layout

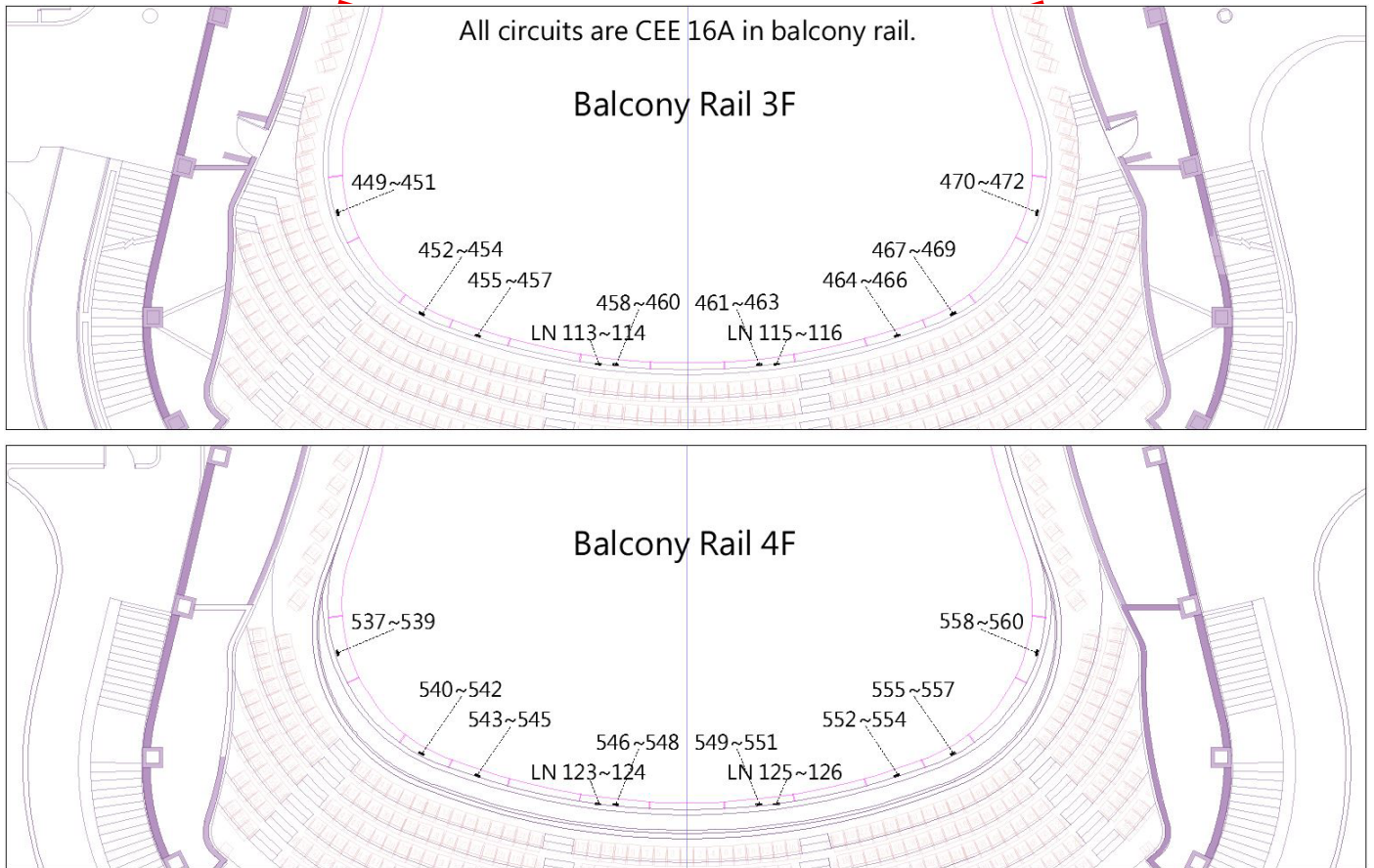


Figure 3.4.2.2- Balcony Rail Lighting Circuit Layout

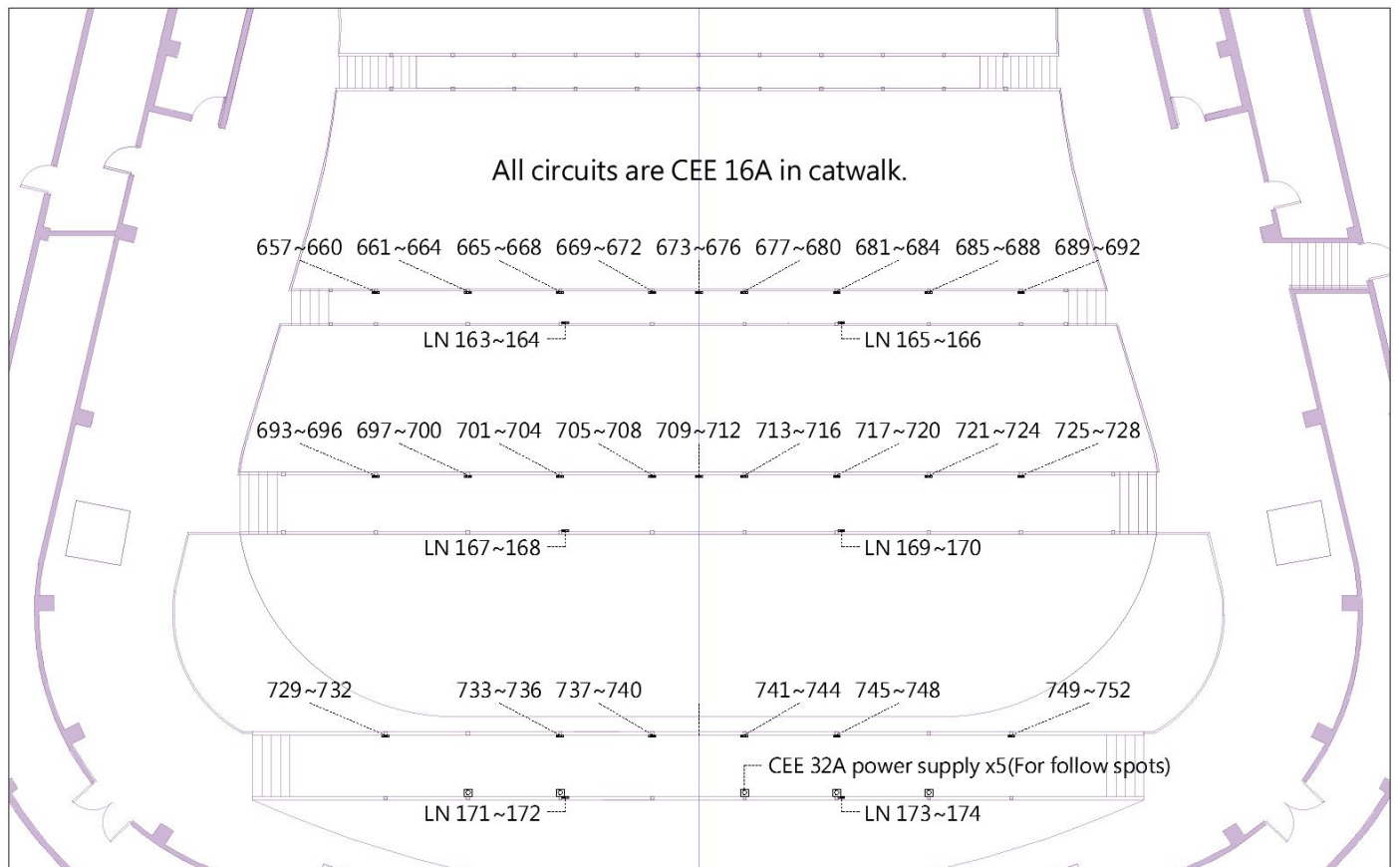


Figure 3.4.2.3- Catwalk Lighting Circuit Layout

### 3-5 Portable Lift

Brand and Model: Snorkel UL-40 (Battery Power Supply)  
 Maximum height: 12.1m  
 Maximum weight: 136kg  
 Quantity: 2

### 3-6 Additional Power Supply

Function	Position	Specifications	Quantity
Stage	Down Stage Left / Right	3φ4W+G 380V/220V /60Hz (CEE 125A/3P+N+PE)	3 / 3
Light		3φ4W+G 208V/120V /60Hz (Camlock 250A)	3 / 3
Sound		3φ4W+G 208V/120V /60Hz (Camlock 100A)	1 / 1
Stage	Up Stage Left / Right / Rear Stage	3φ4W+G 380V/220V /60Hz (CEE 125A/3P+N+PE)	2 / 2 / 2
Light		3φ4W+G 208V/120V /60Hz (Camlock 250A)	2 / 2 / 2
Projector	Rear Stage(Right)	220V/60Hz (CEE 32A)	1



Figure 3.6- Additional Power Supply

### 3-7 Working Light / Auditorium light

#### Work lights

Work lights provided white and blue light mode, and the control switch is located on the stage manager’ s Desk.  
 Lighting area: Stage, Rear Stage lower floor, Stage Traps room, Main Stage Elevation Platform double-deck level (include machine pit), Orchestra Pit, Gallery, Lighting Box, Lighting Bridge, Stage Grid area, Catwalk and Auditorium control Elevation Platform machine pit.

#### Auditorium lights

Auditorium lights consist of houselights and step lights, which can be separately controlled and dimmed by lighting desk or control panel. The control panel is located on the stage manager’ s Desk and lighting control room.

## 4 Audio/Video-Systems

### 4-1 Audio Facilities

Item	Quantity	Brand and Model	Paid Item
Digital I/O fiber module	2	Studer D21M	
Stereo audio converter	1	Whirlwind PcUSB 2-Channel USB Direct Box	
Array main speaker	2 sets	Kling & Freitag SEQUENZA 10W*10 Kling & Freitag SEQUENZA 10B*2	
Left and right channel speakers	2 sets	Kling & Freitag SEQUENZA 10W*3 Kling & Freitag SEQUENZA 10B*1	
Center Array speaker	1 set	Kling & Freitag SEQUENZA 10W*6	
Digital speaker	6	Renkus-Heinz ICONYX IC16/8RII	
Movable speaker	2	Kling & Freitag CA1515-9	
Movable Subwoofer	2	Kling & Freitag SWi118E LabGruppen PLM10000Q	
Stage front speaker	12	Renkus-Heinz CFX 41	
Auxiliary speaker 1F	46	Soundtube CM600i	
Auxiliary speaker 2F	52	Soundtube CM600i	
12" Active Stage Monitor Speaker	2	Renkus-Heinz PN121/9	
15" Active Stage Monitor Speaker	2	Renkus-Heinz PN151/9	
12" Active Stage Monitor Speaker	12	Renkus-Heinz PN121M/12	*
6.5" Active Monitor Speaker	4	Renkus-Heinz PN61	*
Mixing console with flight case	1	Midas heritage D HD96-24-CC-TP Stage Box : Midas DL231	* (Shared with four halls)
Signal Splitters	1	Midas DL431	* (Shared with four halls)
Mixing console	1	Midas M32R LIVE Stage Box : Midas DL16 Comes with RJ-45 cable	* (Shared with four halls)
Mixing console Combo	3	Mixer: YAMAHA DM3 Standard Handheld Wireless Microphone : Mipro ACT-747 x1 · ACT-700H x 4 Speaker : Renkus-Heinz PN61 x 2 Including assembly and disassembly and execution manpower.	* (Shared with four halls)
Wireless PA equipment MIPRO MA-708	4	MIPRO MA-708 (Recommended for indoor use)	* (Shared with four halls)
Wireless PA equipment MIPRO MA-808	2	MIPRO MA-808	* (Shared with four halls)
Wireless PA equipment MIPRO MA-828	2	MIPRO MA-828	* (Shared with four halls)

Items with \* mark are paid items. Please refer to the rate tables of National Kaohsiung Center for the Arts.

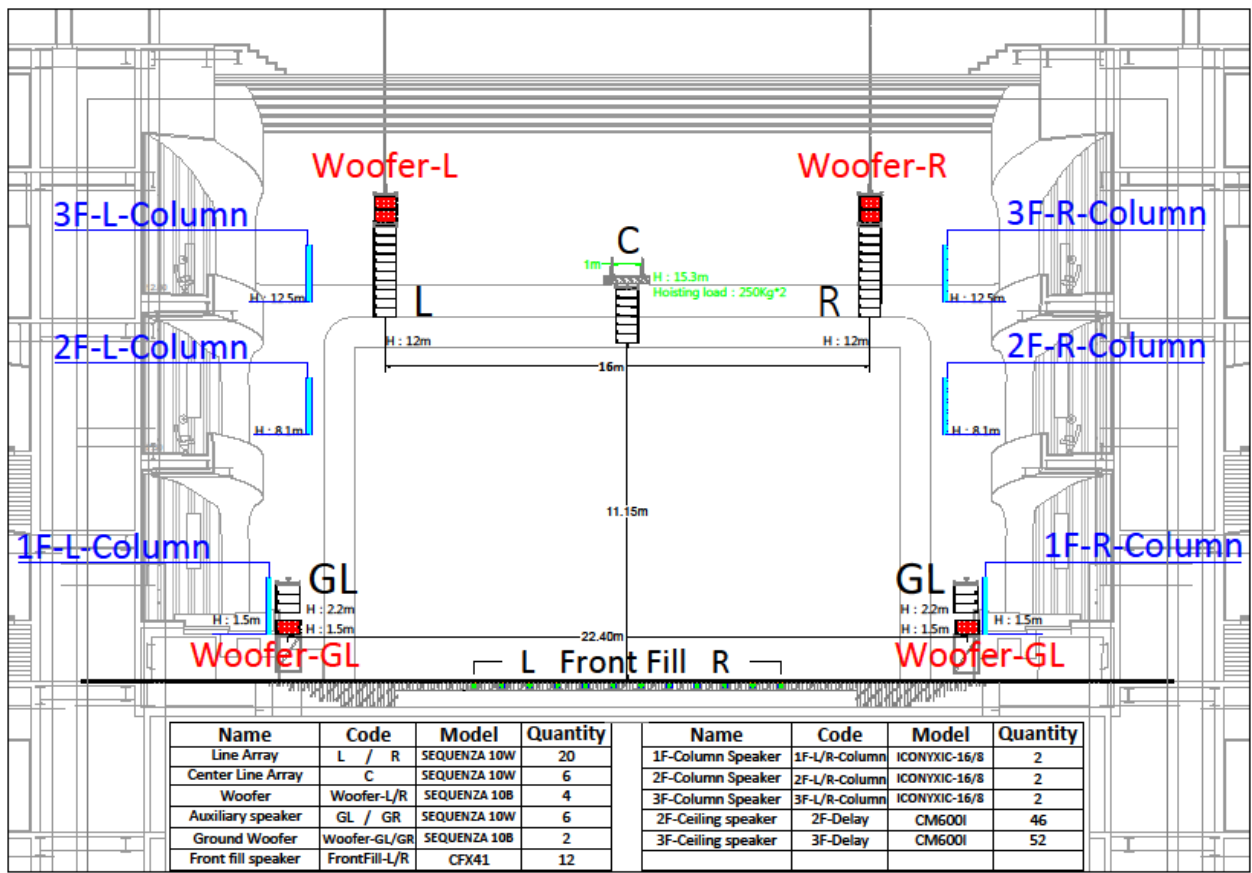


Figure 4-1.1- Speaker elevation diagram

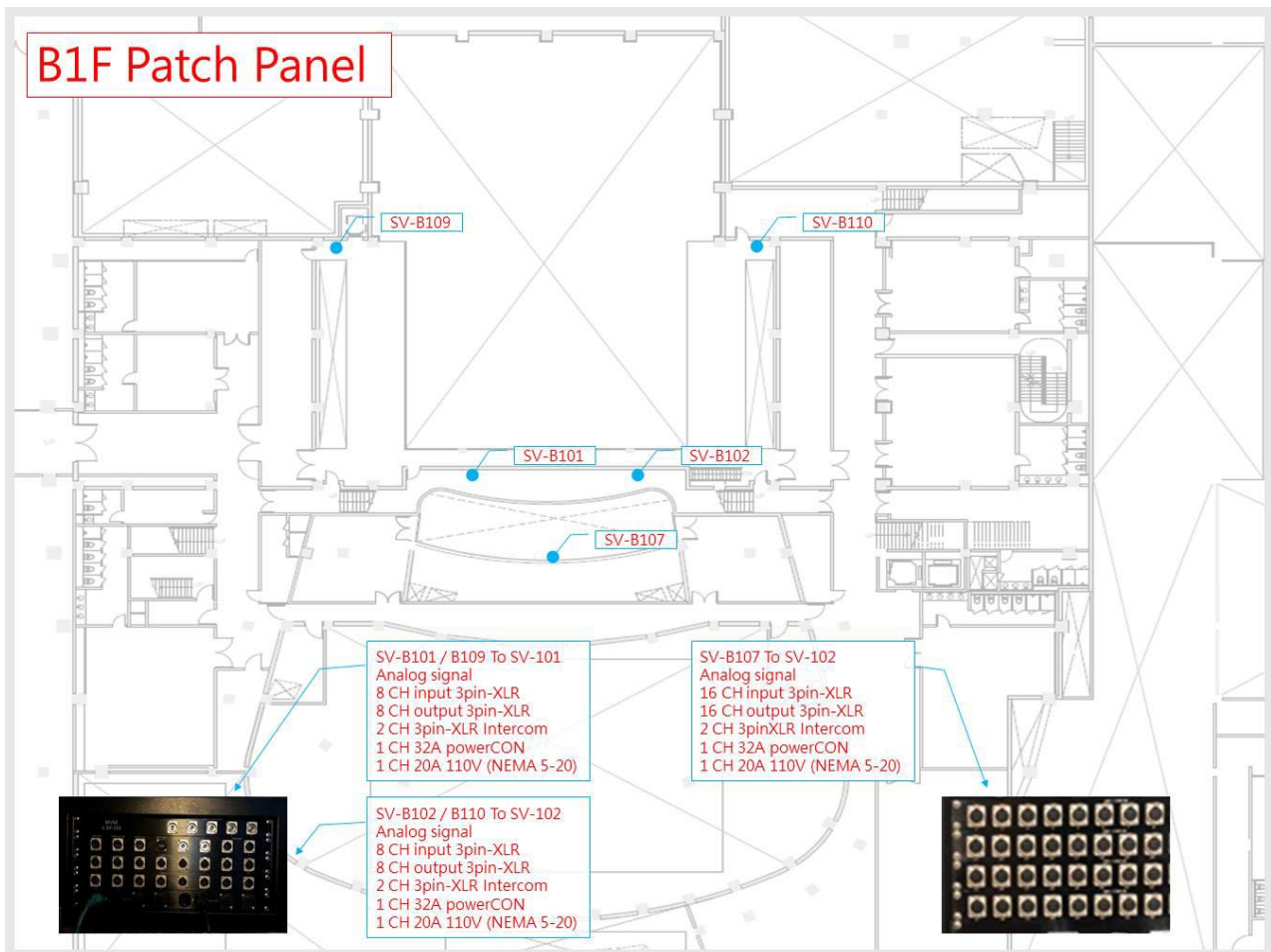


Figure 4-1.2- B1F Audio system channel diagram

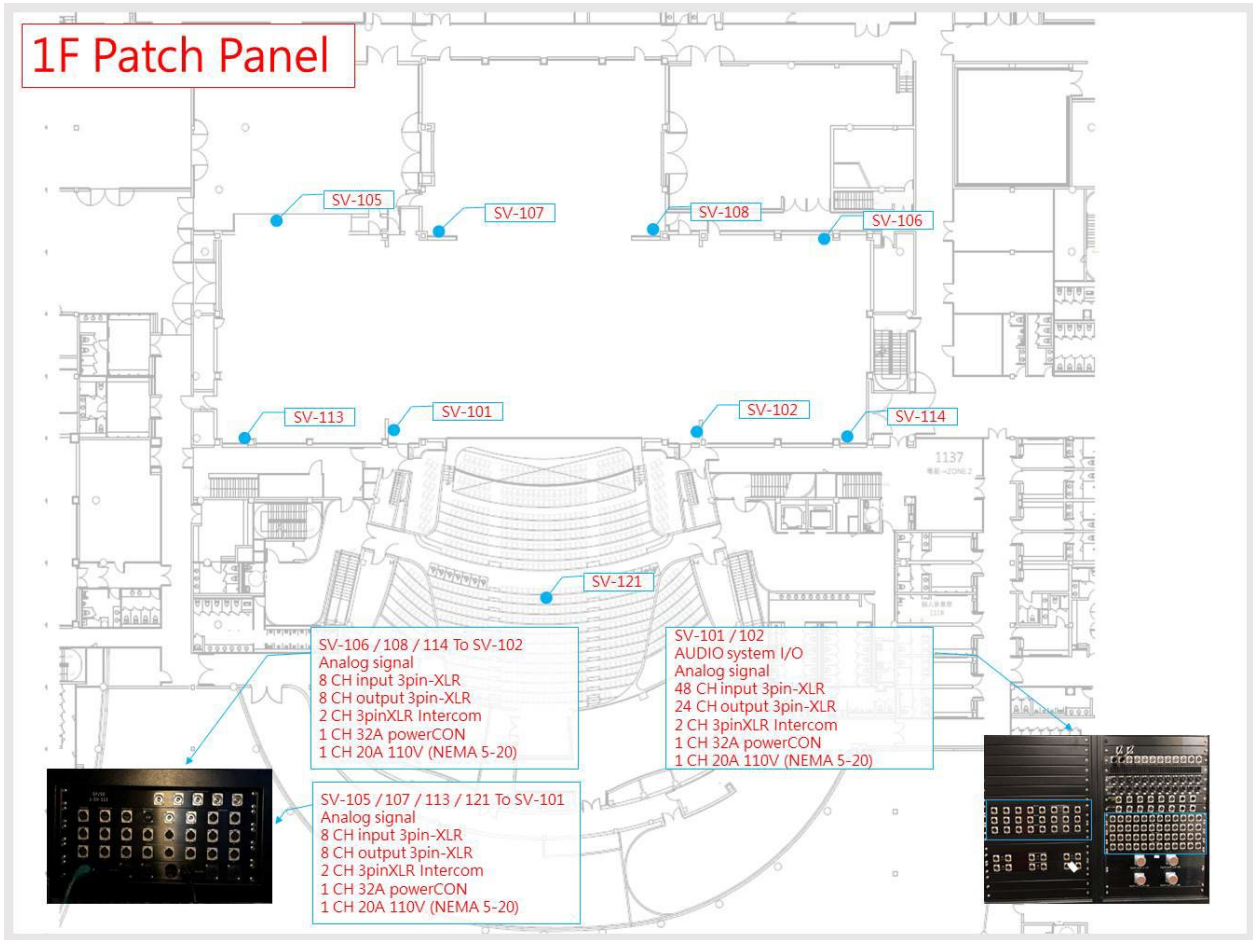


Figure 4-1.3- 1F Audio system channel diagram

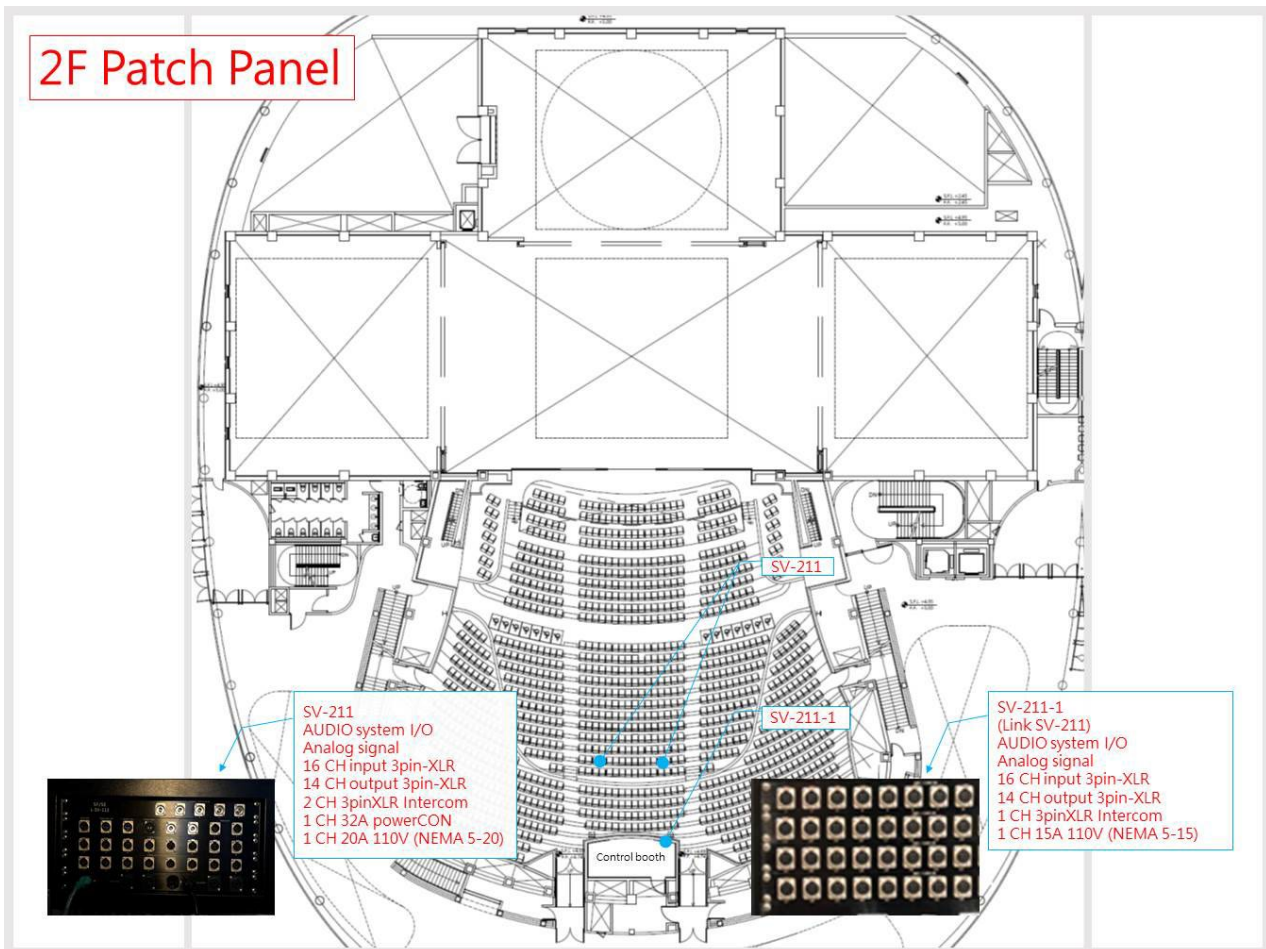


Figure 4-1.4- 2F Audio system channel diagram

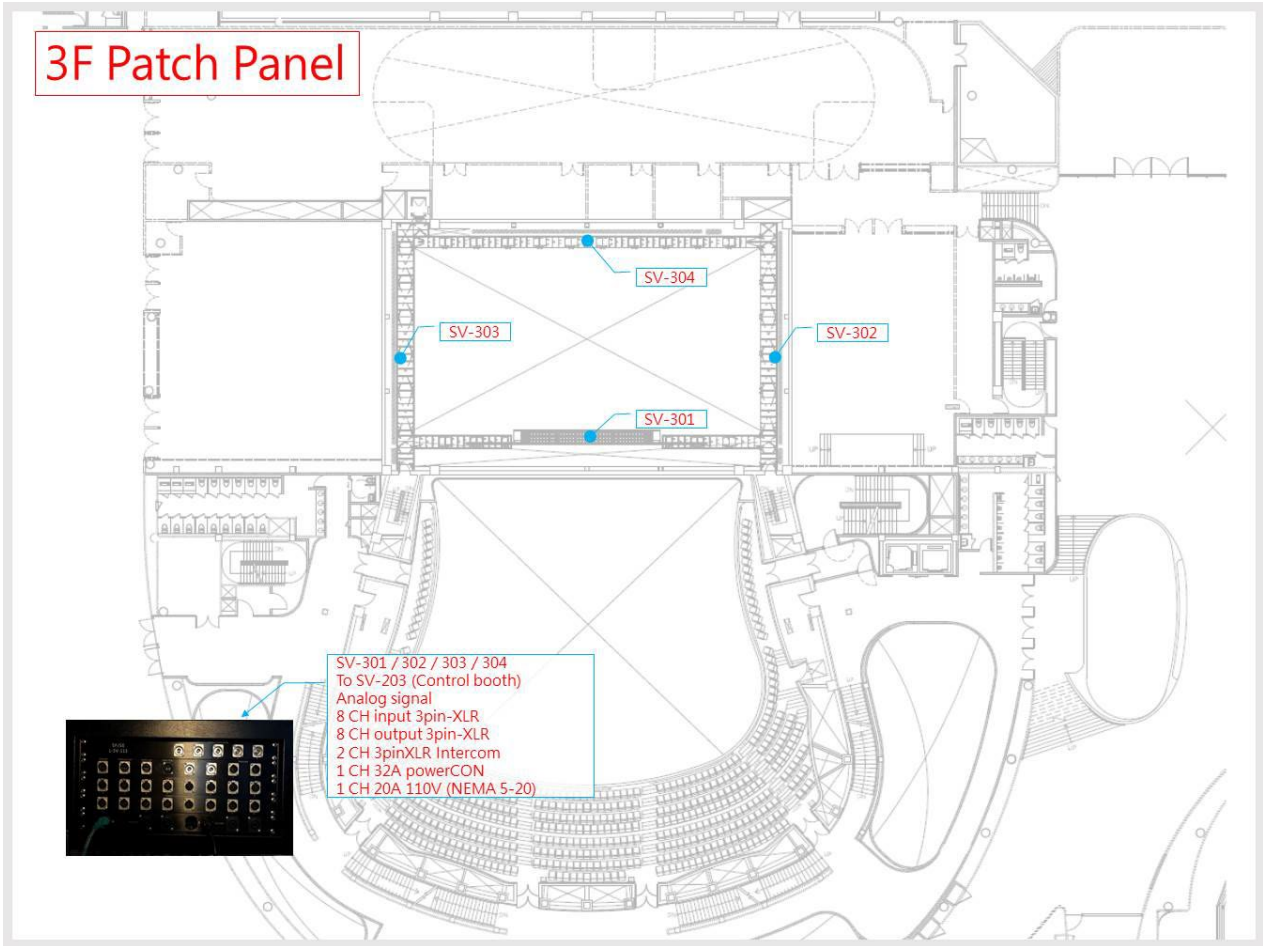


Figure 4-1.5- 3F Audio system channel diagram

**Optical Fiber : Point-to-Point Channel Diagram**

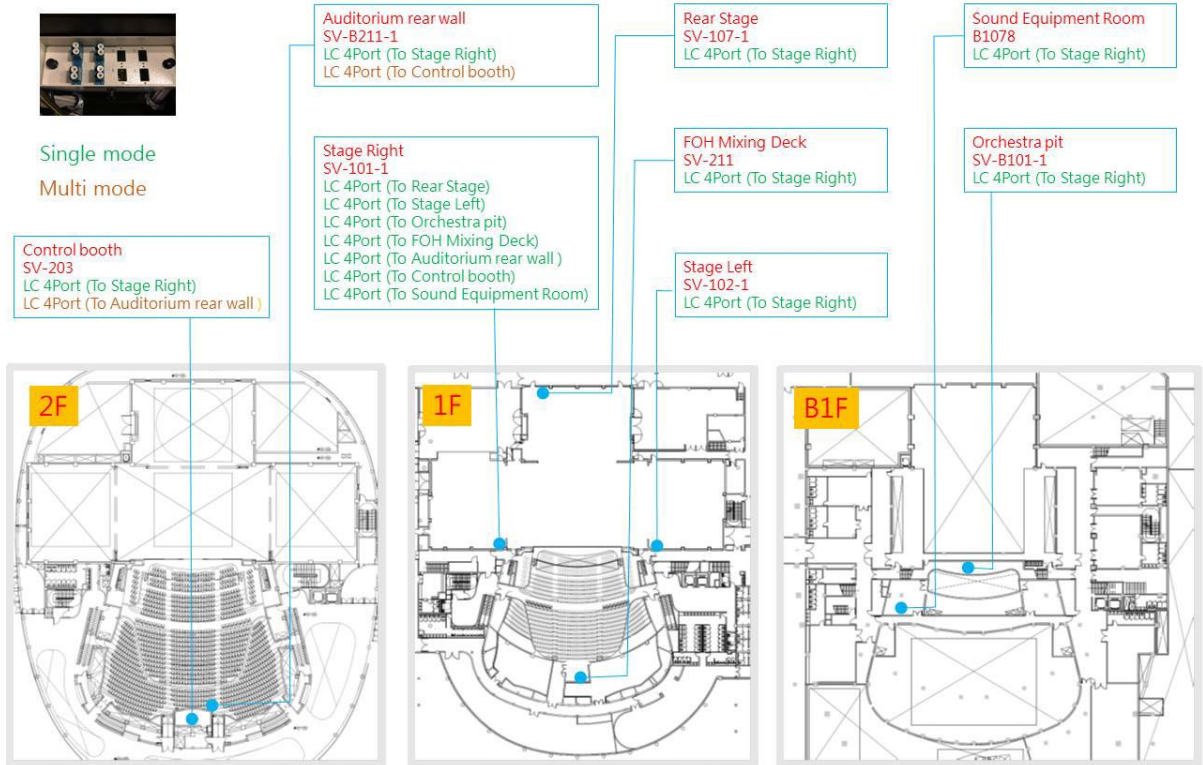


Figure 4-1.6- Optical fiber point-to-point channel diagram

## Point-to-Point Channel Diagram

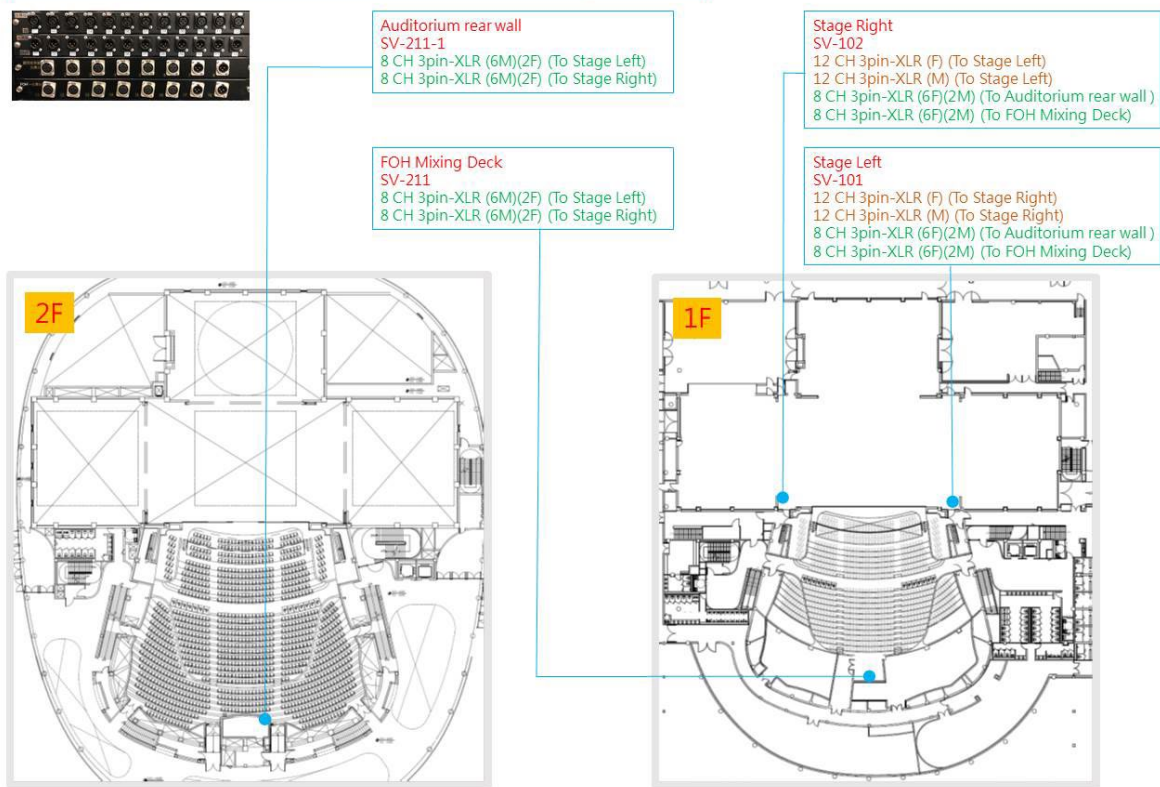


Figure 4-1.7- Signal point-to-point channel diagram

## RJ45 : Point-to-Point Channel Diagram

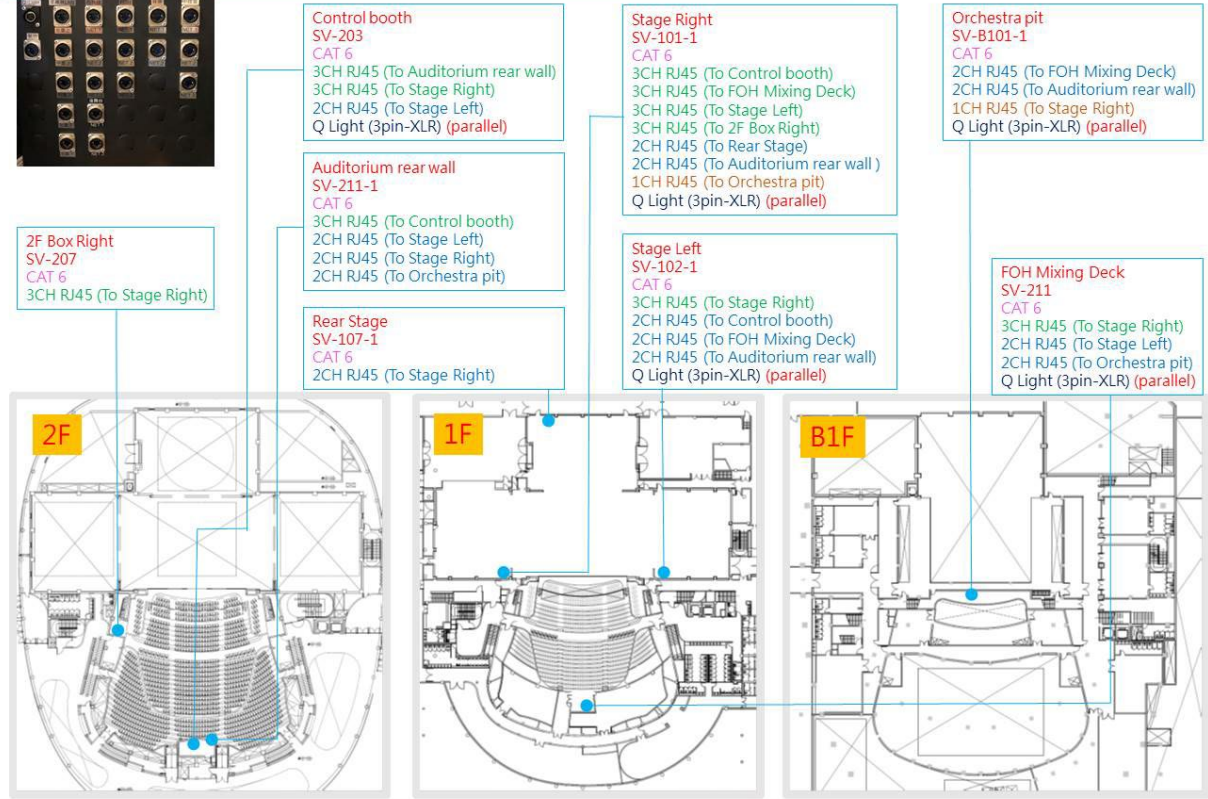


Figure 4-1.8- RJ45 point-to-point channel diagram

### 4-2 Control Room

Item	Quantity	Brand and Model	Paid Item
Master Digital Mixer ( Control Room standard configuration )	1	Studer Vista X	
Digital I/O fiber module	1	Studer D21m / D23m	
CD Player	1	Tascam CD-500B	*
CD-R Player	1	Tascam CD-RW 901 MKII	*
Dual channel digital effects	3	Eventide Eclipse V4	
Multi-track recording equipment	1	JoeCo BBR1D+2.5" USB 1TB HD	*
Dual-track disk recorder	1	Tascam DA 3000	*
Active monitor speakers	2	Dynaudio BM12 MkIII	

Items with \* mark are paid items. Please refer to the rate tables of National Kaohsiung Center for the Arts.

### 4-3 Stage Manager' s Console

The stage manager desk equips with a live sound monitor, video monitors, synchronous show screens with lighting and fly, communication system and paging system.

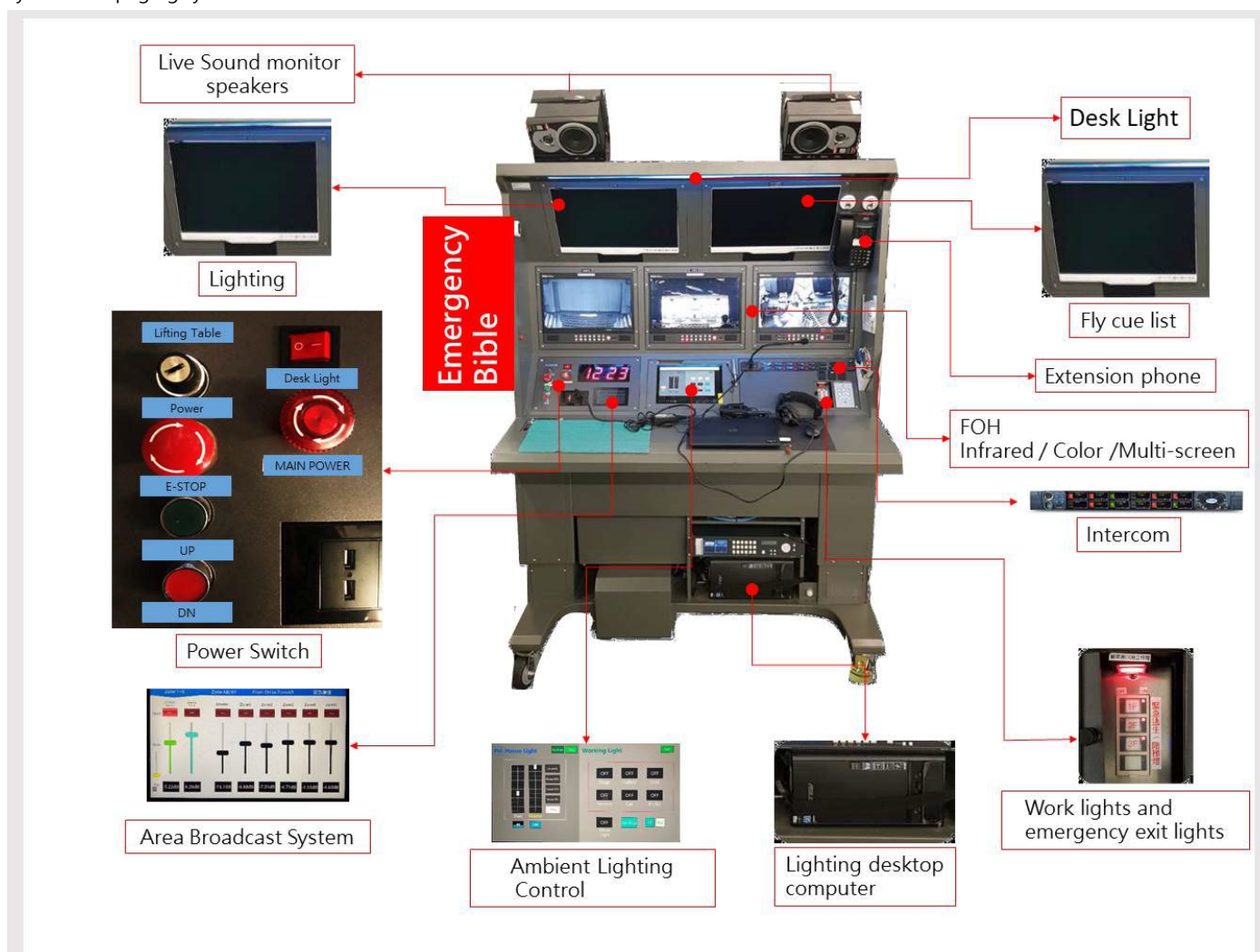


Figure 4-3.1- Stage Manager Desk

**4-4 Microphone**

Item	Quantity	Brand and Model	Paid Item
Voice coil microphone Audio Technica AE4100	6	Audio Technica AE4100	*
Voice coil microphone Audio Technica ATM250	12	Audio Technica ATM250	*
Condenser microphone	4	Audio Technica AE5400	*
Cardioid condenser microphone	8	Audio Technica AT4021	*
Gradient Condenser Microphone	4	Audio Technica BP4073	*
Cardioid Condenser Boundary Microphone	4	Audio Technica U851R	*
Stage reception Microphone	2	DPA 4017B / DPA UA 0836 Holders	
Hypercardioid Condenser microphone	8	AKG CK63-ULS+C480B	*
Cardioid condenser microphone	8	AKG CK61-ULS+C480B	*
Wireless microphone	8	Sennheiser EW500G3+SKM500G3+MME865	*
Mini wireless microphone	16	Sennheiser EW500G3++SKM500G3+MKE2	*
wireless microphone wave antenna	2	Sennheiser AD3700	
Wave antenna distributor	3	Sennheiser ASA1	
Condenser microphone Neumann U87 Ai Studio Set	1	Neumann U87 Ai Studio Set Accessories : EA 87 and WS 87	* (Shared with 4 halls)
Condenser microphone Neumann KM184	8	Neumann KM184 Accessories : SG 21 bk and WNS 100	* (Shared with 4 halls)
Condenser microphone DPA 2011C/MMP-C	4	DPA 2011C/MMP-C	* (Shared with 4 halls)
Condenser microphone DPA 4099-DC-1(For Loud SPL)/DAD6001-BC	8	DPA 4099-DC-1(For Loud SPL)/DAD6001-BC Accessories : 1. Double Bass(BC4099)*2 2. Cello(CC4099)*2 3. Piano(PC4099)*2 4. Clamp(CM4099)*2 5. Guitar(GC4099)*4 6. Sax and Trumpet(STC4099)*2 7. MIC Stand(MS4099)*1 8. Microphone Clip(UC4099)*2 9. Violin and Mandolin(VC4099)*8	* (Shared with 4 halls)

Items with \* mark are paid items. Please refer to the rate tables of National Kaohsiung Center for the Arts.

**4-5 Communications**

Item	Quantity	Brand and Model	Paid Item
Intercom host machine ( Matrix 32 x 32 )	1	Clear-Com Eclipse HX-Delta	
System interface	1	Clear-Com Helixnet HMS-4X	
Double circuit intercom	12	Clear-Com Helixnet HBP-2X	
Fixed intercom microphone/ speak	1	Clear-Com V12PDXY 110 / 340 Clear-Com V12PDDXY 110 / 340	
Single-ear headset	12	Clear-Com CC-300	
Double -ear headset	4	Clear-Com CC-400	
Telephone intercom	2	Clear-Com HS-6	
Digital Wireless Intercom set	12	1. Portable wireless sub-station / Clear-Com FS-BP 2. Single-ear headset / Clear-Com CC-300	*

Items with \* mark are paid items. Please refer to the rate tables of National Kaohsiung Center for the Arts.

## 4-6 Locations of Communications

Each floor is paired with intercom system, 70 units in total.

No.	Floor	Location
1	B3F	Right rear lower stage (B301)
2		Left rear lower stage (B301)
3		Right front B3 side gallery (B302)
4		Left front B3 side gallery (B302)
5	B1F	Below Orchestra (right)
6		Below Orchestra (left)
7		Below Orchestra (middle)
8		Orchestra
9		Command Lounge (B1070)
10		Main stage right upper stage (side gallery B1082)
11		Main stage left upper stage (side gallery B1082)
12		B1F audio equipment room
13		Main Stage Lower Right Stage (side gallery B1082)
14		Main Stage Lower left Stage (side gallery B1082)
15	1F	Down stage right
16		Down stage left
17		Right side upstage right
18		Left side upstage left
19		Upstage right
20		Upstage left
21		Backstage upstage right
22		Backstage upstage left
23		Stage right Downstairs
24		Stage left Downstairs
25		Stage right proscenium
26		Stage left proscenium
27		Auditorium under loop box
28		Rest preparation room 01 (1137)
29		Rest preparation room 02 (1093)
30		Dressing Room 01 (1134)
31		Dressing Room 02 (1132)
32		Dressing Room 03 (1130)
33		Dressing Room 04 (1128)
34		Dressing Room 05 (1126)
35		Dressing Room 06 (1124)
36		Dressing Room 07 (1112)
37		Dressing Room 08 (1114)
38		Dressing Room 09 (1116)
39		Dressing Room 10 (1118)
40		Dressing Room 11 (1120)
41		Dressing Room 12 (1122)
42		Loading Dock 01 (1010)
43		Control Room -under the table (2043)
44		2F
45	Lighting box (2042)	
46	Lighting box (2042A)	
47	Audience area (control table elevating platform)	
48	Event Light Bridge	
49	3F	Event Light Bridge
50		Left working gallery
51		Right working gallery
52		Upper working gallery
53		Stage Area Right Working Corridor 4th Floor
54	4F	Stage Area left Working Corridor 4th Floor
55		Repair catwalk
56	R1F	Catwalk 1st

57		Catwalk 1st
58		Catwalk 1st
59		Catwalk 2st
60		Catwalk 2st
61		Catwalk 2st
62		Catwalk 3st
63		Catwalk 3st
64		Catwalk 3st
65		Amplifier room
66		Dimmer room
67	R2F	Winch room
68		Winch room
69		Grid
70		Grid

#### 4-7 Closed-Circuit Television (CCTV)

Monitors are installed in both side of stage, lobbies, control rooms, dressing rooms and green room.

Item	Quantity	Brand and Model	Paid Item
Camera	1	SONY ILME – FR7	
Camera console	1	Panasonic AW-RP120	
Camera	1	Panasonic AW-HE60SN (Bridge)	
Infrared Camera	1	AIDA GEN3G-200	
Video Recording	Show	Fixed camera for stage panoramic view recording, only suitable for archived copy.	

Items with \* mark are paid items. Please refer to the rate tables of National Kaohsiung Center for the Arts.

### 4-8 Paging Systems

Backstage Paging Systems available for all dressing rooms, green rooms, Company office and Corridors, see next page.  
 The Paging and Program position is located on the Stage Manager Desk.

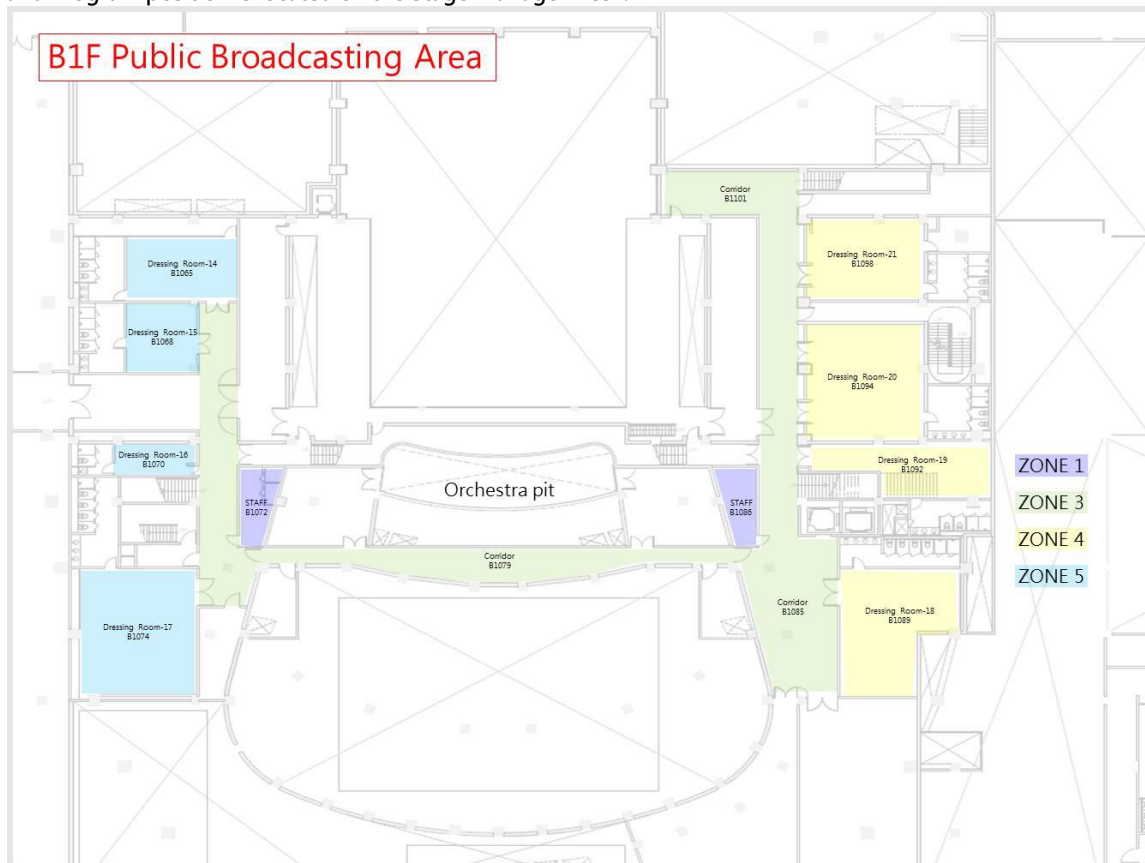


Figure 4-8.1 B1F public broadcasting area

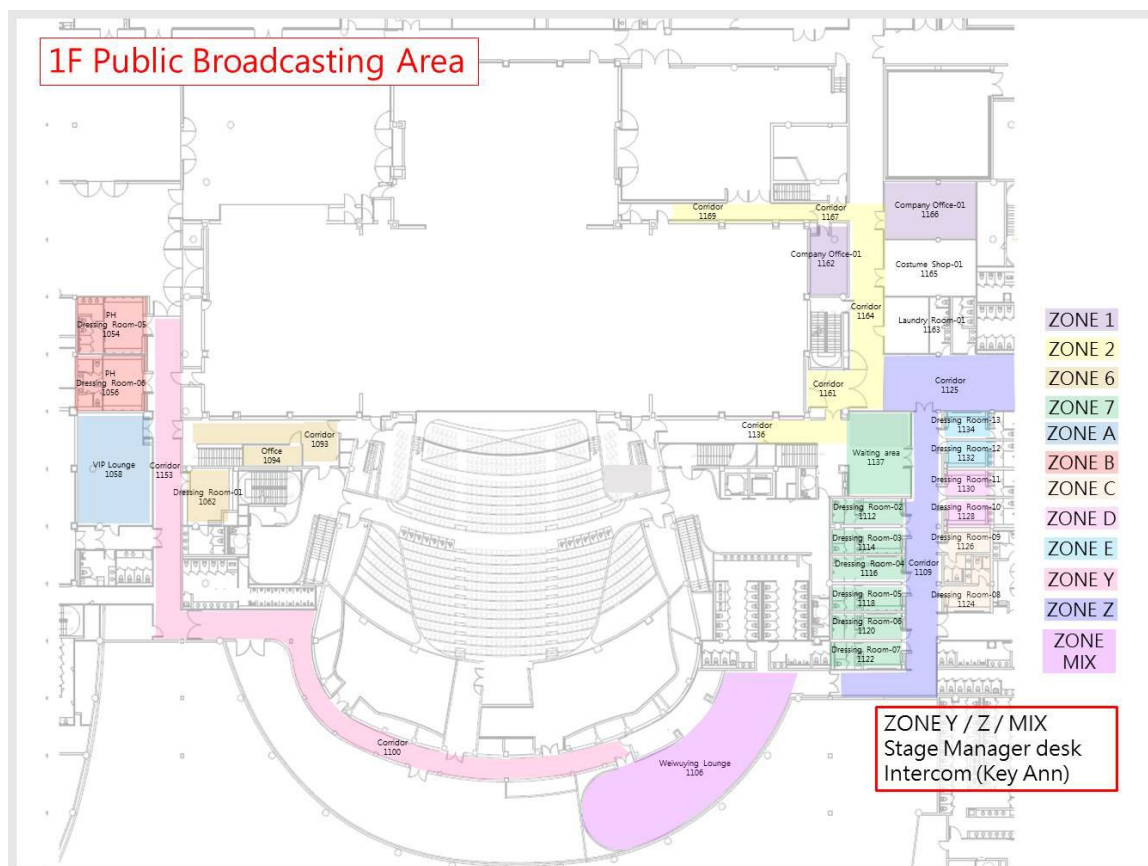


Figure 4-8.2 1F public broadcasting area

**4-9 Projector**

Name of Item	Quantity	Brand and Model	Note
20K Lumens Projector	2	Digital Projection (Titan Super Quad 1080p) There are 3 choices of lens: 1. Fixed wide-angle lens (Ratio 0.67:1) 2. Standard zoom lens (Ratio 1.87-2.56:1) 3. Telephoto zoom lens (Ratio 2.56-4.16:1)	* Option 2
5K Lumens LCD Projector	2	NEC PE501X	* (Shared with 4 halls) Option 1
5K Lumens Laser Projector	2	Optoma ZU500USTe Projection distance 45.7cm (132 inches) - 58.3cm (155 inches)	* (Shared with 4 halls) Option 2
6K Lumens Laser Projector	2	Panasonic PT-VMZ60T, Wide-angle zoom lens Throw ratio 1.09 -1.77 : 1	* (Shared with 4 halls) Option 2
10K Lumens Laser Projector	1	Panasonic PT-RCQ10 Normal zoom lens Lens : throw ratio 1.71~2.41 : 1	* (Shared with 4 halls) Option 2
Dedicated Ultra Short Focus Lens	1	ET-DLE020 Throw ratio 0.28~0.299 : 1 (For Panasonic PT-RCQ10 only)	* (Shared with 4 halls) Option 2
30K Lumens Laser Projector	2	Panasonic PT-RQ35K with ET-D3LEW60 (Throw Ratio 0.991-1.18:1) ET-D3LEW10 (Throw Ratio 1.35-1.84:1) ET-D3LES20 (Throw Ratio 1.79-2.59:1)	* (Shared with 4 halls) Option 2、3
17.3 inches monitor	2	Datavideo TLM-170L	* (Shared with 4 halls) Option 2
Portable Projection Screen	4	Grandview X-Press Pull-UP 100-inch projection screen(W203cm*H152cm)	* (Shared with 4 halls) Option 1
Square Truss 300 mm x 300 mm	10	2 meters (Matte Black finish)	* (Shared with 4 halls) Option 4
Square Truss 250 mm x 250 mm	10	3 meters (Matte Black finish)	* (Shared with 4 halls) Option 5
	10	2 meters(Matte Black finish)	* (Shared with 4 halls) Option 5
	10	1 meter (Matte Black finish)	* (Shared with 4 halls) Option 5

Items with \* mark are paid items. Please refer to the rate tables of National Kaohsiung Center for the Arts.

Option 1 : Setup and operating is not included !

Option 2 : Including assembly and disassembly, operating is not included !

Option 3 : Rental fee 50% off from second show.

Option 4 : Provide connection hardware, setup service is not included

Option 5 : Heavy loaded is prohibited, only used for printed materials and LED screens

**4-10 Subtitle**

Name of Item	Quantity	Brand and Model	Paid Item
LED Subtitle display screen(Group A)	1 set	1. P2.604mm LED display 750*100cm (1 cord) 250*150cm (2 cord) 2. 2 Laptop 3. 1 Switcher	* <b>Option 1</b>
LED Subtitle display screen(Group B)	1 set	1. P2.604mm LED display 250*150cm (2 cord) 2. 2 Laptop 3. 1 Switcher	* <b>Option 1</b>
LED Subtitle display screen(Group C)	1 set	1. P2.604mm LED display 750*100cm (1 cord) 2. 2 Laptop 3. 1 Switcher	* <b>Option 1</b>

*Items with \* mark are paid items. Please refer to the rate tables of National Kaohsiung Center for the Arts.*

**Option 1 : Operating is not included ! Rental fee 50% off from second show. Only for Opera House or Play House.**

## 5 Backstage

### 5-1 Dressing Room and Company office

No.	Floor	Room No.	Name	Capacity	Notes
1	1F	1112	Dressing room 02	3	Includes mirror, table, sofa and chairs, toilet and shower
2		1114	Dressing room 03	3	Includes mirror, table, sofa and chairs, toilet and shower
3		1116	Dressing room 04	3	Includes mirror, table, sofa and chairs, toilet and shower
4		1118	Dressing room 05	3	Includes mirror, table, sofa and chairs, toilet and shower
5		1120	Dressing room 06	3	Includes mirror, table, sofa and chairs, toilet and shower
6		1122	Dressing room 07	3	Includes mirror, table, sofa and chairs, toilet and shower
7		1124	Dressing room 08	3	Includes mirror, table, sofa and chairs, toilet and shower
8		1126	Dressing room 09	3	Includes mirror, table, sofa and chairs, toilet and shower
9		1128	Dressing room 10	3	Includes mirror, table, sofa and chairs, toilet and shower
10		1130	Dressing room 11	3	Includes mirror, table, sofa and chairs, toilet and shower
11		1132	Dressing room 12	3	Includes mirror, table, sofa and chairs, toilet and shower
12		1134	Dressing room 13	3	Includes mirror, table, sofa and chairs, toilet and shower
13		1162	Company office 01	15	Includes table and chairs.
14		1166	Company office 02	15	Includes table and chairs.
15	B1F	B1065	Dressing room 14	16	Includes mirror, table and chairs, toilet and shower
16		B1068	Dressing room 15	8	Includes mirror, table and chairs, toilet and shower
17		B1070	Dressing room16	3	Includes mirror, table and chairs, toilet and shower
18		B1074	Dressing room 17	32	Includes mirror, table and chairs, toilet and shower
19		B1089	Dressing room 18	28	Includes mirror, table and chairs, toilet and shower
20		B1092	Dressing room 19	12	Includes mirror, table and chairs, toilet and shower
21		B1094	Dressing room 20	30	Includes mirror, table and chairs, toilet and shower
22		B1098	Dressing room 21	21	Includes mirror, table and chairs, toilet and shower

### 5-2 Orchestra Facilities

No.	Item	Quantity		Notes
1	Chair	100	*	
2	Ensemble stool	12	*	Rotate : 6 Unable to rotate : 6
3	Conductor' s chair	1		
4	Music stand	90	*	
5	Music stand light	110	*	White light, two brightness mode
6	Conductor' s podium(single layer)	1	*	WENGER L 120cm x W 115cm xH 25cm
7	Conductor' s stand	1	*	
8	Percussion table stand	4	*	
9	Endpin stopper	10	*	
10	Acoustic shield	5	*	
11	Music stand Tray	10	*	
12	Solo Musician' s PODIUM 130*60*16(cm)	2	*	
	Solo Musician' s PODIUM 100*60*16(cm)	10	*	
	Solo Musician' s PODIUM 130*60*30(cm)	2	*	
	Solo Musician' s PODIUM 100*60*30(cm)	8	*	

Items with \* mark are shared with Playhouse

**5-3 Pianos (shared between four theatres)**

No.	Item	Brand	Model Number	Quantity	Paid Item
1	Model-D Concert grand	Steinway & Sons	D-274	3	*
2	Concert grand	FAZIOLI	F308	1	*
3	Grand Piano	YAMAHA	C7XPE	1	*
4	Grand Piano	KAWAI	SK-6L	1	*
5	Harpichord	J.C.NEUPERT	Hemsch	1	*
6	Celesta	Schiendmayer	5 ½ Octave Studio model	1	*
7	Upright Piano	YAMAHA	U3	1	*

*Items with \* mark are paid items. Please refer to the rate tables of National Kaohsiung Center for the Arts.*

**Important :**

- Pianos shared with four venues, booking in advance is required.*
- WeiWuYing's contract-signed piano technician must tune all pianos before performance.(Piano hire fees do not include tuning costs)*
- Extra material (any object touching the strings during the performance, including hands or palms) pianos are limited to YAMAHA C7XPE and KAWAI SK-6L, which should be restored and tuned by the venue's contracted tuner at the end of the performance (at the latest on the next day) at the expense of the applicant..*
- While WWY' s piano is in part of the performance, the Fog and Haze Machine can' t be used.*

5-4 Loading Dock / Scenery Shipping Path / Loading Flow

5-4-1

※Notes for Container Transport:

Due to the limitation of the slope at the entry of the loading dock, the minimum height of the trailer's low bed should be higher than 100cm. Also, if the company hires a 40' high-cube container, the bed rack should be within the height of 135~140cm to accommodate the height of loading gate.

West Dock

Opera House and Playhouse use the West Dock for loading and unloading. The dock is equipped with three hydraulic dock leveler that can be adjusted according to the required height.

Dock Dimension

- Big loading dock: 7.25m (width) x 4.3m (height)
- Small loading dock: 3.5m (width) x 4.3m (height)
- Loading clearance: 4.3m height from floor to top (Truck height limit 4.2m)  
3.7m height from dock to grid area
- Stage entrance and exit: minimum 4m (width) x 3.4m (height)
- Height from dock to floor: 1m

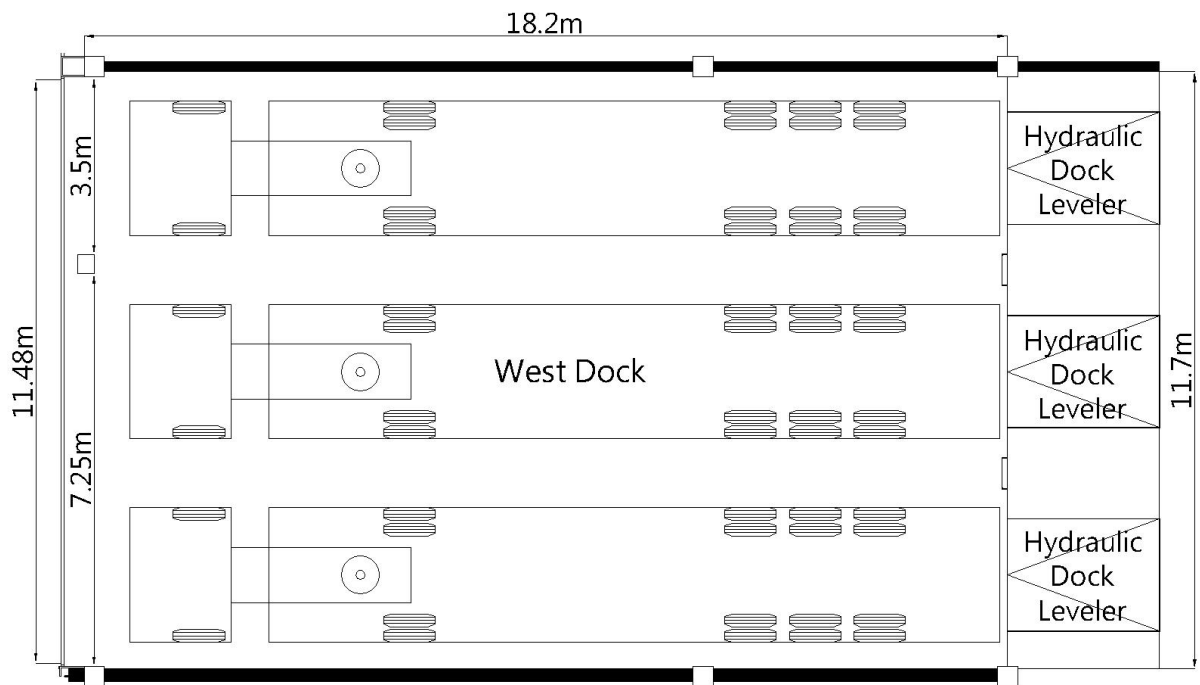
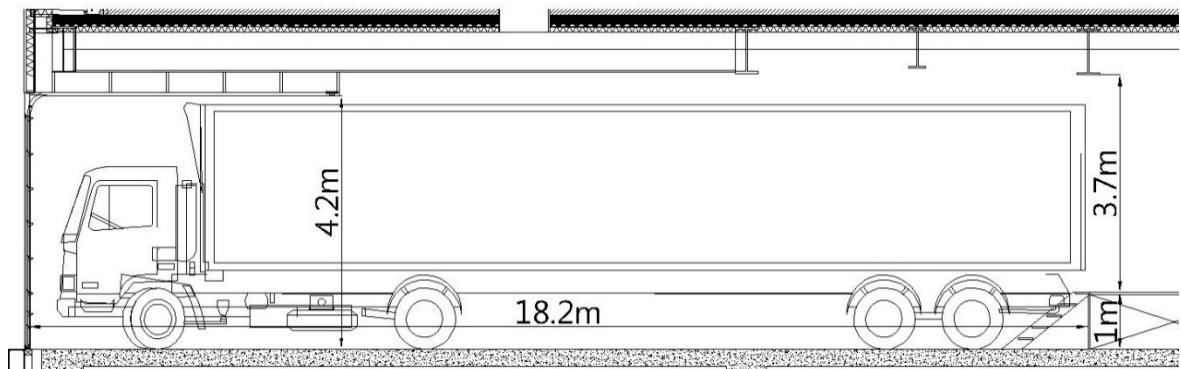


Figure 5.1 - West Loading Dock Plan

Figure 5.2 - West Loading Dock Section



**East Dock**

Recital Hall and Concert Hall use the East Dock for loading and unloading. The dock is equipped with two hydraulic dock leveler that can be adjusted according to the required height.

**Dock Dimension**

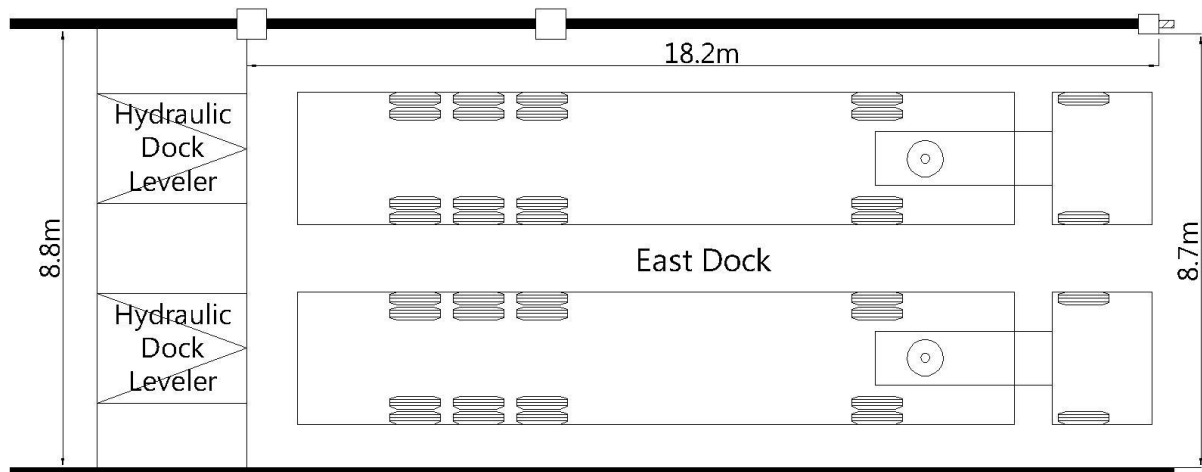
Dimension : 8.75m (width)

Clearance : 4.3m height from floor to top

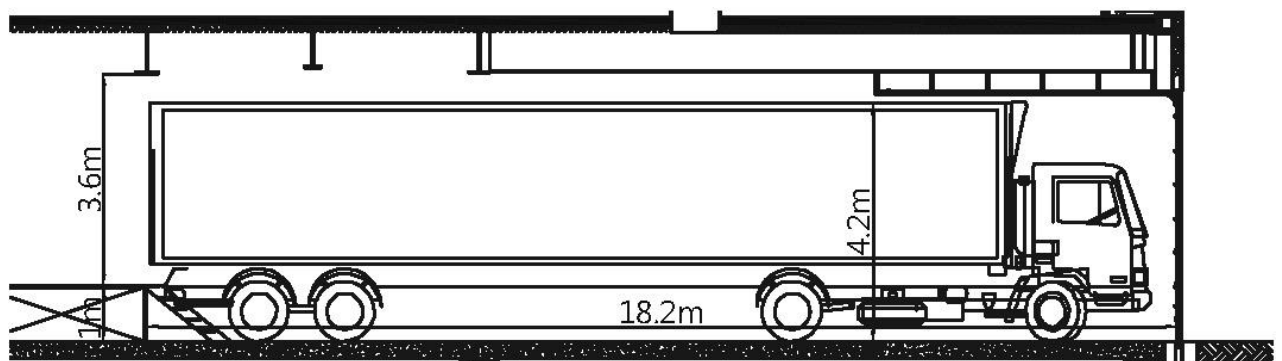
3.8m height from dock to grid area (Truck height limit 4.2m)

Height from dock to floor: 0.98m

Stage entrance: minimum 1.95m (width) x 2.2m (height)



*Figure 5.3- East Loading Dock Plan*



*Figure 5.4- East Loading Dock Section*

**5-4-2 West Dock Handling equipment**

2.5mt Electric Forklift x1

1.5mt Stand-Up Automatic Electric Forklift x1

Figure 5.5- West Loading Flow

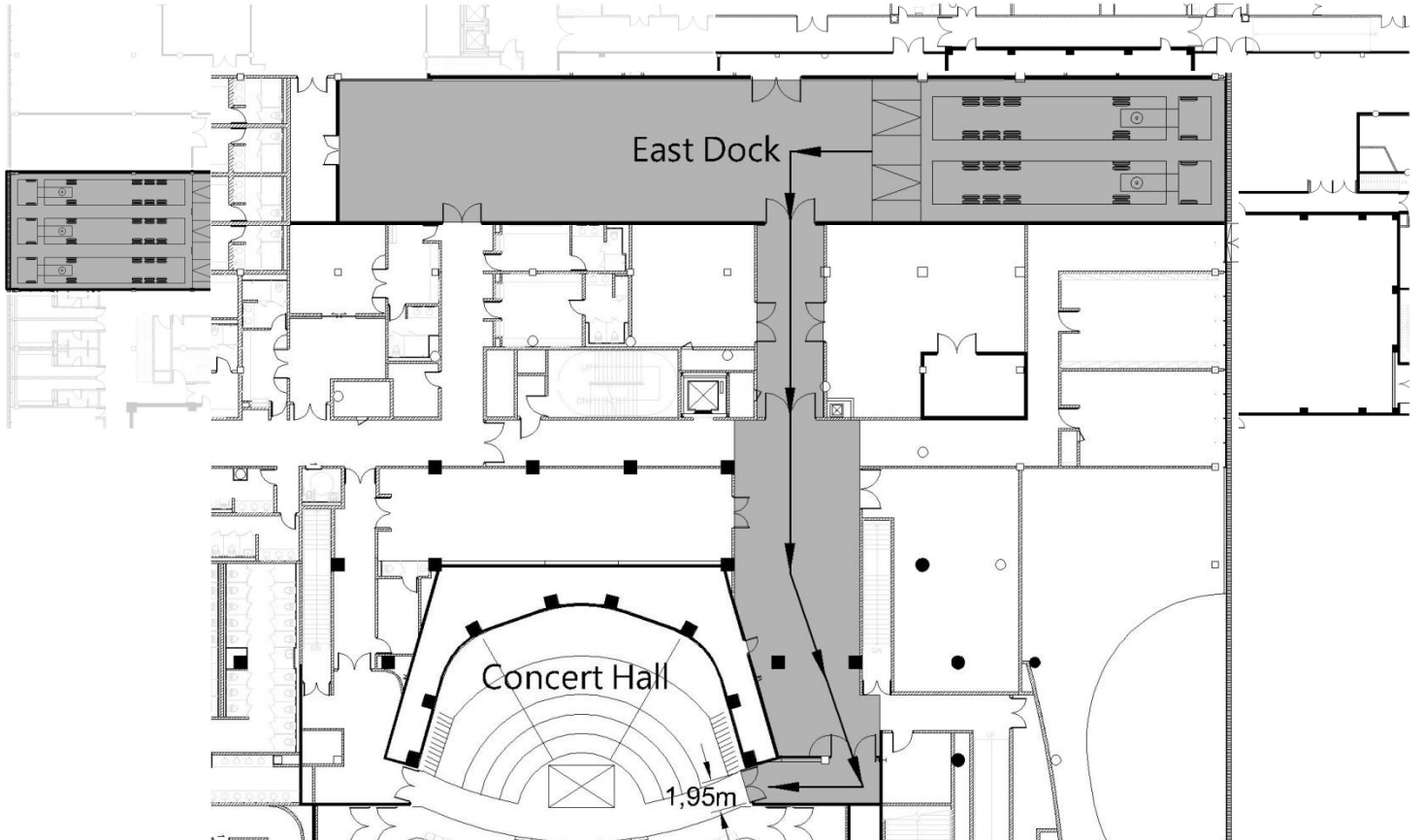


Figure 5.6- East Loading Flow

**5-4-4 Hydraulic Dock Leveler**

Capacity: 22.6mt

Area: 198cm (width) x 221.9cm (length)

Elevation: +/- 30.5cm

West Dock Quantity: 3

East Dock Quantity: 2

## 5-5 Other Facilities

### 5-5-1 Rehearsal Rooms

Opera House provide a dedicated rehearsal studio connecting with rear stage. There are also 12 different function and accommodated rehearsal studios, these available for hire between four major theatres .Requests should be discussed well in advance to determine availability. The hire fees please refer to the rate tables of National Kaohsiung Center for the Arts.

Room No.	Name	Dimension (Length x Width x Height / m)	Notes
1171	Rehearsal Studio-01 (Opera House exclusive rehearsal room)	16.4x12.3x10.4	1. Grand Piano · Wooden floor covered black color dance floor · Wall mount glassless mirrors x 1 side 2. Capacity : 110
		Subsidiary space 6.9x5.3x3	
1182	Rehearsal Studio-02	11.4x10.8x3.8	1. Wooden floor covered gray color dance floor · Sound absorption wall x 2 side · Wall mount glassless mirrors x 2 side 2. Capacity : 50
1184	Rehearsal Studio-03	11.1x10.8x4	1. Grand Piano · Wooden floor covered gray color dance floor · Sound absorption wall x 2 side · Wall mount glassless mirrors x 2 side 2. Capacity : 50
1186	Rehearsal Studio-04	17.5x12.1x3.9	1. Grand Piano · Wooden floor ,black color dance floor · Wall mount glassless mirrors x 2 side · Fixed Ballet barre on the single sided wall mirror x 2 2. Capacity : 110
		Subsidiary space 6.6×8.8 ×3	Rehearsal Studio-04 use only Green Room-01(With dressing room)
1192	Rehearsal Studio-05	19.3x12.2x3.9	1. Grand Piano · Wooden floor , black color dance floor · Wall mount glassless mirrors x 2 side · Fixed Ballet barre on the single sided wall mirror x 2 2. Capacity : 110
		Subsidiary space 6.6×8.8 ×3	Rehearsal Studio-05 use only Green Room-02(With dressing room)
B1111	Rehearsal Studio-06	8x7.4x2.3	1. Upright piano ,Chair , Music stand · Wooden floor · Sound absorption wall 2. Capacity : 25
B1112	Rehearsal Studio-07	5.2x4.4x2.3	1. Chair , Music stand · Wooden floor · Sound absorption wall 2. Capacity : 10
B1113	Rehearsal Studio-08	7.2x5x2.7	1. Chair , Music stand · Wooden floor · Sound absorption wall 2. Capacity : 15
B1114	Rehearsal Studio-09	5.2x3.7x2.7	1. Chair , Music stand · Wooden floor · Sound absorption wall 2. Capacity : 10
B1115	Rehearsal Studio-10	5.2x4.1x2.7	1. Chair , Music stand · Wooden floor · Sound absorption wall 2. Capacity : 10
B1116	Rehearsal Studio-11	5.2 x 4.1 x 2.7	1. Chair , Music stand · Wooden floor · Sound absorption wall 2. Capacity : 10
B304	Chorus Rehearsal Room	15.9x9.9x8.8	1. Grand Piano ,Chair , Ensemble stool · Wooden floor · Sound absorption curtain 2. Capacity : 80
B313	Orchestra Studio	18.7x14.3x7.8	1. fixed auditorium < 84seats > · Grand Piano ,Chair , Ensemble stool · Wooden floor · Sound absorption curtain 2. Capacity : 200

### 5-5-2 Carpentry Shop / Costume Shop / Laundry Room

National Kaohsiung Center for the Arts is equipped with basic production facilities, include Carpentry Shop, Costume Shop, and laundry rooms. The hire fees please refer to the rate tables of National Kaohsiung Center for the Arts.

Room No.	Name	Dimension (Length x Width x Height / m)	Notes
1002	Carpentry Shop	11.9×19.7×3	Basic wood crafts and electrical tools
1165	Costume Shop-01	5.9×10.2×3	Basic facilities for the maintenance of costume; Sewing machine, overlock machine and steam / iron equipment
1181	Costume Shop-02	5.8×11.8×3	
1163	Laundry Room-01	5.8×4.9×3	Washing machine, tumble dryers, sink and clothes folding table
B1019	Laundry Room-02	6×8.2×3	