

Specification

4K@60Hz UHD Video Matrix

AMS-MC4K_16×16

Professional 16-Input / 16-Output Display Control



16 × 16

HDMI Matrix

4K @ 60Hz

Ultra HD

3 MODES

Matrix · Splice · Multiview

WEB

Browser Control

AMS-MC4K_16×16

Shenzhen Amoonsky Technology Co., Ltd.

LCD / LED Video Matrix Solutions

Safety

INSTALLATION & HANDLING

This section summarizes the safety instructions carried forward from the AMS-MC4K series reference specification. These instructions apply to handling, storage, transport, installation and operation.

- Read all instructions before use.
- Keep the instructions for future reference.
- Follow all applicable operating and safety instructions.

STORAGE & TRANSPORT

- ✦ Prevent exposure to dust and water.
- ✦ Avoid prolonged direct sunlight and excessive heat.
- ✦ Keep away from flames, explosive materials and strong electromagnetic environments.
- ✦ Place the device on a stable surface to prevent falling or damage.
- ✦ Keep original packaging for protection during transport or storage.

INSTALLATION & USE

- ✦ Installation should be performed by trained professionals.
- ✦ Disconnect power before connecting or disconnecting equipment.
- ✦ Ensure that the chassis is correctly grounded.
- ✦ Avoid strong vibration and perform regular dust removal.
- ✦ Do not disassemble the product without authorization; contact the supplier for maintenance.
- ✦ Use qualified or manufacturer-supplied spare parts.

Overview

AMS-MC4K_16×16

AMS-MC4K_16×16 is a 4K@60Hz HDMI video matrix with 16 inputs and 16 outputs. Its on-device menu provides Matrix, Splice and Multiview functions; network connection diagrams and English menu captures are included in this specification.

16 HDMI INPUTS

Source connections

16 HDMI OUTPUTS

Display connections

4K @ 60Hz

UHD signal format

3 DISPLAY MODES

Matrix / Splice / Multiview

Seamless Signal Switching

Supports flexible routing of video signals between available inputs and outputs.

Matrix Mode

Assign any numbered input to a selected output using the matrix-routing interface.

Video Wall Splicing

Use the Splice menu and the supplied splice-layout templates for multi-display output.

Multiview Display

Select pre-configured multi-window patterns to show multiple sources in one display layout.

Front-Panel Operation

Full-color LCD, rotary menu knob and dedicated input/output selection keys.

Browser-Based Management

Access the management interface through the NET port using a direct RJ45 connection or network switch.

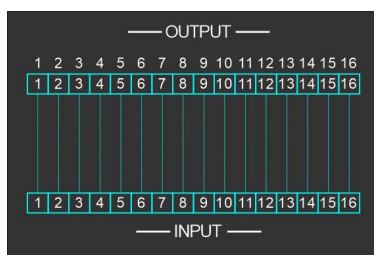
Reference basis: 16×16 product photography, English on-device interface captures and connection diagrams; shared feature descriptions follow the supplied 8×8 specification where applicable.

Operating Modes

ORIGINAL ENGLISH LCD SCREENS

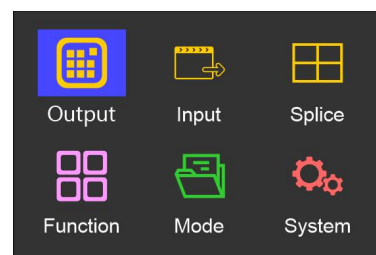
These are the original English menu captures supplied for the 16×16 unit. Numbered source and output channels, menu icons and template thumbnails are preserved as provided.

OUTPUT / INPUT ROUTING



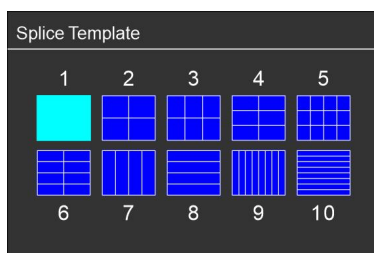
Channel-to-channel matrix routing

MAIN MENU



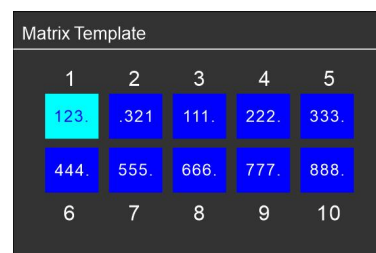
Output · Input · Splice · Function · Mode · System

SPLICE TEMPLATE



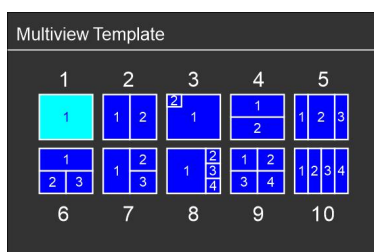
Ten displayed splice-layout choices

MATRIX TEMPLATE



Ten displayed matrix memory choices

MULTIVIEW TEMPLATE



Ten displayed multiview layout choices

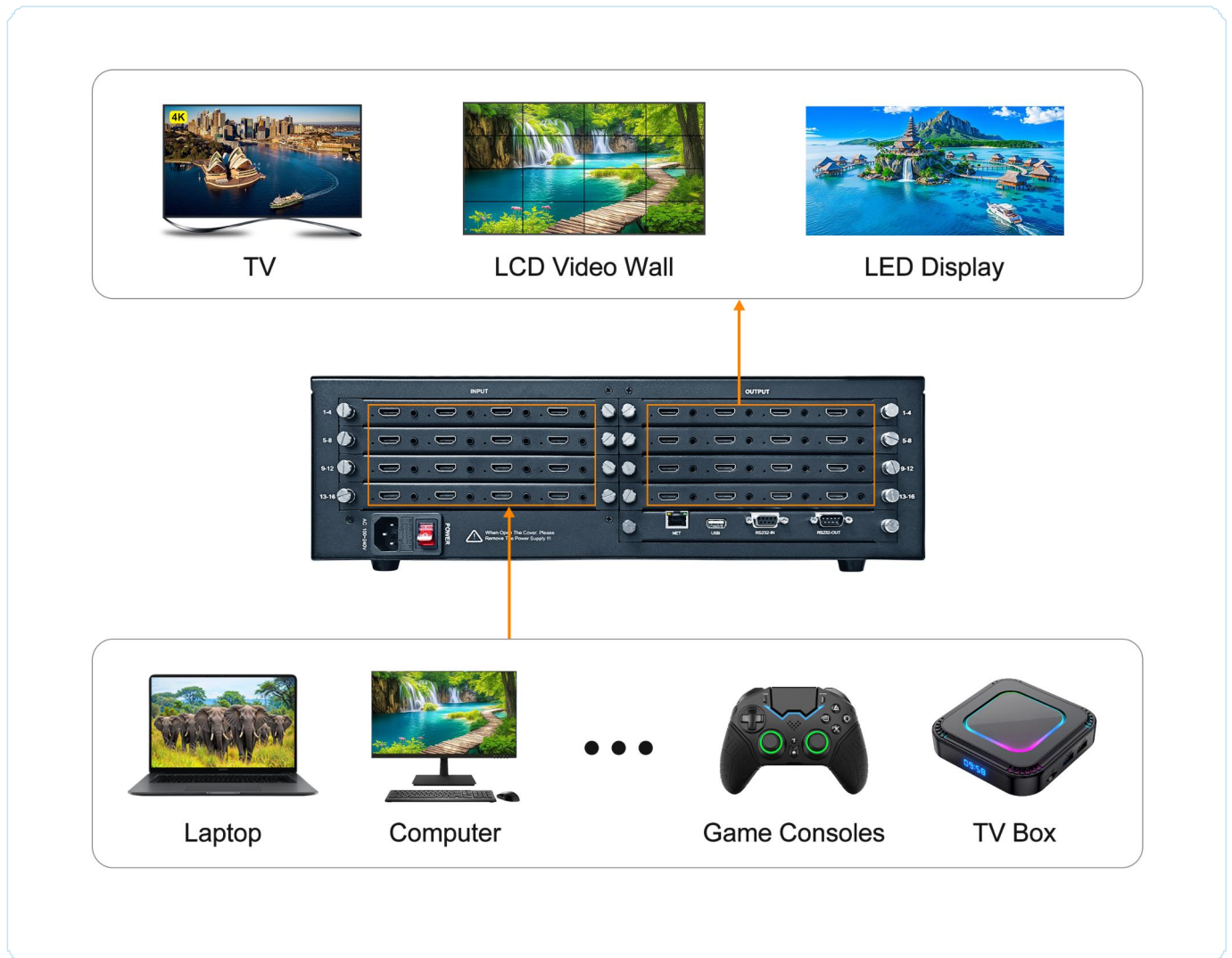
CONTROL WORKFLOW

1. Choose Output or Input.
2. Select Splice for video-wall layout.
3. Load a Matrix or Multiview template.
4. Save or recall the required scene using the available menu controls.

Connection Diagram

SOURCE → MATRIX → DISPLAY

Connect compatible source devices to the 16 HDMI inputs. Route the processed outputs to displays, LCD video walls or LED display systems.



TYPICAL APPLICATIONS

Command Center

Multi-source overview and operator display walls.

Security Monitoring

Distribution of CCTV and monitoring inputs.

Conference AV

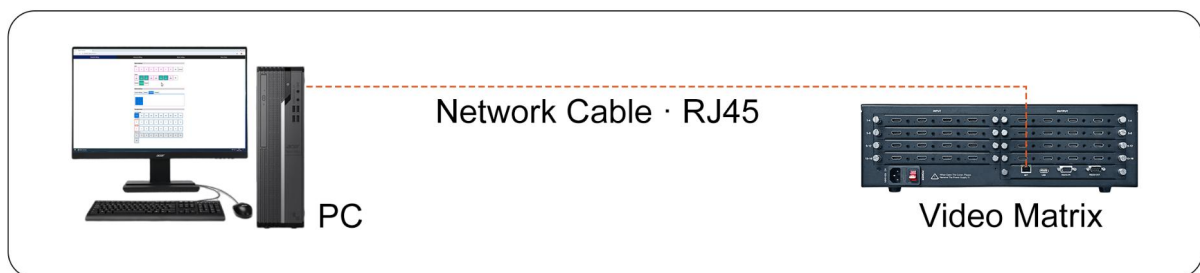
Flexible display routing and video-wall presentation.

Web Control

NETWORK CONNECTIONS

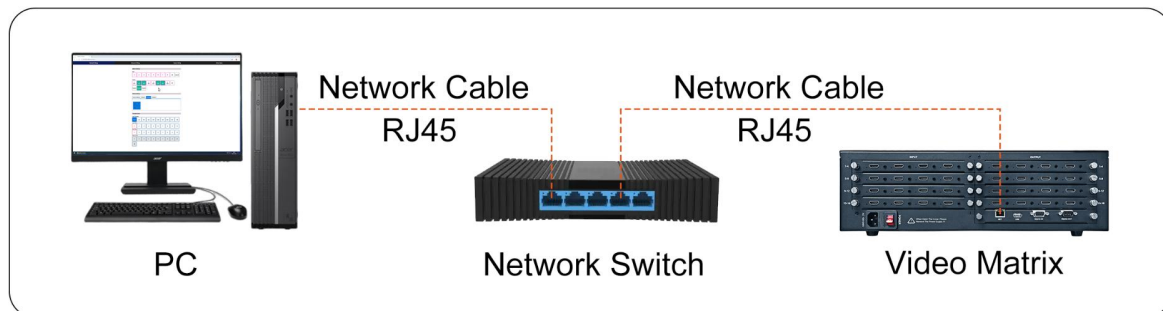
The NET (RJ45) port can connect to a computer directly or through a network switch. The browser-based controller is accessed using the device IP address, following the supplied reference-series procedure.

01 DIRECT ETHERNET CONNECTION



Connect the control PC directly to the matrix NET port with a network cable.

02 LAN CONNECTION THROUGH NETWORK SWITCH



Connect both the control PC and the matrix to the same local network using a network switch.

CONTROL PORTS

NET – web-interface connection RS232-IN / RS232-OUT – serial control ports
 USB – service port labeled USB on the supplied rear-panel photograph

Product Introduction

ACTUAL FRONT & REAR PHOTOGRAPHS

FRONT PANEL



FULL-COLOR LCD

Shows the device menu and operating status.

MENU CONTROL

Rotary knob with dedicated confirmation/return buttons.

INPUT / OUTPUT

Numbered channel-selection keypad and function keys.

REAR PANEL



16 × INPUT

HDMI input bank

16 × OUTPUT

HDMI output bank

SYSTEM CONTROL

NET · USB · RS232 IN/OUT

Parameters

16×16 REFERENCE DATASHEET

The table below lists features supported directly by the supplied 16×16 imagery and menus. Model-specific values absent from the source materials are not invented.

VIDEO / DISPLAY

Model	AMS-MC4K_16×16
Matrix I/O	16 HDMI inputs / 16 HDMI outputs
UHD signal	Up to 3840 × 2160 at 60 Hz (4K@60Hz)
Operating modes	Matrix switching / Splice / Multiview
LCD menu templates	Splice / Matrix / Multiview: 10 slots shown in each supplied menu

CONTROL INTERFACES

Ethernet	NET (RJ45) – browser-based control
Serial	RS232-IN and RS232-OUT connectors
USB	USB connector on rear control panel
Front panel	Full-color LCD, rotary control and numbered keys

MECHANICAL / POWER

AC input	AC 100–240 V (rear-panel marking)
Dimensions / Weight	Not provided in 16×16 source materials
Packing details / P/N	Not provided in 16×16 source materials
Size	485 × 385 × 145mm

Source note. Product photographs and original English menu screens supplied for AMS-MC4K_16×16; formatting and general safety text based on the AMS-MT4K_8×8 Specification (2026.02). Confirm enclosure measurements, operating limits, certification, warranty and ordering number before issuing as a finalized factory datasheet.