

Industry-Specific Installation, Environmental, and Preventive Care Guidance

(Supplement to ISAAC® Server Hardware Global Limited Warranty and Technical Support)

1. Purpose and Relationship to the Hardware Limited Warranty

This Appendix is provided as a **supplement** to the *ISAAC® Server Hardware Global Limited Warranty and Technical Support* and is intended to address **industry-specific installation and commissioning practices** commonly encountered in professional Audio-Video (AV) system deployments.

The Hardware Limited Warranty covers defects in materials and workmanship and excludes failures resulting from **external causes, misuse, abuse, or failure to perform preventive maintenance**, as determined through standard warranty assessment procedures.

This Appendix does not modify, expand, or restrict the terms of the Hardware Limited Warranty. Rather, it provides **contextual guidance** relevant to professional AV environments to assist integrators and end users in maintaining conditions consistent with warranty eligibility.

2. Intended Use and Operating Environment

ISAAC® Server Hardware is designed for installation in professional AV and IT environments, including:

- Equipment racks
- Electrical or AV equipment rooms
- Controlled commercial or institutional facilities

When placed into normal operation, such environments are generally expected to provide:

- Adequate airflow and cooling
- Stable and continuous electrical power
- Reasonably controlled temperature and humidity
- Limited exposure to airborne particulate matter

Operation outside of these conditions may increase the likelihood of failure due to **external causes** rather than defects in materials or workmanship.

3. Installation and Commissioning Conditions in AV Projects

Smart Monkeys, Inc. recognizes that professional AV systems are frequently installed and commissioned while facilities are still under construction or renovation.

During these phases, conditions may include:

- Elevated dust or airborne particulates
- Intermittent HVAC operation
- Temporary or unstable electrical power
- Concurrent mechanical or construction activity in proximity to equipment

Such conditions are **not unusual** in the AV industry; however, they present **increased risk** to electronic hardware if not appropriately managed.

4. Dust, Airborne Particulates, and Contaminants

Airborne dust and construction debris may contribute to:

- Restricted airflow
- Accumulation within chassis, power supplies, and cooling assemblies
- Elevated operating temperatures
- Premature component degradation or failure

Industry-recommended practices include:

- Avoiding operation of equipment during periods of heavy construction dust
- Keeping racks sealed, covered, or otherwise protected when nearby construction is ongoing
- Powering equipment only after reasonable steps have been taken to mitigate exposure
- Inspecting and cleaning equipment prior to final commissioning

Cleaning, when required, should be performed in accordance with the **ISAAC® Hardware Cleaning Guidelines**.

Check the Support Documents page on ISAAC website: <https://www.isaacplatform.com/resources/support-documents>

5. Electrical Power During Installation and Commissioning

Temporary or construction-phase power conditions may include:

- Power interruptions or outages
- Voltage instability, brownouts, surges, incomplete grounding or bonding
- Generator-supplied or provisional electrical feeds

These conditions may result in damage attributable to **external electrical causes**, which are not defects in materials or workmanship.

Recommended practices include:

- Verifying power stability and grounding prior to energizing equipment
- Avoiding repeated power cycling during commissioning

The use of an **Uninterruptible Power Supply (UPS)** is particularly recommended when equipment must be energized prior to final commissioning or while permanent electrical infrastructure is still being completed.

6. Preventive Maintenance and Reasonable Care

Consistent with the Hardware Limited Warranty, customers and integrators are responsible for performing **reasonable preventive maintenance** appropriate to the environment in which the hardware is installed.

This includes:

- Using the product in accordance with published documentation
- Taking reasonable steps to protect hardware from known environmental risks
- Addressing abnormal conditions prior to extended operation

Failure to perform reasonable preventive care may, if directly related to the cause of failure, be considered during warranty evaluation.

7. Misuse, Abuse, and External Cause Considerations

The following conditions **may be considered misuse, abuse, or external causes** under the Hardware Limited Warranty **to the extent that they are determined to be the primary cause of hardware failure**, including but not limited to:

- Operation of equipment in environments with excessive dust or debris without reasonable protective measures
- Powering equipment during active construction under conditions known to present elevated risk
- Continued operation despite known adverse environmental or electrical conditions
- Failure to follow published installation, operation, or cleaning guidance

The remediation of adverse environmental conditions **does not preclude a future warranty denial** if a subsequent failure is determined to have been caused by prior misuse, abuse, or failure to perform reasonable preventive maintenance.

8. Transition to Normal Operation (Final Commissioning)

Prior to placing ISAAC® hardware into continuous service, industry best practices include:

- Confirming that nearby construction activities have concluded
- Verifying stable HVAC and electrical conditions
- Performing visual inspection and cleaning where appropriate
- Confirming airflow, rack clearances, and environmental suitability

These steps help reduce the likelihood of failures attributable to external causes after commissioning.

9. Summary and Intent

This Appendix is intended to:

- Align warranty expectations with professional AV installation realities
- Promote reasonable preventive practices without imposing automatic exclusions
- Support fair and accurate warranty assessments

Adherence to these guidelines helps distinguish failures caused by **defects in materials or workmanship** from those resulting from **external causes or preventable environmental factors**.

For guidance regarding installation conditions, commissioning practices, or environmental concerns, Smart Monkeys, Inc. recommends contacting Support prior to placing equipment into extended operation.