

# MuxLab Self Declaration of adhering to ISO 9001 Standards

MuxLab is a designer and manufacturer of Audio / Video (AV) Connectivity products for the Pro Digital, Broadcast and CCTV markets. The company is very serious about product quality and consistency and is continuously striving to improve. MuxLab has processes and procedures in place consistent with ISO 9001 to ensure that these targets are met.

Our vision is to develop and manufacture high value AV products with respect to features/performance/reliability vs cost ratio which meet or exceed customer expectations. MuxLab's success is directly related to our customer's satisfaction and we place our customers first above all else.

To help MuxLab achieve its target for consistently reliable high value products, an ERP system is in place to assist the company and each department in streamlining operations, in maintaining company-wide records with traceability at all levels, as well as supporting a structured documentation and support system. This system is accessible and used by all departments, including Administration, Operations (Production, Quality Assurance, Order Entry, Purchasing), Customer Support, R&D (Engineering), Product Management, Finance, Sales, and Marketing. Each department accesses different modules of the ERP system relevant to their respective responsibilities.

Below is a high level view and summary of MuxLab processes. MuxLab created a Quality Manual that outlines the below processes in further detail, which may be viewed in person at MuxLab's facility.

### **Brief Overview of Product Development and the Manufacturing Processes:**

Administration is at the helm of the company and is responsible for dictating and maintaining the overall company philosophy and direction. It must steer the company in an efficient and optimal direct that ensures the company has the necessary tools, resources, talent and mindset to achieve its vision. It ensures a working environment that is conducive to creativity, quality and pride in ones achievements. It is worth mentioning that MuxLab's administration at the highest level has its background roots in quality assurance, which accounts for the strong influence in this respect throughout the organization.

New products are requested through the Product Manager via Market Requirement Documents (MRDs) and Product Requirement Documents (PRDs). The Product Manager is required to study market needs, trends, pricing, competition, as well as feature sets, specification requirements and establish product model numbers for each product being proposed for development. The Product Manager is responsible for products throughout their life cycle and is also involved with product modifications/enhancements in a support capacity to R&D, and with product phase-out (product end of life). The Product Manager supports all departments with respect to product related information and training.

The R&D department follows a strict set of processes when developing, testing, releasing, or modifying any given product. R&D reviews the MRDs/PRDs and depending on a given product complexity may perform a Feasibility Study to assess technical knowhow and to determine if a product can be developed



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within a reasonable set of pre-established parameters. R&D will assess development needs such as human & equipment resource requirements, development time, risk and project cost, in order for Administration and Product Management to approve a given project. R&D has at its disposal many process tools utilized throughout development cycle and product life, including New Component Requests (NCRs), Second Source Requests (SSRs), Engineering Change Requests (ECRs), Engineering Change Orders (ECOs), and Product Release Notices (PRNs), just to name a few. MuxLab uses a consistent structured part number system that is used in the Bill Of Materials (BOM) for each product. The BOM for a given product includes a product model number, part numbers for individual components (with a structured part number system supporting different components types and categories), PCBs, PCB assemblies, plastic & metal enclosures, stickers & labels, product packaging, test documents & test procedures, assembly drawings, and user & operation product manuals, just to name a few. Before products are released they must be rigorously tested by a quality assurance team and approved by all departments through a PRN document. In fact each form mentioned above must be signed by various departments, depending on the specific form, before they are implemented for use.

Sales starts the process linked to producing products, by establishing relationships with customers, training customers, working with and supporting customers on a regular basis, working from approved and established product price list tables, and for requesting and managing orders at the higher levels.

Order entry in to the ERP system is performed as orders are received by customers, and begins the manufacturing process. This department follows the manufacturing process and keeps customers informed concerning the status of a given order.

Purchasing reviews orders in the system, and makes use of ERP tools that expand the orders to confirm individual finished goods stock, and when stock is not available in sufficient quantities to fulfill an order, to expand a product's BOM to the individual component level in order to purchase any missing components. The ERP system keeps track of all finished goods and component level stock, and is also proactive in the sense that minimum finished good quantities are reasonably maintained and alerts are generated to inform Operations when new products need to be produced to maintain established stock levels based on sales history. It also flags long lead-time components to ensure agreed upon lead-times are met.

Production manufactures products based on established and approved documentation (including assembly and test procedures) and makes use of all process forms mentioned above, to ensure products adherence to specifications with respect to quality, reliability, and consistency. Parts/components being received by the company are subject to inspection to ensure conformity to specification and to ensure that only approved sources are accepted. Products are manufacture in a consistent manner through detailed assembly procedures and assembly diagrams. Products produced are tested during the assembly process and at the final stages as per established test procedures. Finished goods are moved

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to the stock room ready to be shipped, and individual products are subject to random audit for retest to help ensure that processes are being followed correctly and are working as per established company guidelines and standards. Product traceability is supported by the ERP system, to allow the company to manage product warranties and production batches in the unlikely event of potential issues.

Customer Support is available at the pre and post sales level to all MuxLab customers via phone and email. The support person is responsible to assist customers with any aspect relating to released MuxLab products, including assistance with understanding a product and its capabilities, or whether or not a particular product is suitable or exists for a given application, to helping a customer resolve problems with any product and to advise Administration, Production, R&D and Product Management of any possible problem trend, so that it may be resolved in a timely manner. Trouble tickets are used to trace customer issues, which are opened at the start of a support call and closed when an issue is resolved.

The above is not a complete representation of MuxLab processes, but is intended to provide a high level view of some of the more relevant processes that are in place to help customers understand the steps taken by MuxLab to ensure consistent quality across the MuxLab product range. MuxLab is proud of its reputation as a quality manufacturer, and works hard to continuously improve in order to maintain its reputation for affordable consistent quality products.

Sincerely,

Daniel Assaraf Quality Assurance Manager MuxLab Inc.