APÉNDICE D.

ESPECIFICACIONES DE LOS EQUIPOS.

SPECIFICATIONS Specifications and designs are subject to change without notice.

SYSTEM CONFIGURATION
PCI-X Platform
Dual 2.8GHz Xeon™ Processors
Windows® XP Professional
NEXIO Operating Software
2GB System Memory
80 GB IDE System Drive
2 Gbps Fibre Channel Host Bus Adapter
10/100/1000BaseT Ethernet
PS/2 Keyboard & Mouse

VIDEO

CHANNELS
4 or 2 (upgradeable to 4)
Paired bi-directional
Paired play-only
SDI serial digital component (SMPTE 259M)
SDTI file ingest (SMPTE 305M), bi-directional card only
DVCPRO (25) 4x, 1x ingest
DVCPRO50 1x ingest

INPUTS
XLR, balanced high-Z (AES/EBU)
BNC (embedded)

OUTPUTS
XLR, balanced 15kw (AES/EBU)
BNC (embedded)
Mini XLR (analog mic-level monitor)

PROCESSING & STORAGE
Uncompressed
MPEG 16, 20, or 24-bit, PCM, 48 kHz
DVCPRO 16-bit, PCM, 48 kHz

VIDEO ADJUSTMENTS

REFERENCE GENLOCK
Internal
External

OUTPUT
Horizontal phase
Fine horizontal phase
Vertical phase

DVCPRO:
Bi-directional channels Record bitrate selectable to
DVCPRO (25) or DVCPRO50
Play-only channels DVCPRO (25) only

VIDEO COMPRESSION
MPEG selectable profile, bit rate & GOP
Bi-directional channels All configurations
Play-only channels All configurations
MPEG-2 4:2:2 profile @ main level 4:2:2 sampling,
MPEG 2 IMX
Bit rates 10, 12, 14, 15, 18, 22, 26, 30, 34, 38, 42, 46, 50 Mbps
Variable GOP structures from 1 to 16
I, IB, IP, IBP encoding
MPEG-2 main profile @ main level 4

INPUTS
BNC (SMPTE 259M)

OUTPUTS
BNC (SMPTE 259M)
Composite analog monitor
Auxiliary (input monitor or secondary output)

SERIAL DIGITAL VIDEO NTSC PAL
Signal (in /out) 525 @ 270Mbps 625 @ 270Mbps
Jitter <740ps p-p <740ps p-p
Genlock Yes
Timeable Yes

AUDIO

CHANNELS & FORMATS
DV and MPEG: Four channels of uncompressed digital audio
(two AES/EBU pairs) per video channel.
MPEG-2 only: Four AES/EBU pairs of uncompressed
digital embedded audio (SMPTE 272M) per channel.

REMOTE GPI CONTROL

INPUTS
16 inputs
Play, stop & record

OUTPUTS
8 outputs
Start, stop, rescue & next in
playlist; RAIDset error

REMOTE SERIAL INTERFACE

INPUT / OUTPUT
4 RS-422 ports
DB-9 connector

CONTROL

INPUT / OUTPUT
TCP/IP via socket or UDP
RS-422
GPI

PROTOCOLS
Leitch (VR)
Louth
Odetics
Sony

PHYSICAL CHARACTERISTICS

DIMENSIONS
Height 7" (17.8 cm) (4RU)
Width 19" (48.3 cm)
Depth 20 7/8" (53 cm)

WEIGHT
45 lbs (20.4 kg)

NEXIO Servers

LEITCH.

MPEG-2 main profile @ main level 4
Bit rates 4, 6, 10, 15 Mbps
Variable GOP structures from 1 to 16
I, IB, IP, IBP encoding

VIDEO STORAGE
Fibre Channel
2.Gbps

RAID REDUNDANCY
Software RAID, standard
Single drive parity (RAID-3, single failure protection)
Multiple drive parity (ECC, dual failure protection)

TIMECODE

INPUT / OUTPUT
RS-422
TCP-IP
Leitch clock interface
VITC pass-through

POWER SUPPLY
Redundant dual load-sharing
Voltage AC 115 to 120/200 to 240V, manual select
Frequency 60/50 Hz
Current 10/5A
Consumption 300W

ORDERING INFORMATION   For more information visit www.leitch.com

NX4000TXS	NEXIO Transmission Server chassis (4RU) with 2Gbps fibre channel interface connection to shared storage. Supports up to four bi-directional channels and one NXGIGE card. Includes VROS Operating Software

OPTIONS

NXHBAF	Fibre Channel host bus adapter w/ Optical Interface (for use with 2Gbps Fibre channel NEXIO SAN)
NXRSL	Raidsoft™ shared storage and server clustering software license for attaching NX4000 TXS to Nexio SAN. One license required per server chassis.
NXIO222	NEXIO I/O adds two bi-directional I/O channels for Nexio NX 4000 Series Servers, supports DV, DVCPRO25/50,MPEG2 ML@MP and ML@4:2:2P
NXIO222TX	NEXIO I/O Low cost module focused on long GOP transmission systems. Adds two bi-directional I/O channels for Nexio NX 4000 series servers, supports DV, DVCPRO25 and MPEG ML@MP and ML@4:2:2P
NXIO222IMX	NEXIO I/O adds two bi-directional I/O channels for NX 4000 Series Servers. Supports DV, DVCPRO25/50 and MPEG MLMP and ML/4:2:2P and IMX
NXIO202	NEXIO I/O adds two output-only channels for NX 4000 series servers. Supports DV, DVCPRO25 and MPEG2 ML@MP and ML@4:2:2P

COMPLIANCE WITH STANDARDS

This product has been tested and found to comply with the following:

CE, FCC, UL, ICES and CSA standards.

EMC standards:

- EN55103-1 Electromagnetic compatibility-Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use, Part 1: Emission, Environment E4. CISPR 22; FCC; C-TICK; CE

- EN55103-2 Electromagnetic compatibility-Product family standard for audio, video, audio-visual and entertainment lighting control apparatus for professional use, Part 2: Emission, Environment E4. CISPR 22; FCC; C-TICK; CE

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SPECIFICATIONS
Specifications and designs are subject to change without notice.

PHYSICAL CHARACTERISTICS

DIMENSIONS

Height	7" (17.8 cm) (4RU)
Width	19" (48.3 cm)
Depth	20 7/8" (53 cm)
Weight	5 lbs. (20.4 kg)

POWER

Voltage	AC 100 to 120/200 to 240V, Selectable
Frequency	60/50 Hz
Current	8/4A
Consumption	200.75W

CONFIGURATION
PCI Platform
Windows 2000
NewsFlash-Operating Software
Single Intel Pentium 4 (1.4 GHz)
1 GB Memory
20 GB IDE System Drive
PS/2 Keyboard & Mouse

VIDEO
Channels
1 Digitize/1 Playback

INPUTS
Composite (BNC)
Component Y, R-Y, B-Y (BNC)
601 SDI-SMPTE 259M
IEEE1394 (Firewire)

OUTPUTS
4 (discreet) x SDI embedded per SMPTE 272M Level A
4 x AES/EBU (2 Stereo Pairs), 48kHz, 20 bit
6 x analog, +4dBu Balanced
2 x analog, -10dBu unbalanced

PROCESSING & STORAGE

AUDIO STORAGE
16-bit, PCM, 48 kHz

VIDEO STORAGE
Fibre Channel (Arbitrated Loop)

INPUT
Luma Gain
Setup
Chroma Gain
Chroma Phase

OUTPUT
Subcarrier Phase
Horizontal Phase
Luminance Gain
Luminance Setup
Chroma Gain
Chroma Phase

NTSC
-0.15dB max @ 0-4.2 MHz
-0.4dB max @ 0-4.5 MHz
+0.7dB max @ 0-2 MHz

OUTPUTS
Composite (BNC)
Component Y, R-Y, B-Y (BNC)
601 SDI-SMPTE 259M
IEEE1394 (Firewire)

ANALOG VIDEO
Composite
Y
Cb/Cr
Component Delay (Y/Cb/Cr)
Chroma-Luma Delay
2T-K Pulse Factor
S/N Luma Weighted
Differential Phase
Differential Gain
Luminance Range
Genlock

SERIAL DIGITAL VIDEO
Signal (In/Out)
Jitter
Genlock

AUDIO

INPUTS
4 (discreet) x SDI embedded per SMPTE 272M Level A
4 x AES/EBU (2 Stereo Pairs), 48kHz, 20 bit
4 x analog, +4dBu Balanced
2 x analog, -10dBu unbalanced

VIDEO COMPRESSION
25 Mbs or 50Mbs DV
4-50 Mbs MPEG 2
4:1:1 or 4:2:2 (NTSC)
4:2:0 or 4:2:2 (Pal)

RAID REDUNDANCY
Software RAID, Standard
Single Parity Drive (RAID-3)
Multiple Parity Drive (Error Correction & Compensation)
Hot Spare/Standby Drives

TIMECODE
Remote Serial Interface
RS-422
EXTERNAL MACHINE CONTROL
Remote Serial Interface
RS-422, Sony Protocol (Machine Control during Ingest/Digitization)
8 x GPO's (General Purpose Output) Triggers

ENVIRONMENTAL CHARACTERISTICS

OPERATING TEMPERATURE
+10° to +30° C

OPERATING ALTITUDE
Up to 10,000 feet (3,048 m)

CERTIFICATION
USA: FCC, Class A
International: CE

<20ns
<20ns
<1%
>50dB
<3°
<2.5%
2.5 to 105 IRE
Yes

525 LINE
525 @ 270 Mbps
<740ps p-p
Yes

INTERNAL

CLIP BASED
Proc-Amp: Chroma, Setup, Tint, Luma

PAL
±0.5dB max @ 0-5 MHz
-0.4dB max @ 0-5 MHz
+0.7dB max @ 0-2 MHz
<20ns
<20ns
<1%
>50dB
<4°
<3%
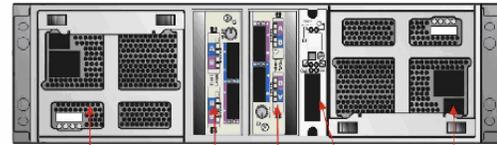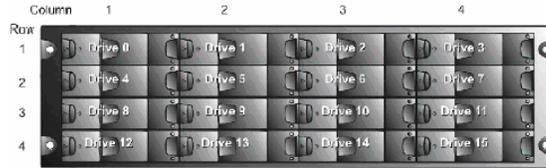17 to 735 mV
Yes

625 LINE
625 @ 270 Mbps
<740ps p-p
Yes

ORDERING INFORMATION   For more information visit www.leitch.com

NX4475ES	NewsFlashFX Supports 10 video and graphic (alpha) tracks per timeline (total of 10 layers). Provides DV 50 and IMX*, as well as full 2D DVE, Third Party Plug-in capability, and bundled CG package. Adds support for digital flat panel displays through DVI connector. Does not include EC400, EC404 or EC408 External Edit Controller, Disk Storage or VGA monitor/s. *IMX sold separately Please specify PAL or NTSC	Box. Single VGA monitor support and single 100 Base-T Network Interface Port. Does not include EC404 or EC408 External Edit Controller, Disk Storage or VGA monitor/s Please specify PAL or NTSC
		NX4465UPG: Full NEXIO NX4465ES NewsFlash to NX4475ES NewsFlashFX upgrade. Includes hardware and software to enable all features and capabilities of NX4475ES NewsFlashFX. Provides DV 50, as well as full DVE, Third Party Plug-in capability and bundled CG package (NX4465PKG2. Adds Support for digital flat panel displays through
NX4465ES	NewsFlash, DV25, MPEG (4-50) based Non-linear Editing system, 525 line. Includes NewsFlash Editing Software with WindowsXP OS. Includes Server Chassis with external Digital/Analog I/O Breakout	
	DVI connector Please specify PAL or NTSC	
NX4465PKG1	Advanced Effects package. Includes hardware and software to enable support for Third Party Plug ins(not included). Adds Full functionality of 2D DVE including Chroma, Luma, Matte and Alpha channel keying. Includes Software Character Generator and 6 additional video/effects compositing tracks	
EC404	External Edit Controller with 4 Flying Faders. Fully programmable with function key mapping including audio Fader track assignments	
EC408	External Edit Controller with 8 Flying Faders. Fully programmable with function key mapping including audio Fader track assignments	
EC400	Jog Shuttle version only (no fader control) - Access to Forward Play, Reverse Play, Rewind, Fast Forward, Still/Stop, Shuttle Select, Frame +, Frame-, Mark In, Mark Out and Eject are arranged in an array around the wheel in easy reach	

NewsFlash Preditor

ORDERING INFORMATION   For more information visit www.leitch.com

NXLRS	NewsFlash Preditor Server
NXLRE1	NewsFlash Preditor Encoder - 1 channel in a 1RU frame
NXLRE2	NewsFlash Preditor Encoder - 2 channels in a 1RU frame
NXLREC1	NewsFlash Preditor Editor 1-User License Pack
NXLREC5	NewsFlash Preditor Editor 5-User License Pack
NXLREC10	NewsFlash Preditor Editor 10-User License Pack
NXLREC25	NewsFlash Preditor Editor 25-User License Pack

SPECIFICATIONS
Specifications and designs are subject to change without notice.

Dimensions	H 134mm, W 446mm, D 500mm
Weight	37kg (81lb) 40kg (88lb) max. configuration
AC Power	450W
Voltage Range	100-120 / 200-240 VAC
Voltage Range Selection	Automatic
Frequency	47-63 Hz
Inrush Current	50A @ 260VAC
Power Factor	>0.98
Harmonics	Meets EN61000-3-2
Safety Compliance	UL 1950 3rd Edition with SELV
	IEC 950 4th Edition
	EN 60950 3rd Edition with SELV
EMC compliance	GR-1089-CORE

ENVIRONMENT

AMBIENT TEMPERATURE AND HUMIDITY

	Temperature Range	Relative Humidity	Max. Wet Bulb
Operational	5°C to 40°C	20% to 80% non-condensing	23°C
Non-Operational	0°C to +50°C	8% to 80% non-condensing	27°C
Storage	1°C to +60°C	8% to 80% non-condensing	29°C
Shipping	-40°C to +60°C	5% to 100% non-precipitating	29°C

Altitude, Operational	0 to 3047 m (0 to 10,000ft)
Altitude, Non-Operational	-305 to 12,192m (-1000 to 40,000ft)
Shock, Operational	Vertical axis 5g peak 1/2 sine, 10ms
Shock, Non-Operational	30g 10ms 1/2 sine
Vibration, Operational	0.21grms 5-500 Hz Random
Vibration, Non-Operational	1.04grms 2-200 Hz Random
Vibration, Relocation	0.3g 2-200 Hz sine
Acoustics	Less than 6.0 B LwA - operating at 20°C
Orientation & Mounting	19" Rack mount (3EIA Units)
• Rack Rails	To fit 800mm depth Racks compliant with IEC 297
• Rack Characteristics	Back pressure not exceeding 5 pascals (0.5mm water gauge)
Safety & Approvals	CE, UL, cUL
• EMC	EN55022 (CISPR - A), FCC A

ORDERING INFORMATION
For more information visit www.leitch.com

NXS3008A	Nexio Shared Storage Chassis — Fibre channel disk array with eight 73GB, 10K rpm disk drives. Includes dual hot swappable power supplies and dual redundant fibre channel controllers.
NXS3016A	Nexio Shared Storage Chassis — Fibre channel disk array with sixteen 73GB, 10K rpm disk drives. Includes dual hot swappable power supplies and dual redundant fibre channel controllers.
NXS3008B	Nexio Shared Storage Chassis — Fibre channel disk array with eight 146GB, 10K rpm disk drives. Includes dual hot swappable power supplies and dual redundant fibre channel controllers.
NXS3016B	Nexio Shared Storage Chassis — Fibre channel disk array with sixteen 146GB, 10K rpm disk drives. Includes dual hot swappable power supplies and dual redundant fibre channel controllers.
NXS3008F73	Field upgrade kit to add eight 73GB, 10K rpm disk drives to the NXS3008A
NXS3008F146	Field upgrade kit to add eight 146GB, 10K rpm disk drives to the NXS3008B
NXS3000SPS	NXS3000 Series Spare power supply module
NXS3000SFC	NXS3000 Series Spare fibre channel controller module

NXS3000SD73	NXS3000 Series Spare 73GB fibre channel disk drive with carrier
NXS3000SD146	NXS3000 Series Spare 146GB fibre channel disk drive with carrier
NXSFPOF	Optical SPF with LC connector. Must be used for 2Gbps systems

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SPECIFICATIONS
Specifications and designs are subject to change without notice.

STANDARDS

FIBRE CHANNEL PROTOCOLS
FC-PH Rev 4.3
FC-PH-2
FC-PH-3
FC-AL Rev 4.5
FC-AL-2 Rev. 7.0
FC-FLA
FC-GS-2
FC-FG
FC-PLDA
FC-VI
FC-SW-2 (when complete)
Fibre Channel Element MIB

FIBRE CHANNEL CLASS OF SERVICE
Class 2

MODES OF OPERATION
Fabric
Full Loop Support
- Public loop
- Private loop

PERFORMANCE FEATURES

FABRIC PORT SPEED
1 or 2 Gb/s, full-duplex

FABRIC LATENCY
Less than 0.4 μs (best case, no contention)
Cut-through routing

MAXIMUM FRAME SIZES
2148 bytes (2112 byte payload)

PER-PORT BUFFERING
ASIC-embedded memory (non-shared)
Each port has a guaranteed 12-credit zero wait state buffer for full performance regardless of cable length

MECHANICAL

ENCLOSURE TYPES
Secure stacking with optional feet
Efficient rack mounting with optional ears (Ears can be mounted front or back)

DIMENSIONS
Width: 432mm/17.4" (19" rack mountable)
Height: 44.4mm/1.75"
Depth: 457mm/18"

SCALABILITY

PORTS PER CHASSIS
16 universal ports, populated in single port increments

MEDIA TRANSMISSION RANGES
Optical — Shortwave: 300 meters
Copper: 13 m (43 ft.) uncompensated, or 30 m (129 ft.) compensated (only for 1 Gb/s performance. Not available in 2 Gb/s data rates)

CABLE TYPES
50/125 micron multimode fiber optic
Copper

MANAGEMENT METHODS
Java-based application management tool SNMP, TFTP, Telenet, SES, GS3

ACCESS METHODS
In-band
Ethernet 10/100 with RJ45

DIAGNOSTICS
Power-up self-test of all functionality except media modules
Field-selectable full self-test including media modules

FABRIC SERVICES
Simple Name Server
Hard Zoning
- Hardware-based
- Broadcast
- Name Server
- World-wide Name
- All zoning assigned on per-node basis, even across multi-stage fabrics
I/O Stream Guard
Multi-chassis in-order delivery
Automatic Path Selection (APS) in multi-stage configurations

USER INTERFACE
LED indicators, command console, and Java-based utilities

NON-OPERATING

Temperature:	-40°C to +70°C
Humidity:	5% to 90% non-condensing
Altitude:	0 to +50,000 feet
Vibration:	IEC 68-2
	5 to 500 Hz, random,
	2.09 G rms, 10 minutes
Shock:	IEC 68-2
	3 repetitions, 3 axes

ORDERING INFORMATION
For more information visit www.leitch.com

NXFS1622	Fibre Channel Switch, 16 port/2Gbps Fabric switch. 1RU form factor, dual power supplies. Order NXSFPCU copper or NXSFPOF optical SFP transceiver separately

OPTIONS

NXFS1622-FOK	Fail over kit for Dual NXFS822 or NXFS1622 in a redundant configuration. Includes 2(qty) 5 meter cables and 4 FCSSFPF transceivers
NXSFPOF	Small form factor pluggable (SFP) for optical fiber LC connector

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SPECIFICATIONS
Specifications and designs are subject to change without notice.

PORTS
24 Auto-MDIX 10BASE-T/100BASE-TX RJ-45 ports
Built-in Network Management

NETWORK INTERFACE
100BASE-TX: RJ-45 UTP Cat. 5

SWITCH FABRIC
9.6Gbps

BUFFER ARCHITECTURE
6Mb shared

SWITCHING DATABASE
4K MAC address entries

LED
System: Power, Fault, Self Test
Activity
Link
Fan Status
Reset

CLEAR

WEIGHT
6.0Lb
2.7 Kg

SIZE
17.4 x 8.0 x 1.8 in

TEMPERATURE
Operating: 0 °C to 55 °C (32 °F to 131 °F)
Relative humidity: 15 to 95% @ 40 °C (104 °F), non-condensing
Storage: -40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity: 90% @ 65 °C (149 °F), non-condensing

HUMIDITY
Operating: 5% to 95%

STANDARDS
IEEE802.3 Ethernet
IEEE802.3u Fast Ethernet
IEEE802.1D Spanning Tree Protocol and traffic priorities
IEEE802.1p Priority tags
IEEE802.1Q VLAN
IEEE802.1ac VLAN tagging
IEEE802.1ad Link aggregation control protocol
IEEE802.3x Flow Control
IEEE802.3z Gigabit Ethernet ISO
IEC8802.3
SNMP (RFC 1157), RMON (RFC 1757), ARP
(RFC 826), IEGMP (RFC1157), IGMP
(RFC 1112),MIB II (RFC 1213), Ethernet-like
MIB (RFC 1643), Bridge MIB (RFC 1493)

AC INPUT
100 to 240V, 50 to 60 Hz

POWER SUPPLY
Internal, auto-ranging transformer: 100 to 240VAC, 50 to 60 Hz

POWER CONSUMPTION
36W

HEAT DISSIPATION
123 BTU/hr

MAXIMUM CURRENT
Voltage: 100-127 VAC/200-240 VAC
Current: 2.4 A max/1.2 A max

MTBF
8 years

SWITCH FEATURES
Spanning Tree Protocol
Forwarding Mode
Store-and-forward
VLAN Support
Up to 30 groups; port-based or with 802.1Q
VLAN tagging, GVRP for automatic VLAN learning
Quality of Service
Supports two levels of priority
MultiLink Trunking (LACP)
Port Mirroring

MANAGEMENT FEATURES
In-Band Management
Telnet, SLIP, Web-based HTTP, or SNMP manager

OUT-OF-BAND MANAGEMENT
RS-232 DB-9 console port

SOFTWARE LOADING
TFTP in-band or Xmodem out-of-band

ORDERING INFORMATION
For more information visit www.leitch.com

NXES124   4 port 10/100Base Ethernet Switch

NEXIO Servers

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SPECIFICATIONS
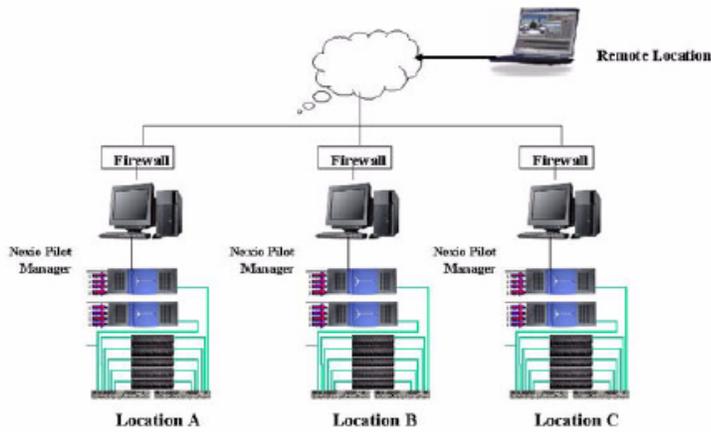Specifications and designs are subject to change without notice.

Leitch Main Frame
2x 100BaseT Ethernet Ports
Rundown Manager playout application
VRSB clip list ActiveX control Power specifications

ORDERING INFORMATION
For more information visit www.leitch.com

NX2000RDM	Main Frame, Rundown Manager playout application, VRSB ActiveX control

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Nexio Pilot Remote Connection

SPECIFICATIONS   Specifications and designs are subject to change without notice.

SYSTEM CONFIGURATION

NEXIO PILOT CLIENT PC
Minimum requirements:
Intel PIII 1 GH CPU
256MB RAM
32 MB VGA
1GB Free disk space
100 baseT network card
Windows® XP Professional
SNMP v1.0

COMPONENTS
NEXIO Pilot Management software
SNMP MIB and Agent
Annual License
Client PC

ORDERING INFORMATION   For more information visit www.leitch.com

NX2000PM	NEXIO server platform for Pilot Manager Client Software
NXA1000PM	NEXIO Pilot Manager Client Software
NXA1000MPCL	NEXIO Pilot Manager Client License
	Redundant Server Platform

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