

# DISPLAY<sup>®</sup> DEVICES

## *IBL Series - Projector Lift Models 1522, 2424*



## Installation Manual

**READ ALL INSTRUCTIONS BEFORE BEGINNING INSTALLATION**

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## Contents

Important Installation Notes	3
Lift Placement	4
Installation	4
Control Settings	5
Plenum Enclosure Assembly	6
Physical Installation – top mounting	7
Physical Installation – side mounting	9
Connecting Power	11
Projector Mounting	13
Cabling the Lift	13
Ceiling Closure	15
Final Adjustments	17
Specifications	17
Lift Removal	18
Maintenance and Safety	18
Emergency Operation	19
Remote Control Operation and Programming	20
Digital 9 pin Interface Schematics	29
Troubleshooting Chart	30
Warranty	31
Installation Feedback Form	32

Thanks for purchasing a Display Devices lift product. We're sure your customer will enjoy this lift for years to come. Our products are designed to be maintenance-free, saving you future service time. If you experience any difficulties, please contact us at 303-412-0399. Thank you for your support.

## Important Installation Notes

Before starting...

Read **all** instructions before installation.

### **CAUTION!**

**The lift is heavy! Take proper safety precautions and get adequate help when raising the lift.**

Leave metal shipping brackets in place to protect **you** and the lift from damage until fully and securely mounted.

Ensure the electrical outlet is readily accessible and complies with the lift and projector specifications for voltages and amperages.

Check above the ceiling for obstructions (i.e. water pipes, wires, cables, duct work, extreme temperature variations, etc.) before beginning installation.

Ensure the ceiling structure is capable of holding at least **four times** the combined weight of the lift **and** projector. This is a **minimum** requirement. Follow any local or state codes that apply to your specific area.

Organize your mounting hardware and have the necessary tools on-hand before installation.

Attach the projector, ceiling closure system, or other items to the lift only after the lift has been properly installed and tested.

### **CAUTION:**

**Anytime you are installing or performing maintenance on the lift, disconnect power at the receptacle or breaker/fuse panel, program the lift to MANUAL MODE, or activate the NO MOVEMENT switch on the side of the control box to prevent inadvertent movement of the lift.**

## Lift Placement and Location

Verify the projector's lens offset from the center of the projector and center the lens onto the center of the projection screen.

If your lens is offset from the center of the projector, the lift should have the same opposing offset to center.

Ensure that the centerline of the lens remains aligned with the centerline of the screen.

If your projector does not have a zoom lens, the focal length distance and image size from screen to lift is **critical**. See your specific projector manual for detail.

Verify where the front of the projector's lens is in relationship to the lift, and compensate accordingly.

## INSTALLATION

Mounting hardware is not provided. Be sure to have all your mounting hardware and tools readily accessible before installation. Consult your local building codes for proper structural attachment.

Here are the tools you will need:

Safety glasses

Socket set with 7/16" socket wrench

Box wrenches

1/16" hex drive

Philips Head Screwdriver

Adjustable wrench

Magnetic torpedo level (two, if possible)

Ladders or manlift

Genie Lift, or heavy straps and pulleys (for DataLift and DataLite Models)

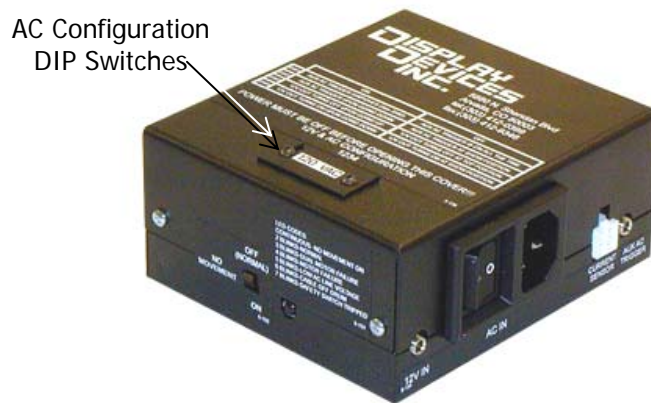
Knockout kit or hole saw

½" drill and/or ½" hammer drill

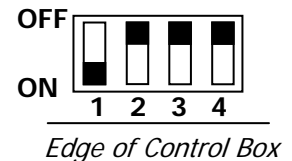
## CONTROL SETTINGS

Prior to the physical installation, you must perform the following steps:

1. Be sure that there is no power attached when setting the DIP switches.
2. Set the DIP switches on the control box before you install the lift in the ceiling. Refer to the chart below for proper configurations.
3. Dip switches are located under the small access panel on the Control Box attached to the lift frame. Use a 1/16" hex drive to open.
4. Set the 12-volt trigger and AC Trigger based on your system design.



	ON	OFF
SW1	Aux AC Trigger (see SW2 below)	Aux AC Trigger is on all the time
SW2	Aux AC Trigger upon going down	Aux AC Trigger at show position
SW3	12V out turns off upon going up	12V out turns off at top position
SW4	12V out turns on upon going down	12V out turns on at show position

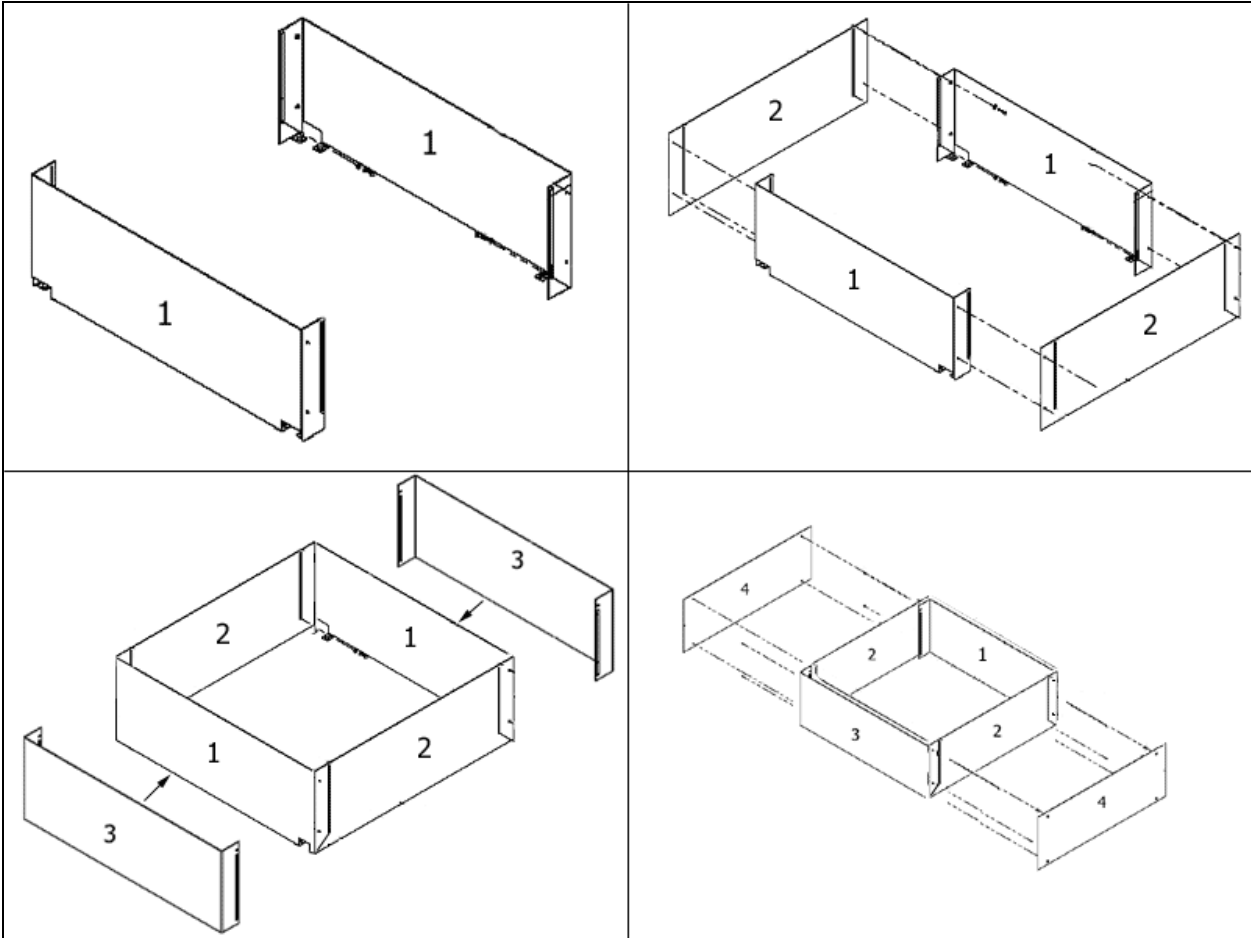
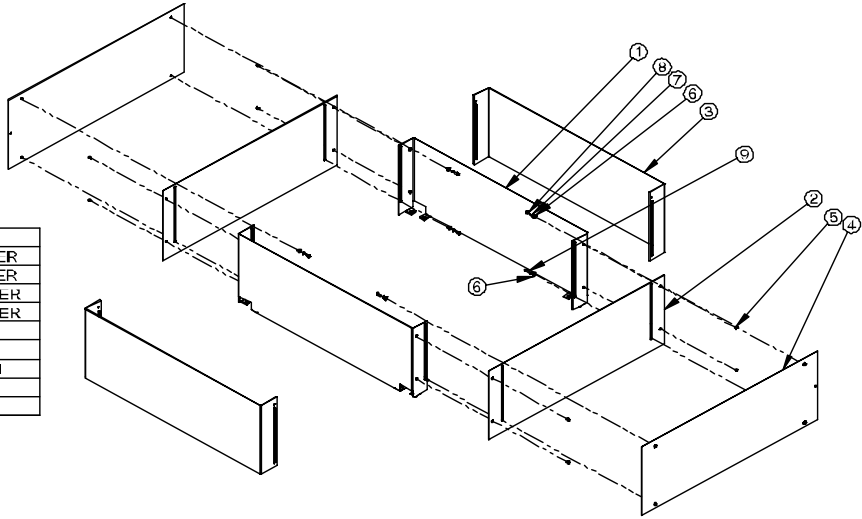


NOTE: Dip Switch SW1: configuration only works in automatic mode.

## PHYSICAL INSTALLATION Plenum Enclosure Assembly

This assembly is shipped as a kit. Layout all components as follows and assemble based on the steps below.

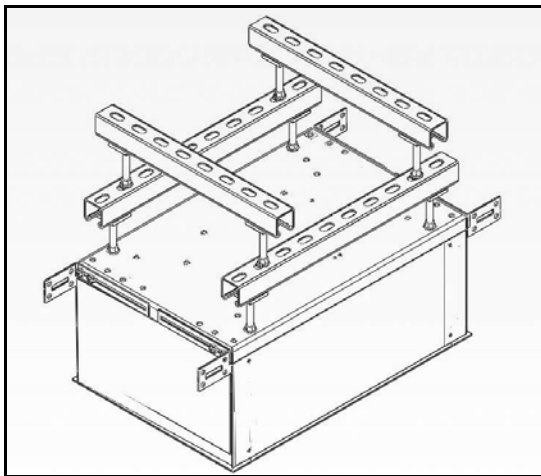
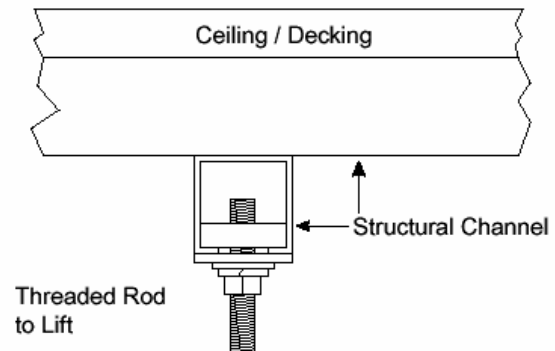
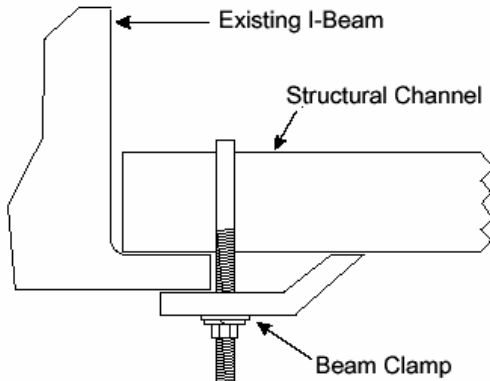
ITEM NO	QTY	PART NO	DESCRIPTION
1	2	25-103	2 X 2 INNER END COVER
2	2	25-104	2 X 2 INNER SIDE COVER
3	2	25-105	2 X 2 OUTER END COVER
4	2	25-106	2 X 2 OUTER SIDE COVER
5	8	5900-1610	4-10 X 1/4, FH, P, STL, Z
6	8	5950-12050	# 6, FL WASHER STL, Z
7	8	5950-16150	# 7, 1K WASHER STL, Z
8	4		6-32 X 5/16, Philips Head
9	4		6-32 X 1/2, Philips Head



## PHYSICAL INSTALLATION TOP-MOUNTING

Top mounting is typically used when installing the lift into a false ceiling (grid tile) or an exposed unfinished ceiling.

We recommend you install mounting hardware into a structural channel.



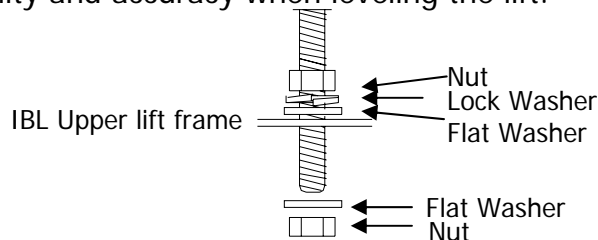
### ***Example – Top Mounting***

*Structural channel provides flexibility for adjusting the lift front-to-rear and side-to-side.*

- All hardware should be at least in 3/8" (M10) diameter.
- You should use angled stabilizers if threaded rods extend 2' (60 cm) or more between structural channel and the lift.
- You should also leave the threaded rods slightly loose to ease in alignment and leveling after installing the lift.
- You need to make sure all hardware is securely tightened at the end of your installation.

## PHYSICAL INSTALLATION TOP-MOUNTING

- 1.) *Plenum installations* - attach the plenum enclosure to the 8 studs on the lift's upper frame. Add flat washer, split lock washer and 7/16" nuts – tighten.
- 2.) Before you begin, be sure the threaded rods have a nut and split washer above the lift frame, and a flat washer and nut below the frame. These can be temporarily held in place with tape or chewing gum.
- 3.) Raise the lift into position and add hardware. Follow the hardware order below to ensure stability and accuracy when leveling the lift.



**Note:** The following are some of the most important steps in proper lift installation! Use a torpedo or bubble level to level the top frame of the lift. You may want to use more than one.



1. Level the lift from the right-front to the left-front.
  2. Level the lift from left-front to left-rear.
  3. Level the lift from left-rear to right-rear.
  4. Recheck.
  5. Tighten all hardware.
- 4.) If you are using the plenum enclosure, adjust the height by loosening the (4) Philips Head Screws, slide the enclosure box to the proper vertical height, and retighten.
  - 5.) Determine the best location for power, control and signal cables to enter the lift enclosure. Use a knockout tool or drill holes in the enclosure for cables. We recommend using flex conduit to the enclosure.



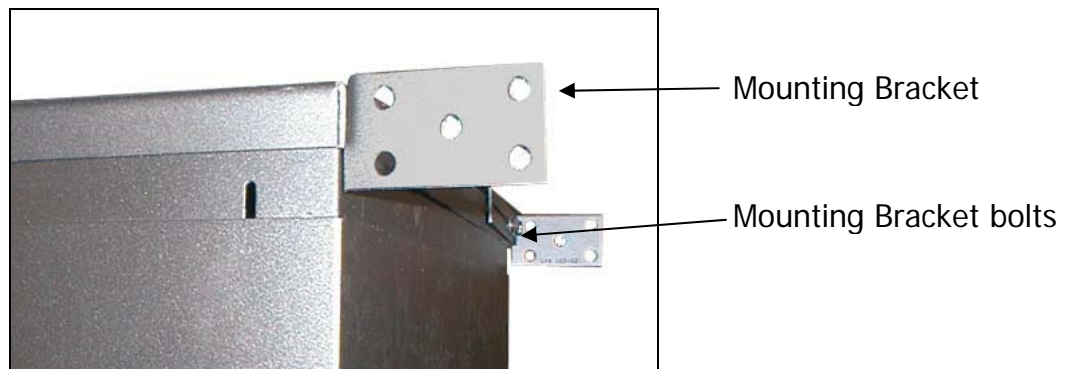
## PHYSICAL INSTALLATION SIDE-MOUNTING

Side-mounting is typically used when installing the IBL-1522 lift between 16" on-center floor joists.

### **NOTE for Retrofit installations with the IBL-1522:**

Cut hole opening – 21"l x 14.5"w.

- 1.) Determine the top height of lift/enclosure and mark the top position on the joists. Mark the front and rear position of the lift on the joists – both the left and right sides.
- 2.) For installations which need the plenum enclosure, attach the plenum enclosure to the 8 studs on the lift's upper frame. Add flat washer, split lock washer and 7/16" nuts – tighten. Retrofit installations in sheetrock ceilings often require the plenum enclosure to be removed.
- 3.) Determine the best location for power, control and signal cables to enter the lift enclosure. Use a knockout tool or drill holes in the enclosure for cables. We recommend using flex conduit to the enclosure.



- 4.) Install the four mounting brackets to the floor joists using 1/4" x 1 1/4" lag screws and washers. The brackets mount to the joist.
- 6.) Raise the lift into position between the mounting brackets. Attach lift to mounting brackets reinstalling the 1/4"x 20 bolts. Do not tighten yet.

**NOTE for Retrofit installations:** Raise the lift on an angle – get one end of the lift above the sheetrock, then lift the opposite end up above the ceiling. Level and attach mounting brackets reinstalling the 1/4"x 20 bolts. Do not tighten yet.

- 7.) Be sure the lift is centered left-to-right, then tighten the mounting bracket hardware.
- 8.) If you are using the plenum enclosure, adjust the height by loosening the (4) Philips Head Screws, slide the enclosure box to the proper vertical height, and retighten.
- 9.) Raise the enclosure up into and through the ceiling hole. While holding the enclosure, insert power, signal, and control cables through the access hole you just made and affix the flex conduit with strain relief/cable clamps. Slide the enclosure into position and reinstall the (8) bolts to securely hold the enclosure to the lift.
- 10.) Install the strain relief/cable clamps in the panels that are knocked out.
  - It may be convenient to put the cables through at this time, depending upon the ceiling's finish and accessibility.
  - Accessibility should not be a problem in a drop-tile ceiling.
  - If it is a finished sheetrock or other solid material, you may need to feed the cables through the cable holes **before** you reinstall the enclosure.

## Lift Connections / Connecting Power

- 1.) Verify voltage at the outlet/power source for the projector/lift. You can now connect the lift's power cord to a properly rated electrical circuit in the ceiling near the lift.
- 2.) Plug the remote control unit cable into either of the two 9 pin control remote ports on the side of the control box.
- 3.) Tighten the cable clamps / strain relief connectors, if required.
- 4.) If using the 12V trigger and/or AC Trigger, plug in the provided 1/8" mono mini plug on the sides of the control box at this time. Be sure the cable won't interfere with the lift mechanics. Do not use a stereo mini connector (Tip / Ring / Sleeve).



Be sure the cables will not sag into the lift mechanism during its operation.

- 5.) You are now ready to cut the tie. Be sure to remove **all** tie wraps on both sides of the lift.
- 6.) After following these precautions, you are now ready to turn on the power switch on the lift control box.
- 7.) On the side of the control box, you will find the small black switch labeled NO MOVEMENT. The lift is shipped from the factory with the NO MOVEMENT switch in the ON position.
- 8.) Flip the NO MOVEMENT switch to the OFF position. The LED will then blink twice.  
  
If the NO MOVEMENT switch is on, the STATUS LED on the control box and the remote control will be on solid, not blinking.
- 9.) Remove the two galvanized metal shipping brackets between the lower and upper frames on the front and rear of the lift.

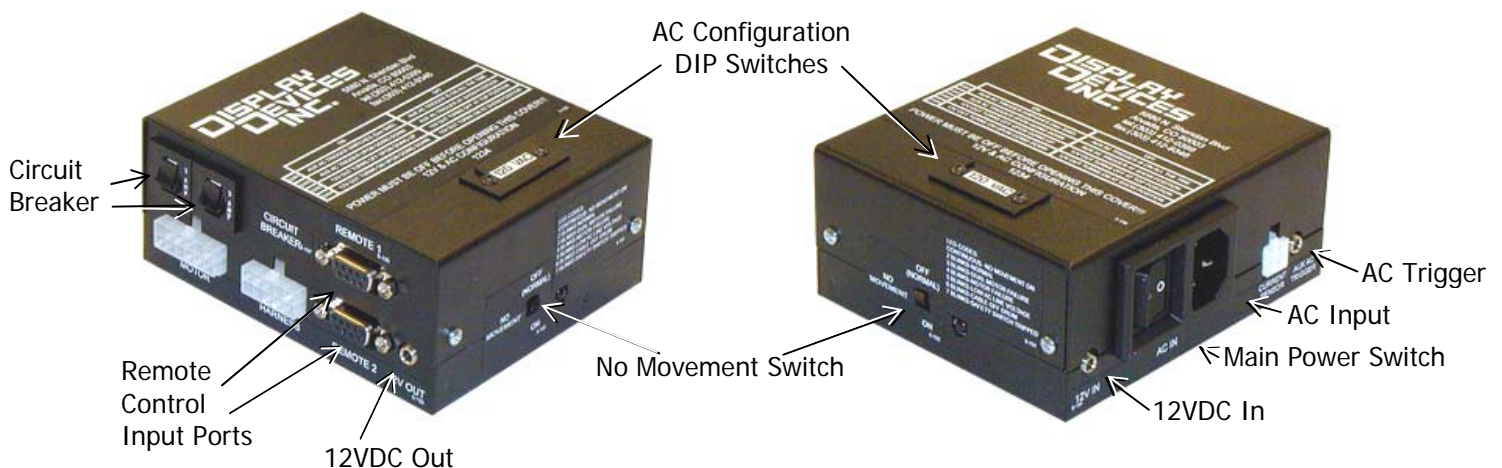
## Caution!

Make sure all tools, cables, and body parts are clear of the lift before pushing the UP button.

10.) With the hand-held remote control, press the UP button to send the lift to its fully UP, home position. Refer to the Remote Control Operation and Programming section for details on how to operate program the lift's functions.

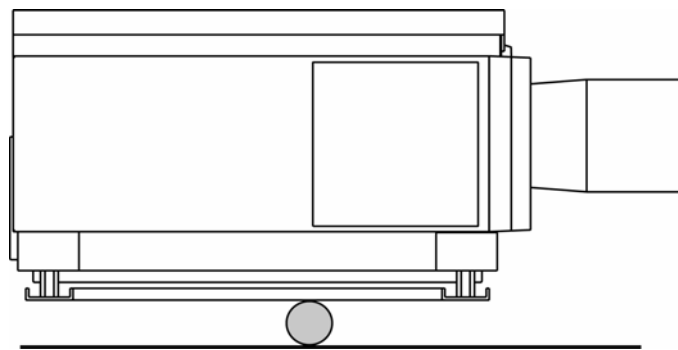
For this installation, here is a guide to the LEDs on the control box and the remote, and what the blinking means:

If the LED...	It means...	Fix it by...
Is Continuously On	The NO MOVEMENT switch on the side of the control box is activated. This disables all movement of the lift.	Moving the switch to the OFF position
Blinks twice (after unit is powered up, LED then stops blinking)	The lift is operational	
Blinks three times	NA	NA
Blinks four times	Motor is not moving	Check the power to the motor or for a mechanical obstruction on the lift
Blinks five times	Low AV line voltage	Check circuit voltage
Blinks six times	Cables off the drum	Re-cable the drum(s)
Blinks seven times	Lower limit safety switch activated	Follow steps on page 25 of the remote instructions



## Projector Mounting

- 1.) The lift is shipped with the projector mounting adapter attached. Remove it from the lower frame of the lift, if you have not already done so.
- 2.) Invert your projector and attach the mounting adapter to the bottom of the projector with the proper hardware.
- 3.) Find the projector's center of gravity using a dowel.



- 4.) Attach the adapter to the lift with the projector's center of gravity under the vertical wire rope of the lift. Use the enclosed ¼"-20 hardware.

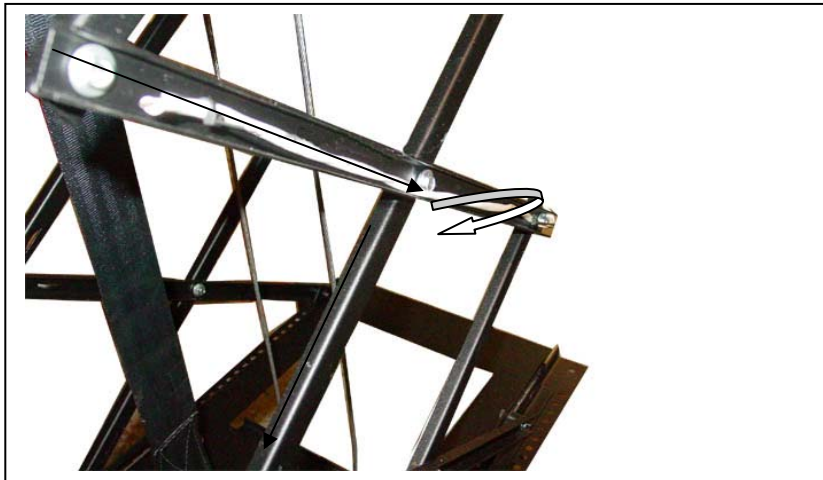
## Cabling the Lift

The IBL Series lifts accommodates a limited number of cables. We recommend Extron™ Superflex Mini HR cable. **Caution: Using large diameter RGB and other signal and / or control cable is not recommended on Display Devices lifts.**

Large, bulky cables have too large of a bend radius to allow them to fit in the cable management clips mounted on the scissor assembly.

## Attaching the Cables

- 1.) Using the hand-held remote, lower the lift down to the MAINTENANCE position. See the enclosed remote control instructions for information about how to program this position. The signal, power, and control cables can now be routed into the cable management clips on sides of the scissor assembly.
- 2.) The lift is shipped with a sample cable in the clips. Attach your cables in a likewise manner. Small cable tie wraps are supplied for securing the cables into the clips.



- 3.) Carefully route the projector cables starting at the bottom scissor towards the front of the lift and work towards the top front of the lift. Please note that the cables alternate inside-to-outside on the scissors. **Be careful to avoid twisting the cable.**

### *NOTE:*

It is common practice to keep the signal cables (audio, video, RGB) separate from the projector power and control cables to prevent signal interference. Utilize the clips on both sides of the lift for isolation.

- 4.) Raise the lift to its home position with the **UP** button (in MANUAL mode) slowly, carefully, and intermittently. Carefully observe the cables rigged to the sides of the lift and watch for any problems.
- 5.) Lower the lift down with the **DOWN** button again watching for any problems and ensuring proper overall operation. Repeat this process several times.
- 6.) If you did not set the 12-volt trigger and AC configuration, revisit Part 1 and set the Dip Switches for your system design. You are now ready to attach the ceiling panel closure.

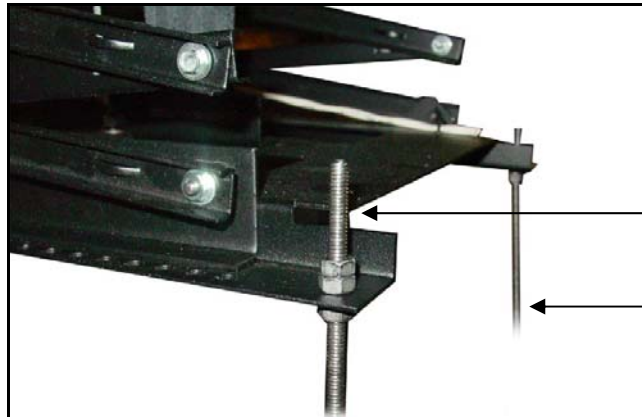
## Ceiling Closure



- 1.) If you are using a 2424 model, attach the CTB Sliders to the front and rear of the lower lift frame. Use ¼-20 hex head bolts, flat washer, split washer and nut. Do not tighten.
- 2.) Attach the left and right CTB Brackets to the CTB Sliders using ¼-20 hex head bolts, flat washer, split washer and nut. Do not tighten.
- 3.) Determine the length of the threaded rod and cut to length needed. Be sure to leave the rod long enough to have an airspace between the projector and the closure panel.
- 4.) Use the enclosed closure rods. Remove the nylock ¼"-20 nut, washer, spring and plastic grommet.
- 5.) Insert the threaded rod into the closure panel mounting points.
- 6.) Slide the plastic grommet and spring on the threaded rod from the underside of the threaded rod. Add the washer and compress spring. Replace the ¼"-20 nylock nut and tighten. Do not overtighten.
- 7.) Insert the ceiling material inside the frame. NOTE: Depending upon the finished ceiling, you may insert a 3/8" board into the closure frame as a backer board for the finish material to attach to the underside of the closure frame.
- 8.) Raise the closure panel to the projector and insert the threaded rods into the 4 mounting points on the lift.

- 9.) Raise the lift up – keep a close eye as the lower frame enters the enclosure/hole. Center the closure panel left-to-right and front-to-rear. Tighten the CTB Bracket and Slider hardware when completed.

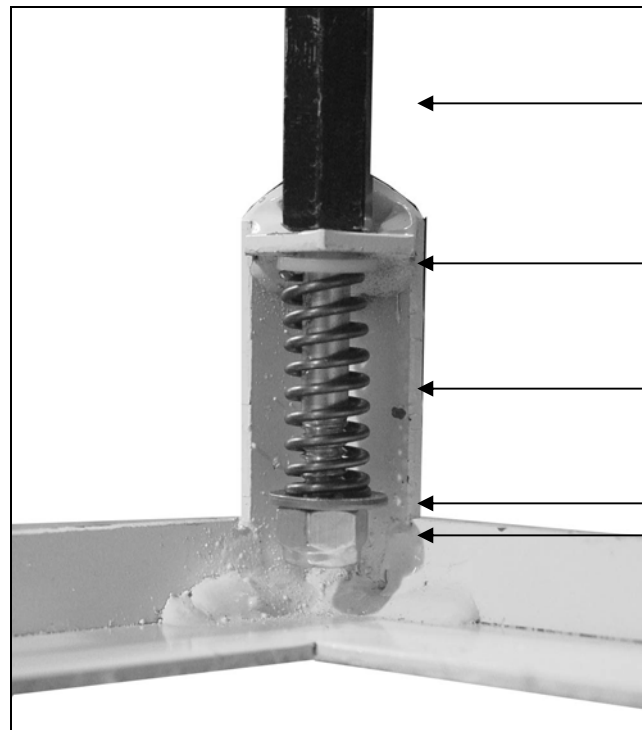
Closure Frame Rod  
upper detail  
(1522 model)



No longer than 2"  
above lift frame

Cut rods to length  
for projector

Closure Frame Rod  
lower detail



1/4-20 Rod Nut

Plastic Sleeve

Spring

Flat Washer

1/4-20 Nylock Nut

**NOTE:**

- Prepare the ceiling closure panel by painting it to match the existing ceiling.
- Carefully raise the lift using the remote control.
- Finally, adjust the rods so that the ceiling closure panel fits flush with the ceiling.
- When adjusting the Closure Panel, the springs should compress about 1/8" to 1/4".



## Final Adjustments

Operate the lift up and down several times to verify all adjustments and ensure proper operation.

Raise the lift to its home position with the **UP** button (in MANUAL mode) slowly, carefully, and intermittently. Observe the cables rigged to the sides of the lift carefully and watch for any problems.

Bring the lift down with the **DOWN** button, and again watch for any problems. Adjust the closure system as needed.

Operate the lift up and down several times.

Place the lift in automatic mode. (**VERRIDE + STOP**).

If you did not set the 12-volt trigger and AC configuration revisit Part 1 and set the Dip Switches for your system design.

The lift is now installed and ready for operation.

## Specifications

<b>IBL1522</b>	100 lbs. combined weight – projector, lens, plenum and ceiling closure
<b>IBL2424</b>	107 lbs. combined weight – projector, lens, plenum and ceiling closure
<b>IBL6060</b>	107 lbs. combined weight – projector, lens, plenum and ceiling closure
<b>Operating Temperature Range</b>	32° – 104°F / 0° – 40°C
<b>Horsepower</b>	1/15 – 110V60Hz or 220V 50Hz
<b>Current Draw</b>	2.0A @ 110V 1.0A @ 220V

## Lift Removal

1. Disconnect all cables from the projector. It may be necessary to remove all cabling
2. from the cable management clips on the side of the lift if disconnects were not installed.
3. Remove the Ceiling Closure Panel.
4. Remove the projector from the lift.
5. Raise the lift into the closed position.
6. Disconnect the AC power and remote control cables.
7. Support the lift with an appropriate support system.
8. After the lift is secured, remove the mounting hardware.
- 9. Caution: mounting hardware may fall when removed.**
10. Lower the lift from the ceiling, and crate for transport.

## Maintenance & Safety

All Display Devices lifts are virtually maintenance free.

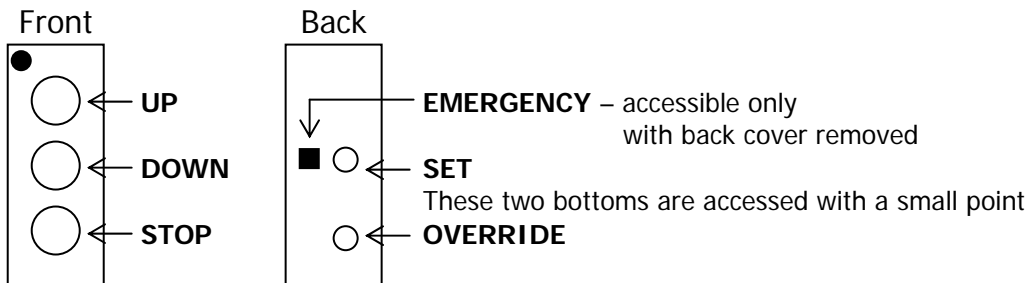
Annual safety checks are suggested to insure continued reliability and safe operation.

1. Inspect lifting cables for wear.
2. Inspect drive chain for any wear.
3. If equipped with safety strap(s), verify that they are drawing smoothly in and out of the clutch area, and that there is no sign of wear and tear. Also check them for proper locking operation with a quick tug on the strap(s).
4. Check motor and bearings for any leakage.
5. Verify limit switch operation.

## Emergency Operation

If your lift has traveled **below** the service position, and activated the lower limit safety switch, you will need to refer to the Remote Control Operation and Programming section and/or follow the steps below:

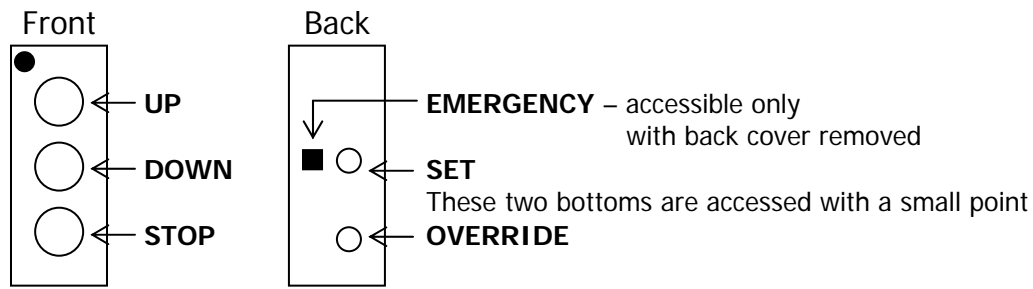
1. Remove the back cover of the handheld remote control case, or remove the switch plate from the wall box.
2. Press and hold the **EMERGENCY** button in the circuit board, press the **UP** button and release, then release the **EMERGENCY** button. The Lift should travel upward.
3. Verify operation and reprogram positions if necessary.



If the above steps do not resolve the problem, call Technical Support at 303.412.0399 during normal business hours, or E-mail Display Devices, Inc. at [tech@displaydevices.com](mailto:tech@displaydevices.com).

## Hand-held Remote Control Unit

Model # S10018



The Display Devices Hand-held Remote Control Unit is a versatile, multi-functional programmable remote for lift operation.

The **UP** button moves the lift to the home position in AUTOMATIC mode, and raises the unit intermittently on command in MANUAL mode.

The **DOWN** button lowers the lift to its SHOW position in AUTOMATIC mode, and lowers the unit intermittently on command in MANUAL mode.

The **SET** and **OVERRIDE** buttons on the back of the unit are used in combination with the three command buttons on the front to program the remote control to run the lift.

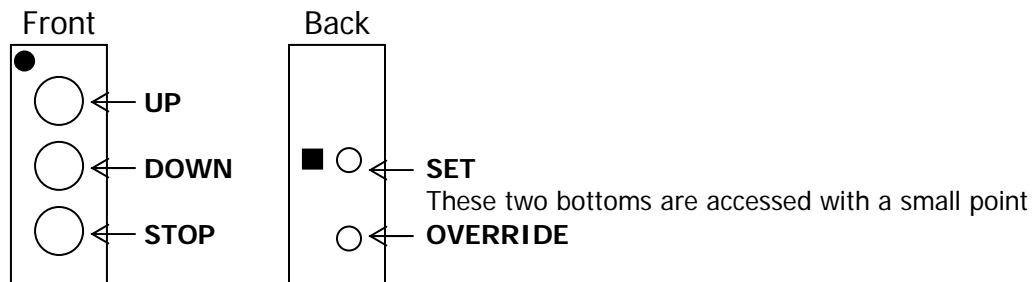
The **EMERGENCY** button is only to be accessed only in the unlikely case of the lower limit switch being activated. This will be discussed later.

\* It is recommended to keep the handheld 9-pin remote attached to the control box **in addition** to any control system for easy maintenance override or in case of control system failure.

HOW DO I?

## Program the lift to MANUAL MODE

1. Use a small point (straightened paperclip) to press and hold the **OVERRIDE** button then press the **UP** button. Release **UP**, then release **OVERRIDE**.
2. Test the unit by pressing the **DOWN** button. It should move only when the button is depressed. The lift will stop when the button is released.

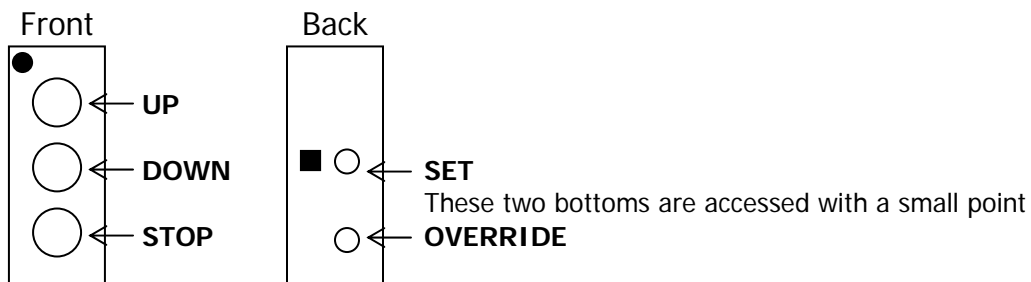


HOW DO I...

## Set the SHOW position

This is the intermediate level for "on screen" projection.

1. Program the remote to MANUAL MODE - Press and hold the **OVERRIDE** button then press the **UP** button. Release **UP** then release **OVERRIDE**.
  2. Lower the lift with the **DOWN** button to its desired projection position.
  3. To program the remote to the SHOW position: press and hold the **SET** button then press the **UP** button. Release **UP** then release **SET**.
  4. To return the remote to the AUTOMATIC MODE, press and hold the **OVERRIDE** button, followed by the **STOP** button. Release **STOP**, then **OVERRIDE**.
  5. Return the lift to the HOME position by pressing the **UP** button once.
  6. Test the operation of the lift to verify it has accepted your program.
  7. Press the **DOWN** button once. The lift will travel to its programmed position. If the lift does not travel to the position just programmed, repeat this process.
- \* Remember, the remote must be in AUTOMATIC MODE for the commands to operate correctly.



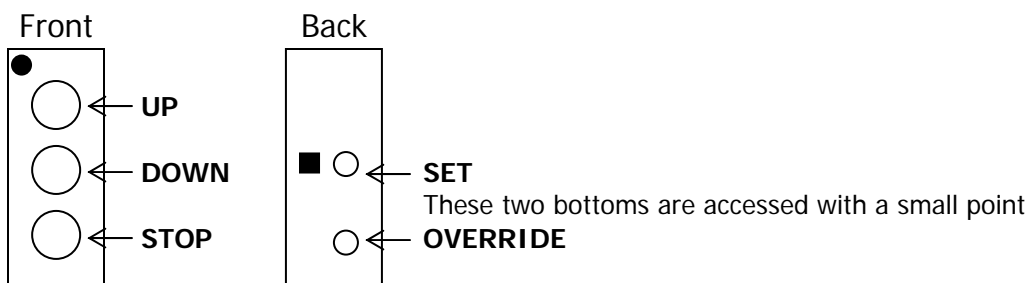
HOW DO I?

## Set the SERVICE / MAINTENANCE position

This is lower than the SHOW setting, bringing the lift to a level making maintenance, service, lamp and filter changes, and projector adjustments easier.

1. Program the remote to MANUAL MODE - Press and hold the **OVERRIDE** button then press the **UP** button. Release **UP**, then release **OVERRIDE**.
2. Lower the lift with the **DOWN** button to its desired position for the easiest access for maintenance and repair.
3. To program the remote to the SERVICE/MAINTENANCE position, press and hold the **SET** button, followed by the **STOP** button. Release the **STOP**, then **SET** buttons.
4. To return the remote to the AUTOMATIC MODE, press and hold the **OVERRIDE** button, followed by the **STOP** button. Release the **STOP**, then **OVERRIDE** buttons.
5. Return the lift to the HOME position by pressing the **UP** button once.
6. Test the operation of the lift to verify it has accepted your program, press and hold the **OVERRIDE** button, followed by the **DOWN** button. The lift will travel to its programmed position.

Remember, the remote must be in AUTOMATIC MODE for the programs and operations to operate correctly.

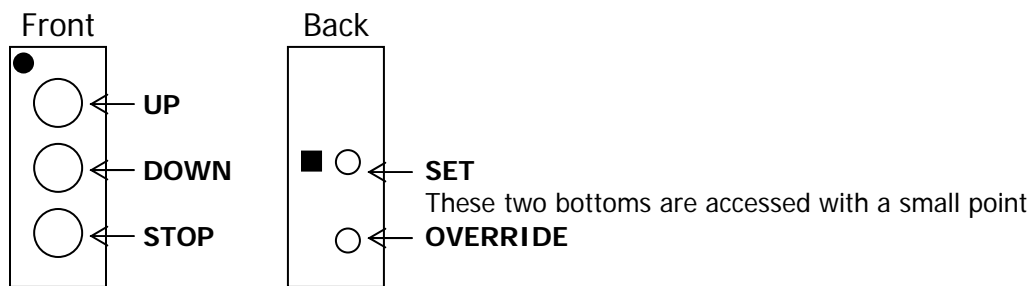


HOW DO I?

## Program the remote to AUTOMATIC MODE

1. Press and hold the **OVERRIDE** button, followed by the **STOP** button. Release the **STOP** then **OVERRIDE** buttons.

In the AUTOMATIC MODE, the lift will automatically descend to the proper show level, rise to the HOME position, and descend to its lower limit service and maintenance.



## Clearing Errors

To clear errors, press and hold the STOP button for 10 seconds and release. If the same error occurs, call Display Devices technical support.

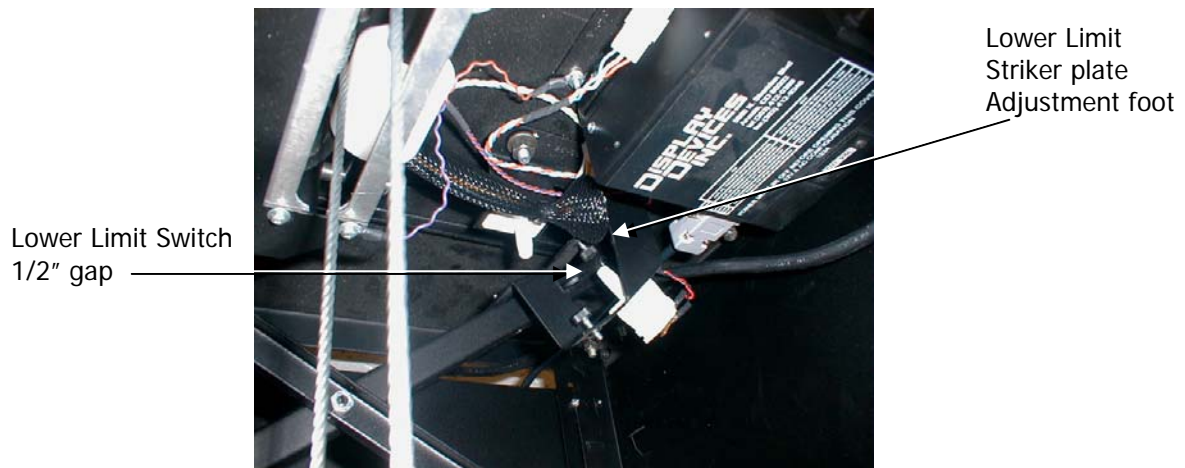


HOW DO I...

## Recover Lift from LOWER LIMIT SWITCH ACTIVATION

When the Lift is lowered beyond its lower limit or Service/Maintenance position, a small trip lever activates a safety shut-off on the lower limit switch. It is located on the between the control box and scissors. If the lift will not respond to any command buttons and the LED on the remote and control box blinks seven times proceed with the following:

1. Remove the back cover of the remote control with a small Phillips-head screwdriver. Now you have access to the **EMERGENCY OVERRIDE** button on the circuit board.
2. Hold in the **EMERGENCY** button, followed by the **UP** button. The lift will return to its HOME position in the ceiling, allowing the lift to reset its memory.
3. Put the cover back on the remote.
4. Put the lift into MANUAL MODE (**OVERRIDE + UP**).
5. Press the **OVERRIDE** and **SET** buttons at the same time. This allows you to set a new SERVICE / MAINTENANCE position for the lift.
6. Press and hold the **DOWN** button until the striker plate foot (on the upper scissor arm) is ½ inch from tripping the lower safety switch when it reaches its desired SERVICE/MAINTENANCE position (but not so low as to activate the safety switch again!)

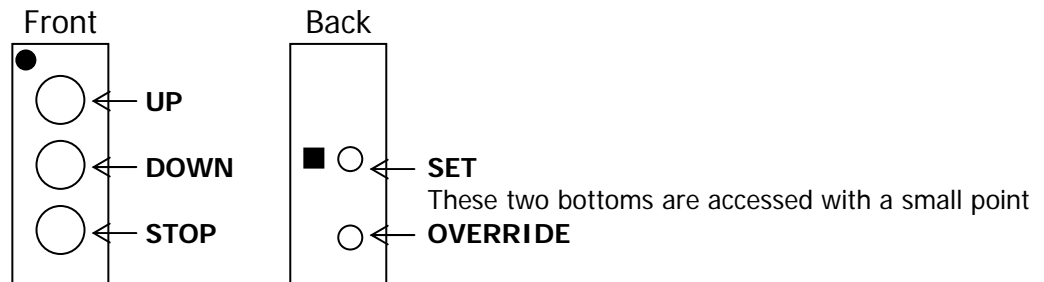


# DISPLAY DEVICES

IP025-001 V3  
IBL Lift Series Installation

7. Press both the **OVERRIDE** and **SET** buttons at the same time. This will reset the electronic lower limit switch.
8. Return the remote to **AUTOMATIC MODE (OVERRIDE + STOP)**.
9. Press the **UP** button, and allow the lift to travel up to its home position.

\*Hold in the **EMERGENCY OVERRIDE** button (the LED will stop blinking). Keep the **EMERGENCY OVERRIDE** button held, then press and hold the **UP** button. Keep both buttons held until the lift has moved six inches. Allow the lift to travel all the way to the home position.



## Summary of the Remote Control Functions

The OVERRIDE and SET buttons are hidden on the back of the remote control. The lower button is OVERRIDE and the top button is SET. A straightened paper clip or similar device will be needed to activate them.

When using the OVERRIDE and SET buttons, these buttons must be pressed first and released last in the sequence.

To set the normal show position, press and hold SET, press and release UP, and then release SET.

### Automatic Mode:

UP moves lift to the top position, DOWN moves lift to show position, and STOP stops the motion of the lift.

UP, DOWN, and STOP are functional while the lift is moving.

### Manual Mode:

UP and DOWN buttons move the lift only while the buttons are depressed. Unit will stop at the top limit switch.

STOP stops the motion of the lift at the current position.

OVERRIDE & DOWN from the show position moves the lift to the maintenance position.

OVERRIDE & UP from any position will place the lift into the manual mode.

OVERRIDE & STOP terminates the manual mode and returns the lift to automatic mode.

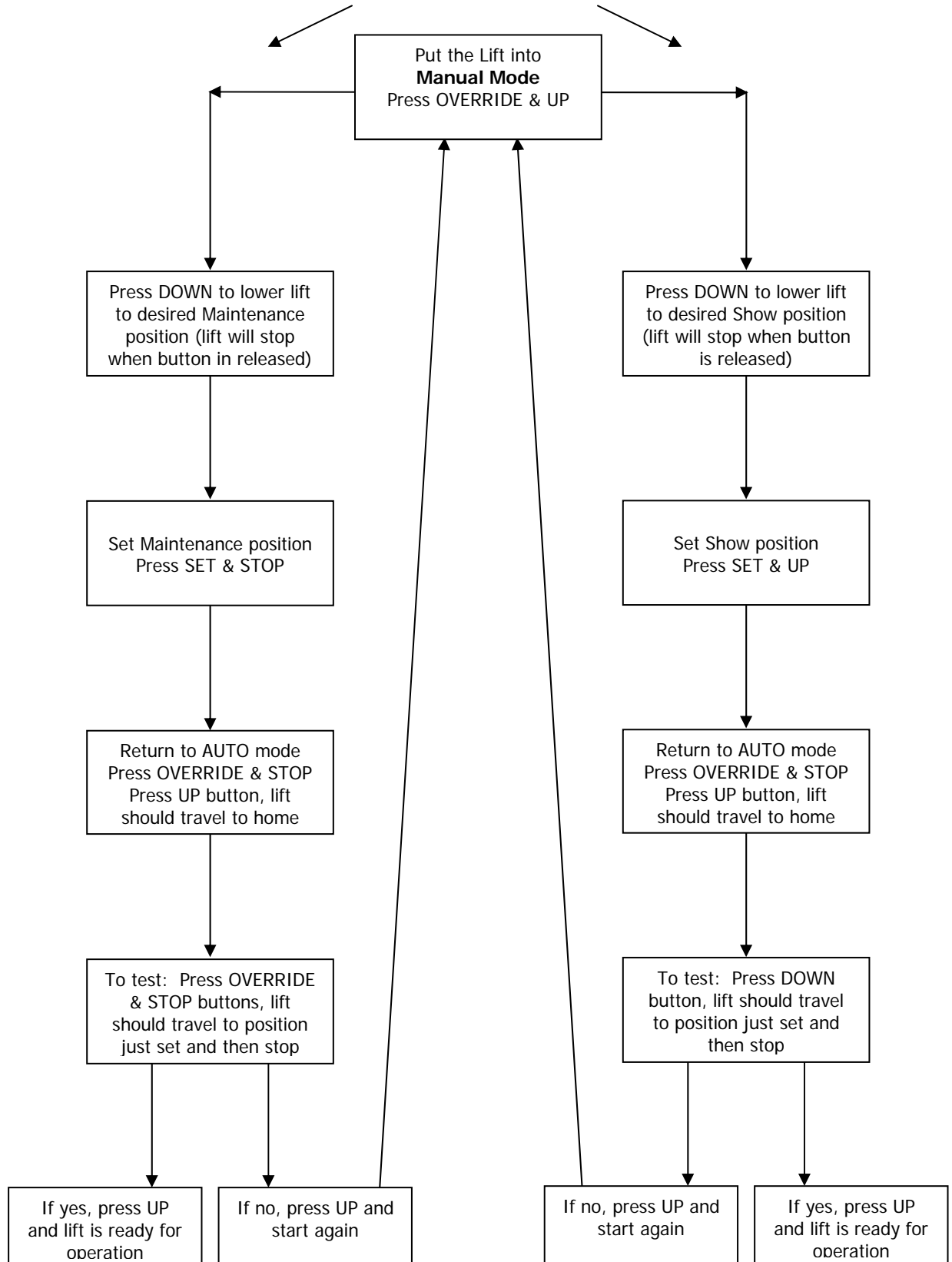
SET & UP sets show position and only works in manual mode.

SET & STOP set the maintenance position and only works in manual mode.

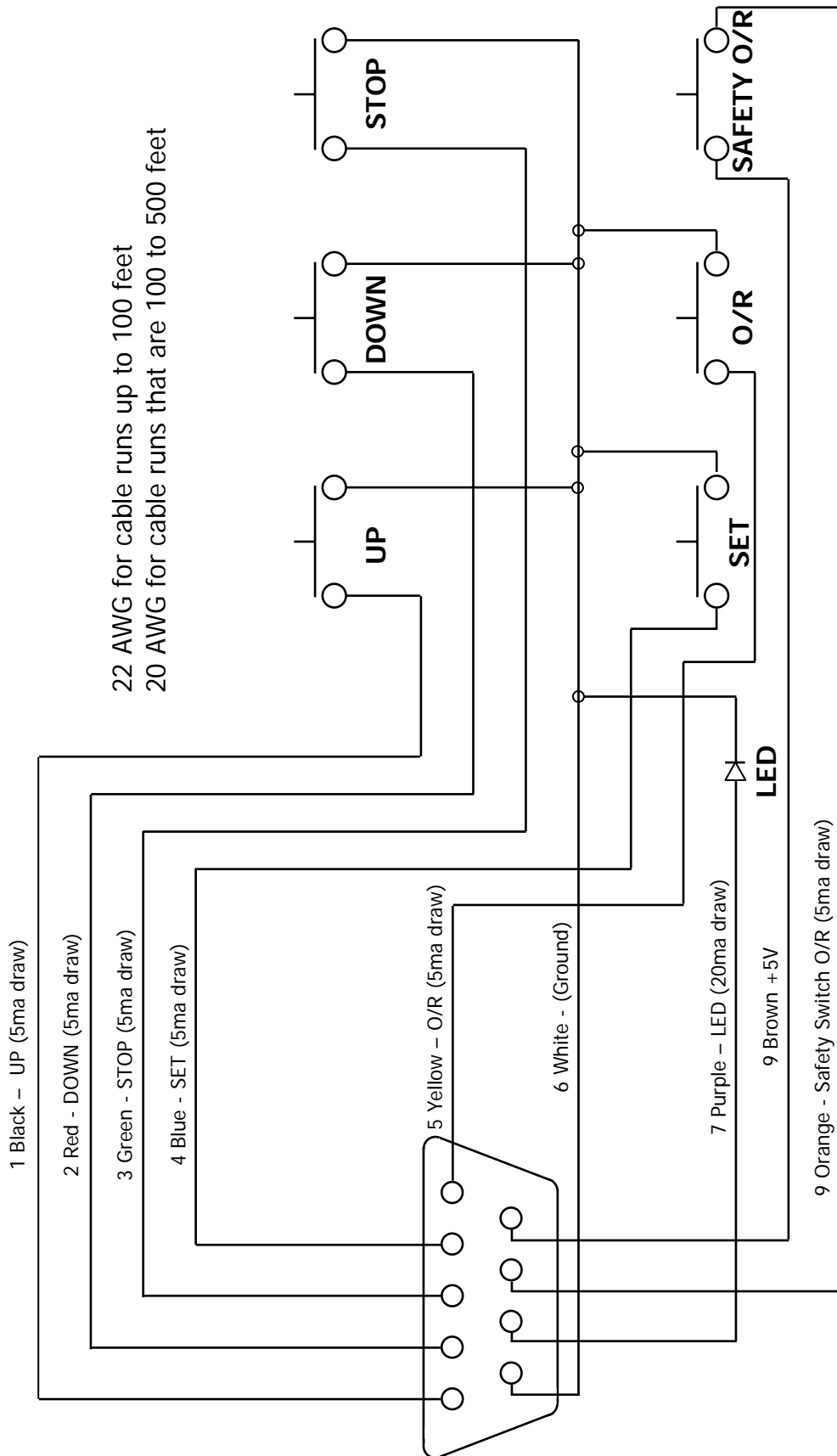
When in the automatic mode, press and hold OVERRIDE, then press STOP & UP together to place the unit into test mode. This will continually cycle the lift between home and show positions, pausing at each position. To terminate, press stop. The NO MOVEMENT switch is located on the control box mounted to the lift frame and disables all movement of the unit. Remote control buttons become inactive.

EMERGENCY & UP raises the lift only after the lower safety switch has been triggered.

## SETTING MAINTENANCE AND SHOW POSITIONS

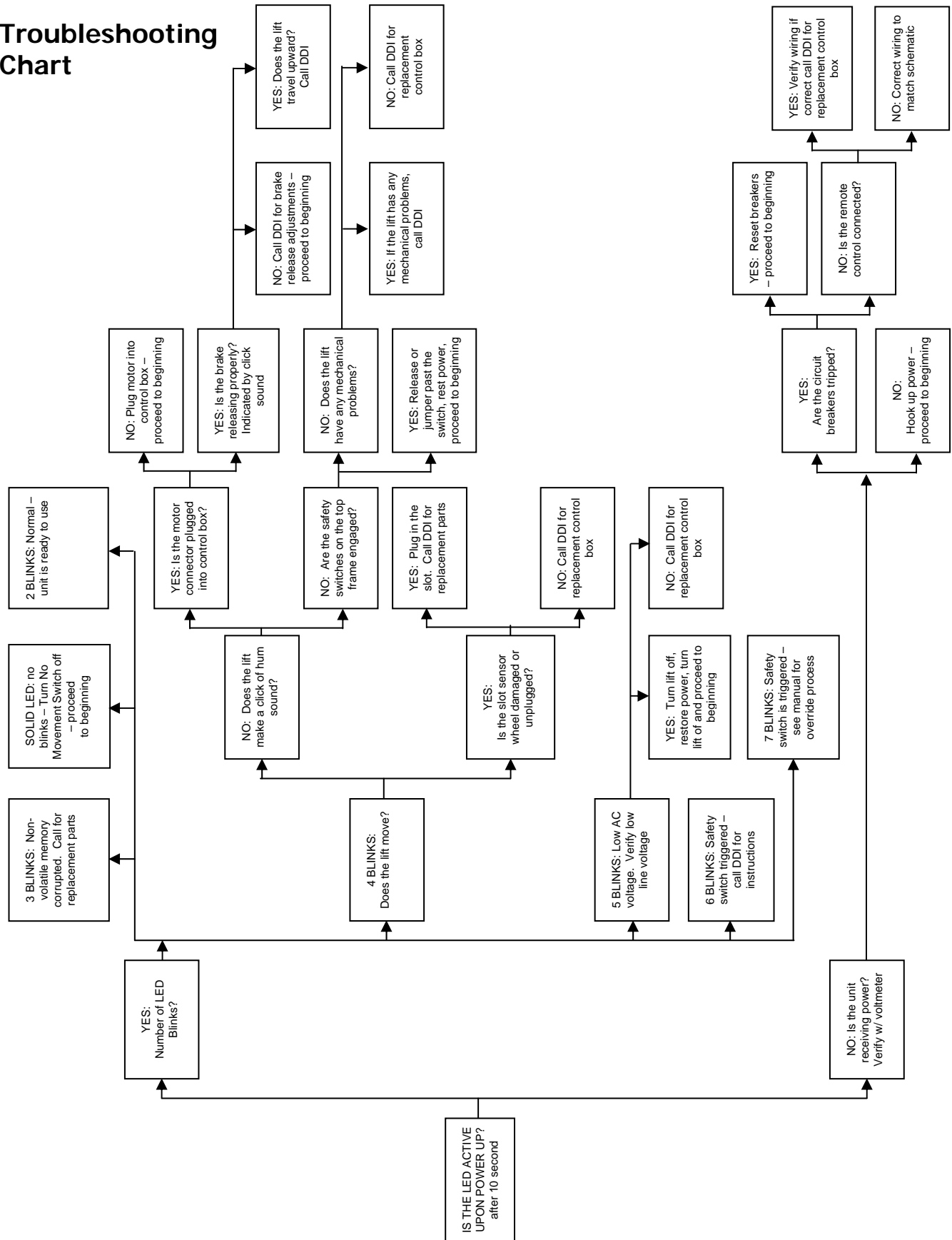


## Digital Remote Interface Schematic



**NOTE:**  
O/R = OVERRIDE  
Do not connect or short any wires to Pin 8 or 9 except Safety Override Button

## Troubleshooting Chart



## Warranty

This product is warranted against defects in material and labor for 12 months from the date of shipment from Display Devices, Inc. Unit must not exhibit previous alterations or repairs except those performed by an authorized Display Devices dealer, distributor or factory service center.

Exclusions:  
Routine maintenance, normal wear and tear, misuse, improper operation or installation, neglect, abuse or acts of nature.

Fax or mail to:  
Display Devices, Inc.  
5880 N. Sheridan Blvd.  
Arvada, CO 80003  
(v) 303-412-0399  
(f) 303-412-9346

Company Information: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

Dealer purchased through: \_\_\_\_\_  
Date purchased: \_\_\_\_\_  
Model #: \_\_\_\_\_  
Serial #: \_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Help us help you!

We value your feedback about our products. Any input you can provide will help us design and build better products for you. Please take a few minutes to answer the following questions. Use a 1 to 10 scale with 1 being poor to 10 being excellent. When complete, fax it back to us at 303-412-9346.

Thanks for your support!

### Product Quality

Appearance of finish \_\_\_\_\_  
Packaging \_\_\_\_\_  
Dimensionally correct \_\_\_\_\_  
Mounting Bracket alignment (if applicable) \_\_\_\_\_

### Installation

Ease of installation \_\_\_\_\_  
Understandability of Manual \_\_\_\_\_

### Customer Service

How was your purchasing experience? \_\_\_\_\_  
Was the product shipped on time? \_\_\_\_\_  
Was your order shipped complete? \_\_\_\_\_

### Product Improvement

Are there any features or options you would like to have available?

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If we designed and built a new product for you, what would it be?

---

---

What can we do better for you next time?

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Order Number \_\_\_\_\_  
Name \_\_\_\_\_  
Phone \_\_\_\_\_  
E-mail \_\_\_\_\_

Company \_\_\_\_\_  
Fax \_\_\_\_\_