

Culmination



Matthew Ramosa

My team



Professor Elliot Yokum

- Compassionately organizing the chaos that gradually enveloped my brain after jumping from project to project to midterm to project
- Emphatically directed my course of work to allow me to take in all the information I have acquired, and meaningfully display the inner workings of this beautiful production for others



Professor Miguel Angel Valderrama

- Generously bestowed this amazing opportunity upon me, allowing me to experience all the intricate nuances that occur when working out in the field that we all enjoy so very much
- His willingness to instruct, support, and overall understand me throughout the entirety of this project, could not go without saying. Every step of the way he has been by my side with guiding answers, meaningful instruction, and of course his charismatic conversations



Lightscape

Brooklyn Botanic Garden

A presentation by Matthew Ramosa

What is Lightscape?

- Lightscape is a captivating annual event held at the Brooklyn Botanic Garden, transforming the familiar landscapes into a breathtaking spectacle of color and illuminance.
- It is not just a display of lights; it is an immersive experience that celebrates the beauty of nature in a unique and enchanting way.



455 Flatbush Avenue Entrance

Flatbush Avenue



Washington Avenue

MAP OF BBG

- Generator
- UK Generator (50Hz)
- 12x Generator
- ◆ Power Distributor

Administrative Entrance

990 Washington Avenue Entrance

2 3

150 Eastern Parkway Entrance

Eastern Parkway

What is my job?

- I was given the opportunity to assist Professor Valderrama, as well as the onsite staff, with the organizing, assessing, and planning of all power requirements for the installation.
- I was also on hand to assist with the shop prep, as well as the load-in phase of the project.



Production Phases

01

Creative Process

Drafting documents, Calculating and assessing power, gear, and equipment requirements

02

4Wall Prep

Using documents to accurately categorize and organize all cable and PD's based on zones

03

Installation

Working with PLAN Experimental over 2 weeks to properly install power and light systems at BBG

04

Performance

Opening night

05

Reflection

Recounting all observations, notes, and pictures from the experience to present for others

01

Creative Process

Let's start brainstorming!

Where the heck do we even start?!?!?

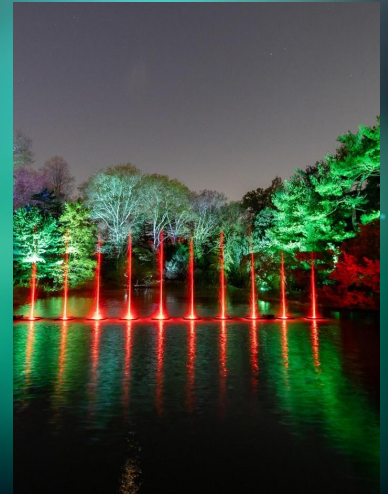
Let's take a look at a sample of our fixtures and installations to find out!

What lighting instruments and Installations will require the most Wattage?



Specifications:
Proteus Hybrid

ELECTRICAL / THERMAL AC
100-240V - 50/60Hz **700W Max**
Power Consumption 14°F to 113°F
(-10°C to 45°C)



Before we start installing anything, we must make sure we fit the requirements for the fixtures we are using

Where the heck do we even start?!?!?

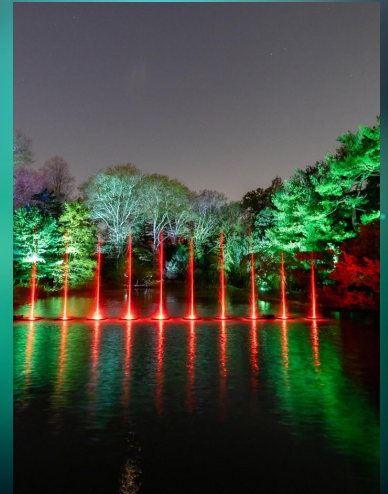
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Dancing Water Colors

This art installation was created in Europe, therefore requires a different frequency of power to be able to operate efficiently. (50 Hertz instead of 60 Hertz)



Before we start installing anything, we must make sure we fit the requirements for the fixtures we are using

Strategy

BBG is a 52 acre space, so undertaking this massive task of distributing power to practically each corner of the garden would be daunting.

To simplify this, our team used the strategy of “Zonifying” the garden, in order to divide the large space into smaller, more manageable, workplaces.

Each area/workplace will be allotted one generator, with a specific amount of PD’s depending on the capacity required.

Assessing these two devices are the first two steps for creating a power system.

One distinct restriction we were presented with was a request from the BBG staff to use the least amount of generators possible to avoid pumping toxic diesel fumes near the plant life.



Strategy

Here we can see pictures of different *Whisperwatt* generators rented from Herc.

The lowest powered device we used was the 45kW.

Our devices included 60kW generators, 70kW generators, and our highest power device for our UK art installation comes in at a whopping 220kW.



Drafting Documents

02

RACK IDS

03

MULT BREAKDOWN

01

DISTRO LIST

RACK	POSITION	PORT	MULT	Voltage
DISTRO 1	PB 1 ENTRY LAWN	4	ND011	120
DISTRO 1	PB 1 ENTRY I-BEAM	3	ND012	120
DISTRO 1	PB 1 ENTRY I-BEAM	5	ND013	120
DISTRO 1	PB 1 ENTRY I-BEAM	7	ND014	120
DISTRO 1	ENTRY CONCESSIONS	9	ND015	120
DISTRO 1		11		120
DISTRO 1		13		120
DISTRO 1		15		120
DISTRO 2	PB 2 HALF ARCHES EAST	3	ND021	120
DISTRO 2	PB 2 HALF ARCHES WEST	3	ND022	120
DISTRO 2	PB 2 HALF ARCHES WEST	5	ND023	120
DISTRO 2		7		120
DISTRO 3	PB 3 FOUNTAIN SHOW	3	ND031	120
DISTRO 3	PB 3 FOUNTAIN SHOW	2	ND032	120
DISTRO 5	ANTARES STARS EAST	3	ND051	120
DISTRO 5	SINGING TREE PATH	3	ND052	120
DISTRO 5	SINGING TREE PATH	5	ND053	120
DISTRO 5	SINGING TREE PATH	7	ND054	120
DISTRO 5	SINGING TREE PATH	9	ND055	120
DISTRO 5	ELECTRIC CANDLES NORTH	11	ND056	120
DISTRO 5		13		120
DISTRO 5		15		120
DISTRO 6	PB 4 SUPA NOVA	3	ND061	120
DISTRO 6	PB 4 SUPA NOVA	3	ND062	120
DISTRO 6	PB 5 BATTEN SHOW	5	ND063	120
DISTRO 6	PB 5 BATTEN SHOW	7	ND064	120
DISTRO 6	PB 5 BATTEN SHOW	9	ND065	120
DISTRO 6		11		120
DISTRO 6		13		120
DISTRO 6		15		120
DISTRO 7	FIRE GARDEN	1	ND071	120

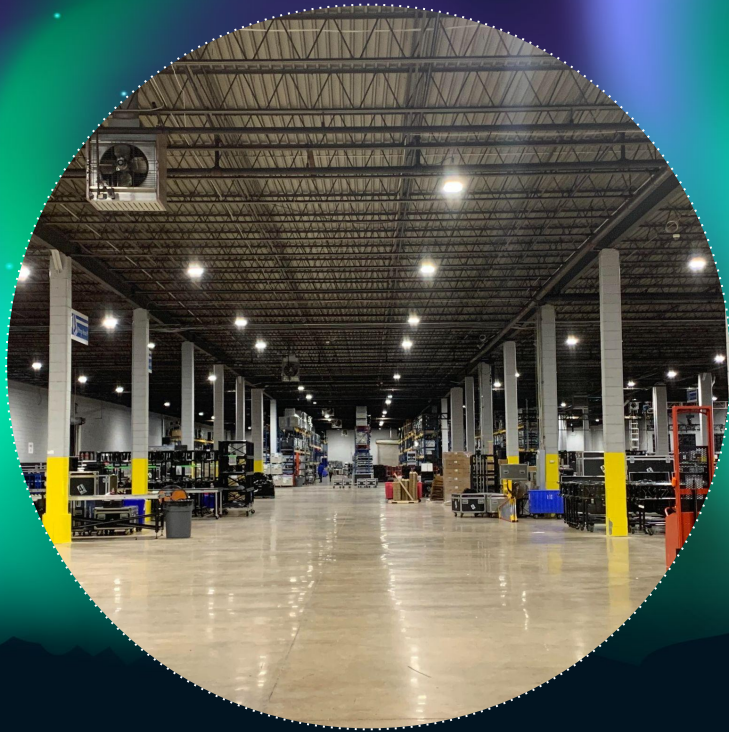
RACK IDS						
Rack ID	SIZE	Range	Location	Voltage	Address	Color
DISTRO 1	48x	N101-N148	PLAYBACK 1	120/208V	N/A	PINK
DISTRO 2	24x	N201-N224	PLAYBACK 2	120/208V	N/A	RED
DISTRO 3	12x	N301-N312	PLAYBACK 3	120/208V		BLUE
DISTRO 4		I-PANEL	PLAYBACK 3	EURO 50 HZ		
DISTRO 5	48x	N501-N548	ANTARES PATH	120/208V		WHITE
DISTRO 6	48x	N601-N648	PLAYBACK 5	120/208V		GREEN
DISTRO 7	24x	N701-N724	CONCESSIONS	120/208V		WHITE/ORANGE
DISTRO 8	24x	N801-N824	CONCESSIONS	120/208V		WHITE/ORANGE
DISTRO 9	24x	N901-N924	PROJECTION TREES	120/208V		WHITE/GREEN
DISTRO 10	24x	N1001-N1024	LIGHT A WISH	120/208V		WHITE/GREEN
DISTRO 11	24x	N1101-N1124	PLAYBACK 6/7	120/208V		TEAL
DISTRO 12	24x	N1201-N1224	NEON TREE	120/208V		TEAL
DISTRO 13	24x	N1301-N1324	KALEDEI CIRCLE	120/208V		WHITETEAL
DISTRO 14	48x	N1401-N1448	PLAYBACK 9	120/208V		PURPLE
DISTRO 15	48x	N1501-N1548	PATH TO MEADOW	120/208V		WHITE/BROWN
DISTRO 16	24x	N1601-N1624	PLAYBACK 10	120/208V		BROWN

MULT BREAKDOWN										
MULT	PART 1	PART 2	PART 3	PART 4	PART 5	BREAKOUT	SPARES	BREAK	COLOR	
ND011	25'	100'					1, 6		PINK	
ND012	100'	75'							PINK	
ND013	25'	100'							RED	
ND014	100'	100'							RED	
ND015	75'								PINK	
ND021	50'								TRUE 1	
ND022	100'	100'	100'	75'					RED	
ND023	100'	100'	25'						RED	
ND031	100'	100'	75'						BLUE	
ND032	100'	100'	100'	100'	25'				BLUE	
ND051	100'	75'							WHITE	
ND052	10'								WHITE	
ND053	10'	100'	100'						WHITE	
ND054	100'	100'	100'	100'					WHITE	
ND055	75'								WHITE	
ND056	100'	100'	100'	100'					WHITE/ORANGE	
ND061	100'	100'							ORANGE	
ND062	100'	75'							TRUE 1	
ND063	10'								GREEN	
ND064	100'	100'	100'	50'					GREEN	
ND065	25'	100'							GREEN	
ND071	100'	100'	100'	25'					WHITE/ORANGE	
ND072	100'								WHITE/ORANGE	
ND073	75'								WHITE/ORANGE	
ND074	10'	100'							WHITE/ORANGE	
ND081	100'	100'	25'						WHITE/ORANGE	
ND082	10'								WHITE/ORANGE	
ND083	100'								WHITE/ORANGE	
ND091	100'	25'							WHITE/GREEN	
ND092	10'								WHITE/GREEN	
ND093	100'	100'	25'						WHITE/GREEN	

02

4Wall Prep

Soo.... much... cable



4Wall Entertainment

“4Wall Entertainment is a full-service lighting, video, and rigging company servicing all facets of the entertainment industry - from corporate events and theatre to concert touring and television.”

Agenda

02

MORE CABLES

01 CAAAABLES



Organized Cables 03

