

SEAMLESS

DAKOTA LED LIGHT PANELS

INSTALLATION MANUAL



FOR ACRYLIC AND GLASS
ARTISTIC SURFACES

TABLE OF CONTENTS

- **SECTION 1**..... 3
 - MULTIPANEL OPTION
- **PREPARE THE DAKOTA PANELS**..... 4
 - STEP 1
 - STEP 2
- **MULTIPLE PANEL INSTALLATION BLUEPRINT**..... 5
- **FINAL INSTALLATION VIEW**..... 6
 - MULTIPLE PANEL
- **WALL PREP WITH INDENT**..... 7
 - MULTIPLE PANEL
- **INSTALLATION ON INDENTED WALL** 8
 - MULTIPLE PANEL
- **INSTALLATION ON FLAT WALL**..... 9
 - MULTIPLE PANEL
- **SECTION 2**..... 10
 - SINGLE PANEL OPTION
- **SINGLE PANEL INSTALLATION**..... 11
 - BLUEPRINT
- **WALL PREP WITH INDENT**..... 12
 - SINGLE PANEL
- **INSTALLATION ON INDENTED WALL**..... 13
 - SINGLE PANEL
- **INSTALLATION ON FLAT WALL**..... 14
 - SINGLE PANEL
- **SECTION 3**..... 15
 - ELECTRICAL WIRING
- **WIRING INSTALLATION DIAGRAM**..... 16
- **POWER SUPPLY SPACING** 17
- **DIMMER ASSEMBLY**..... 18
 - NON DIMMABLE / DIMMABLE 1
- **DIMMER ASSEMBLY**..... 19
 - DIMMABLE 2
- **SECTION 4**..... 20
 - CONTROLLER OPTIONS & WIRING
- **GLASS-TOUCH PRO - 4 ZONE**..... 21
 - CONTROLLER WIRELESS DIMMER DIAGRAM
- **GLASS-TOUCH PRO - 4 ZONE**..... 22
 - CONTROLLER WIRELESS DIMMER WIRING
- **DYNAMIC GLASSTOUCH**..... 23
 - WIRELESS WALL CONTROLLER DIAGRAM
- **DYNAMIC GLASSTOUCH**..... 24
 - WIRELESS WALL CONTROLLER WIRING
- **DMX-W RGB-W CONTROLLER**..... 25
 - DIAGRAM
- **DMX-W RGB-W CONTROLLER**..... 26
 - SET-UP & PAIRING
- **DMX-W RGB-W CONTROLLER**..... 27
 - WIRING OPTIONS
- **SECTION 5**..... 28
 - COMPLETE INSTALLATION SAMPLES
- **FINAL RESULT VIEW**..... 29
- **NO NUMBER LIMIT ON DAKOTA SEAMLESS PANELS**..... 30
- **IMAGINE THE POSSIBILITIES**..... 31
 - TALK TO US



SECTION 1

MULTIPLE PANEL OPTION

IMPORTANT NOTE

BEFORE INSTALLATION, IT IS STRONGLY RECOMMENDED TO TEST ALL DAKOTA SEAMLESS PANELS TO ENSURE THEY ARE FREE FROM ANY DAMAGE OR MALFUNCTIONS THAT MAY HAVE OCCURRED DURING SHIPPING OR TRANSPORTATION.

AFTER THE DAKOTA PANELS HAVE BEEN INSTALLED, ALLOW THEM TO SETTLE FOR A MINIMUM OF 24 HOURS BEFORE PROCEEDING WITH THE INSTALLATION OF ANY ARTISTIC SURFACE. THIS WAITING PERIOD HELPS ENSURE OPTIMAL ADHESION, ALIGNMENT, AND PERFORMANCE.

REMINDER

Regardless of the number of panels or the type of installation, every project must begin with the cleaning process described in Step 1 and Step 2 on page 4. Following these steps ensures proper adhesion, performance, and longevity of the installation.

To avoid damage to Dakota Seamless Panels and their electrical components, always follow the installation procedures outlined in this manual.

For the proper installation of any specific stone, refer to the guidelines provided by the stone supplier.

If you have any questions, contact us at **305-652-2599** or email sales@lumiron.com.



PREPARE THE DAKOTA PANELS

STEP 1

FIND A STABLE SURFACE

Due to the handling process, it is necessary to ensure that the **DAKOTA SEAMLESS PANELS** are clean before beginning the installations.

The initial step involves thoroughly vacuuming the **DAKOTA SEAMLESS PANELS** to remove any hard residue and dust from the panel surface.



STEP 2

KEEP PANEL ON SAME STABLE SURFACE

After vacuuming the **DAKOTA SEAMLESS PANELS**, use alcohol applied to a soft cloth or paper towel to clean the surface of the panel.

Please refrain from applying the alcohol directly to the panel.

Allow the panels to dry completely before proceeding to the next step of the installation process.

IMPORTANT NOTE:

The specifications provided in this manual are subject to change at any time due to ongoing improvements to LED lighting options. Please note that the pictures included in this manual serve as examples only. Dimensions and types may vary according to the requirements of each custom project.

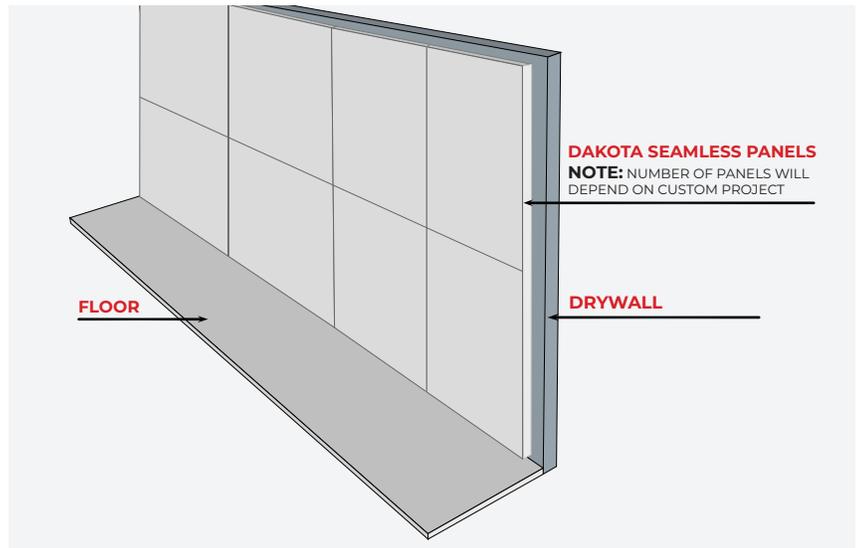
BLUEPRINT

VIEW OF MULTIPLE DAKOTA SEAMLESS PANELS

If the wall or surface to be covered requires more than one panel, a multi-panel installation can be used. The unique engineering of DAKOTA Seamless panels allows multiple panels to be installed together with no noticeable seams.

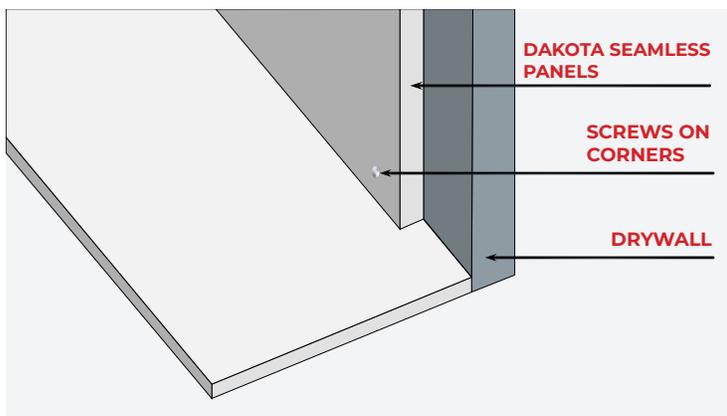
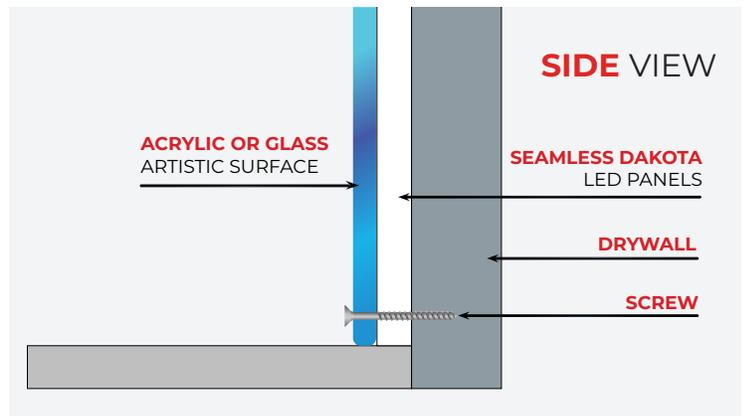
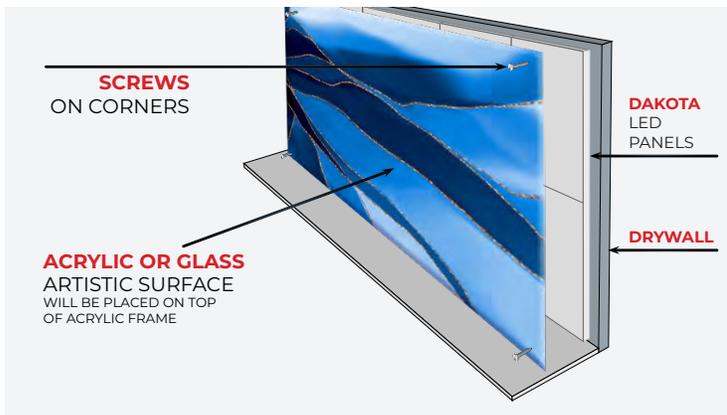
We recommend securing each panel to the wall using screws placed at the corners of the panels.

For the installation of the artistic or finished surface, please follow the installation method recommended by the surface manufacturer.



NOTE:

LUMIRON recommends fastening the artistic surface and the panels together directly to the wall. Color-matched or touch-up paint may be used to conceal the screws. Always follow the surface provider's installation guidelines and requirements.



PLEASE NOTE: If screws cannot be used on the artistic surface, the DAKOTA SEAMLESS panels must be secured directly to the wall using screws at the panel corners.

Always follow the installation method recommended by the artistic surface provider.

QUESTIONS?

TALK TO US! 305-6522599

FINAL INSTALLATION VIEW

MULTIPLE PANEL



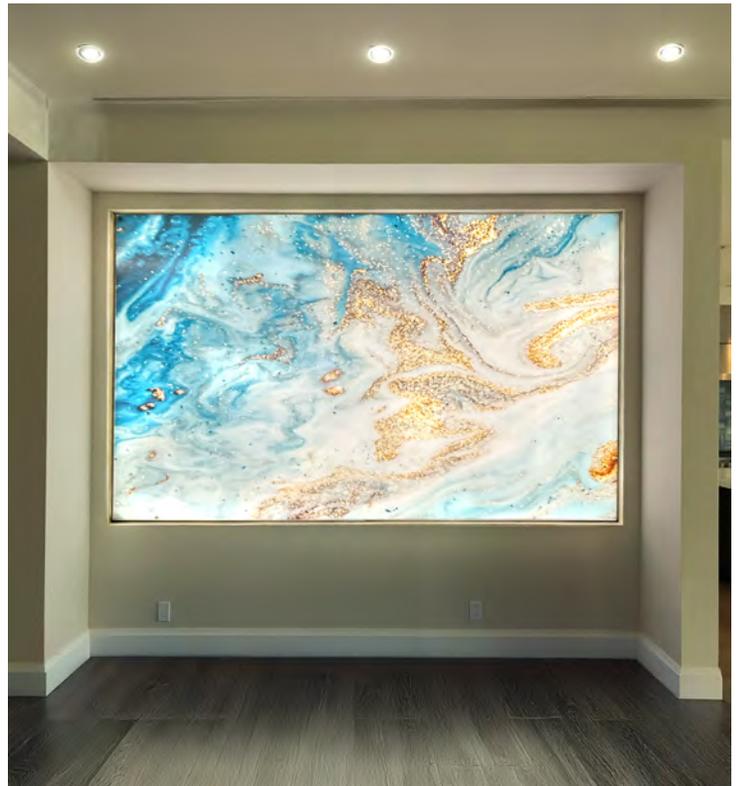
PLEASE NOTE: If screws cannot be used on the artistic surface, the DAKOTA SEAMLESS panels must be secured directly to the wall using screws at the panel corners.

Always follow the installation method recommended by the artistic surface provider.



NOTE:

LUMIRON recommends fastening the artistic surface and the panels together directly to the wall. Color-matched or touch-up paint may be used to conceal the screws. Always follow the surface provider's installation guidelines and requirements.



WALL PREP WITH INDENT

OPTION

1

MULTIPLE PANEL

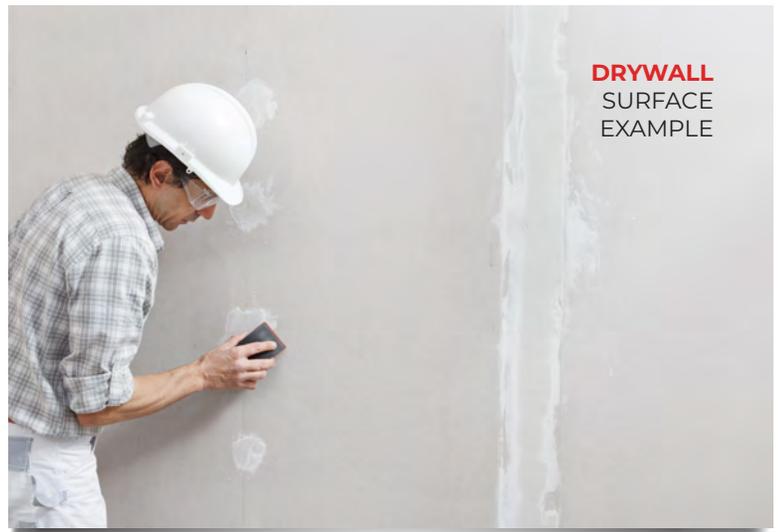


GET THE WALL READY

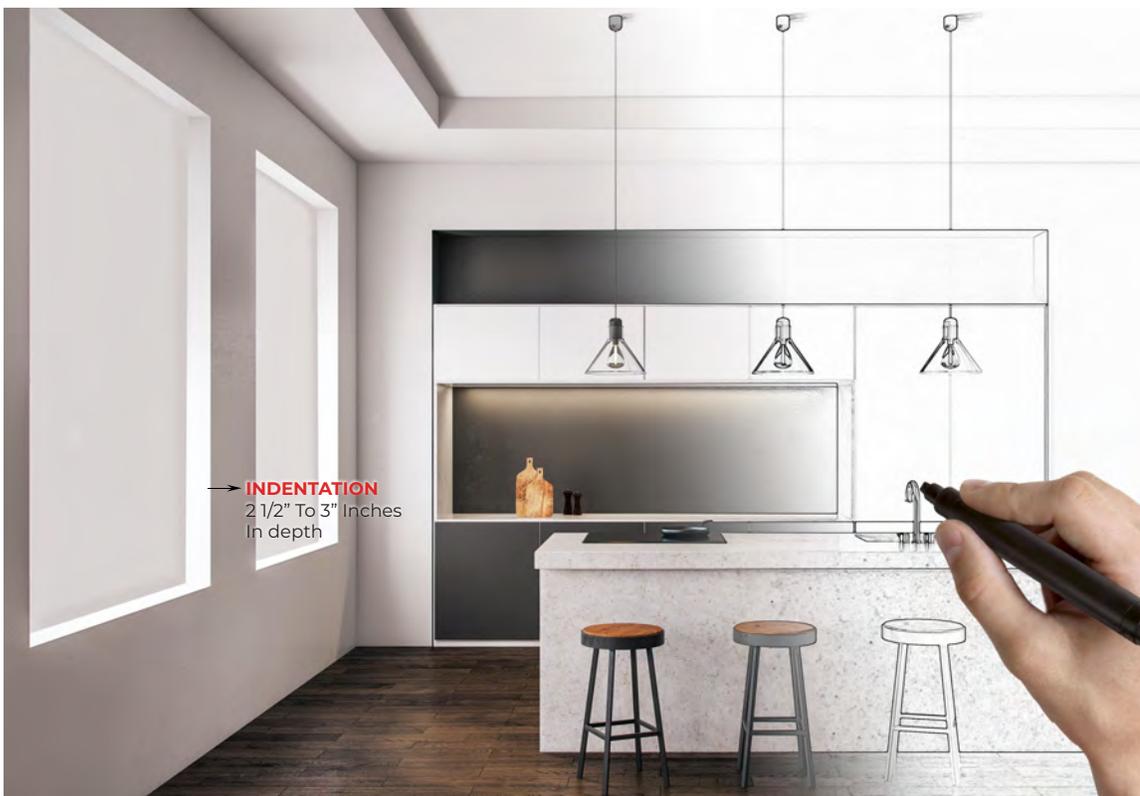
Prepare the wall surface for the installation of the **DAKOTA SEAMLESS PANELS**. In this option, the wall can feature an indentation measuring 2 1/2 to 3 inches in depth, this just a suggestion, indentation can be determined

The panels should be installed inside the indentation only after the wall is ready for installation.

Please consider that dimensions may vary depending on the custom project and design requirements.



DRYWALL
SURFACE
EXAMPLE



→ **INDENTATION**
2 1/2" To 3" Inches
In depth

WALL SAMPLE WITH INDENT VIEW

NOTE:
The next step will involve the installation of multiple **DAKOTA SEAMLESS PANELS** once the wall preparation is complete.

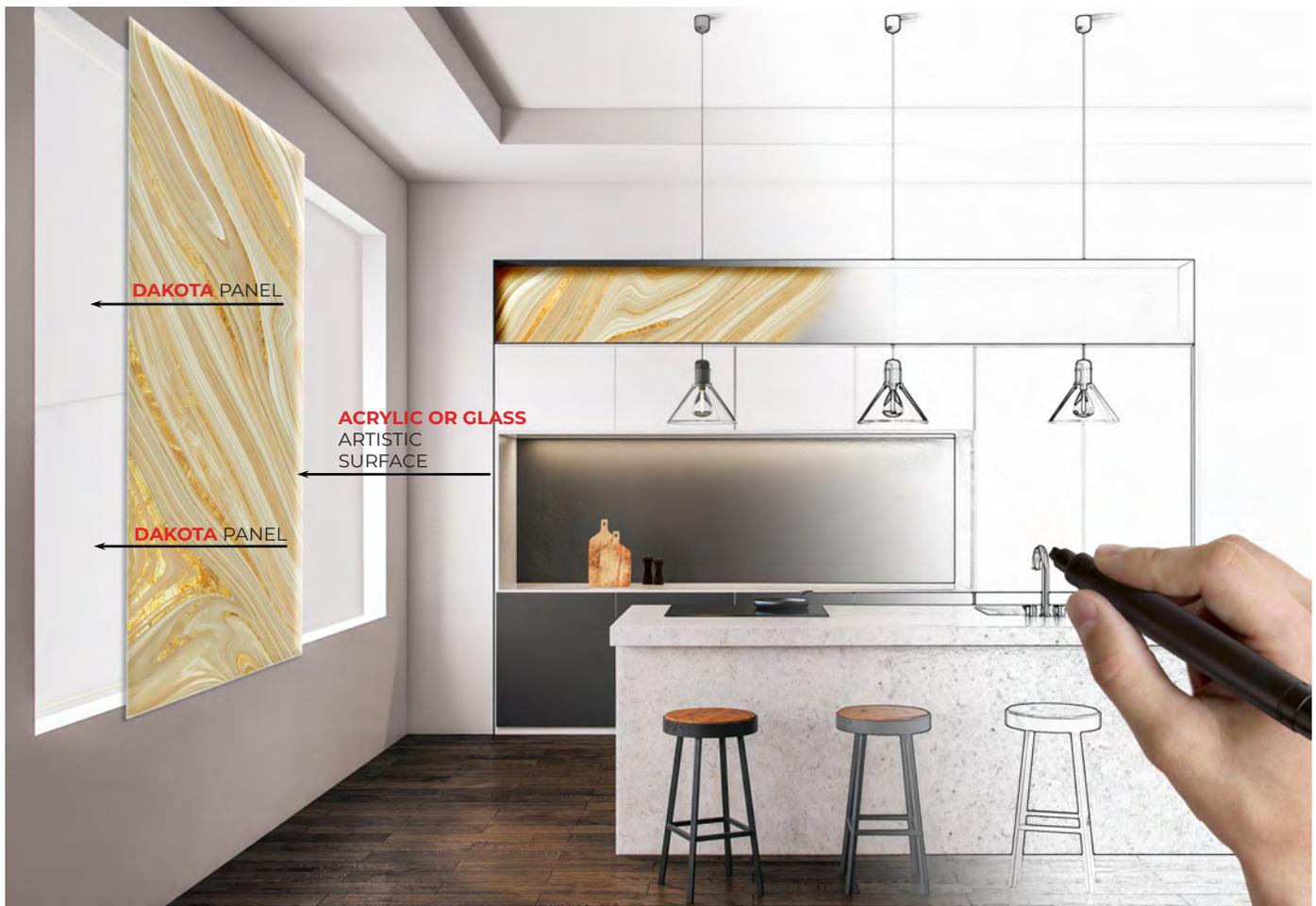
MULTIPLE PANEL

PLACE DAKOTA SEAMLESS PANELS

DAKOTA SEAMLESS PANELS should sit inside the indentation, secured by screws or the best method chosen for proper installation. Make sure to adjust the screws gently, to ensure there is no damage to **DAKOTA SEAMLESS PANELS**

REMEMBER: On This option, with multiple **DAKOTA SEAMLESS PANELS** installation, the wall can have an indentation of 2 1/2" to 3" inches in depth. Dimensions of the wall will depend on a specific project to be worked on.

NOTE:
The **ACRYLIC OR GLASS ARTISTIC SURFACE** will rest directly on the **DAKOTA SEAMLESS PANELS**. For installation of **ARTISTIC SURFACE** follow instruction of the manufacturer.



INSTALLATION ON FLAT WALL

OPTION
2

MULTIPLE PANEL

 **SCREWS ON EVERY CORNER**

Secure the **DAKOTA SEAMLESS PANELS** to the drywall with anchors or screws on each corner, depending on preferred method for installation.

IMPORTANT:

Make sure to use the appropriate tool, to avoid damage of the panel.

DO NOT leave a gap between panels or this will create a shadow once the **ARTISTIC SURFACE** is placed.

IMPORTANT NOTE

If screws cannot be used on the artistic surface, the DAKOTA SEAMLESS panels must be secured directly to the wall using screws at the panel corners.

Always follow the installation method recommended by the artistic surface provider.

FRONT VIEW

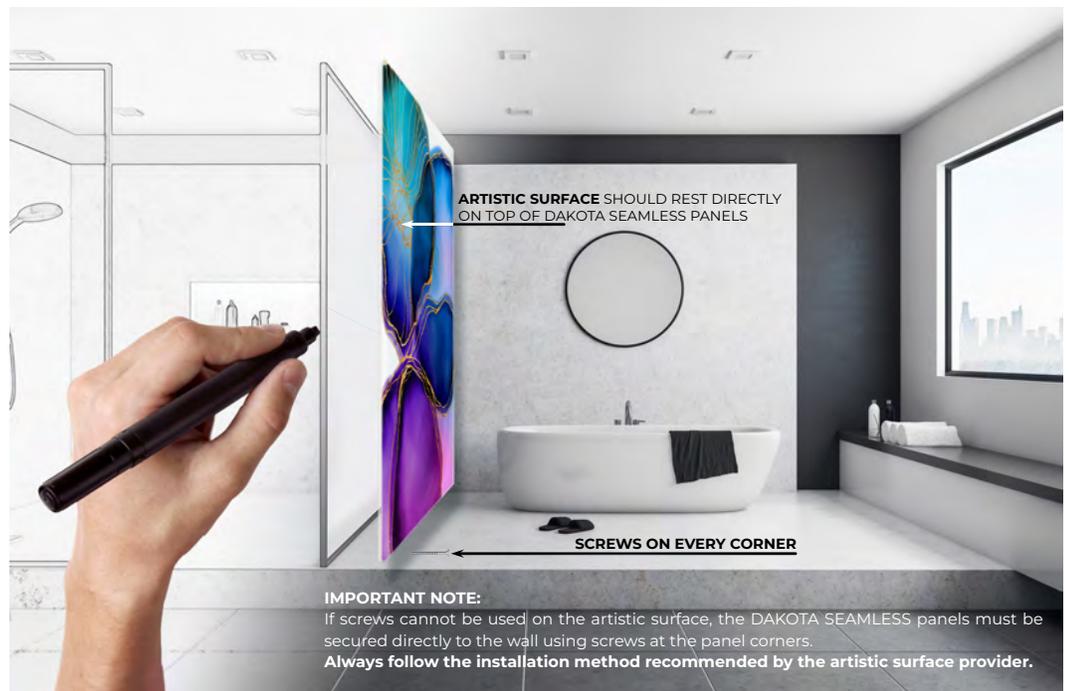


 **PLACE DAKOTA SEAMLESS PANELS**

On This option, **DAKOTA SEAMLESS PANELS** will be secured directly to a wall without the indent.

Follow instructions on page 7 on placement of frames. Frame will be placed directly on the **DAKOTA SEAMLESS PANELS**

Dimensions of the wall will depend on a specific project to be worked on.



IMPORTANT NOTE:

If screws cannot be used on the artistic surface, the DAKOTA SEAMLESS panels must be secured directly to the wall using screws at the panel corners.
Always follow the installation method recommended by the artistic surface provider.

SECTION 2

SINGLE PANEL OPTION

For proper installation, always adhere to **STEP 1** and **STEP 2** of this manual, irrespective of the number of **DAKOTA SEAMLESS PANELS** used or the chosen installation options.

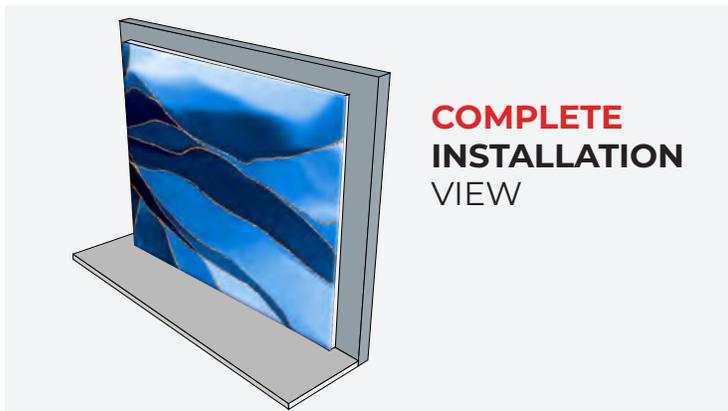
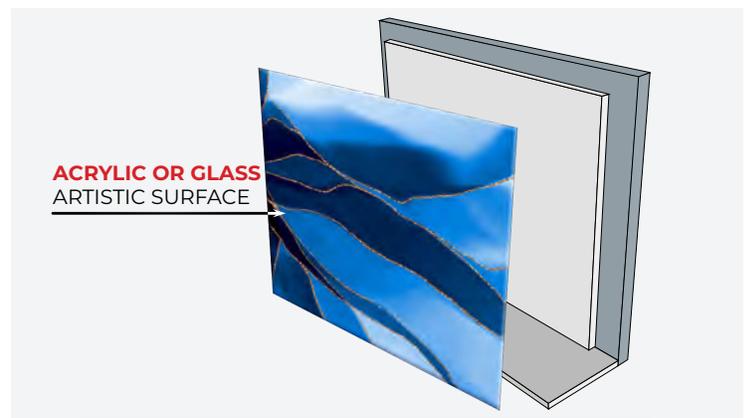
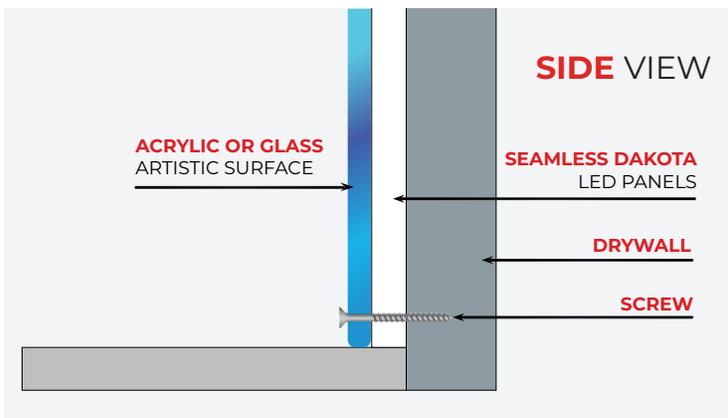
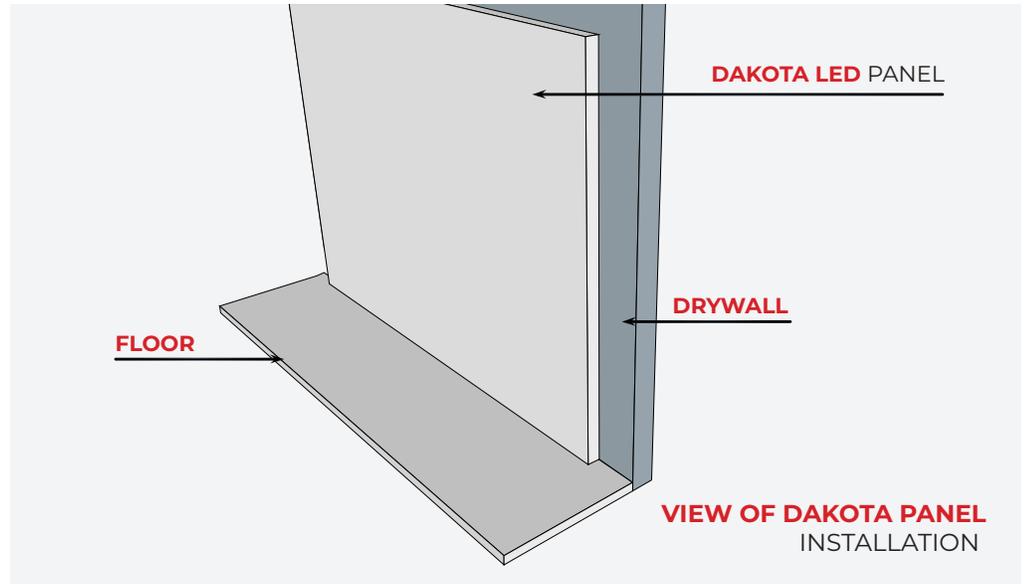
SINGLE PANEL INSTALLATION

BLUEPRINT

VIEW OF SINGLE DAKOTA PANEL

We recommend securing each panel to the wall using screws placed at the corners of the panels.

For the installation of the artistic or finished surface, please follow the installation method recommended by the surface manufacturer.



NOTE:

LUMIRON recommends fastening the artistic surface and the panels together directly to the wall. Color-matched or touch-up paint may be used to conceal the screws. Always follow the surface provider's installation guidelines and requirements.

NOTE:

The **ACRYLIC OR GLASS ARTISTIC SURFACE**, will rest flush mount on top of **DAKOTA SEAMLESS PANEL**

INSTALLATION PROCESS WITH SINGLE DAKOTA SEAMLESS PANEL, WILL BE THE SAME WITH FLAT WALL, OR WALL WITH INDENT

WALL PREP WITH INDENT

OPTION
3

SINGLE PANEL

GET THE WALL READY

Prepare the wall surface for **DAKOTA SEAMLESS PANEL** installation, whether using a single panel or not.

If opting for an indented installation, ensure the wall has an indentation depth of 2 1/2 to 3 inches, where the panel will be placed inside. Acrylic spacers are not required when using a single **DAKOTA SEAMLESS PANEL**.

Note: The dimensions will vary based on the custom project and design. The maximum size of a single panel is 48 inches by 96 inches (4 feet by 8 feet)



DRYWALL
SURFACE
EXAMPLE



SINGLE PANEL
INSIDE INDENTED
WALL

NOTE:
The dimensions will vary depending on the custom project and design.

FOR SINGLE PANEL INSTALLATIONS, THE WALL CAN BE EITHER INDENTED OR FLAT.

INSTALLATION ON INDENTED WALL

SINGLE PANEL

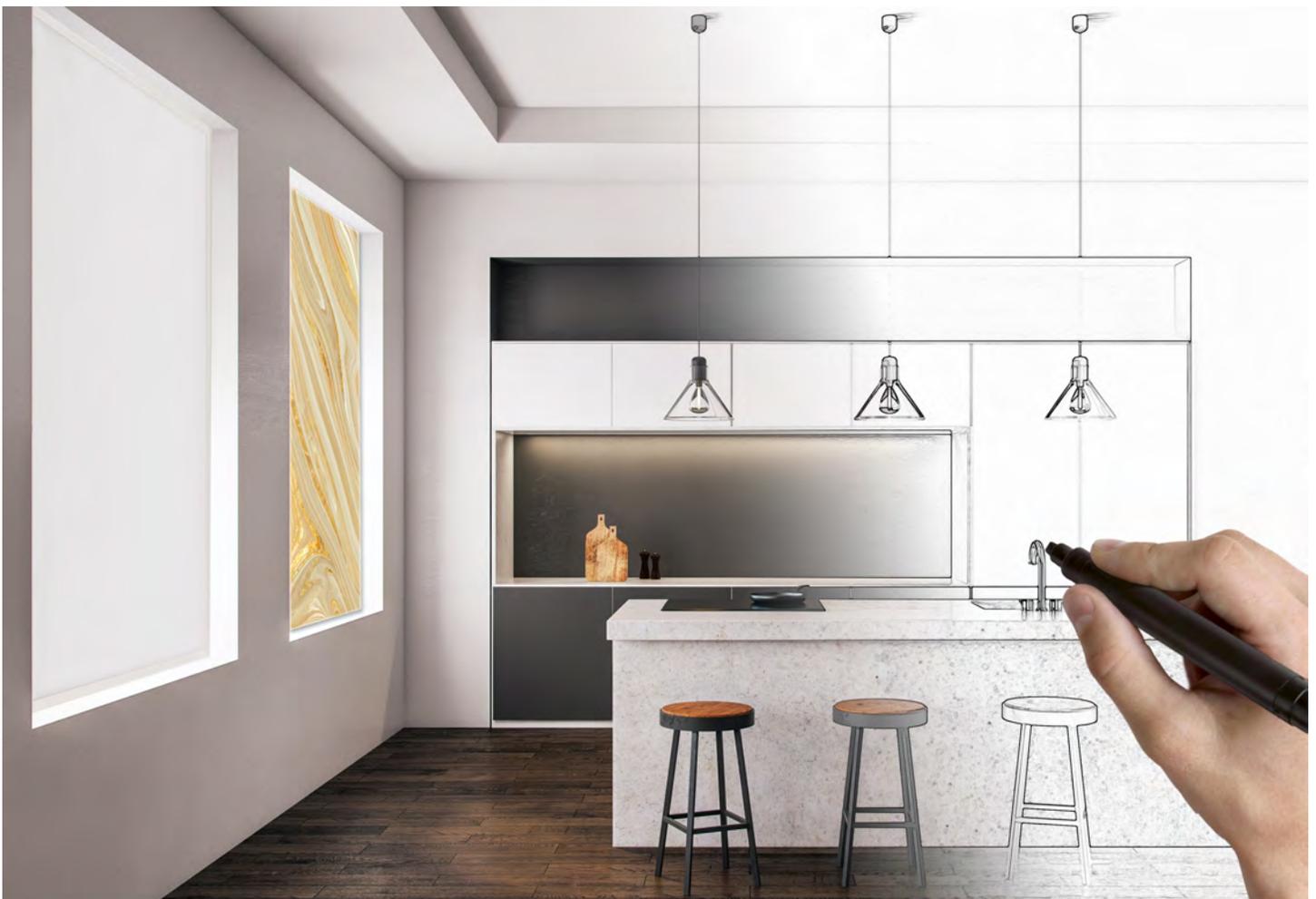
WALL WITH INDENT INSTALLATION

If using this option, **DAKOTA SEAMLESS PANEL** should sit inside the indentation secured by screws on every corner. Same process if installing on flat drywall. Make sure to adjust the screws gently, to ensure there is no damage to **DAKOTA SEAMLESS PANEL**.

REMEMBER: On This option, with a single **DAKOTA SEAMLESS PANEL**, acrylic frame or spacers **ARE NOT REQUIRED**. Dimensions of the wall will depend on a specific project to be worked on.

NOTE:

The **ACRYLIC OR GLASS ARTISTIC SURFACE** will rest flesh mount on top of **DAKOTA SEAMLESS PANEL**.



SINGLE PANEL

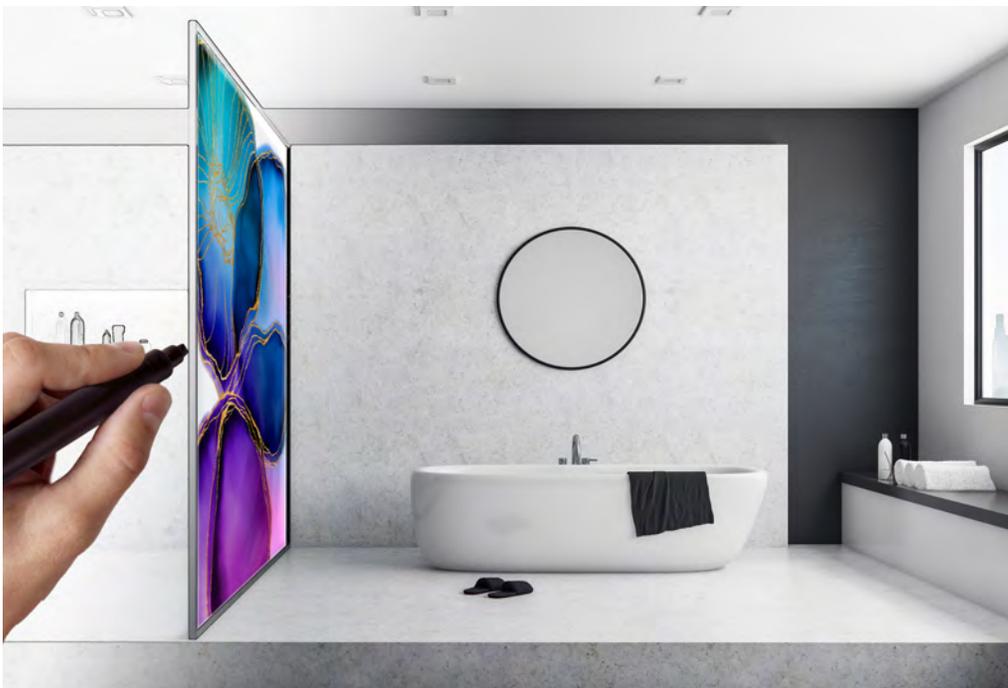
SINGLE PANEL INSTALLATION VIEW

The maximum size for each **DAKOTA SEAMLESS PANEL** is 8' X 3'

If a larger **DAKOTA SEAMLESS PANEL** is needed, multiple panels can be used.

DAKOTA SEAMLESS PANEL can be adjusted to the measurements and shape needed for each project, regardless of number needed.

NOTE:
After installation is completed, your designer will cover the both **DAKOTA PANEL** and Artistic Surface with a frame of your choosing. This will only be required on a flat wall installation.



SINGLE PANEL VIEW

DAKOTA SEAMLESS PANEL will be installed flush mount on the wall, and The **ACRYLIC OR GLASS ARTISTIC SURFACE** will be installed directly on top.

Please note that a frame of Client's choosing is **OPTIONAL** The frame will be secured all around the **DAKOTA SEAMLESS PANEL** and the **ARTISTIC SURFACE**.

The purpose of this frame is only aesthetic and it is not a requirement, and can be determined by each Designer or Project Manager from each installation site.

SECTION 3

ELECTRICAL WIRING

Regardless of the type of installation, the electrical wiring remains consistent. All the necessary electrical supplies required for each specific project will be provided alongside the **DAKOTA SEAMLESS PANELS**.

WIRING INSTALLATION DIAGRAM

CORRECT

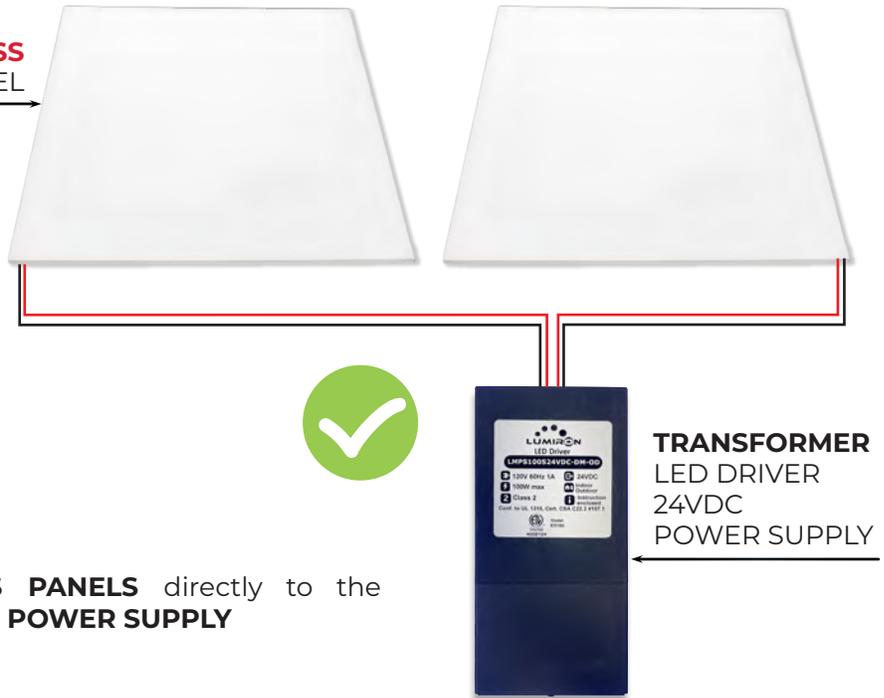
DAKOTA SEAMLESS
LED LIGHT PANEL

! WARNING!

DO NOT CONNECT THE
DAKOTA SEAMLESS LED
LIGHT PANEL DIRECTLY
TO THE 110VAC-220VDC

 FOLLOW
THE CORRECT WIRING

Connect the DAKOTA SEAMLESS PANELS directly to the
TRANSFORMER LED DRIVER 24VDC POWER SUPPLY

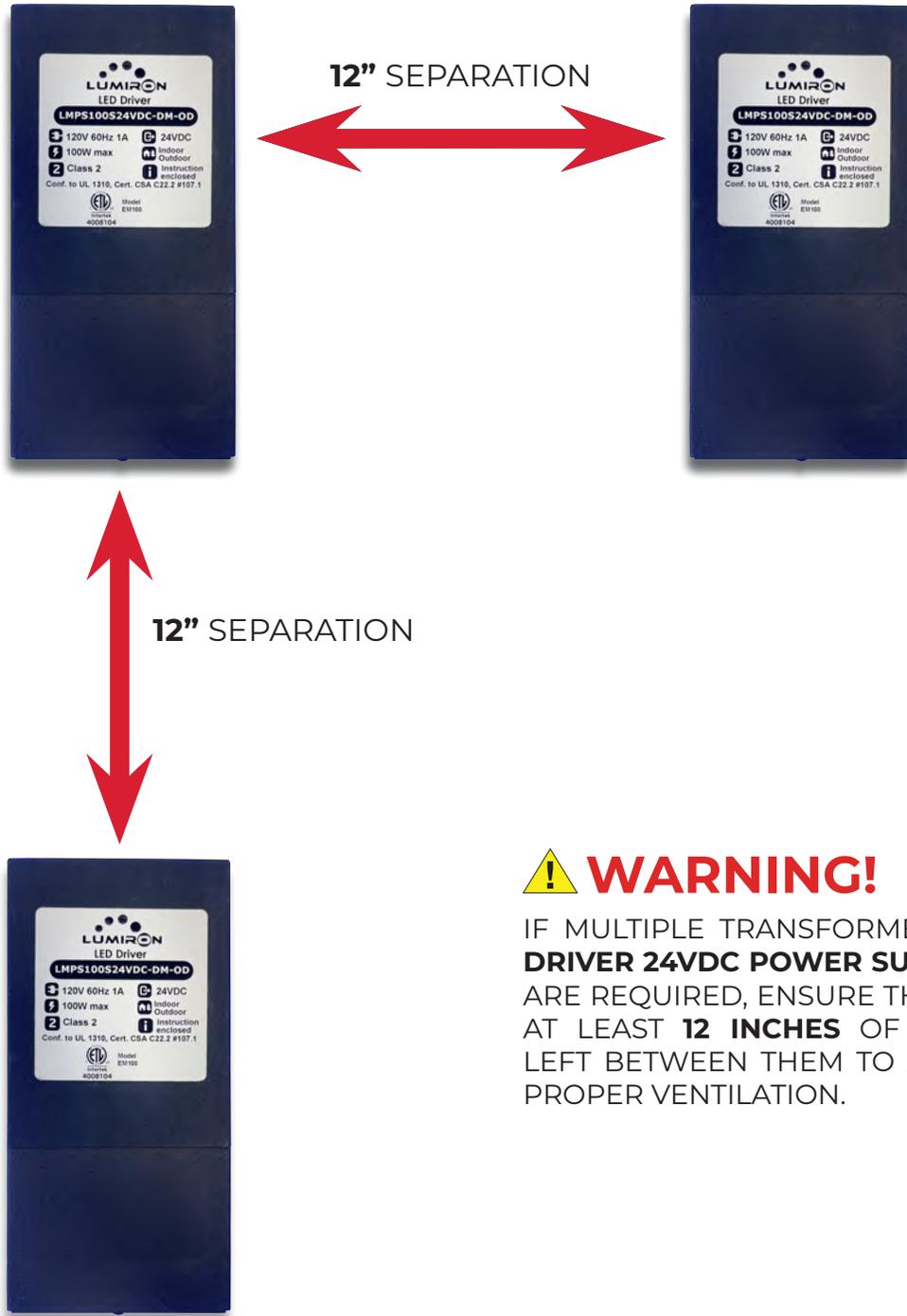


INCORRECT



! WARNING!

DO NOT UTILIZE A JUNCTION
BOX FOR CONNECTING THE
TRANSFORMER LED DRIVER
24VDC POWER SUPPLY TO THE
DAKOTA PANELS.



WARNING!

IF MULTIPLE TRANSFORMER **LED DRIVER 24VDC POWER SUPPLIES** ARE REQUIRED, ENSURE THERE IS AT LEAST **12 INCHES** OF SPACE LEFT BETWEEN THEM TO ALLOW PROPER VENTILATION.

DIMMER ASSEMBLY

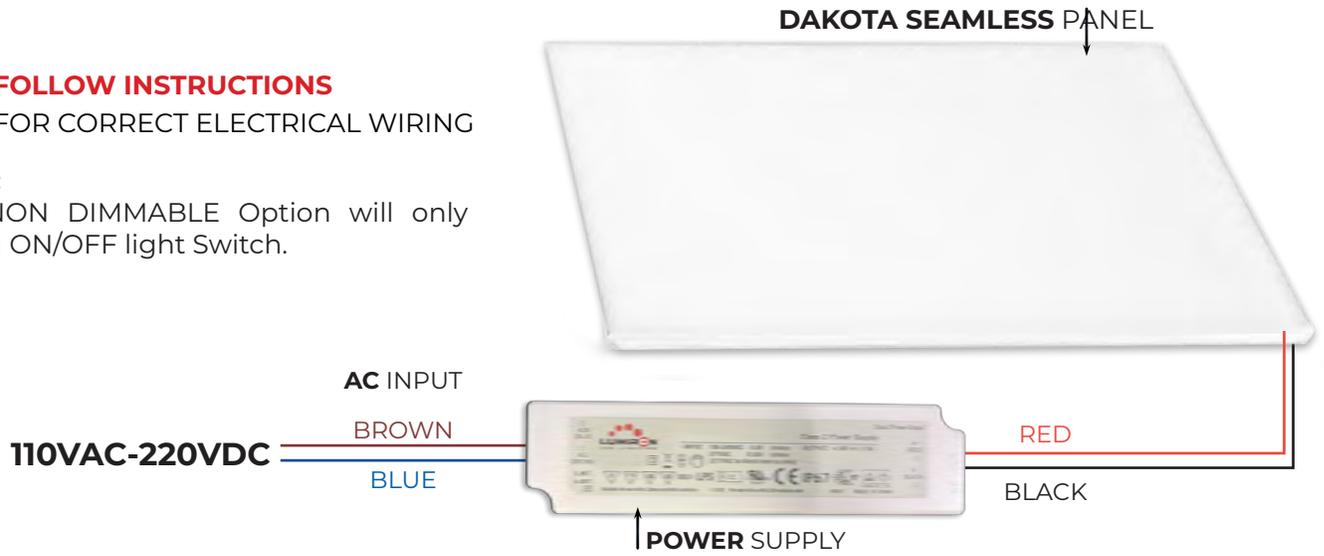
LUMIRON

NON
DIMMABLE

ON/OFF ONLY
OPTION FOR NON-DIMMABLE

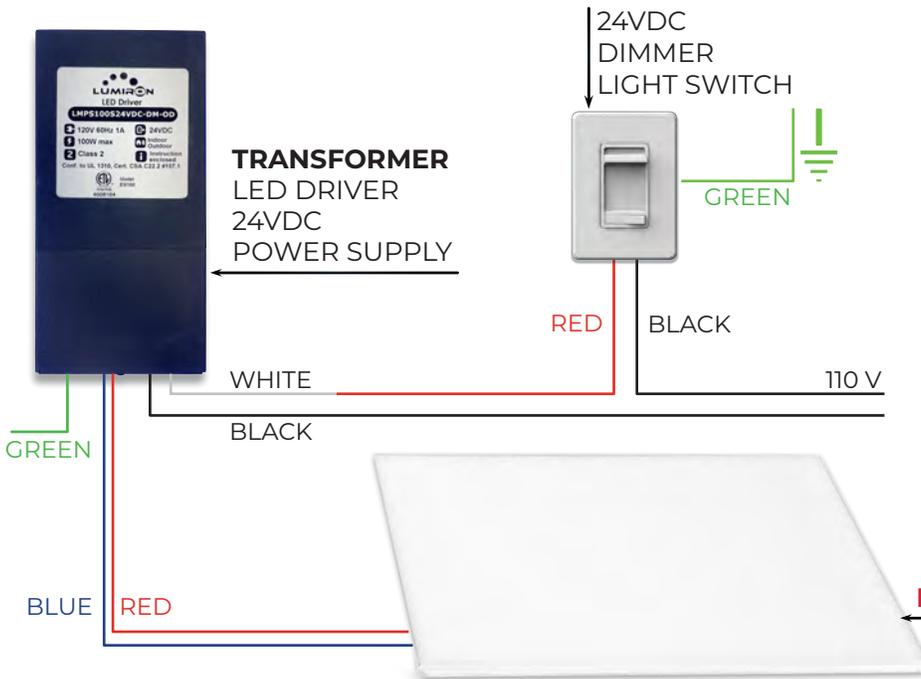
 **FOLLOW INSTRUCTIONS**
FOR CORRECT ELECTRICAL WIRING

NOTE:
The NON DIMMABLE Option will only
have a ON/OFF light Switch.



WIRED
OPTION FOR DIMMABLE

DIMMABLE
1



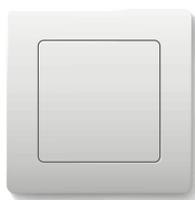
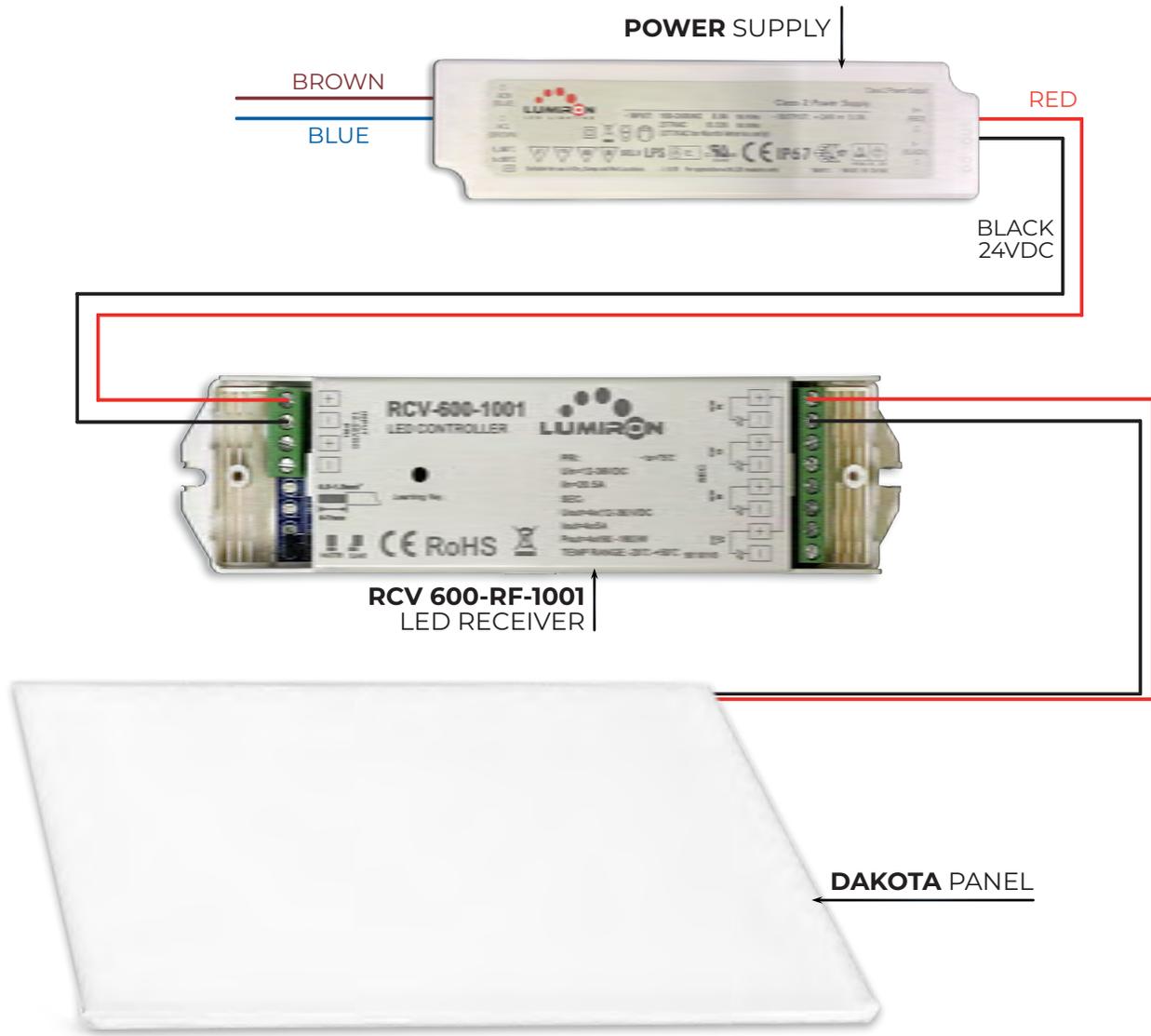
 **WARNING!**
DO NOT CONNECT THE
**DAKOTA SEAMLESS A LED
LIGHT PANEL** DIRECTLY TO
THE **110VAC-220VDC**

DIMMER ASSEMBLY

LUMIRON

DIMMABLE
2

WIRELESS
OPTION FOR DIMMABLE



WIRELESS SWITCH
WALL MOUNT

! WARNING!

DO NOT CONNECT THE
DAKOTA SEAMLESS A LED
LIGHT PANEL DIRECTLY TO
THE 110VAC-220VDC

SECTION 4

CONTROLLER OPTIONS & WIRING

The type of controller you receive will depend on the COLOR TEMPERATURE specified for your project.

Please refer to the controller specifications for your project to ensure correct pairing and wiring.

IMPORTANT INFORMATION:

- For Single Color (CW, WW, NW) – see page 21
- For CCT Duo (CW–WW) – see page 23
- For Multi-Color (RGBW or RGB) – see page 25

For more CONTROLLER options, you can visit our website at



<https://lumiron.com/product-category/led-remote-dimmers-controllers/>

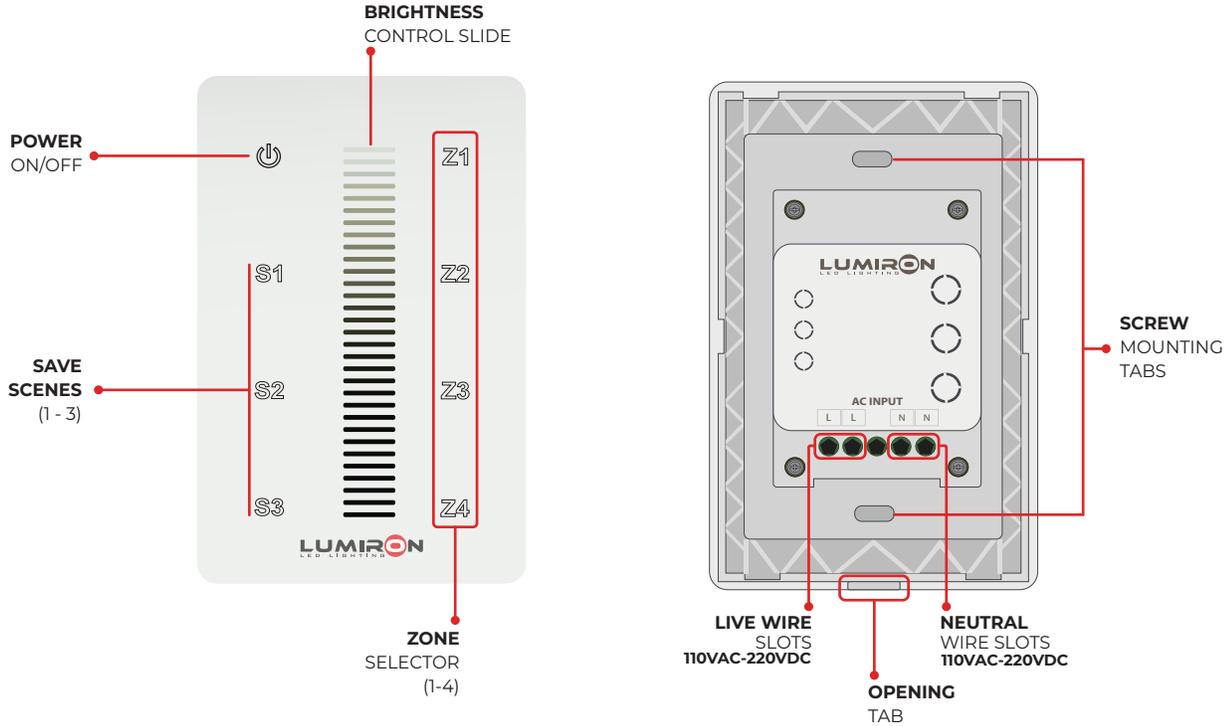
GLASS-TOUCH PRO - 4 ZONE

CONTROLLER WIRELESS DIMMER DIAGRAM

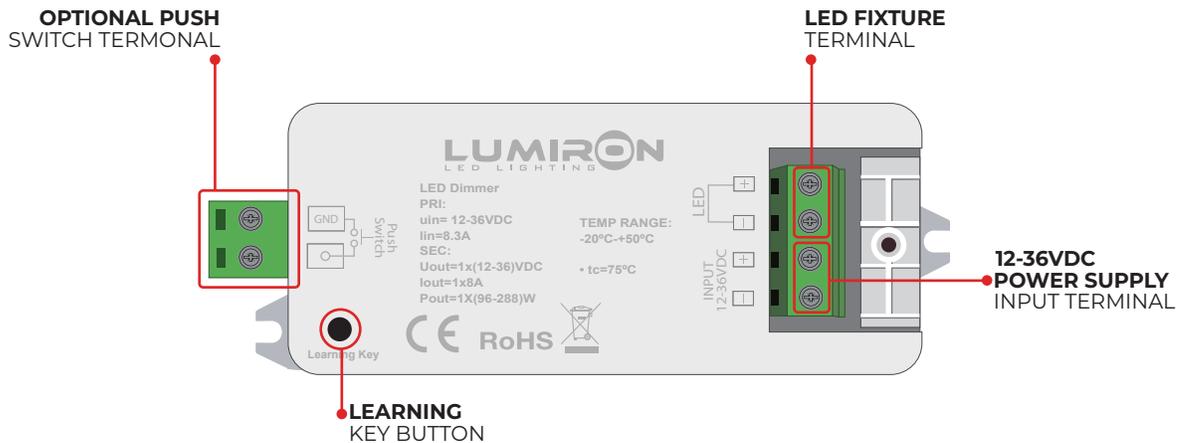
IMPORTANT TO KNOW

THIS CONTROLLER OPTION, IS FOR **WHITES ONLY**

DIMMER



DIMMING-RECEIVER



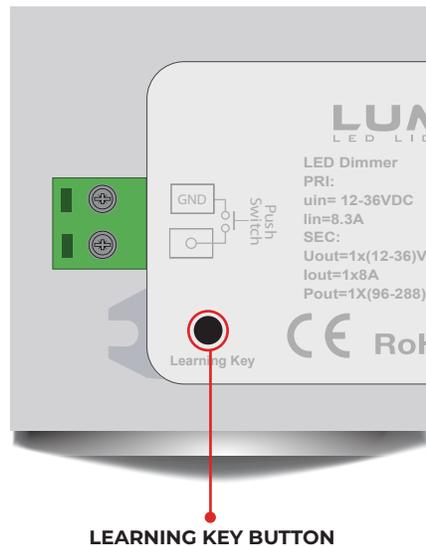
GLASS-TOUCH PRO - 4 ZONE

CONTROLLER WIRELESS DIMMER WIRING

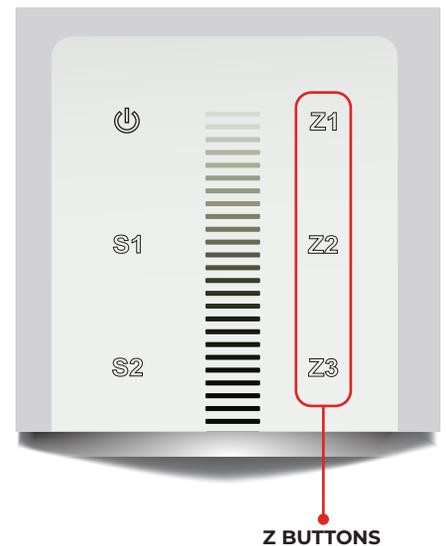
PAIRING THE GLASSTOUCH DIMMERTO TO THE DIMMING-RECEIVER

1. Push the "Learning Key" button on the Dimming-Receiver you desire to pair.
2. Push and hold the "Z" button on the GlassTouch Dimmer for the zone you desire to pair to the dimming-receiver. The lights will flash and turn off once pairing is successful.

BACK VIEW

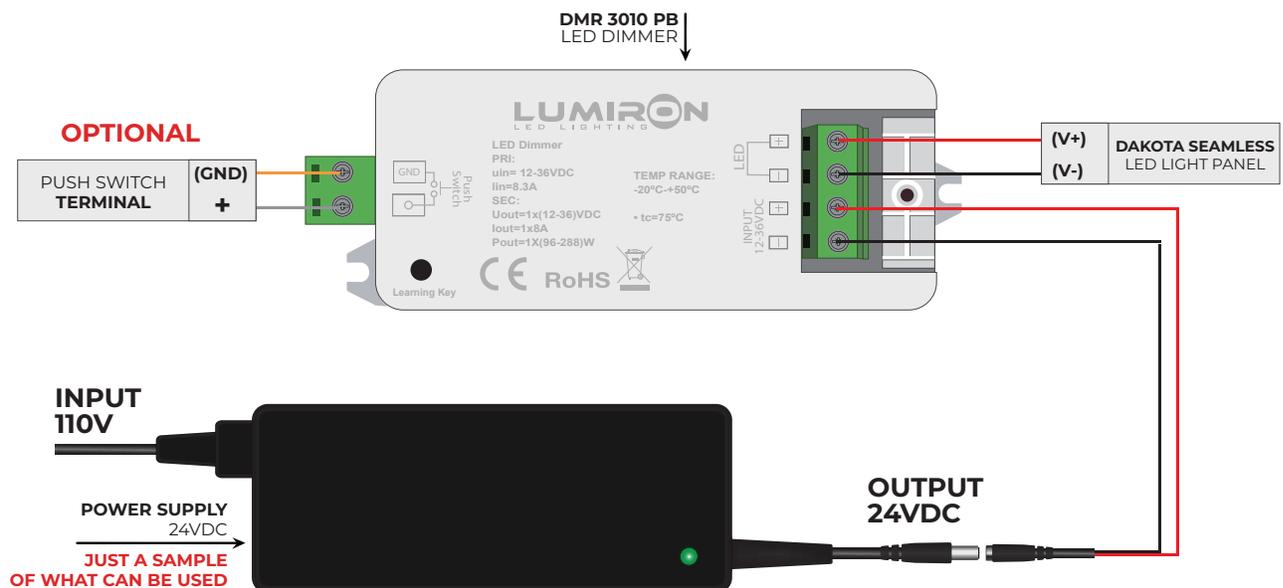


LEARNING KEY BUTTON



Z BUTTONS

WIRING OF RECEIVER



DYNAMIC GLASSTOUCH

WIRELESS WALL CONTROLLER WIRING

PAIRING THE GLASSTOUCH CONTROLLER TO THE RECEIVER

1. Push the **“LEARNING KEY”** button on the Receiver once.
2. Tap the **“POWER”** button pad on the GlassTouch controller. The lights would flash.



WIRING OF RECEIVER



DMX-W RGB-W CONTROLLER



DIAGRAM

CONTROLLER FRONT VIEW



IMPORTANT TO KNOW

THIS CONTROLLER
OPTION, IS FOR
RGBW ONLY

NOTE:
For Direct DMX Control, No
Receiver Needed

OPTIONAL RECEIVERS

FOR DMX CONTROL OF RGB-W LIGHT FIXTURES:
DMX 600 RGBW 4 Zones LED Controller

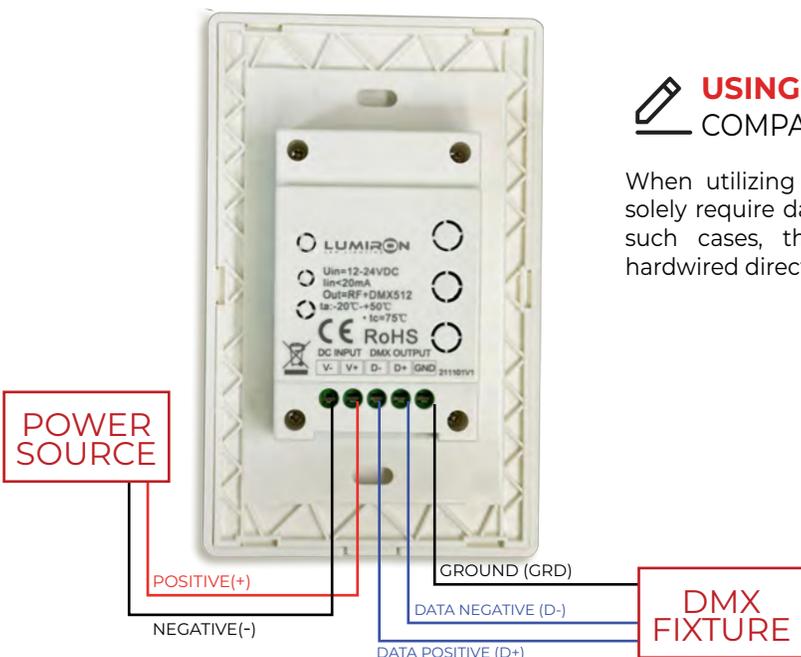


FOR WIRELESS RGB-W CONTROL:
Receiver 8 Zone LED Controller 5a



USING DMX COMPATIBLE LED PRODUCTS

When utilizing **DMX** or wireless-compatible LED products that solely require data connections, there is no need for a receiver. In such cases, the **DMX-WIRELESS RGB-W** Controller can be hardwired directly to the **DMX LED** Products.



! WARNING!

BEFORE PROCEEDING, ENSURE TO FIRST TURN OFF OR UNPLUG THE POWER AT THE LOCATION'S JUNCTION BOX. ALTERNATIVELY, CONSULT A CERTIFIED ELECTRICIAN TO APPROPRIATELY TURN OFF THE POWER.

DMX-W RGB-W CONTROLLER



SET-UP & PAIRING

CONTROLLER

FRONT VIEW

BACK VIEW



USING RGB-W (five wire)

LED PRODUCTS REQUIRING DMX CONNECTIONS

When using DMX compatible LED products requiring RGB-W five wire connections, use the 4 Channel MDX to RGB-W Controller

DMX CONTROL OF RGB-W LIGHT FIXTURES: DMX 600 RGBW 4 Zones LED Controller



GROUND (GRD)
DATA POSITIVE (D+)
DATA NEGATIVE (D-)

NOTE:

Repeat the previous Step A except the three wires for data and ground (D-, D+ GRD) need to be connected to the 4 Channel DMX to RGB-W Controller.

WIRELESS CONNECTION OPTION



USING WIRELESS CONTROL

FOR RGB-W (five wire) LED PRODUCTS

When utilizing **DMX** in wireless mode to connect to LED products, the use of WIFI receivers is necessary to control the **RGB-W** light fixtures.



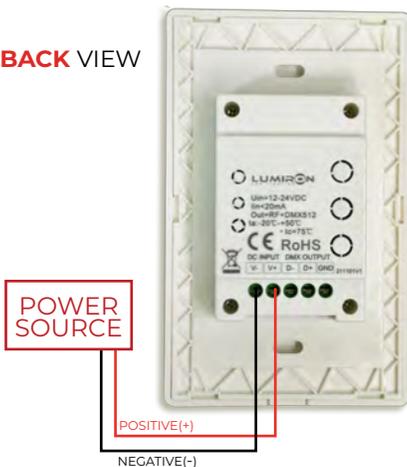
FRONT VIEW



WARNING!

BEFORE PROCEEDING, ENSURE TO FIRST TURN OFF OR UNPLUG THE POWER AT THE LOCATION'S JUNCTION BOX. ALTERNATIVELY, CONSULT A CERTIFIED ELECTRICIAN TO APPROPRIATELY TURN OFF THE POWER.

BACK VIEW



WIRELESS TO
RGB-W RECEIVER

POWER
SOURCE



DAKOTA
SEAMLESS
LED LIGHT
PANEL

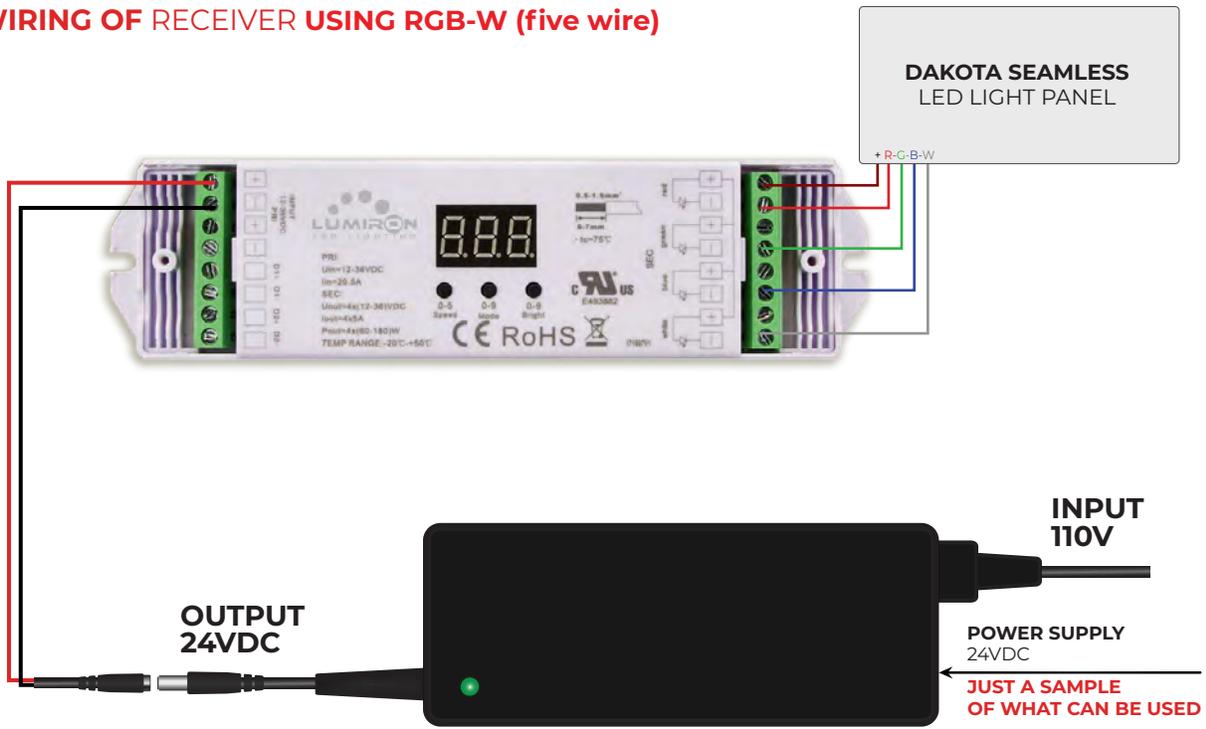
+R-G-B-W

LEARNING
KEY BUTTON

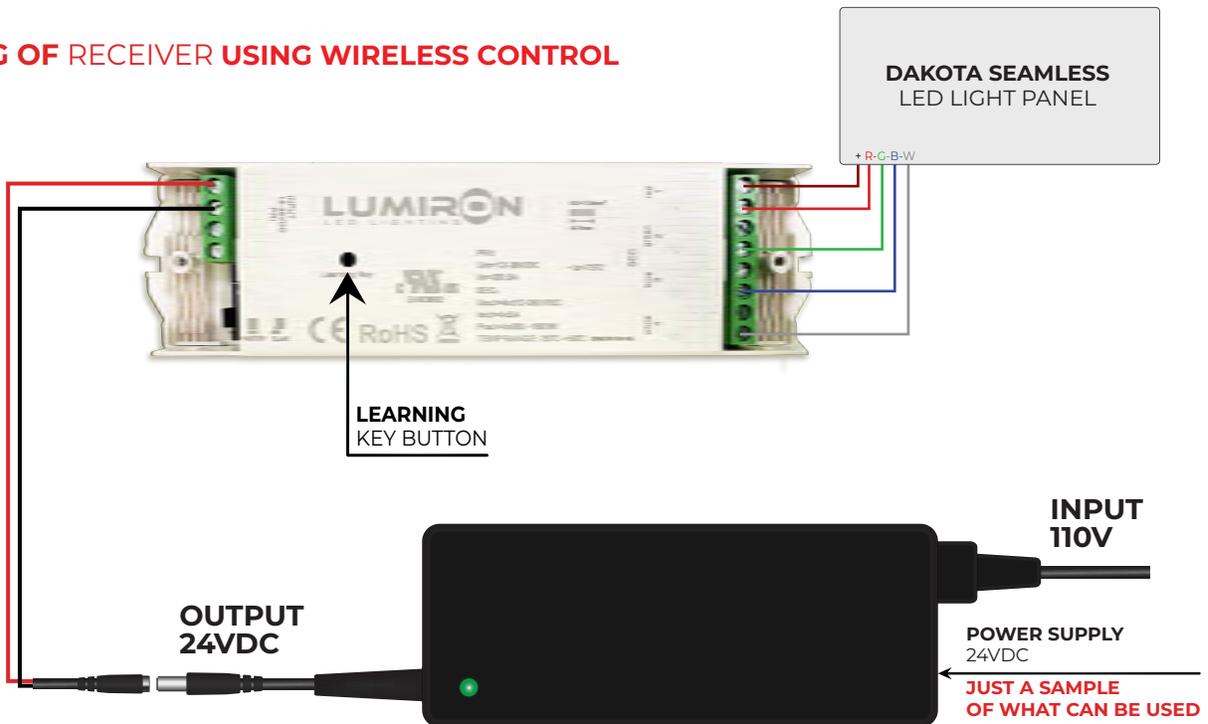
DMX-W RGB-W CONTROLLER

WIRING OPTIONS

WIRING OF RECEIVER USING RGB-W (five wire)



WIRING OF RECEIVER USING WIRELESS CONTROL



SECTION 5

COMPLETE INSTALLATION SAMPLES

The final result will vary depending on the type of **ACRYLIC OR GLASS ARTISTIC SURFACE** used.

The pictures shown here serve as examples of actual final results.

LUMIRON™ will provide custom-made **DAKOTA SEAMLESS PANELS** tailored to each specific project.

BACK-LIT ARTISTIC SURFACES

The **ARTISTIC SURFACES** are handmade acrylic, glass or a very thin translucent covering panels suitable for any location, illuminated on the back by **DAKOTA SEAMLESS LED LIGHT PANELS**, when exposed edges are present

WE LISTEN TO THE NEEDS OF OUR CONSUMERS

Our goal is to achieve excellent performance, energy savings and yet offer the most advanced technology and the highest level of lighting quality control and design



IMPORTANT NOTE:

SPECIFICATIONS SHOWN IN THIS MANUAL CAN CHANGE AT ANY TIME DUE TO THE CONSTANT IMPROVEMENTS TO LED LIGHTNING OPTIONS. PICTURES ON THIS MANUAL ARE ONLY EXAMPLES, DIMENSIONS AND TYPE WILL VARY ACCORDING TO EACH CUSTOM PROJECT.



lumiron.com

PHOTOS BY:
© 2025 LUMIRON™

NO NUMBER LIMIT ON

DAKOTA SEAMLESS PANELS



ARTISTIC SURFACES

BACK-LIT PANELS

Artistic Surfaces, by Different Artist, can be made of acrylic or glass, and a natural thin stone can be used as well

Give us a call if you need any suggestions to find the perfect artist. We will be happy to help find the perfect fit for you!



IMPORTANT NOTE

The picture here shows the possibility of multi-panel assembly, and it is only an example of what is possible to design. If the surface to work on exceeds dimension limits of **DAKOTA SEAMLESS LED LIGHT PANEL**, like in this case, the option of multi-panel assembly is offered.



TALK TO US

INFINITE OPTIONS ARE POSSIBLE WITH **DAKOTA PANELS**
AND ANY ACRYLIC OR GLASS ARTISTIC SURFACE.



LEADING THE WAY ON STYLISH LIGHTNING



THANK YOU



 sales@lumiron.com

 305-652-2599
786-248-3918

 20725 NE 16 Ave.
Suite A-33 Miami, FL 33179

