

eDMX4 MAX ISODIN22



USER MANUAL

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1. INTRODUCTION

Thanks for purchasing a DMXking product. Our aim is to bring you high quality products with great features we know you'll appreciate. DMXking MAX series devices are Art-Net and sACN/E1.31 protocol compatible designed for use with computer based show control software or expansion of lighting console outputs. There are many free and commercial software packages available. http://dmxking.com/control-software

HARDWARE AND FIRMWARE VERSIONS

From time-to-time minor hardware changes occur in our products usually small feature additions or unseen optimizations. The table below lists eDMX4 MAX ISODIN22 product variants. Check the product label for P/N details.

| Part Number | Feature addition |
|-------------|-------------------------|
| 0130-1.1 | Initial product release |

Firmware updates are released on a semi-regular basis. We recommend updating to the latest available firmware version so all product features are available. Please take note the user manual reflects latest firmware version features unless otherwise noted.

| Firmware Version | Comments |
|------------------|---|
| V4.0 | Initial release. RDM support disabled. |
| V4.1 | Improved port LED intensity. Fixed startup hang with certain SD cards. |
| V4.2 | DMX-IN recording issue fix. ArtNet subnet broadcast traffic issue fix – resolves problem with being unable to scan for (L)eDMX MAX units. |
| V4.3 | Initial release with USB DMX support. |
| V4.5 | Extensions to DMXking USB DMX protocol. Required update for USB DMX functionality. |
| V4.6 | Art-Net TimeSync. ArtPollReply changed to single universe per message. Art-Net RDM functionality enabled. DMX512 timing parameters adjustable. Art-Net UDP Port adjustable. Art-Net RDM Controller optional fixed IP and adjustable UDP Port. Diagnostics messages priority enhancements. |
| V4.7 | SD card detection improvements. |

An internally accessible USB-C port is available device configuration without Network connection.

MAIN FEATURES

- Wide input power range 7-28Vdc
- DIN rail mount 22.5mm wide
- Static or DHCP IPv4 network addressing
- Supported operating systems: Windows, MacOS, Linux, iOS, Android
- eDMX4 MAX ISODIN22 4x DMX512 Out or DMX512 In with Art-Net, sACN E1.31 and E1.20 RDM support
- Art-Net broadcast, Art-Net II,3 & 4 unicast, sACN/E1.31 Multicast and sACN Unicast support
- Merge 2 incoming Art-Net/sACN streams per output channel with both HTP and LTP options
- Merge Art-Net/sACN + DMX input -> DMX output(s)
- Merge 2x DMX input -> DMX output(s)
- Split 1x DMX input -> 3x DMX outputs
- sACN Priority takeover for multi-tier controller arrangements
- Mix and match ArtNet with sACN merge/priority sources
- DMX-IN and DMX-OUT channel offset re-mapping
- User configuration of Art-Net Node short and long names
- Fully compatible with all software and hardware that supports Art-Net I, II, 3 & 4 and sACN protocols
- Works with your existing console if Art-Net or sACN external nodes are supported
- Universe Sync Art-Net, sACN and Madrix Post Sync
- Recording and playback to microSD card (not included). See eDMX MAX Record / Playback manual
- Standalone show playback without computer or network connection
- Internal clock with optional battery backup for timed playback. NTP time sync
- Configuration utility with basic Art-Net output/input test functionality

eDMX MAX translates Art-Net 00:0:0 to Universe 1 (i.e. offset by 1) so there is an easy mapping between sACN/E1.31 and Art-Net.

2. EXTERIOR VIEW

FRONT VIEW



Network 10/100Mbps RJ45 socket. Pluggable 2way 3.81mm pitch terminal block for 7-28Vdc power input. Four 4way 5mm pitch pluggable terminal block connectors for DMX512.

STATUS LED TABLE

| LED | Indication |
|----------|--|
| Protocol | Protocol activity. Flash Red = Art-Net/sACN. Solid Red = Bootloader mode |
| Link/Act | Network activity. Green = Link, Flash = Traffic |
| Port A | DMX512 Port A TX/RX activity |
| Port B | DMX512 Port B TX/RX activity |
| Port C | DMX512 Port C TX/RX activity |
| Port D | DMX512 Port D TX/RX activity |

3. DEFAULT CONFIGURATION

All eDMX4 MAX DIN units ship with default IP address settings. Please reconfigure network settings as required before use.

| Parameter | Default Setting |
|------------------------------|-------------------|
| IP Address | 192.168.0.112 |
| Subnet Mask | 255.255.255.0 |
| Default Gateway | 192.168.0.254 |
| IGMPv2 Unsolicited Report | Unchecked |
| Network Mode | Static IP address |

DMX512 Port configuration parameter defaults.

| Parameter | Default Setting |
|--------------------------------|--|
| Async Update Rate | 40 [DMX512 frames per second]. Universe Sync will override. |
| Port Operation Mode | DMX-OUT |
| Timeout all sources | Unchecked |
| Channel Offset | 0 |
| Fixed IP | 0.0.0.0 [Only for DMX IN – Unicast to 1 IP address only] |
| Merge Mode | НТР |
| Full DMX Frame | Unchecked |
| *Broadcast Threshold | 10 [Art-Net II/3/4 unicasting up to 10 nodes]. Set to 0 for Art-Net I broadcast on DMX IN ports. |
| Unicast IP [DMX-IN] | 0.0.0.0 |
| sACN Priority [DMX-IN] | 100 |
| RDM Discovery Period [DMX-OUT] | Os / RDM Disabled |
| RDM Packet Spacing [DMX-OUT] | 1/20s |
| DMX-OUT Failsafe Mode | Hold Last |
| Recall DMX Snapshot at startup | Unchecked |
| DMX512 Universe | 1-4 [Net 00, Subnet 0, Universe 0-3] |
| | Note: sACN Universe 1 = Art-Net 00:0:0 |

^{*}Global threshold for all DMX-IN ports, configured only in Port A settings tab.

4. CONFIGURATION UTILITY

Download eDMX MAX Configuration Utility from https://dmxking.com/downloads-list

User manual for the utility https://dmxking.com/downloads/eDMX MAX Configuration Utility User Manual (EN).pdf

5. TECHNICAL SPECIFICATIONS

- Dimensions: 22.5mm x 125mm x 100mm (WxHxD)
- Weight: 130 grams (0.29lbs)
- DC Power input 7-28Vdc, 3W max. Typical current consumption @ 12Vdc 200mA
- DMX512 connector: 4 way 5mm pitch terminal block.
- DMX512 ports electrically isolated.
- Optional Earth referenced DMX outputs jumper wire between DMX Common and Earth on output connector.
- Ethernet 10/100Mbps Auto MDI-X port.
- Internal DMX512-A line biasing termination as per ANSI E1.20 RDM requirements
- Art-Net, Art-Net II, Art-Net 3, Art-Net 4 and sACN/E1.31 support.
- ANSI E1.20 RDM compliant with RDM over Art-Net. Not available in firmware 4.0
- Universe Sync Art-Net, sACN and Madrix Post Sync.
- Both HTP and LTP merging of 2 Art-Net streams per port
- sACN Priority
- Internal merging capability with DMX In and DMX Out ports on same Universe.
- IPv4 Addressing
- IGMPv2 for multicast network management
- DMX512 Frame Rate: Adjustable per port
- Operating temperature -20°C to 50°C non-condensing dry environment

6. WARRANTY

DMXKING HARDWARE LIMITED WARRANTY

What is covered

This warranty covers any defects in materials or workmanship with the exceptions stated below.

How long coverage lasts

This warranty runs for two years from the date of shipment from an authorized DMXking distributor.

What is not covered

Failure due to operator error or incorrect application of product.

What DMXking will do

DMXking will repair or replace, at its sole discretion, the defective hardware.

How to obtain service

Contact your local distributor https://dmxking.com/distributors

7. ACKNOWLEDGEMENTS

Art-Net™ Designed by and Copyright Artistic Licence

8. DECLARATIONS

The eDMX4 MAX ISODIN22 has been tested against applicable standards and certified compliant as below.

| Standard | |
|-------------|--|
| IEC 62368-1 | Audio/Video and ICTE Safety Requirements |
| IEC 55032 | Radiated Emissions |
| IEC 55035 | EMC Immunity Requirements |
| | |
| FCC Part 15 | Radiated Emissions |
| RoHS 3 | Restriction or Hazardous Substances |

| Country | |
|---------------|--|
| Europe | |
| North America | |
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