NEXIO® mCAPTURE™
Compressed Media Stream Recorder

NEXIO® mCAPTURE™ is a compressed media stream recorder that records HD and SD MPEG-2 and H.264 content, using GPI or schedule control. Programs are selected from single-program or multi-program transport streams on either DVB-ASI-C or Gigabit Ethernet IP input. Content is stored as MPEG-compliant program stream files for interoperability, and can be trimmed and formatted using an MPEG editor such as Velocity XNG™, and then be played out on either the Digital Turnaround Processor™ (DTP™) or NEXIO® server systems.

Applications for the mCAPTURE product include capture of satellite or IP feeds and export to the NEXIO SAN for more advanced editing and baseband playout; store and forward of media from the NetvX™ video networking platform or DTP; and capture of content for archival purposes. mCAPTURE supports ASI and IP inputs for flexibility. Auto-increment of IDs is also supported, which is extremely useful in crash record situations or when recording periodic events. Device control for the compressed media stream recorder is managed via Ethernet.

FEATURES

mCAPTURE Software
- Records up to eight HD or SD programs simultaneously from MPEG transport streams
- Supports both MPEG-2 and H.264 (MPEG-4)
- Captures media to local or network attached storage (NAS)
- Extends recording time with the push of a button
- Automates periodic feeds with a built-in scheduler
- Supports auto-increment of IDs with rename capability for crash record functionality
- Facilitates external automation control with API
- Supports management and partial restores of recorded content using video archive communications protocol (VACP)
- Checks content with I-frame monitoring of incoming programs
- Controls IP networks remotely with Java-based GUI

mCAPTURE Platform
- Dual Gigabit Ethernet IP input (standard)
- Optional four or eight ASI inputs, each supporting up to 100 Mb/s streams
- 1RU form factor
- Hot-swappable redundant power supplies

PRODUCT DETAILS

Storage
mCAPTURE can be configured to store programs either internally to the 160 GB SSD drive (up to 70 hours of 4 Mb/s SD or 15 hours of 18 Mb/s HD content), or externally to a NAS such as the NEXIO® NEXIQ storage product line from Isilon® Systems. mCAPTURE supports either CIFS or NFS connections to NAS.

Stored MPEG programs can be used directly by the DTP compressed stream server or imported natively to a NEXIO AMP™ server for baseband playout.

SPECIFICATIONS

Specifications are subject to change without notice.

Product/Performance

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Interfaces</td>
<td>2 Gigabit Ethernet input ports</td>
</tr>
<tr>
<td>(for program data)</td>
<td>Optional: 4 or 8 DVB-ASI input ports</td>
</tr>
<tr>
<td>Input Data Rate on Gigabit</td>
<td>Aggregate network input bandwidth 320 Mb/s</td>
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<tr>
<td>Ethernet Input</td>
<td>Supports up to 16 configured input streams</td>
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<tr>
<td>Input Data Rate on DVB-ASI Inputs</td>
<td>100 Mb/s maximum transport stream data rate on each ASI input</td>
</tr>
<tr>
<td>Network Input Options</td>
<td>UDP unicast, UDP multicast</td>
</tr>
<tr>
<td></td>
<td>RTP unicast, RTP multicast</td>
</tr>
<tr>
<td></td>
<td>RTP source specific multicast (SSM)</td>
</tr>
<tr>
<td>Local Ingest Bandwidth</td>
<td>320 Mb/s throughput to local disk</td>
</tr>
<tr>
<td>Record Channel Capacity</td>
<td>8 record channels standard</td>
</tr>
<tr>
<td>Content Ingest Format</td>
<td>Must be MPEG transport stream format</td>
</tr>
<tr>
<td></td>
<td>SPTS or MPTS either ATSC, DVB, DigicipherII or ISO format</td>
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<tr>
<td>Video Input Format</td>
<td>MPEG-2 video 4:2:2 color space</td>
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<tr>
<td></td>
<td>MPEG-2 video 4:2:0 color space</td>
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<td></td>
<td>H.264</td>
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<tr>
<td>Audio Input Formats</td>
<td>MPEG-1 layer I/II</td>
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<tr>
<td></td>
<td>Dolby® AC3</td>
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<tr>
<td></td>
<td>AAC</td>
</tr>
<tr>
<td></td>
<td>AES3 wrapped in SMPTE 302M</td>
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<td></td>
<td>Dolby® E wrapped in SMPTE 302M</td>
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</tbody>
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Network Output Interface
- Dedicated Gigabit Ethernet Port for connection to external NAS solution or other network-attached server system

Network-Attached Storage
- NFS and CIFS

File Management Protocol
- VACP, FTP and Harris FTM support

Graphical User Interface Control
- Java-based application (PC required) running over 10/100Base-T Ethernet supports control over LAN or WAN

Input/Record Monitoring
- I-frame monitoring using Java-based application running over 10/100Base-T Ethernet link

Diagnostic Control
- User access control supported

Manual Override
- Application-level alarms
- On-board, time-stamped, archived log file (up to 30 days)

Control/Usability Features
- Built-in scheduler
- Auto ID for easy clip naming

Content Storage Format
- MPEG program streams with optional SMPTE time code embedding in GOP headers

Local Storage Capacity
- 160 GB solid-state drive, –130 GB available
- 70 hrs @ 4 Mb/s SD
- 15 hrs at 18 Mb/s HD

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Network-Attached Storage
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Presets . . . . . . . . . . . . . . . . . . . . Allows setup and control of any record channel
TCP/IP-based Control API . . . . . Complete control of the mCAPTURE with IP
connections (two-way network required)
Control Options . . . . . . . . . . . . . . Local control via Java-based GUI
Content Exchange . . . . . . . . . . . . MPEG standards-compliant program streams

Electrical and Electrical Emissions Summary
Emissions . . . . . . . . . . . . . . . . . . CE Mark, FCC Class A, EMC/EMI FCC
Power Supply . . . . . . . . . . . . . . . 1 + 1 redundant 650 W power supplies
Power Consumption . . . . . . . . . . Typical: 290 W @ 120 V; 260 W @ 240 V
Idle: 150 W @ 120 V; 140 W @ 240 V

Safety Agency Certifications and Environmental
Safety . . . . . . . . . . . . . . . . . . . . . RoHS-compliant, VCCI, TUV/CB
Temperature . . . . . . . . . . . . . Operating: 32° to 80° F (0° to 27° C)
Humidity . . . . . . . . . . . . . . Operating: 10% to 90% RH and non-condensing
Heat Dissipation . . . . . . Typical: 990 BTU/hr @ 120 V; 890 BTU/hr @ 240 V
Idle: 510 BTU/hr @ 120 V; 480 BTU/hr @ 240 V

Physical
Dimensions (W x D x H) . . . . . . . . 19 x 25.75 x 1.75 in. (48.2 x 65.4 x 4.4 cm)
Weight . . . . . . . . . . . . . . . . . . . . 30 lbs (14 kg)

ORDERING INFORMATION
NX1010MC . . . . . . . . . . . . . . . . . NX1010 mCAPTURE: MPEG program recorder
NX1010-ASI-40 . . . . . . . . . . . Optional 4 x ASI input interface card for the
NX1010 platform
NX1010SPS . . . . . . . . . . . . . . . . . Shelf spare 650 W power supply for NX1010
chassis
NX1010SSD160 . . . . . . . . . . . . . Shelf spare 160 GB solid-state system drive for
NX1010 chassis
NX1010MC-BASIC . . . . . . . . . . . 1-year Basic ServicePAK HW/SW support for
NX1010MC
NX1010MC-GOLD . . . . . . . . . . . 1-year Gold ServicePAK HW/SW support for
NX1010MC