

# FILM-TECH

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# masterImage MI-2100 Installation Guide (Series II Projectors)



## Quick Steps version 2.5

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# Important Notes





## Caution:

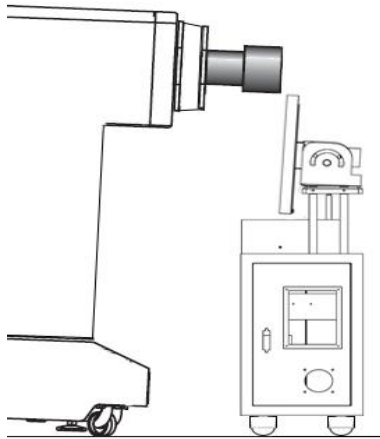
The MI-2100 operates a high speed rotating filter disk. Keep all hands and objects away from the system when starting up and operating.

Disconnect the power cord before doing service work or opening the base compartment.

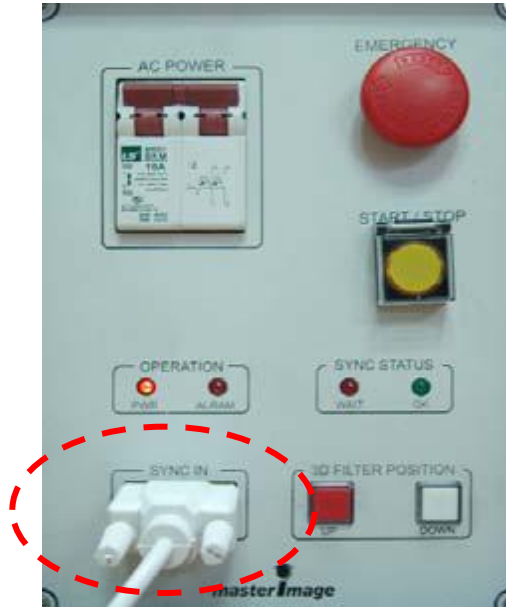
## Set-up Installation Notes:

1.  Warning – In order to avoid burning the polarizer filters, the MI-2100 filter wheel must be lowered or moved out of the light path during lamp adjustments. In general the filter should always be turning when it is in the light path of the projector.
2.  Warning – In order to avoid burning the polarizer filters, the MI-2100 filter wheel must be operating (turning) while doing any “color shooting” or projector framing adjustments.
3. When projector is in 2D mode the filter wheel will turn slower than when in 3D mode (approx. 2880 rpm vs. 4320 rpm in 3D). During “color shooting” the wheel will default to the lower 2D rotation rate and speed up when the projector is taken back into 3D mode.
4. If installing or replacing a new filter wheel, insure that the protective film pieces have been removed from each of the polarizing filter segments.

# MI-2100 INSTALL STEPS



1. Position the MI-2100 in front of Projector and determine the best orientation based on having the filter close to the lens within the space available in front of the projector. The filter position can be adjusted using the slots in the motor base.
2. The control panel may be on either side of the projector (right side shown, usually preferred) based on user access and closest positioning of the filter to the lens.
3. Check the filter wheel and insure that the polarizing film is on side facing towards the theater screen, and the polycarbonate disc is on the side facing the projector lens. Be careful not to touch the filter surface in the image area.
4. If the filter is backwards remove the cover and filter, and re-install the filter with the proper orientation (polarizer on screen side). Check for even spacing of filter wheel in the sensor gap. Insure all screws are tight and use a balanced tightening pattern to secure the filter wheel.

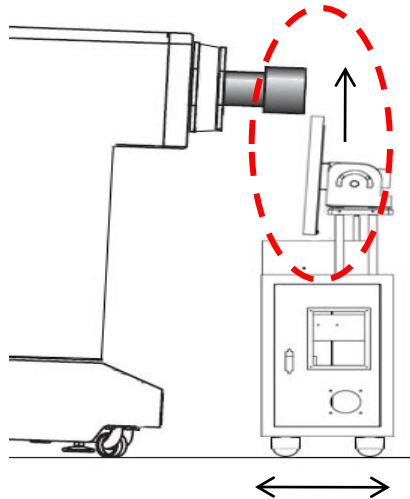


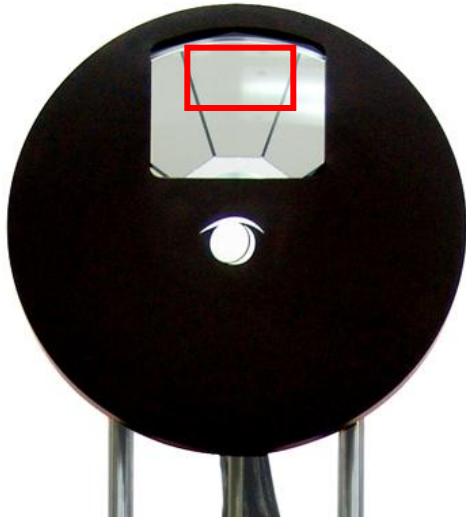
5. With the MI-2100 power breaker in the off position, connect the supplied SYNC Cable to MI-2100 and the GPIO port of the Projector.

6. Check that the red “Emergency Stop” button has not been pressed during system unpacking or installation setup. To check and reset – turn this button clockwise and pull out.


7. Position the MI-2100 centrally with the projector lens and adjust the filter wheel height using the “UP” and “DOWN” buttons. These buttons can only be used when the filter is not spinning. Holding a button down for 5 seconds and releasing will allow the system to move up or down continuously until one of the buttons is pushed again or a limit switch is reached.

When in position the MI-2100 filter wheel should be parallel to the projector lens from both the top and side views. Insure all motor mount screws and nuts are tight.





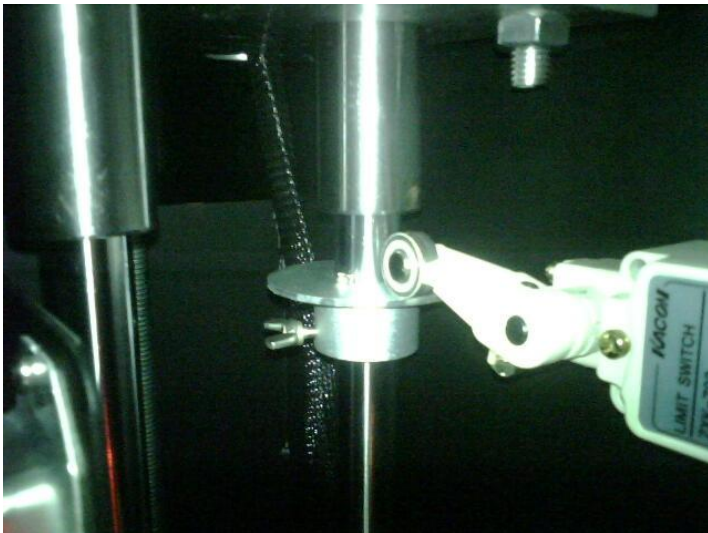
8. Project an image on the screen and “fine adjust” the position of the image on the MI-2100 filter – The image should be just below the top of the filter area and equally spaced on the left and right sides.

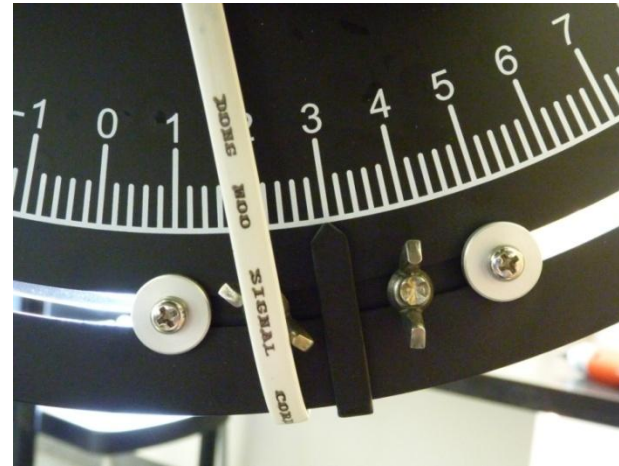
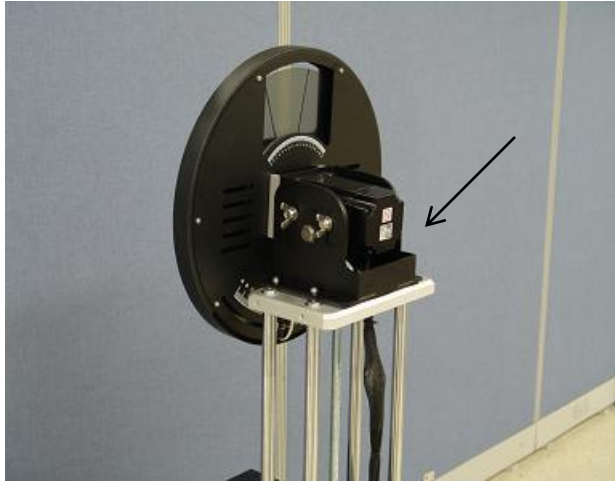
\*  To prevent burning the filter use a darker image for this set-up and do not expose the stationary filter to image for more than 30 seconds at a time.

\* The filter cover should be approximately  $\frac{1}{4}$ ” to  $\frac{1}{2}$ ” away from the projector lens when looking at a side view.


• Do not make position adjustments with the filter turning.

9. With systems having V1.3 software or above it is critical to set the Up/Down upper limit switch to its correct stop position in order that the system motor does not hit the lens while the filter head is moving continuously up.

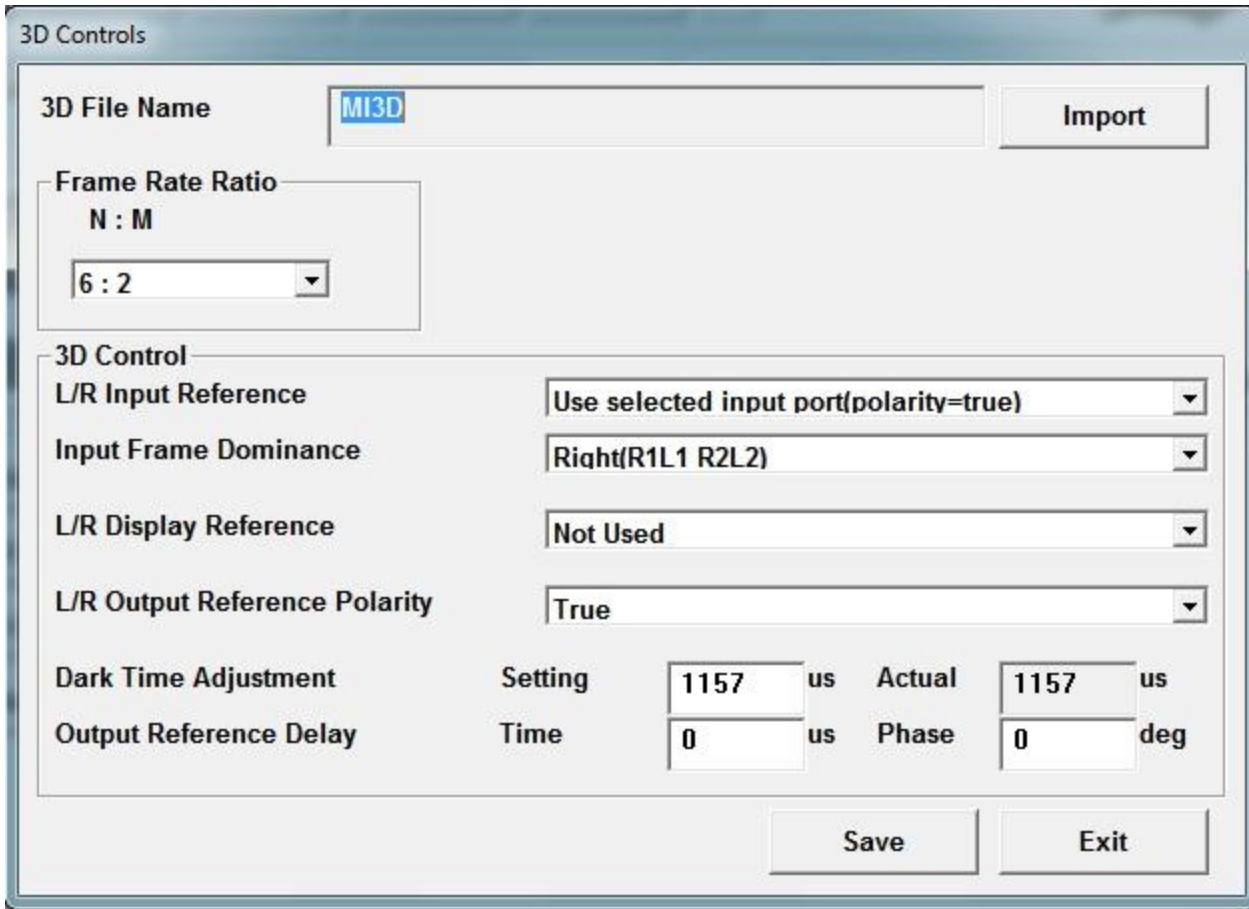




10. Insure the sensor indicator on the bottom of the MI-2100 filter cover is set to the number 3, and it is tightly secured.

11.  Lock down at least two of the base wheels by turning the foot pads down – turn the orange ring counter-clockwise. If the MI-2100 is on an uneven floor all four foot pads must be down to insure stability.

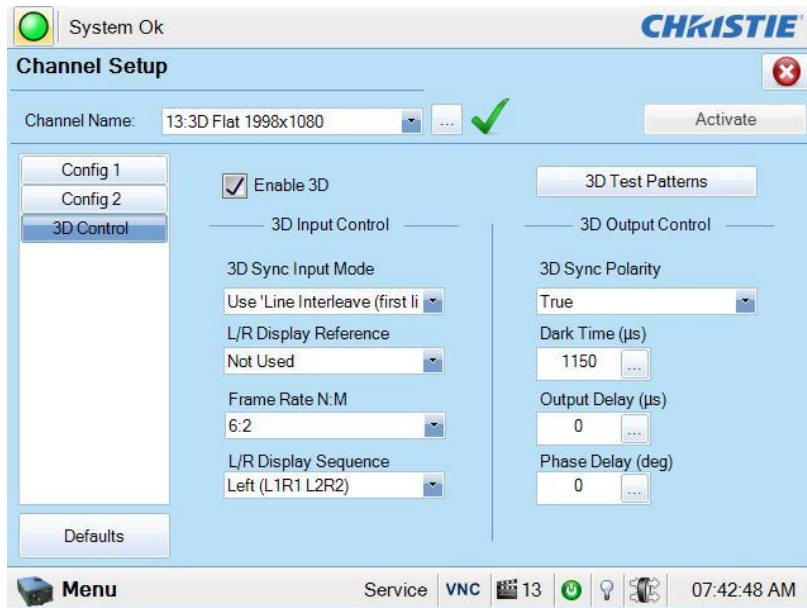




12. Configure the Series II Projector 3D control file as shown. (NEC shown above, Christie, Barco on following page)

- Please check with masterImage Technical Support if altering any of these settings.
- Note that the setting for NEC is different from both Christie and Barco. This projector should have the L/R Input Reference set to 'Use selected input port (polarity=true)'



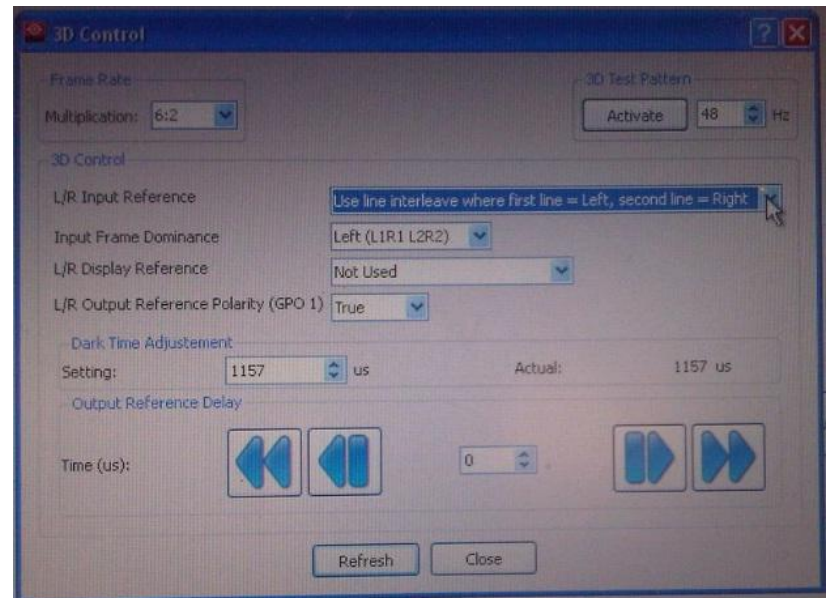


- Both Christie (Left) and Barco (Below) projectors should be set to 'Use line interleave (First line = Left, second line = right)'

- If any changes are made to the projector 3D Control File during the viewing tests, the filter wheel may need to be fully stopped and restarted to insure proper sync. Always ensure that 3D material is viewed on screen to ensure no artifacts are present.

- In certain installations, where space is restricted in front of the projector or if the lens protrudes a long way, it maybe necessary to install the MI-2100 the opposite way around i.e. the PFD motor is under the lens. In this condition it is important that the PFD itself is refitted the opposite way maintaining the filter material facing the screen.

- Should the above installation condition be necessary then the 3D setting for L/R Output Reference Polarity or 3D Sync Polarity should be changed to 'Inverted'.





13. With the projector in 3D mode/channel, insure the Main Power breaker is “On” and system is ready to start (Red “PWR” LED and Red “WAIT” LED are on). Push the yellow Start/Stop button.

The filter wheel will start immediately after releasing the Start/Stop button and the Red “WAIT” LED will switch to the Green “OK” LED after 2–5 secs indicating that the system is in sync with the projected 3D images.

Check the 3D picture for proper 3D effects, minimal ghosting, pseudo/reversed eyes, proper framing, etc. 3D test charts and 3D trailers should both be used for these tests.

*Note: If the Green “OK” LED is flashing five pulses and a pause along with one or more Red “WAIT” pulses the following errors are present.*

- RED and GRN on 1st pulse – Estop button is engaged. Release as per step 6.*
- RED and GRN on 2<sup>nd</sup> pulse – No 3D sync signal from projector. Check projector is on 3D channel and/or sync cable connections.*
- RED and GRN on 3<sup>d</sup> pulse – Problem with MI filter sensor.*
- RED and GRN on 4<sup>th</sup> or 5<sup>th</sup> pulse – Sync signal from projector is out of standard range.*

No.	Item	Check	Remarks
1	Determine spacing and position of the MI-2100 in front of Projector		
2	Check that the polarizing filter is on the screen side of the disk, and silver screen and non-depolarizing port glass are installed.		
3	Check SYNC Cable connection between MI-2100 and Projector		
4	Check the Projector lens and MI-2100 Filter are parallel and that the base wheels are locked.		
5	Check location of the projected image on the top center of MI-2100 filter.		
6	Check that the sensor location is on 3		
7	Set upper limit switch for Up/Down buttons		
8	Check the Projector 3D Control File settings		
9	Check that the SYNC STATUS LED is Green/OK when filter is running		
10	Check the 3D picture for proper 3D effects, proper framing and no ghosting		