

Installation/Operating Instructions

220V VCB Ultimate Access/Series E Electric Video Conferencing Background by Draper

⚠ **Caution**

- ① Read instructions through completely before proceeding.
- ② Follow instructions carefully. Installation contrary to instructions invalidates warranty.
- ③ Entire bottom of case should be unobstructed to permit access to bottom panel for electrical connections or servicing.
- ④ Unit should be installed level (using a carpenter's level).
- ⑤ Nothing should be fastened to dowel or background.
- ⑥ Operating switch(es) and mounting brackets are packed separately in carton. Do not discard with packing material.
- ⑦ Unit operates on 220V, 50 Hz. AC, 1 ph current.

NOTE: Unit has been thoroughly inspected and tested at factory and found to be operating properly prior to shipment.

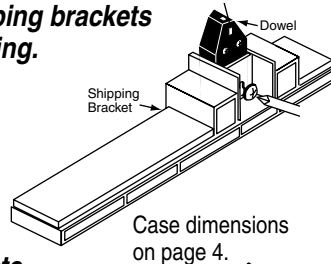
These instructions are meant as a guide only. They do not imply any responsibility on the part of the manufacturer for improper installation or faulty workmanship at the jobsite.

Hanging Unit

When locating background and checking clearance for unit's operation, remember surface is centered in the length of the case. Unit is normally recessed above ceiling with the motor on the left (as the audience sees the background). For reverse roll backgrounds, install headbox with motor on the right. See typical installations detailed on page 3 of this sheet. Regardless of mounting method used, the following points apply:

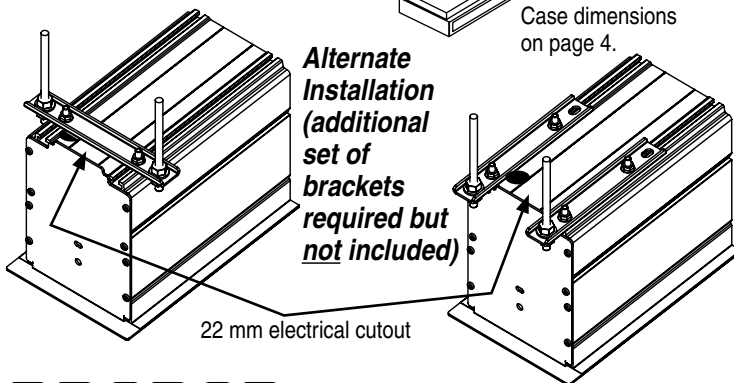
- ① Mounting brackets are packed separately in carton. Engage each bracket with top of housing as shown below and tighten set screws. Bracket should be within 203 mm from each end of case. Brackets can be removed and case mounted with lag screws through top of case (holes drilled on site).
- ② Unit should be positively and securely supported so that vibration or even abusive pulling on background will not weaken installation.
- ③ Installer must insure that fasteners used are of adequate strength and suitable for the mounting surface chosen.
- ④ Entire bottom of case must be readily accessible after installation is complete.
- ⑤ The bottom access panel, trap door, and lower edge of the case are joined with continuous hinge joints and must operate freely. Front and back of case must be straight—not forced to warp or bow. Hinge joints must be free of mastic or paint build up, and trapdoor and access panel must be unobstructed by ceiling tiles.
- ⑥ If case is painted on location, removal of roller/fabric assembly is recommended prior to painting. If not removed, slots on bottom of case

Remove shipping brackets before operating.



Slots along top of case permit brackets to be set at an angle

Typical Installation



US Patent Nos. 5,341,241; 6,137,629; 6,421,175; 6,532,109; 6,816,308; 7,559,707

- should be shielded to protect background from paint splatters or overspray.
- ⑦ Do not seal unit in ceiling until electrical connections have been made and screen has been operated successfully.

Electrical Connections

Unit operates on 220V, 50 Hz., 1 ph current.

Junction box is located just above the bottom access panel at the left end of the unit.

Open the access panel/trap door for access to the junction box cover. (See bottom access panel/trap door opening and closing instructions below). Remove two (2) hex head screws that secure the cover to the junction box to expose the brown, black, and blue pigtail leads and the green ground wire per wiring diagram on page 3.

If optional low voltage control is specified and factory installed, please refer to wiring diagrams on page 4.

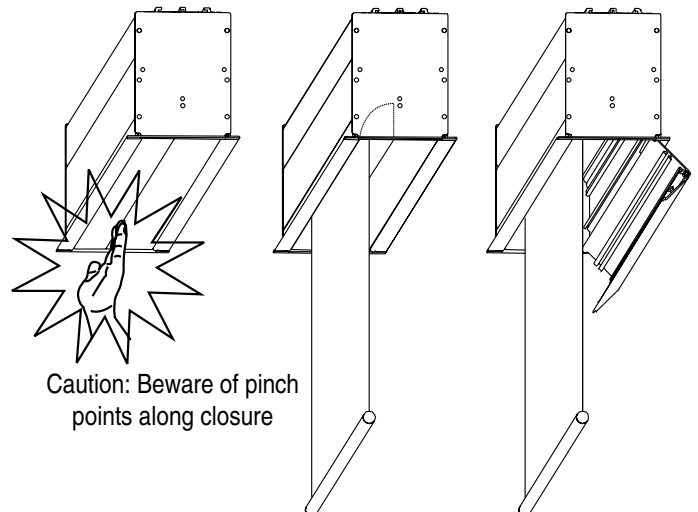
Unit is shipped with internal wiring complete and control switch(es) fully boxed. Wire to connect unit to switch(es) and switch(es) to power supply should be furnished by installer. Connections should be made in accordance with attached wiring diagram, and wiring should comply with national and local electrical codes.

All operating switches should be "off" before power is connected.

Bottom Access Panel/Trap Door Opening & Closing

After case has been mounted, remove the dowel shipping brackets from dowel if provided. **A spring latch at each end of the trap door holds this assembly closed. In some units there will also be a spring latch near the center of the case.** To gain access to the inside of the case, disengage spring latch at each end of the case (and near the center of the case, if applicable) by sliding the latch lever towards the center of case, then pulling down slightly on the trap door assembly. The latch levers are somewhat concealed from view. Locate these with the trap door open by feeling for the vertical latch lever above the door about 76 mm from case endcaps and near the center of the case.

The assembly will swing down, opening about 135°. Pivot the prop arms at each end of the trap door assembly towards the ends of case. Prop arms engage with a hole in each endcap to hold the trap door assembly fully open. To close the trap door assembly disengage prop arms from endcaps and pivot these over the access panel. Swing the trap door assembly upward, stopping just before the latch levers hit the bottom flanges of the endcaps (and center of case where appropriate). Pull levers of latches towards center of case to allow the trap door assembly to be pivoted to its closed position. Make sure that the spring latch levers engage fully with case endcaps (and center of case where appropriate).



Suitable for use in environmental air space in accordance with Section 300-22(c) of the National Electrical Code, and Sections 2-128, 12-010(3) and 12-100 of the Canadian Electrical Code, Part 1, CSA C22.1.

If you encounter any difficulties installing or servicing your VCB Ultimate Access, call your dealer or Draper, Inc., in Spiceland, Indiana, 765/987-7999 or fax 765/987-7142.

DRAPER

Motorized Roller/Fabric Installation

The bottom access panel/trap door assembly must first be opened and placed in fully opened position.

The motor end mounting bracket has a metal bracket with snap ring for accepting motor head. Back out the four set screws in bracket until they are flush with top side of bracket.

To engage the motor end bracket flange above the two channels in the top of the housing, rotate the bracket approximately 45° counterclockwise to allow the top surface of the motor bracket to rest flat against the top inside of the housing. Rotating the bracket clockwise until it is engaged with the channels, slide it along the length of the housing against the electrical junction box.

Engage the idler end bracket (rectangular mounting pad) in the same manner as the motor end bracket and slide it toward the opposite end of the housing.

Do not tighten the set screws on the brackets until the roller/fabric assembly is installed, and centered in the case.

Locate the black washer and retaining clip.

Note: This will require two people to perform safely. Raise the roller/fabric assembly up into the housing and **engage the head of the motor completely into the motor mounting bracket, making sure the snap ring engages with the motor** and that the limit switch adjusting knobs are visible from the bottom of the housing.

While supporting the idler end of the roller, slide the idler end mounting bracket toward the roller. Insert the roller pin into the nylon bushing on the idler end mounting bracket.

The roller idler pin needs to go through the idler bracket far enough to allow the washer and retaining clip to be reinstalled on the pin.

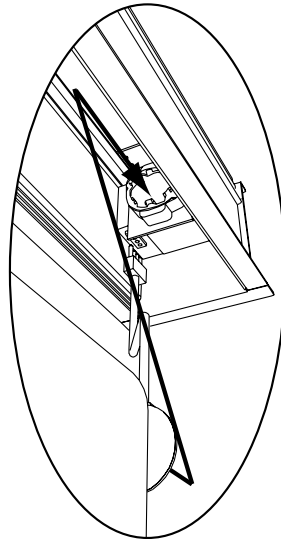
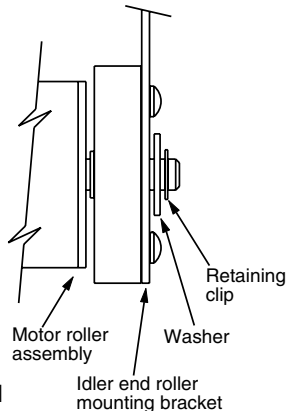
Failure to replace the washer and retaining clip as shown could result in the separation of the roller from the brackets.

The roller/fabric assembly and roller brackets may need to be slid left or right in mounting channel of case to center fabric within case.

Securely tighten the set screws on the roller mounting brackets.

Connect the electrical plug from the motor to the mating socket on the junction box.

Close the bottom access panel/trap door as previously described.



Motorized Roller/Fabric Removal

Reverse the instructions above "Motorized Roller/Fabric Installation" for removal of the unit.

Operation

When unit is first operated, **be cautious!** Cycle unit down and up several times to confirm satisfactory operation.

110-120V SINGLE STATION CONTROL—3-position UP-OFF-DOWN switch permits operation to be stopped at any point. Factory adjusted limit switches automatically stop background when fully down or fully up.

110-120V MULTIPLE STATION CONTROL—Switches are similar in appearance to 110-120V Single Station Control. Background stops when switch is released and may be restarted in either direction. Factory adjusted limit switches stop background automatically when fully down or fully up.

24V MULTIPLE STATION CONTROL—Three-button UP-STOP-DOWN switches stop at any point desired, operate in any sequence. Factory adjusted limit switches automatically stop background when fully down or fully up.

KEY OPERATED SWITCHING—Two kinds of key-operated switches are optionally available with this unit. ① The key-operated power supply switch controls power to unit and switches. When it is "off", the switches will not operate unit. Key may be removed from the switch in either "on" or "off" position. ② A three-position key switch permits unit to be operated directly by key. In this case, the unit operator must always have a key.

RS232/Ethernet—Serial communication and network communication optionally available with wall switches, RF or IR remote.

Limit Adjustments

Please Note: Limits are factory set for optimum performance of the background. A procedure is outlined below for minor tweaks, but any adjustment of these limits may negatively affect the flatness of the background and could also void the warranty. Please check with Draper prior to resetting the limits.

⚠ CAUTION: Always be prepared to shut off manually when new adjustment is being tested. Unit may be severely damaged if background is allowed to run too far up or too far down.

⚠ CAUTION: Be sure all switches are in "off" position before adjusting limit switches.

The motor limit screws are normally located on the audience left of background roller.

"DOWN" LIMIT ADJUSTMENT

To Reduce Background Drop

- ① Raise background about 305 mm above desired setting and turn off.
- ② Turn the WHITE/DOWN limit screw clockwise (three screw turns = ½ roller revolution).
- ③ Test by running background down and repeat steps 1 and 2 until desired position is reached.

To Increase Background Drop

- ① Run background to the down limit.
- ② With the down switch on, turn the WHITE/DOWN limit screw counterclockwise (3 turns of screw equals ½ roller revolution) to increase drop.
- ③ Test by running background up about 305 mm and back down to new down limit.
- ④ Repeat steps 2 and 3 until desired position is reached.

"UP" LIMIT ADJUSTMENT

Background is Running Too Far Up

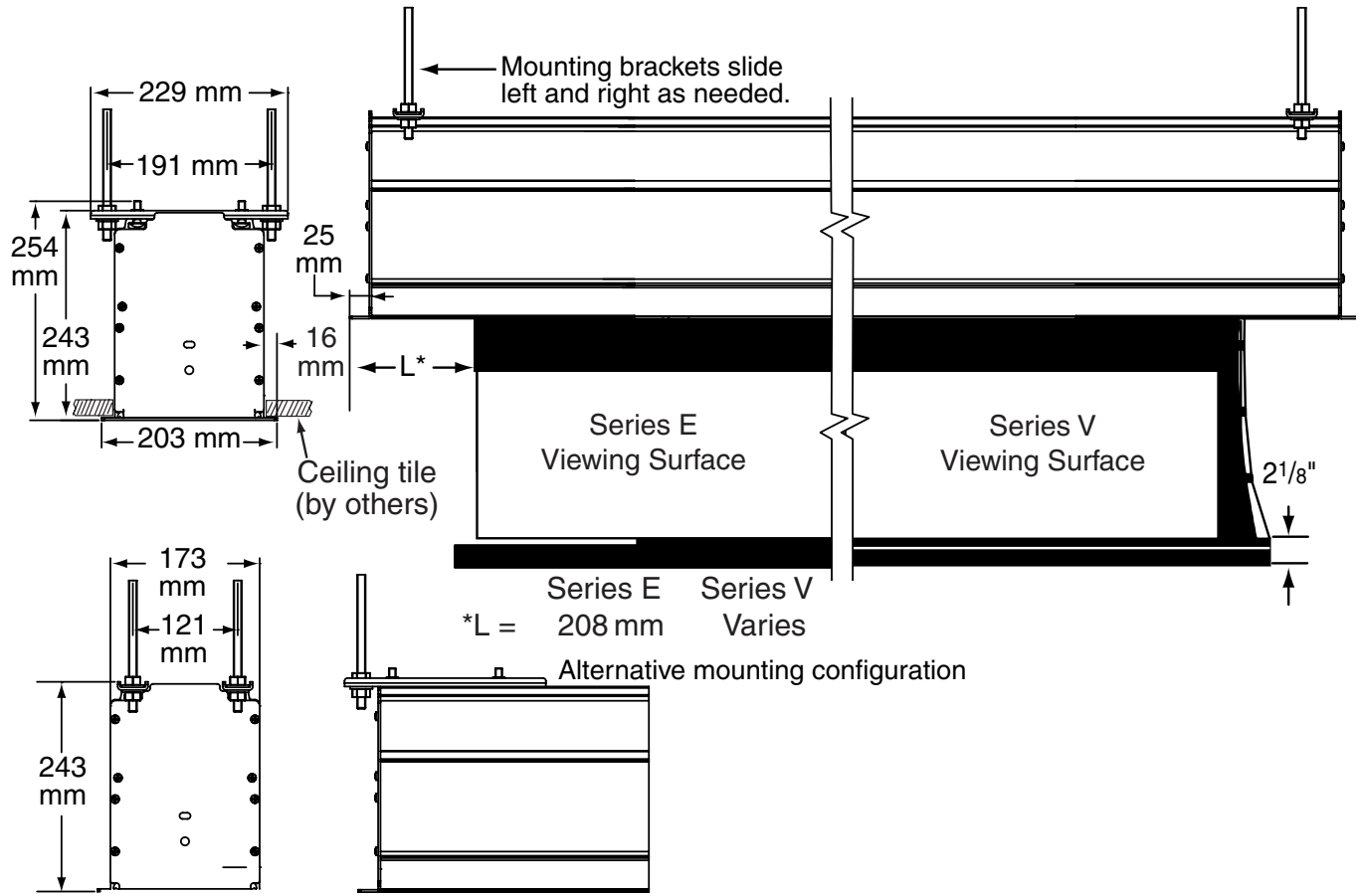
- ① Lower background about 305 mm below desired setting and turn off.
- ② Turn the YELLOW/UP limit screw clockwise (three screw turns = ½ roller revolution).
- ③ Test by running background up.
- ④ Repeat steps 1 through 3 until desired position is reached.

Background Needs to Run Up More

- ① Run background down about 305 mm and turn off.
- ② With the up switch on, turn the YELLOW/UP limit screw counterclockwise (three turns of screw = ½ roller revolution).
- ③ Repeat steps 1 and 2 until desired position is reached.

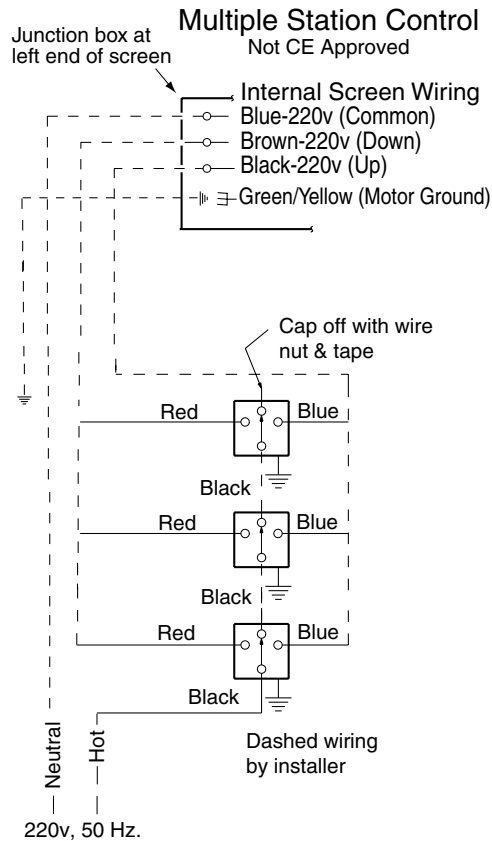
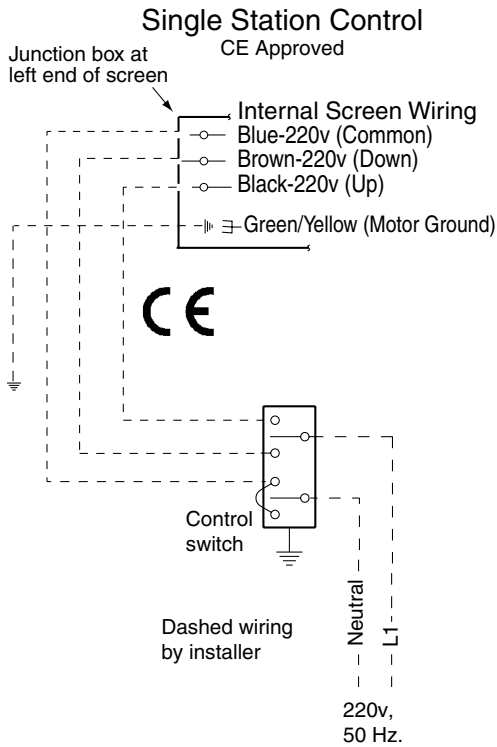
CAUTION: Do NOT allow the dowel to wrap up over the roller when the background is running up! This could damage the unit.

Case Dimensions

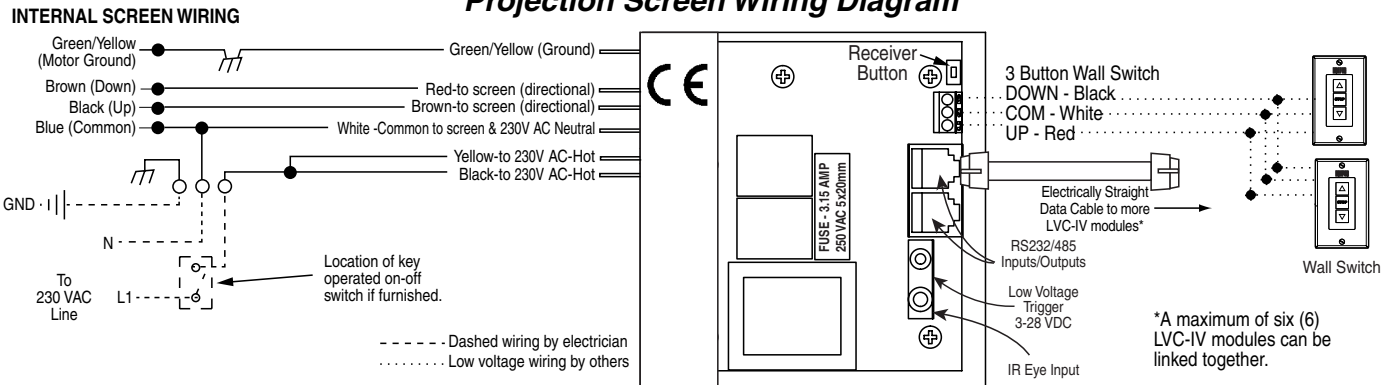


Wiring Diagrams

Please Note: Do not wire motors in parallel.



Built In LVC-IV - Single or Multiple Projection Screen Wiring Diagram



External LVC-IV - Single or Multiple Projection Screen Wiring Diagram

