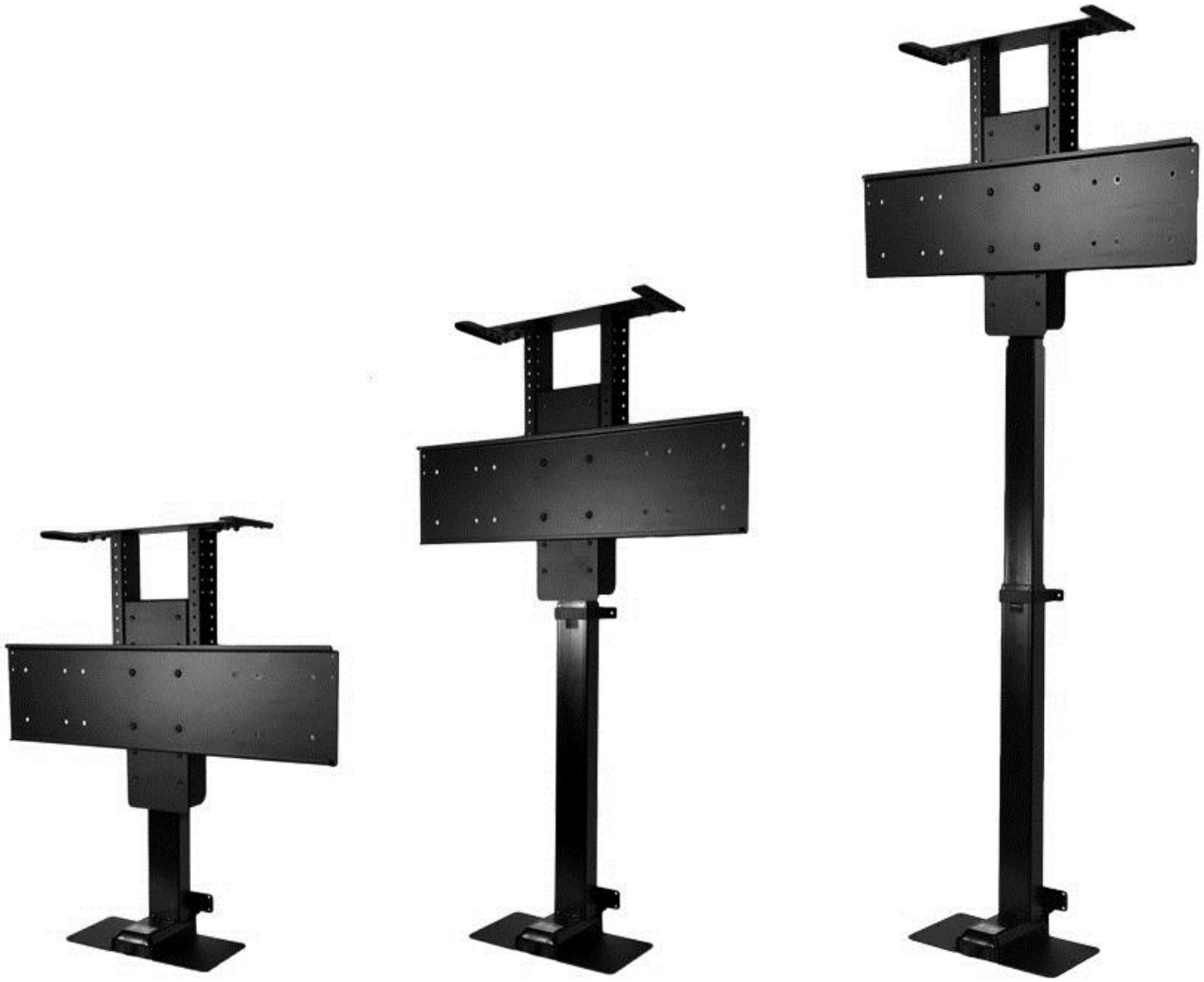
nexus 21
CONCEALMENT SYSTEMS

TV Lift System Model L-45S
Installation Instructions



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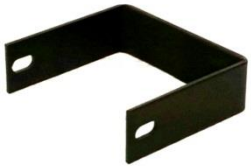
Revised: 7/05/16

Below is a parts list describing all of the items included with the Model L-45S Lift System. You may also wish to refer to the diagram shown on "Supplemental Page A" (at the end of this document).

Before beginning assembly and installation, please make sure that you have all items included on the list. If any parts are missing or damaged, please contact Nexus 21. Our contact information is shown at the top of this page.

Parts List

1. L-45 Lift Column
(28 ¾" x 7" x 3 ¾")



2. Upper Support Bracket
(3" x 3 ½")

3. Upper Support Bracket Base
(5 1/8" x 7")

3. Lower Support Bracket
(6 ¼" x 2")

4. Screen Support
(17 ½" x 2 ¾")

5. Vertical Mounting Bars (2)
(20" x 1")

6. Screen Back Plate
(32" x 9")

7. Control Box
(10 ½" x 3 ¾" x 1 ½")

9. Top Plate
(18" x 4 ½" x 6 ½")

(This part not included when using a hinged-lid)

NOTE: Items 5 & 6 are included in the "Nexus 21 Standard TV Mount" package.

Parts List, continued

10. Base Plate (2)
(5 1/8" x 7")

11. Top Support Brackets (2)
(14" x 2 ¾")

12. Swivel Adapter Plate
(4 ½" x 3")

13. Swivel Mechanism
(4 ½" x 3")

14. Assorted TV Mounting Screws
(6 ½" x 4")

Cables

- **Motor Cable** – Black cable with white, six-pin plugs. Use this cable to connect the Lift Column to the Control Box (using slot #1 on the Control Box). Three feet long.
- **Power Cable** – Connects Control Box to power outlet. Three feet long.
- **RF Cable (only present if you ordered the RF version of the Lift System)** – Use to connect the RF Receiver to the Control Box. Each end has a RJ45 connector. One foot long.

Hardware

15. Two (2) -- Screen Locks
16. Eight (8) -- 6mm x 16mm Flat Head Machine Screw
17. Sixteen (16) -- 6mm x 12mm Button Head Machine Screw
18. Two (2) -- 1½" x ¼" Steel Threaded Taper Pins (For Floating Top)
19. Four (4) -- 3/8 - 16 x ¾" Button Head Machine Screw
20. Two (2) -- #10 x 1 ¾" Flat Head Wood Screw
21. Eighteen (18) -- #10 x ¾" Truss Head Wood Screw
22. Four (4) -- #8 x ¾" Flat Head Wood Screw
23. RF Controls or IR Controls
24. Two (2) -- Allen Wrenches – 4mm and 7/32"
25. One (1) -- "Snakeskin" Wire Management Sleeve – 4 feet long
26. Four (4) -- Velcro end Ties, for use with Wire Management Snakeskin
27. Four (4) -- Plastic Ties, also for use with Wire Management Snakeskin
28. Four (4) -- Square Multi Mount Washers
29. Four (4) -- Wire Clips
30. Four (4) -- Lid Catch Brackets w/ (8) #10 x ¾" THWS

Additional Hardware included in "Swivel Pak"

31. Four (4) – 6mm x 10mm Button Head Machine Screw
32. Four (4) – 6mm x 16mm Button Head Machine Screw
33. One (1) – 1.25" Flat Head Wood Screw
34. One (1) – Interface Cable

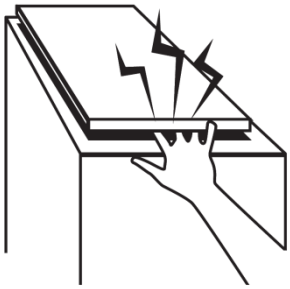
Wire Management

The Lift System has no exposed gears or moving parts that can damage your wires, so wire management is simple. We have included a four-foot long "SNAKESKIN" sleeve, which is a state-of-the-art wire bundling and protection system (the sleeve can be cut shorter if you wish). The System also includes 4 Velcro end ties and 4 plastic ties. Use the Velcro ties at

the ends of the SNAKESKIN, to close the ends of the sleeve and to keep the wires together inside it. Use the plastic ties to fasten the cable bundle in a fixed position, so it moves up and down with the lift.

⚠ SAFETY INFORMATION ⚠

SEVERE PERSONAL INJURY AND PROPERTY DAMAGE CAN RESULT FROM IMPROPER INSTALLATION OR ASSEMBLY. READ THE FOLLOWING WARNINGS BEFORE BEGINNING:

TV HAZARD	CABINET LID HAZARD
	
CAUTION: Avoid contact with the TV and Lift System during operation. Use with caution.	***CAUTION:*** The cabinet lid must be installed as described in the instructions, using the Steel Threaded Tapered Pins. Installing the cabinet lid in any other fashion will create hazardous pinch points that can cause serious personal injury.

WARNINGS:

1. Do not use this product for any application other than those specified by Nexus 21.
2. Do not exceed the weight capacity. This can result in serious personal injury or damage to the equipment. It is the installer's responsibility to ensure that the total combined weight of all attached components does not exceed that of the maximum figure stated.
3. Follow all technical specifications and instructions during the installation.
4. Only use attachments/accessories specified by the manufacturer.
5. Close supervision is necessary when this system is being used by, or near, children, or disabled persons.
6. It is the responsibility of the installer to warn all potential users of the dangers of interfering with the mechanism during operation.
7. Read all technical instructions fully before installation and use. It is the installer's responsibility to ensure that all documentation is passed on the users and read fully before operation.
8. Failure to provide adequate structural strengthening, prior to installation can result in serious personal injury or damage to the equipment. It is the installer's responsibility to ensure the structure to which the Lift System is affixed can support four times the weight of the system.
9. Risk of electric shock. Do not attempt to open the Control Box.
10. To reduce risk of fire or electric shock, do not expose parts to rain or other liquids.
11. Protect the power cord from being walked on or pinched.
12. Keep all documentation.
13. Heed all warnings.
14. Clean only with a dry cloth.
15. Refer all service questions to Nexus 21 if the system does not operate normally.

Nexus 21 disclaims any liability for modifications, improper installations, or installations over the specified weight range. Nexus 21 will not be liable for any damages arising out of the use of, or inability to use, Nexus 21 products. Nexus 21 bears no responsibility for incidental or consequential damages. This includes, but is not limited to, any labor charges for the servicing of Nexus 21 products performed by anyone other than Nexus 21.

Nexus 21 intends to make this and all documentation as accurate as possible. However, Nexus 21 makes no claim that the information contained herein covers all details, conditions or variations, nor does it provide for every possible contingency in connection with the installation or use of this product. The information contained in this document is subject to change without prior notice or obligation of any kind. Nexus 21 makes no representation of

warranty, expressed or implied, regarding the information contained herein. Nexus 21 assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

Types of Controls for Nexus 21 Lift Systems

All Nexus 21 Lift Systems come standard with a **wireless remote control** and receiver. We offer a choice of two different type of remotes: IR and RF (both of which are explained in detail below). Our standard control type is RF, so unless you specifically requested the IR version when you made your purchase, you probably received the RF controls with this Lift System. The method of installation for each type of remote control is slightly different, so you should now identify which type of remote you have by reading below, and then follow the instructions for that type of remote.

NOTE: If you will be using the Lift with a home control system (like the ones made by companies such as Crestron or Control 4) the most common form of control is to WIRE IT DIRECTLY to the relays of your home control system. This direct-wire method is called **Integration by Contact Closure**, and is accomplished by using the Backup Control Switch (Height Limit Switch) that was supplied with the Lift System to connect the Lift to the control unit from your home control system.

Before You Begin the Installation: Identify Your Control Type

IR (Infrared) – This control option allows you to utilize a 3rd party universal style remote control to raise and lower the TV Lift. Your universal remote will "learn" the IR codes from the provided IR Handset, which will enable you to control the lift. The universal remote will then communicate with the "eye" located on the IR Receiver via your 3rd party emitter (or flasher). Instructions for mounting the IR controls are on page 10. Instructions for setting the TV Lift's travel limit are on Supplemental Page B.

NOTE: If you are NOT planning on using a 3rd party Universal Remote, switch to the RF setup. (There is no charge for swapping)

These are the parts included with IR controls:

Contact Closure Hardware

IR Receiver

IR Handset

Height Limit Insert

RF (Radio Frequency) - This system utilizes a wireless remote control handset that sends a radio signal to the RF Receiver. The radio signal can go through cabinet walls and does not require line-of-sight. Instructions for mounting the RF controls are on page 11. Instructions for setting the Lift System travel limit are on Supplemental Page B.

TIP: Planning to integrate the TV Lift with your UNIVERSAL REMOTE CONTROL? The RF version of the Nexus 21 controls won't do it. Switch to IR.

These are the parts included with RF controls:

Backup Switch

RF Receiver

RF Handset

Height Limit Insert

Integration by Contact Closure – To direct-wire the TV Lift controls to a home control system (Crestron, Control 4, AMX, etc.) you will use the Back-up Control Switch (Height Limit Switch). You won't use any Nexus 21 receiver or handset

for this type of control because you will use the handset or control pad that comes with your home control system. **Instructions for setting up the System using Contact Closure are on "Supplemental Page C".**

Assembly and Mounting – Things to Think About First

SAFETY NOTICE:

- For proper support, the Lift System MUST NOT be attached to any material that is less than ¾" thick. This applies to BOTH the back and bottom mounting points.
- The Lift Column is ONLY designed and rated for VERTICAL, NON-INVERTED USE. **DO NOT MOUNT THIS LIFT SYSTEM UPSIDE DOWN or SIDEWAYS (HORIZONTALLY, AS IN A LATERAL MOUNT)!**

TIP: Inverted (drop down) lift systems are available from Nexus 21. Contact Customer Service at (866) 500-5438.

Space requirements for the L-45S Lift System are as follows:

Depth = TV Depth + 6.6" or 10", whichever is greater.

Height = TV Height + "2, or a minimum of 30.75", whichever is greater.

Width = TV Width + 2".

IMPORTANT NOTE: The TV must be mounted **as high up as possible inside the cabinet,** so that when the Lift is in the fully "DOWN" position (fully retracted), the top of the TV will be just underneath the lid of the cabinet.

Lift System height and mounting position:

The Top Support Brackets (Part #10) allow you to adjust the installation height of the Lift up to 8" (in ½" increments) to fit your cabinet height. When fully assembled, the HEIGHT of the Lift will be a minimum of 29.3" (configured for "floating top") or 29.5" (configured for "hinged top") and a maximum of 37.3" (floating top) or 37.5" (hinged-top) with the Top Support Brackets in the highest position. If the **inside height** of your cabinet is taller than this, you will need to mount the Lift **higher up inside the cabinet**.

About the Cabinet Lid (Cabinet Top)

SAFETY NOTICE:

- **WARNING! YOU MUST NOT DIRECTLY SCREW THE CABINET LID (TOP) TO THE LIFT SYSTEM!! THIS CREATES HAZARDOUS "PINCH POINTS" AND MAY AFFECT THE OPERATION OF THE LIFT OR CAUSE DAMAGE TO THE CABINET TOP.**
- For floating lids, **DO NOT USE SCREWS to attach the lid to the Lift System**. Instead, use the "Threaded Taper Pins". This will keep the lid firmly in place, but will also allow it to **separate from the lift system** if anything (like a finger) gets in the way when the TV lowers.

Which Lid Style Will You Use? (There are 3 Different Styles)

Floating Lid (Floating Top) – The whole top of the cabinet sits on top of the Lift System and raises/lowers with the TV. This is the standard Installation method, using the Top Plate (part #8) and Threaded Taper Pins.

Cut-Out Floating Lid (Top) – You will "cut out" part of your cabinet top, customizing it to the size of your TV. That cut-out lid then sits on top of the Lift System and raises/lowers with the TV. This method uses the Top Plate (part #8) and Threaded Taper Pins, but you must set up a "catch" for the cut-out lid so that when the TV lowers, the lid stops level with the rest of your cabinet top (like a manhole cover).

Hinged-Lid (Hinged-Top) – The top is hinged at the back of the cabinet, behind the TV. It is pushed open by the motion of the Lift System when the lift travels up, and closes by gravity when the lift travels down. This type of installation does NOT use the Top Plate or the Tapered Guide Pins, but **requires use of the optional Nexus 21 "Hinged-Top Guides" (purchased separately)**.

IMPORTANT NOTE: For hinged-top installations, the pivot point of the hinge must be at least 2" behind the back of the Lift Column. This may require up to one inch of extra depth inside the cabinet.
TIP: The actual HINGES are part of your cabinet and are not provided with the Lift System.

You Are Ready to Begin

Please perform the following steps, in order:

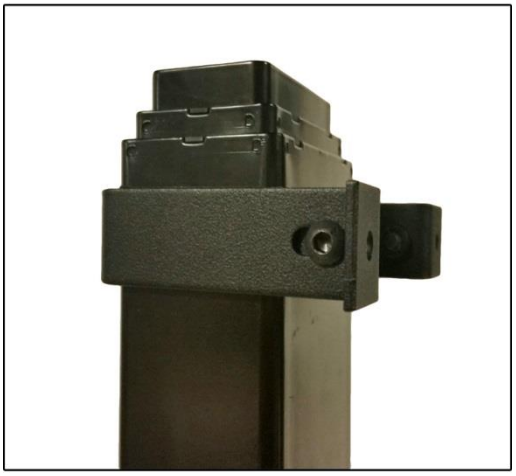
Step 1: Inventory the Parts List. Carefully inspect all items, making sure you have everything in the Parts List on page 1. Be sure to open the Nexus 21 TV Mount carton that includes parts #5, #6 and #15.

Step 2: Attach both Base Plates to the bottom of the Lift Column. Using (4) 6mm x 12mm Button Head Machine Screws (BHMS), attach (1) Base Plate to each side of the base of the lift column (two screws per side). **Do Not Over Tighten**.

Step 3: Attach the Lower Support Bracket. Using (2) 6mm x 12mm Button Head Machine Screws (BHMS) attach the Lower Support Bracket to the rear of the base of the lift column. **Do Not Over Tighten.**

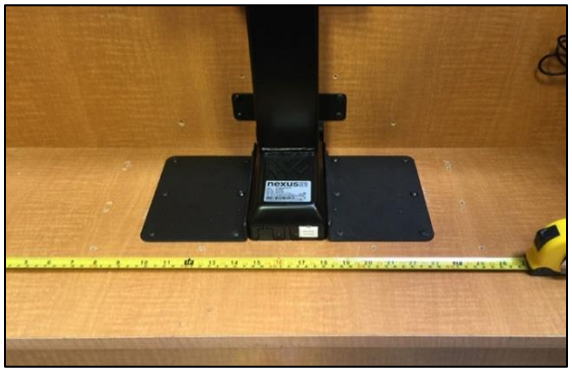
Step 4a: Attach the Upper Support Bracket. Slide the Upper Support Bracket around the outer profile. Make sure the Upper Support Bracket sits just above the Nexus 21 label for optimal support.

Step 4b: Attaching the Upper Support Bracket Base. Using (2) 6mm x 12mm Button Head Machine Screws (BHMS) attach the Upper Support Bracket Base to the Upper Support Bracket. Make sure to hold the Upper Support Bracket Base firmly against lift column while tightening the screws, to ensure there is no lateral movement.



Step 5a: Place the assembled mechanism in the cabinet. At this point ensure the lift is centered horizontally**.**

Step 5b: Using (4) #10 x 3/4" THWS mount the Lower Support Bracket to the back wall of the cabinet



Step 5c: Using (2) #10 x ¾" THWS attach the Upper Support Bracket to the back wall of the cabinet.

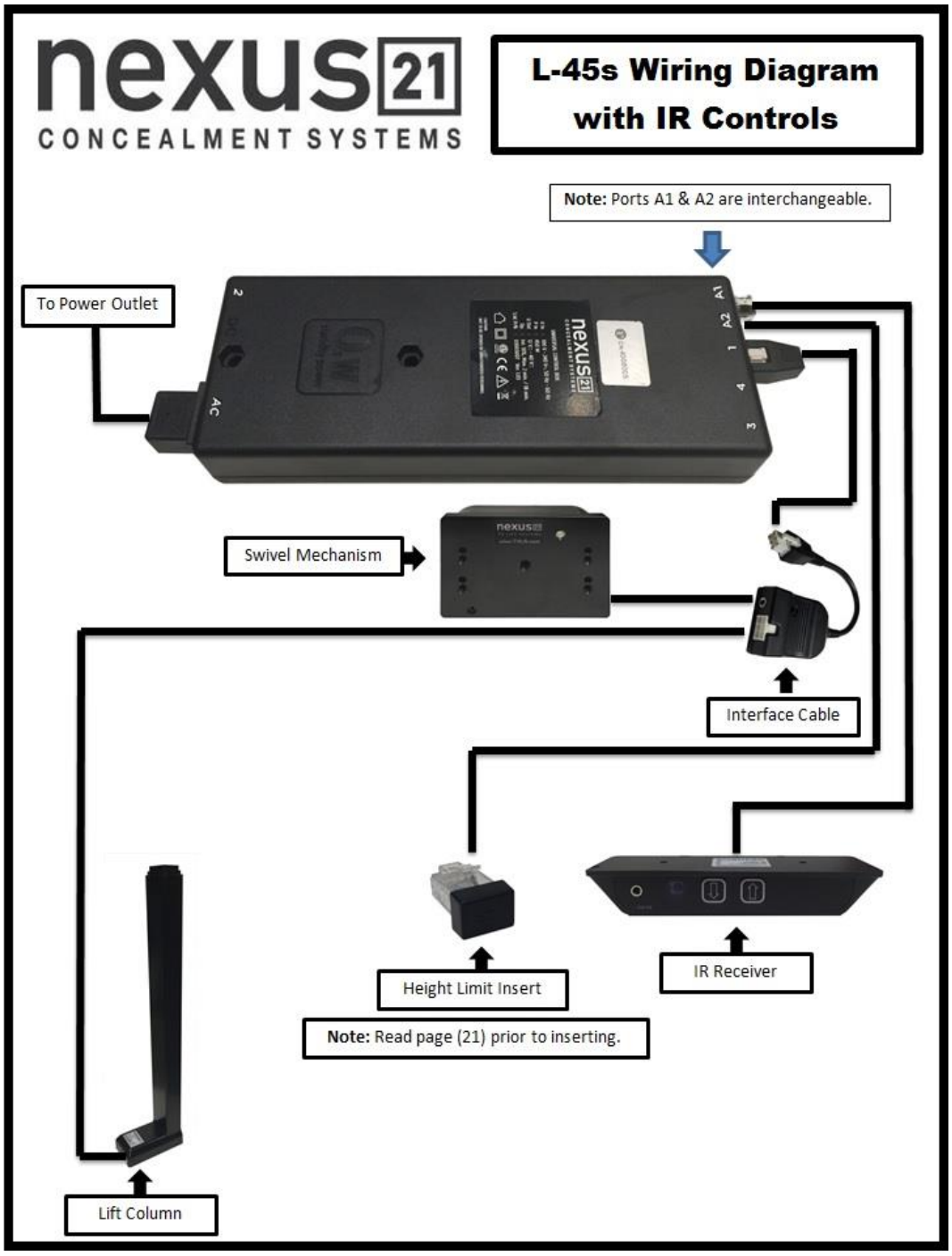
Step 6: Using (12) #10 x ¾" THWS attach both Base Plates to the base of the cabinet.

NOTE: The lift does not have a lower limit. If the cabinet is 8" taller than the lift column, the lift may need to be blocked up.

Step 7: Mount the Control Box and controls to the wall at a nearby accessible location: Using (2) #10 x 1 ¾" FHWS mount the Control Box to the wall. **Using (2) #8 x ¾" FHWS** mount the Wired Back Up Switch. If you ordered IR Controls, then you will use **(2) #8 x ¾" FHWS** to mount the IR Receiver. If you ordered RF Controls, then you will use **(2) #6 x ¾" FHWS** to mount the RF Receiver.

Step 8: Connect the cables for IR Controls as noted on the diagram on this page, or on page 11 for RF Controls. Ensure that the motor cable is connected to port #1. The lift will not operate if motor the cable is connected to ports #2, #3, or #4.

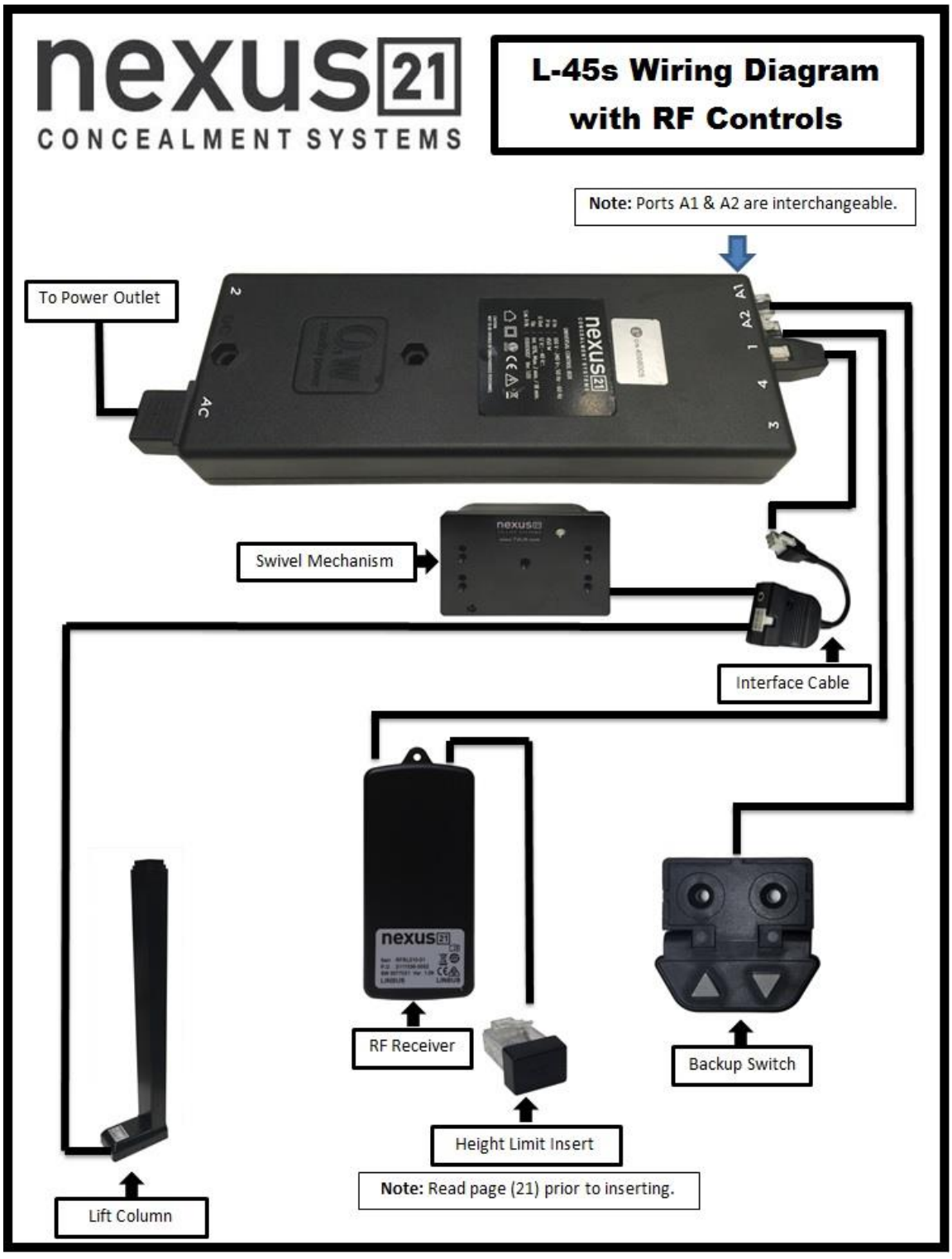
IF YOU HAVE IR CONTROLS, USE THIS DIAGRAM **(for RF Controls, see the following page)**



Once you have connected the controls, test the Lift Column as follows:

First, you need to "initialize" the Lift System. If you have already raised the Lift Column, lower it again, since this step must be performed in the "down" position. Find the Wired Backup Switch, which has two triangle-shaped buttons - an UP (with raised dot) and a DOWN. Press the DOWN button and HOLD IT DOWN for approximately 5 seconds. You should see a slight movement in the Lift Column. If you do not see the movement, release the Down button, and repeat the process - press and hold the Down button again for 5 seconds. Once you have seen the slight movement, the Lift System is now functional. Test it by pressing the Up button (no need to hold the Up button) and the lift will go up. You may let it go to the top, or stop it at any time by pressing the Down button.

IF YOU HAVE RF CONTROLS, USE THIS DIAGRAM **(for IR Controls, see the previous page)**



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Step 9a: Using (4) 6mm x 16mm BHMS attach the Swivel Adapter Plate to the top of the lift column. Make sure the Swivel Cut-Off Cable is facing the front of the lift column. Do not over tighten.

Step 9b: Attach the Swivel Mechanism to the top of the Swivel Adapter Plate. Make sure to carefully align the 3 prongs on the Swivel Micro Switch with the Swivel Cut-Off Cable before you fully seat the Swivel Mechanism. Using the provide 4mm Allen Wrench tighten the Swivel Mechanism to the Swivel Adapter Plate using the four non-threaded holes.

Step 10: Mount the Screen Support to the lift column. Using (4) 6mm x 10mm BHMS attach the Screen Support to the top of the lift column, using the four outermost holes without the recessed dot marking. You may extend the lift at this time to make the install of the Screen Support Bracket easier.

Step 11: Attach Top Support Brackets to each side of the Screen Support Bracket. Using (8) 6mm x 12mm BHMS attach the Top Support Brackets to the sides of the Screen Support Bracket (4 Screws per side). Make sure the Top Support Brackets are no more than ¾" from the bottom side of the lid catches, when the lift is fully retracted.

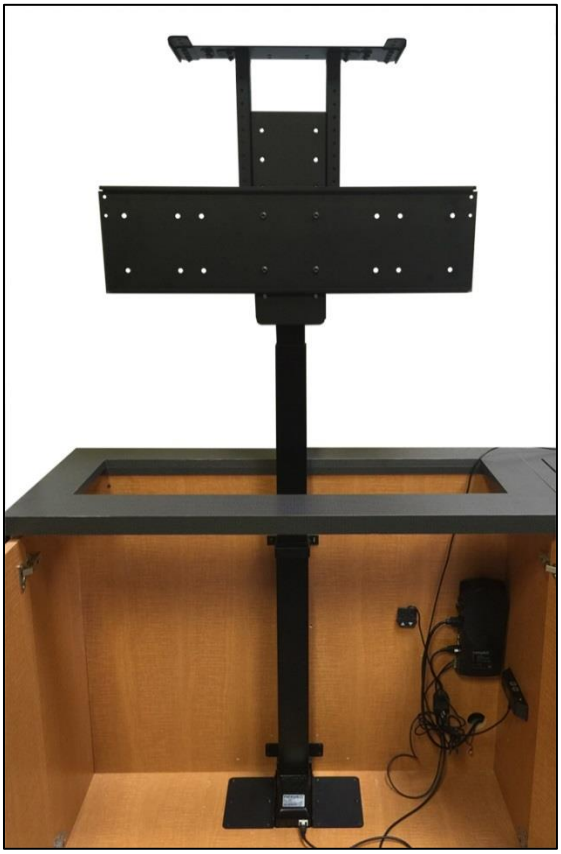
Step 12: Attach the Top Plate to the Top Support Brackets. Using (4) 6mm x 16mm FHMS attach the Top Plate to the Top Support Brackets. The Top Plate has adjustable wings, to allow more support for larger lids.

NOTE: Do not bolt/screw the Lid to the Top Plate. Use the provided Tapered Pins to attach the Lid to the lift system. The Tapered Pins allow the lid to lift away when there is an obstruction. See pages 17 and 18 for details.

The Top Plate is a 5-part plate (one Main Plate, two Extensions and two Fine-tuning Plates) that allows you to adjust the depth and position of the plate relative to the Threaded Tapered Pins (Steps 22-27). The Top Plate comes pre-assembled in a semi-retracted configuration. If you need to expand the depth of the plate to accommodate a deeper cabinet lid, remove the flat head machine screws from the Extensions, move them to the depth you need, and re-insert the machine screws. Fully retracted, the Top Plate has a depth of 6 ½", and can be adjusted to 7 ½" and 8 ½" with the Extensions on either end of the plate. (See Photo Below)

Step 13: Attach the Screen Back Plate to the Screen Support Bracket. Raise the lift to fully expose the Screen Support Bracket. **Using (4) 3/8 – 16 x ¾" BHMS** attach the Screen Back Plate to the Screen Support Bracket. To determine which set of holes to use, measure the upper bolt hole on the back of the TV to the top of the TV, this measurement should be relatively the same from the top of the Screen Support Bracket to the bottom of the Top Plate.

NOTE: The bent tabs on the Screen Back Plate indicate the top of the plate.



How to Install the Tapered Pins:

You will be screwing the Tapered Pins into the underside of your cabinet lid, and they will hang down and drop into the two holes in the Top Plate (Part #8).

Step 14: Before installing the Tapered Pins, position the Cabinet Lid. With the TV and the Lift System in the fully DOWN position, set the Cabinet Lid in place. It will not be attached at this point, so move it around on the Top Plate, making sure it fits centered in the cabinet opening.

Step 15: Run the Lift System up and down with the Cabinet Lid sitting on top, but not attached. Without bumping the Cabinet Lid out of place, use the Remote Control Handset to send the Lift System up and down. Make sure that when the Lift comes down, the Cabinet Lid drops into the proper position relative to your cabinet opening.

NOTE: You may want to temporally tape your lid, to prevent the lid from shifting.

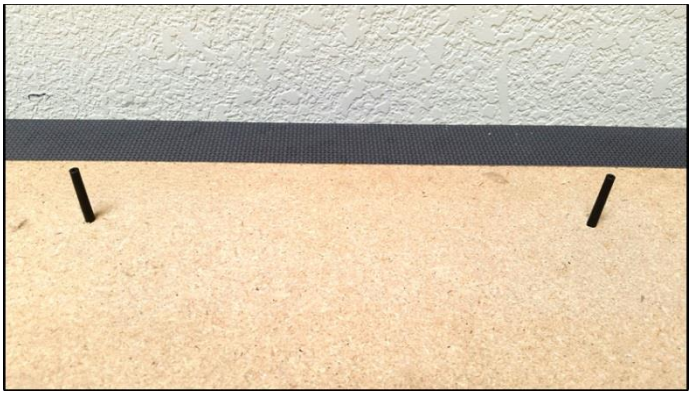
Step 16: Mark the spots for the Tapered Pins. Again, without bumping the Cabinet Lid out of place, run the Lift System all the way UP, with the Cabinet Lid sitting on top. Look at the UNDERSIDE of the Top Plate, find the two holes, and use a felt-tip pen or a pencil to mark the position of the holes on the underside surface of the Cabinet Lid.

NOTE: Make sure the nuts on the bottom side of the Top Plate are hand tight and centered, before you mark your lid.

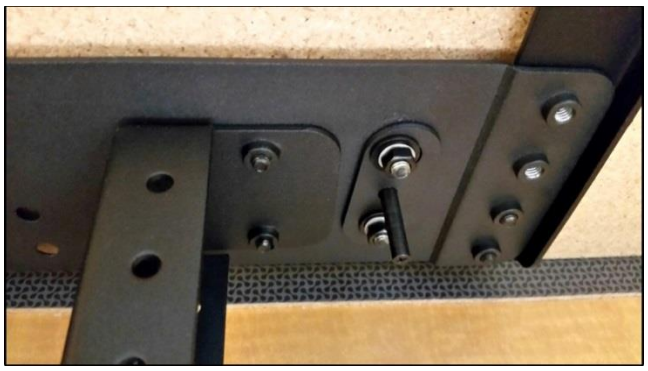
Step 17: Remove Cabinet Lid and drill two holes in the marked positions. Use a 7/32" drill bit to drill two holes, ½" deep, in the underside of the Cabinet Top where you have marked.

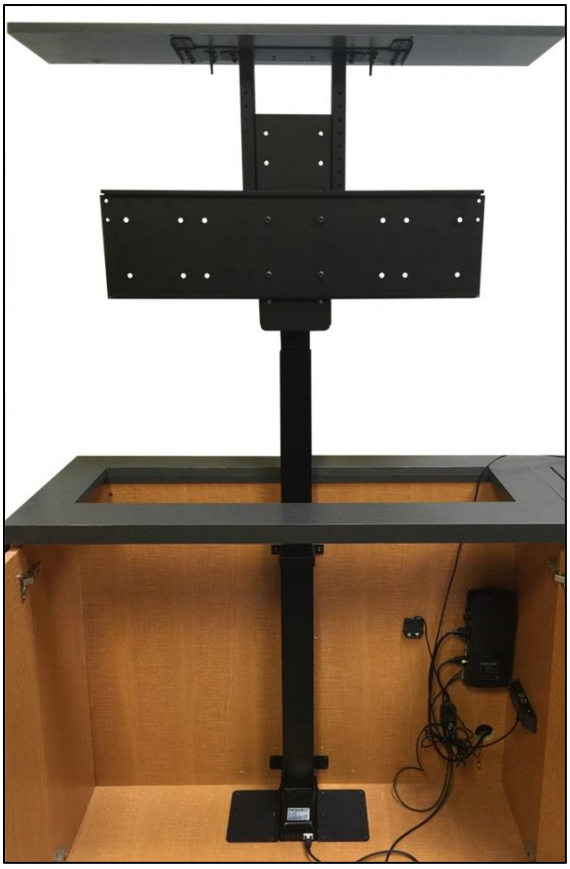
Step 18: Using a Phillips head screw driver (not provided) screw each Tapered Pin into the holes drilled in step 16.

Tapered Pins



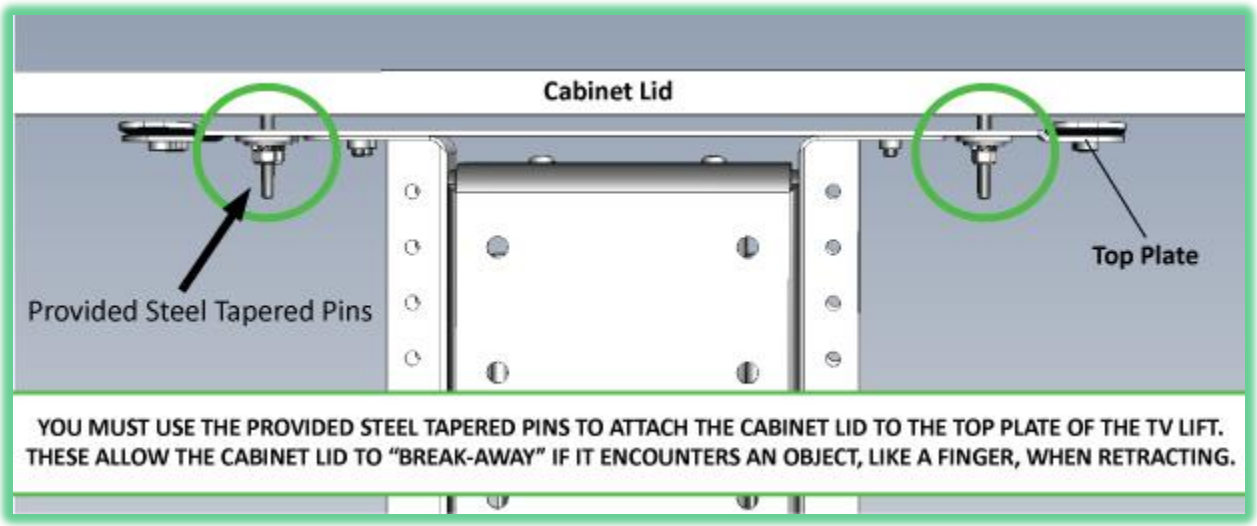
Step 19: Place the Cabinet Lid onto the Lift System. Align the Tapered Pins with the 2 holes in the Top Plate and put the Lid on. Tighten the nuts on the underside of the hole where the Tapered Pins pass through the Top Plate.





NOTE: *You will have a ¼" tolerance (in all directions) for the placement of the Tapered Pins into your cabinet lid. There are a set of nuts on the underside of the Top Plate that allow you to adjust the position of the hole that the Tapered Pins will pass through to secure the cabinet lid to the Top Plate. If you happen to position the Tapered Pins a few millimeters off from your intended position, you can still make adjustments to fit properly.*

Installing the Tapered Pins in the Floating Lid



What Are the Tapered Pins, and Why Use Them?
The two 1½" x ¼" Steel Threaded Tapered Pins are used IN PLACE OF SCREWS to hold your cabinet top (lid) in place on the Lift System Top Plate (Part #8). The Tapered Pins will keep your lid firmly in place, but will also allow it to **separate from the lift system** if anything (like a finger) gets in the way when the TV lowers. See Safety Notice above. Please do NOT use screws with your cabinet lid.

Before You Install the Tapered Pins, Here is a Reminder of the Two Types of Floating Lids (Floating Tops):
Floating Lid (Floating Top) – The whole top of the cabinet sits on top of the Lift System and raises/lowers with the TV.

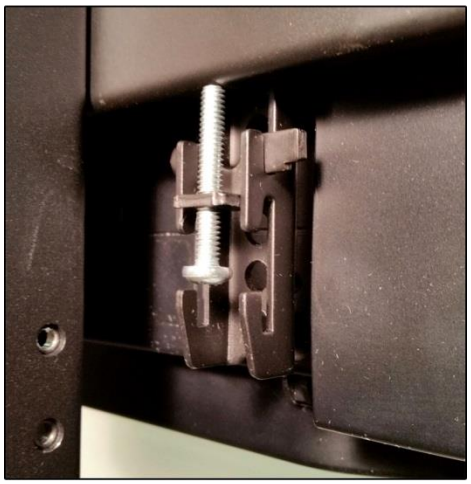
Cut-Out Floating Lid (Top) – This option assumes that you have "cut out" part of your cabinet top, customizing it to the size of your TV. That cut-out lid then sits on the Top Plate of the Lift System, held in place by the Taper Pins, and raises/lowers with the TV. You must set up a "catch" for the Cut-Out Lid so that when the TV lowers, the Lid stops level with the rest of your cabinet top (like a manhole cover), and the Lift System continues down a little further into the cabinet (no more than ¼" to ½"). In this way, when the Lift System is fully retracted, the Cut-Out Lid will always be level, and the Top Plate of the Lift System will always be positioned just below the Lid. Since the Lid and the Top Plate are slightly separated from one another, but still very close, the Taper Pins (which are 1½" long) will still be hanging down through the holes in the Top Plate so when the Lift System moves, everything is properly aligned and the Lid rides smoothly up and down.

Step 20: Attach the Vertical Mounting Bars to the TV. Before you begin, hand thread screws (found in bag labeled "TV Mounting Screws/Spacers") into the threaded inserts on the back of your TV to determine the correct screw diameter (M6 or M8). The length of the screw required will depend on whether the TV has a flat/unobstructed or irregular/obstructed back. Follow diagram **"A"** for TV's with flat/unobstructed back. Use diagram **"B"** for TV's with irregular/ obstructed back. The diagrams can be found on the following page.

Step 21: Mount the TV (with the Vertical Mounting Bars attached) to the Screen Back Plate. Each Vertical Mounting Bar has "hooks" on either end that allow the bars to "hang" on the Screen Back Plate. Lift the TV onto the Screen Back Plate. Center the TV. Be sure that both the upper and lower set of "hooks" fully engages with the Screen Back Plate.

Step 22a: Insert the Screen Locks into both Vertical Mounting Bars. The Screen Locks will be placed into the lower "hook" that is just below the Screen Back Plate.

Step 22b: Using a Phillips head screwdriver, tighten both Screen Lock screws into the underside of the Screen Back Plate. This will lock your TV onto the TV Lift. You have now successfully attached your TV.



Step 23: Do a final wire management check. Test operate the Lift and be sure that all wires are clear of the Lift so they do not get "hung up" when the TV is moving either up or down.

Congratulations your L-45S Lift System is now completed!

Mounting the TV to the Lift

A Flat/Unobstructed Back

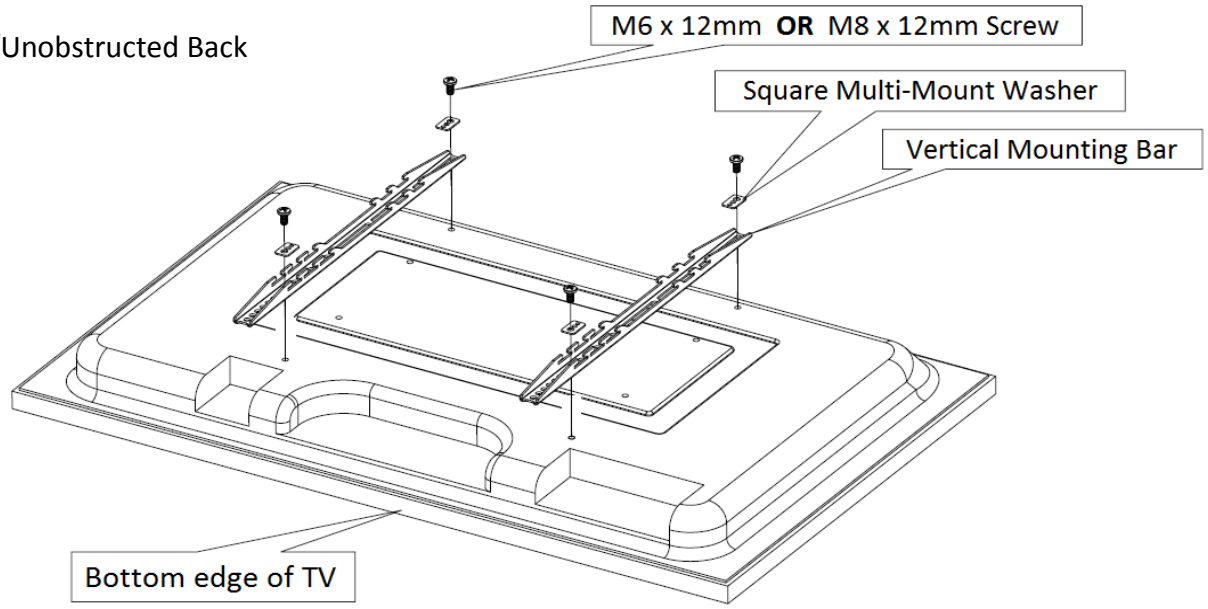


Diagram **"A"** installation procedure:
1) Place the flat screen TV face down on a protected surface.
2) Position the Vertical Mounting Bars equidistant from the bottom and top of the TV, with the slots facing toward the top of the TV.
3) Using the four (4) Square Multi-Mount washers and the TV mounting screws selected from the bag, attach and tighten the hardware. **DO NOT OVERTIGTHEN HARDWARE. DAMAGE TO TV MAY RESULT.**

B Irregular/Obstructed Back

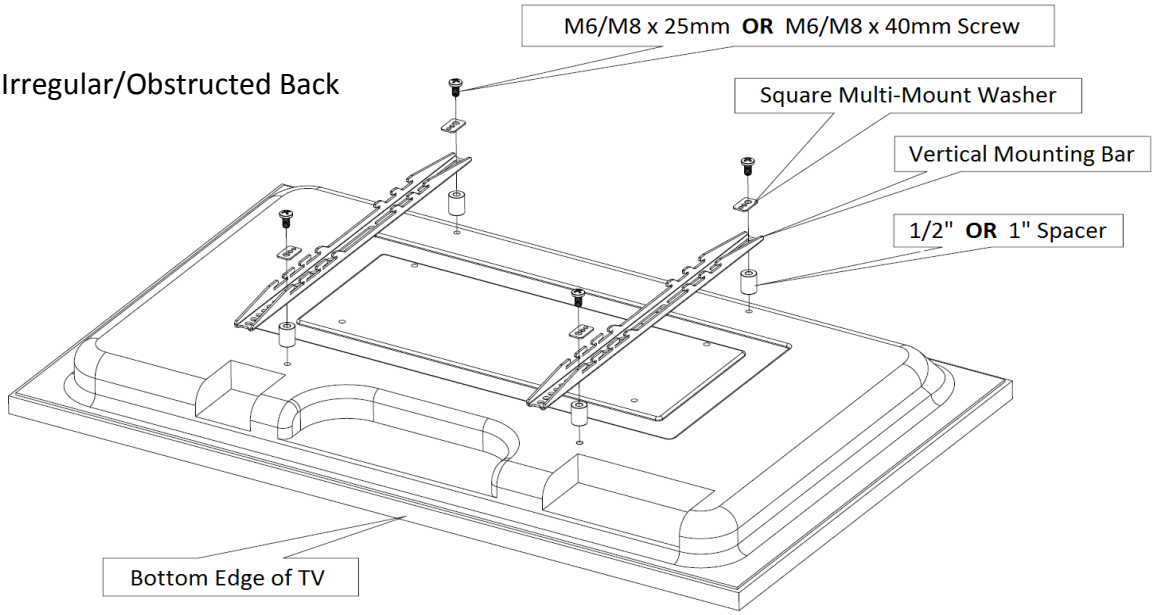
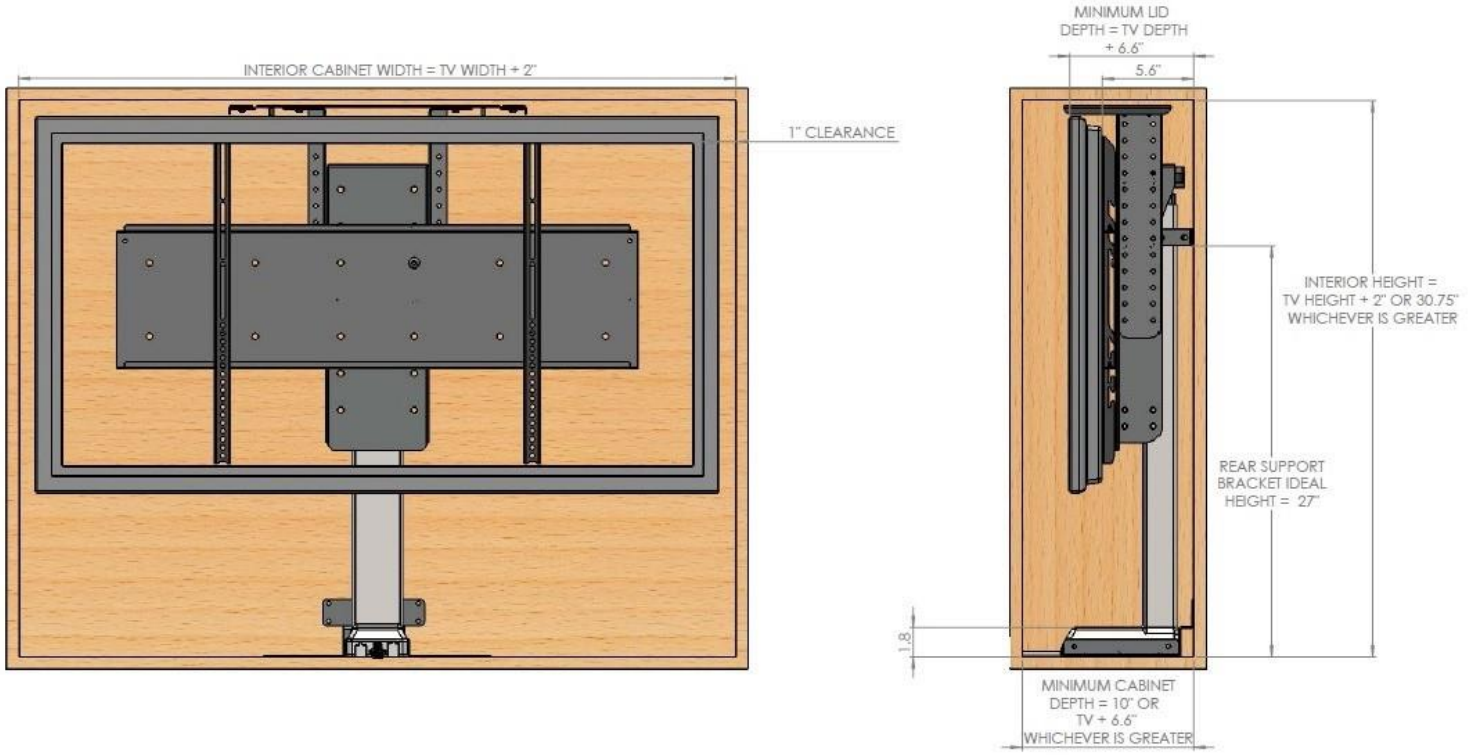


Diagram **"B"** installation procedure:
1) Place the flat screen TV face down on a protected surface.
2) Position the Vertical Mounting Bars equidistant from the bottom and top of the TV, with the slots facing toward the top of the TV.
3) Using the four (4) spacers needed, (4) Square Multi-Mount washers and the TV mounting screws selected from the bag, attach and tighten the hardware. The hardware will be used in this order (as shown in the diagram above): TV, Spacers, Vertical Mounting Bars, Square Multi-Mount Washers, TV Mounting Screws.
DO NOT OVERTIGTHEN HARDWARE. DAMAGE TO TV MAY RESULT.

MODEL L-45S TV LIFT STANDARD CONFIGURATION



NOTES:
1. THE CABINET BOX SHOWN IN THE DIAGRAM IS FOR REFERENCE ONLY AND IS NOT PROVIDED WITH THE LIFT SYSTEM.
2. FOR THIS LIFT MODEL, THE LENGTH OF ITS TRAVEL [EXTENSION LENGTH OR STROKE] IS 37.8"
3. FOR THIS LIFT MODEL, THE WEIGHT CAPACITY IS 100 LBS.
4. THIS LIFT MODEL MANUALLY ROTATES 180° IN BOTH DIRECTIONS, WITH A LOCKING HOME POSITION.
5. LIFT WILL NOT OPERATE WHEN SWIVELED.
6. HEIGHT OF THIS MODEL IS ADJUSTABLE IN 1/2" INCREMENTS UP TO 8" [MINIMUM HEIGHT = 30.75; MAXIMUM HEIGHT = 38.75]
7. REAR SUPPORT CAN BE LOCATED AT ANY HEIGHT ALONG THE BACK OF CABINET, BUT THE HIGHER IT IS, THE MORE SUPPORT IT PROVIDES.
8. WHEN DETERMINING TV HEIGHT, ALWAYS USE MANUFACTURER SUPPLIED "TV WITHOUT STAND" HEIGHT .
9. LIFT MECHANISM IS POWDERCOATED BLACK STEEL. COLORS IN DIAGRAM ARE FOR CLARITY ONLY.

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UPDATED 10/23/15

Supplemental Page B: Setting a Height Limit

Please follow this procedure if you would like to limit the distance that your TV Lift extends.

To set your Travel Limit with IR Controls:

If you want the lift system to always go to its full extension, do NOT use the Height Limit Insert. Simply leave it unplugged and the system will always travel to the full extension. To limit the travel, follow the procedure below:

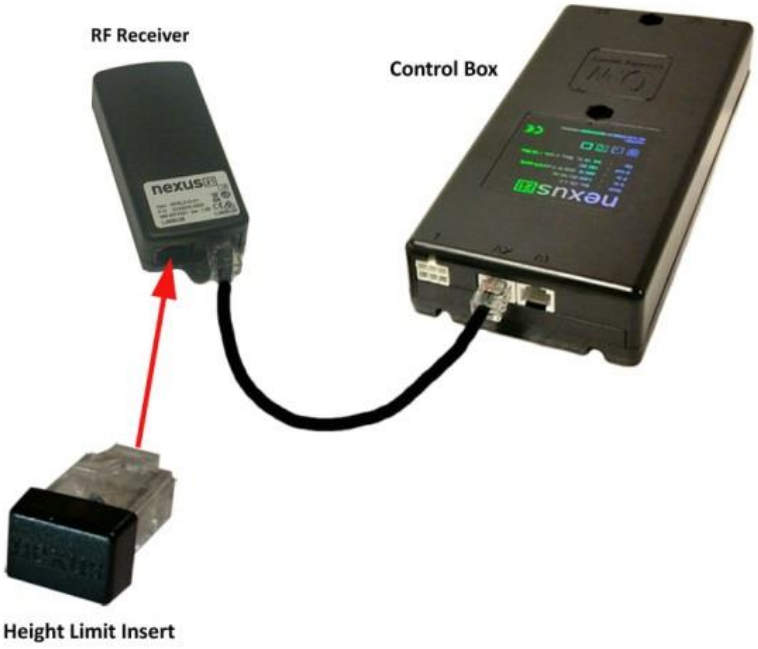
1. Using the IR Receiver, run the lift system to height limit position and stop it there.

2. With the lift system stopped, plug the Height Limit Insert into the available RJ45 port on the Control Box. This will set the height limit at this position for both the IR Remote (or 3rd party universal remote) and the IR Receiver.

3. If the height limit is set at the incorrect position, remove the Height Limit insert and repeat the procedure.

To set your Travel Limit with RF Controls:

If you want the lift system to always go to its full extension, do NOT use the Height Limit Insert. Simply leave it unplugged and the system will always travel to the full extension. To limit the travel, follow the procedure below:



1. Using the Wired Backup Switch, run the lift system to the ideal height limit position and stop it there.

2. With the lift system stopped, plug the Height Limit Insert into the available RJ45 port on the RF Receiver. This will set the height limit at this position for both the RF Remote and Backup Switch.

3. If the height limit is set at the incorrect position, remove the Height Limit insert and repeat the procedure.

Supplemental Page C: Connect the Lift to Home Control System

Connecting the Nexus 21 Lift System to Other Control Systems

Use these instructions if you need to wire the Lift System directly to a Home Control System, like those made by Crestron, AMX, Control 4, RTI, etc. A common term for this method of integration is "connection by contact closure."

Contents of Contact Closure Hardware Pack:

Step 1: Contact Closure Hardware Pack

This pack contains the following parts:

1 – *Contact Closure Cable*, RJ-45 to Relays

1 – *Height limit Insert*

Contact Closure Cable, RJ-45 to Relays

Height Limit Insert

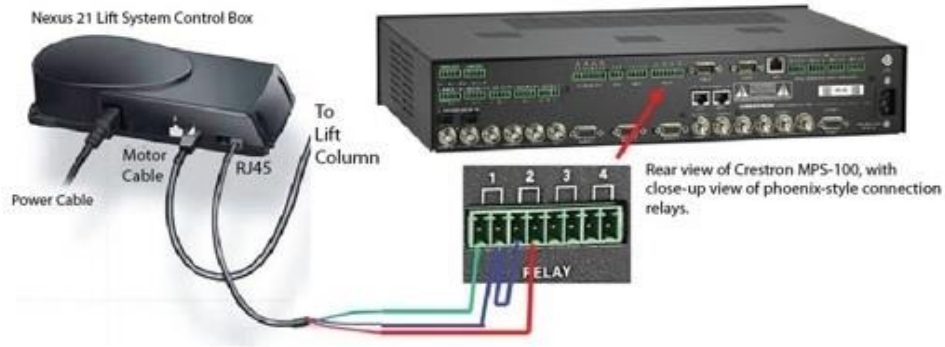
Step 2: Connecting the Lift System to the Control System

Using the *Contact Closure Cable* to connect the three wires directly to the relays on your control module (see image below). Then connect the RJ-45 plug on the *Contact Closure Cable* to the Nexus 21 system, using either one of the two RJ-45 ports on the side of the Nexus 21 *Control Box*.

The colored wires function as follows:
BLUE = common (Pin 4 from RJ45) GREEN = Extend (Pin 5 from RJ45) RED = Retract (Pin 8 from RJ45)
Wire combinations for the relays:
The lift system uses two relays. One for "extend" and one for "retract." The common wire runs between both relays, by using the BLUE common wire, together with a jumper wire you supply.

Relay 1 Extend: BLUE common wire with GREEN normally open.
Relay 2 Retract: BLUE common wire (use jumper) with RED normally open.

Close-up View of RJ-45 Pins



Rear view of Crestron MPS-100, with close-up view of phoenix-style connection relays.

Step 3: Setting a Height Limit for the Lift System

Begin with the Height Limit Insert UNPLUGGED. Then send the "UP" command from your control system and run the Lift System up to your desired height. Once the Lift System is at the desired height, send the "DOWN" command to stop the lift at the point. Now PLUG the Height Limit Insert into the available RJ45 port on the Nexus 21 Control Box. The Lift will now remember the height and always stop at that point. To change, unplug the Height Limit Insert and repeat Step 3.

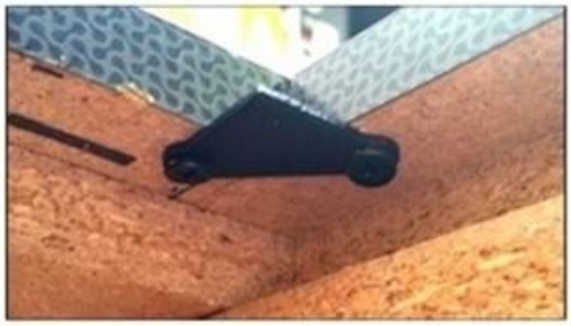
For technical support or to ask questions, call Nexus 21 Customer Service, toll-free at (866) 500-5438.

Supplemental Page D: Creating a Lid Catch

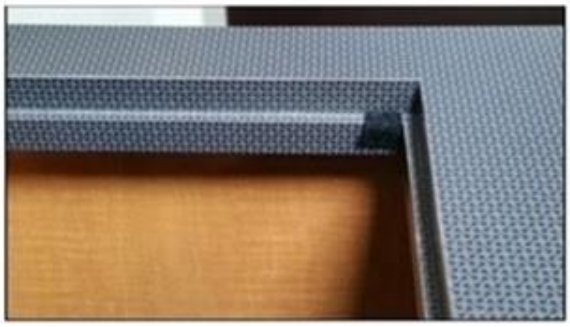
How to Properly Install a Lid "Catch" with a Nexus 21 Lift System

There are multiple ways to properly create a "catch" for the lid to rest on, when the lift is in the fully retracted position. Down below are a few examples.

Using the provided Lid Catch Brackets with (8) #10 x 3/4" THWS attach the brackets to each corner of the lid opening. This will provide a support point for the lid to rest on while the lift is in the fully retracted position, assuring the lid is flush with the rest of the cabinetry every time.



Here are a few other examples on how to create a "catch" or "lip" for the cabinet lid to rest upon.



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