

3D HydroMatrix

3D HydroMatrix HD / SD Module

- 500 mm x 50 mm x 100 mm (L x W x H)
- Fountainheight from 5 cm up to 1,5m
- Pixel- and Fountainpitch:
HD: 50 mm / SD: 100 mm
- DMX RDM for recalibration
- Auto addressing with optional available programming connector and additional software

DMX Channels per module:

- HD module: 50 channels
- SD module: 25 channels
- DMX channels per pixel-fountain: 5
(1: red, 2: green, 3: blue, 4: white, 5: fountain height)

Supply Voltage:

- HD module: 24VDC / 3.2A
- SD module: 24VDC / 1.6A

Maximum number of modules until new electricity feed-in:

- 5 HD modules
- 10 SD modules

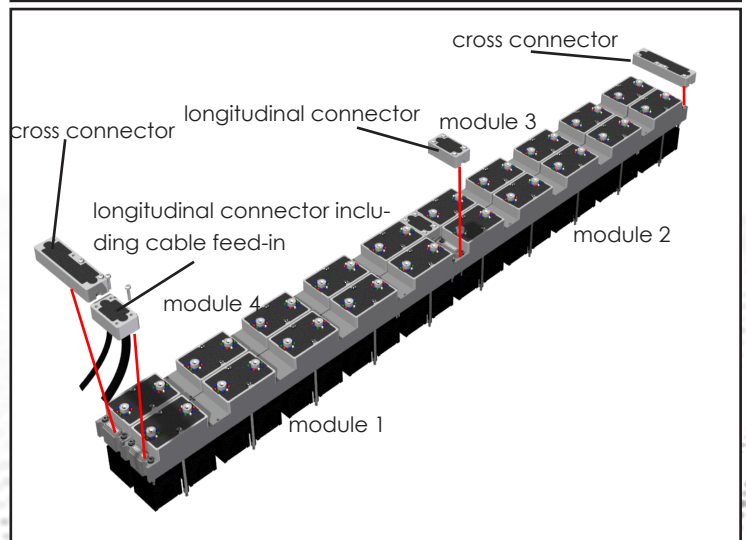
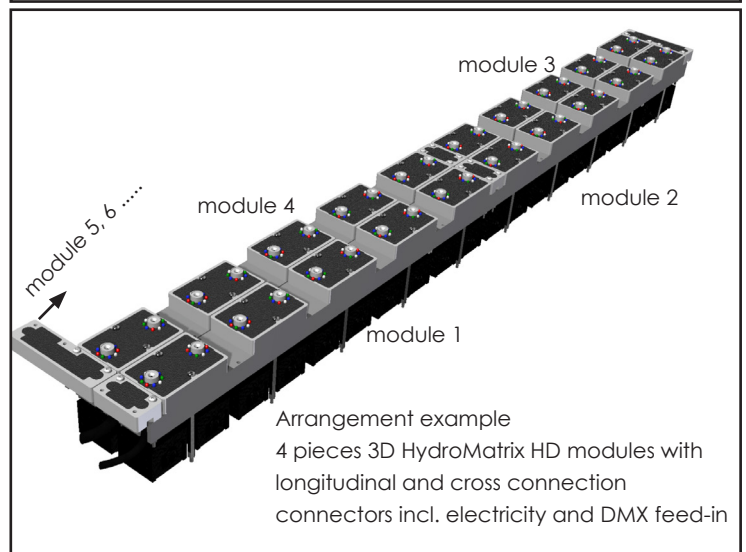
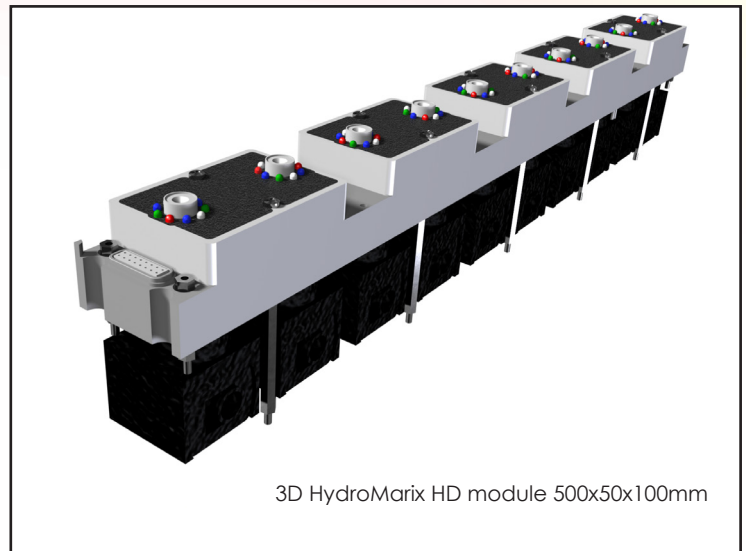
Maximum number of modules per DMX universe:

- 10 HD modules
- 20 SD modules

Water quality requirements:

- pH-Value: 7.2 to 7.6
- Total hardness of water:
(deutsche Härte) 1° to 8.4° dH
- Free chlorine: max. 0.3 mg/liter
- Chloride contents: max. 250 mg/liter
- Total dry residue: max. 50 mg/liter
- Water temperature: 5° to 35°C
- Max. particle size: 50 micron

Single modules are arbitrary expandable and combinable. Scaling of modules by longitudinal or cross connection connectors. Geometrical figures can be realized by using flexible cable splices.



Assembly and replacement of single or double dot

The LED dots include the complete intelligence for the pumps and LED settings.

During replacement process a calibration or takeover of the old dot's data is necessary.

Auto addressing has to be done for the universe in which the replacement has taken place.

For this, the optional programming connector and additional software is necessary.

See separate manual:

Software for calibration and auto addressing

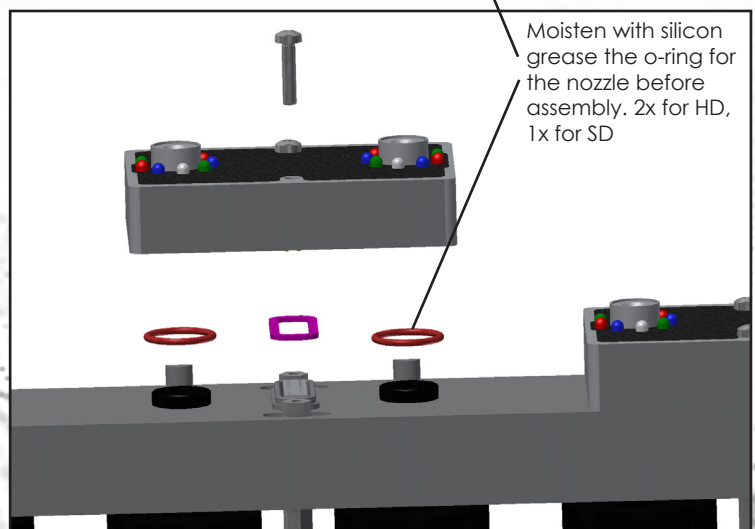
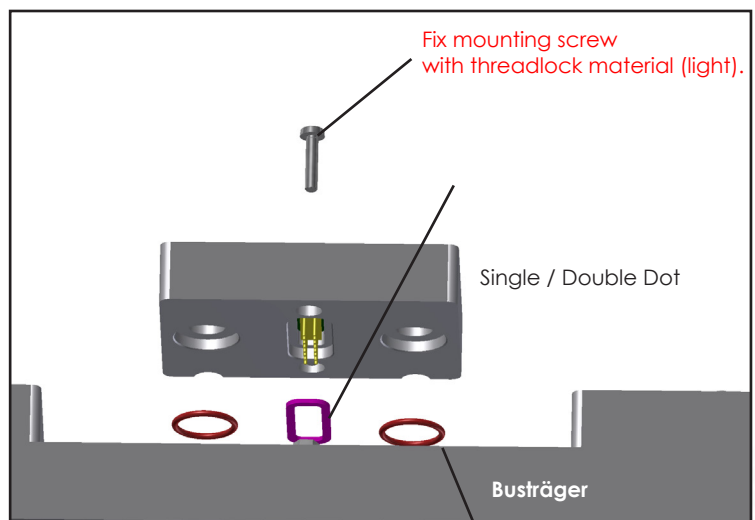
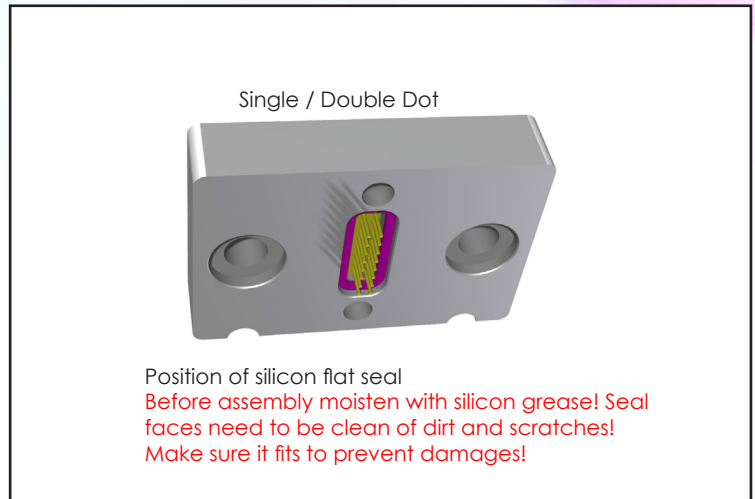
Assembly of the HydroMatrix dot:

Make sure that the connector is completely dry and free of moisture or water. **In case that water intruded, the connector has to dry. Using compress air is only allowed at a max. of 0.5 Bar and a min. distance of 10cm, as otherwise the seal gel might be blown out, leading to damages.**

The seal face of the connectors and nozzles has to be clean of dirt and scratches.

The silicon flat seal and the o-ring seal need to be moistened with silicon grease. **Make sure it fits precise to prevent damages.**

The dot is screwed with two stainless steel screws onto the busboard. **Those screws need to be fixed with threadlock material (light)**



Assembly of longitudinal / cross connection connectors and / or cable feed-in

The longitudinal and the cross connection connectors, as well as the cable splices fulfill 3 functions, depending on equipping.

Function 1: Extending the signal and electricity longitudinal or cross to the next module.

Function 2: Feed-in of the signal and the electricity. The longitudinal or cross connection connector has 2 input cables for signal (DMX) and supply voltage.

Function 3: Electricity feed-in without signal feed-in. The longitudinal or cross connection connector has one cable for feed-in supply voltage each 5 HD or 10 SD modules.

Assembly of longitudinal or cross connection connector:

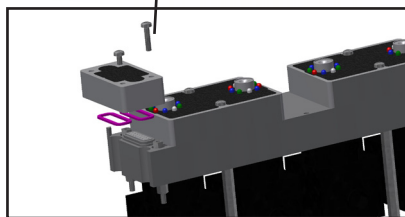
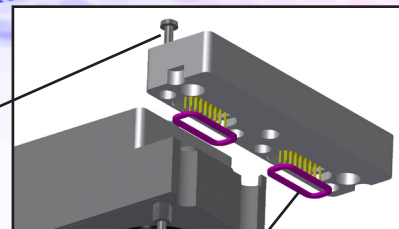
Make sure that the connector is completely dry and free of moisture or water. **In case that water intruded, the connector has to dry. Using compress air is only allowed at a max. of 0.5 Bar and a min. distance of 10cm, as otherwise the seal gel might be blown out, leading to damages.**

The seal face of the connectors and nozzles has to be clean of dirt and scratches.

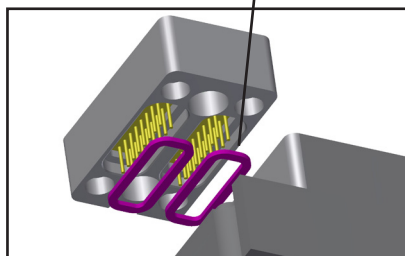
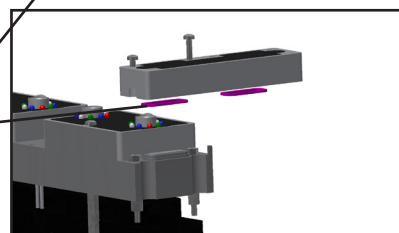
The silicon flat seal need to be moistened with silicon grease. **Make sure it fits precise to prevent damages.**

The longitudinal or cross connection connector is screwed with four stainless steel screws onto the busboard. **Those screws need to be fixed with thread-lock material (light).**

Fix the 4 mounting screws with threadlock material (light).



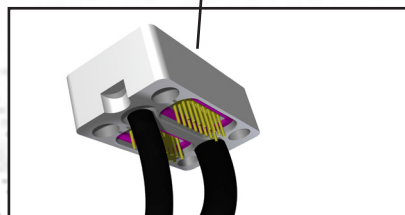
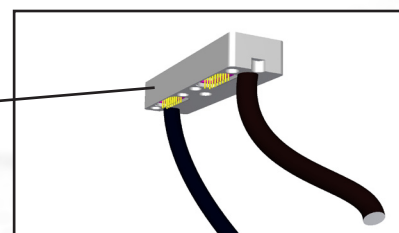
Moisten silicon flat seal with silicon grease before assembly.



Cable feed-in

Cross connection connector

Longitudinal connector



Flexible longitudinal connector with connection cable (70cm) or customized for realizing geometrical figures.

