

LJ-X8080

2D/3D Laser Profiler Sensor Head

CONTROLLED ENGINEERING COPY

Mount LJ-X8080 on a rigid low-vibration structure, preserve the reference-distance geometry, configure laser safety controls, and verify Z calibration and profile stability on a traceable target.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	LJ-X8080
Manufacturer part	LJ-X8080
Hardware type	73 mm
System family	LJ-X8000 laser profiling system



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01 PRE-INSTALLATION PLAN

- 1

Verify LJ-X8080 and the assigned controller port before mounting.
- 2

Apply the required Class 2M laser-control and access procedures.
- 3

Keep the optical window clean and avoid contact with coated surfaces.
- 4

Maintain the 73 mm reference geometry and prevent bracket deflection.
- 5

Route the sensor cable separately from high-current switching conductors.

MATCHED HARDWARE

- LJ-X8000 series controller
- approved sensor-head cable
- rigid optical mount
- shielded industrial Ethernet and I/O connections

INSTALLATION CONTROL RECORD

CONTROL ITEM	REQUIRED RECORD
Identity	LJ-X8080 / LJ-X8080 recorded
Physical interface	LJ-X8000 series controller
Companion check	approved sensor-head cable
Functional proof	Projects a blue laser line across the measured surface
Application test	Inline height and flatness measurement

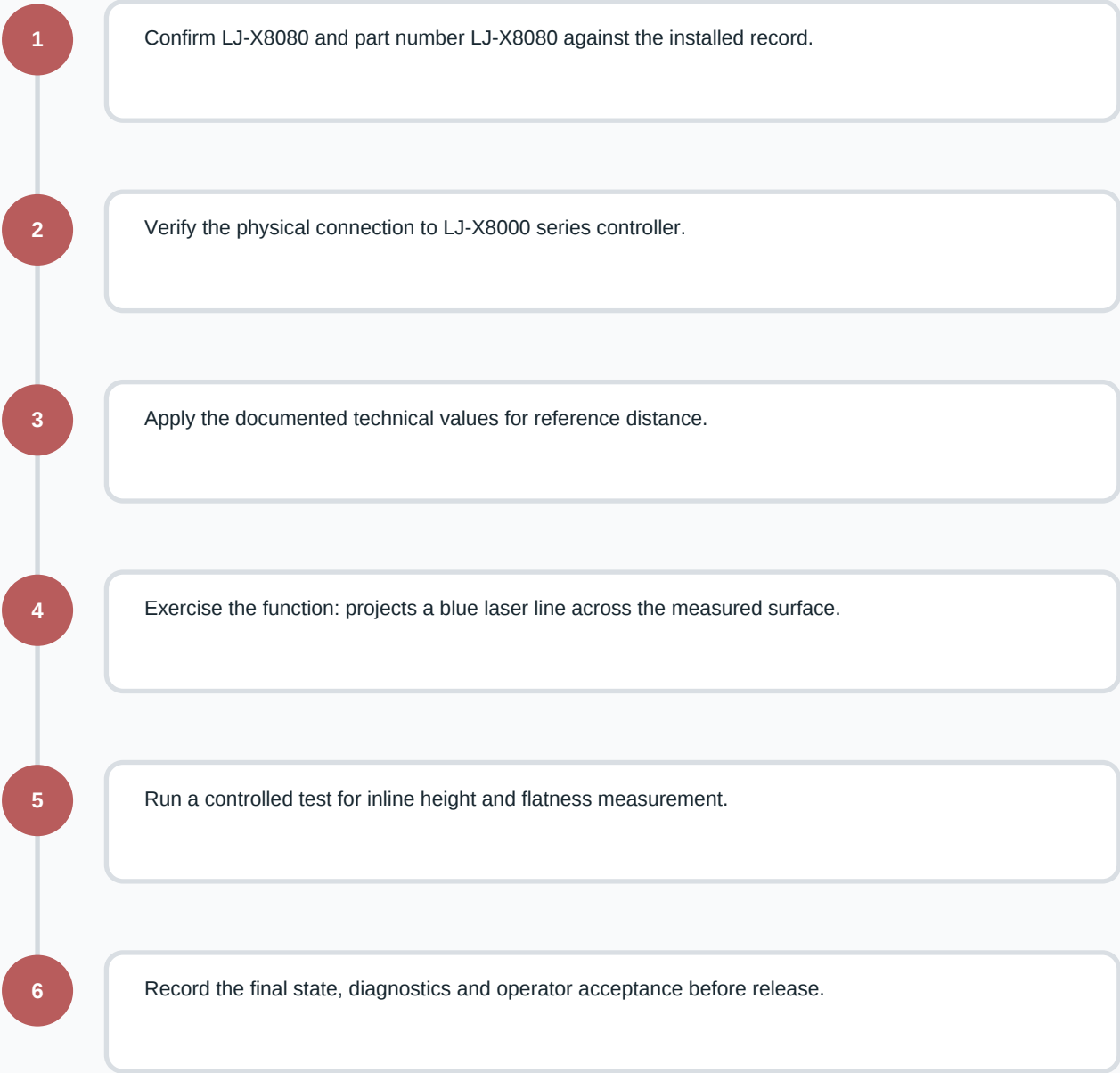
02 WIRING & INTERFACE CHECKS

CHECK ITEM	REQUIRED VALUE
Reference distance	73 mm
Z measuring range	+/-20.5 mm
X range at near position	30 mm
X range at reference	35 mm
X range at far position	39 mm
Laser wavelength	405 nm
Laser class	Class 2M
Laser output	10 mW
Spot size	44 mm x 72 um approximately
Z repeatability	0.5 um
X repeatability	1 um
Z linearity	+/-0.03% FS
Profile interval	12.5 um
Profile points	3200

FIELD NOTE

Mount LJ-X8080 on a rigid low-vibration structure, preserve the reference-distance geometry, configure laser safety controls, and verify Z calibration and profile stability on a traceable target.

03 COMMISSIONING WORKFLOW



COMMISSIONING ACCEPTANCE EVIDENCE

EVIDENCE ITEM	ACCEPTANCE CONDITION
Identity	LJ-X8080 / LJ-X8080 recorded
Physical interface	LJ-X8000 series controller
Companion check	approved sensor-head cable
Functional proof	Projects a blue laser line across the measured surface
Application test	Inline height and flatness measurement

04 RETURN-TO-SERVICE RECORD

- ☐
- Configure the actual X/Z measurement region without clipping the workpiece.
- ☐
- Validate repeatability and linearity with a traceable target.
- ☐
- Confirm trigger timing, profile transfer, and reject logic at production speed.
- ☐
- Confirm the intended process response before normal operation.

VERIFICATION RECORD

TECHNICIAN

DATE

CABINET / POSITION

FINAL DIAGNOSTIC STATE

RELATED PRODUCTS ON APTER POWER

MODEL	SYSTEM ROLE	APTER POWER PAGE
GT2-H32	High-accuracy digital contact sensor head	Open product page

SOURCE IDENTIFIERS

KEYENCE LJ-X8080 Model Specifications

LJ-X8080

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