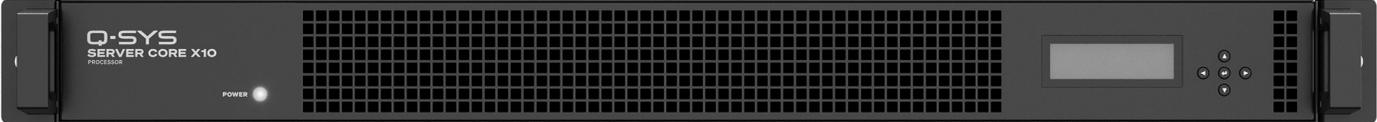


# Hardware User Manual



## Server Core X10 Processor



WA-001009-01-A



# EXPLANATION OF TERMS AND SYMBOLS

The term "**WARNING!**" indicates instructions regarding personal safety. If the instructions are not followed, the result may be bodily injury or death.

The term "**CAUTION!**" indicates instructions regarding possible damage to physical equipment. If these instructions are not followed, it may result in damage to the equipment that may not be covered under the warranty.

The term "**IMPORTANT!**" indicates instructions or information that are vital to the successful completion of the procedure.

The term "**NOTE**" is used to indicate additional useful information.



The lightning flash with arrowhead symbol in a triangle alerts the user to the presence of uninsulated dangerous voltage within the product's enclosure that may constitute a risk of electric shock to humans.



The exclamation point within a triangle alerts the user to the presence of important safety, operating, and maintenance instructions in this manual.



## IMPORTANT SAFETY INSTRUCTIONS



1. Read, follow, and keep these instructions.
2. Heed all warnings.
3. Do not use this apparatus near water.
4. Clean only with a dry cloth.
5. Do not block any ventilation opening. Install in accordance with the manufacturer's instructions.
6. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
7. Only use attachments/accessories specified by the manufacturer.
8. Refer all servicing to qualified service personnel.
9. Adhere to all applicable, local codes.
10. Consult a licensed, professional engineer when any doubt or questions arise regarding a physical equipment installation.

## Maintenance and Repair



**WARNING!** Advanced technology, e.g., the use of modern materials and powerful electronics, requires specially adapted maintenance and repair methods. To avoid a danger of subsequent damage to the apparatus, injuries to persons and/or the creation of additional safety hazards, all maintenance or repair work on the apparatus should be performed only by a QSC authorized service station or an authorized QSC International Distributor. QSC is not responsible for any injury, harm or related damages arising from any failure of the customer, owner or user of the apparatus to facilitate those repairs.



**WARNING!** The Server Core X10 is designed for indoor installation only. Le Server Core X10 est conçu pour être installé à l'intérieur uniquement.

# LITHIUM BATTERY WARNINGS



**WARNING!** THIS EQUIPMENT CONTAINS A NON-RECHARGEABLE LITHIUM BATTERY. LITHIUM IS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR BIRTH DEFECTS. THE NON-RECHARGEABLE LITHIUM BATTERY CONTAINED IN THIS EQUIPMENT MAY EXPLODE IF IT IS EXPOSED TO FIRE OR EXTREME HEAT. DO NOT SHORT CIRCUIT THE BATTERY. DO NOT ATTEMPT TO RECHARGE THE NON-RECHARGEABLE LITHIUM BATTERY. THERE IS A RISK OF EXPLOSION IF THE BATTERY IS REPLACED BY AN INCORRECT TYPE.

## Environmental Specifications

- **Expected Product Life Cycle:** 10 years
- **Storage Temperature Range:** -40°C to +85°C (-40°F to 185°F)
- **Storage Humidity Range:** 10% to 95% RH @ 40°C, non-condensing
- **Operating Temperature Range:** 0°C to 40°C (32°F to 104°F)
- **Operating Humidity Range:** 10% to 95% RH @ 40°C, non-condensing

## Environmental Compliance

Q-SYS complies with all applicable environmental regulations. This includes (but is not limited to) global environmental laws, such as EU WEEE Directive (2012/19/EU), China RoHS, Korean RoHS, U.S. Federal and State Environmental Laws and various resource recycling promotion laws around the world. For more information, visit:

[qsys.com/about-us/green-statement](https://qsys.com/about-us/green-statement)

## FCC Statement

The Q-SYS Server Core X10 has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference; in which case, the user will be required to correct the interference at his own expense.

# RoHS Statements

The QSC Q-SYS Server Core X10 is in compliance with European RoHS Directive.

The QSC Q-SYS Server Core X10 is in compliance with “China RoHS” directives. The following table is provided for product use in China and its territories.



EFUP assessment is 10 years. This period is based on the shortest component or subassembly EFUP declaration used in the Server Core X10 product designs.

QSC Q-SYS Server Core X10						
部件名称 (Part Name)	有害物质 (Hazardous Substances)					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(vi))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
电路板组件 (PCB Assemblies)	X	O	O	O	O	O
机壳装配件 (Chassis Assemblies)	X	O	O	O	O	O

本表格依据 SJ/T 11364 的规定编制。

O: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

X: 表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求

(目前由于技术或经济的原因暂时无法实现替代或减量化。)

This table is prepared following the requirement of SJ/T 11364.

O: Indicates that the concentration of the substance in all homogeneous materials of the part is below the relevant threshold specified in GB/T 26572.

X: Indicates that the concentration of the substance in at least one of all homogeneous materials of the part is above the relevant threshold specified in GB/T 26572.

(Replacement and reduction of content cannot be achieved currently because of the technical or economic reason.)

## What's in the Box?

- Q-SYS Server Core X10
- Accessory Kit (Ear Handles and rack-mounting rail kit hardware)
- Power cable, appropriate to region
- Warranty statement, TD-000453-01
- Safety Information & Regulatory Statements doc, TD-001718-01

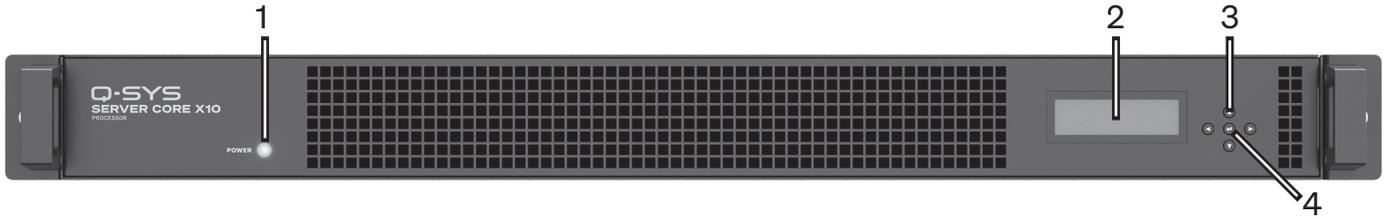
## Introduction

The Q-SYS Server Core X10 represents the next generation of Q-SYS processing, pairing the Q-SYS OS with off-the-shelf, enterprise-grade IT server hardware to deliver a flexible and scalable audio, video, and control solution for a vast range of applications. Server Core X10 is a fully networked, programmable AV&C processor that provides centralized processing for multiple spaces or zones while distributing network I/O where it's most convenient.

**NOTE:** The Q-SYS Server Core X10 processor requires Q-SYS Designer Software (QDS) for configuration and operation. QDS version compatibility information can be found [here](#). Information about the QDS components related to the Server Core X10, including their properties and controls, can be found in Q-SYS Help at [help.qsys.com](http://help.qsys.com). Or, simply drag a Server Core X10 component from the Inventory into the Schematic and press F1.

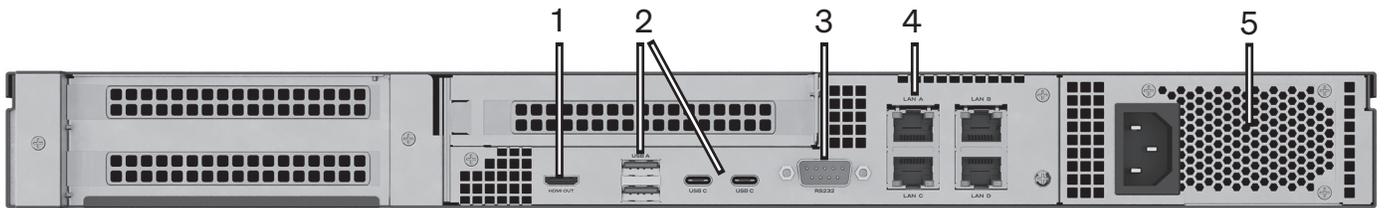
# Connections and Callouts

## Front Panel



1. **Power light:** lights up blue when the unit is powered on.
2. **Front-panel display:** displays pertinent information about the core, such as its network configuration, the system it is running, active faults, etc.
3. **Navigation buttons (up, down, left, right):** allows the user to navigate through the menus on the front-panel display:
  - a. Both the up and right buttons advance to the next menu item.
  - b. Both the down and left buttons go back to the previous menu item.
4. **ID/Select button:** press the center button to put the Core into ID mode for identification within Q-SYS Designer Software. Press again to turn off ID mode.

## Back Panel



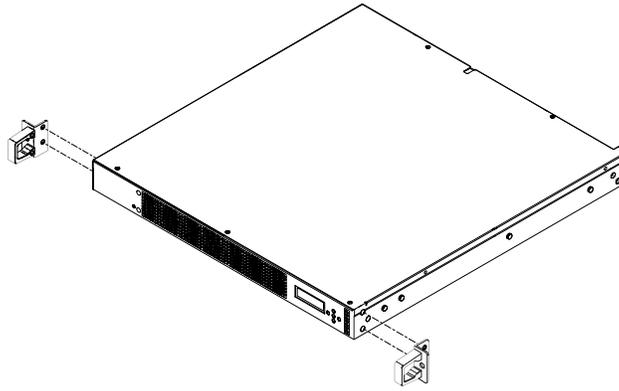
1. **HDMI port:** not supported.
2. **USB A and USB C ports:** not supported.
3. **Serial communications RS232 (male DB-9):** for connecting to serial devices.
4. **Q-SYS LAN ports (RJ45):** from left to right; top row is LAN A and LAN B, bottom row is LAN C and LAN D.
5. **Power supply unit (PSU).**

# Installation

The following procedures explain how to install the ear handles and slide rail accessories onto the system chassis and into the rack.

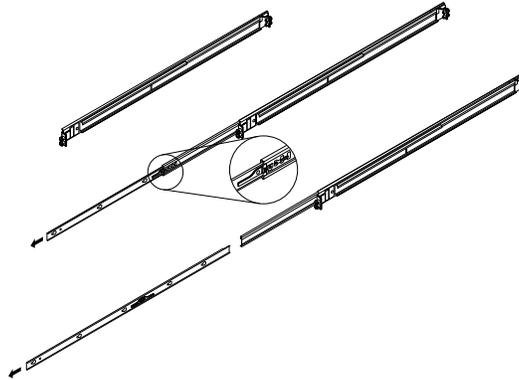
## Ear Handle Installation

To install the pair of mounting ears and handles in the accessory box, insert the provided screws into the front-right and front-left mounting ears and fasten them.

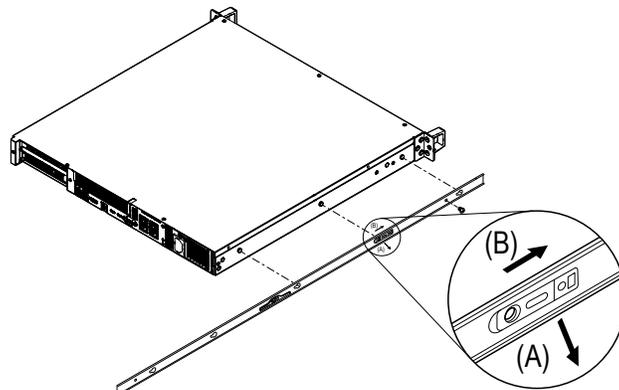


## Slide Rail Preparation

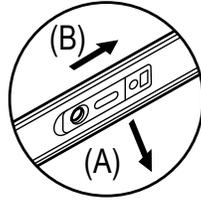
1. Release the inner rail from the outer rail.
  - a. Extend the inner rail until it stops.
  - b. Press the release lever on the inner rail to remove it.



2. Attach the inner rail to the chassis.



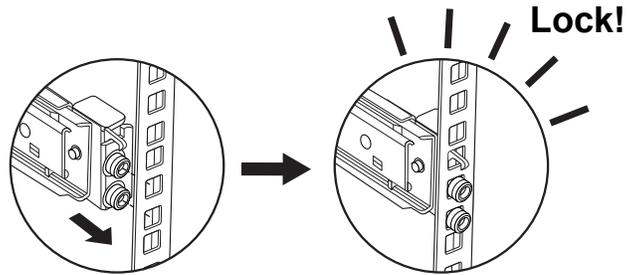
3. Press the released inner rail against the chassis of the server or AV system. Then lift the clip (A) and slide the inner rail toward the chassis rear (B).



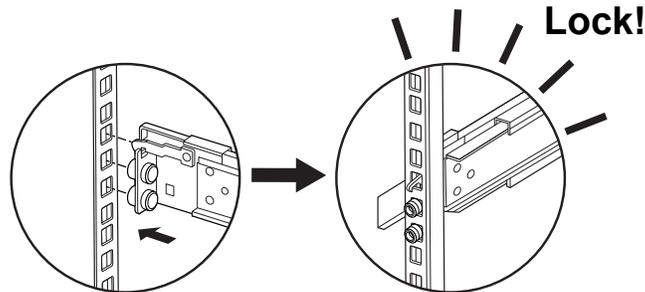
## Rack Rail Installation

### Server Racks

1. Lift the lever on the outer rail. Aim the rack mount pin at the front rack post and push forward to lock.

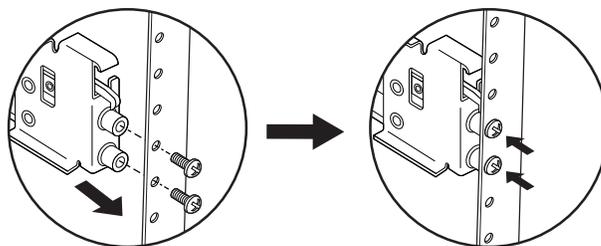


2. Lift lever again. Align the rear rack mount pin to the rack post and pull back to lock the rear of the outer rail.



### AV Racks

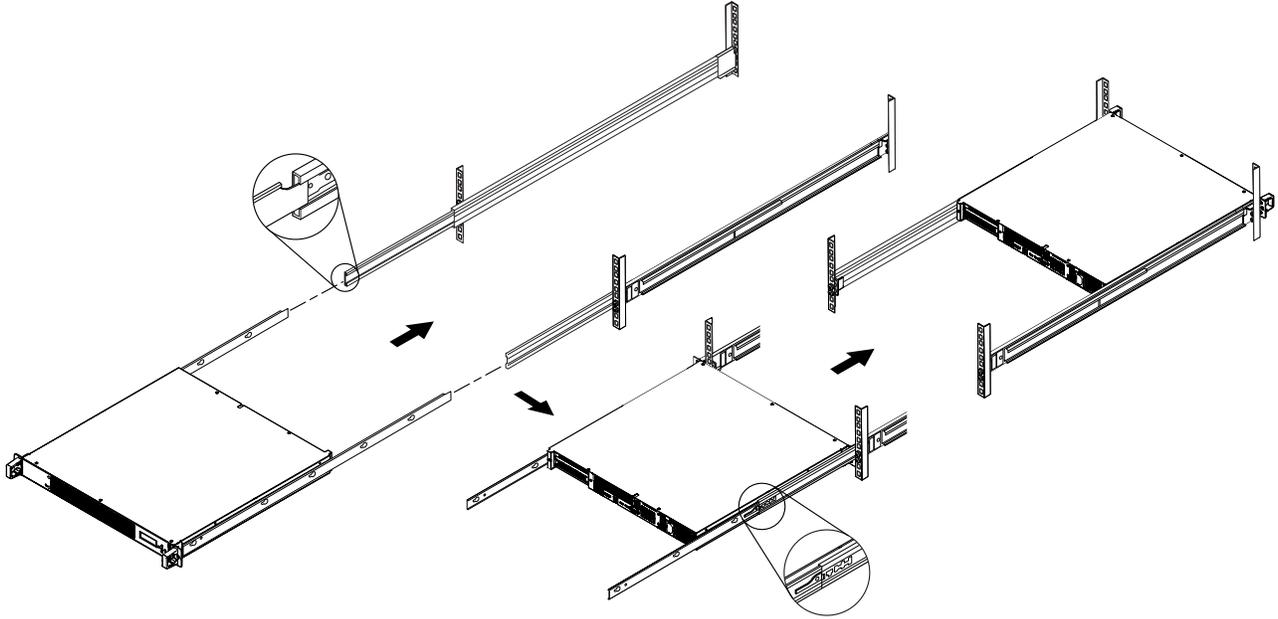
1. Align the front of the outer rail with the AV rack's round mounting holes. Insert and tighten #10-32 rack screws (two per side).
2. Repeat steps for the rear.



## System Installation

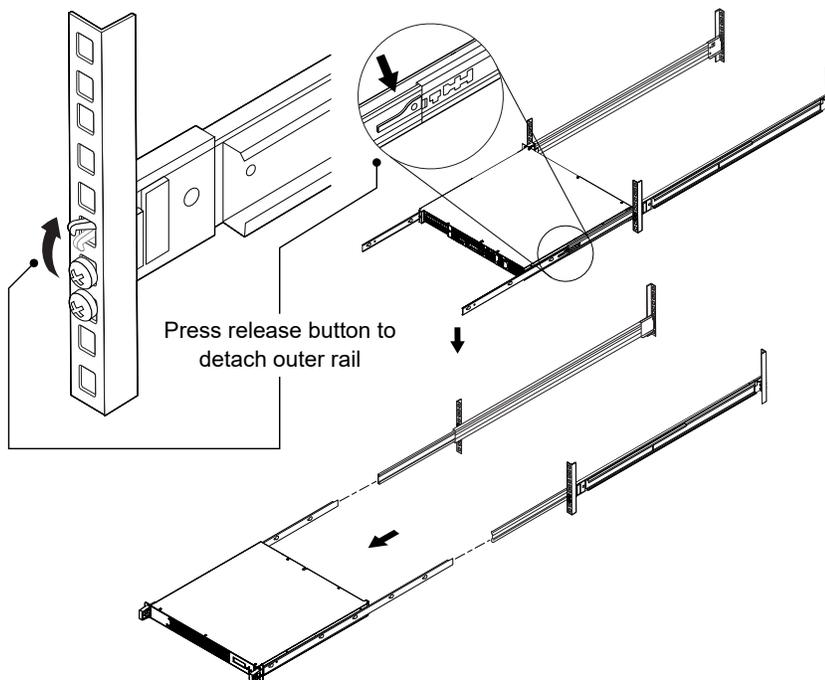
Mount system onto the rack:

1. Ensure the ball-bearing retainer in the outer rail is locked in the forward position.
2. Pull the middle rail out of the outer rail until it locks.
3. Align the system's inner rails (attached in earlier steps) with the middle rail and push the system fully into the rack until it locks.



## Outer Rail Removal

1. To remove the outer rail from the rack, press the release latch on the side of the rail.
2. Slide the rail out from the mounting rack.





## Knowledge Base

Find answers to common questions, troubleshooting information, tips, and application notes. Link to support policies and resources, including Q-SYS Help, software and firmware, product documents, and training videos. Create support cases.

[support.qsys.com](https://support.qsys.com)

## Customer Support

Refer to the Contact Us page on the Q-SYS website for Technical Support and Customer Care, including their phone numbers and hours of operation.

[qsys.com/contact-us/](https://qsys.com/contact-us/)

## Warranty

For a copy of the QSC Limited Warranty, go to:

[qsys.com/support/warranty-statement/](https://qsys.com/support/warranty-statement/)