

INSTRUCTION BOOK FOR Multi Format Imager



When using your video equipment, basic safety precautions should always be followed, including the following:

- 1. Read and understand all instructions before using equipment.
- 2. Close supervision is necessary when any appliance is used by or near children. Do not leave appliance unattended while in use.
- 3. Care must be taken as burns can occur from touching hot parts.
- 4. Do not operate appliance if it has been dropped or damaged
- until it has been examined by a qualified service technician.
- 5. To reduce the risk of electric shock, do not immerse this appliance in water or other liquids.
- 6. The use of an accessory attachment not recommended by the manufacturer may cause risk of fire, electric shock or injury to persons.

Save These Instructions

Multi Format Imager Assembly

Preparation: Have ample space for this available on a flat clean surface such as a large table or floor. The work area should be larger than the frame size. If the floor is used, clean papers should be spread to keep all dirt from the Pro-Trim surfaces.

Tools Required for Assembly: 1/8" Allen Wrench, 5/64" Allen Wrench, Carpenter's Level, Tape Measure, Electric Screw Gun, Utility Knife.

Unpackaging the Frame:

- 1. The frame will arrive in two separate cardboard boxes. One box will be very long and will house the top and bottom pieces. The smaller cardboard box will house the side frame pieces, hanger hardware, assembly hardware and the wall switch.
- 2. To open the boxes, there is a side flap that is taped down the length of the box. It will be labeled "Open This Side". Refer to picture A. Carefully cut tape down the length of the box with a utility knife and fold box open. You will have to pull hard as it is stapled on the ends.
- Inside each box the frame pieces will be individually paper wrapped and taped. Remove all paper from pieces. Do not use a utility knife to remove paper from pieces.
- 4. Remove all paper and styrofoam blocks from top frame assembly after unwrapping.



Frame Assembly:

- 1. In the hardware package, you will receive (4) #10 x .375" long button head screws and (12) #10 x .500" long button head screws required for frame assembly.
- 2. Lay frame pieces out on floor or table as shown in Figure 1. The right and left side frame assemblies have the rollers and motors attached to them. The bottom frame piece has (2) guide rails and the wiring junction box attached to it. The top frame piece will have the (2) guide rails attached to it.



3. Assemble left side of frame to the top of frame. (**NOTE:** Figure 2 is looking from the back of the frame.) The large black metal L bracket will slide into the aluminum extrusion while the small L bracket will slide into the aluminum channel. When sliding the bracket into the top frame assembly, guide the slat roller carriage into the top aluminum guide channel as shown in Figure 3.



Multi Format Imager Assembly

4. Fasten (3) #10 x .500" long button head screws through top of frame into the corner connector bracket. See Figure 5. Tighten two set screws on flat "L" bracket to line up the front faces as shown in Figure 6.



 Assemble bottom side of frame to left frame. The large metal L bracket will slide into the aluminum extrusion while the small L bracket will slide into the aluminum channel. When sliding the bracket into the bottom frame assembly, guide the slat roller carriage into the bottom aluminum guide channel. See Figure 7.



6. Route the two cable assemblies around motor bracket and plug the 3 wire male connector into the 3 wire female connector on the motor bracket. The motor will have a gray data cable with an RJ-45 connector on the end coming out of the head of the motor. Plug this end into the RJ-45 coupler. Tuck the RJ-45 coupler underneath motor bracket securely to prevent entanglement as shown in Figure 9.



7. Finish assembling corner assembly by inserting (3) #10 x .500" long button head screws through bottom of frame into the corner L connector bracket. Tighten two set screws on flat "L" bracket to line up the front faces as shown in Figure 10.



8. Assemble right side of frame to top and bottom frame assemblies. The two large black metal L brackets will slide into top and bottom aluminum extrusion while the two small metal L brackets will slide into the aluminum channel. When sliding the right side assembly into the aluminum extrusion, guide the slat roller carriage into the top and bottom guide channels as shown in Figure 11.



Figure 11

9. Assemble top right and bottom right corner assembly by inserting (3) #10 x .500" long button head screws through bottom of frame into the corner L connector bracket. Tighten two set screws on flat "L" bracket to line up the front faces as shown in Figure 12.



10. Route the two cable assemblies around motor bracket and plug the 3 wire male connector into the 3 wire female connector on the motor bracket. The motor will have a gray data cable with an RJ-45 connector on the end coming out of the head of the motor. Plug this end into the RJ-45 coupler. Tuck the RJ-45 coupler underneath motor bracket securely to prevent entanglement as shown in Figure 13.



11. Untape black steel wire tension cable from bottom left side assembly. Un-wire tie the cable assembly. Run black steel wire tension cable down around pulley at end and bring back towards the end. You may have to pull slightly hard and clip the tension cable to the eyebolt secured in the slat bar as shown in Figure 14. Be careful not to pinch your fingers in the spring. Repeat this step for bottom right corner of screen.



12. Assemble pinch guard bracket using (2) #10 x .375" long button head screws to opposite side of pulley bracket as shown in Figure 15. Repeat this step for bottom right corner of screen.



13. Untape black steel wire tension cable from top left side assembly. Un-wire tie the cable assembly. This cable assembly will have an extra safety wire ran through the spring. Run black steel wire tension cable down around pulley at end and bring back towards the end. You may have to pull slightly hard and clip the tension cable to the eyebolt secured in the slat bar as shown in Figure 16. Be careful not to pinch your fingers in the spring. Repeat this step for top right corner of screen.



14. Assemble pinch guard bracket using (2) #10 X .375" long button head screws to opposite side of pulley bracket as shown in Figure 17. Repeat this step for top right corner of screen.



15. Attach first side of safety cable to eyebolt in middle of screen. Attach other side of safety cable to the eyebolt in side of frame in front of wind up pulley. Repeat this step for top right corner of screen.



Wall Mounting Assembly:

- Depending on size of screen it will be shipped with either 2 wall brackets that are 48" long or 2 wall brackets that are 64" long. Two small "L" brackets included will be used to hold frame securely to wall at bottom.
- 2. To install the Multi-Format Imager over a Da-Lite Perm-Wall screen you will need to place the supplied wooden spacers between the screen and the wall.

Da-Snap, Imager and Cinema Contour frame do not require any spacers.

 Refer to Figure 16 for hanger bracket location. Dimension "A" will vary depending on the type of screen you have. Dimension "A" is measured from the top of the screen frame to the top of the hanger bracket.

Screen Type:	Dimension "A"
Cinema Contour	3-3/4"
Perm-Wall	4-3/4"
Imager	4-3/4"
Da-Snap	5-1/4"



Figure 20

- Both wall brackets must be mounted into at least two wall studs. Two mounting points must be spaced at least 24" away from each other. Wall studs must be 2 x 4 construction. Check to make sure both brackets are vertically level with each other.
- 5. Drill hole for mounting bracket in to wall. Dimension for hole is shown from the top bracket to center hole position. It is recommended to use a 1/4" x 1-1/2" Lag Screw (not supplied) to fasten bracket to wall.



Figure 19

6. Wall hanging brackets must be evenly spaced across top of frame. Measure the frame width and divide by three then make two marks from the end. The center of each wall bracket shall be located on those marks.



7. Hang the frame assembly on the hanger brackets as shown in Figure 22. Be careful as bracket is to slide in front of the aluminum guide channel. There is a lip on the back of the frame that wedges itself in to the hanger bracket once fully installed on bracket. This is a two person installation. Do not attempt to do this without two people.



1. To connect power to unit locate junction box cover on bottom frame assembly. There will be two black screws holding the wiring box cover on as shown in Figure 25.



2. Install electrical connections. Make sure to review the wiring diagram for proper hook up as shown in Figure 26. NOTE: Must be installed in accordance with the requirements of the Local Building Codes, the Canadian Electrical Code (CEC), CAN/CSA C22.1 RJ-45 and the National Electric Code (NEC), NFPA 70. An appropriate disconnect Brown Manual 2 device shall be provided as part of the building installation. +12V Blue Bus (RP Data) Yellow RQ Data Green +5V Red Ground Black RQ Clock Orange 6P6C Manual 1 Purple Г RJ-22 Cable Three Conductor From QAUX Power Wire To QEYE 8P8C RJ-45 RJ-45 Cable Coupler RJ-45 Coupler 0 0 0 Black 0 0 Quick Connect (Hot) Quick Connect Motor Plug White Motor Plug (Common) Left Motor Green **Right Motor** (Ground) Input 120V / 60Hz

Figure 26

3. Connect IR eye to splitter for screen operation. IR eye shall be plugged into a QEYE port on the primary splitter as shown in Figure 27.



NOTES: 1. 6P6C = 6 Pins 6 Conductor Wire 2. 6P4C = 6 Pins 4 Conductor Wire

Multi Format Imager Operation

The Multi-Format imager has been preset to four different formats. The screen can be set to any format by simply pressing the corresponding button on the remote. Below is a list of each button function.

IMPORTANT! When operating the switch, press and release the buttons. Do not hold the button for more than five (5) seconds or the button will be reprogrammed to the current screen position.

- 3 Sets format to NTSC (1.33:1) format.
- 2 Sets format to HDTV (1.78:1) format.
- 1 Sets format to Letterbox (1.85:1) format.
- OPEN Sets format to Anamorphic (2.35:1) format.
- STOP Stops the masks at any position when pressed.
- <> Individual Control of left and right mask.

Test installation by carefully running mask surfaces in and out 2-3 times. Be prepared to stop screen. Standard Duty Cycle: 1 Min. On. / 3 Min. Off.

- ▲ CAUTION! Excessive continuous operation may cause overheating. If motor overheats do not press on remote and allow motor to cool for 30 minutes.
- ATTENTION! Le fonctionnement continu et excessif peut provoquer une surchauffe. Si le moteur surchauffe, n'utilisez pas la télécommande et laissez le moteur refroidir pendant 30 minutes.



Figure 28

- To adjust intermediate stopping positions make sure both masks are completely retracted into the frame. Press the left mask ">" button. The mask will start to move outward. Press the stop button at the position you want it set to. If you go too far outward press the left mask "<" button and the mask will retract back into the case.
- 2. Press the right mask "<" button. The mask will start to move outward. Press the stop button at the position you want it set to. If you go too far outward press the right mask ">" button and the mask will retract back into the case.
- Once both masks are at the desired stopping position. Press and hold Preset 1, Preset 2 or Preset 3 button on remote for 10 seconds.
- 4. Repeat steps 1 thru 3 for other Preset locations.

Multi Format Imager Limit Travel Adjustment

- 1. To make limit travel adjustments you will need the 3-button low voltage wall switch that was shipped with your masking screen.
- Locate the junction box cover on bottom frame assembly. Remove two screws holding junction box cover on the bottom of frame.
- 3. Unplug the 6P6C cable that goes from QEYE of primary splitter to QAUX of secondary splitter as shown in Figure 29.
- 4. Unplug the IR eye end of the 6P4C cable that goes from the QEYE of primary splitter to the IR eye.
- To adjust travel of left mask. Plug the 6P4C cable into the back of wall switch as shown in Figure 30. The wall switch LED will blink green twice when the 6P4C cable is plugged in.





- Locate the two tactile buttons on the back of the switch. They are square silver with black round buttons as shown in Figure 30.
- 7. To adjust how far the mask travels outward towards the middle of masking screen, press and hold the down tactile button until the LED on back of switch turns solid red. This will put the motor in limit set mode. Turn the wall switch over and use the down button on front of switch. Press and hold until the desired travel position is reached. If you travel to far outward you can press the up to move mask inward. If you press and let go of either up or down button the motor will do a small jog in that direction for finer adjustment of mask. Once desired position is reached turn switch over press and hold the down tactile button until the LED on back of switch blinks red twice. The outward travel limit is now set.
- 8. To adjust how far the mask travels inwards away from the middle of making screen, press and hold the up tactile button until the LED on back of switch turns solid green. This will put the motor in limit set mode. Turn the wall switch over and use the up button on front of switch. Press and hold until the desired travel position is reached. If you travel to far inward you can press the down to move the mask outward. If you press and let go of either up or down button the motor will do a small jog in that direction for finer adjustment of mask. Once desired position is reached turn switch over press and hold up tactile button until the LED on back of switch blinks green twice. The inward travel limit is now set.
- 9. To test limit switch setting, press and release the up or down button on the wall switch to operate the mask.
- 10. To adjust travel of right mask. Unplug the 6P4C cable from the QEYE of primary splitter and plug into the QEYE of secondary splitter.
- Locate the two tactile buttons on the back of the switch. They are square silver with black round buttons as shown in Figure 30.

- 12. To adjust how far the mask travels outward towards the middle of masking screen, press and hold the up tactile button until the LED on back of switch turns solid green. This will put the motor in limit set mode. Turn the wall switch over and use the up button on front of switch. Press and hold until the desired travel position is reached. If you travel to far outward you can press the down to move mask inward. If you press and let go of either up or down button the motor will do a small jog in that direction for finer adjustment of mask. Once desired position is reached turn switch over press and hold the up tactile button until the LED on back of switch blinks green twice. The outward travel limit is now set.
- 13. To adjust how far the mask travels inwards away from the middle of making screen, press and hold the down tactile button until the LED on back of switch turns solid red. This will put the motor in limit set mode. Turn the wall switch over and use the down button on front of switch. Press and hold until the desired travel position is reached. If you travel to far inward you can press the up to move the mask outward. If you press and let go of either up or down button the motor will do a small jog in that direction for finer adjustment of mask. Once desired position is reached turn switch over press and hold down tactile button until the LED on back of switch blinks red twice. The inward travel limit is now set.
- 14. Replace the 6P6C cable that goes from QEYE of primary splitter to QAUX of secondary splitter as shown in Figure 29.
- 15. Unplug the 6P4C cable from the QEYE of secondary splitter and plug back into the QEYE of primary splitter.
- 16. Unplug the 6P4C cable from the back of wall switch and plug back into IR Eye.
- 17. Replace junction box cover.
- 18. Reset intermediate stopping positions. (See Intermediate Stop Adjustment).

Troubleshooting

Symptom	Cause	Solution
Masking System will not operate. Motor does not hum.	Incorrect line voltage.	Verify 115-125V (or 220-240V). If insufficient voltage, rewire incoming electric line.
	Blown fuse.	Replace fuse.
	Tripped circuit breaker.	Reset circuit breaker.
	No power to junction.	Check above. Tighten all loose wire connections. Correct any improper connections. Check for power across black and white leads.
	Power at junction box Thermal overload tripped.	Let motor cool down for 30 minutes. Try again.
	Defective motor, limit switch or capacitor.	Replace motor assembly. NOTE: Motor is a sealed assembly.
	Capacitor burned out.	Replace motor assembly.
Masking System does not stop at correct position.	Limit switch is out of adjustment.	See Limit Travel Adjustment section.
	Squeaking, rubber end plug rubbing on motor.	Center roller in case.
Noise. NOTE: Masking Systems will operate with a low-pitched hum.	Grinding. Foreign object in screen rubbing on roller or fabric.	Remove.
	Gear noise.	Replace motor assembly.
Coasting.	Defective Brake.	Replace motor assembly.
Fabric hangs crooked.	Masking System not installed properly.	Check for level and plumb.
	Mask is damaged.	Replace mask.

Conditions for Transportation and Storage

- Temperature: Between 40 100°F (5 40°C)
- Relative Humidity: 30% to 70%, non-condensing
- Make sure the entire package is supported when stored
- Do not stack more than six projection screens on top of each other
- and storage
 - Always keep the projection screen horizontal during transport Make sure the heaviest package is places at the bottom of the stack

Screen surface should be allowed to air out once every two months, or otherwise used on a regular basis, if the temperature is above 72°F (22°C) and at least once every month if the temperature goes above 85°F (30°C).

LIMITED FIVE YEAR WARRANTY ON DA-LITE PRESENTATION PRODUCTS

Milestone AV Technologies LLC warrants certain Da-Lite branded products to the original purchaser only, to be free from defects in materials and workmanship for a period of five (5) years from the date of purchase by the original purchaser; provided they are properly operated according to Da-Lite's instructions and are not damaged due to improper handling or treatment after shipment from the factory.

This warranty does not apply to equipment showing evidence of misuse, abuse or accidental damage, or which has been tampered with or repaired by a person other than authorized Da-Lite personnel.

Da-Lite's sole obligation under this warranty shall be to repair or to replace (at Da-Lite's option) the defective part of the merchandise. Returns for service should be made to your Da-Lite dealer. If it is necessary for the dealer to return the screen or part to Da-Lite, transportation expenses to and from Da-Lite are payable by the purchaser and Da-Lite is not responsible for damage in shipment. To protect yourself against damage or loss in transit, insure the product and prepay all transportation expenses.

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES AS TO FITNESS FOR USE AND MERCHANTABILITY. Any implied warranties of fitness for use, or merchantability, that may be mandated by statute or rule of law are limited to the five (5) year warranty period. This warranty gives you specific legal rights, and you may also have other rights, which vary from state-to-state. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW. NO LIABILITY IS ASSUMED FOR EXPENSES OR DAMAGES RESULTING FROM INTERRUPTION IN OPERATION OF EQUIPMENT, OR FOR INCIDENTAL, DIRECT, OR CONSEQUENTIAL DAMAGES OF ANY NATURE.

In the event that there is a defect in materials or workmanship of a Da-Lite product, you may contact our Customer Care Specialists at 3100 North Detroit Street, Warsaw, IN 46582, (574) 267-8101, (800) 622-3737.

IMPORTANT: THIS WARRANTY SHALL NOT BE VALID AND DA-LITE BRANDED PRODUCTS SHALL NOT BE BOUND BY THIS WARRANTY IF THE PRODUCT IS NOT OPERATED IN ACCORDANCE WITH THE DA-LITE WRITTEN INSTRUCTIONS.

Keep your sales receipt to prove the date of purchase and your original ownership.



FOR YOUR IMAGE | legranday.com

USA	P 866.977.3901	E info@da-lite.com
CANADA	P 877.345.4329	E canadainfo@milestone.com
EMEA	P +31 495 580 840	E emea.sales@milestone.com
APAC	P +852 2145 4099	E asia.da-lite@milestone.com

In British Columbia, Milestone AV Technologies ULC carries on business as MAVT Milestone AV Technologies ULC. ©2018 Milestone AV Technologies. DL-0249 (Rev. 3) 7/18 Da-Lite is a registered trademark of Milestone AV Technologies. All other brand names or marks are used for identification purposes and are trademarks of their respective owners. All patents are protected under existing designations. Other patents pending.