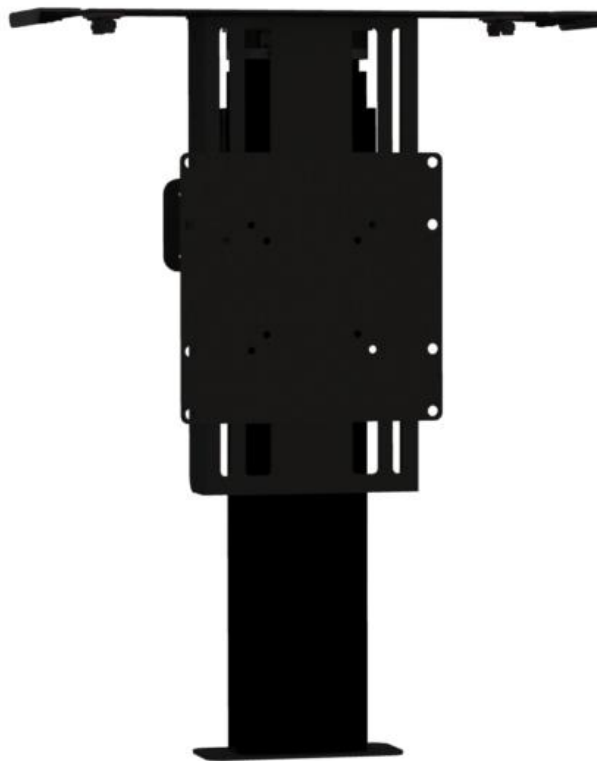


nexus **21**

CONCEALMENT SYSTEMS

**TV Lift System Model L-23S
Installation Instructions**



Below is a parts list describing all of the items included with the Model L-23S Lift System. 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. **Lift Column**
(22" x 4")



2. **Base Mount**
(7" x 3 1/2")



3. **Bayonet Bracket**
(8" x 5 1/4")



4. **Monitor Adapter Plate**
(8 1/2" x 8 1/2")



5. **Monitor Hanger**
(9 1/4" x 15" x 2")



6. **Control Box**
(10 1/2" x 3 3/4" x 1 1/2")



7. **Top Plate**
(15" x 4")

Parts List, continued

Swivel Parts



9. **Swivel Assembly**
(with Switch Cable attached)



10. **Interface Cable**

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). Six 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. Ends have telephone-style connectors. One foot long.



TIP: You may want to install a power strip (not included) in the bottom of your cabinet to plug in the Lift System Control Box, TV and any other components in the cabinet.

Hardware

11. Two (2) -- 1 ½" x ¼" diameter Steel Threaded Taper Pins
12. Four (4) -- #8 x ¾" Flat Head Wood Screws
13. Four (4) -- 6mm x 12mm Flat Head Machine Screws
14. Four (4) -- 6mm Hex Nyloc Nuts
15. One (1) -- Bag of Assorted TV Mounting Screws
16. Two (2) -- #10 x 1 ¾" Flat Head Wood Screws.
17. Four (4) -- #10 x ¾" Truss Head Wood Screws
18. Four (4) -- 6mm x 20mm Flat Head Machine Screws

Swivel Pak

19. Four (4) -- 3/8" Nylon Spacers
20. Eight (8) -- ¼" Flat Washers
21. Four (4) -- 6mm x 12mm Flat Head Machine Screws
22. Four (4) -- #10 x 1" Truss Head Wood Screws

Items that are included, but not shown in Exploded View diagram on Supplemental Page A:

- RF Controls or IR Controls (see explanation on page 5)
- Four (4) -- Wire Management Clips
- One (1) -- Allen Wrench – 4mm
- One (1) -- "Snakeskin" Wire Management Sleeve – 3 feet long
- Four (4) -- Velcro end Ties, for use with Wire Management Snakeskin
- Four (4) -- Plastic Ties, also for use with Wire Management Snakeskin
- Four (4) -- Lid Catch Brackets w/ (8) #10 x ¾" THWS

Wire Management




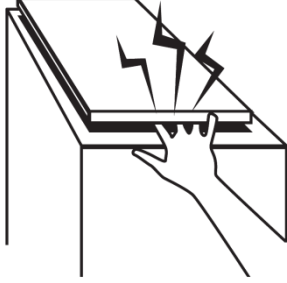
The Lift System has no exposed gears or moving parts that can damage your wires, so wire management is simple. We have included a three-foot long "SNAKESKIN" sleeve, which is a state-of-the-art wire bundling and protection system (the sleeve can be cut shorter if you wish). The System also includes 4 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 and does not bind.



SAFETY INFORMATION



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

<p>TV HAZARD</p> 	<p>CABINET LID HAZARD</p> 
<p>CAUTION: Avoid contact with the TV and Lift System during operation. Use with caution.</p>	<p>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.</p>

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.

i 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.

i 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 3/4" 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-23S Lift System are as follows:

Depth= TV depth + 5.4"
 Height = 24.1" minimum
 Width= TV Width + 2"



IMPORTANT NOTE: The Lift System 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:

When fully assembled, the HEIGHT of the Lift will be 24.1". If the **inside height** of your cabinet is taller than this, you will need to mount the Lift **higher up inside the cabinet**.



TIP: If you need to mount the lift higher up inside the cabinet, you can cut a wood block or mount a small shelf inside the cabinet for the lift column to sit on. Keep in mind that the "Bayonet Bracket" (part #3) will bear most of the weight.

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 2 Different Styles) – Hinged Lid is Not Compatible

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 #7) 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 #7) 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).



NOTE: There are several different methods for setting up the "catch", but the hardware to do it is not included with the Lift System because it is part of the cabinet. Hardware suggestions include: buy 4 small corner brackets and screw to underside of main top, with edges exposed to catch the corners of the cut-out lid. The same thing can be accomplished with 1" x 1" "cleats", which are strips of hardwood, mounted underneath, with edges exposed to catch the lid.

Assembly and Mounting Instructions – You Are Ready to Start

Please perform the following steps, in order:

Step 1: Inventory the Parts List. Carefully inspect all items, making sure you have everything shown in the Parts List.

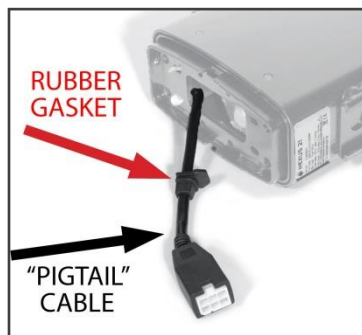
Step 2: Seat the “pigtail” cable properly on the top of the Lift Column. Take the Lift Column (Part #1) and find the end with the short black cable (this cable is called the “pigtail”). This end will become the TOP of the Lift Column. Before you begin to assemble the system, you must position the pigtail properly. Look at the top edge of the Lift Column. You will see two square cut-out channels, notched into the steel, one on either side of the pigtail. Choose one of the cut-outs (it does not matter which one), and seat the pigtail into the cut-out, using the rubber gasket attached to the cable.



IMPORTANT NOTE: If the pigtail cable is not properly seated, it may be damaged when you attach the monitor hanger (part #5), causing loss of power to the lift column.



IMPORTANT NOTE: The pigtail now hangs over one side of the Lift Column. From this point forward, that side will be referred to as the “Front” of the Lift Column.



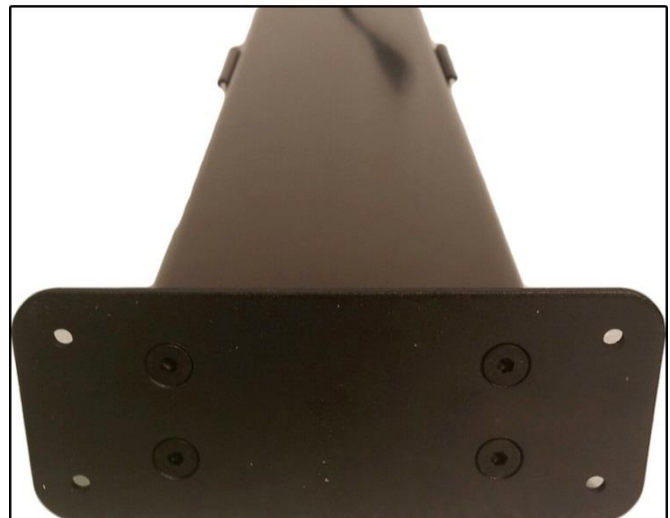
BEFORE (pigtail is loose)



AFTER (pigtail is properly seated)



Step 3: Attach the Base Mount to the Bottom of the Lift Column. Find the Base Mount (Part #2). Using the small Allen wrench and four of the 6mm x 20mm Flat Head Machine Screws, attach the Base Mount to the bottom of the Lift Column (the end with NO pigtail). The Base Mount has 8 holes – use the 4 innermost holes, which will align with the 4 threaded holes in the bottom of the Lift Column. **DO NOT OVER TIGHTEN!**



Step 4: Attached the Bayonet bracket to the Lift Column. Slip the Bayonet Bracket into the welded sleeves located on the side of the Lift Column. Make sure the position the Bayonet Bracket on the opposite side of the pigtail cable. Level the Bayonet Bracket, as this will ensure the lift column is square and level once placed inside the cabinet.



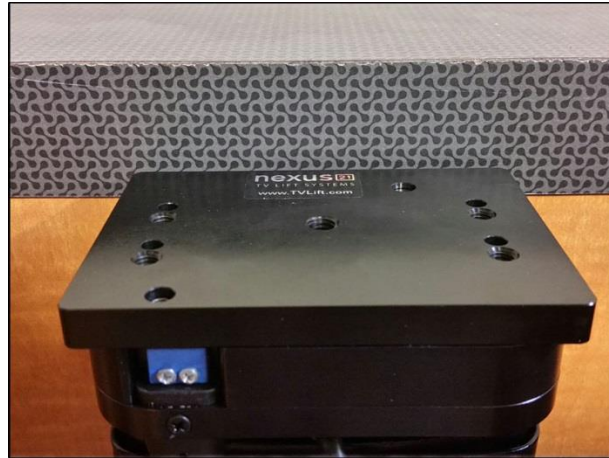
Step 5: Attaching the Swivel Mechanism to the Lift Column: Align the four screws on the bottom of the swivel mechanism with the four holes on the top of the lift column. Once aligned, place the provided allen wrench into the four non-threaded holes to tighten all four screws. **BE SURE THE PIGTAIL ON THE TOP OF THE LIFT COLUMN IS PROPERLY SEATED (FACING FORWARD) IN THE SQUARE CHANNEL (SEE STEP #2) USING THE RUBBER GASKET ATTACHED TO THE CABLE.**



Step 6: Position the TV Lift (with Bayonet Bracket attached) in the cabinet. Center the Lift within the enclosure. You will need to mount the Lift Column at the proper height so that its top edge (the top of the swivel) is $\frac{1}{2}$ " below where the cabinet lid will rest when the TV Lift is down position.



IMPORTANT NOTE: *If the interior height of your cabinet exceeds 24.75" then you will need to create a mounting platform to raise the Lift System, so that the top of the Swivel is within $\frac{1}{2}$ " of the underside of where the cabinet lid will rest when the TV Lift is down. A small wood block can be used for this purpose.*



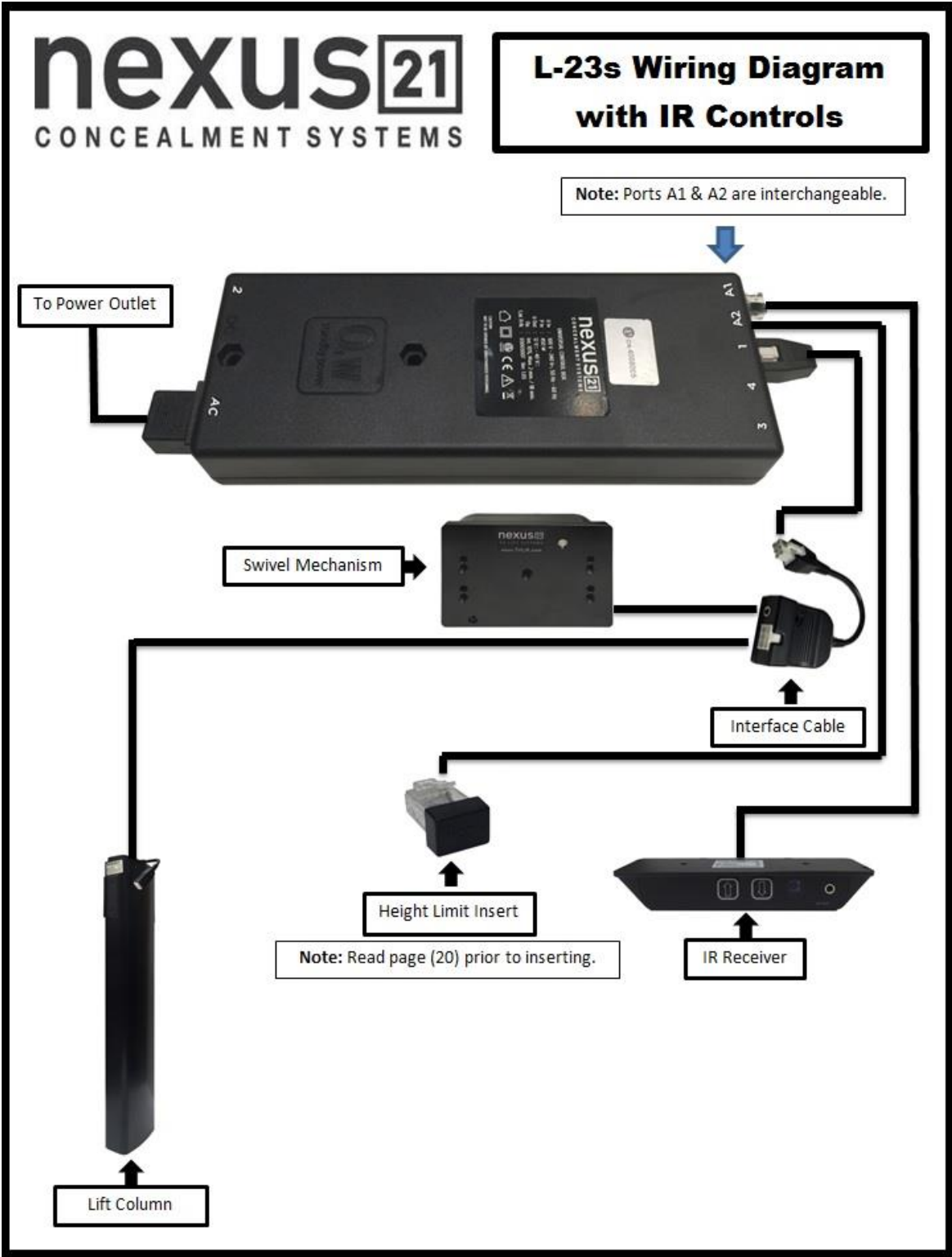
Step 7: Attach the Bayonet Bracket to the back of the cabinet. Using four (4) of the #10 x 1" Truss Head Wood Screws (THWS) and $\frac{3}{8}$ " spacers (both found in bag labeled "Swivel Pak"), attach the Bayonet Bracket to the back of the cabinet as indicated by the mounting holes. Place the $\frac{3}{8}$ " spacers between the Bayonet Bracket and back wall of the cabinet.



Step 8: Attach the Base Mount to the bottom of the cabinet using four (4) #10 x $\frac{3}{4}$ " Truss Head Wood Screws (THWS). Level the Lift Column from front-to-back before attaching.

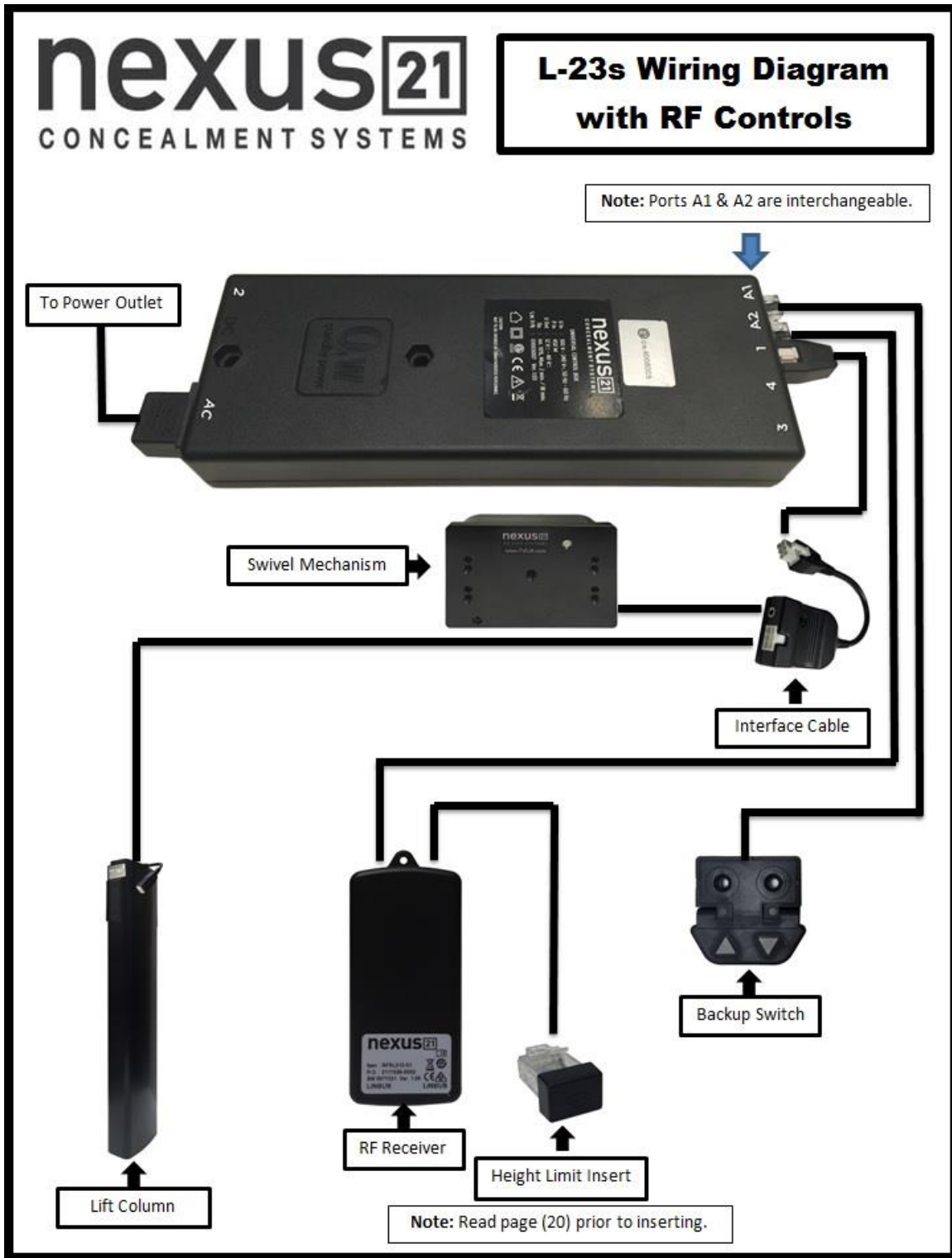


Step 9: Connect the cables for IR Controls as noted on the diagram on the following page, or on page 12 for **RF Controls**. Ensure that the motor cable is connected to port #1. The lift will not operate if motor the cable is connected to ports #2 or #3.



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 Backup Control 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.



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 Height Limit 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.

Step 10: Mount the Control Box and controls to the wall at a nearby accessible location: Using (2) #10 x 1 3/4" FHWS mount the Control Box to the wall. Using (2) #8 x 3/4" FHWS mount the Wired Back Up Switch. If you ordered IR Controls, then you will use (2) #8 x 3/4" FHWS to mount the IR Receiver. If you ordered RF Controls, then you will use (2) #6 x 3/4" FHWS to mount the RF Receiver.



It is Now Time to Mount Your TV



Step 11a: Place your TV on a flat surface with the screen facing down. Locate the VESA mounting holes on the back side of the TV. They will be in a square or rectangular pattern, with threaded metal inserts.

NOTE: The standard Monitor Adapter Plate included with your TV Lift can accommodate mounting patterns of 75 x 75, 100 x 100, 200 x 200, and 200 x 100. If the TV being used does not have one of these mounting patterns please contact Product Support at 866-500-5438 to receive a larger Monitor Adapter Plate.

Step 11b: Attach the Adapter Plate (Part #4) to the back of your TV. Align the Adapter Plate with the VESA mounting holes on the back of your TV. Use a Phillips Screwdriver (not provided) to attach the adapter plate to the VESA mounting holes using the appropriate size bolts, located in the Assorted TV Mounting Hardware.

NOTE: The Monitor Adapter Plate has 4 threaded studs. Make sure they are facing away from the TV when you perform this step.

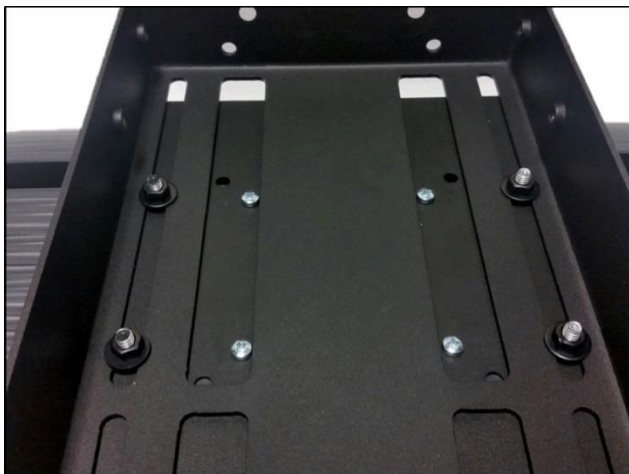




Step 12: Add the Monitor Hanger (Part #5). Lay the Monitor Hanger on top of the Monitor Adapter Plate. It should be oriented with the flat side down, and the top surface (the edge that has 4 mounting holes for the top plate) facing “up”, toward the top of the TV. Line up the smaller slots with the threaded studs on your Monitor Adapter Plate.

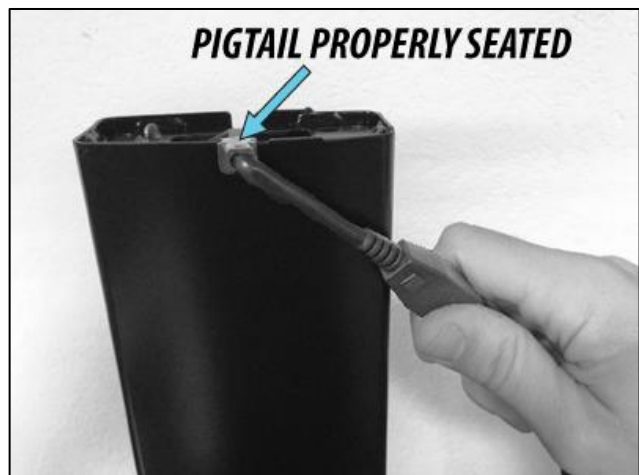
Step 13a: Position the Monitor Hanger. Slide the Monitor Hanger up, so the top edge (the edge that has 4 mounting holes for the top plate) sits $\frac{1}{4}$ " to $\frac{1}{2}$ " HIGHER than the top of the TV.

NOTE: This step determines how much of a “gap” will exist between your lid piece and your TV. The smaller the gap, the better it will look. If you are using a hinged-style lid, mount your TV as high as possible on the Monitor Hanger. This will insure that the Hinged-Top Guides, which will be installed in Step 15, are not mounted too high above your TV and give the installation an awkward look.



Step 13b: Fasten the Monitor Hanger to the Monitor Adapter Plate. Use the four $\frac{1}{4}$ " Flat Washers, and the four 6mm Hex Nyloc Nuts, placing them onto the threaded studs from the Monitor Adapter Plate. **DO NOT OVER TIGHTEN.**

Step 14: Run the TV Lift UP. Before proceeding, check the position of the pigtail cable. **BE SURE THE PIGTAIL CABLE IS STILL PROPERLY SEATED IN THE SQUARE CUT OUT CHANNEL ON THE TOP OF THE LIFT COLUMN (as described previously described in Step 2).** The Monitor Hanger will press tight to the Lift Column, so before going on to the next step you will need to gently hold the Motor Cable plug to one side to make mounting the Monitor Hanger easier. **TIP:** Gently pull the Motor Cable to the side that is closest to where you plan to mount the Control Box (Part #6).





Step 15a: Align the Monitor Hanger (Part #5) with the 4 threaded holes on top of the Swivel Mechanism.

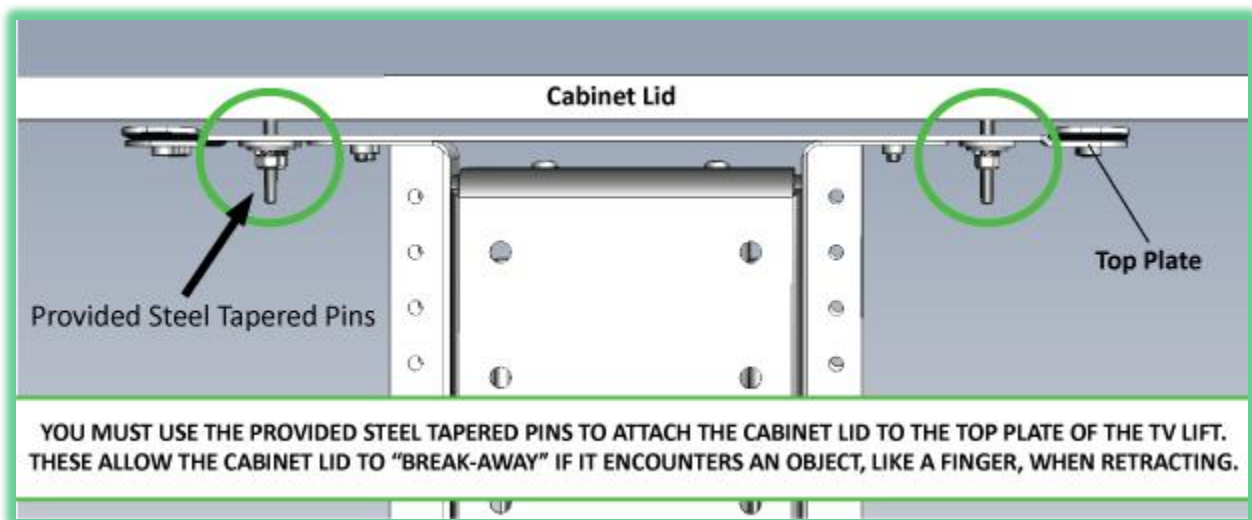
Step 15b: Align to the Top Plate (Part #7) with the Monitor Hanger and Swivel Mechanism holes. Using four (4) 6mm x 12mm FHMS Screws fasten the Monitor Hanger and Top Plate to the top of the Swivel Mechanism.



Step 16: Managing the Motor Cable. Use the plastic Wire Management Clips to keep the Motor Cable in position, so it will not interfere with the movement of the Lift. The Clips have peel-and-stick adhesive backing. Attach two Clips on the inside sidewall of the Monitor Hanger, one near the top, and the other toward the bottom, as shown in the photo. Secure the Motor Cable in the clips.



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.

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).

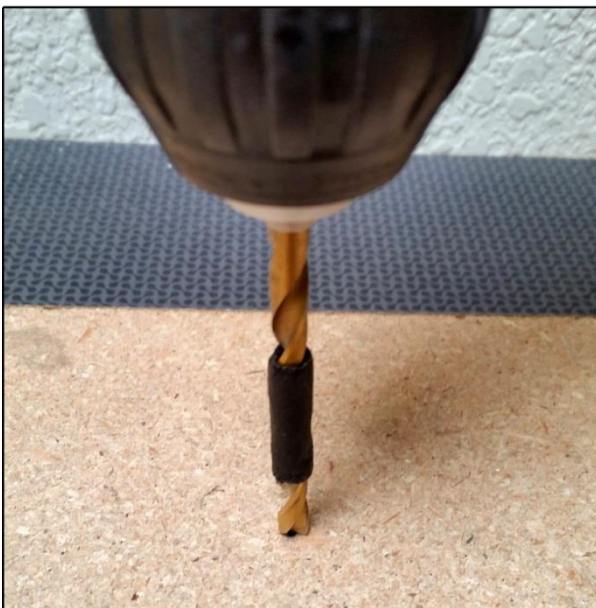
Step 17: Before installing the Tapered Pins, position the Cabinet Lid. With the TV and the Lift System in the fully DOWN position, set the Cabinet Lid in place. It will not be attached at this point, so move it around on the Top Plate, making sure it fits centered in the cabinet opening.

Step 18: 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 temporarily tape your lid, to prevent the lid from shifting.

Step 19: 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.



Step 20: Remove Cabinet Lid and drill two holes in the marked positions. Use a 7/32" drill bit to drill two holes, 1/2" deep, in the underside of the Cabinet Top where you have marked.



Step 21: Using a Phillips head screw driver (not provided) screw each Tapered Pin into the holes drilled in step 16.



Tapered Pins





Step 22: Place the Cabinet Lid onto the Lift System.

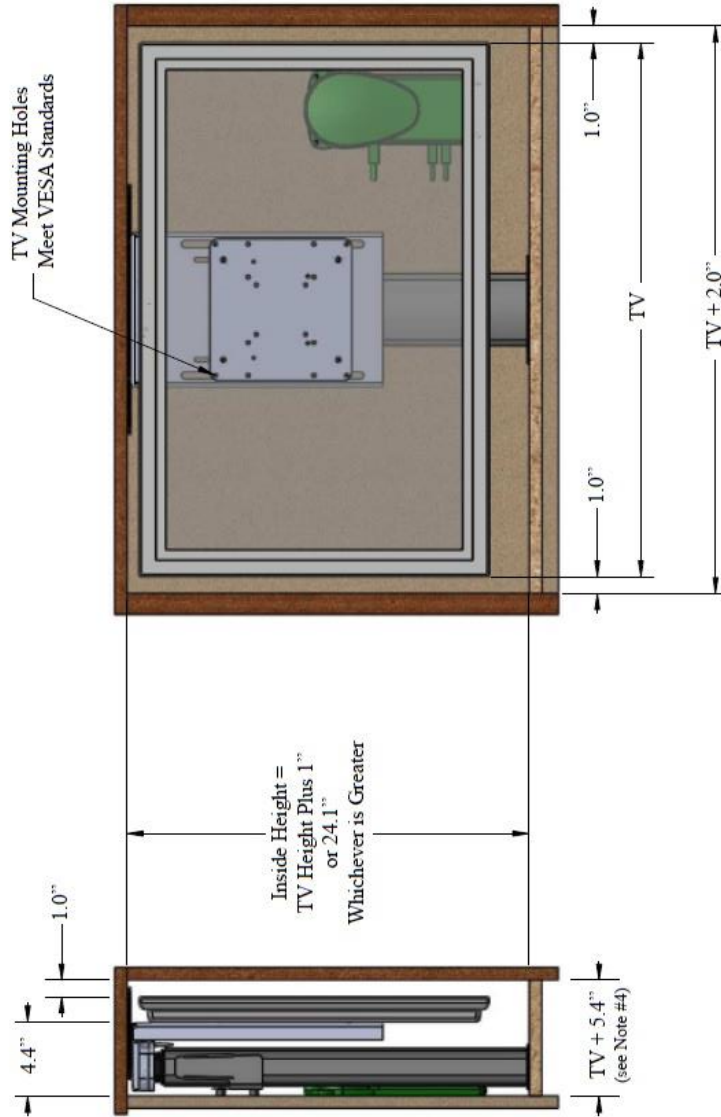
Align the Tapered Pins with the 2 holes in the Top Plate and put the Lid on.

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. Refer back to the previous step entitled “Using Wire Management”.

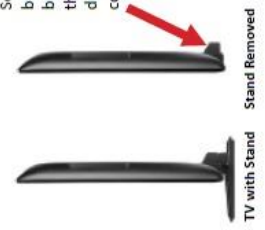
YOU ARE NOW DONE! Your Nexus 21 Model L-23S TV Lift System is now installed. Thank you for purchasing our product, and please feel free to contact us at any time if you need support.



**Model L-23 S
Installation Dimensions:
Standard Configuration**



See Note #4: The stand has been removed but a protruding bump may remain on the back of your TV. If your TV has a bump similar to this, you must measure and add the depth of the bump when calculating the true depth of your TV. The depth dimension given by the TV manufacturer will never take this into consideration, and it will affect your minimum installation depth.



Notes:

- 1) The cabinet box shown is for reference only and is not provided with the TV Lift.
- 2) For this TV Lift, the length of its travel is 23".
- 3) TV not to exceed 21.5" in Height.
- 4) TV manufacturers often only calculate the TV's depth dimension by measuring the screen from front to back at the slimmest point. When calculating the true depth of your TV, please be sure to consider the depth added by any protruding plastic housings or stand attachments on the back panel. Spacers will be required to accommodate the protrusion. (see image at right)

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:

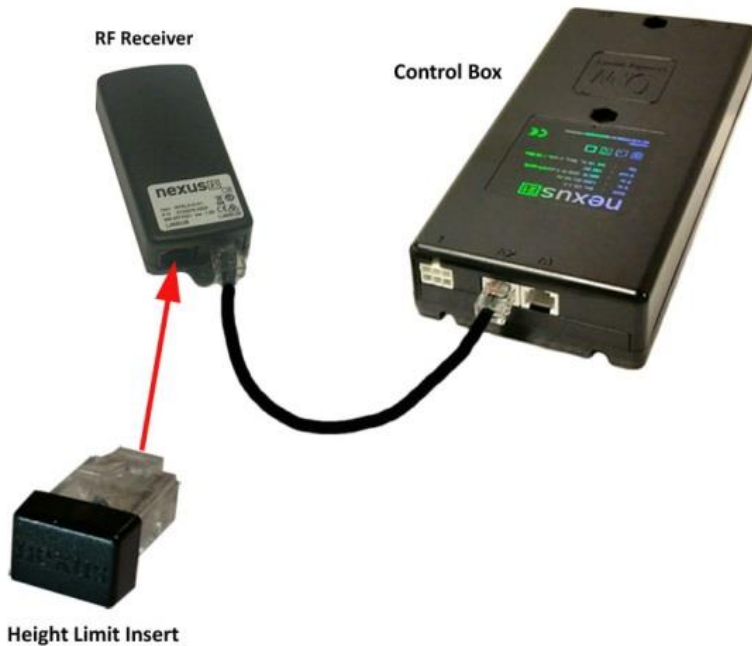
If you want the lift system to always go to its full extension, do NOT use the Height Limit Insert. Simply leave it unplugged and the system will always travel to the full extension. To limit the travel, follow the procedure below:



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



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.

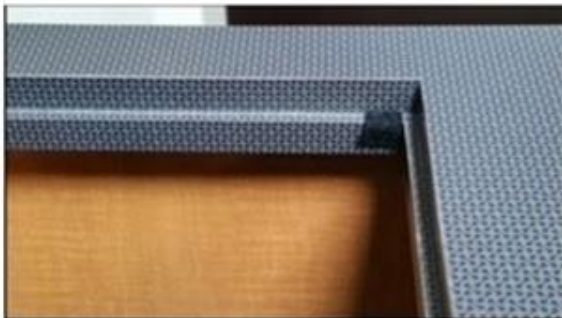
How to Properly Install a Lid "Catch" with a Nexus 21 Lift System

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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