

Troubleshooting

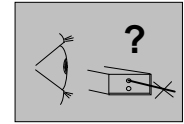
Troubleshooting

1. Laser measuring head

errors	causes	action
Laser doesn't ignite	<ul style="list-style-type: none"> - fuse defect - power supply defect - high voltage defect - aging laser tube - wrong line voltage 	<ul style="list-style-type: none"> - inform customer service - inform customer service - inform customer service - inform customer service - right line voltage
LED remains permanently "red"	<ul style="list-style-type: none"> - Regulation altered or faulty - Location laser measuring head too warm - Feedback * 	<ul style="list-style-type: none"> - inform customer service - keep temperature $\leq 30^{\circ}\text{C}$ - new adjusting of measuring set-up
LED switches to "red" or flashes during the operation	<ul style="list-style-type: none"> - Laser control altered or faulty - Location laser measuring head too warm - Feedback * 	<ul style="list-style-type: none"> - inform customer service - keep temperature $\leq 30^{\circ}\text{C}$ - new adjusting of measuring set-up
No light at electrical socket „Reference“ (reference = upper electrical socket)	<ul style="list-style-type: none"> - inner defect in the laser measuring head 	<ul style="list-style-type: none"> - inform customer service
No light at electrical socket „Mess“ (measuring = beneath electrical socket)	<ul style="list-style-type: none"> - beam path not correctly adjusted - inner defect in the laser measuring head 	<ul style="list-style-type: none"> - new adjusting of measuring set-up - inform customer service
At the measuring head cable no light at the reference egress	<ul style="list-style-type: none"> - Measuring head cable defect, if light is available at electrical socket (reference egress = upper electrical socket) 	<ul style="list-style-type: none"> - Exchanging measuring head cable
At measuring head cable is no light at measuring egress	<ul style="list-style-type: none"> - Measuring head cable defect, if light is available at electrical socket (measuring egress = below electrical socket) 	<ul style="list-style-type: none"> - Exchanging measuring head cables

* Feedback

If a part of the light is reflected back into himself, it comes to the feedback. Through this the regulation fails. This is the case at particularly exact adjustment at plane mirror interferometers (also Straightness and Squareness measurement). Normally the reflective planes are minimally tilted because of the tolerances of the components. At feedback then she it prevent through a lowly disgruntle the adjustment.

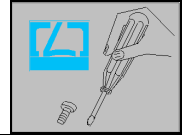
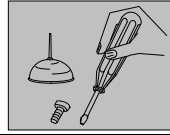


Troubleshooting

2. Evaluation unit AE 700

<p>AE 700 N AE 700 PCI AE 700 cPCI-PXI</p>	<p>Dockingstation with PCI-BUS - system and notebook Industrial PC with PCI-BUS - system Industrial PC with cPCI/PXI-BUS - system</p>
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errors	causes	action
Control lamp to connection side under "Stat" doesn't glow	<ul style="list-style-type: none"> - Evaluate unit no right connected - evaluate unit defect 	Checking all connection, inform customer service
Control lamp connection front under „Stat“ illuminate „red“ despite connected fibre optics cable	<ul style="list-style-type: none"> - no Light at measuring head cable output „Ref“ or „Mess“ - insufficiently congruenc between measuring and reference beam - evaluate unit defect 	See table “laser measuring head” adjustment the congruence improve inform customer service
Control-LED connection front is flaring during function	<ul style="list-style-type: none"> - Measuring head cable connection insufficiently - measuring head cable defect - insufficiently congruence between measuring and reference beam - evaluate unit defect 	Inspect Measuring head cable, measuring head cable exchang improving adjustment of congruence inform customer service



Care and Maintenance

- The ZLM 700 / 800 does not need any periodic maintenance operations.
- All bright steel parts are made of high-grade non-magnetic steel. The optical surfaces of the interferometers must be kept clean. Coarse faultings impair the measurement result.
- On optical surfaces no touch with the fingers. Dust should be removed only with a clean brush. For removing coarse dirt, use a wad of cotton wetly with distilled water. For removing greasy dirt, use a wad of cotton wetly with cleanse spirits.
In order to avoid such soiling, always cover up unused optical components, or keep them in the carrying case.
- There are no fuses to be changed by the user. Inform the JENAer Meßtechnik GmbH service department in case of laser failure. The fuses of the laser head are inaccessible to the user and can only be changed by authorized service staff. Evaluation unit AE 700 and the AUK Environmental Sensor do not have any fuses. If they fail, call the JENAer Meßtechnik GmbH service department.
- It is recommendable to have it checked all 2 years and, if necessary, calibrated by the manufacturer.



IMPORTANT

Do not open: Laser measurement head and AE 700 / AE 800 !

The right to claim under guarantee goes out when opening the device unauthorizedly.

Service

The specialists off JENAer Meßtechnik GmbH stand on hand by all occur asks and problems to work with ZLM 700/800

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