

Assembly Instructions

These instructions explain the assembly and disassembly of the respective $\textit{har-modular}^{\texttt{®}}$ modules.



General advice:

Only modules of the same design (male straight, male angled or female straight) can be combined into a $har-modular^{(\!8\!)}$ connector.

All modules can be assembled in any order. A guide module P or T must be integrated at each outer position to meet the mating conditions and for safe guidance and polarization in the mating. The guide modules can also be positioned in other places.

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Male connector:

- 1. Decide first which modules you wish to assemble in what order.
- 2. Place the assembly aid on a smooth surface with the word "MALE" facing up.



MALE side of the assembly aid with stop left

Place the desired modules next to each other (without spaces in between) on the assembly aid at the side stop with the connector face down. Make sure that the date indicator is always visible from the same module side. This ensures that the contacts and PCB fixing are all oriented in the same direction with angled connectors.



Date indicator in a P-module



Modules lined up on the assembly aid

If the assembly aid is too short for all the modules, please use a second one. This is then placed next to the first assembly aid as an extension with the stop edge facing out. 3. Now insert a yellow fixing rail of the correct length in the lower slot of the module row with the HARTING logo easily visible. Make sure that the fixing rail lies against the stop side and does not extend beyond the last module on the other end.



HARTING logo on fixing rail



Fixing strip (yellow) inserted in the lower slot

4. Now press the upper edge of the fixing rail into the upper slot of the module. Start this at one of the two ends and connect one module after the other.



Fixing rail snapped in at top and bottom

- 5. Then repeat steps 3.) and 4.) on the opposite side.
- 6. Now take the fully assembled multipole connector from the assembly aid. Install any special contacts in the corresponding M1 modules.



Now the male multipole connector is fully assembled.

Female connector:

Place the assembly aid on a smooth surface with the word "FEMALE" facing up.



1. Place all the modules of the desired female connector on the assembly aid in the correct order, ensuring that the connector face is facing sideways and the date indicator is always visible from the same module side.





It can be helpful for this to place the already assembled male connector next to the assembly aid with the connector face towards it.



Female modules arrayed on assembly aid

Check that

- the sequence in the connector face matches that of the already assembled *har-modular*[®] male connector.
- the P modules face the right way. The guide pin of the P module is shifted to one side to realize a polarization of the *har*-modular[®] connector. The guide pin needs to match the opposite P module.

2. Place the yellow fixing rail in the slot on the connection side of the module row so that the HARTING logo is easily visible.



Make sure that the fixing rail does not extend beyond the modules and is of a correct length. Now press the upper edge of the fixing rail into the upper slot of the module. Start this at one of the two ends and connect one module after the other.

3. Then turn the modules around so that the freshly attached fixing rail lies on the assembly aid and repeat step 2.)



4. Install any special contacts in the corresponding M1 modules.



Now you have assembled the male and female and the *har*-modular[®] connectors can be soldered to the PCB. Then the guide pin is inserted in the T module of the female, if required, and fastened with the self-locking nut from the PCB back.



For disassembly, pull or push the modules out to the left or right between the two fixing rails. It is easiest to disassemble the modules one after the other. Start with an outermost module for this.



Individual modules can always only be moved a little on the fixing rails. Each module has a lock-in element that is responsible for positioning it on the fixing rail. When a module is pushed along the fixing rail, it thus "jumps" from one position to the next, so to speak.



The disassembly of modules requires some force. It can therefore be helpful to drive a pointy object (e.g. tweezers or small screwdriver) between the modules. The small openings in the connector face can be helpful for this.





Frequent assembly and disassembly can lead to more play between individual modules in an assembled condition than is customary with new fixing rails and modules.