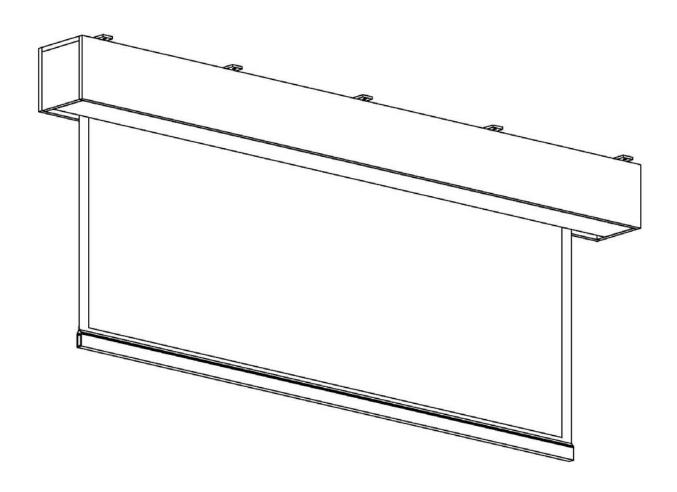
# **Installation Instructions**

# LARGE SCREEN SERIES

# LECTRIC 2-C MDF SINGLE MOTOR 120VAC OR 220VAC





# IMPORTANT SAFETY INSTRUCTIONS

Basic safety precautions should always be followed; including the following:

- **♠** Read and understand all instructions before proceeding with the installation and operations.
- **♠** Be certain that the supporting structure is sound and capable of carrying the weight as required.
- **▲** Seek qualified electricians to perform electrical requirements.
- **♠** This permanently connected projection screen must be protected by a fuse or circuit breaker. Make sure that there is a readily disconnect device incorporated on the building installation wiring.
- **♦** Obtain proper lifting mechanism to raise and hold the unit steady for installation.
- **♦** Plan ahead so the installation can go smoothly and efficiently.



### IMPORTANT WARNINGS AND CAUTIONS!



WARNING: A WARNING ALERTS THE POSSIBILITY OF SERIOUS INJURY OR DEATH IF THE INSTRUCTIONS ARE NOT FOLLOWED.



CAUTION: A CAUTION ALERTS THE POSSIBILITY OF DAMAGE OR DESTRUCTION OF EQUIPMENT IF THE INSTRUCTIONS ARE NOT



WARNING: FAILURE TO READ, THOROUGHLY UNDERSTAND, AND FOLLOW ALL INSTRUCTIONS CAN RESULT IN SERIOUS PERSONAL INJURY, DAMAGE TO EQUIPMENT, OR VOIDING OF FACTORY WARRANTY! IT IS THE INSTALLER'S RESPONSIBILITY TO MAKE SURE ALL COMPONENTS ARE PROPERLY ASSEMBLED AND INSTALLED USING THE INSTRUCTIONS PROVIDED.



WARNING: FAILURE TO INSTALL ELECTRICAL REQUIREMENTS ACCORDING TO NATIONAL/LOCAL ELECTRICAL CODES AND REGULATIONS MAY CAUSE PREMATURE FAILURE, FIRE HAZARD, ELECTRICAL SHOCK, UNSAFE PRACTICE AND REVOCATION OF USE.

#### DISCLAIMER

Vutec Corporation intends to make this manual accurate and complete. However, Vutec 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 for use of this product. The information contained in this document is subject to change without notice. Vutec makes no representation of warranty, expressed or implied, regarding the information contained herein. Vutec assumes no responsibility for accuracy, completeness or sufficiency of the information contained in this document.

#### **PRE-INSTALLATION**

- 1) Carefully cut and remove packing materials.
- 2) Carefully unpack and inspect the unit for sign of damages.
- 3) Be sure to recheck and measure all pertinent dimensions before installation.
- 4) Most basic tools are required for installation.

# **SAVE THESE INSTRUCTIONS**

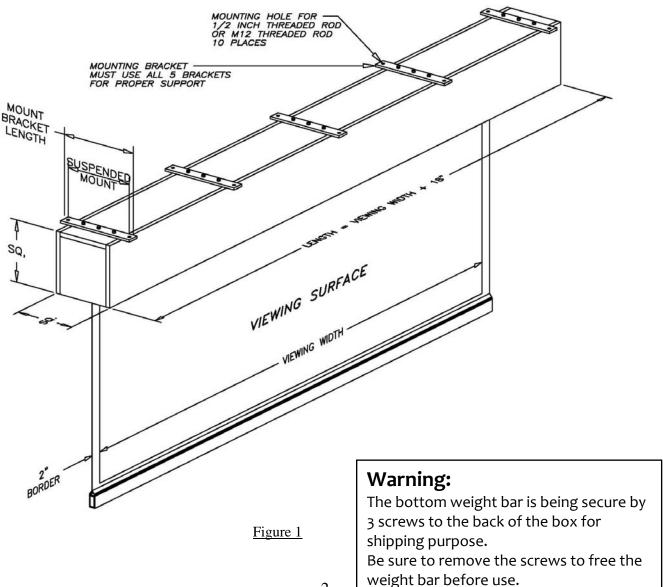
### **MECHANICAL INSTALLATION**

The LECTRIC 2-C MDF large screen series weight approximately 300lbs to 550lbs depending on the size of the screen (200" to 285" diagonal). Carefully determine the lifting and transporting methods for bringing the screen to the mounting location.

Warning: The mounting location must be structurally sound, rigid and capable of carrying at least 4 times the weight of the screen. Safety cable attachment is strongly recommended for additional security.

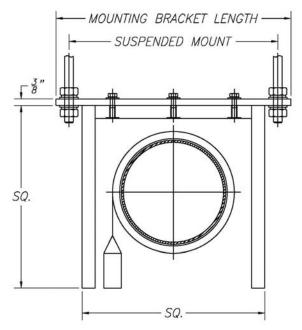
As shown in Figure 1, there are five mounting brackets for the screen. Use 1/2 inch or 12mm diameter threaded rods (not supplied) to hang the screen. The spaces between the brackets are varied according to the size of the screen; to be sure, take measurements from actual unit.

Note: The two end brackets are tied to the screen roller brackets inside. These two brackets must be used to install the screen.



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Profile dimensions shown in figure 1 vary according to the size of the screen ordered, see figure 2 below:



ROLLER	SQ.	SUSPENDED MOUNT	MOUNTING BRACKET LENGTH
4½"	92"	11"	122"
6"	102"	12"	13½"
8"	13"	14½"	16"

Figure 2

# **ELECTRICAL CONNECTIONS**

- 1. Be certain the power is *OFF* before making electrical connections. All wiring are required to comply with National and/or Local electrical codes and regulations.
- 2. The standard LECTRIC 2-C MDF screen operates on 120VAC, 60Hz power supply. Control of the screen is usually by a SPDT toggle switch with center 'OFF' position. Optionally, an IR (Infrared) or RF (Radio Frequency) remote control or 12VDC-trigger relay can also operate the screen. Please consult the dealers for details.

**Note:** The switch's contacts or relay's contacts must meet the minimum specification below. Contact Rating: 10A @ 120VAC, 6A @ 250VAC, 1/4 HP.

3. Refer to the Wiring Diagram at the end of this manual and make connections as required. All wiring should be made using a minimum 18-gauge wire.

For installations with 220VAC motor, the equivalent wire colors for the motor are as follow:

120VAC motor	220VAC motor	Description
Green	Yellow/Green	Ground
White	Blue	Neutral
Red	Black	Screen up direction
Black	Brown	Screen down direction

For any 220VAC installation that equipped with a 120VAC motor, a step down transformer is provided for this application. Simply follow the Wiring Diagram and connect the transformer as shown. Be sure to place the transformer in a safe and well-ventilated location.

### FOR UNITS WITH 4 1/2" ROLLER OR 9 1/2"SQ PROFILE

#### UPPER LIMIT ADJUSTMENT

The upper limit for the screen is when the bottom weight bar stop just inside the housing. Do not change the screen upper limit unless absolutely necessary.

#### LOWER LIMIT ADJUSTMENT



WARNING: UNLESS OTHERWISE SPECIFIED AND ORDERED, STANDARD LEADER DROP IS 12 INCHES MAXIMUM. EXCEEDING THE MAXIMUM MAY CAUSE THE SCREEN TO FALL OFF THE ROLLER AND VOID THE WARRANTY.

#### **HEX SOCKET LIMIT SWITCH**

Key features of the hex socket (Figure 6) limit switch:

- ⇒ Each full turn (360 degrees) of the hex socket cause the screen to travel approximately 3/4 inch.
- ⇒ Follow the label affixed to the electrical cover plate for turning of the hex sockets.
- ⇒ As the hex socket is turning, the screen will move only in the direction of increasing travel. Hint: Going down direction (lower limit) will see the screen move as more down being adjusted but not the opposite.

#### MORE SCREEN DROP

Send the screen down to the lower limit and it should stop automatically. Leave the control switch on. Turn the White hex socket in the + direction (see label on electrical cover plate) to make the screen come down more. Stop turning when the screen reaches the desired lower limit.

#### LESS SCREEN DROP

Send the screen down to the lower limit and it should stop automatically. Leave the control switch on.

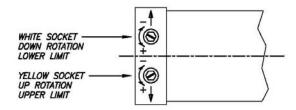
Determine the number of turns required to stop the screen above the desired lower limit.

Turn the White hex socket in the - direction the number of turns that has been determined to make it stop above the desired lower limit.

Send the screen up half way and stop. Send it down and expect it to stop above the desired lower limit.

Repeat until the screen has stopped above the desired lower limit.

When the screen stops above the desired lower limit; proceed to *MORE SCREEN DROP* part to lower the screen to the desired lower limit.



USE 5/32 (4mm) HEX KEY TO TURN OR SMALL FLAT BLADE SCREWDRAIVER

Figure 3
Limit Switch Sockets

# FOR UNITS WITH 6" AND 8" ROLLER OR 10 1/2" AND 13"SQ PROFILE

# **OPERATIONS**

Refer to Figure 4, the Upper and Lower limit switches are built-in motor limit switches and have been preset at the factory. Remove the yellow protective cap and check that both the yellow and white buttons are out. The **white** button controls the Lower limit of the screen. The **yellow** button controls the Upper limit of the screen.

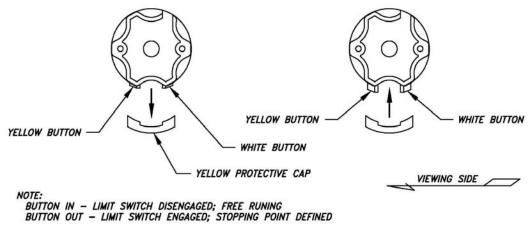


Figure 4

It is important that the first cycle up and down of the screen be performed under control of an attendant. The motor limit switches might have become disengaged during shipping and may not stop the screen automatically resulting in damage to the screen.

- 1 Send the screen down to its lower limit, observing the screen roller as it unwraps the screen fabric. The screen should stop at the correct amount of leader specified or approximately 12 inches for standard leader. If the screen stop as conditions mentioned, skip to step 3.
- 2 If the screen continues to operate past the conditions mentioned, stop the screen and do not let it go into reverse wrapping. Send the screen up and stop when the leader disappears into the roller. Send the screen down and stop at the amount of leader desired. Press the **white** button to set it in, press again to bring it out. The screen lower limit is defined.
- 3 Send the screen up, observing the screen fabric as it being takes up by the screen roller. Stop when the screen bottom just rolls up inside the screen housing and disappears from normal viewing location. Press the **yellow** button to set it in, press again to bring it out. The screen upper limit is defined.
- 4 Test run the screen up and down again to ensure proper operations, replace the yellow protective cap of the limit switches.

**NOTE**: The motor is protected by a Thermal Overload device! Operate the screen too often without allowing sufficient off time could result in the thermal overload becomes engaged. If this occurs, the motor will shut down for cooling off until enough time has passed for it to return to normal operating temperature (approximately 15 minutes).