### TVM Multiformat Signal Analyzers

**AVM Audio and Video Monitoring System**

- **TVM-VTM-DLK**: Adds support for RGB (4:4:4) and RGB+A (4:4:4+) (for AVM-717, TVM9140PKG, and VTM4140PKG only)
- **TVM-VTM-ACV-2**: Supports HD and SD-SDI
- **TVM-VTM-SDI-S**: Supports HD and SD-SDI with eye pattern
- **TVM-VTM-EYE-H**: Multiformat HD/SD-SDI waveform monitor/vectorscope; convenient half-rack scope package; displays waveform, vector, gamut, picture or the Harris Videotek patented timing scope package; displays waveform, vector, gamut, picture or the Harris Videotek patented timing
- **TVM-VTM-JEM**: Versions available with dual HD/SD, SD only, or composite inputs; SD only software upgradable to HD/SD; data analyzer standard; options for additional SDI or composite inputs; fixed-screen layout; XGA output; optional four-channel audio

**TVM, AVM and Video Optionsto**

- **TVM-4MA**: Metadata analyzer, HD/SD-SDI; discovers, monitors and alarms on ancillary timing
- **TVM-4DG**: Additional input module with analog, AES, embedded (four AES inputs) and Dolby®, plus loudness monitoring with trend chart and true peak to BS.1770

**Videotek VTM Series™ technology provides high-resolution display of picture, waveform, vectors and optional audio convenience, in either individual full screen or concurrent displays on any standard computer display.**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TVM-2690</td>
<td>Two HD-SDI and two composite video inputs; fixed screen layout; YSA output; optional four-channel audio</td>
</tr>
<tr>
<td>TVM-2690</td>
<td>Two HD-SDI video inputs; fixed screen layout; ISA output; optional four-channel audio</td>
</tr>
<tr>
<td>TVM-2690</td>
<td>Supports HD/SD-SDI, AES, and embedded (eight AES inputs) plus metadata display</td>
</tr>
<tr>
<td>TVM-2690</td>
<td>Supports AES, embedded and Dolby® plus metadata display</td>
</tr>
<tr>
<td>TVM-2690</td>
<td>Supports AES and embedded (eight AES inputs); includes built-in XGA output and audio tone channels and user-loadable test signals; also inputs GPS (VITC) and absolute time reference (DARS) AES and analog audio with independent analog blackburst (video as HD, SD and analog composite or tri-level sync); vertical interval time code generator; four independently configurable channel audio</td>
</tr>
<tr>
<td>TVM-2690</td>
<td>Supports AES, embedded and Dolby® plus metadata display</td>
</tr>
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</tbody>
</table>

**Videotek Audio and Video Options**

**Generators**

- **TSG-3901-1S**: NEO HDTV test signal generator with integrated ACO module with blackburst, tri-level sync (video as HD, SD and analog composite or tri-level sync); test signal generation, four independently configurable channel audio
- **TSG-3901-SYS**: NEO® master timing generator; NEO modular reference signal generator (as required), fan module, alarm interconnect module, 1 x ACO-3901 module, FR-3923 frame with blank front panel, power supply, detachable power cord, MTG-3901-SYS standalone external power supply; back modules, 1 RU frequency-agile demodulators DM-145 and DM-154
- **TSG-3901-SYS-1**: NEO® master timing generator; NEO modular reference signal generator (as required), fan module, alarm interconnect module, 1 x ACO-3901 module, FR-3923 frame with blank front panel, power supply, detachable power cord; MTG-3901-SYS standalone external power supply; back modules, 1 RU frequency-agile demodulators DM-145 and DM-154
- **TSG-3901-SYS-3**: NEO® master timing generator; NEO modular reference signal generator (as required), fan module, alarm interconnect module, 1 x ACO-3901 module, FR-3923 frame with blank front panel, power supply, detachable power cord; MTG-3901-SYS standalone external power supply; back modules, 1 RU frequency-agile demodulators DM-145 and DM-154
- **TSG-3901-SYS-5**: NEO® master timing generator; NEO modular reference signal generator (as required), fan module, alarm interconnect module, 1 x ACO-3901 module, FR-3923 frame with blank front panel, power supply, detachable power cord; MTG-3901-SYS standalone external power supply; back modules, 1 RU frequency-agile demodulators DM-145 and DM-154

**Lawful Interception**

- **TVM-4MA**: Supports AES3/4 connected via optical fiber or AES3/4 via AES3/4 connector, with blackburst, tri-level sync (video as HD, SD and analog composite or tri-level sync); test signal generation, four independently configurable channel audio

**Digital Demodulators**

- **DDM-6800+D**: Serial digital color corrector with real-time video processing for RGB, encoded and vector-based limits
- **DDM-6800**: Serial digital color corrector with real-time video processing for RGB, encoded and vector-based limits

**Videotek® Test & Measurement Solutions**

**Legalizers, Proc Amps, Color Correctors**

**Demodulators**

- **DM-100**: HD/SD-SDI legalizer, automatically legalizes HD-SDI video for FAS, encoded and vector-based limits
- **DM-145**

Please visit www.broadcast.harris.com/videotek for additional models and options.

- **VSG-410**: ViewSonic DisplayLink technology
- **VSG-420**: ViewSonic DisplayLink technology
- **VSG-430**: ViewSonic DisplayLink technology
- **VSG-440**: ViewSonic DisplayLink technology
- **VSG-450**: ViewSonic DisplayLink technology
- **VSG-460**: ViewSonic DisplayLink technology
- **VSG-470**: ViewSonic DisplayLink technology
- **VSG-480**: ViewSonic DisplayLink technology
- **VSG-490**: ViewSonic DisplayLink technology
- **VSG-500**: ViewSonic DisplayLink technology
- **VSG-510**: ViewSonic DisplayLink technology
- **VSG-520**: ViewSonic DisplayLink technology
- **VSG-530**: ViewSonic DisplayLink technology
- **VSG-540**: ViewSonic DisplayLink technology
- **VSG-550**: ViewSonic DisplayLink technology
- **VSG-560**: ViewSonic DisplayLink technology
- **VSG-570**: ViewSonic DisplayLink technology
- **VSG-580**: ViewSonic DisplayLink technology
- **VSG-590**: ViewSonic DisplayLink technology
- **VSG-600**: ViewSonic DisplayLink technology
- **VSG-610**: ViewSonic DisplayLink technology
- **VSG-620**: ViewSonic DisplayLink technology
- **VSG-630**: ViewSonic DisplayLink technology
- **VSG-640**: ViewSonic DisplayLink technology
- **VSG-650**: ViewSonic DisplayLink technology
- **VSG-660**: ViewSonic DisplayLink technology
- **VSG-670**: ViewSonic DisplayLink technology
- **VSG-680**: ViewSonic DisplayLink technology
- **VSG-690**: ViewSonic DisplayLink technology
- **VSG-700**: ViewSonic DisplayLink technology
- **VSG-710**: ViewSonic DisplayLink technology
- **VSG-720**: ViewSonic DisplayLink technology
- **VSG-730**: ViewSonic DisplayLink technology
- **VSG-740**: ViewSonic DisplayLink technology
- **VSG-750**: ViewSonic DisplayLink technology
- **VSG-760**: ViewSonic DisplayLink technology
- **VSG-770**: ViewSonic DisplayLink technology
- **VSG-780**: ViewSonic DisplayLink technology
- **VSG-790**: ViewSonic DisplayLink technology
- **VSG-800**: ViewSonic DisplayLink technology
- **VSG-810**: ViewSonic DisplayLink technology
- **VSG-820**: ViewSonic DisplayLink technology
- **VSG-830**: ViewSonic DisplayLink technology
- **VSG-840**: ViewSonic DisplayLink technology
- **VSG-850**: ViewSonic DisplayLink technology
- **VSG-860**: ViewSonic DisplayLink technology
- **VSG-870**: ViewSonic DisplayLink technology
- **VSG-880**: ViewSonic DisplayLink technology
- **VSG-890**: ViewSonic DisplayLink technology
- **VSG-900**: ViewSonic DisplayLink technology
- **VSG-910**: ViewSonic DisplayLink technology
- **VSG-920**: ViewSonic DisplayLink technology
- **VSG-930**: ViewSonic DisplayLink technology
- **VSG-940**: ViewSonic DisplayLink technology
- **VSG-950**: ViewSonic DisplayLink technology
- **VSG-960**: ViewSonic DisplayLink technology
- **VSG-970**: ViewSonic DisplayLink technology
- **VSG-980**: ViewSonic DisplayLink technology
- **VSG-990**: ViewSonic DisplayLink technology

**Digital Demodulators**

- **DDM-990**: Multiple frequency agile demodulator, B8, B4, A24 demodulator to ASI output for the AVM-717™ system
- **DDM-990-B**: Serial digital color corrector with real-time video processing for RGB, encoded and vector-based limits

**Analog NTSC Demodulators**

- **DM-100**: HD/SD-SDI legalizer, automatically legalizes HD-SDI video for FAS, encoded and vector-based limits
- **DM-145**: HD/SD-SDI legalizer, automatically legalizes HD-SDI video for FAS, encoded and vector-based limits
Harris offers a complete line of handheld solutions for video, audio, transport stream, RF and optical fiber test and measurement.

**MUSA Series**
The new Multi-Source Analyzer (MUA) Series from Harris offers a range of solutions that create confidence monitoring with full testing for compressed video content, audio level, data streams and ETR-290 on any terrestrial broadcast, cable headend or telco network. With two base platforms available (MUA-100 and MUA-300), customers can select the IO configuration, channel capacity and system version that meet their needs. Even for the most specific needs, both options are offered in space-efficient 1U packages.

The MUA Series delivers awareness of system information and ancillary data, with the ability to provide the convergence results in an intuitive GUI interface, along with one or more mosaic displays that provide real-time full-motion video decode and audio level analysis. A variety of physical input formats are supported, along with multiple compression standards, a wide array of transport and streaming protocols, and the ability to simultaneously handle a large number of channels in real time.

**MUA-100**
- 3RU platform, standard with one codec and 16 SD PIPs, providing full confidence testing and traffic status monitoring.

**MUA-300**
- 5RU platform, standard with one codec and eight HD PIPs, providing full confidence testing and traffic status monitoring.

* Options
- MUA-CODEC-MPEG-4 — MPEG-4, Part 10
- MUA-CODEC-MPEG-2 — MPEG-2, IMX/CBG, Sony XDCAM
- MUA-CODEC-H264 — H.264/AVC
- MUA-CODEC-MPEG4 — MPEG-4, Part 2
- MUA-CODEC-VPX — VPX 4.3
- MUA-CODEC-VPX-C — VPX 4.2

The Videotek® Compact Monitor Series is a family of space-saving, efficient video and audio monitoring systems that offer optimal 3G capabilities in two SDI inputs. Both the scope and sanitizer packages are available as portable or fixed equalization platforms.

The MUA Series is designed to monitor and measure multi-source uncompressed video streams, with a variety of physical input formats and the ability to simultaneously handle a large number of channels in real time. The MUA Series delivers awareness of system information and ancillary data, along with one or more mosaic displays that provide real-time full-motion video decode and audio level analysis. A variety of physical input formats are supported, along with multiple compression standards, a wide array of transport and streaming protocols, and the ability to simultaneously handle a large number of channels in real time.

**Compact Monitor Series**

The Videotek Compact Monitor Series is a family of space-saving, efficient video and audio monitoring solutions that offer optimal 3G capabilities in two SDI inputs. Both the scope and sanitizer packages are available as portable or fixed equalization platforms.

**Quic Media Analysis Server**
Videotek Quic® is a fully automated, field-based and measurement server platform. The Quic® solution allows you to verify the quality of compressed digital content five times as fast as real time at SD, and twice as fast as real time for HD. Quic® supports the quality assurance (QA) workflow by providing adjustable alarm thresholds for each parameter analyzed. Each parameter in Quic® determines whether ingested or transmitted content is acceptable or unacceptable. Quic® can be operated manually using an intuitive Graphical User Interface (GUI), automatically using a “drop box” for file-based features, or via automation using the Quic® API to place content into the analysis queue. Through the Remote View Station option, users can operate the GUI from a distributed Windows PC.

**Codex**
One codec comes standard with multiple codecs to choose from:
- MUA-CODEC-MPEG-4 — MPEG-4, Part 10
- MUA-CODEC-MPEG-2 — MPEG-2, IMX/CBG, Sony XDCAM
- MUA-CODEC-MPEG-2 — MPEG-2, IMX/CBG, Sony XDCAM
- MUA-CODEC-H264 — H.264/AVC
- MUA-CODEC-MPEG4 — MPEG-4, Part 2

**Option**
- MUA-OPT-COMPRESSION-1 — compression debugging
- MUA-OPT-VIEW-SPORT — viewing options
- MUA-OPT-AUDIO-1 — audio quality monitoring

**File-Based Testing**

**Compact Monitor Series**

The Videotek Compact Monitor Series is a family of space-saving, efficient video and audio monitoring solutions that offer optimal 3G capabilities in two SDI inputs. Both the scope and sanitizer packages are available as portable or fixed equalization platforms.

**CMF-311**
Compact Monitor Series multi-channel on-screen monitor for 1440x900, 10-bit, full real-time, upgradable to 2.5 Gb/s

**CMF-415**
Compact Monitor Series multi-channel on-screen monitor with dual 15.6-inch (WXGA) LCDs, 10-bit, full real-time, upgradable to 3 Gb/s

**CMF-911**
Compact Monitor Series multi-channel on-screen monitor with dual 19-inch (UXGA) LCDs, 10-bit, full real-time, upgradable to 3 Gb/s

**CMF-214**
Compact Monitor Series bus-based system with panel control

**VMM-4SNY**
Integrated video and audio measurement module for Sony® 3G-SDI input, 1RU, HD-SDI/SD-SDI input upgradable to 3 Gb/s

Videotek is recognized for high-performance instruments that meet the mission-critical requirements of broadcasters around the world every day. From customizable signal analyzers, on-screen monitors and handheld test monitors, to the latest portable optical fiber tools, file-based QC servers, and 3G solutions, Harris offers a high-performance Videotek product to meet any audio or video monitoring requirement.

All Videotek systems are backed by proven performance, exceptional service and responsive support.

For more information, please visit www.broadcast.harris.com/videteck.

**Harris**
Broadcast Communications Division
25 Dyas Road | North York, ON M3B 1V7 | Tel: (416) 445 9640

**Videotek**
www.broadcast.harris.com
Handheld Test Monitors

Harris offers a complete line of handheld solutions for video, audio, transport stream, RF and optical fiber test and measurement.

MSA Series

The new Multi-Source Analyzer (MSA) Series from Harris is a range of solutions that create confidence monitoring with full testing for compressed video content, audio level, data streams and RF-200 on any terrestrial broadcast, cable/telephone or satellite network. With four base platform available (MSA-100 and MSA-300), customers can select the CO configuration, channel capacity and system level that meets their specific needs. Both solutions are offered in spatial-efficient 13.8 packages.

The MSA Series delivers awareness of system information and ancillary data, with the ability to provide the conformance results in an intuitive GUI interface, along with one or more monitors that display that real-time full-motion video decode and audio level analysis. A variety of physical input forms are supported, along with all major compression standards, a wide array of transport and streaming protocols, and the ability to simultaneously handle a large number of channels in real time.

MSA-100™ — 18-plug platform, standard with one codec, and 42 SD PIPs, providing full conformance testing and traffic status monitoring.

**MSA-300™ — 48-plug platform, standard with one codec and eight SD PIPs, providing full conformance testing and traffic status monitoring.**

* Number of PIPs and/or shadow testing varies depending on codec type, picture resolution and bit rate.

**Compact Monitor Series**

The new compact monitor series is a family of space-saving, efficient video and audio monitoring solutions that offer optional 3 Gb/s capability in two SDI inputs. Both the scope and analyzer packages are available as portable or rack mounted units.

**CM-41™ — Compact Monitor Series handheld on-screen monitor, HD-SDI, 2 HD, full rack, upgradeable to 3 Gb/s.**

**CM-4L™ — Compact Monitor Series platform with panel control.**

**CM-4W™ — Compact Monitor Series multiple-on-screen monitor with 750 Hz HD-SDI, 2 HD, full rack, upgradeable to 3 Gb/s.**

**CM-91™ — Compact Monitor Series full-frame signal analyzer with integral (12/L, 14/SI, 24/G, 32/D, full rack, upgradeable to 3 Gb/s.**

**CM-62A™ — Compact Monitor Series business analyzer.**

**CM-360™ — Compact Monitor Series multi-functional signal analyzer with integral LCD and speakers, Bluetooth, and uploadable to 3 Gb/s.**

**VMM-4SNY™ — Integrated video and audio measurement module for Sony HD-SDI monitors with 6G-SDI or 3G-SDI input (4) PIP inputs with audio, 16-channel encoded and decoded display, include price, waveform, vectors, format, audio, timing.**

**RCU-CMS™ — Remote Control Host for the HD/SDI-4600 video and audio measurement module and the CM-41, CM-4W, CM-91 and CM-360 compact monitors.**

Codes

One code comes standard with multiple codes to choose from:

- **M-SW-CODEC-MPEG-2** — MPEG-2, PS, BMPEG, Sony BMPEG,
- **M-SW-DVC** — DVCPro, DVCPRO, DVCProHD, SxS, XDCAM, XDCAM EX,
- **M-SW-MPEG-2** — Made in MPEG-2, DVCPro, HDV, XDCAM, XDCAM EX
- **M-SW-4HDCAM** — ALC in 4HDCAM

Options

- **M-OFF** — File correction tools software package
- **M-REM-VS** — Remover View, Station Client Software for Videotek
- **M-OFF** — Customized monitoring benchmark evaluation for EBU-T1771 standard
- **M-START-MAT** — Adds 4-plug viewable monitors. Includes full software upgrade and enhancements — 7th of the line.
Handheld Test Monitors

Harris offers a complete line of handheld solutions for video, audio, transport streams, RF and optical fiber test and measurement.

SD-STAR™ — Analog and SD-SDI generator and receiver, embedded audio, selectable oscilloscope functionality, RS-422/485

HD-STAR™ — HD and SD-SDI generator and receiver with embedded audio

GEN-STAR™ — HD and SD-SDI generator and receiver for video and audio

ASI-STAR™ — Transport stream monitoring with VSB, C-SDI, D-ASI, and E1/T1 primary framing, timing, and protocol analysis

VSB-STAR™ — Measures and failed signal for VSB ASI, 8QAM, QAM digital signals and IATC analog signals

Optical Fiber Testing

Videotek optical fiber test tools provide you with convenience and affordability. Whether you’re at the station or covering a big game, these handy tools provide accurate physical layer verification and reliable monitoring of your single and multi-mode fiber networks.

MSA Series

The new Multi-Source Analyzer (MSA) Series from Harris is a range of solutions that create confidence monitoring with full testing for compressed video content, audio level, data services and ETR-290 on any terrestrial broadcast, cable television, satellite or fiber network. With two base platforms available (MSA-100 and MSA-300), customers can select the I/O configuration, channel capacity and specific enhancements that meet their specific needs. Both solutions are offered in space-efficient 1U packages.

The MSA Series delivers awareness of system information and ancillary data, with the ability to provide the conformance results in an intuitive GUI interface, along with one or more menus displays that provide real time full function video decoder and audio level analysis. A variety of physical input formats are supported, along with all major compression standards, a wide array of transport and streaming protocols, and the ability to simultaneously handle a large number of channels in real time.

MSA-100 — its platform, standard with one codec, and SD PIP, providing full conformance testing and traffic status monitoring

MSA-300 — its platform, standard with one codec, and SD PIP, providing full conformance testing and traffic status monitoring

* Number of PIPs and/or shadow testing varies depending on codec type, picture resolution and bit rate.

File-Based Testing

QuiC™ Media Analysis Server

Videotek QuiC™ is a fully automated, file-based and measurement server platform. The QuiC solution allows you to verify the quality of compressed digital content five times as fast as real time for SD, and twice as fast as real time for HD. QuiC supports the quality assurance (QA) workflow by providing reliable alarm thresholds for each analytic parameter used. Each parameter in QuiC determines whether ingested or transferred content is acceptable or unacceptable. QuiC can be operated manually using an intuitive Graphical User Interface (GUI), automatically using a "drop box", or a file buffer, or via automation using the QuiC API to place content into the analysis queue. Through the Remote Manager Station option, users can remotely operate the GUI from a networked Windows PC.

MSA-1200 — With HD-SDI, SD-SDI, and D-ASi; also supports ASI, video, and audio

MSA-2400 — With SD-SDI, D-ASi, and video

MSA-4000 — With HD-SDI, D-ASi, and video

MSA-7200 — With D-ASi, video, and audio

Compact Monitor Series

The Videotek Compact Monitor Series is a family of space-saving, efficient video and audio monitoring solutions that offer optional 3G’s capability in two SDI inputs. Both the scope and st rozor packages are available as portable or rack equipped units.

CM-41 — Compact Monitor Series multiformat scopes with ASI-STAR™, built-in SD-ASI input, upgradeable to 3 Gb/s

CM-61 — Compact Monitor Series with built-in OSCilloscope capability

The Videotek name is recognized for high-performance instruments that meet the mission-critical requirements of broadcasters around the world every day. From customizable signal analyzers, on-screen monitors and handheld test monitors, to the latest portable optical fiber tools, file-based QC servers and 3G solutions, Harris offers a high-performance Videotek product to meet any audio or video monitoring requirement.

All Videotek systems are backed by proven performance, exceptional service and responsive support.

For more information, please visit www.broadcast.harris.com/videoqcm.

The Latest in Video and Audio Monitoring

Television standards and formats come and go, but the broadcaster’s responsibility to maintain signal quality remains constant. That’s why the world’s most-discriminating television program production and distribution facilities have relied on Harris® Videotek® test and measurement solutions for more than three decades.

The Videotek name is recognized for high-performance instruments that meet the mission-critical requirements of broadcasters around the world every day. From customizable signal analyzers, on-screen monitors and handheld test monitors, to the latest portable optical fiber tools, file-based QC servers and 3G solutions, Harris offers a high-performance Videotek product to meet any audio or video monitoring requirement.

All Videotek systems are backed by proven performance, exceptional service and responsive support.

For more information, please visit www.broadcast.harris.com/videoqcm.

BR_VIDEOTEK_0410
Harris offers a complete line of handheld solutions for video, audio, transport streams, RF and optical fiber test and measurement.

SD-STARR™ — Analog and SD-SDI generator and recorder with embedded audio, selectable waveform scope functionality, configurable inputs/output levels.
HD-STARR™ — HD-SDI and SD-SDI generator and monitor with embedded audio.
GEN-STARR™ — SDI and SD-SDI generator and recorder.
OTM-20A/C — Optical time domain reflectometer
SLS-21A-03/SLS-25B-03 — Visible laser source
OPM-15A/B — Optical power meter
OFI-20B — Optical fiber instrument

Optical Fiber Testing
Videotek optical fiber test tools provide you with convenience and affordability. Whether you’re at the station or covering a big game, these handy units are ready to go. With wide ranging capabilities and options, our fiber test tools will meet your specific needs. Both solutions are offered in both optical and IP solutions.

OTM-200 — Optical fiber Identifier
OTM-15A/B — Optical power meter
SL2-41/S-41-203-03 — Stabilized laser source
SL2-203 — Lasers lasers
VL2-200A — Video level meter
OTM-200C — Optical receiver
PanOptOTN-200C — Optical time domain reflectometer

MSA Series
The new Multi-Source Analyzer (MSA) series from Harris is a range of solutions that can support monitoring with full testing for compressed video content, audio level, data streams and FRD-290 on any input/output signals. Conformance testing for all major compression standards, a wide array of transport and streaming protocols, and the ability to simultaneously handle a large number of channels in real time.

MSA-500 — 5-plex platform, standard with one codec and one IP PIP, providing full conformance testing and traffic status monitoring.
MSA-300* — 3-plex platform, standard with one codec and eight IP PIPs, providing full conformance testing and traffic status monitoring.
MSA-100 — 1-plex platform, standard with one codec and two IP PIPs, providing full conformance testing and traffic status monitoring.

Options
MSA-MODEC-MP98 — MP98-1 (ISO 13818 and MP98-2)
MSA-MODEC-MP98 — MP98-7
MSA-MODEC-VCM — VCM 1/2M
MSA-AO-DPM-Plus-TX — Adder block of 2x2 port 6G/HD PIPs with full conformance testing and traffic status monitoring.
MSA-AO-DPM-Plus-RX — Adder block of 2x2 port 6G/HD PIPs with full conformance testing and traffic status monitoring.
MSA-AO-DVR-AD — Dual input 2 input HD PIPs with full conformance testing and traffic status monitoring.
MSA-AO-DVR-RF — RF fiber board option (DVB-S | DVB-S2 | DVB-T | DVB-T2 | DVB-C | 8VSB | QAM 64/256)
MSA-AO-IDC — IDC option for all platform
MSA-AO-DPU — 1-channel decoder platform
MSA-AO-RFS — Remote view server (Ethernet)

QuíC Media Analysis Server
Videotek QuíC is a fully automated, file-based and measurement server platform. The QuíC solution allows you to verify the quality of compressed digital content five times as fast as real time, and twice as fast as real time for HD. QuíC supports the quality assurance (QA) workflow by providing adjustable alarm thresholds for each analysis parameter. Each parameter in QuíC determines whether ingested or transmitted content is acceptable or unacceptable. QuíC can be operated manually using an intuitive Graphical User Interface (GUI); automatically using a “drop box” facility or “file feature”; or via automation using the QuíC API to place content into the analytics queue. Through the Remote Station and Station option, users can operate the GUI from a networked Windows PC.

MA-1200 — With one PIP, DVI, GPI, and QAM encoded inputs; includes one data base (internal database) and one data output (remote database).
MA-1250 — With file connection and hardware I/Os, provides the same features as the MA-1200, while utilizing audio I/Os.

Codes
One codec comes standard with multiple codecs to choose from:
MA-SW-MPEG-2 — MPEG-2, HD, SD-SDI
MA-SW-DV — DVCAM, DVCPro, HD-SDI, SD-SDI
MA-SW-MPEG-4 – 264/264A
MA-SW-MPEG-4A — AVC-Intra

Options
+MA-SFTW-MAINT — Adds one year to software package, includes software upgrades and MA-OPT-FCT — File correction tools software package
+MA-OPT — Remote View Station Client Software for Windows
+MA-1200 — Remote Control server for the VideoNile 4000 and 6000 series

Compact Monitor Series
The Videotek Compact Monitor Series is a family of space-saving, efficient video and audio signal monitoring solutions that offer optional 3G inputs capability in two 3RU inputs. Both the scope and sanitizer packages are available as portable or rack mounted units.

CMA-92 — Compact Monitor Series multiscraper on-screen monitor, HD-SDI, 3G, half rack, upgradeable to 3 RU.
CMA-91 — Compact Monitor Series multiscraper with panel control

Optical Fiber Testing
Video at any level.

MFA-93 — Compact Monitor Series multiscraper on-screen monitor with 720p and HD-SDI capability (720p, 3G), half rack, upgradeable to 3 RU

HD-STAR — Analog and SD-SDI monitor and generator

ASI-STAR™ — ASI sync test signal (V2A)

SD-STAR™ — Transport stream monitoring with PSIP table

Options
+MA-SW-MPEG-2 — MPEG-2, HD, SD-SDI
+MA-SW-DV — DVCAM, DVCPro, HD-SDI, SD-SDI
+MA-SW-MPEG-4 – 264/264A
+MA-SW-MPEG-4A — AVC-Intra

Loudness monitoring, loudness evaluation per ITU BS.1770 standard

File-Based Testing

File correction tools software package

Options
+MA-OPT — Remote View Station Client Software for Windows
+MA-1200 — Remote Control server for the VideoNile 4000 and 6000 series

Compact Monitor Series
The Videotek Compact Monitor Series is a family of space-saving, efficient video and audio signal monitoring solutions that offer optional 3G inputs capability in two 3RU inputs. Both the scope and sanitizer packages are available as portable or rack mounted units.

CMA-92 — Compact Monitor Series multiscraper on-screen monitor, HD-SDI, 3G, half rack, upgradeable to 3 RU.
CMA-91 — Compact Monitor Series multiscraper with panel control

Options
+MA-SFTW-MAINT — Adds one year to software package, includes software upgrades and MA-OPT-FCT — File correction tools software package
+MA-OPT — Remote View Station Client Software for Windows
+MA-1200 — Remote Control server for the VideoNile 4000 and 6000 series

As a price

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+852 2776 0628
Asia, Pacific Rim
+1 800 800 5719
Product Support
**TVM Multiformat Signal Analyzers**
Videotek TVM test instruments are designed with the operator in mind, incorporating traditional features and ergonomically designed controls. All models in the TVM and AVM product line feature multiformat signal analyzers with an integrated LCD display to cover any need.

**TVM- or VTM-A3-OPT 3TL**
- Upgrades A3-OPT 3 or A3-OPT 3TL to add full Dolby® decoding plus metadata display
- Loudness monitoring with Trend chart and True Peak to BS.1770

**TVM- or VTM-A3-OPT 2**
- Supports analog AES and embedded SDI; decoding plus metadata display
- Audio tone channels and user-loadable test signals; also inputs GPS blackburst (video as HD, SD and analog composite or tri-level sync); vertical interval time code

**TVM- or VTM-A3-OPT 5**
- Supports analog AES; 4:2:0, 4:2:2, and 10-bit color image processing
- Color correctors
- Serial digital color corrector with real-time video processing

**TVM- or VTM-A3-OPT 5TL**
- Supports analog AES; 4:2:0, 4:2:2, and 10-bit color image processing
- Color correctors
- Serial digital color corrector with real-time video processing

**TVM- or VTM-A3-OPT 3**
- Supports analog AES and embedded (light AES input)
- Loudness monitoring with trend chart and true peak in BT.1770

**TVM- or VTM-A3-OPT 3F**
- Supports analog AES, 4:2:0, 4:2:2, and 10-bit color image processing
- Color correctors
- Serial digital color corrector with real-time video processing

**TVM- or VTM-A3-OPT 2F**
- Includes analog True Peak to BS.1770

Please visit www.broadcast.harris.com/for additional form factors and options.

**Generators**

**VSG-410**
- HD/SD-SDI and analog video and audio signal generators; outputs include HD: SD analog composite or in-loop sync; two signal generation, four independently configurable inputs; RGB and YPrPb; synchronized to all selectable internal or external inputs

**VSG-2400**
- SD/HD analog waveform generator; four outputs with selectable input material; independent wave, bar, pattern, and audio

**VSG-201**
- Analog color sync and pulse generator with period, duty

**GSM-31**
- HD and SD generator with embedded audio and display

**VSX-11D**
- Multiformat HD/SD-SDI waveform monitor/vectorscope; convenient half-rack additional input module
- VIEW-4DG
- Multiformat HD/SD-SDI waveform monitor/vectorscope; convenient half-rack additional input module

**VSG-401**
- HD-SDI and SD-SDI, four independently configurable inputs; RGB and YPrPb; synchronized to all selectable internal or external inputs

**VSG-202**
- SD-SDI, four analog blackburst outputs (two are separately and independently adjustable and may be linked to either NTSC or PAL); analog video plus RGB/HDSDI video input and embedded audio; digital black input and 10 selectable test signals; VSG-201 analog color sync and pulse generator with period, duty

**GSM-31**
- HD and SD generator with embedded audio and display

**VSG-201**
- HD-SDI and SD-SDI, four independently configurable inputs; RGB and YPrPb; synchronized to all selectable internal or external inputs

**VSG-202**
- SD-SDI, four analog blackburst outputs (two are separately and independently adjustable and may be linked to either NTSC or PAL); analog video plus RGB/HDSDI video input and embedded audio; digital black input and 10 selectable test signals; VSG-201 analog color sync and pulse generator with period, duty

**GSM-31**
- HD and SD generator with embedded audio and display

**VSX-11D**
- Multiformate automatic hue control

**Modular Sync and Timing**

**MTG-3901**
- Master timing generator, MDI modular reference signal generator module with blocklock to level sync thresholds; NTSC 4.43 input

**SDC-101**
- Serial digital color corrector with real-time video processing

**DDM-840**
- Digital demodulator products. The Harris Videotek demodulator product line includes:
- 1/3RU utility demodulator
- MTG-3901-SYS-1
- MTG-3901-SYS-3

**VSG-201**
- HD-SDI and SD-SDI, four analog blackburst outputs (two are separately and independently adjustable and may be linked to either NTSC or PAL); analog video plus RGB/HDSDI video input and embedded audio; digital black input and 10 selectable test signals; VSG-201 analog color sync and pulse generator with period, duty

**GSM-31**
- HD and SD generator with embedded audio and display

**VSX-11D**
- Multiformate automatic hue control

**Legalizers, Proc Amps, Color Correctors**

**Dual Digital Demodulators**

**DDM-800**
- Modular reference signal generator module with blocklock to level sync thresholds; NTSC 4.43 input

**DDM-840**
- Digital demodulator products. The Harris Videotek demodulator product line includes:
- Serial digital color corrector with real-time video processing

**DDM-840**
- Digital demodulator products. The Harris Videotek demodulator product line includes:
- Serial digital color corrector with real-time video processing

**DDM-840**
- Digital demodulator products. The Harris Videotek demodulator product line includes:
- Serial digital color corrector with real-time video processing
**Videotek TVM Series**

Technology provides high-resolution display of picture, waveform, vectors and optional audio conveniently, in either individual full screen or concurrent quadrant displays on any standard computer display.

**VTVM-2600** — Two HD/SD-SDI video inputs, fixed screen layout; XGA output; optional four-channel audio.

**VTVM-2400** — Two HD/SD-SDI video inputs; data analyzer; analog, AES and embedded audio.

**VTVM-2000** — Two SD-SDI and two composite video inputs; fixed screen layout; XGA output; optional four-channel audio.

**VTVM-9100** — Adds lip sync timing measurement to A3-OPT 3TL or A3-OPT 5TL.

**VTVM-9140** — Adds support for RGB (4:4:4) and RGB+A (4:4:4:) (for AVM-717, TVM-9100PKG, and VTM4140PKG only).


**VTVM-VTM-SDI-S** — Supports SD-SDI only (field upgradeable to HD/SD).

**VTVM-VTM-SDI-H** — Supports HD and SD-SDI.

**VTVM-VTM-EYE-H** — Supports HD and SD-SDI with eye pattern.

**VTVM-200-PS** — HD single-link detector (both outputs are separately and independently adjustable and may be linked to either one of the Harris D-21 cards) on per output basis; XGA black, digital, and stereo audio analytic.

**VTVM-200-AL** — Analog lip sync detector (may be independently adjustable and may be linked to any software module). For more information, please visit www.broadcast.harris.com/videotek.
TVM Multiformat Signal Analyzers

AudiO and Video Monitoring System

Videotek® TVM Series™ technology provides high-resolution display of picture, waveform, vectors and optional audio convolver, in either individual full screen or configurable panels on any standard computer display.

VTM-2000 — Two 3 Gb/s and two composite video inputs; fixed screen layout; VGA output; optional four-channel audio

VTM-2400 — Two 3 Gb/s video inputs; fixed screen layout; VGA output; optional four-channel audio

VSM-40G — Multiformat SDI waveform monitor; combines half-rack package, display, vectorscope, waveform, picture in the front panel of TVM Series.

VSM-400A — Metadata analyzer; SD/HD/3G SDI discovers monitors and alerts on any SDI and 1125/2250 data, decoded video data, tally, talkback.

AVM-717 — Two SDI-3G video inputs; data analyzer; analog and embedded audio convolver; touchless control in program speech. Offers for additional SDI or composite inputs

TVM, AVM and AVT Video Options

Digital Demodulators

DDM-840 — Frequency-agile digital demodulator, 8VSB, 64/256 QAM demodulator to ASI

Legalizers, Proc Amps, Color Correctors

Generators

DDM-800 — Frequency-agile digital demodulator/decoder, 8VSB, 64/256 QAM demodulator to ASI output for the Harris 6800+™ frame system

VSG-204D — SD-SDI serial digital sync generator; infinite genlock, four analog blackburst outputs, digital black burst, digital bars and stereo audio tone channels and user-loadable test signals; also inputs GPS blackburst (video as HD, SD and analog composite or tri-level sync); vertical interval time code

VSG-201D — SD-SDI serial digital sync generator; infinite genlock, four analog blackburst (video as HD, SD and analog composite or tri-level sync); vertical interval time code

VSG-410 — Includes analog video and audio signal generator; outputs include HD, SD analog composite in 1920x1080, two signal generators, four independently configurable output forms, each with 32 independent levels of control; also 1920x1080 waveform, vector and optional audio convolver, including 3D vector scope, 1080p/1080i waveform, vector and 3D vector scope

VSG-200D — Includes analog video and audio signal generator; outputs include HD, SD analog composite in 1920x1080, four independently configurable output forms, each with 32 independent levels of control; also 1920x1080 waveform, vector and optional audio convolver, including 3D vector scope, 1080p/1080i waveform, vector and 3D vector scope
Videotek TVM test instruments are designed with the operator in mind, incorporating traditional features and ergonomically designed controls. All models in the TVM and AVM product line feature multi-formatted signal analysis, with integrated LED displays to save space.

**TVM Multiformat Signal Analyzers**

- **TVM-VTM-DLK** — Supports NTSC and PAL
- **TVM-VTM-ASI** — Supports SD-SDI only (field upgradeable to HD/SD)
- **TVM-VTM-SDI-S**
- **TVM-VTM-SDI-H** — Supports HD and SD-SDI
- **TVM-VTM-JEM** — Supports HD and SD-SDI with eye pattern
- **TVM-VTM-3GB**

**AVM-717, TVM9140PKG, and VTM4140PKG only**

- **TVM-4MA**
- **TVM-4DG**

**TVM9100PKG**

- **Two HD/SD-SDI video inputs; data analyzer; analog, AES and embedded audio**
- **SD VBI data; decodes selected data types; half rack, 3RU**

**TVM-4MA**

- **Metadata analyzer, HD/SD-SDI; discovers, monitors and alarms on ancillary timing scope package; displays waveform, vector, gamut, picture or the Harris Videotek patented multiformat**

**TVM-4DG**

- **Multiformat HD/SD-SDI waveform/vectorscope; convenient half-rack display**
- **Waveform, vector and optional audio conveniently, in either individual full screen or concurrent quadrants on any standard computer display.**

Please visit www.broadcast.harris.com/videotek for additional models and options.

**Generators**

- **MG-3901-SYS-1** — MTG-3901 system with FR-3901 frame; includes two MTG-3901, FR-3923 frame with blank front panel, power supply, detachable power cord, PWRSUPPLY-MTG standalone external power supply, alarm interconnect module, fan module, 1 x ACO-3901 module, FR-3923 frame with blank front panel, power supply, alarm interconnect module, fan module, 1 x ACO-3901 module, FR-3923 frame with blank front panel, power supply, detachable power cord, PWRSUPPLY-MTG standalone external power supply, back module (as required), fan module, alarm interconnect module, accepts up to any combination of 9 additional NEO series modules.

**TSG-3901-1S** — NEO HDTV test signal generator with integrated ACO

- **TSG-3901-1S**
- **TSG-3901-SYS-1** — MTG-3901 system with FR-3901 frame; includes two MTG-3901, FR-3923 frame with blank front panel, power supply, detachable power cord, PWRSUPPLY-MTG standalone external power supply, back module (as required), fan module, alarm interconnect module, accepts up to any combination of 9 additional NEO series modules.

**TSG-3901-1S** — NEO HDTV test signal generator with integrated ACO

Please visit www.broadcast.harris.com/test for additional models and options.

**Demodulators**

- **DDM-800** — Digital demodulator module, 8VSB, 64/256 QAM demodulator to ASI
- **DDM-840** — 1RU frequency-agile demodulator
- **DDM-6800+D** — Digital demodulator module, 8VSB, 64/256 QAM demodulator to ASI
- **DDM-840** — Frequency-agile digital demodulator/ASI

**Legalizers, Proc Amps, Color Correctors**

- **DL-610** — 12-SDI legalizer, automatically legalizes SDI video for FPGA, encoded and watermarked fields.

**Digital Demodulators**

- **DDM-800** — Digital demodulator module, 8VSB, 64/256 QAM demodulator to ASI
- **DDM-840** — Frequency-agile digital demodulator (includes 8VSB, 64/256 QAM demodulator with MPEG-2 MP-ML 4:2:0 decoder)

**Analog NTSC Demodulators**

- **DM-145 and DM-154** — 1RU frequency-agile demodulators

**Videotek Test & Measurement Solutions**
Handheld Test Monitors

Harris offers a complete line of handheld solutions for audio, video, transport stream, RF and optical fiber test and measurement.

SD-STAR™ — Analog and SD-SDI monitor and generator and embedded audio, selectable scalpel functionality, RS-422 trigger, 3RU, half rack; includes software...

HD-STAR™ — HD-SDI and 3G-SDI monitor and generator with embedded audio...

GEN-STAR™ — 4K SDI and 3G-SDI generator with embedded audio...

VLS-20A — Optical loss tester...

PalmOTDR-20A/C — Optical test meter...

OTM-20A/C — Visible laser source...

VLS-20A — Optical loss tester...

OFI-20B — Optical fiber identifier...

Quic® Media Analysis Server

Videotek Quic® is a fully automated, file-based test and measurement server platform. The Quic® solution allows you to verify the quality of compressed digital content five times as fast as real time for HD, and twice as fast as real time for HD. Quic supports the quality assurance (QA) workflows by providing adjustable alarm thresholds for each parameter used. Each parameter in Quic determines whether ingested or transferred content is acceptable or unacceptable. Quic can be operated manually using an intuitive Graphical User Interface (GUI), automatically using a “drop box” file, file features, or via automation using the Quic API to place content into the analysis queue. The remote authorized Station operator uses an interface to operate the GUI from a networked Windows PC.

M1A-100® — With HD, 3G-SDI, and SD-SDI output, input HD/SD-SDI, 1RU, half rack, upgradable to 3 Gb/s...

M1I-100® — Includes a year of software maintenance and includes the software upgrades and enhancements for the year.

Options

M1-SCC-MPEG-2 — MPEG-2 SD, HD, and SMpte 3G-SDI...

M1-SCC-MPEG-4 — Part 2...

M1-SCC-CTV — 4:2:2, 1RU...

M1-SCC-DV — 1RU, half rack...

M1-SCC-DP — 1RU, half rack...

M1-SCC-HP — 3RU, half rack...

M1-SCC-IO — 3RU, half rack...

M1-SCC-4 — 3RU, half rack...

M1-SCC-4P — 3RU, half rack...

File-Based Testing

Compact Monitor Series

The Videotek Compact Monitor Series is a family of space-saving, efficient video and audio monitoring solutions that offer optional 3 Gb/s capability in two SDI inputs. Both the scope and sanitizer packages are available as portable or rack-mounted units.

CM1-41 — Compact Monitor Series multiformat on-screen monitor, HE-SDI, 3G, half rack, upgradeable to 3 Gb/s...

CM1-45L — Compact Monitor Series with extra front panel control.

CM1-45V — Compact Monitor Series multiformat on-screen monitor with 750 dpi TV (HD/SD-ASI) or multiple composite inputs, 1RU, half rack, upgradeable to 3 Gb/s...

CM1-91 — Compact Monitor Series multiformat signal analyzer with integral (HD/SD-ASI, 3G), half rack, upgradeable to 3 Gb/s...

CM1-LA — Compact Monitor Series бизнес за наблюдению

CM4-306 — Compact Monitor Series Multiformat signal analyzer with integral HD and standard-definition video input, 3RU, half rack, upgradeable to 3 Gb/s...

VS1-4200 — Integrated video and audio measurement module for Sony 4200 monitors with multiple composite inputs, 4 RU, half rack, upgradeable to 3 Gb/s.

VS1-4400 — Integrated video and audio measurement module for Sony 4400 monitors with multiple composite inputs, 4 RU, half rack, upgradeable to 3 Gb/s.

VMM-4SNY — Video and audio measurement module for Sony 4500 monitors with multiple composite inputs, 3RU, half rack, upgradeable to 3 Gb/s.

OCS-1000 — Remote Control Panel for the VMM-4SNY video and audio measurement module.

Options

M9-WAV-MPEG — Waveform monitor...M9-SDI-MPEG — MPEG-2, 800 MHz, 1RU...M9-WAV-DV — Waveform monitor, HD-SDI, 800 MHz, 1RU...M9-DV — Waveform monitor, HD-SDI, 800 MHz, 1RU...M9-CBF — Camera control box, 1RU...M9-CACTUS — Camera control box, 1RU...M9-DX — Camera control box, 1RU...M9-NAV — Camera control box, 1RU...M9-NAV-M — Camera control box, 1RU...

The Latest in Video and Audio Monitoring

Television standards and formats come and go, but the broadcaster’s responsibility to maintain signal quality remains constant. That’s why the world’s most-discriminating television program production and distribution facilities have relied on precision Harris® Videotek® test and measurement solutions for more than three decades.

The Videotek name is recognized for high-performance instruments that meet the mission-critical requirements of broadcasters around the world every day. From customizable signal analyzers, on-screen monitors and handheld test monitors, to the latest portable fiber tools, file-based QC servers, and 3 Gb/s solutions, Harris offers a high-performance Videotek product to meet any audio or video monitoring requirement.

All Videotek systems are backed by proven performance, exceptional service and responsive support.

For more information, please visit www.broadcast.harris.com/videotek.