

BX2 CONTINUOUS ARCHIVE



16 CAMERA, HIGH PERFORMANCE DIGITAL VIDEO RECORDER

The BX2 is a high-performance 16-camera digital video recorder capable of 120pps (NTSC) record rate or 100 pps (PAL). Advanced record schedules allows the user to individually program each camera record setting, giving greater flexibility to either assign a higher record rate to specific cameras on alarm, or configure cameras in high sensitivity areas to record more frequently.

Standard units contain 4 hard-drives providing up to 2TB storage, or over 6 months high quality, continuous digital recording. A high reliability Continuous Archive unit is also available that provides RAID 1 fault-tolerance to disk failure. The Continuous Archive unit allows archive disks to be hot-swapped without affecting recording, enabling continuous archiving for as long as the application demands.

All recordings are accessible to the user at the touch of one button or via powerful GOTO and event preview facilities. Images can be copied to the internal DVD-R for play back on a PC.

BX2 provides the ideal platform for digital system integration. Built-in network video transmission, including bandwidth limitation offers matrix-style multiple user network viewing and control. The remote keyboard can be used to control up to 256 cameras, with an integral multi-directional joystick delivering swift, seamless control of leading manufacturer's domes.

FEATURES

- ▶ **Maximum record rate of up to 120pps (NTSC), 100pps (PAL)**
- ▶ **Choice of 640GB, 1.2TB or 2TB standard internal storage for up to and over 6 months of recordings**
- ▶ **Simultaneous MPEG-4 and JPEG transmission & recording**
- ▶ **Allow removal of drives without shutting down DVR**
- ▶ **Quick and easy copy to internal DVD-R**
- ▶ **Video Motion Search facility – allows the user to search back through recordings for movement in a particular area of the image**
- ▶ **Immediate access to any time/date via instant GOTO capability**
- ▶ **Audio recording**
- ▶ **Multiway DuoVu for live and recorded viewing simultaneously**
- ▶ **20 internal alarm inputs**
- ▶ **6 internal relay outputs**
- ▶ **MultiMode Recording - Dynamically-switchable resolution, record-rate & compression (MPEG4/JPEG) per camera**
- ▶ **Direct telemetry control with keyboard (supplied separately)**
- ▶ **Embedded non-pc operating system, immune from computer virus attacks**
- ▶ **NetVu Connected**



CAMERAS

6, 9 and 16 camera models available. Auto detection on power up. Loop through BNC connectors provided for each camera input. Alarm on Camera Fail

HIDDEN CAMERAS

Option to view all or selected cameras, without affecting cameras recording. Hidden cameras can be viewed via the network.

MONITOR VIEWING

Main monitor (S-Video & Composite):

Full screen, programmable sequence & alarm switching.

Programmable multi-screens: picture-in-picture, quad, 5+1, 4+3, 9 way, 8+2, 12+1, 16 way x2 electronic zoom, freeze frame.

Spot monitor: (Composite)

Full screen, programmable sequence & alarm switching.

SEARCH AND PLAYBACK

- One button touch
- Frame advance/rewind, fast picture search and pause keys
- Event list, including event list filter with unique quadrant preview facility
- GOTO time and date
- Playback in full screen and multi screen
- Simultaneous live and playback on screen

MULTIWAY DuoVu

DS2 has traditionally provided playback in full screen, picture in picture and quad display modes. Now you can choose to playback in any multiway display mode, right up to 16-way. For ultimate flexibility you can now have any combination of live and recorded segments on the multiway view, allowing you to review recorded material, while keeping an eye to ongoing surveillance.

VIDEO MOTION SEARCH FACILITY

Allows the user to search through hard-disk recordings for movement in a particular area of the image, set up on a 16x14 (NTSC) cell grid (16x16 PAL). The unit is then able to search back through the hard drive and create a list of activities for the user to view and archive as required. Searching can also be filtered to limit the search to user-defined times and dates.

MultiMode RECORDING

MultiMode recording gives you the ability to set different record rates, resolutions and compression algorithms across scheduled, normal and alarm modes. Up to 24 MultiMode Recording profiles can be set per unit, giving you the flexibility to adjust resolution (QCIF to 4CIF), record rates and compression settings (MPEG-4/JPEG) dynamically on individual cameras and across the whole unit.

RECORDING

Playback and record to hard disk simultaneously.

The unit provides the option to continuously archive video and audio data to a FTP server

A choice of hard disk options are available. Please contact customer services in your region or check the website at www.dedicatedmicrosus.com for further information.

Please note drive sizes may vary from time to time which may result in a larger drive capacity than stated being supplied with the unit.

Protected images:

The system can be configured to protect images from being overwritten permanently or for a fixed period of time, when an alarm is activated. The end user can also manually configure sections of recorded images to be protected from overwrite, and remove protection.

RECORD RATE

The BX2CA can record 2 asynchronous cameras at 120PPS (NTSC), 100PPS (PAL).

EXTERNAL RAID DEVICES

We recommend that only DM approved external RAID devices should be used with the DS2 range.

Please contact Technical Support in your region for further information on recommended devices or visit the web site at www.dedicatedmicrosus.com

FLASH DISK OPERATION

To ensure that surveillance and alarm reporting functions are unaffected in the unlikely event of HDD failure, the DS2 has a built-in Flash Disk containing all the essential program and configuration data.

SCHEDULING

Choice of day, night or weekend scheduling offers the ability to automatically:

- Select the cameras to be recorded
 - Switch alarms and activity on/off
 - Alter the record rate for standard, alarm and activity recording
- Activation is via timer or alarm panel link to Alarm input

TIMED EXPIRY

- Timed expiry option allows images to be held for a selected number of days
- Images on the disk which are older than the number of days selected are not accessible

EVENT COPYING

Individual images, event sequences, audio and user defined recorded sequences can be saved to the internal DVD-R drive of DS2.

The DVD or CD images are digitally signed for authentication purposes. Playback of images from the DVD or CD is via a standard DVD-ROM drive (CD-ROM for CD-R media). The DVD/CD playback software will auto-run and does not require the installation of software on the users PC.

DIGITAL AUTHENTICATION

The use of a digital authentication process allows the user to detect whether the image or series of images has been tampered with since it was written to the storage media.

ALARMS

20 internal alarm inputs available via on board 25 way D-type connection (expandable via up to 16 optional remote alarm modules CIO1).

Up to a total of 8 contacts may be assigned to each camera input. Multiple alarms can trigger one camera and/or 1 alarm can trigger multiple cameras

Options:

- Up to 15 minutes of protected pre and post alarm recording per event
- Protect Alarm images from overwrite for a configurable period of time
- Main monitor display of last alarm camera or all alarmed cameras in sequence or multiscreen
- Trigger telemetry preset on alarm
- Capture additional still image at moment of alarm
- Buzzer activated on alarm
- Light duty relay output triggered via alarm zone
- Instant messaging to remote network client on alarm
- Automatic archive of alarm video and audio to FTP server or DVD-R/CD-R

PRE-ALARM

Each camera input can continuously capture a configurable number of images at a user defined pre-alarm capture rate. When an event occurs, the images captured before the alarm event are recorded to disk, allowing the viewer to see enhanced evidence leading up to the event.

VIDEO MOTION DETECTION

Programmable 16x14 NTSC (16x16 PAL) grid with 5 levels of sensitivity for each camera view.

16 advanced VMD trigger zones with individual sensitivity on a 88x60 NTSC (88x64 PAL) grid for each camera.

This is based on standard resolution settings of 720x240 NTSC (720x256 PAL).

Options:

- Up to 15 minutes of protected pre and post activity recording per event
- Protect VMD images from overwrite for configurable period of time
- Main monitor display of last VMD camera, or all VMD cameras in sequence or multiscreen
- Buzzer activated on VMD
- Light duty relay output triggered on VMD activity
- Instant messaging to remote network client on VMD
- Automatic archive of VMD to FTP server or DVD-R/CD-R

FALSE ALARM SUPPRESSION

Advanced alarm zones added to BX2CA allow you to combine multiple detection sources to minimize false triggers. E.g. you can set an alarm to be triggered by a combination of a PIR and Camera VMD to remove miss-triggers from either source. Added to this, each alarm input can be temporarily disabled by a remote administrator to ensure that faulty detectors do not mask real alarm incidents.

TEXT SUPPORT

Through the inclusion of Text Support, the BX2CA can search captured transaction data for specific goods purchased, transaction numbers, credit card references, keywords etc. and jump straight to the associated video sequence. Additional functionality allows alarms to be raised on the use of keywords from POS and other devices. Search and playback is also supported through NetVu ObserVer.

INSTANT ALARM REPORTING

The system can dial-out on alarm to a remote site to provide instant alarm notification.

- Instant alarm reporting
- Dial-out on alarm
- Alternative signalling path

E-MAIL & SMS NOTIFICATION

Emails can be sent on alarm or other critical events.

Notifies the following events on a camera by camera basis:

- Alarm
- Activity
- Camera fail
- Power up

Access to mail server via Ethernet or dial-up is required for this feature.

Short Message Service texts (SMS) can also be sent to a specified mobile phone number, via an SMS capable modem.

AUDIO

The user has the option to record and play back audio through the unit in real time. Recorded with images, audio can be played back directly from the unit via powered external speakers.

The system can also receive audio from a remote network viewer and play it directly out of the unit for audio challenge or help point applications.

Recorded audio is automatically copied when video is archived to DVD-R/CD-R or exported across a network.

Connections:

Line in: 47K. input impedance, 1V pk-pk, RCA phono socket

Line out: 1V pk-pk, RCA phono socket

NetVu Connected

BX2CA now has NetVu technology built-in to ensure maximum compatibility with future developments in networked security. NetVu technology enables the BX2CA to fully interoperate with other NetVu compatible products from DM including the DV-IP Decoder, NetVu ObserVer and PDA Viewers. Providing interoperability between the worlds leading security companies, NetVu uses industry standard networking protocols supported by a wide range of third-party integration products and SDKs to ensure on-going compatibility for the future.

WEB BASED CONFIGURATION

Web based configuration enables system adjustments to be made remotely to a networked unit, such as change the record rate, set up the advanced VMD grids, program presets and more – without the need for a site visit.

NETWORK CAPABILITIES

A standard Ethernet connection allows live and recorded viewing on a networked PC using DM's NetVu ObserVer software or via web pages using a standard Internet browser. Network viewing is independent and does not affect the recording or local operation. The BX2CA includes a network bandwidth limitation option, which allows the bandwidth used by the BX2CA to be capped. For low bandwidth remote network links, viewing applications can request that video is sent in MPEG-4 format, while local network viewers can simultaneously view using high quality JPEG images.

NetVu ObserVer software and Web page features include:

- Live full, quad, 6, 9 and 16 way screens
- VCR style fast forward and rewind, playback and frame advance/rew

- GOTO time and date
 - File export of digitally signed images over the network to the user's PC using NetVu software
 - Archived images can be viewed using DM's NetVu ObserVer software, supplied with the product and as a free download from the DM website
 - Remote manual control of relay output on the unit
 - Telemetry control, including PTZ and telemetry presets
 - Multiple user access
 - Event log
 - Network viewing is also available for Mac OSX and Linux
- See the latest NetVu ObserVer datasheet for more information.

COLOR RESOLUTION

Sampling rate: 13.5 MHz to CCIR 601

Number of pixels: PAL 720h x 512v
NTSC 720h x 448v

16.8 million colors 256 levels of grey, 8-bit luma.

COMPRESSION

Standard JPEG format files with user definable compressed image size for high quality recording.

Simultaneous MPEG-4 network streams for low bandwidth remote viewing or background recording.

LANGUAGES

English, French, German, Spanish, Italian, Russian, Czech, Polish, Dutch, Hungarian and Swedish.

DATA

SCSI - 50-pin HD SCSI-2 connection.

NET - RJ-45 10-baseT Ethernet connection.

BUS A - RS-485 telemetry port 1.

BUS B - RS-485 telemetry port 2 (Used in conjunction with BUS A with Sensormatic telemetry).

485 BUS - 2x MMJ ports for DM 485-BUS accessories.

SERIAL 1 - 9 way (Male) D Type RS 232 serial port.

SERIAL 2 - 9 way (Male) D Type RS 232 serial port.

SERIAL 3 - 9 way (Male) D Type RS 485 telemetry.

SERIAL 4 - 9 way (Male) D Type RS 485 telemetry.

ARCHIVE MEDIA

Standard DVR: Built-in DVD writer for Compact Disk Recordable Media.

Continuous Archive DVR: Twin hot-swappable archive hard disks caddies with redundant mirrored caddies for continuous recording, plus built-in DVD writer for Compact Disk Recordable Media.

TEMPERATURE RANGE

Operating temperature 41 – 113°F (5 – 45°C)

RELATIVE HUMIDITY

10% - 85% Non-condensing.

DIMENSIONS

BX2:

6 3/4" (H) x 17 3/8" (W) x 20 3/8" (D)

170mm (H) x 440mm (W) x 517mm (D)

"Rack-mount" ears and supports are provided with the BX2.

Keyboard:

2 1/2" (H)* x 16 1/8" (W) x 7 1/4" (D)

(* 3.93" including Joystick)

61mm (H)* x 410mm (W) x 183(D)mm,

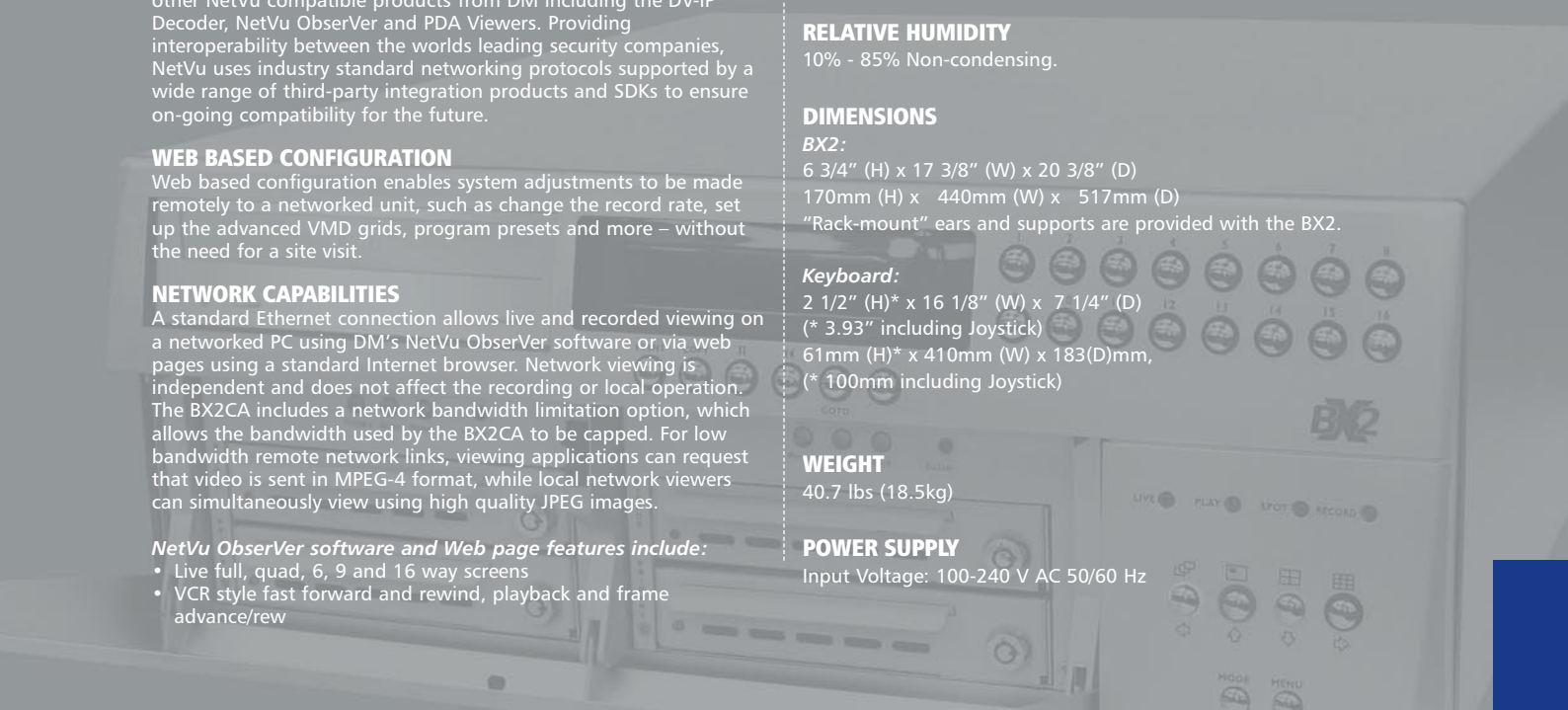
(* 100mm including Joystick)

WEIGHT

40.7 lbs (18.5kg)

POWER SUPPLY

Input Voltage: 100-240 V AC 50/60 Hz



KBS3A - REMOTE KEYBOARD

TELEMETRY DATA

Built-in RS485/Twisted pair protocols provide direct control of the following domes:

- JVC TK-C675BE, TK-C676 & TK-C553E
- Ultrak Ultradome™ KD6
- Ademco Orbiter & Jupiter Microspheres™
- Aritech/Kalatel CyberDome™
- BBV RS485 StarCard
- Bosch/Philips G3
- Ernitech
- Mark Mercer
- Panasonic WV-CS850A, WV-CS854, WV-CW860 external
- Sensormatic Speeddome™ IV & V (Using 4-wire RS-422)
- Pelco P Spectra II, Spectra III
- Samsung SCC-641
- Vista Power Dome

COAX TELEMETRY

- BBV RX100 (protocol converter for control of major manufacturer's domes)
- Pelco Spectra II & III (Please note that patrol modes are not available)

REMOTE KEYBOARD OPTION

Keyboard features include:

- Joystick control of telemetry camera with twist zoom facility
- Wash/wipe, focus, iris, lamps, preset, patrol and auto-pan keys
- Up to 16 BX2 units can be controlled from one keyboard – up to 16 keyboards can be connected to the 485 BUS providing a flexible configuration eg: 1 unit can be connected to 16 keyboards
- Onboard LCD identifying connected unit name and number
- Removal of tracked telemetry cameras from sequence
- KBS3A also compatible with BX2 - See website for details (May be connected directly or remotely via 485 BUS cabling (please note maximum cabling distance is 4921 feet).



BUILT-IN CD WRITER RANGE

16 CAMERA COLOR DUPLEX WITH CD	BX2P DX16C	640GB
16 CAMERA COLOR DUPLEX WITH CD	BX2P DX16C	1.2TB
16 CAMERA COLOR DUPLEX WITH CD	BX2P DX16C	2TB
16 CAMERA COLOR DUPLEX WITH CONTINUOUS ARCHIVE	BX2CA	600GB
16 CAMERA COLOR DUPLEX WITH CONTINUOUS ARCHIVE	BX2CA	1TB
OPTIONAL REMOTE KEYBOARD	KBS3A	
VIDEO SWITCHER	VS16	
IR REMOTE CONTROL	IR REMOTE	
PC PLAYBACK VIEWER FOR BX2 CONTINUOUS ARCHIVE CADDIES	USB CA VIEWER	
PAIR OF MATCHED 600GB CADDIES FOR BX2 CONTINUOUS ARCHIVE	CA CDY - 600GB	
PAIR OF MATCHED 1TB CADDIES FOR BX2 CONTINUOUS ARCHIVE	CA CDY - 1TB	

A CHOICE OF HARD DISK OPTIONS ARE AVAILABLE INCLUDING THE LATEST 1TB CONTINUOUS ARCHIVE STORAGE OPTION

PLEASE CONTACT CUSTOMER SERVICES IN YOUR REGION OR CHECK THE WEBSITE AT WWW.DEDICATEDMICROSUS.COM

PLEASE NOTE DRIVE SIZES MAY VARY FROM TIME TO TIME WHICH MAY RESULT IN A LARGER DRIVE CAPACITY THAN STATED BEING SUPPLIED WITH THE UNIT.

THE MANUFACTURER RESERVES THE RIGHT TO CHANGE THE SPECIFICATION WITHOUT NOTICE

PLEASE CHECK THE WEBSITE FOR DETAILS OF COMPATIBLE PRODUCTS AND OTHER LATEST DEVELOPMENTS

FOR FURTHER INFORMATION PLEASE CONTACT

Dedicated Micros USA	14434 Albemarle Point Place, Suite 100, Chantilly, Virginia 20151 USA Toll Free: 800 864 7539 Tel: +1 703 904-7738 Fax: +1 703 904-7743 and 23456 Hawthorne Blvd. Suite 100, Torrance, CA 90505, Tel: +1 310 791-8666 Fax: +1 310 791-9877.
Dedicated Micros UK	11 Oak Street, Swinton, Manchester M27 4FL UK Tel: +44 (0) 845 600 9500 Fax: +44 (0) 161 727 3300.
Dedicated Micros Germany	Neckarstraße 15, 41836 Hückelhoven, Germany Tel: +49 243 352 580 Fax: +49 24 33 52 58 10.
Dedicated Micros France	9-13 rue du Moulinet, 75013 Paris, France Tel: +33 1 45 81 99 99, Fax: +33 1 45 81 99 89.
Dedicated Micros Asia	16 New Industrial Road, #03-03 Hudson Techno Centre, Singapore 536204. Tel: +65 62858982 Fax: +65 62858646.
Dedicated Micros Australia	15/3 Packard Avenue, Castle Hill, NSW 2154, Australia Tel: +612 9634 4211 Fax: +612 9634 4811.
Dedicated Micros Malta	UB 2, San Gwann Ind. Est., San Gwann, Malta Tel: +356 21483 673 Fax: +356 21449 170.
Dedicated Micros Middle East	Building 12, Suite 302, P.O.Box 500291, Dubai Internet City, Dubai, United Arab Emirates Tel: +971 (4) 390 1015, Fax: +971 (4) 390 8655.
Dedicated Micros Slovenia	Delavska cesta 24, 4208 Sencur, Slovenia Tel: +386 4 279 18 90 Fax: +386 4 279 18 91.
Dedicated Micros Benelux	Joseph Chantraineplantsoen 1, 3070 Kortenberg, Belgium Tel: +32 2751 3480 Fax: +32 2751 3481.



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