# **Installation/Operating Instructions**

# **Ambassador Electric Projection Screen by Draper**

### $ilde{\mathbb{A}}$ Caution

- ① Read instructions through completely before proceeding.
- ② Follow instructions carefully. Installation contrary to instructions invalidates warranty.
- ③ Entire bottom of screen case should be unobstructed to permit proper operation of automatic trap door, and access to bottom panel for making electrical connections or servicing.
- Screen should be installed level (using a carpenter's level).
- ® Nothing should be fastened to screen dowel, viewing surface or automatic trap door.
- 6 Do not touch screen while in motion.
- ⑦ Operating switch(es) packed separately in screen carton. Do not discard with packing material.
- ® Screen operates on 110-120v, 60 hz., .78 amp draw.

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

#### Hanging Screen

#### General:

When locating viewing surface and checking clearance for screen operation, remember surface is *not* centered in case; it is offset to audience's right (see drawing on back). Normally viewing surface, not case, should be centered in room

Screen is normally recessed above ceiling and may be installed in a variety of ways. See typical installation detailed on back of this sheet. Regardless of mounting method used, the following points apply:

- ① Screen should be positively and securely supported so that vibration or even abusive pulling on viewing surface will not weaken installation.
- ② Installer must insure that fasteners used are of adequate strength and suitable for the mounting surface chosen. Screen must be level for satisfactory operation. Use carpenter's level.
- ③ Entire bottom of case must be readily accessible after installation. (Operating door must be free to open; access door must open to permit electrical connections and limit switch adjustment; semi-permanent bottom panel must be removable in case fabric replacement is ever required.)
- 4 Hinge on bottom board and particularly hinge on automatic trap door of screen must be permitted to operate freely. Front and back of case must be straight—not forced to warp or bow. Hinges must be free from mastic or paint buildup, and doors must be unobstructed by ceiling tiles.
- ⑤ Do not use screen case to support adjacent sections of ceiling.
- ⑥ If trim pieces must be attached to case, do not permit screws to protrude through ¾" wall of case. Do not attach trim with nails.
- ② Extended hinges are available to allow gluing of ceiling tile when recessed.
- ® If case is painted, slots around doors should be shielded to protect viewing surface from paint splatters or overspray.
- Do not seal unit in ceiling until electrical connections have been made and screen has been operated successfully.

#### **Electrical Connections**

Screen operates on 110-120V, 60 hz., .78 amp draw.

Junction box for electrical hook-up is located at left end of screen and may be exposed by opening access door and removing box cover.

Removal of junction box cover plate exposes red, black and white pigtail leads and green internal ground wire per wiring diagram on reverse.

Screen is shipped with internal wiring complete and control switch(es) fully boxed. Wire connecting screen 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.

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#### Operation

When screen is first operated, be cautious! If automatic trap door does not drop open immediately when switch is flipped "down", return switch to "off" and free trap door and/or recheck electrical connections before proceeding. 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 screen when fully down or fully up.

**110-120v Multiple Station Control**—Switches are similar in appearance to 110-120v Single Station Control. Screen stops when switch is released and may be restarted in either direction. Factory adjusted limit switches stop screen automatically when fully up or fully down.

**24v Control** — Three-button up-stop-down switches stop at any point desired, operate in any sequence. Factory adjusted limit switches automatically stop screen when fully up or fully down.

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 the screen and switches. When it is "off", the switches will not operate screen. Key may be removed from the switch in either "on" or "off" position. ② A three-position key switch permits the screen to be operated directly by key. In this case, the screen's operator must always have a key. \*RS232/Ethernet\*—Serial communication and network communication optionally available with wall switches, RF or IR remote.

#### Adjustments

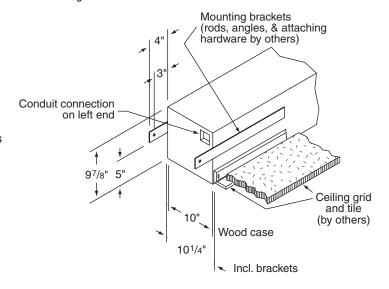
Screen has been factory set and should not normally require further adjustment. However, if you desire to change the "up" and "down" stopping positions, proceed as follows:

**CAUTION:** Be sure all switches are in "off" position before adjusting limit switches. Always be prepared to shut screen off manually when new adjustment is being tested. Screen may be severely damaged if viewing surface is allowed to run too far up or too far down.

**Adjusting "fully up" position**—"Up" limit switch is located on bracket at left end of operating door. Raising switch slightly will permit door to close farther; lowering switch will cause door not to close as far.

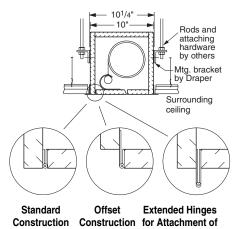
**Adjusting "fully down" position** — "Down" limit switch is located on left side of limit switch assembly immediately behind access door on left end of case. Left hand, hex head machine screw contacts limit switch button to shut screen off in "Down" position. Turning this machine screw clockwise will allow viewing surface to run farther down before stopping. Turning it counterclockwise will cause surface to stop in a less extended position.

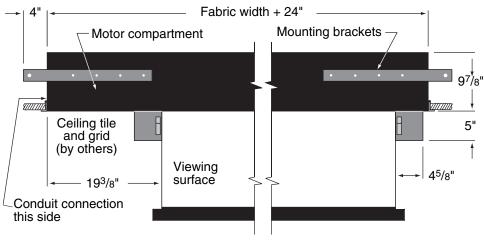
At no time should viewing surface be unrolled far enough to expose any part of screen roller. Be sure nut on machine screw is tight against steel plate before closing access door.



Ceiling Tile (Wt. not to exceed 16 oz. per sq. ft.)

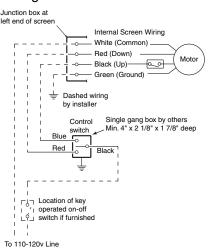
## Case Dimensions



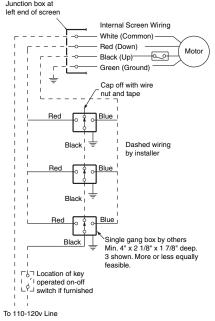


# Wiring Diagrams

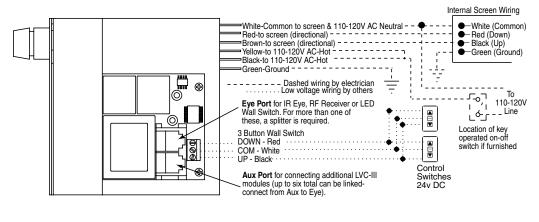
### Single Station Control



### Multiple Station Control



# Low Voltage and Remote Control



# Two-Way Serial Communication (RS232) with MC1

See separate Serial Communication RS232 Instruction sheet for enabling RS232 with the MC1.

