

STORM3BEAMWASH – Ring Upgrade Kit

Objective/Purpose	How to successfully install Ring Kit
Doc Number	001
Originator	Joe Wright – International Product & Technical Support
Revision Date	04/06/2024
Type	Technical Bulletin

Tools & Content

Tools required

- Allen key set. 2.5mm 3mm are required
- PH1 PH2 Screwdriver
- Side cutters
- Hot air gun
- Loctite 242
- Chauvet IP Tester
- Chauvet Firmware USB Stick

Kit contents

- 1x Front head cover with pre-installed LED ring
- 1x Ring Frost filter
- 1x Zoom lens frame
- 1x XY/LED Driver PCB
- 1x Screw set
- 1x Zip tie set



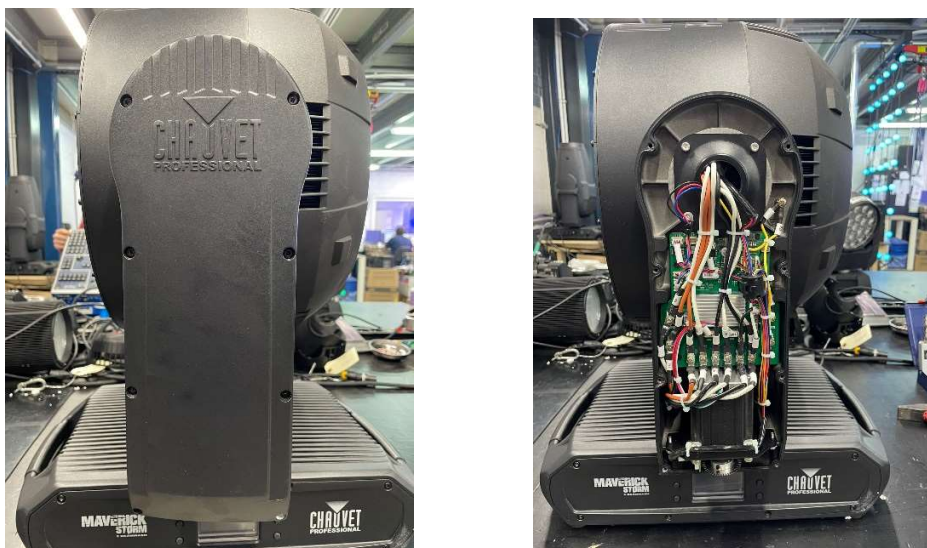
Step 1 – Removing bodywork covers

Remove 16x Hex 2.5 screws from front lens plates (4pc) Carefully remove glass from the front.

Remove 12x Hex 2.5 screw from rear head cover and put to one side.



Remove 8x Hex3 screws from the arm cover on the opposite side of the tilt lock.



Step 2 – XY/LED Driver

Disconnect X Fan 2 connector and remove from cable fastener – this cable will be pulled through the arm bearing later so needs to be free.

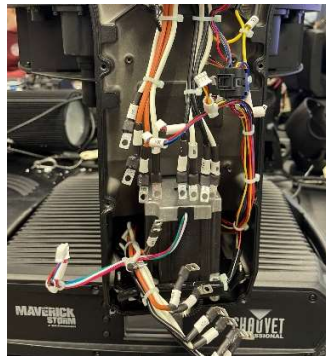
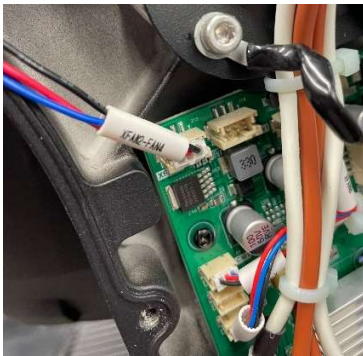
Unplug all connections & unscrew power connections on XY/LED Driver PCB.

Remove 4x black Phillips screws and remove PCB.

Move blue thermal pad from the backside of the PCB over to the new PCB.

Install new XY/LED PCB into the arm, fitting with 4x Phillips head screw.

Do not plug in cables at this time.



Step 3 – Remove Head Front Cover

Remove 8x countersunk Hex3 screws from top and bottom of the rear of the head.

***CAUTION** This will loosen the front chassis cover. Make sure the front cover is secure or held when removing the screws. **DO NOT REMOVE** the 8 counter sunk screws either side of the head (4 per side) as shown in the image below (Right)

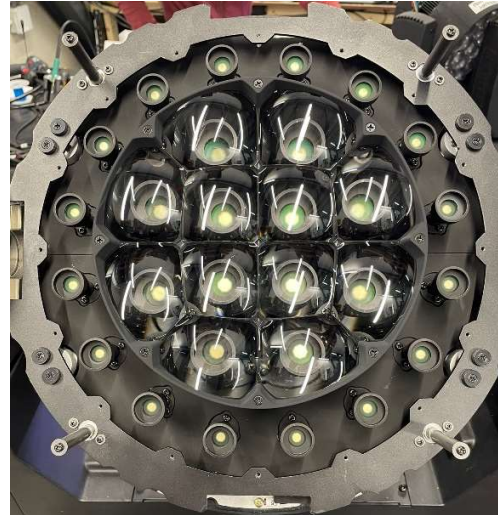


Step 4 – Remove Zoom Lens

Fully loosen the outer 16x Phillips screws from the zoom lens without removing the screws.

This unit is made up of 3 layers, take care when handling this.

Pull the outer ring zoom lens off the zoom plate as one complete unit, with the long screws keeping the mechanism together.



Remove the 4x guide rail Phillips head screws and pull the zoom frame out of the fixture.



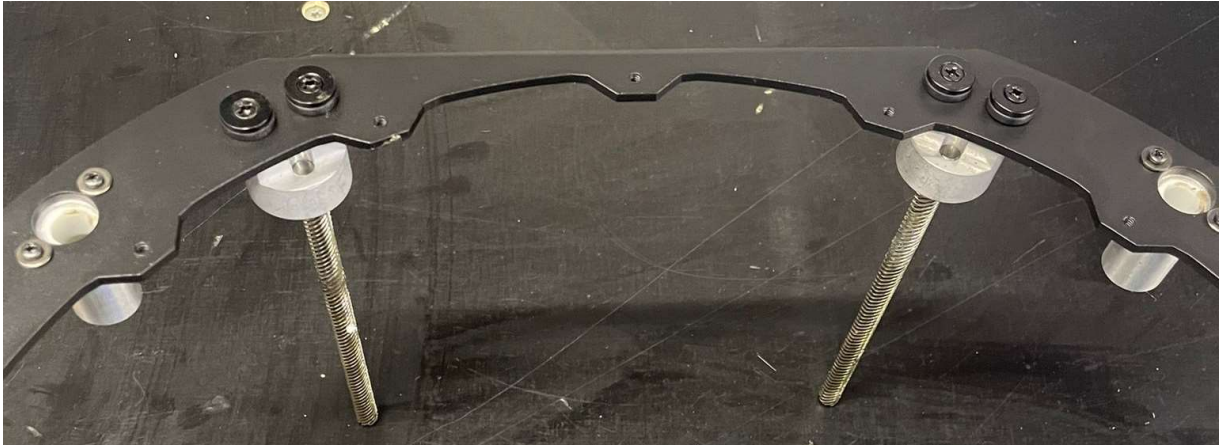
**** DO NOT REMOVE SCREWS WITHOUT HEAT****

Apply Heat gun to the zoom blocks on the end of the zoom spirals. Lots of heat is needed to soften the screw glue internally. Please be patient and wait for the heat to transfer into the zoom block

Remove all screws from the zoom plate. Set the blocks, guide slots, and rubber inserts aside for installation into the new zoom frame.

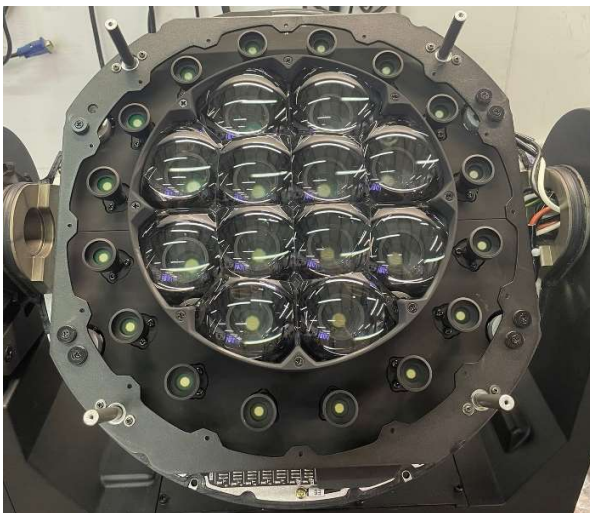
Step 5 – Reinstall Zoom Plate

Install zoom blocks, rubber inserts and guide slots into the new zoom frame, using new supplied screws if required. Add a small amount of Loctite 242 into these screws.



With the fixture powered off, place the zoom threads into the motors, and align the guide slots with the guideposts in the fixture. Power on the fixture and hold the zoom plate in place whilst the fixture calibrates. At the end of the movement calibration the zoom motors will engage and pull the plate into the fixture. ** CAUTION – make sure everything is aligned with moving to avoid damage.

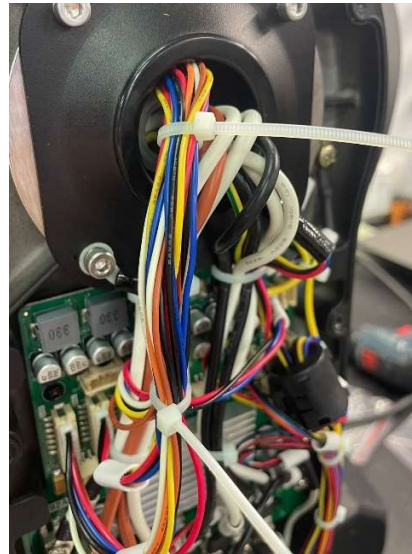
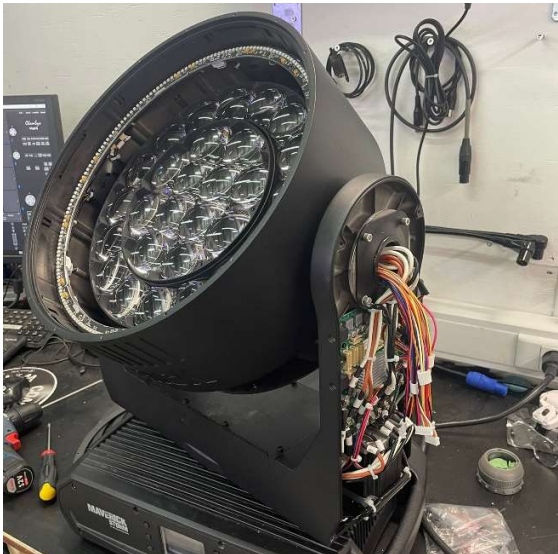
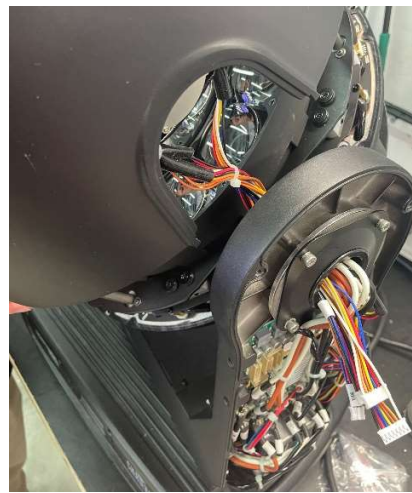
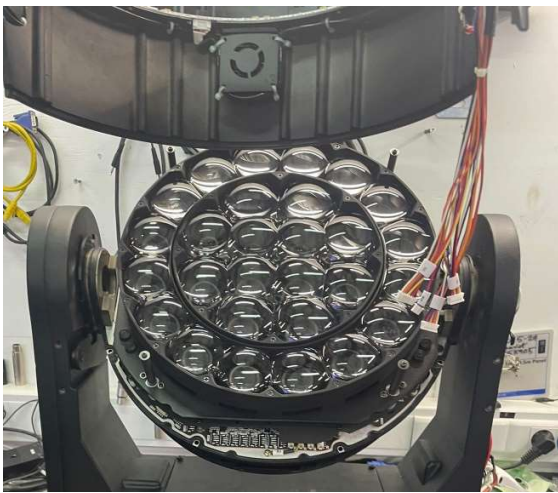
Once the zoom plate is calibrated back into the fixture, power off and place the outer ring zoom lens back onto the plate. Tighten the 16x Phillips head screws in an opposites pattern to ensure it is tightened aligned.



Step 6 – Install Upgraded Front Head Cover

Place the 4 cables through the arm connection bearing whilst placing the head cover over the LED zoom modules. This may require four hands. Seat the front head cover flat onto the chassis taking extra care for any loose or stuck cables. Insert 2x counter sunk hex 3 screws into the rear of the head cover to secure it in place.

Connect all the cable connections in the arm of the fixture, including the power and newly added LED cables. Use the provided cable ties to place the cables along the same path as the existing cable loom, making sure they are not over tightened. Cut away the excess cable tie once secured.



Step 7 – Secure the Head Covers

Install the final 6x Countersunk hex3 screw into the rear of the head in an opposite pattern to ensure a flat seal.

Carefully place the glass back into the front of the head and place the 4x glass retention plates into position. Add 2x 2.5Hex screws to the middle holes of the retention plates to hold them in place. Complete the process by adding all the remaining screws. Finally secure the rear head cover with 12x 2.5Hex screws and arm cover with 12x Hex3 machine screws.



Step 8 – Software update & IP Testing

Power on the device and insert Chauvet Firmware USB stick with **A407CA**-STORM3BEAMWASH RING-V1.240429.CHL file.

Select update and wait. When the unit loses pan and tilt power, and the display reads “updating, do not power off” turn the power off for 3-5 seconds and power back on. This will enter force update mode. Wait for the upload to finish.

Remove USB stick and change file for **A40900**-STORM3BEAMWASH RING-V1.240429.CHL. Now update the fixture with a normal USB software update.

Once complete, run an auto test to confirm the fixture is working correctly and no CPU errors are showing.

The final step is to complete an IP test to ensure the fixture is still IP65 rated.

Document History

Issue No	Revision date	Reasons /Description of change	Created by/Modified by
001	03/06/2024	Original	Int'l Product & Technical Support
002			
003			