LIANSTOR ENERGY

After-Sales & O&M Manual

SZGZ-X

Solar Tracking Racking

Dual-axis sun tracking keeps the whole array facing the sun

WZPV-SZGZ-X



Key Positions to Inspect During Walkdowns

Item	Content
Column and foundation	Check anchors, flanges, corrosion, cracks and loose connections; keep anomaly photos.
Motion and load bearing	Check azimuth and tilt drives and frame connections; watch for jamming, unusual noise and rubbing.
Cables and enclosures	Check wear, pulling, sealing, grounding and water ingress; isolate and test for voltage before electrical service.
Feedback and limits	Review each axis's position and end-point changes; re-verify abnormal counts, false triggers and harness connectors.
Control and platform	Check positioning time, connectivity, current alarms and authorization; judge against the site condition.
Check timing	Walk down per the approved maintenance plan; add checks after severe weather, faults and part replacement.

The companion gear motors use maintenance-free lifetime lubrication; never open the housing to add grease. Other drivetrain parts follow their own documents. Stop, isolate and secure moving parts before servicing.

Fault Symptoms and First-Round Checks

Item	Content
Cannot power up / no motion	Stop operating; electrical personnel check isolation, fuses and supply, and verify emergency stop or protection.
Not tracking / abnormal angle	Check mode, position, time, limits, feedback and calibration; do not continue automatic operation before the anomaly is identified.
Noise / jamming	Stop and isolate; check obstacles, connections and the drivetrain - never force motion or bypass limits.
Frequent protection / will not recover	Check site weather, wind-speed input, protection state and settings; recover only after environment and equipment are confirmed.
Offline / no metering data	Check supply, link, device binding and metering connection; distinguish communication issues from mechanical faults.
Rotation will not reach position	Check motion clearance, limits, feedback and settings; never force the self-locking drive.

Attach device identity, onset time, mode, alarms and site photos to the repair request; code meanings are looked up per this unit's control version.

After Severe Weather, Inspect Before Recovering

Check protection state

Record actual weather, protection cause, device posture and platform status; personnel stay out of any range that may still move.

Inspect structure and electrical

Check foundation, column, frame, drive connections and cables; isolate and address looseness, deformation, water ingress or rubbing first.

Resume tracking

After environment, mechanical and electrical checks pass, authorized personnel release the relevant protection, verify self-check, limits and motion, then restore automatic operation.

Never force recovery by lowering wind thresholds, masking sensors or bypassing limits. Protection setting changes must be recorded and confirmed by authorized personnel.

Software Maintenance: Back Up First, Then Operate

Prepare the matching version

Confirm model, control board and software versions; back up position, time, calibration, limits, weather thresholds and communication configuration. Obtain the authorized upgrade package.

Keep a stable supply

Stop automatic operation and secure moving parts; qualified personnel perform the local or remote upgrade per this control board's release process - never mix firmware.

Recover and re-verify

After the upgrade, read back or restore configuration; verify both axes' direction, feedback, limits, self-check and platform; on abnormal stop, contact technical personnel.

Boot address, application address, file names and reset steps follow this unit's release notes - never copy other control boards' examples.

From Repair Request to Acceptance, Keep a Complete Work Order

Item	Content
Intake	Register device, contact, location, symptoms, alarms and photos.
Diagnosis	Collect operating information remotely; when site inspection is needed, define safety and testing scope first.
Cost and plan	Confirm warranty judgment, labour, spares, travel and transport; priced items proceed after quotation.
Repair and replacement	Record fault location, component version, serial number, installation checks and old-part disposal.
Re-verification and sign-off	Verify related motions, protection and platform functions; record site acceptance and open items.
Archiving	Keep diagnosis, quotation, repair, versions, testing and customer sign-off.

Response, costs, warranty and spare delivery follow the contract and approved work order; historical price lists are not current quotations.

For Repair Requests, Prepare Records That Can Locate the Problem

Item	Content
Identity and versions	Model, device number, serial number, control board, software and configuration.
Occurrence context	Time, weather, supply, operating mode and recent changes.
Specific symptoms	Cannot power up, abnormal angle, protection, unusual noise, offline or metering anomalies.
Screenshots and photos	Device full view, fault close-up, nameplate, status, alarms and end-point display.
Checks already done	Safety isolation, supply, communication, limit and feedback checks with results.
Contact and site conditions	Contact, site location, safety conditions, serviceable window and related work orders.

Never disassemble the gear motor or modify protection to troubleshoot on your own. LIANSTOR Energy | sales@lianstor.com | lianstor.com

Device Ledger and Spare-Part Records

Item	Content
Device identity	Model, serial number, delivery date, installation address and order number.
Mechanical parts	Record the as-built drive, motor, connection and load-bearing frame models, versions and quantities.
Electrical and software	Control board, firmware, sensors, communication and metering configuration; backup locations.
Spare selection	Select by as-built BOM, interfaces, ratings and versions; confirm compatibility before substitution.
Faults and maintenance	Date, symptoms, alarms, checks, replacements, re-verification and operators.
Repair request materials	Device full view, fault close-up, nameplate, status page, configuration list and work-order number.

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LIANSTOR ENERGY

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C Certified

L Long-lasting

E Efficient

A Affordable

N Net-positive