MU-STIX-A

STIX Test Ecosystem Signal Analyzer

The MU-STIX-A is a revolutionary Murideo thumb drive-sized 8K HDMI signal analyzer supporting HDMI 2.1 FRL signals up to 48 Gbps and legacy HDMI 2.0 TMDS signals up to 18 Gbps. The MU-STIX-A is ideal for rack room assembly testing or light-duty in-field pass/fail signal transmission verification.

The MU-STIX-A analyzes video test patterns at resolutions from 720p through 8K/30 fps, including 4K/120 fps High Frame Rate. Its mini OLED screen displays the incoming video signal, resolution and timing, bit depth, chroma information, and HDCP Version, a versatile HDMI video monitor no larger than a USB "stick." Powered by any standard USB power port, the MU-STIX-A can operate on the go around an installation site connected to a phone or tablet using a USB Type-C to Type-C cable. Its ultra-compact, stow-away form factor enables all field technicians to have a cost-effective HDMI video monitor and signal analyzer available for signal path verification for legacy HDMI system troubleshooting or new HDMI 2.1 installations.

The MU-STIX-A and MU-STIX-G Ecosystem enables rapid yet thorough in-house signal throughput confirmation before site deployment, verifying endpoint devices are functioning correctly, appropriately responding to programming, and aligned with system performance parameters. The Murideo MU-STIX-A OLED display physically corroborates source information parameters when connected to the output of an HDMI source.
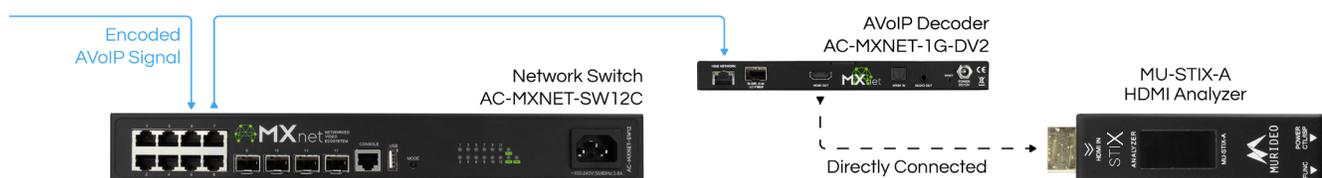
The MU-STIX-A is a convenient, cost-effective multi-resolution format analyzer for commercial or residential integrators when simple pass-fail transmission path and display capability verification are required. Having multiple pairs of the STIX duo on hand makes tedious, labor-intensive pre-deployment rack room testing easy and fast. Field Technicians equipped with one or more MU-STIX-As enable system signal throughput confirmation for display-supporting electronics installed inside cable and device management in-wall storage enclosures, eliminating potential duplicate labor before the display is mounted.

FEATURES:

- HDMI 2.1b, 8K 48 Gbps (FRL) compliant
- Accepts 720p, 1080p, 4K and 8K signal timings at 8-, 10-, and 12-bit Color Depths, in RGB, 4:2:0, 4:2:2, and 4:4:4 Color Spaces
- Detects signal changes, sync losses, and logs loss time
- OLED screen displays incoming video image, source timing, FRL version or TDMS, color space, color depth, and HDCP version
- Displays audio information, including incoming sampling frequency, bit rate size, and audio type
- The STIX Ecosystem is compatible with any brand of HDMI devices

System Testing
MU-STIX-A Application Diagram

Signal Path
Ethernet

Encoded AVoIP Signal

Network Switch
AC-MXNET-SW12C

AVoIP Decoder
AC-MXNET-1G-DV2

MU-STIX-A
HDMI Analyzer

Directly Connected

MURIDEO®

PRODUCT SPECIFICATIONS:

VIDEO INPUT/INGESTION	
HDMI Version	2.1
HDCP Version	1.4 and 2.3
HDCP On/Off	No
Maximum Clock Rate	600 Mc/s (1188 MHz)
Maximum Throughput Per Channel	12 Gbps (48 Gbps Total)
Resolution Timings	HDMI VICs up to 8K/60 fps DCI up to 4K/60 fps VESA DMT VESA CVT-RB up to 600 MHz
Video Encoding	RGB, YCbCr
Video Sampling Models	RGB 4:4:4, YUV 4:4:4, YUV 4:2:2, YUV 4:2:0
Color Bit Depth	8-, 10-, 12-bit
AUDIO (DIAGNOSTICS ONLY)	
Audio Type	LPCM
Audio Sampling Rate (kHz)	32, 44.1, 48, 88.2, 96, 176, 192
Audio Channels	Up to 8
Audio Volume	No
PORTS	
HDMI	Male Type-A
Firmware/Control	USB Type-C
ENVIRONMENTAL	
Operating Temperature	23° to 125° F (-5° to 51° C)
Storage Temperature	-4° to 140° F (-20° to 60° C)
Operating Humidity	5% to 90% RH (No Condensation)
Cooling	Passive
POWER	
Max Power Consumption	2.7 W
Power	5 VDC, 540 mA
DIMENSIONS	
Dimensions (Unit only Width/Depth/Height)	mm: 12 x 21 x 81.1 in: .47 x .82 x 3.2
Dimensions (Packaged Width/Depth/Height)	mm: 122 x 91 x 26 in: 4.80 x 3.58 x 1.02
Weight (Unit)	27 grams / 1 oz
Weight (Packaged)	136 grams / 4.8 oz
Product Warranty	2 years

BENEFITS:

LOW-COST, FLEXIBLE ANALYZER: Verify standard output timings used by HDMI-based entertainment sources at low cost. Sources can be MU-STIX-G generated or in-field from installation source devices. Additional signal-related information is also captured and displayed on the MU-STIX-A OLED screen.

ANALYZE STANDARD SIGNAL TIMINGS: HDMI VICs up to 8K/60 fps, DCI up to 4K/60 fps, VESA DMT, and VESA CVT-RB up to 600 MHz.

DISPLAYS ADDITIONAL SOURCE INFORMATION: 8-, 10-, and 12-bit color depth is detected and displayed, along with RGB, 4:2:0, 4:2:2, and 4:4:4 color spaces.

AUDIO DIAGNOSTICS (NOT AUDIBLE): Up to 8 LPCM audio channels at sampling rates from 32 kHz up to 192 kHz.

ULTRA-COMPACT FORM FACTOR: The HDMI headshell-sized footprint enables easy connectivity in tight spaces after racks are built. It can also be conveniently stored with tools or in a computer bag for any time troubleshooting.

INTEGRAL COMPONENT OF THE STIX ECOSYSTEM: The STIX Ecosystem allows for asymmetrical scalability for MU-STIX-A deployment in end-to-end testing scenarios. Paired with the MU-STIX-G generator, system troubleshooting and infrastructure performance confirmation can be easily accomplished before sources and displays are installed.