



**PRO
CHURCH
LIGHTS**

HYBRID INSTALL PLAYBOOK™

First Christian Church of Belleville



First Christian Church of Belleville
Get Ready To... *Love Your Lights.*

PROCHURCHLIGHTS

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INTRODUCTION

We Are Here To Serve!

You've made a great decision by choosing the Pro Church Lights Hybrid Install Service. This plan was expertly crafted for your church by an experienced PCL lighting professional.

This playbook will equip you and your team in bringing your new lighting system to life. We've made all effort too clearly, simply and accurately guide you through the entire install process. If something isn't coming together, is missing or is just plain confusing - we're here for you.

Please follow all instructions laid out here as closely as possible. But remember, lighting is both technical and an art form. Also remember to have fun with it! And most importantly, remember the missional reason we're all doing this!

Sincerely,

A handwritten signature in black ink that reads 'Frank'.

Frank Schabell
Lead Lighting Designer at PCL
LOVE YOUR LIGHTS™

Hybrid Install Playbook™

INTRODUCTION



**IF YOU HAVEN'T SCHEDULED
YOUR PRE-INSTALL CALL...
DO IT NOW!**

**CLICK HERE
TO SCHEDULE**

OR VISIT:

<https://calendly.com/prochurchlights/lighting-pre-install-call>

**IT IS CRUCIAL THE PRE-INSTALL CALL
TAKE PLACE BEFORE YOU OPEN ANY BOXES!**

PROCHURCHLIGHTS

Hybrid Install Playbook™

INTRODUCTION



Install Support

We're here for you!

If you have questions during your install about anything - please contact us in any of the following ways...

Phone: 888-317-7745 extension 700

Text: 888-317-7745

Email: installsupport@prochurchlights.com

STOP!

EACH FIXTURE BOX IS LABELED WITH A FIXTURE ID AND DMX ADDRESS. THESE ID'S MATCH THE PLACEMENT OF THE FIXTURES CALLED OUT IN THIS MANUAL. STAY ORGANIZED FOR A SMOOTH INSTALL.



PROJECT SHOW FILES

DOWNLOADS



Here are the download links to the LightKey™ software and your custom created show file that was setup by the PCL Hybrid Install Team.

**Receive an instant 10% discount off your LightKey™ license.
Use coupon code: [PROCHURCHLIGHTS](#)**

**DOWNLOAD
LIGHTKEY™ HERE!**

**DOWNLOAD YOUR
SHOW FILE HERE!**

**PURCHASE YOUR
256 LICENSE KEY
HERE!**

PROJECT SHOW FILES

DOWNLOADS



Here is the download link to your fixture manuals.
There is also a QR code in each fixture box that
will direct you to the manuals as well.
Save them on your lighting computer for quick
reference.

**DOWNLOAD YOUR
FIXTURE MANUALS
HERE!**

RIGGING AGREEMENT

By moving forward with your install you agree to the following items...

1. Your building structure can accept the additional weight loads you will be adding to it. Weights are displayed on the next page.
2. You assume all risk and liability for every aspect of the install including but not limited to rigging and load calculations, hardware choices, appropriate permitting, correct installation methods, positioning and safety.
3. You understand this playbook is only a guide and that you are fully responsible for determining the best method, position and equipment choice for the rigging and hanging of your equipment.

AGREEMENT

WEIGHTS / LOADS

By moving forward with your install you understand and agree that your building structure can handle the additional loads you will be adding to it. You also agree to perform all final load calculations and factor at least a 7:1 safety margin.

ADDITIONAL LOADS:

4 ProWashPlus™ Fixtures: 11 lbs each x 11 = 44 lbs

4 ProKicks™ Fixtures: 9 lbs each x 4 = 36 lbs

Rigging and Cable: 50 lbs

TOTAL WEIGHT ADDED TO YOUR STRUCTURE = 130 lbs

AGREEMENT

BY MOVING FORWARD WITH YOUR INSTALL YOU AGREE TO THE FOLLOWING:

Buyer (First Christian Church of Beleville) assumes all liability for use of products and services sold by Seller (PRO CHURCH LIGHTS). Buyer agrees sole liability and assumes all risk for any damage, fire, fall, shock, loss, death from use of any product or service sold by Seller. Buyer agrees to utilize safe rigging and electrical practices and assumes full responsibility. Buyer understands the risks of fire and electrocution that could be caused by lights, electronics, electrical equipment and heat generating equipment and agrees to hold seller harmless shall any damage, shock, electrocution or fire arise out of use of items purchased from Seller.

First Christian Church of Belleville acknowledges that in no way is Pro Church Lights liable for any electrical guidance, loss, misuse, damage, injury or death that occurs from use of fixtures, equipment, accessories or services provided by Pro Church Lights.

First Christian Church of Belleville agrees to fully assume responsibility for understanding local and national electrical code requirements.

First Christian Church of Belleville acknowledges that in no way is Pro Church Lights liable for any rigging guidance, loss, misuse, damage, injury or death that occurs from rigging or use of fixtures, equipment, accessories or services provided by Pro Church Lights.

SAFETY AND AGREEMENT

INSTALL AT YOUR OWN RISK!

By moving forward with your install, you agree to take all necessary safety precautions and assume full responsibility for any damage to your church, building, personnel and/or equipment. You also knowingly agree and assume all responsibility for any damage, fire, fall, death and/or injury. You are installing your project 100% at your own risk.

BE SMART. BE SAFE.
PROTECT YOURSELF AND OTHERS.



**SAFETY
FIRST**

SAFETY AND AGREEMENT

WORK SAFELY!

Keep yourself and others safe. Use appropriate equipment, protection and safety practices when performing your install. Here are some tips and suggestions for a safe install...



Rent a lift from a local rental outfit. Lifts are not expensive and will speed up your install and create a safe working environment.

Use safe ladder practice as well as equipment that is maintained, certified and current.

Wear PPE (personal protective equipment).

Be verbal when working overhead or moving a lift. Keep an eye out for people, walls, chandeliers, cables, etc.

Say something if you see someone doing something unsafe.

Hybrid Install Playbook™

KEY STEPS



KEY STEPS

ONE PIECE AT A TIME

Just like a 1000 piece puzzle, it all comes together one piece at a time. Take your lighting install piece by piece, step by step. This is important because if you JAM pieces of the puzzle in the wrong places, your end result may not be as intended. Here are the KEY steps that will make up your lighting install.

1

**POSITION &
RIGGING**

2

DMX & POWER

3

**AIMING,
FOCUSING &
COLOR**

4

**PROGRAMMING &
OPERATION**

Hybrid Install Playbook™

POSITION & RIGGING



Position & Rigging

OVERVIEW



Find the optimal position for your lights.

Perhaps the most important aspect of this install will be the positioning of your new light fixtures. Positioning is KEY in reducing shadows, creating symmetry and producing smooth and even light across your stage.

1

FIND THE CORRECT POSITIONING

The diagrams on the following pages will help you confirm the recommended positioning we've outlined within this document.

2

RIGGING MATERIAL ALLOCATION

Once the approximate positioning is located - you'll need to allocate the needed rigging materials. We've prepared a list of the key parts and pieces that will make up your rigging system.

3

INSTALL THE RIGGING

Once the positioning and materials are ready, you will then begin installing the pieces to your structure.

Position & Rigging

RIGGING DISCLAIMER



ATTENTION:

You (the installer) are solely responsible for choosing the correct rigging and support items. The items listed here are only to be used as a guide and starting point for your ultimate rigging solution.

Your hang points, joists, beams, studs and load capacity will determine the correct hardware to use. Be sure to calculate loads and know that your structure can support the weight.

Be sure to fasten items to walls, beams, joists or other hang points correctly, utilizing the correct grade and rated hardware for the job.

If you have any questions - please contact us for rigging guidance.

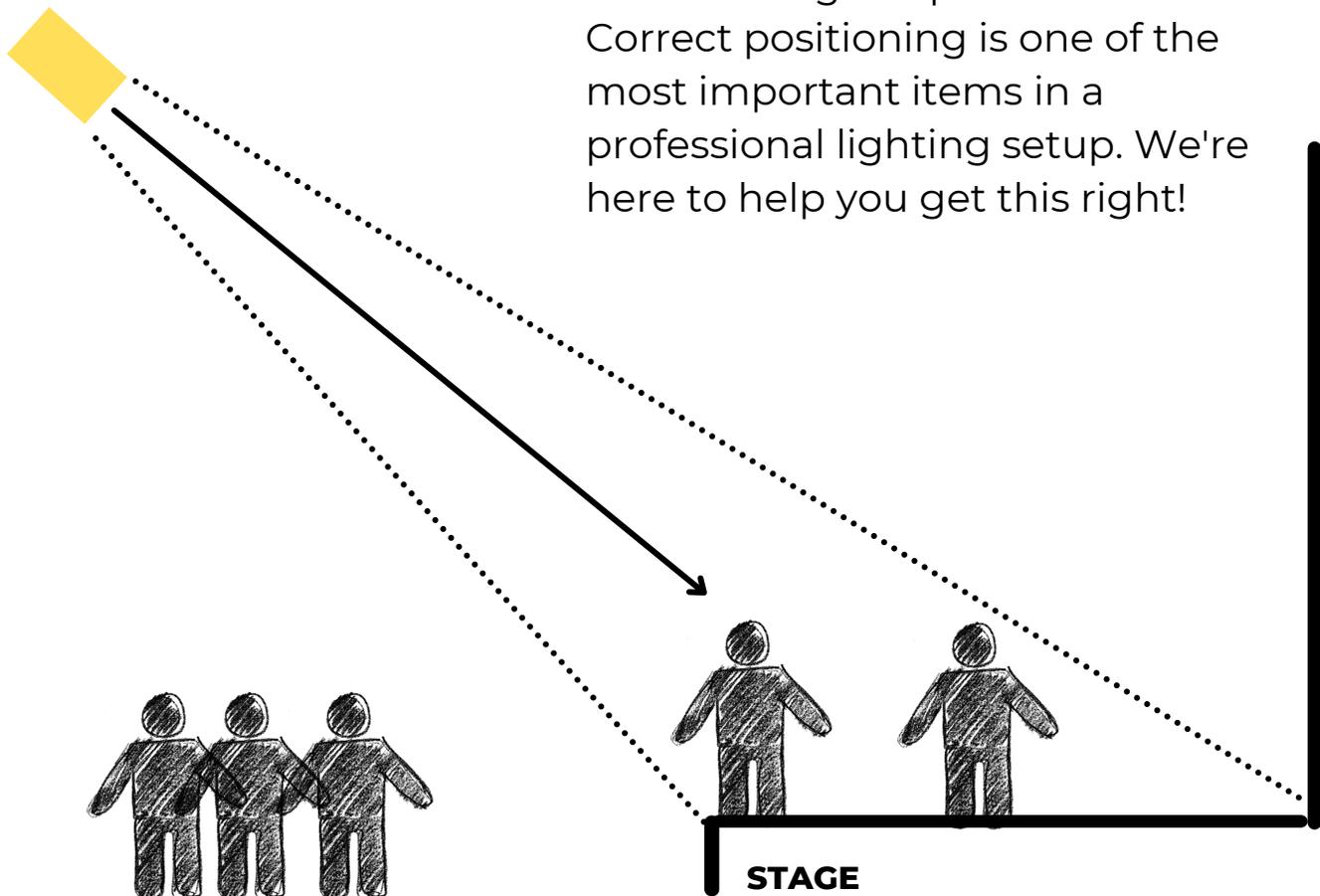
FRONT WASH POSITIONING

Locating the front wash position

The front wash position should be roughly 45 degrees up and out from the pulpit. In the following pages, you'll use 2 methods to narrow down your front wash positioning. You will also see pictures of your space that highlight approximate positions for your front wash based on the measurements and pictures you supplied to us.

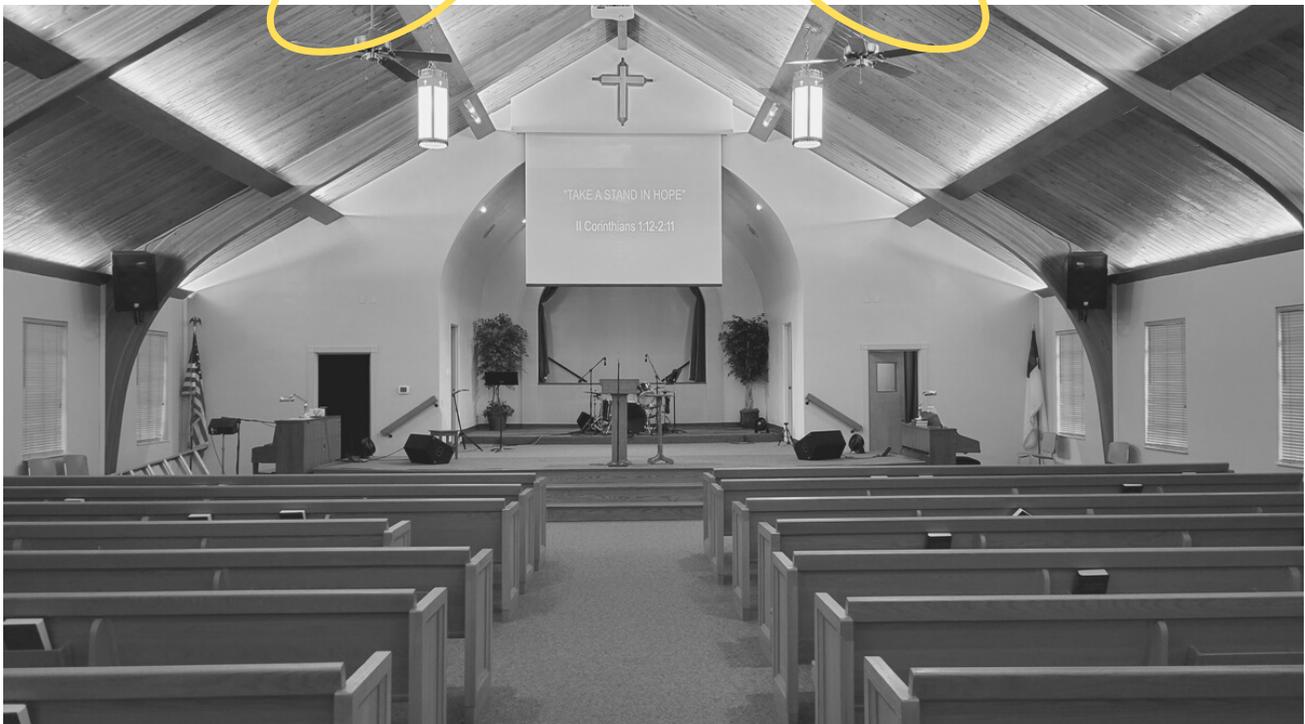
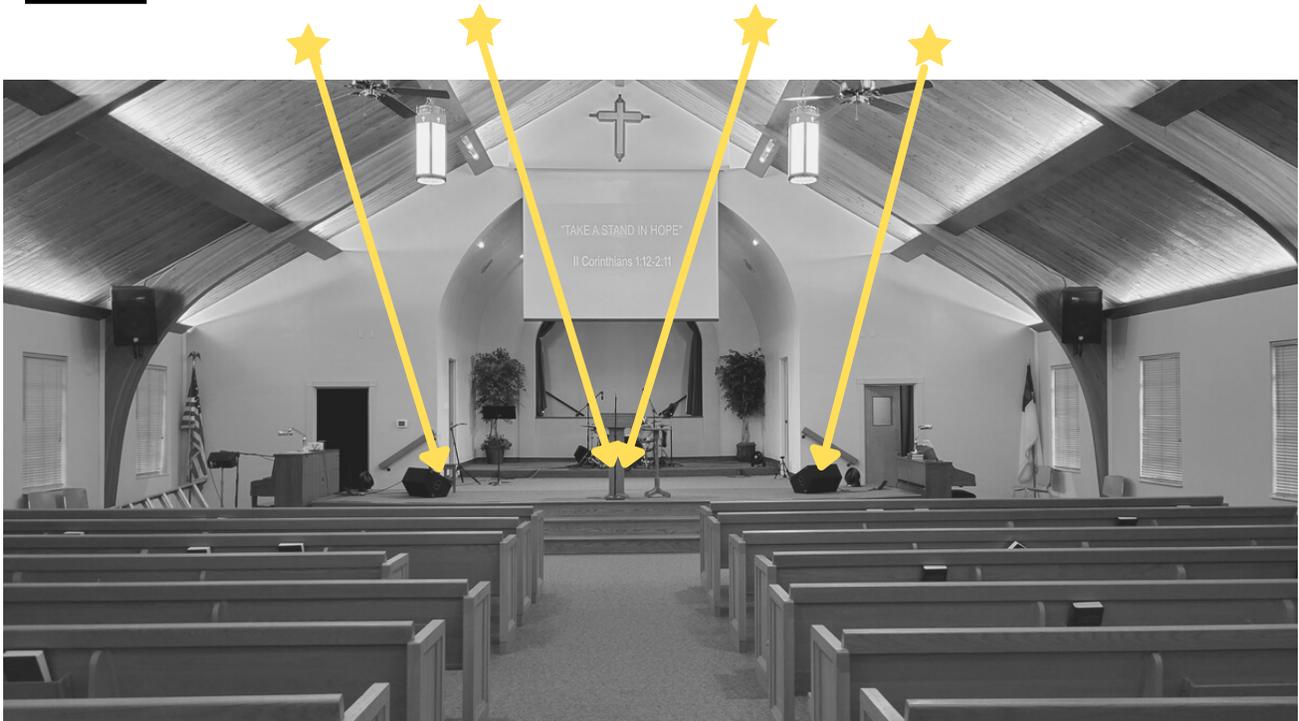
Positioning will be discussed in detail during the pre-install call. Correct positioning is one of the most important items in a professional lighting setup. We're here to help you get this right!

Front Wash Fixture



Position & Rigging

FRONT WASH POSITIONING



Pictures showing approximate positioning of frontline wash.

FRONT WASH POSITIONING

Confirm the positioning

The proper angle will help bring light to the platform in a way that has minimal shadows to those on stage. A 45 degree angle is an ideal angle. Confirm the location before installing any rigging!

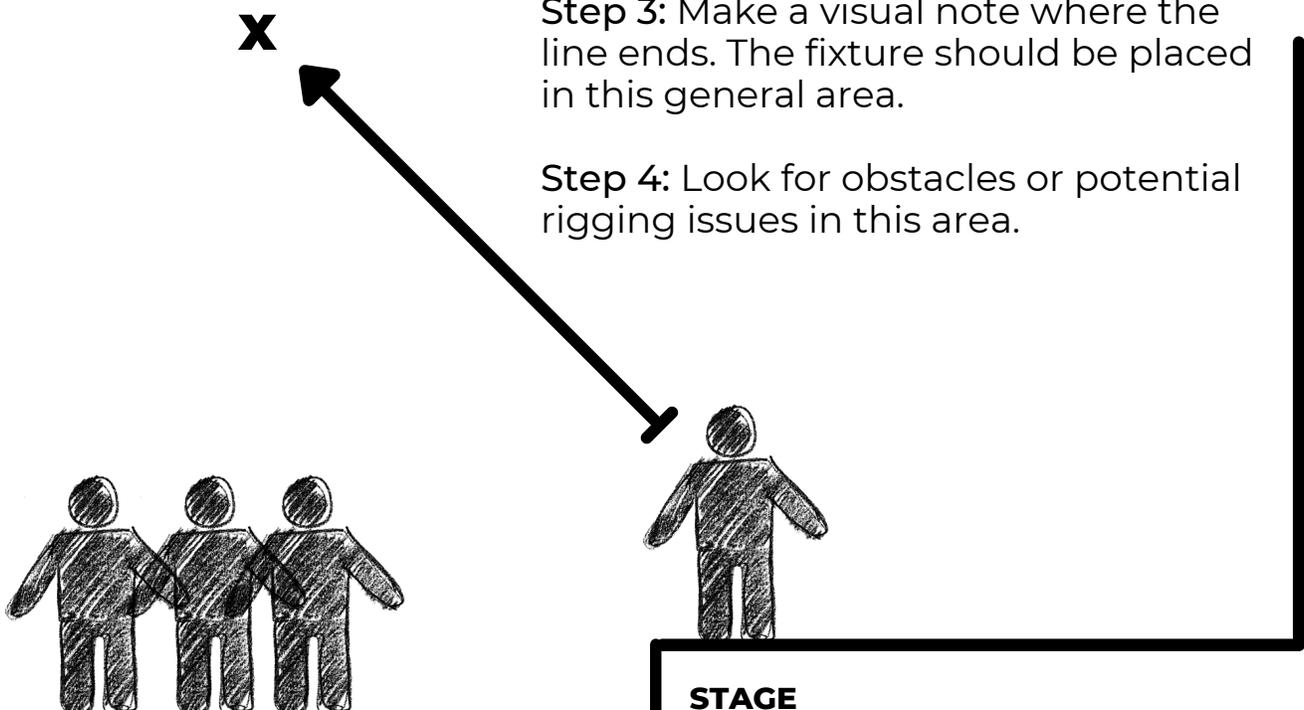
Method 1: Visualize

Step 1: Stand on stage at the pulpit and point your arm at a 45 degree angle.

Step 2: Visualize an imaginary line that follows your arm to the ceiling.

Step 3: Make a visual note where the line ends. The fixture should be placed in this general area.

Step 4: Look for obstacles or potential rigging issues in this area.



1. Position & Rigging

FRONT WASH POSITIONING

Confirm the positioning

Method 2: Measure

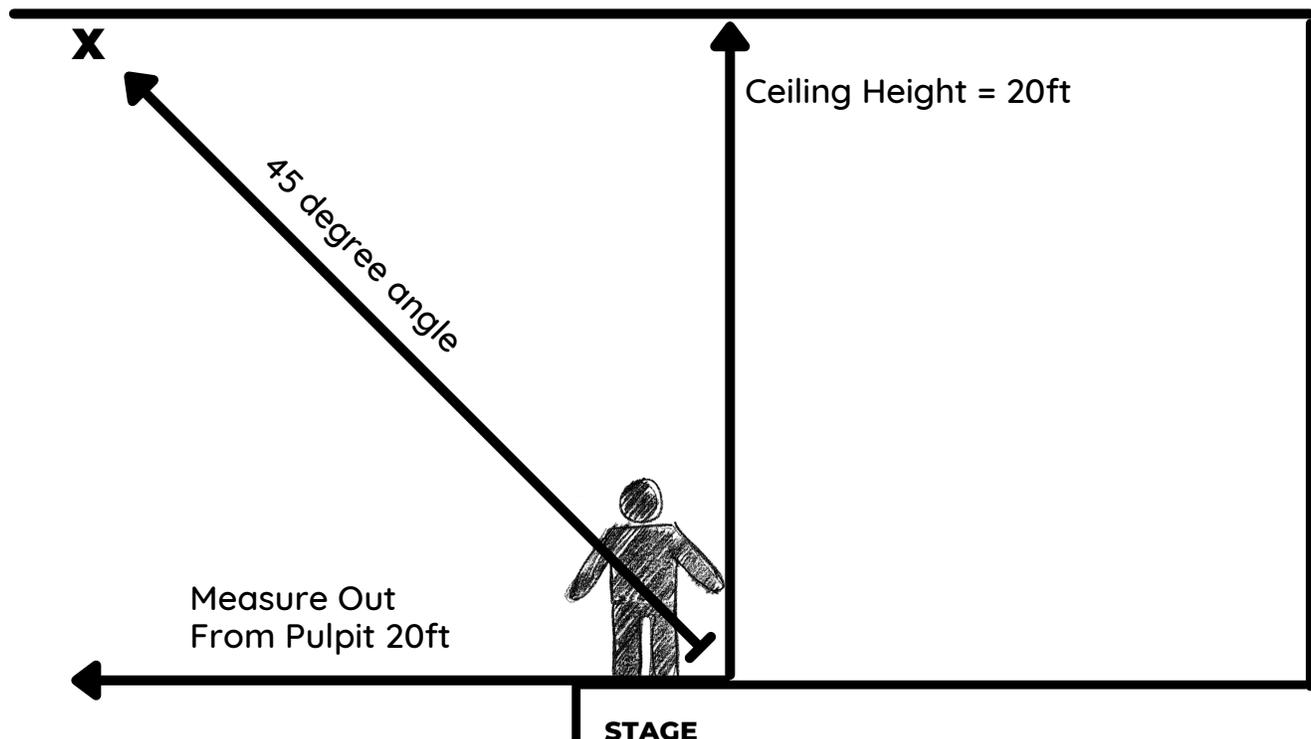
Step 1: Stand at the pulpit and measure the height from stage to ceiling.

Step 2: Measure out from the pulpit into the seats the same distance you collected in step 1.

Step 3: Make a note where the measurement ends into the seating area.

Step 4: Look for obstacles or potential rigging issues in this area.

Example:



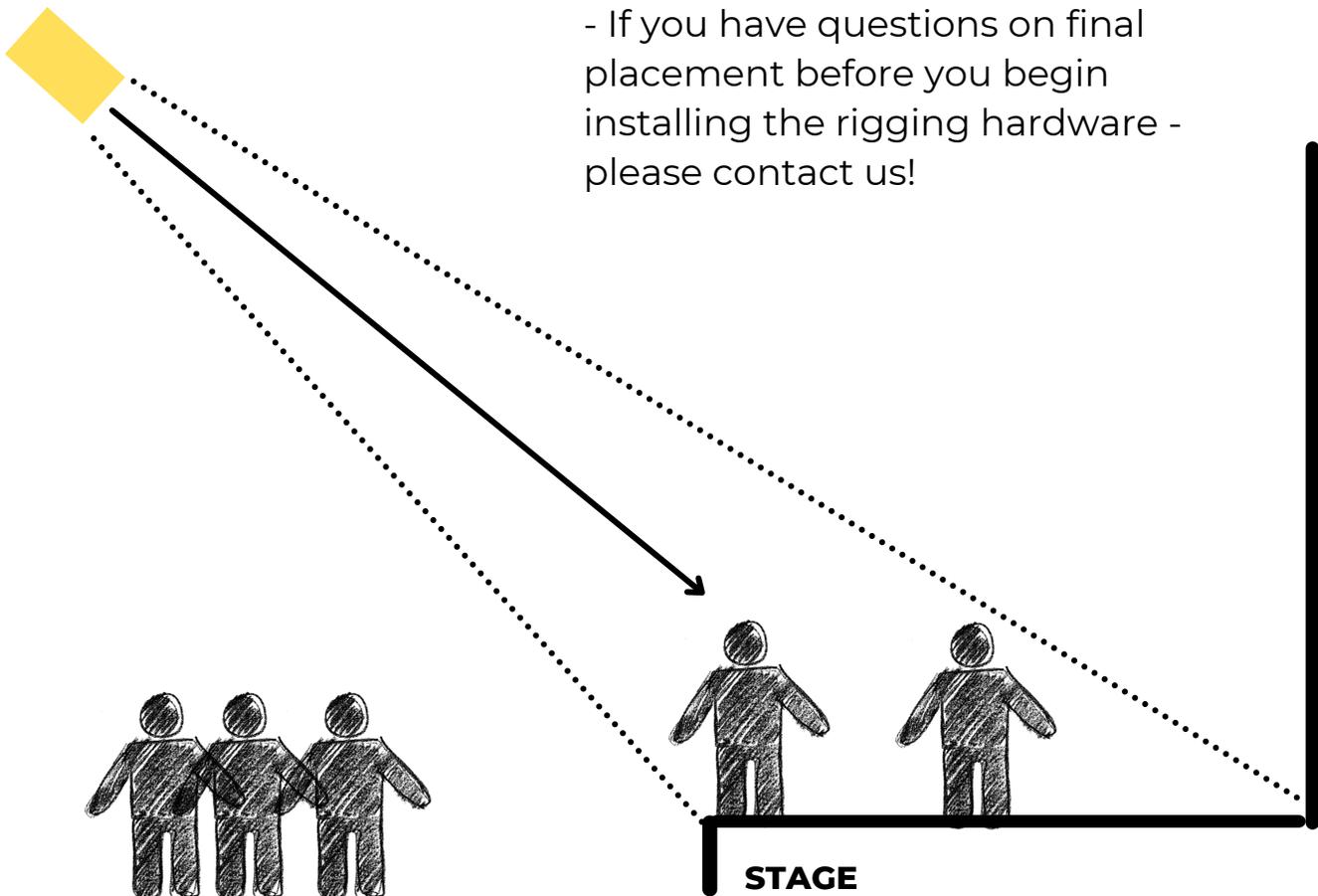
FRONT WASH POSITIONING

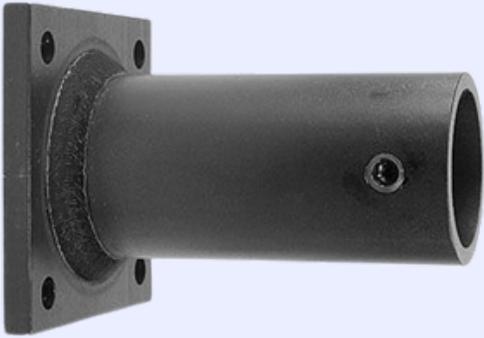
Finalize the front wash position

Important things to keep in mind before finalizing the mounting location...

- 45 Degrees is the target goal. 40 to 50 degrees is still in the "sweet spot".
- It is most important to find the nearest primary structural component (ie beam) to rig to that is within the 40 - 50 degree sweet spot.
- If you have questions on final placement before you begin installing the rigging hardware - please contact us!

Front Wash Fixture





BEAM MOUNT

The beam mount is to be fastened to your beam using the 4 lag screws and washers shown below. A steel pipe extension will then seat into the mount and be secured using the 1/4" set screw.



1.5" SCHEDULE 40 STEEL PIPE

The steel pipe shown here is to be fully inserted into the beam mount and secured using the 1/4" set screw. Your fixture will be attached to the steel pipe utilizing a stage light fixture clamp.



3" LAG SCREWS (5/16 DIA)

Lag screws are to be used to fasten the mount to the beam. These lag screws are 3" long and 5/16" in diameter. Flat washers are to be used as well during the fastening process.

INSTALL TIP: Drill 9/64" Pilot



2" EYEBOLT

An eye bolt is to be positioned near each beam mount as a safety cable anchor point. Screw the eyebolt into the beam a few inches away from the mount. Then insert the safety cable through the eye and around 1 or 2 points of the fixture yoke and body.



WRAP AROUND CLAMP

The wrap around clamp is to be attached to the fixture yoke. Be sure that the flat washer and lock washer is in place before tightening the wing nut.



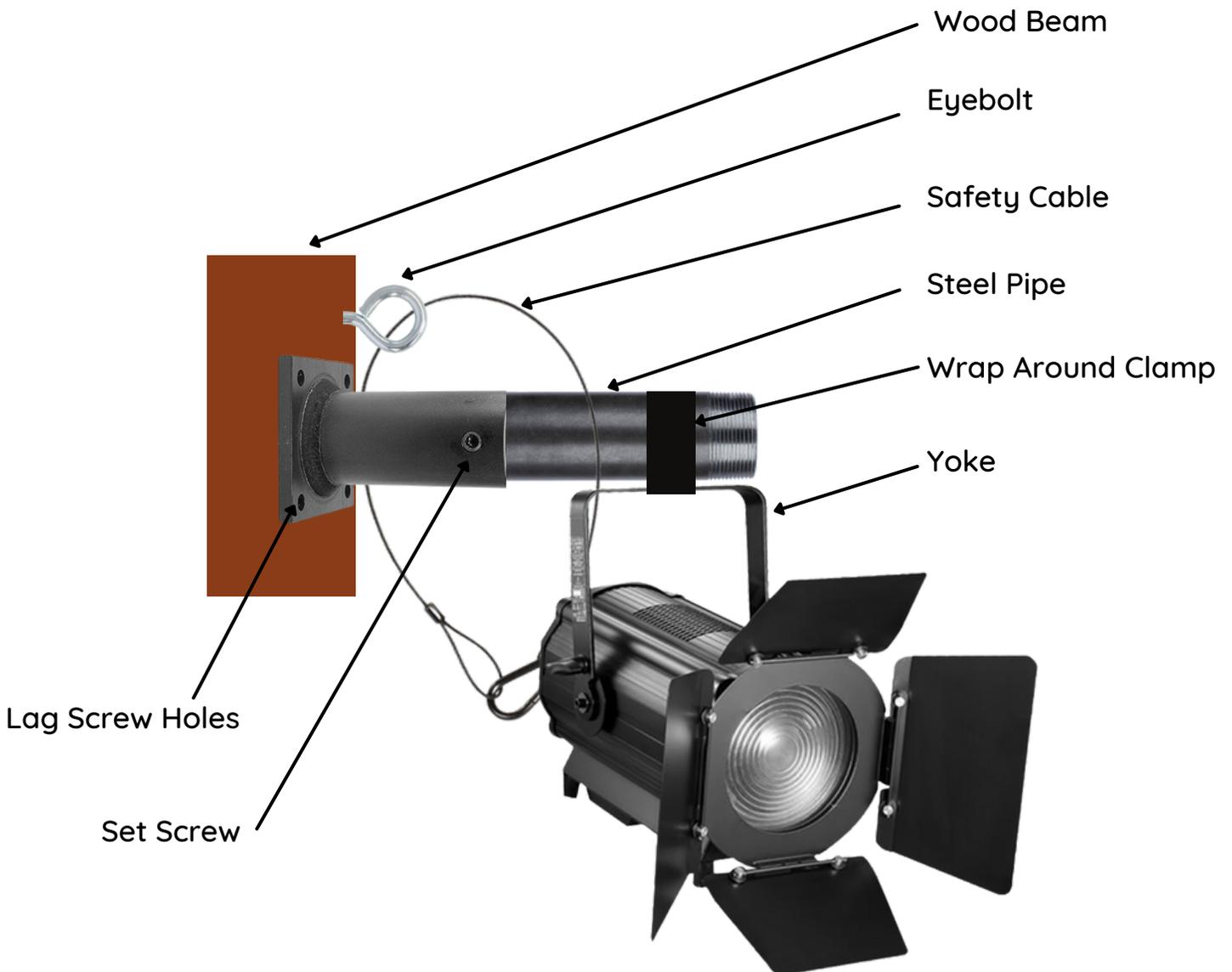
SAFETY CABLE

A safety cable is to be attached to the fixture and threaded into the eye of the installed eyebolt.

Position & Rigging

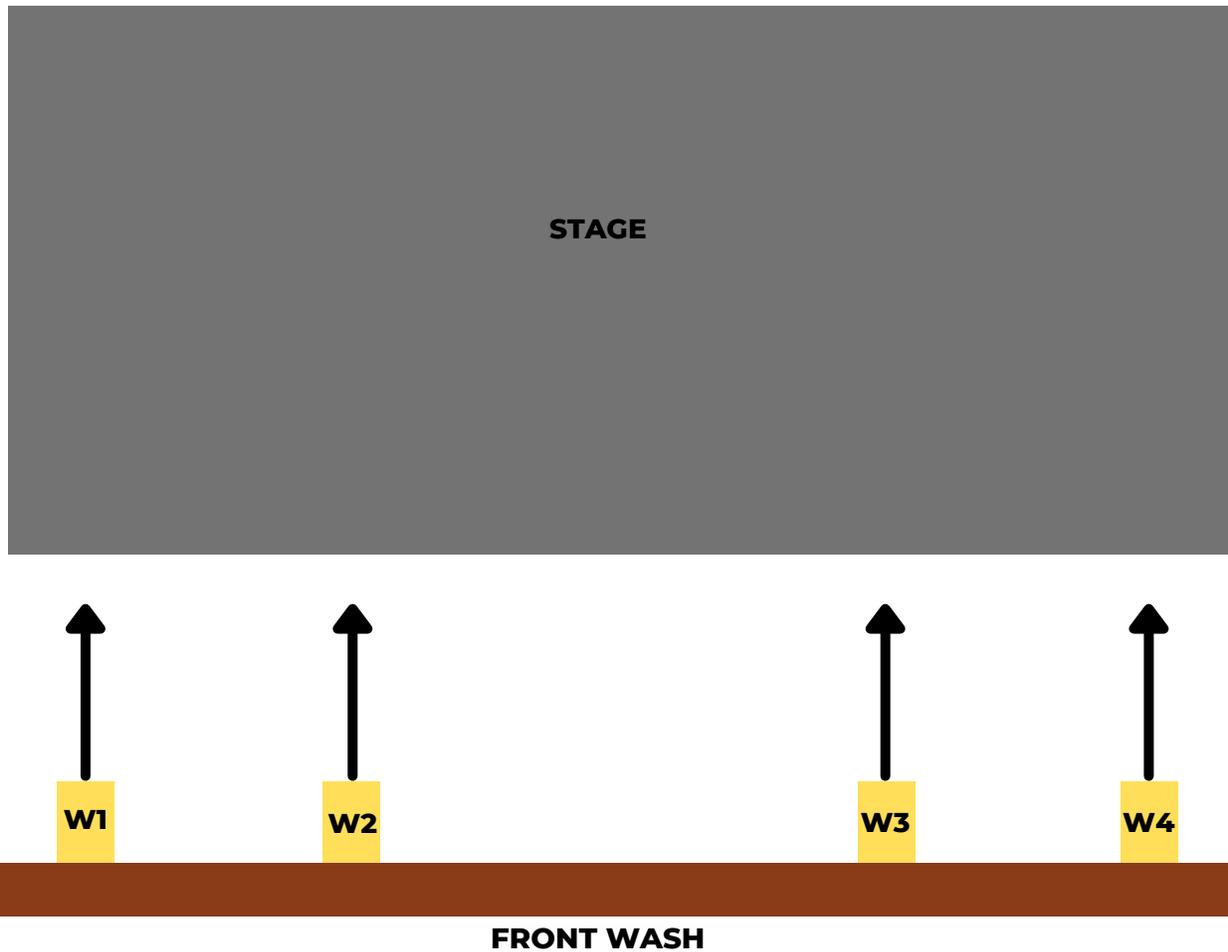
**BEAM MOUNT
RIGGING DIAGRAM**

Side View Assembly



Position & Rigging

POSITIONING TOP VIEW

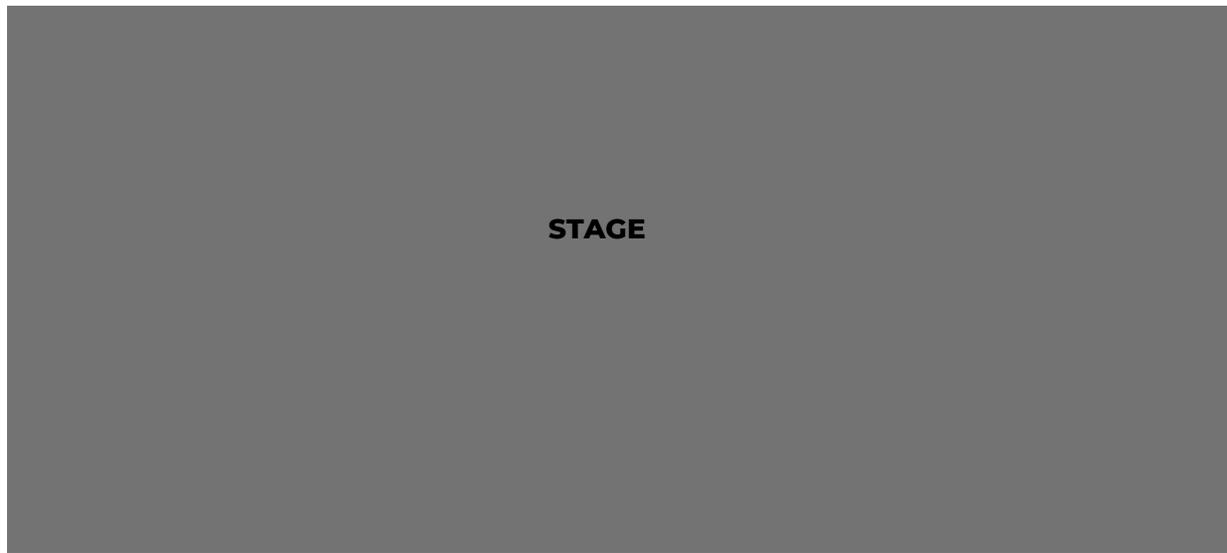


FRONT WASH DISTRIBUTED PLACEMENT

Hang the front wash fixtures onto the wood beam approximately 4ft apart from each other. The fixtures do not need to be powered at this time. Aiming and focusing will come later.

Position & Rigging

FRONT WASH FIXTURE ID



Fixture ID



W1

W2

W3

W4



Wood Beam

FRONT WASH

FIXTURE ID PLACEMENT

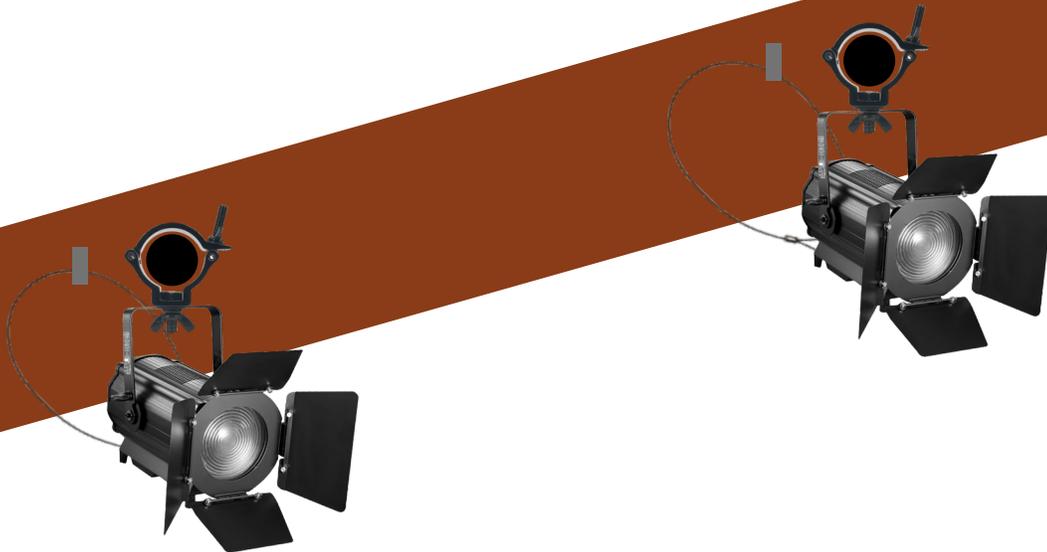
This is a birds eye view of fixture placement and the fixture ID ordering. Your fixtures have been pre-addressed with their unique DMX address and must maintain the positions called out here to match the pre-programmed LightKey™ show file.

Simply place the front wash fixtures in the locations called out on this page.

Position & Rigging

BEAM MOUNT RIGGING DIAGRAM

Front View Assembly



Position & Rigging

BEAM MOUNT RIGGING

TIPS & THINGS TO REMEMBER

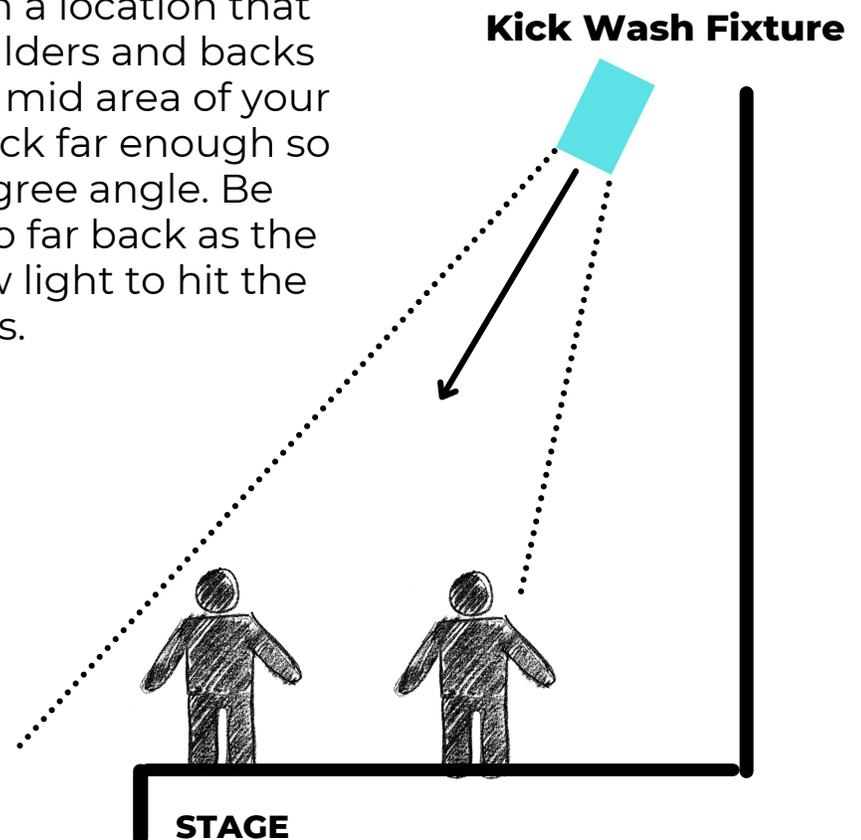
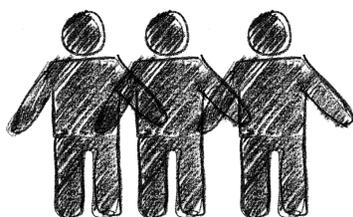
- Drill 9/64" pilot holes for lag screws and eyebolt.
- Ensure that ALL lag bolts are fastened firmly to the wood beam.
- Lock washers must be in place when attaching the clamp to the fixture
- Tighten the wall mount set screw so the pipe is secure
- Be sure to install the safety eyebolt and safety cable.

KICK WASH POSITIONING

Locating the kick wash position

Kick wash provides the needed backlight for higher quality video and fill light for the live worship service. The kick fixtures should be positioned about 10 degrees to the rear of the pulpit. Your ceiling and stage depth height will determine the final positioning.

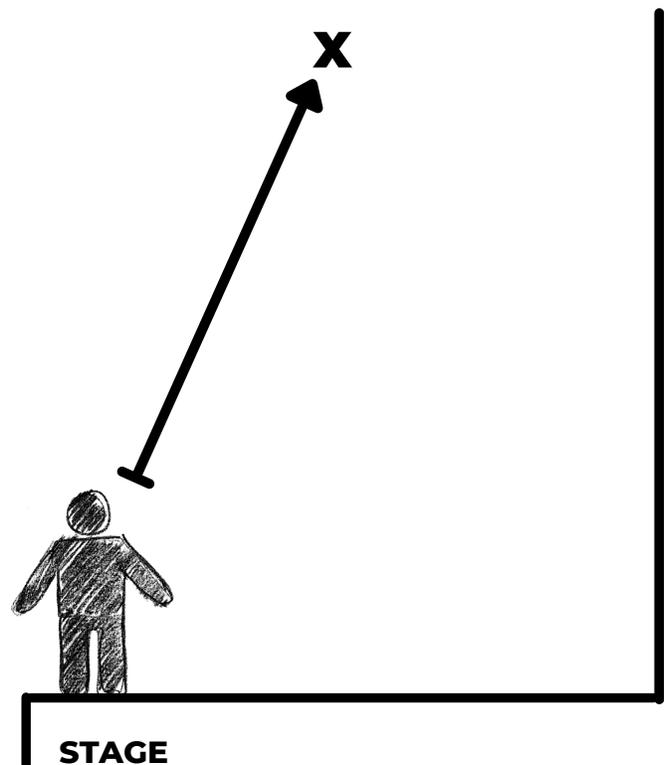
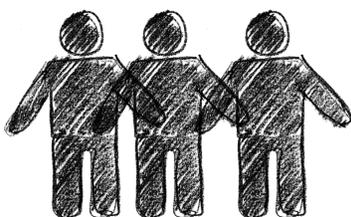
The goal is to hang the light in a location that lights the rear side head, shoulders and backs of those towards the front and mid area of your stage. The fixture should be back far enough so that there is at least a 10 degree angle. Be careful that the fixture isn't too far back as the more extreme angle will allow light to hit the first row of seats.



KICK WASH POSITIONING

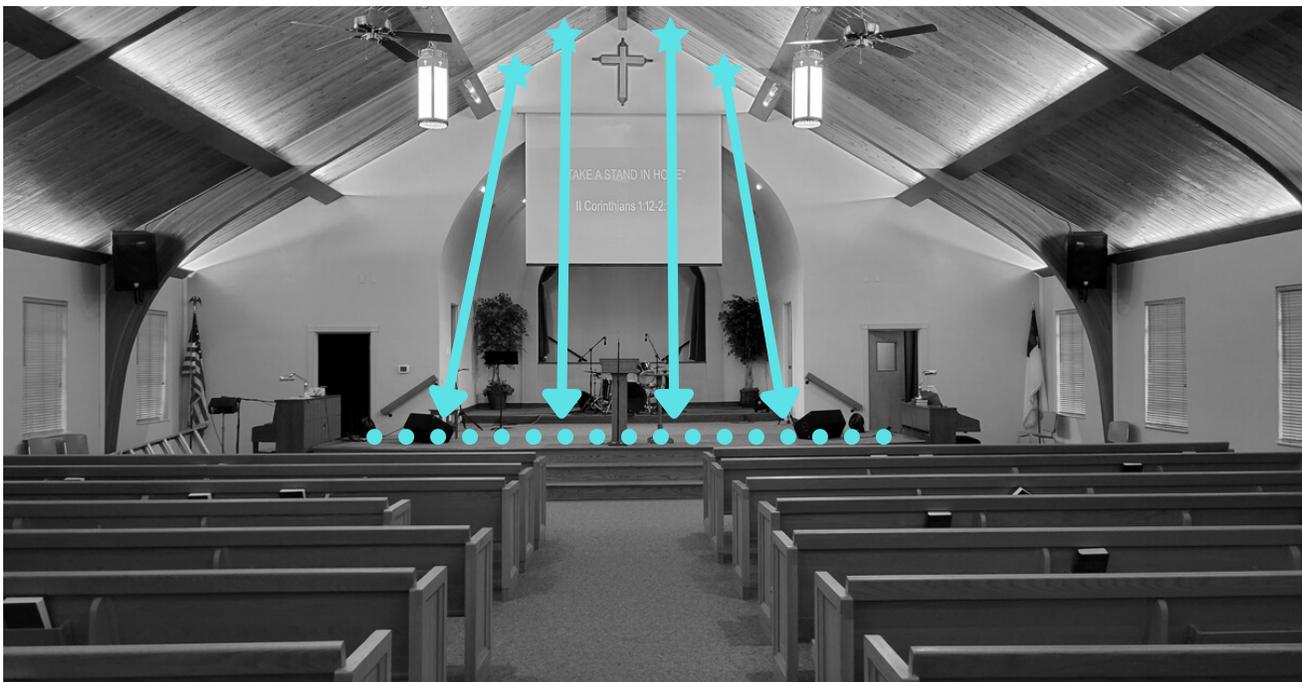
Confirm the positioning

You will use the barn doors to prevent the light from hitting the first row of seats. Have someone sit in the first row of seats while you're aiming to ensure not to splash this area with light. Also have someone on stage while you aim to ensure you're covering their heads and shoulders with light.



Position & Rigging

KICK WASH POSITIONING



Picture showing approximate positioning of kick light fixtures.

Kick fixtures should be mounted behind the wood beam.

The fixture will then point forward. Be sure to dry fit the mount first to ensure the fixture hangs down low enough to clear the beam. This will be around the mid point of the beam.

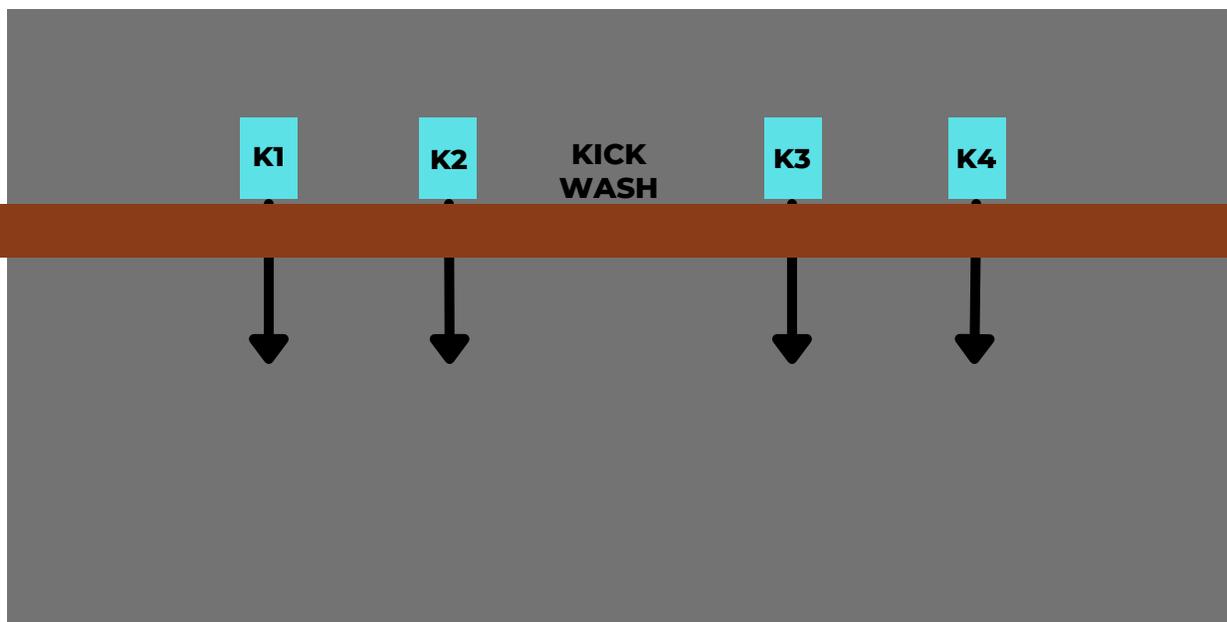
Position & Rigging

KICK WASH RIGGING



The same rigging method and materials will be used for the kick light as was used for the front wash.

KICK FIXTURE POSITIONS



KICK WASH DISTRIBUTED PLACEMENT

Hang the kick wash fixtures onto the behind the wood beam approximately 4 ft apart from each other. The fixtures do not need to be powered at this time. Aiming and focusing will come later. Rigging behind the beam will allow for easy concealment of cabling and hardware.

Be sure that the fixtures are rigged low enough to allow for aiming.

Position & Rigging

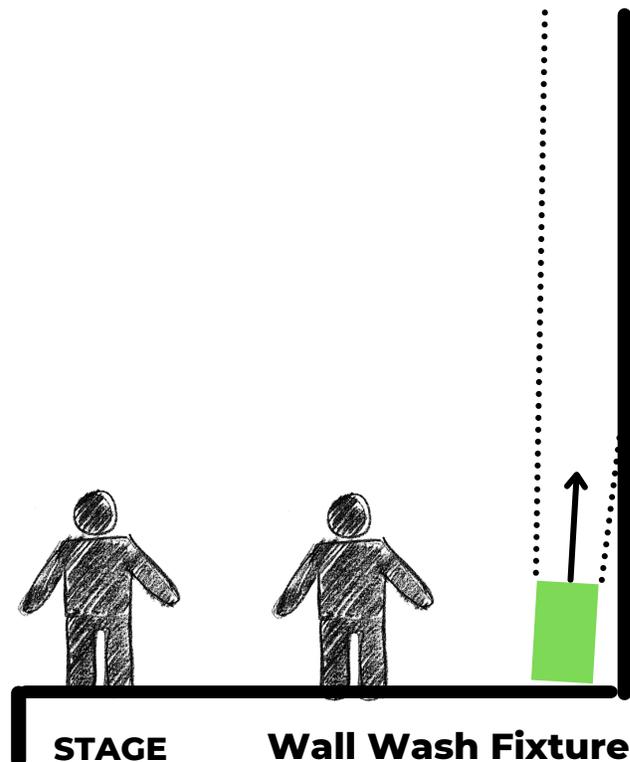
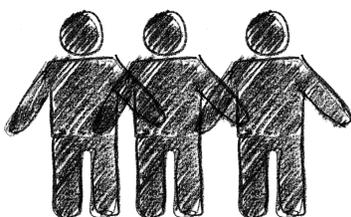
WALL WASH POSITIONING



Locating the wall wash position

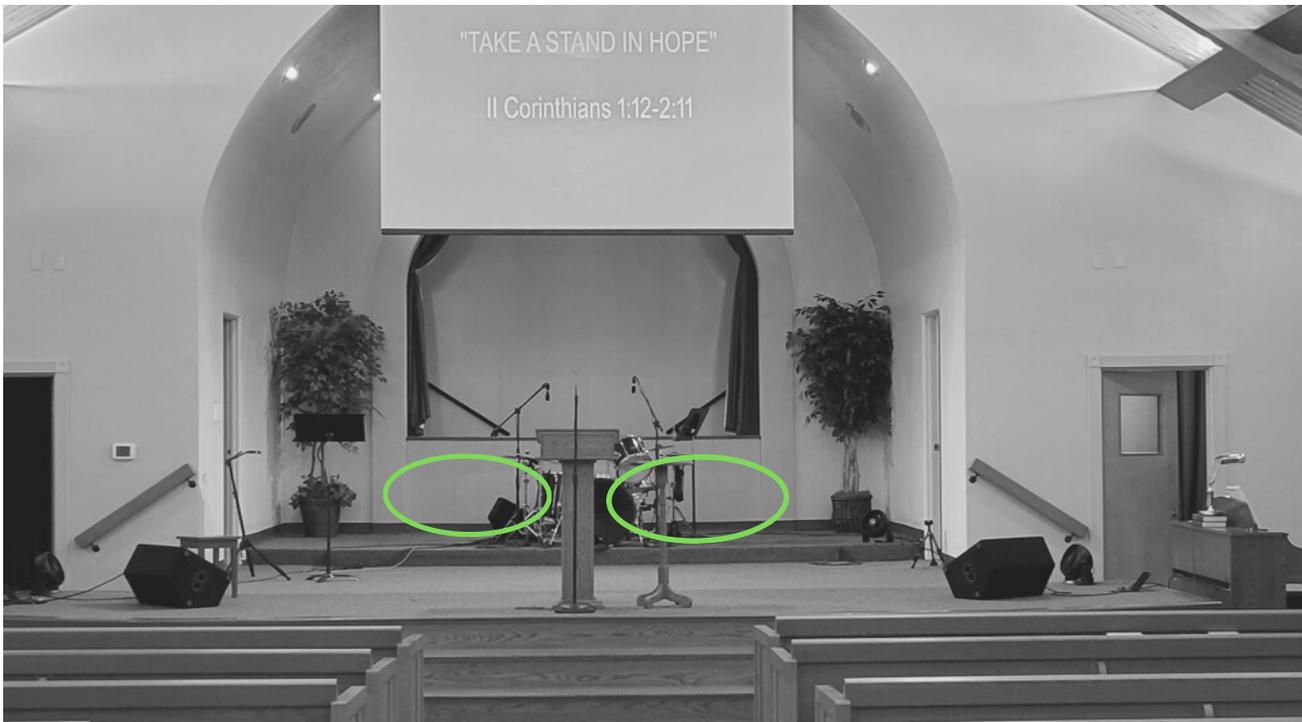
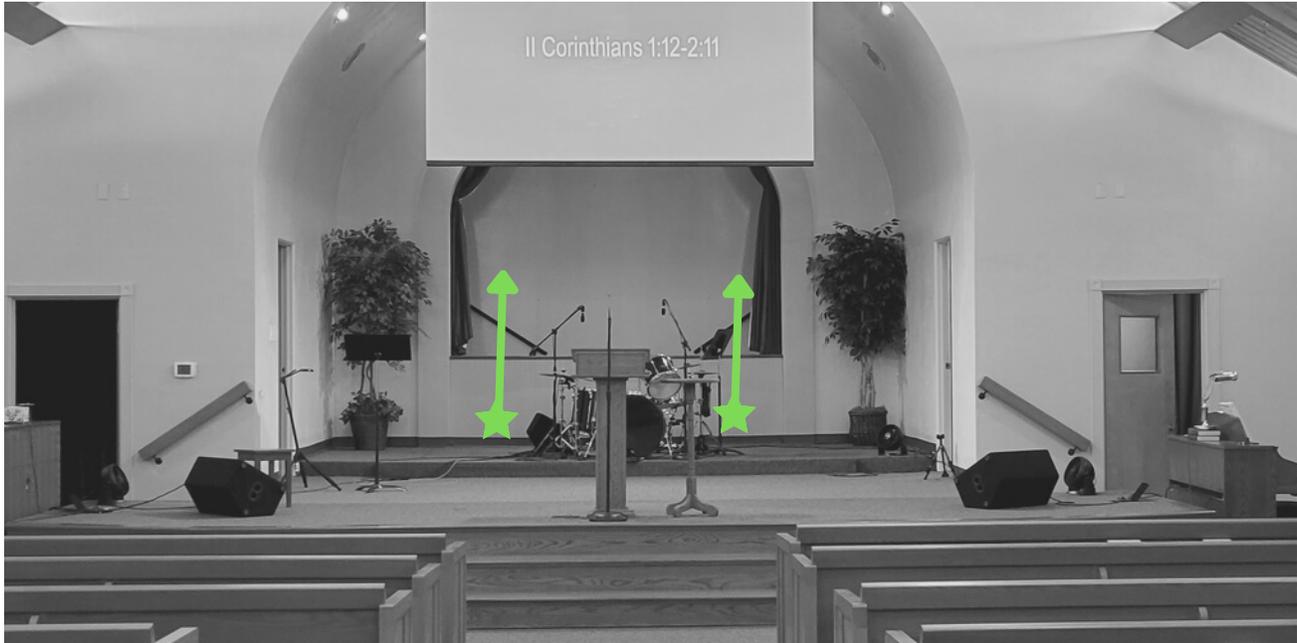
Wall wash adds color to walls and can be used to light scenic design pieces. Wall wash helps to create an atmosphere and ambiance on stage during teachings and worship. Wall wash can also be used as floor kick.

Experiment with different positions. Get creative!



Position & Rigging

WALL WASH POSITIONING



Pictures showing approximate positioning of wall wash.

POSITIONING TOP VIEW



FIXTURE ID PLACEMENT

This is a birds eye view of fixture placement and the fixture ID ordering. Your fixtures have been pre-addressed with their unique DMX address and must maintain the positions called out here to match the pre-programmed LightKey™ show file.

Simply place the wall wash fixtures in the locations called out on this page.

Hybrid Install Playbook™

DMX & POWER



SECTION 2

DMX SYSTEM & POWER

Let's Wire Them Up!

"Digital Multiplex" or DMX is the language that your lighting fixtures communicate using. There are 512 channels in 1 DMX Universe. All lights in your new system will have a DMX cable attached to them plus power.

1

RUN YOUR SIGNAL CABLE

Your system includes both Cat5e and DMX cable. The wiring diagrams in the pages to follow will outline each of your runs.

2

POWER THE FIXTURES

Distribute power to the fixtures properly to ensure that breakers will not be overloaded. We do recommend that stage lighting be put on dedicated circuits for a more organized system and separate from audio, band and video.

3

CABLE MANAGEMENT

Once DMX and power has been ran, tidy up all cable with lots of zip ties. Tidy cables will make troubleshooting easier and create a visually appealing setup. Zip ties are cheap - don't be scared to use a lot of them. Make it nice and neat!

DMX & Power

DMX ADDRESSES

OVERVIEW:

All of your fixtures have been pre-addressed by the PCL Hybrid Install Team before being shipped to your location. Each fixture box has been labeled with its appropriate Shortname ID and Assigned DMX Address. If a fixture needs to be re-addressed for any reason, please refer to the fixture user manual.

DMX ADDRESSES

First Christian Church of Belleville

Universe 1

*.....	001 – 001	W1	Pro Church Lights ProWashPlus (Mode 1)
.*.....	002 – 002	W2	Pro Church Lights ProWashPlus (Mode 1)
**.....	003 – 003	W3	Pro Church Lights ProWashPlus (Mode 1)
..*.....	004 – 004	W4	Pro Church Lights ProWashPlus (Mode 1)
......	005 – 011	K1	Pro Church Lights ProKick
..**.....	012 – 018	K2	Pro Church Lights ProKick
**.*.....	019 – 025	K3	Pro Church Lights ProKick
..*.***	026 – 032	K4	Pro Church Lights ProKick
.....	033 – 038	B1	Pro Church Lights ProBar (AR1.d)
***.*...	039 – 044	B2	Pro Church Lights ProBar (AR1.d)



USB TO DMX INTERFACE

This is the starting point of your DMX system. This device will connect via USB cable to your Mac. The DMX output will then connect to the DMX distributor.



RJ45 TO DMX

The primary (long) runs of your DMX setup will utilize true copper Cat5e. The RJ45 to DMX adapter is the critical component that allows this to happen.



5PIN TO 3PIN TURN AROUND

Your DMX system will be 3-pin DMX. You will use this 5-pin to 3-pin turn around cable to convert the 5-pin output of the Enttec device to 3-pin.



DMX CABLE

DMX cable (not XLR cable) will link your fixtures together in a daisy chain.



CAT5E TRUE COPPER

Cat5e will be used for your longest runs. The cable PCL supplied to you is True Copper CMR. Never use CCA or any aluminium clad cable for data!



FIXTURE DMX PORTS

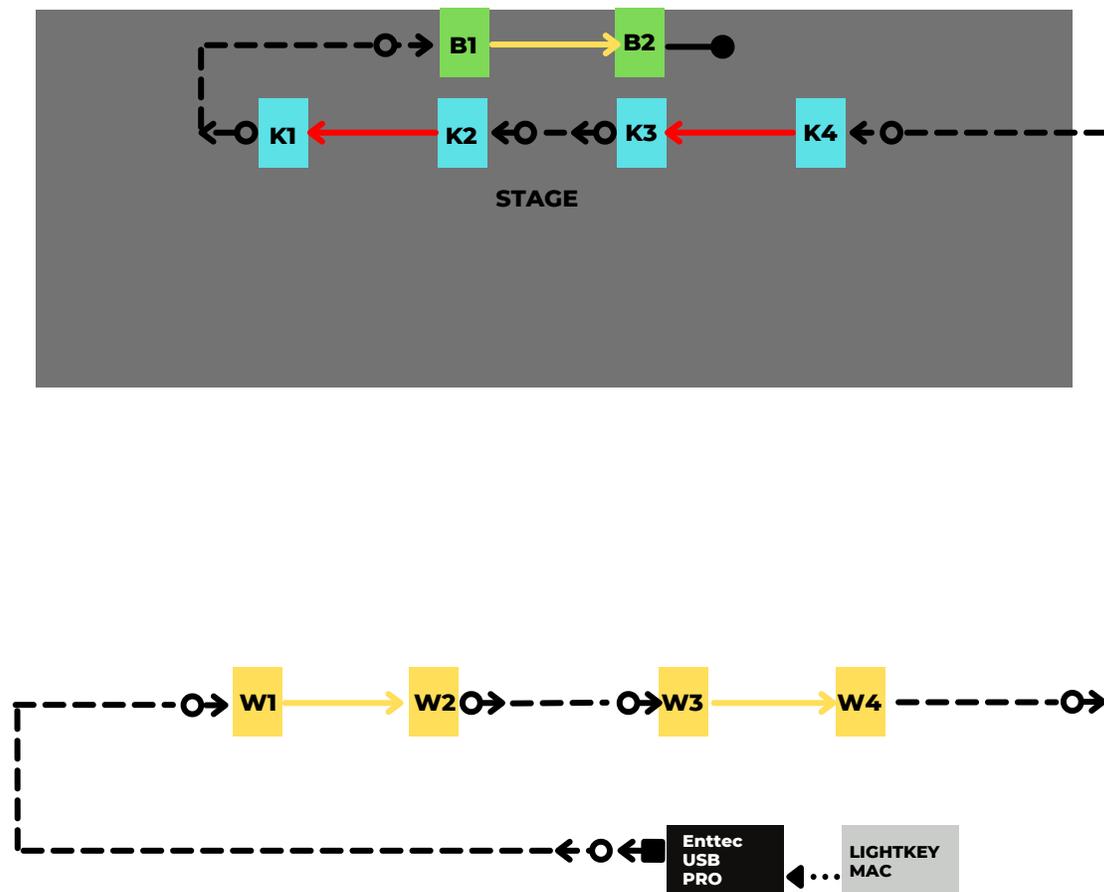
Each fixture has a DMX IN port and DMX OUT port. Your fixtures will be daisy chained together using these ports so that they all can communicate over your DMX system with the controller.



DMX TERMINATOR

At the end of each DMX chain a terminator will be used that will terminate the DMX signal in that line.

DMX WIRING DIAGRAM



- ADAPTER / CABLE KEY**
-▶ USB CABLE
 - ▶ DMX TURNAROUND
 - - -▶ RJ45 TO DMX
 - - - - Cat5e
 - ▶ DMX
 - TERMINATOR

- LENGTH KEY**
- 3'
 - 5'
 - 10'
 - 15'
 - 25'
 - 50'
 - 100'

RJ45 TERMINATION

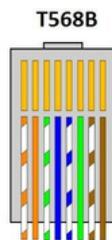
OVERVIEW:

Cat5e is an extremely reliable and cost effective solution for your main DMX runs or jumps. You will use Cat5e for your longest runs from control to front wash, front wash to kick and kick to floor. You will also use Cat5e for longer jumps across your ceiling. Your order included true copper Cat5e that you will pull and cut. Be sure to leave a few feet extra on each end.

RJ45 TERMINATION HOW-TO

- 1.Strip the jacket with a wire stripper or bladed tool.
- 2.Untwist and Separate wires.
- 3.Arrange wires from Left to Right in this order:

- a.White Orange
- b.Orange
- c.White Green
- d.Blue
- e.White Blue
- f.Green
- g. White Brown
- h. Brown



- 4.Once wires are arranged in Termination B configuration, ensure that wires are the same length, trim wires with crimp tool cutter.
- 5.Carefully insert wires into RJ45 end. Make sure that the wires are inserted fully to ensure a good connection.
 - a.**TIP: Both ends of Cat5 cable must be identical for correct DMX communication. PCL recommends having both RJ45 end clips point down when terminating ends.**
- 6.Confirm that wires are arranged in proper order and are inserted fully.
- 7.Using a RJ45 crimping tool, insert RJ45 end into tool and firmly crimp down end.

IMPORTANT:

Max length = 1000ft

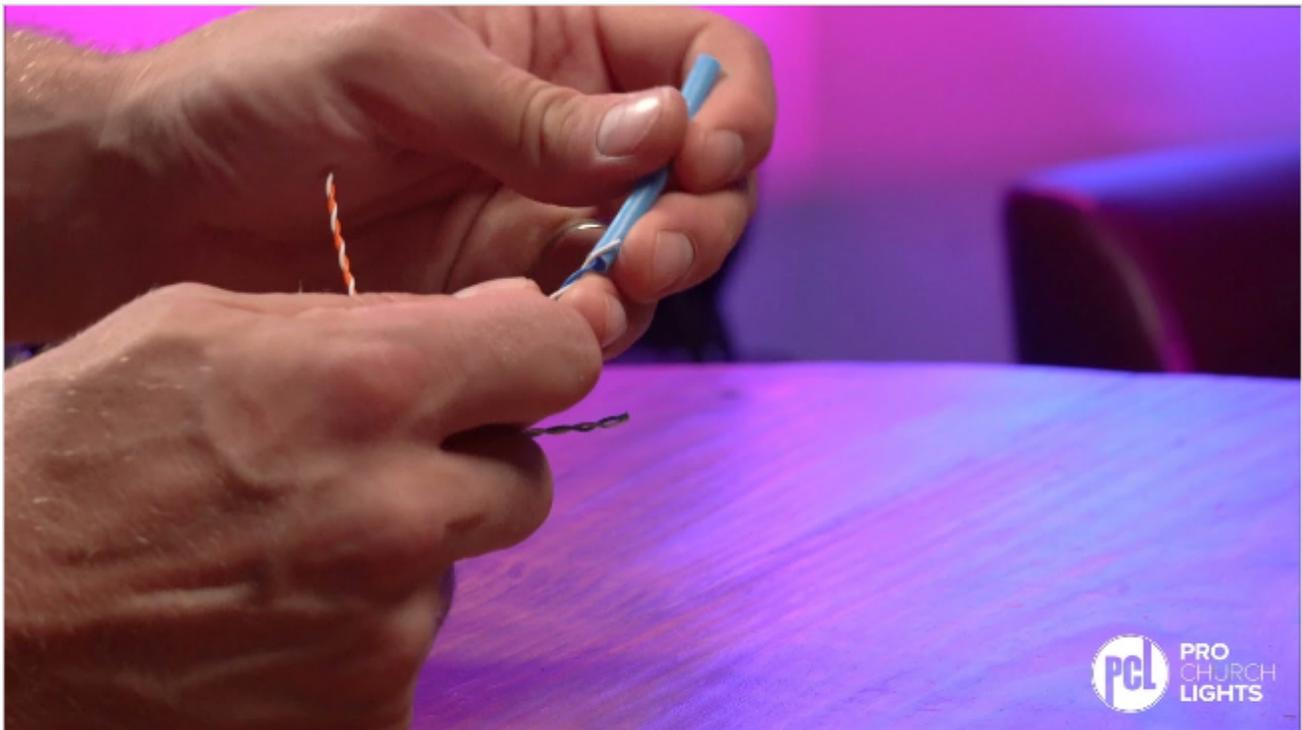
Do not plug cable into Hub or Switch! Your Cat5e DMX system must be a direct runs!

DMX & Power

RJ45 TERMINATION



RJ45 CONNECTOR ASSEMBLY VIDEO



How to Terminate a Cat5e Cable Easily

 YouTube / 4:21

Important Notes Regarding Power

It is good practice to have dedicated breakers for your stage lights. If this is not possible, you will need to make sure you have the available amps on the circuits you are using. The next page shows the calculated amp draw specific to your setup.

Do not plug your lights into dimmers - this will void the warranty!

To extend the life of your LED fixtures, be sure to power down your fixtures when not in use. All LED fixtures have internal components such as power supplies, fans, and circuit boards.

If power is not shut off to the fixture, the components will be powered 24x7. It is best to power down your lighting rig at the breaker or by implementing a switched relay to the primary outlets that make up your stage lighting circuits. All LED fixtures no matter the brand should be powered off when not in use. Fading them to "black" is not OFF.

If you have questions about power - please ask!

POWER CONNECTION

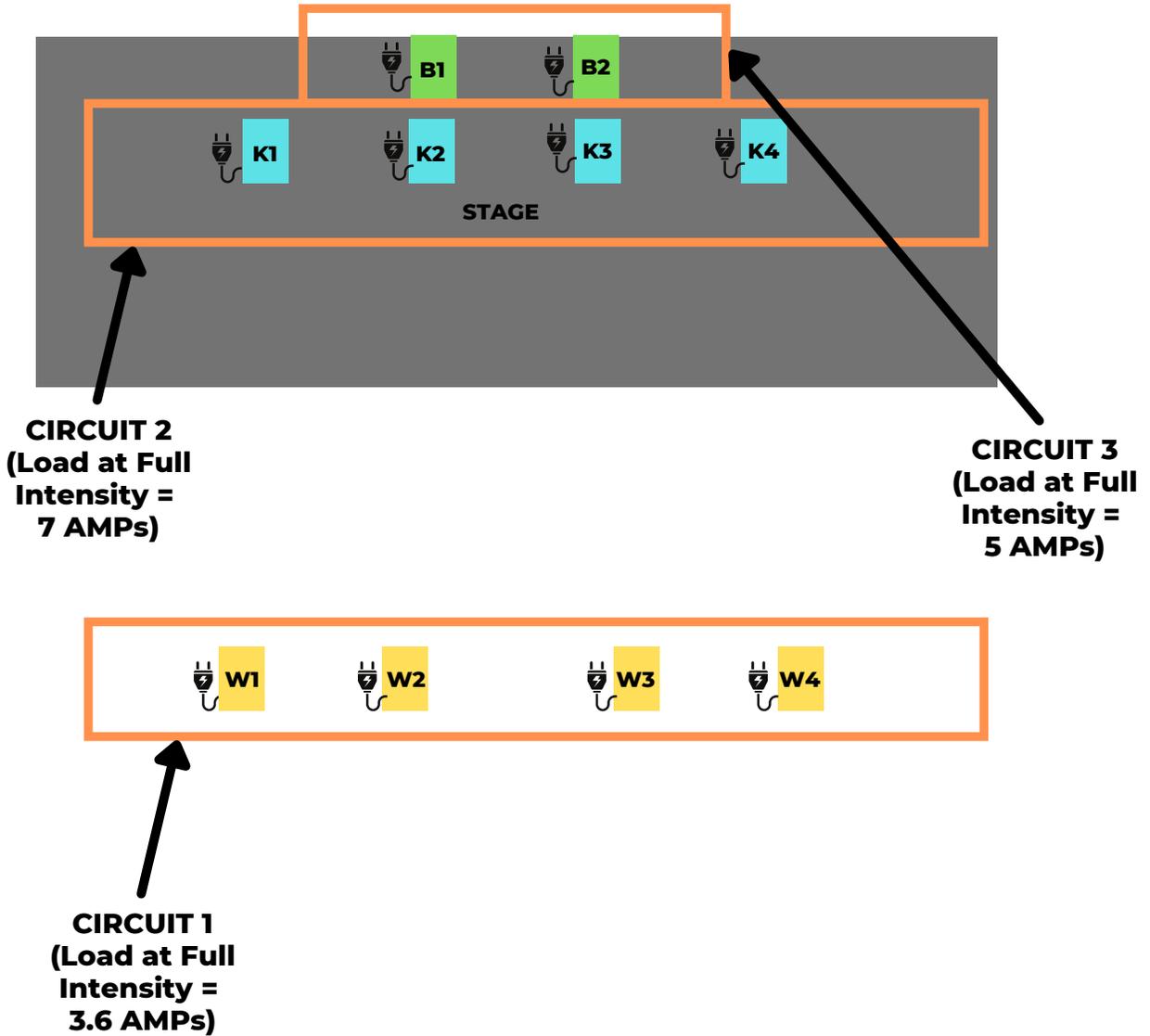
PowerCon™

PowerCon is a lockable 3 pole equipment (AC) connector with contacts for line, neutral, and pre-mating safety grounds. Color coded for easy identification, PowerCon offers power-in (blue) and power-out (gray) versions with different keying to avoid the possibility of inter-mating.

All PCL fixtures are equipment with PowerCon™ ports. PowerCon™ power linking cable was NOT included with your lighting package. If you are interested, please let us know!



STAGE POWER



POWERCON™ CABLE LENGTH KEY

3'
8'
10'
25'

DMX & Power

POWER CONNECTION



MAXIMUM FIXTURE COUNT for PowerCon™ Daisy Chain

It is important to not overload the power "chain". Connecting too many fixtures together via PowerCon™ will present damage to the fixtures.

ProWashPlus™: 6 Fixtures MAX!

ProKick™: 6 Fixtures MAX!

ProBars™: 5 Fixtures MAX!

CABLE MANAGEMENT

Take time and make your install clean!

- Tidy up cabling after you have finished wiring your fixtures. This will prevent accidentally tripping, snagging or damage to the cables.
- Utilize Zip Ties
- Coil cables neatly behind each fixture and zip tie them
- Use cable management supplies that match the color of your ceiling to help camouflage them - such as White or Black snake skin.
- Use cutting tools to cut down excess Zip Ties or Snake Skin. This helps your install to have a clean and professional look in your worship space.



Hybrid Install Playbook™

AIMING, FOCUSING & COLOR



SECTION 3

OVERVIEW



Fixture Aiming and Focusing

Now we're getting to the fun part! This is where the art of lighting begins to kick into high gear. Take time with the aiming and focusing process. Don't rush it!

1

TURN ON THE FIXTURES

Turn on one fixture at a time to gauge the wash produced by the fixture. Take time to focus the light onto the stage.

2

USE BARN DOORS TO SHAPE YOUR LIGHT

Using the barn doors, frame in the wash to cover the areas you wish to light. TIP: Proper use of barn doors will prevent bleed onto areas you do not wish to light.

3

DIAL IT IN

Go fixture by fixture to dial in each fixture so your stage is covered with an even, shadowless wash. Do not be satisfied until it is perfect. Apply the included 4000k CTB gel to create a more crisp, white light.

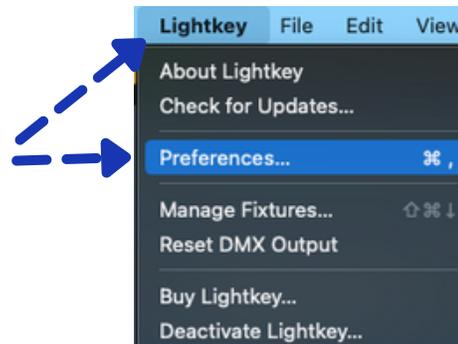
Aiming, Focusing & Color

ENTTEC USB PRO

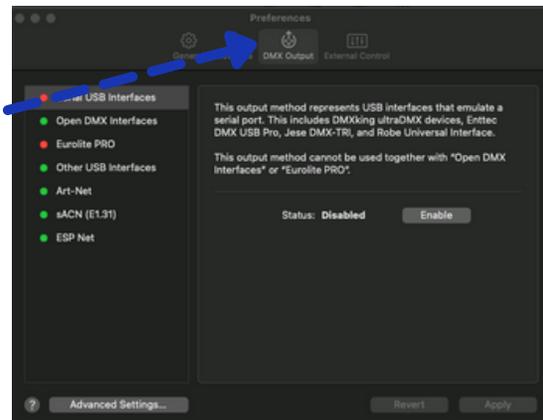
1. Open the LightKey™ show file on your Mac that you downloaded at the start of this manual and plug in the Enttec USB Pro.



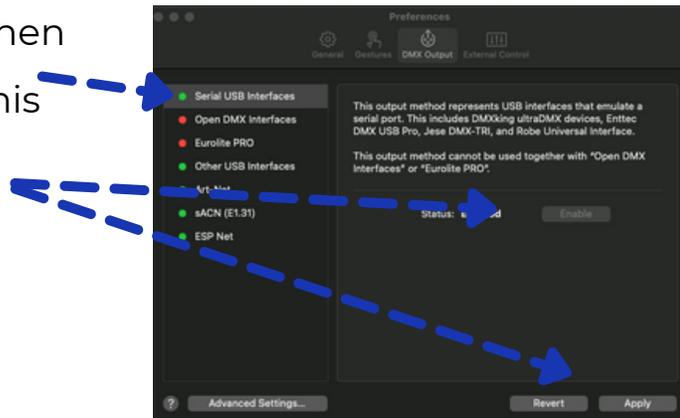
2. Click on "LightKey" at the top left of your screen and select "Preferences".



3. In the Preferences Window, select "DMX Output".



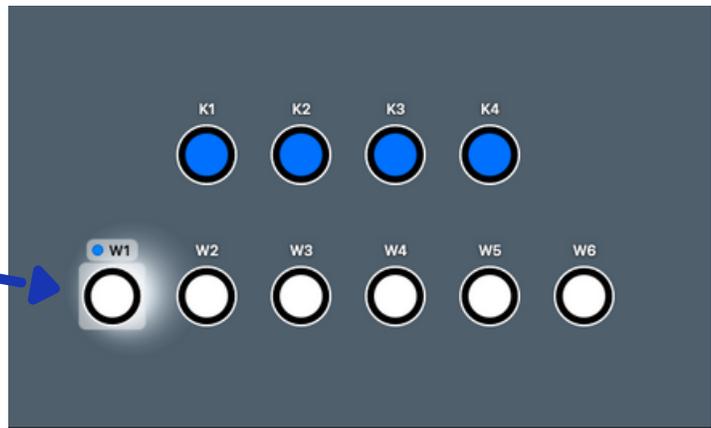
4. Select "Serial USB Interfaces", and "Enable", then select "Apply" to confirm this setting.



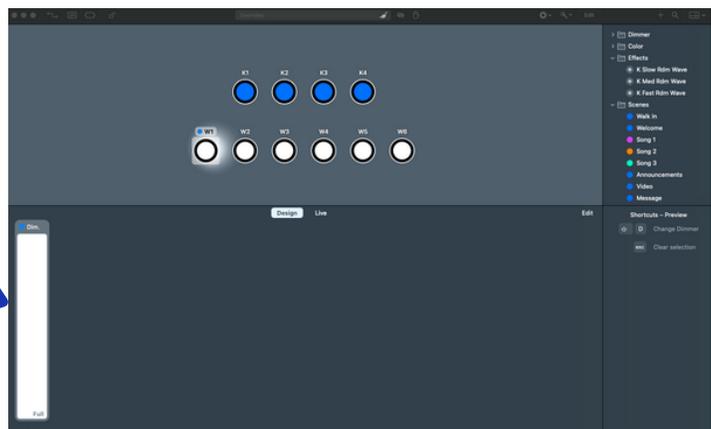
Aiming, Focusing & Color

TURN ON THE FIXTURES

1. While in the "Design Window", double click your desired fixture that you are reading to aim.



2. Slide the Dimmer/Intensity fader up to turn on the light for aiming.

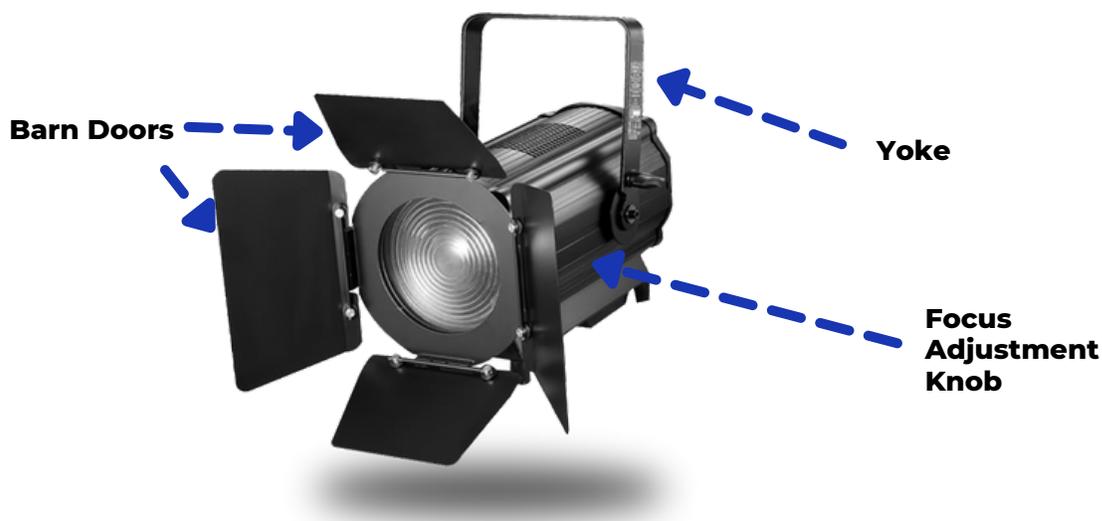


Aiming, Focusing & Color

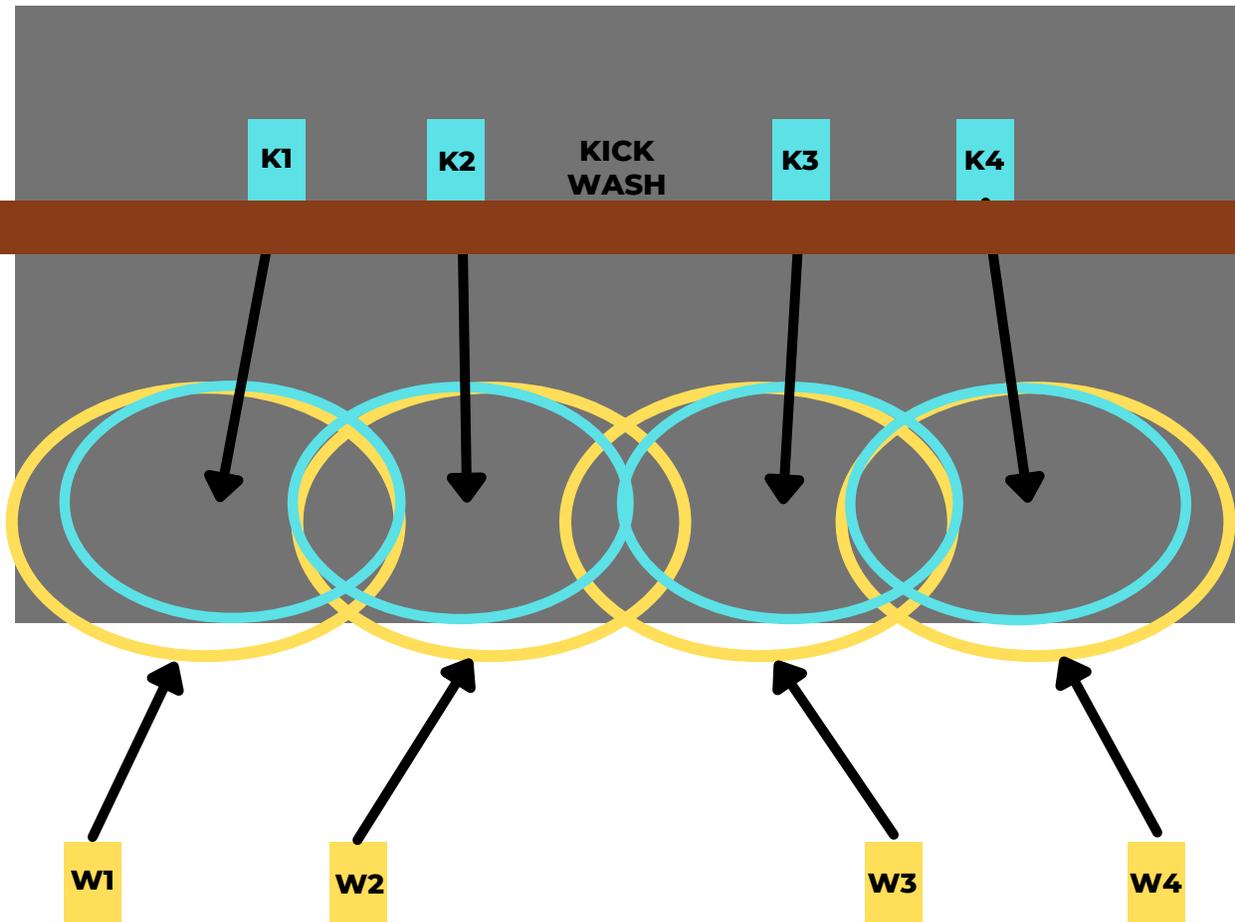
FRESNEL FOCUSING

FOCUSING A FRESNEL FIXTURE

1. Hang all fixtures evenly. This will help to ensure that your front stage wash will be even and uniform.
2. Turn house lights OFF to see more clearly your adjustments.
3. Aim the fixture towards the desired area. Have someone stand on stage.
4. Open up the barn doors fully.
5. Use the focus adjustment knob/slider on the side of the fixture and adjust the beam size to fit the area you are lighting.
6. Begin to adjust the barn doors to “shape the light”, preventing light bleed into areas you don’t want to light (i.e. Screen).
7. Repeat this process moving from one side of your set of fixtures to the other. Have another person help you by turning the fixtures on and off so that you can see the fixture you’re focusing alone as well as with adjacent fixtures. Plan to spend about 5 minutes per fixture, testing and trying different blends that fit your stage best.
8. Have someone on stage while you focus each light. Have them walk between the blended zones and look closely to ensure you’ve created a smooth blend of light between fixtures.
9. Don’t stop until you’re satisfied! Fine tune all adjustments until you have a smooth and even front wash.



AIMING TOP VIEW



FRONT WASH

FRONT WASH

Overlap the fixtures to produce a smooth wash. Use the focusing slider to adjust the beam spread. Fine tune with the barn doors.

KICK WASH

Aim K1-K4 fixtures towards mid to front stage area. Angle fixtures to minimize splash into seating area. Sit in front row to ensure lighting isn't in people's eyes. Use the barn doors to prevent splash into seats.

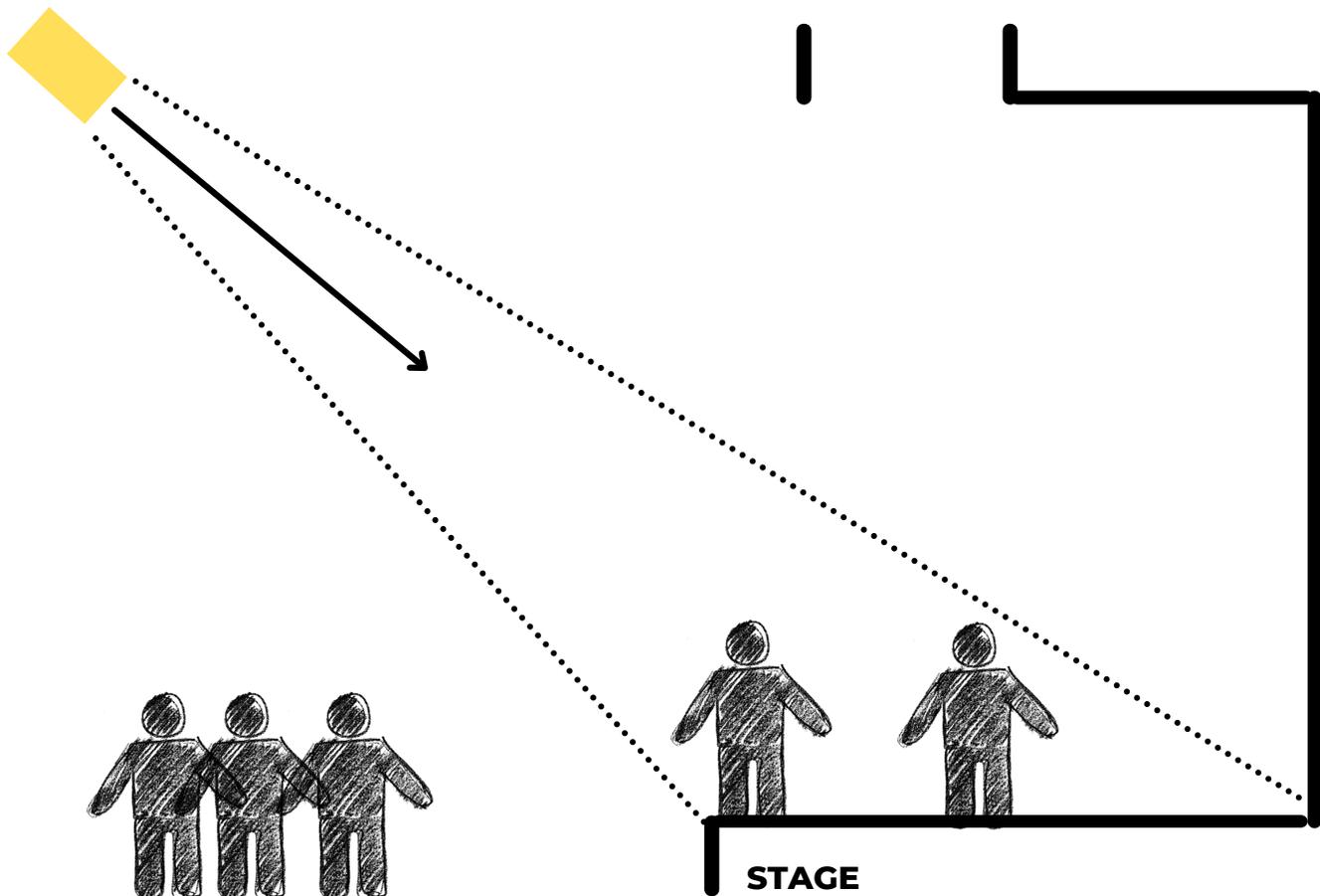
Aiming, Focusing & Color

AIMING SIDE VIEW-FRONT

FRONT STAGE WASH AIMING

Aim your front wash fixtures so that the center of the beam is aimed at the head of the person on stage standing behind the pulpit. Do not aim too low as that will prevent the full spread of light to hit your stage. Do not aim too high to avoid extra light on your backdrop.

W1-W4

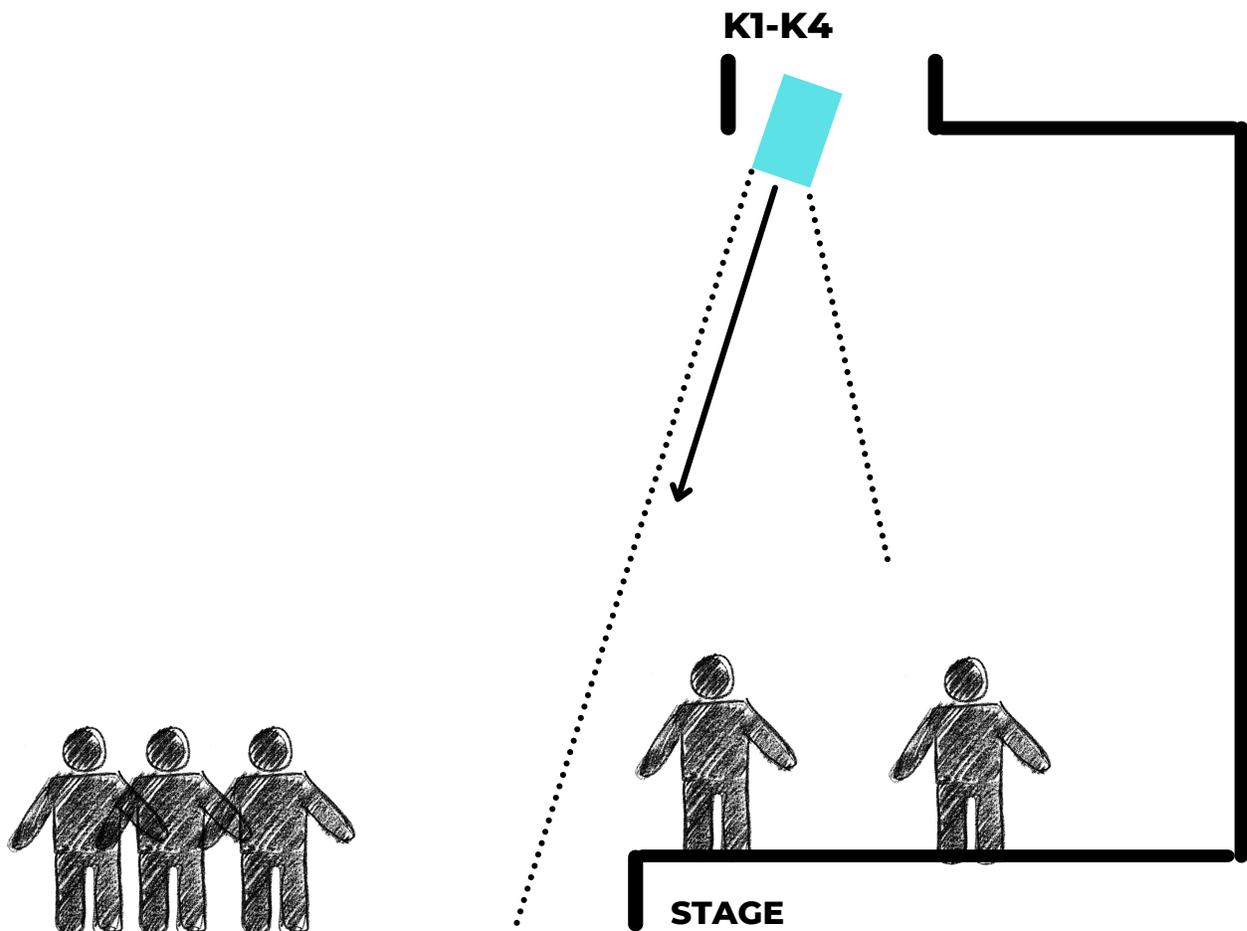


AIMING SIDE VIEW-KICK

KICK WASH

Aim your kick fixtures so that the front to mid area of the stage is illuminated by this fixture set. The goal here is to light the rear side head, shoulders and backs of those towards the midpoint and front area of your stage.

You will use the barn doors to prevent the light from hitting the first row of seats. Have someone sit in the first row of seats while you're aiming to ensure not to splash this area with light. Also have someone on stage while you aim to ensure you're covering their heads and shoulders with light.

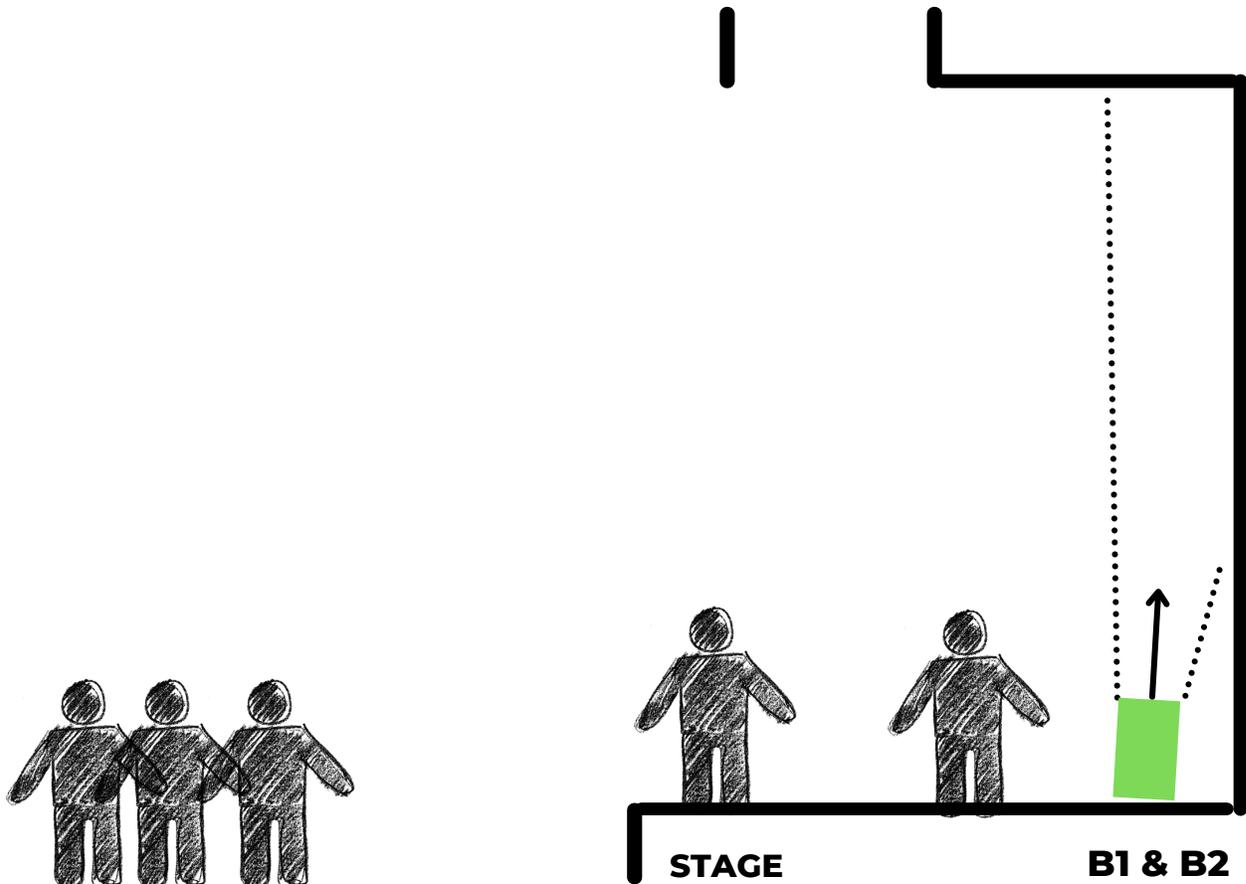


AIMING SIDE VIEW-WALL

WALL WASH

Aim your wall wash fixtures to illuminate the walls on stage. The goal is to create a backdrop using color to help add definition of those on stage in person and on video.

Position the fixtures close to the desired wall on stage and slightly tilt towards the wall.



Aiming, Focusing & Color

FRONT WASH AIMING



FRONT WASH

W1

W2

W3

W4



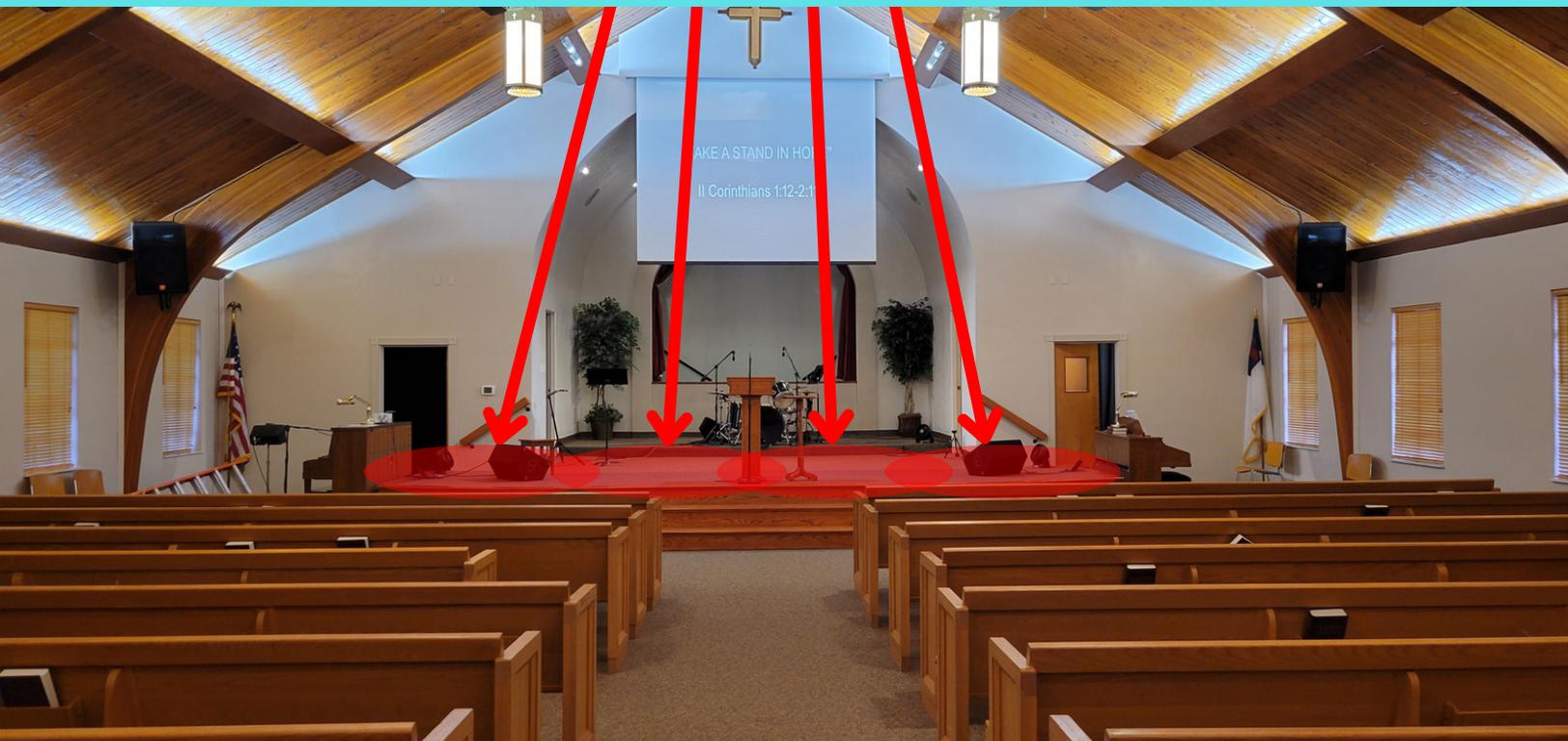
Aiming, Focusing & Color

KICK WASH BLENDING



KICK WASH

K1 K2 K3 K4



Aiming, Focusing & Color

WALL WASH AIMING



B1 B2

WALL WASH

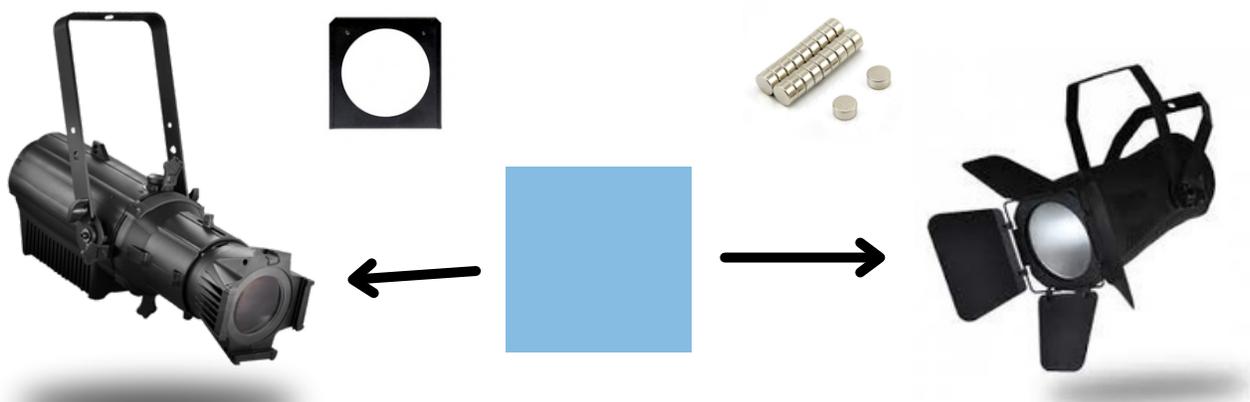
NOTE: BE SURE TO POSITION WALL WASH FIXTURES BEHIND THE CENTER PROJECTION SCREEN.

Aiming, Focusing & Color

COLOR TEMPERATURE GELS

USING CTB GEL WITH YOUR FIXTURES

1. Color Temperature Blue or CTB gels is common way to help bring fixtures that produce Warm White to a Cooler White. This is how you will achieve a more pure, crisp White and reduce undesirable yellow tones.
2. We've provided you CTB gel with your install pack. Use them by slipping an individual pre-cut gel sheet into either the provided gel frame for ellipsoidals or by using 4 magnets to hold the CTB gel in place on the barn door frame face.
3. We recommend $\frac{1}{3}$ CTB gel to "cool" down the light color temperature. Using this will provide a clean and crisp white and will improve the light for both camera and people in the room.
4. TIP: Work closely with your video director or camera team to ensure your cameras are white balanced correctly. Check your cameras white balance often, especially after major lighting changes in the room.
5. TIP: There is no need to run your lighting fixtures at full intensity. Use only as much light intensity needed to light people on stage well and enough for your cameras to pick up clearly without using any gain (or minimal gain). 100% light intensity is rarely needed unless you are in a room with a lot of windows and sun.



Hybrid Install Playbook™

OPERATION & PROGRAMMING

SECTION 4

OVERVIEW



Take Control!

The best part of the install:
TAKING CONTROL OF
YOUR NEW LIGHTING RIG!
This is where the rubber
meets the road.

1

TEST YOUR FIXTURES

Go through each fixture and ensure that you have full control of your new rig, that the placements match the show file and that everything is functional.

2

SCHEDULE YOUR TRAINING

Now that installation is complete, it is time to book your team's training session.

3

OPERATE YOUR NEW LIGHTING RIG

With the training under your belt, you are now able to program and operate your rig.

Operation & Programming

TRAINING

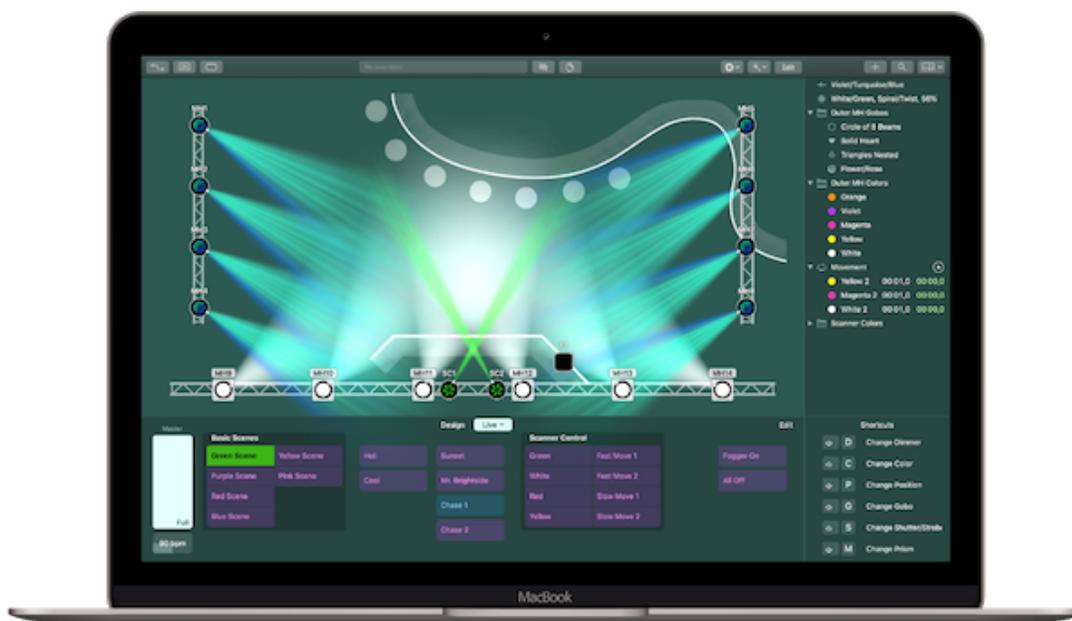


Your Hybrid Package Includes Private LightKey™ Training!

Book your Training Session and download your materials!

SCHEDULE YOUR TRAINING SESSION [HERE](#)

DOWNLOAD TEAMVIEWER™ [HERE](#)



TRAINING OVERVIEW

Phase	Activity	Outcome
Patching, Layout & LightKey™ 101	Walk through patching fixtures & setting up the Layout View	<ul style="list-style-type: none">• Understand the concept of patching fixtures• Understand how to edit and arrange the Fixture Layout
Presets, Cues and FX	Create Cues, Presets & Effects for LightKey™	<ul style="list-style-type: none">• Trainees will be able to create cues/presets• Trainees will understand the basics of Effect Creation
Dashboard Creation & Operation	Walk through of the Dashboard basics & operation concepts	<ul style="list-style-type: none">• Understand customization of the Control Panel• Trainees will be given tips for effective console operation

SUGGESTIONS

HOUSE LIGHTS

1

COLOR TEMPERATURE

Upgrade your house light bulbs to 4000k color temperature. Also use a bulb that has a 45 degree beam angle. Be sure ALL of your house lights are a matching color temperature.

2

DIMMABLE

Utilize a high quality LED bulb that is dimmable.

3

TURN OFF

Turn off all recessed cans above the stage.

CONCLUSION

CONGRATS! YOU MADE IT! With your newly installed lighting rig, your in person experience and video quality will be massively improved. Here are some parting tips to consider to maximize your new lights...



COLOR

- Use complimentary colors
- Consider the emotion that colors can create
- Utilize Motion Backgrounds as an extension of your lighting

SUBTLETY

- Don't be afraid to turn off some lights during worship
- Less is more in Art
- Use music as a guide for programming choices



DYANAMICS

- Listen to the mp3 of the worship set while programming
- Save BIG LOOKS for big parts of songs
- See lighting as an extension of the worship team

Just because the install is done, it does not mean you cannot continue to improve your lighting skills! Sign up for Pro Church Lights Training for you and your team to continue your Lighting education!

Hybrid Install Playbook™

ACKNOWLEDGEMENTS



PRO
CHURCH
LIGHTS

All of us at Pro Church Lights pray that the best years of ministry are ahead for First Christian Church of Belleville. As your ministry and production needs grow, Pro Church Lights is here to help support you as you continue to reach your community for Christ. Please reach out to us any time. We're here to serve.

May God bless you and your ministry.

Sincerely,

The Install Team at Pro Church Lights

First Christian Church of Belleville

LOVE YOUR LIGHTS™



Phone: 888-317-7745
www.prochurchlights.com