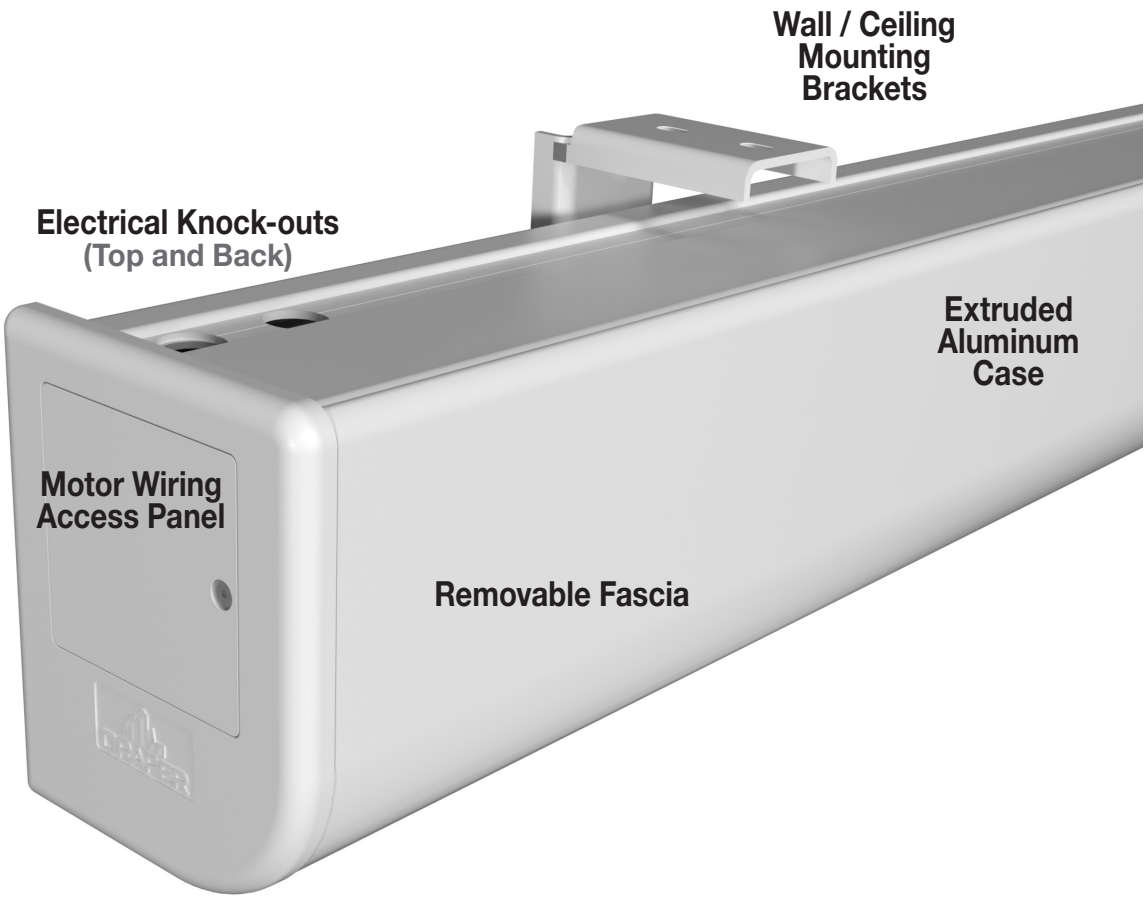
Acumen™ Recharge E & V

Battery operated electric projection screen

INSTRUCTIONS
INSTALLATION & OPERATION

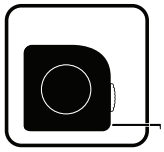
Overview - **Components**

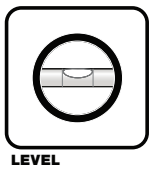


TOOLS REQUIRED

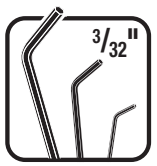

PENCIL


POWER DRILL


TAPE MEASURE


LEVEL


HARDWARE (by others)



HEX WRENCH

⚠ CAUTION ⚠

Read and understand all warnings *(Page 2 of this document)* ***before beginning installation.***

Contents

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BACK PAGE ***- Wall & Ceiling Bracket Dimensions for Mounting***

If you have any difficulties installing or servicing your Acumen, call your dealer or Draper, Inc.

DRAPER®

Draper, Inc. | 411 S. Pearl St. Spiceland, IN 47385
draperinc.com | 765.987.7999 | 800.238.7999

© 2020 All Rights Reserved | **FORM: AcumenRC_E_V_Inst20**

PLEASE READ - **Safety Information**

Important Safety Information ⚠ WARNING ⚠ *Important Safety Information*

Improper installation and use of the Acumen screen can result in serious injury or death. Primarily, injuries can occur if the unit falls due to imprecise installation, mishandling of the unit during installation, or installation on an insufficient wall or ceiling structure. Please use extreme care.

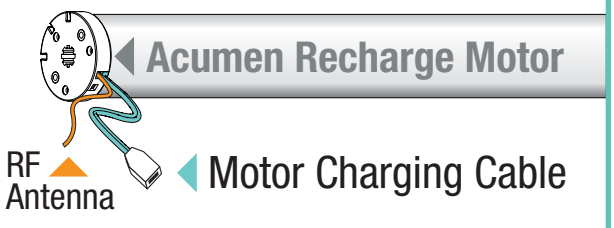
1. Please read the following installation guidelines thoroughly and follow them carefully. Failure to do so may cause product to fall or otherwise fail, and could result in serious injury.
2. Installation and calibration of the unit should only be performed by an authorized, qualified, and experienced professional. In particular, electrical work and wiring [indicated in diagram by dashed lines] must be completed only by a qualified professional electrician who has read this manual completely and is familiar with the construction and operation of this equipment and the hazards involved.
3. Do not affix the unit to walls or ceilings that have inadequate strength to permanently hold the unit during use. It is the owner's and installer's responsibility to confirm the wall or ceiling to which the unit attaches is sufficient to permanently hold the weight and stress loads of the unit at all times. Draper, Inc., is not responsible for improper installation, application, testing, or workmanship related to the product at place of installation.
4. It is the installer's responsibility to make sure appropriate fasteners are used for mounting.
5. All hardware must be installed level. Unit must be level and square.
6. Never leave the area while operating the unit during installation, maintenance, or normal operation, unless it is secure and safe.
7. Before testing or operation, carefully inspect the entire area and path *(especially underneath)* of unit to be sure no persons or objects are in the area.
8. Turn off power and any nearby equipment or cables carrying electricity before connecting switches, wires, controls, or electrical components.
9. Do not wire motors in parallel without written permission from Draper, Inc.
10. During testing or operation, carefully watch the surrounding area for any potential safety concerns including nearby persons or objects.
11. After installation, the entire system, including all sensors, should be carefully tested to ensure safe and normal operation. Extreme care should be taken during testing to remain clear of moving parts to avoid possible injury.
12. Operation of unit should be performed only by authorized and qualified personnel, who have been trained in its safe and effective operation and understand its safety features.
13. The safety features of the unit should never be disabled, bypassed, or overridden. The system should not be operated until all safety features are properly and completely installed, calibrated, and tested.
14. Unit may need to comply with local, state, or district rules and regulations, in particular when installed in schools. All applicable rules and regulations should be reviewed before installation and use.
15. **Failure to precisely follow installation guidelines invalidates all warranties.**
16. Custom products/installations may not be reflected in this manual. Call Draper, Inc., if you have questions about the installation of custom products or any questions about your installation.

Before Beginning Installation

1. Look for any job site conditions that could interfere with installation or operation of the system.
2. Read carefully and be sure to understand all installation instructions and all related operations manuals. These instructions are intended to serve as a guide for the installer and owner. They should be followed closely and combined with the expertise of experienced qualified installers. Draper, Inc., is not responsible for improper installation, application, testing, or workmanship related to the product at place of installation. Please retain all instructions for future use.
3. Open cartons lengthwise.
4. Locate and lay out all pieces.
5. Inspect all boxes to make sure you have received the proper unit and parts. Controls may be shipped separately, or in same carton as unit.
6. If you have any difficulties with installing, servicing, or operating your unit, call your dealer or Draper, Inc., 765-987-7999.

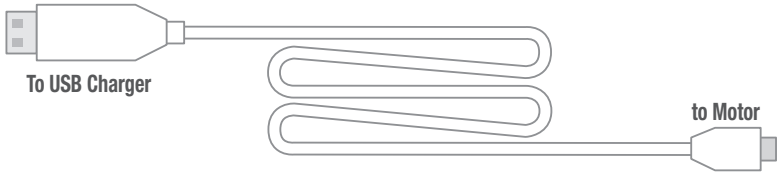
Section 1 - **Charging Motor**

Before first use please charge motor using the recommended AC charger.



Charging Accessories





12' (4M) Charging Cable - Part#: C107.126

If the motor beeps 10 times during operation, it needs to be charged.

Section 2 - **Fascia Removal**

MUST BE DONE PRIOR TO REMOVAL OF SHIPPING BRACKETS

To remove fascia:

1. Remove the screws from bottom lip at each end of the fascia using 3/32" hex wrench.
2. Lift fascia off of the top lip of the case spine extrusion.

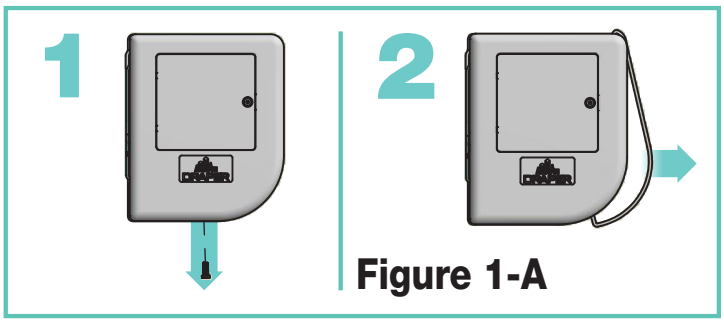


Figure 1-A

To install fascia:

1. Hook the top lip of fascia over the top lip of spine extrusion.
2. Push bottom edge of fascia towards the case spine.
3. Align holes in fascia with end cap holes and screw in the attachment screw using 3/32" hex wrench.

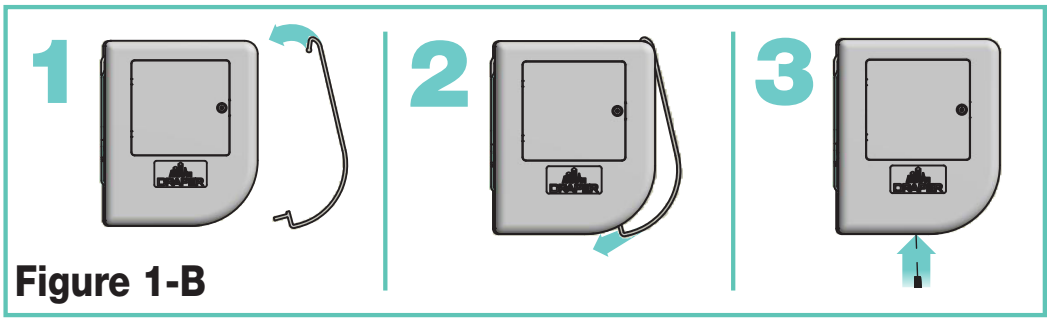


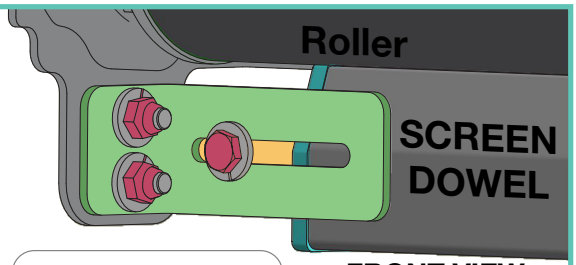
Figure 1-B

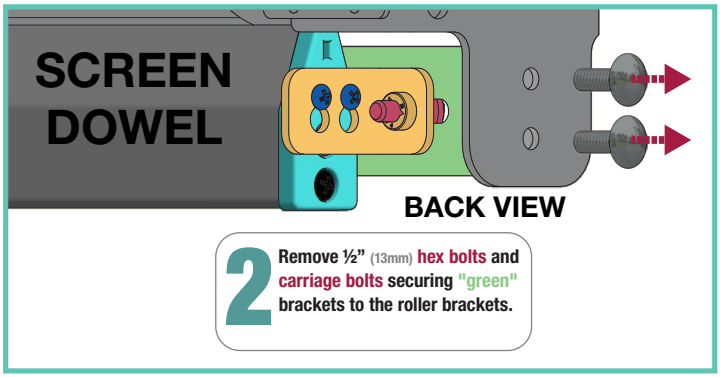
Section 3 - **Removing Shipping Brackets** *(Tab-Tensioned Screens Only)*

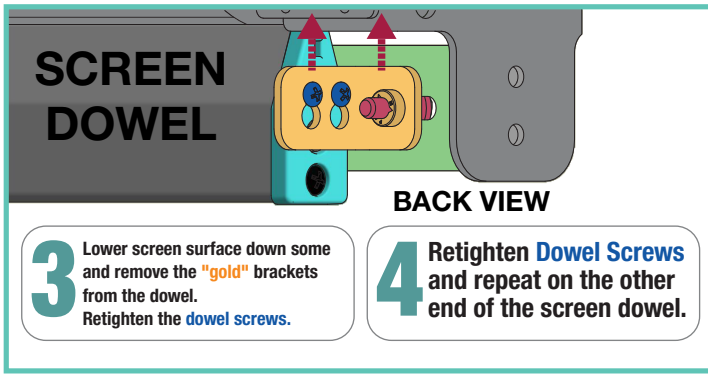
Screen should not be operated until after dowel shipping brackets are removed

Please Note: Before fully operating screen: lower viewing surface enough to fully expose shipping brackets, then remove shipping brackets See Fig. 2.

Figure 2







Section 4 - **Hanging Screen**

Section 4.1 - General:

1. Wall Mounting Brackets (minumum of 2) must be attached to the case regardless of mounting method.
2. Screen should be lifted into position only by case end caps. Keep case level by lifting case end caps simultaneously to prevent surface damage. Never attempt to lift screen along its length.
3. When locating viewing surface and checking clearance for screen's operation, remember surface is centered in case. Handle case carefully to protect its finish.
4. Regardless of mounting method, screen should be positively and securely supported so that vibration or even abusive pulling on viewing surface will not cause case to loosen or fall. Installer must ensure that fasteners used are of adequate strength and suitable for mounting surface chosen.

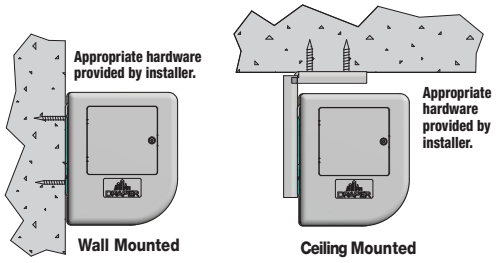


Figure 3

REFER TO DIAGRAM ON LAST PAGE OF MANUAL FOR WALL BRACKET DIMENSIONS

Section 4.2 - Wall Installation:

1. Secure the Mounting Brackets (minumum of 2) to the wall using appropriate hardware *(by others)*.

⚠ ***CAUTION:*** Product is very heavy: Installer must provide adequate attachment hardware and anchors as required. Installer must also ensure that structure is of adequate strength.

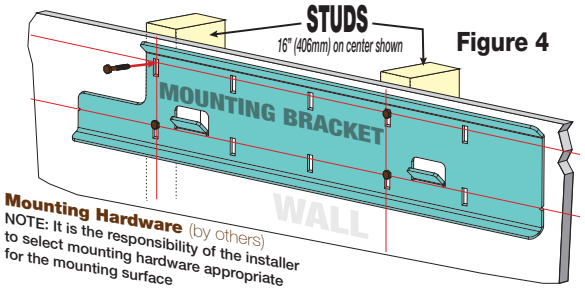


Figure 4

2. Ensure that mounting brackets are level.

3. Slide all Bracket Locks to the center of case.

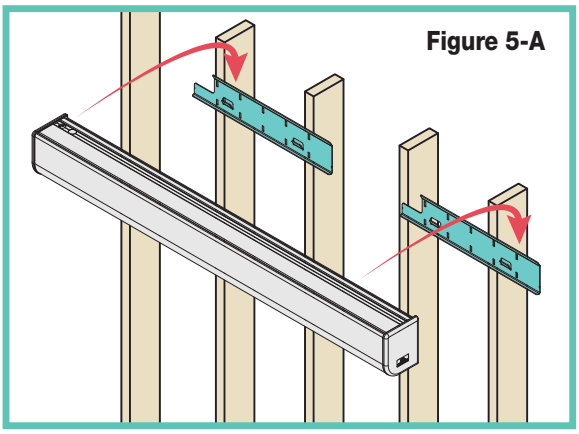


Figure 5-A

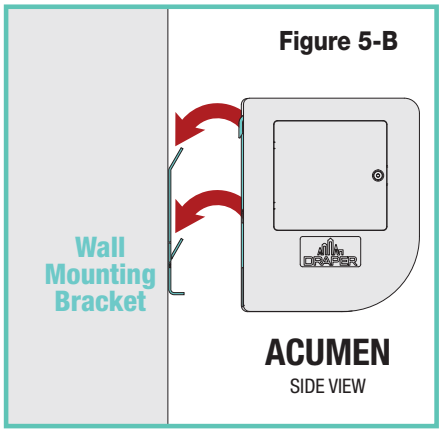


Figure 5-B

4. Holding the case by the endcaps, lift it up and over the cleats on the mounting brackets *(see Fig. 5)*. **Wall Bracket Mounting Channels are shown in Fig. 6 below.**

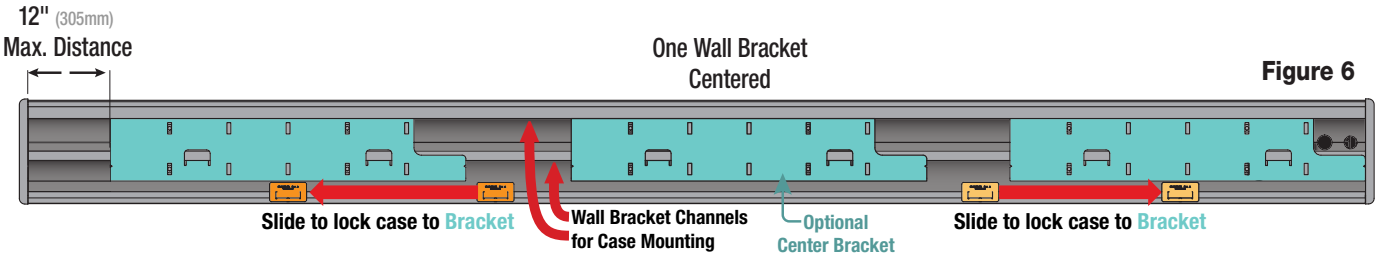
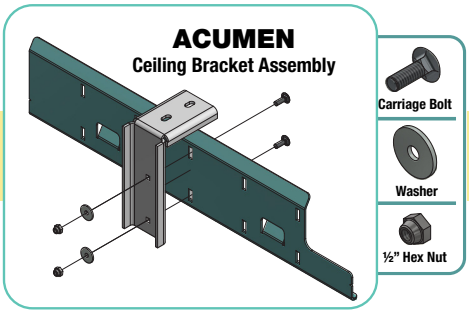


Figure 6

5. Once the case is settled on the mounting brackets, slide the Bracket Locks to the center of each mounting bracket *(see Fig. 6)* and secure set screw on the lock.

Section 4.3 - Ceiling Installation:

Ceiling Bracket Assembly



1. Attach Ceiling Brackets to Mounting Brackets using the provided hardware *(see figure at right)*.
2. Secure the Ceiling Brackets to the ceiling using appropriate hardware *(by others)*.

⚠ ***CAUTION:*** Product is very heavy:
Installer must provide adequate attachment hardware and anchors as required.
Installer must also ensure that structure is of adequate strength

3. Ensure that mounting brackets are level.

4. Slide all Bracket Locks to the center of the case.

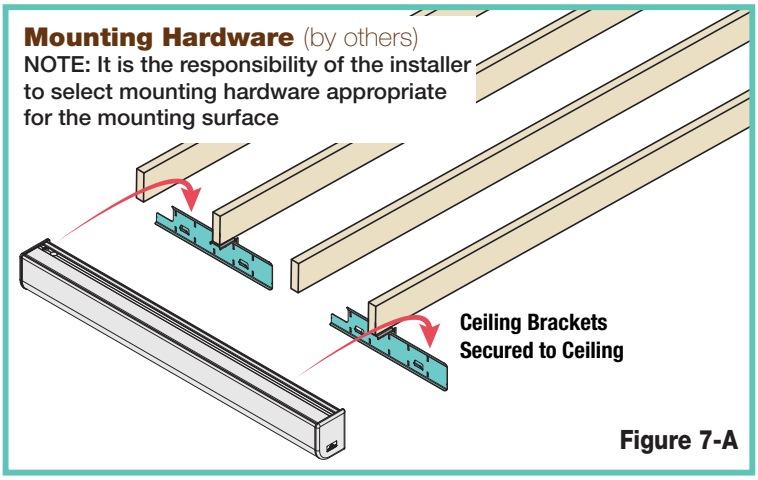


Figure 7-A

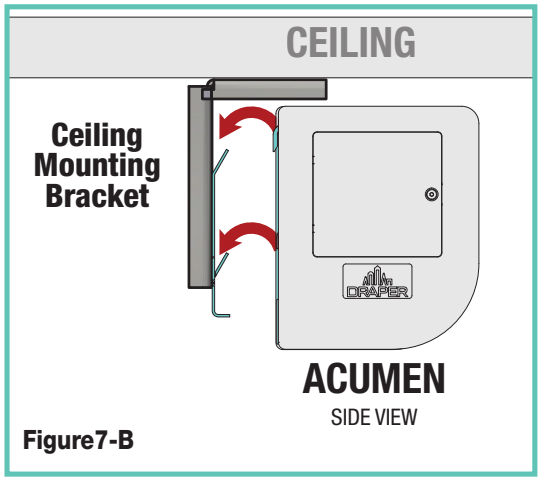


Figure7-B

5. Holding the case by the endcaps, lift it up and over the cleats on the mounting brackets *(see Fig. 7)*. **Wall Bracket Mounting Channels are shown in Fig. 8 below.**

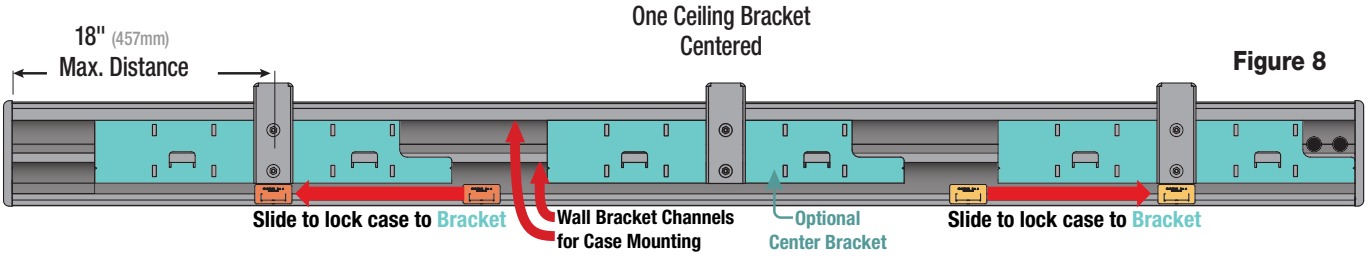


Figure 8

6. Once the case is settled on the mounting brackets, slide the Bracket Locks to the center of each mounting bracket *(see Fig. 8)* and secure set screw on the lock.

Section 5 - **Wake Up Motor** *(Exiting Sleep Mode)***e**

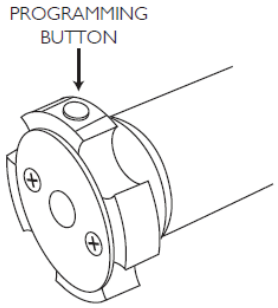
Each Acumen ReCharge battery motor will come preprogramed from Draper.
Upon leaving the factory the motor is placed into “Sleep Mode” to avoid accidental operation during shipping.
It is necessary to “Wake” the motor before operation and setup.

1. To “Wake” the motor and exit Sleep Mode assure the screen is mounted on the wall or ceiling.

2. Plug charging cable into motor and plug cable into a 110V wall outlet *(see Section 6 - page 6)*.

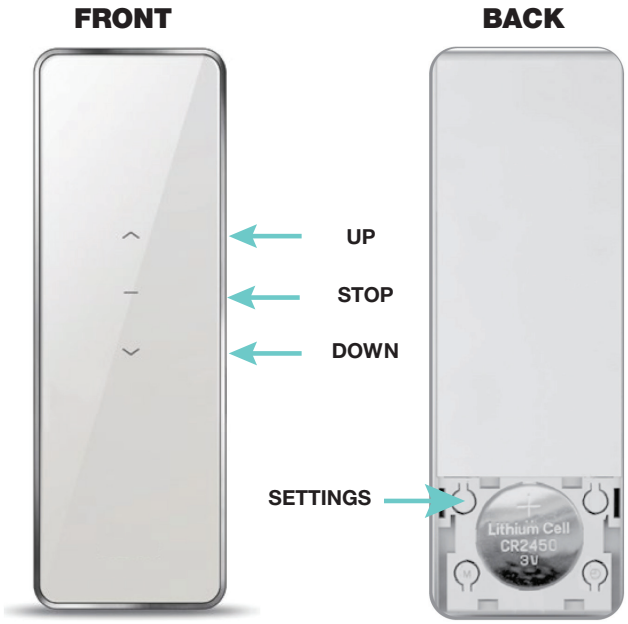
3. The motor is now no longer in “Sleep Mode” and ready for further setup.

Handheld remote will operate screen out of the box. Limits are set at the factory.



Please Note: Programming button will face down.

Section 6 - **Handheld Remote Control**



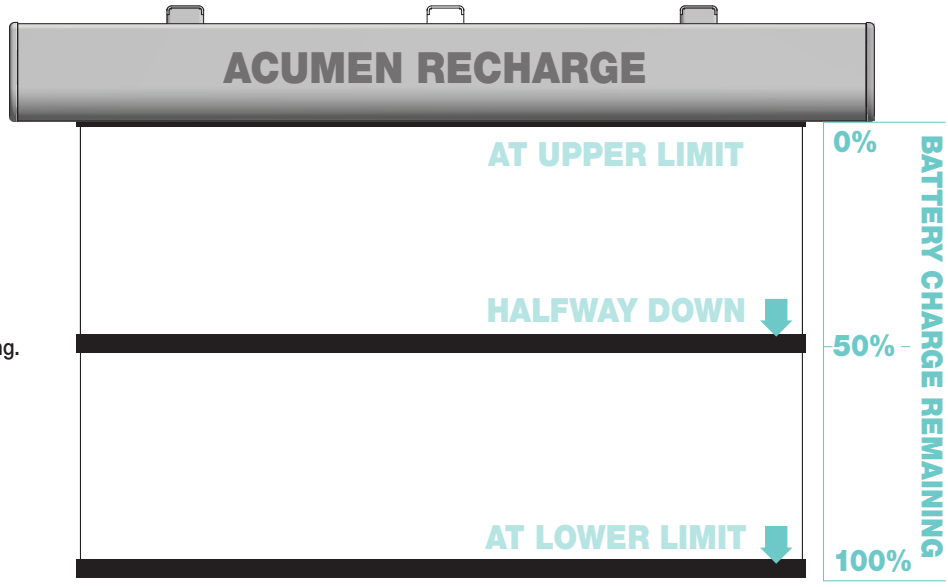
Section 7 - **Check Battery Charge Level**

1. Move screen to UPPER LIMIT/

2. Hold the UP button on the remote for 5 Seconds.

HOLD APPROX. **5 SECS**

3. Screen moves to percentage of battery charge remaining.



Section 8- **Set Motor Limits**

Move screen to desired highest or lowest position by pressing UP or DOWN buttons on controller.

OR

To save upper limit, hold both UP and STOP.

To save lower limit, hold DOWN and STOP.

⚠ ***Important:*** After setting limits, motor will automatically exit from initial programming mode.

⚠ ***Important:*** Cycle screen up and down prior to setting limits to settle fabric.

Motor Response: BEEP x3

Approx. 2 SECS JOG x2

Section 8.1 - Adjusting Upper Limit

Hold UP and STOP on controller. For 10-15 seconds screen will time out on remote: continue holding.

Motor Response: EXT. BEEP x1

Approx. 10-15sec JOG x1

Move screen to desired position by pressing UP or DOWN button.

To save upper limit, hold UP and STOP.

Motor Response: BEEP x3

Approx. 5 SECS JOG x2

Section 8.2 - Adjusting Lower Limit

Hold DOWN and STOP on controller. For 10-15 seconds screen will time out on remote: continue holding.

Motor Response: EXT. BEEP x1

Approx. 10-15sec JOG x1

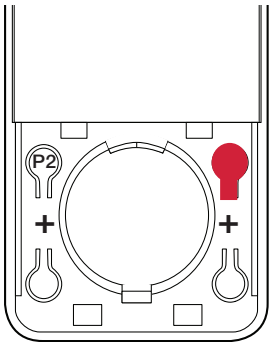
Move screen to desired position by pressing UP or DOWN button.

To save lower limit, hold DOWN and STOP.

Motor Response: BEEP x3

Approx. 5 SECS JOG x2

Section 8.3 - Disable limit setting function of remote



⚠ ***Important:*** It is still possible to add/delete channels and perform P2 functions while lock function is enabled.

⚠ ***Important:*** This mode is intended to be used after all screen programming is completed. Locked Mode will prevent accidental or unintended changing of limits.



Pressing right button for 1 second or less will display current mode

Response
LED solid on when locked
LED blinking when unlocked

Section 9 - **Tab-Tension Adjustment Procedure**

Please Note: The Draper Tab-Tensioning System is factory-set, and under normal circumstances will not require field adjustment. If wrinkles are observed, however, follow the adjustment procedure shown in Figure 9.

⚠ ***CAUTION:*** Do not touch or bend surface.

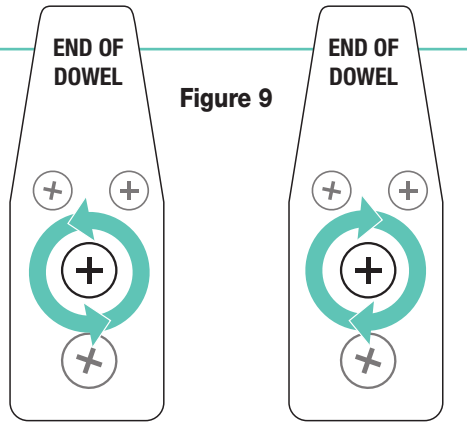


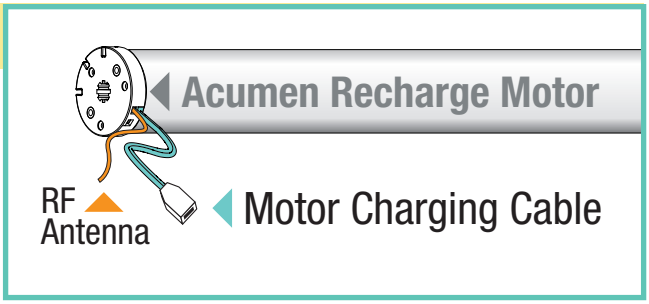
Figure 9

Section 10 - **Charging Options**

This motor has a 5V built in Li-ion battery with integrated charge management. Max power input for recharging: 5V / 2 Amp.

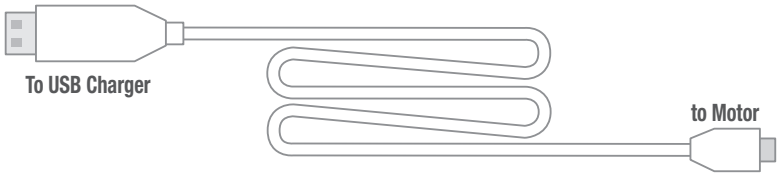
- Once battery has been depleted, the motor must be charged for 6 hour using the reccomended AC charger.
- During operation, if voltage drops to less than 4V, the motor will beep 10 times to prompt it needs to be charged.
- Motor will stop running when the voltage is lower than 2V and it will resume again when the voltage is greater than 2.5V.

⚠ ***Caution:*** Ensure cable is kept clear of fabric.
Ensure antenna is kept straight and away from metal objects.



Charging Accessories





12' (4M) Charging Cable - Part#: C107.126

Section 11 - **3rd Party Control System Components** *(optional)*



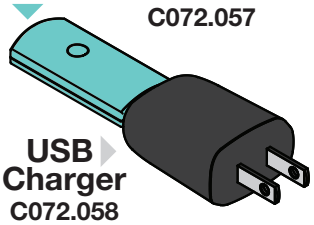
RF Single Channel
Wall Switch - C112.257



Dry Contact Transmitter - C156.264

Please Note: Consult user manual provided with each component for detailed useage instruction.

ARC REPEATER
C072.057



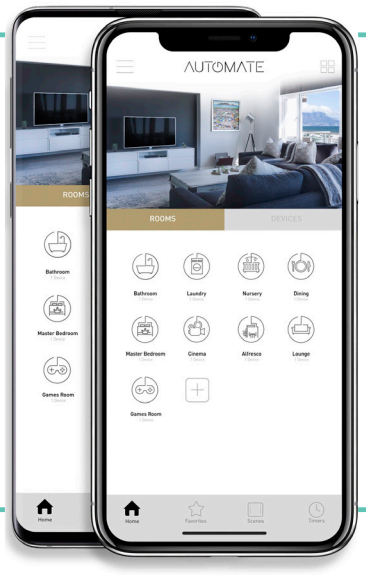
USB
Charger
C072.058

Please Note: Consult user manual provided with each component for detailed useage instruction.

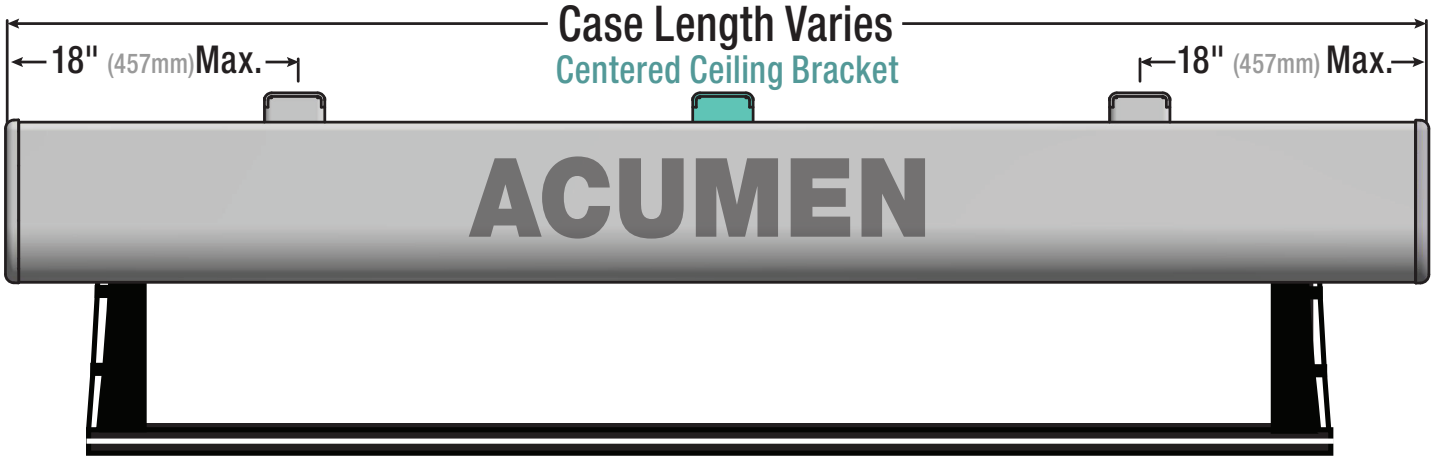


Pulse Hub 2
C156.308

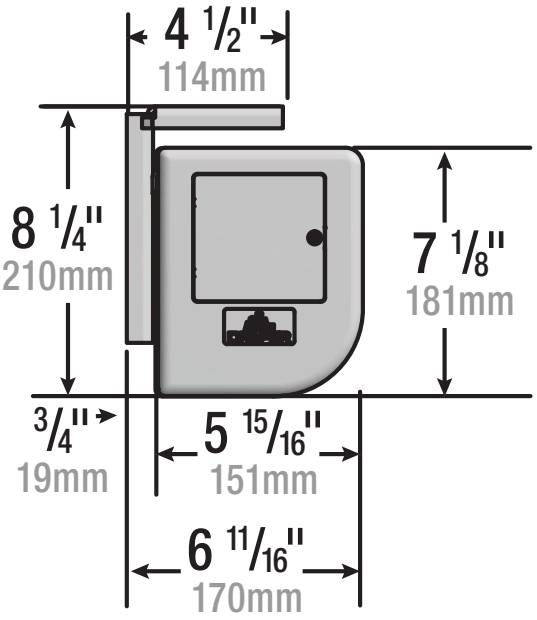
Please Note: Consult user manual provided with each component for detailed useage instruction.

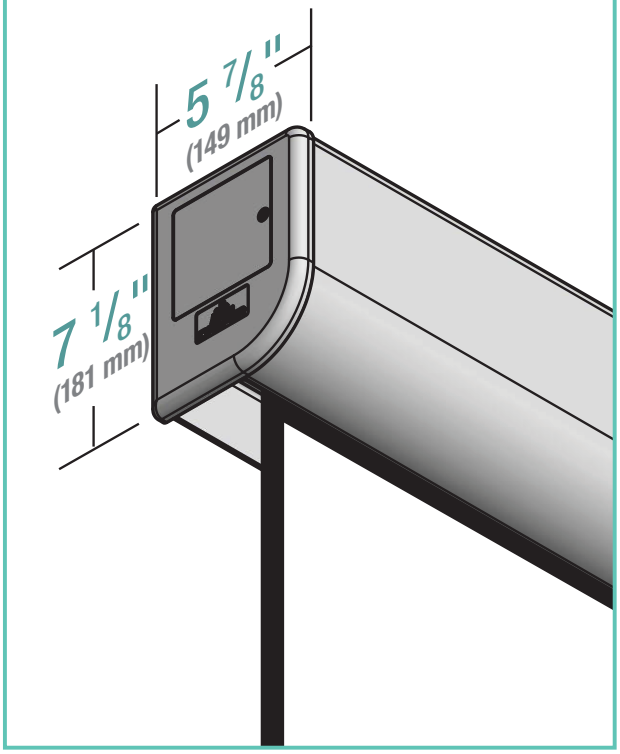


Section 12 - **Dimensions** *(Tab-Tensioned Surface Shown)*

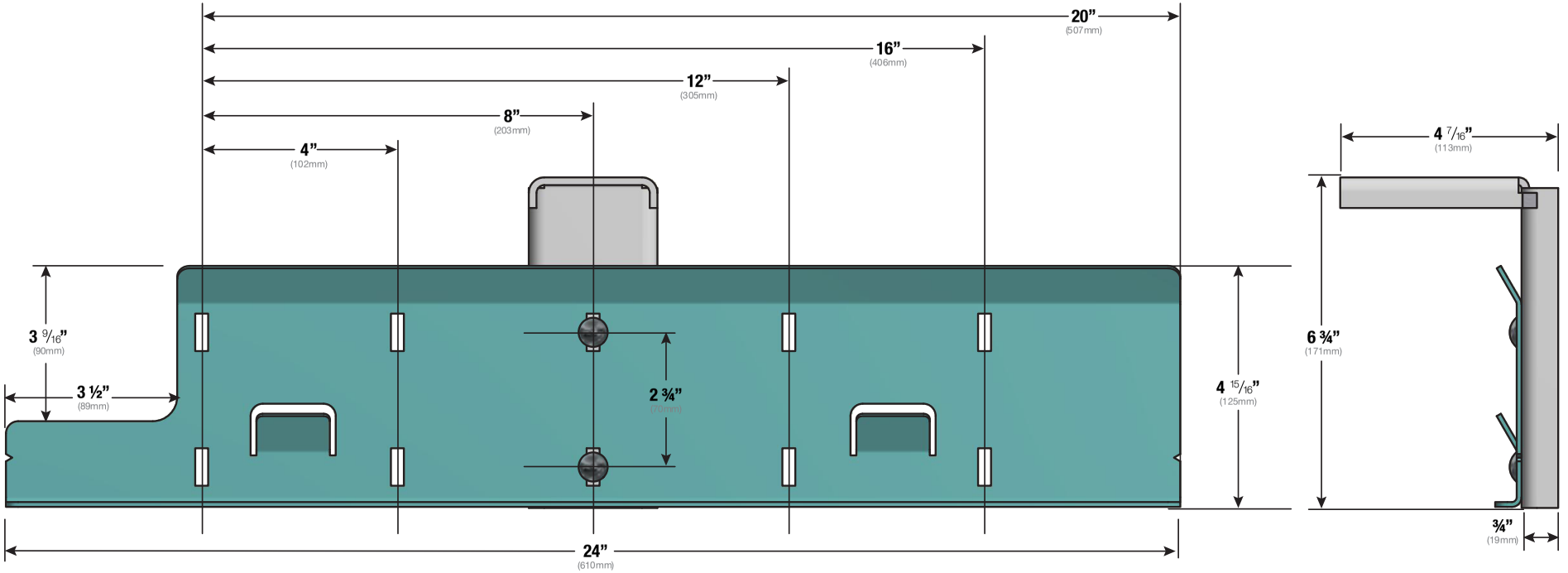


***End of Case Dimensions** - Shown with Ceiling Bracket*





Wall & Ceiling Bracket Diminesions



Mounting Hardware (by others)

NOTE: It is the responsibility of the installer to select mounting hardware appropriate for the mounting surface.

Draper, Inc. | 411 S. Pearl St. Spiceland, IN 47385
draperinc.com | 765.987.7999 | 800.238.7999
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