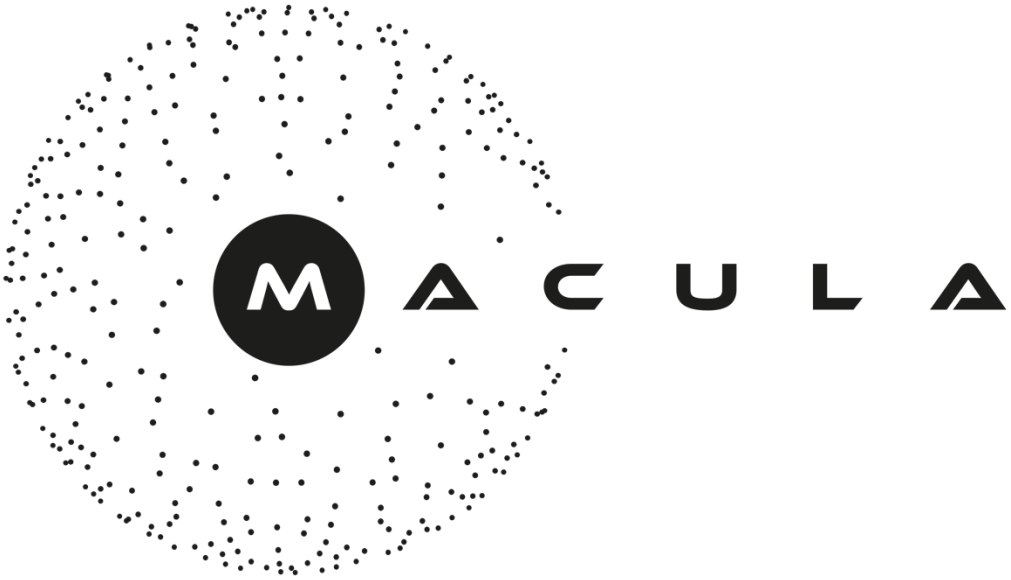
Setup MoveVision



Introduction

We thank you for choosing our Macula system. The system can be used as a standalone system or set up with multiple lamps. The system allows an intuitive approach to a complex setup and creates synergy between the Follow Spot Operator and the Light Designer/Programmer.

MoveVision Setup Guide

1. Mounting the MoveVision Camera

- Mount on Truss: The MoveVision camera is designed to be mounted on a truss or standard lighting rig. Use a superclamp with a safety wire to securely attach the camera. Ensure the truss location allows for optimal pan and tilt range (540° pan, 260° tilt).
- Camera Weight: The camera weighs 5.4 kg, so ensure the truss and clamp can support the weight safely.
- Safety Precaution: Always use safety wires when mounting equipment on trusses.
- *Please see Figure 1 & 2 for correct orientation.*

2. Connecting the Camera (5-pin DMX and sACN)

- Power and Network Setup:
    - The MoveVision requires both power and network connection for camera control. Connect the camera via the RJ45 outlet for network signals (NDI).
    - Use a standard 5-pin DMX cable for DMX control input/output.
- sACN Node Setup:
    - To convert sACN from the Macula system to DMX, an sACN node is required. The node will take the sACN signal over Ethernet and output 5-pin DMX to the MoveVision camera.
    - Connect the sACN node's RJ45 port to the Macula Control Unit's "sACN/Artnet" socket using a network cable.
    - The output from the node should be a 5-pin DMX cable that connects to the MoveVisions DMX port.

3. Setting Up the MoveVision in Macula

- Macula System Setup: Ensure the Macula system is powered on and connected. The camera will be patched into the Macula system via the following steps.

Steps for Patching in Macula:

- Create Universe in Macula:
  - Navigate to the System tab.
  - Enter the universe name, e.g., "Universe 1".
  - Select sACN as the protocol.
  - Set the universe direction to OUT.
  - Press Create to finalize the configuration.
- Patch the Camera and Node:
  - Patch the MoveVision camera using the steps mentioned in the fixture patching section underneath.
  - Ensure that the sACN node is correctly configured to convert the sACN signal to 5-pin DMX, following the node manufacturer's instructions.

- Go to the Fixture tab on the touch screen.
- Press ADD FIXTURE.
- Enter a name for the MoveVision, such as "Cam001".
- Select the MoveVision from the fixture library.
- Choose the correct Universe (e.g., Universe 1).
- Assign the DMX address (e.g., 1).
- Press Create and Patch to complete the setup.

4. Final Setup and Testing

- Testing the Setup:
  - Power on the MoveVision camera, Macula system, and sACN node.
  - Check if the MoveVision receives the correct DMX signal by moving the pan/tilt.
  - Verify if the camera feed is correctly transmitted via the NDI network.
  - If there are issues, use the troubleshooting guide in the Macula manual to check IP address ranges, cable connections, and sACN outputs
  - (MoveVision - Product Document) & (Short Manual - Macula).

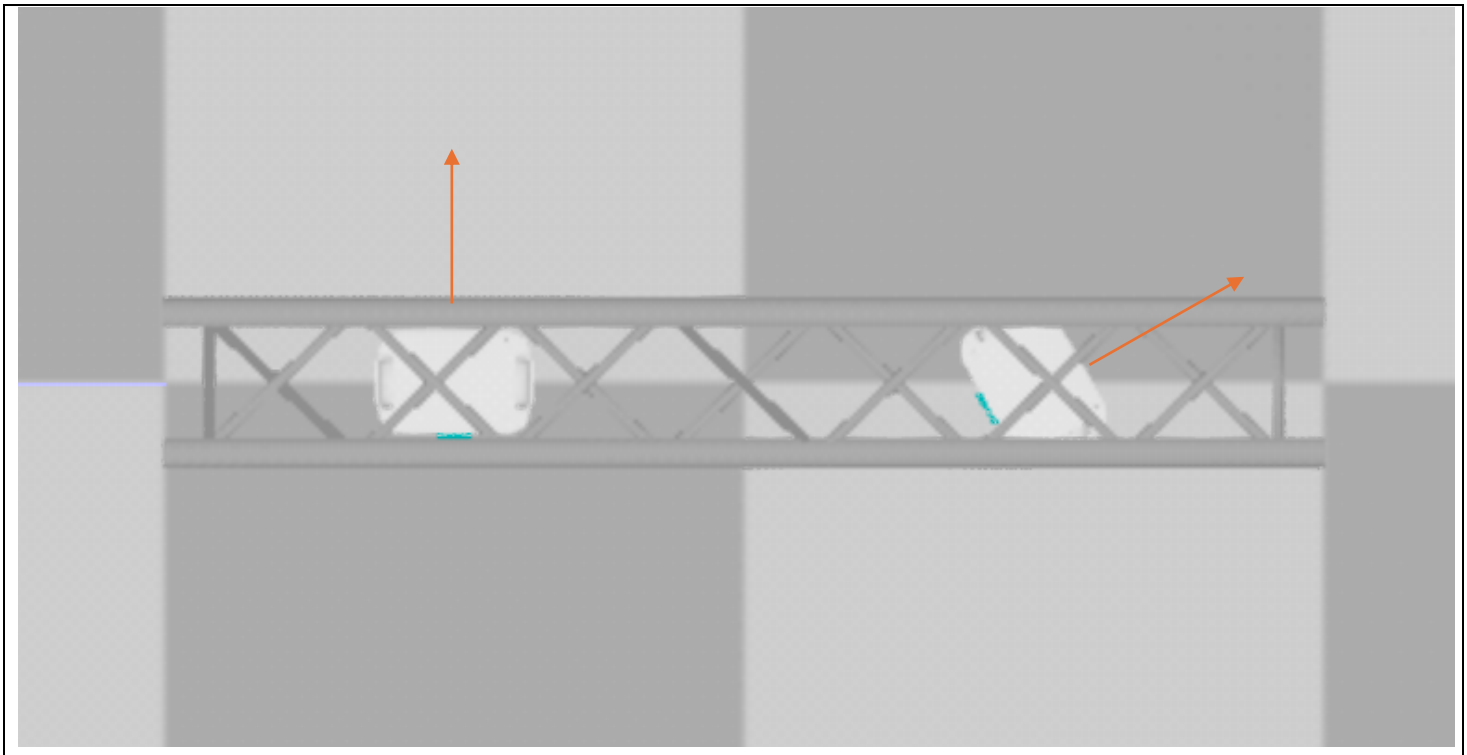


Figure 1 – The left MoveVision is correct, the right MoveVision is hanging with 30 Degree.

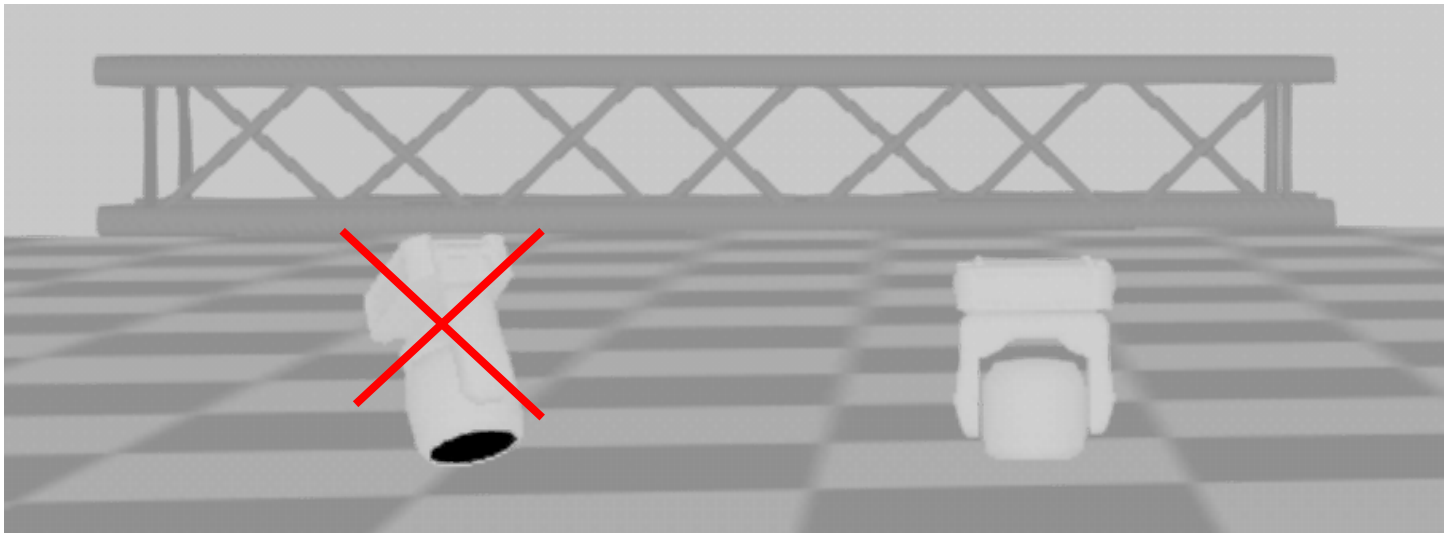


Figure 2 – The Left MoveVision is hanging incorrect. The Right MoveVision is hanging correct.

Multi-Fixture Parameters for MoveVision Setup

When setting up multi-fixture operations, it's crucial to measure fixture positions accurately to ensure smooth and precise tracking. There are two main approaches for positioning and measuring fixtures:

1. Measuring from the MoveVision Fixture

- If you are working with a single front light positioned near your MoveVision fixture, the quickest and most precise method is to measure the distance between the MoveVision camera and the front light. This approach saves time and ensures higher accuracy, especially in smaller setups.

- Ensure you capture the correct horizontal and vertical distances (X, Y coordinates) and don't forget to account for the Z height of each fixture relative to the stage floor. This is critical to avoid mismatches in motion tracking.

2. Measuring from a Scenic Zero Point

- In more complex setups, especially when working with multiple fixtures and larger stage designs, it's often better to measure from a defined scenographic zero point (0,0,0) on the stage.
- In this scenario, all fixtures (including the MoveVision camera) should have their positions measured relative to this common reference point. This method ensures uniformity and helps maintain consistency across the entire rig.
- When using a scenographic zero point, input the exact X, Y, and Z coordinates of each fixture into the Macula system for precise control and tracking.

Practical Example:

In this example, the scenic zero point has been used for fixture measurements. However, if you are setting up only a single front light near the MoveVision camera, it is recommended to measure directly between the two fixtures, taking into account their Z height difference. *See Figure 3 & 4.*

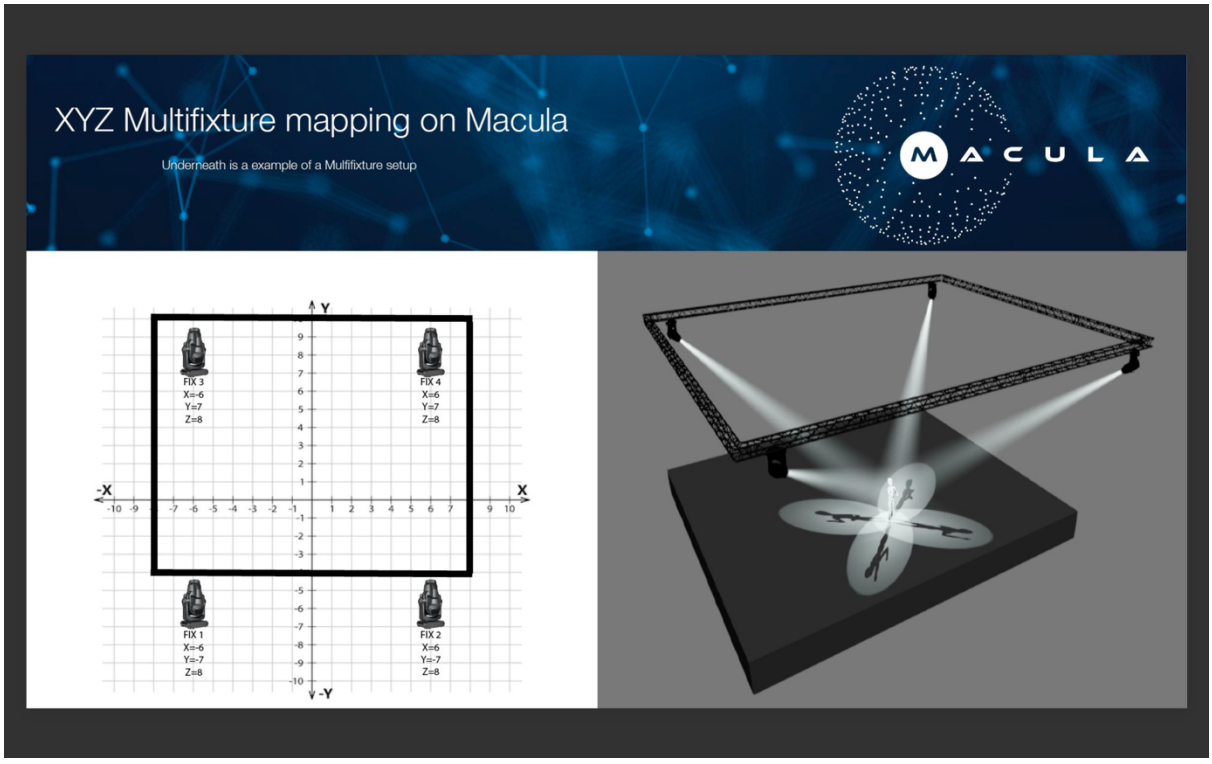


Figure 3

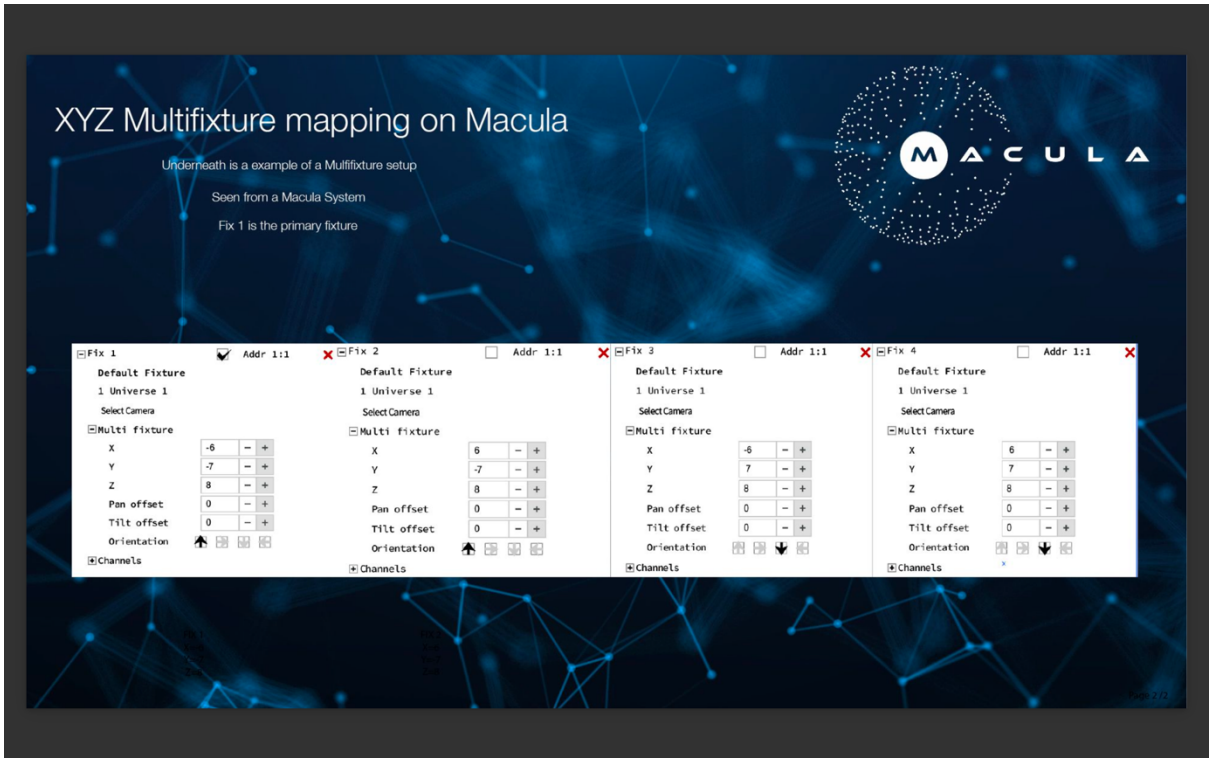


Figure 4

Troubleshooting

- Does the system have power?
- Does the camera have power?
- Are RJ45 cables for sACN and Camera correct?
- Do the Camera and Macula have the correct IP addresses?
- Network DMX and Network Camera must not have the same IP.
- Have an sACN Viewer ready to see if Macula outputs data. It could be a bad switch.
- If you have no control over the lamp and camera, double-check all Third-party equipment. Otherwise, direct connection (RJ45) to the lamp, separate cable, and a separate cable to the Camera.
- Ensure that the cable (RJ45 – CAT5 MIN) to the camera is 1000mbit/s.

Support

For further support, contact:

- Email: support@macula.sendboard.com
- Mobile: +45 22 31 75 65
- YouTube channel for quick tutorials: www.youtube.com – Search for "Macula Systems"

This manual covers basic setup and configuration of the Macula System. For more detailed information and advanced setups, see the full user manual. We do not take responsibility for Third-party equipment used with Macula.