



# Four Channel, High Resolution Solid State, H.264 Mobile Digital Video Recorder

## Up to 150 Hours of Record Time

### Key Features & Benefits

Small Light Weight Design – Solid State

Up to 32 GB of Storage - SD HC Memory Card

H.264 Video Encoding

MAXVIEW™ 400 Viewing Software

Record up to 4 Channels of Audio

Optional GPS

The NiTRO™ 404 is a solid state, four channel mobile digital video recorder. Utilizing H.264 compression, the same compression technique that is used in Blu-Ray disk players, the NiTRO™ 404 will simultaneously record up to 4 channels of video at D1 resolution @ 30fps on each channel. This combination of features produces crystal clear, best in class video playback.

About the size of two decks of playing cards laid side by side, the NiTRO™ 404 is a marvel of miniaturization. The small size provides almost limitless mounting options for the NiTRO™ 404. In place of a spinning hard drive the N404 records video to a removable SD memory card. Utilizing state of the art surface mount components, the NiTRO™ 404 is built to withstand the shock and vibration of school bus operation.

### GPS (Optional)

The optional GPS module tracks where the fleet has been, where it stopped and for how long. GPS functionality can easily be added either at the time of install or as an upgrade later. The NiTRO™ 404 comes complete with a 20' power/ignition harness and is available in kits with or without a camera and either a 16GB or 32GB memory card.



**NiTRO™ 404 High Resolution  
Solid State Recorder**

### MAXVIEW™ Viewing Software

Keeping with tradition, the NiTRO™ 404 includes the MAXVIEW™ 400 viewing software. The MAXVIEW™ 400 viewer is a very easy to use application that allows users to quickly find the video of interest and save a clip. With a press of a button users can print images and then send them to qualified staff.

### Night Vision and High Resolution Color Cameras

Gatekeeper optic packages have a smart sensor providing infrared capability during night time or early morning operation and switching to brilliant color during daytime operation. This unique design auto adjusts to fluctuating light conditions and includes integrated audio. The entire optics package is housed in an esthetically pleasing vandal resistant dome.



**MAXVIEW™ Viewing Software**



Specifications subject to change without notice. 10/25/2010 V404 1.03

## Protecting Your Precious Cargo

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# Product Data Sheet



## OPERATING CHARACTERISTICS

### Audio/Video:

Video Standard	NTSC or PAL (Configurable)
Video Input	4 Channels
Audio Input	4 Channels - One audio channel per video channel

### Recording:

Compression	H.264
Record Resolution	720x480 576x384 480x320, (NTSC)
Record Rate	30, 15, 10, 7, 6, 5, 4, 2, 1 fps
Recording Quality	High, Good, Normal
Recording Mode	Overwrite or Stop after storage full
Record Extend Delay	User configurable in one second increments up to 24 hours

### Configuration:

Control and Configuration	On screen display using infrared remote control
Daylight Savings	Yes - User Configurable

### Event:

Sensors	Three (label names configurable by user)
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### Storage:

Recording Medium	SDHC Card
Capacity	16GB or 32GB

### Warranty:

Three Year - parts and labor, return to factory warranty

### GPS:

Yes - Optional

## PHYSICAL / ENVIRONMENTAL CONDITIONS

### Power Protection:

Voltage	8V to 32V
Power	Operating 6W / 12V @ 500mA (DVR only in record)

### Video Management:

Viewing Software	MaxView™ 400
Forward Playback	Yes
Clip Generation	Yes - AVI Format
Sensor Status Indication	Yes
Audio	Yes
Operating Systems Supported	Windows XP, Vista, Windows 7 32 bit
Minimum Computer Specification	Dual core 2.2 GHz Processor 4 GB RAM, 250 GB Hard Drive 1240 x 760 Resolution

### Connectors:

Camera Input	Gatekeeper integrated camera connection (Video, Audio and Power)
AV Output	Composite Video / Audio - RCA
Sensor Inputs	(Flying Leads)
Media Interface	SDHC Card Reader Required

### Mechanical:

Depth	4.5 in / 11.5 cm
Width	3.6 in / 9.2 cm
Height	1.0 in / 2.5 cm
Weight	0.7 lbs / 0.32 kg

### Environmental:

Operating Temperature	-22° F to 140° F (-30° C to 60° C) *
Storage Temperature	-40° F to 158° F (-40° C to 70° C) *
Mounting Orientation	* SD Card must not face down.

## NITRO™ 404: PRODUCT ORDER GUIDE

### NiTRO™ 404 - DVR Only

No SDHC Card  
No Camera or Camera Harnesses  
Camera adapter harness for 4 cameras  
Power and sensor adapter harness  
Power harness  
Sensor harness

#### Accessories

GPS - NiTRO™ 404 Series  
GPS antenna with 20' cable to mate with NiTRO™ 404 Power Harness Assembly  
Remove 30' camera harness, substitute 15' camera harness (per camera)  
Remove 30' camera harness, substitute 60' camera harness (per camera)  
External SDHC card reader  
Remote Control  
2 camera, camera adapter harness

### NiTRO™ 404 - 32GB or 16GB SDHC Card

32GB or 16GB SDHC Card  
One, Two, Three or Four cameras as ordered (Includes 30' camera harness)  
Camera adapter harness as per cameras ordered  
Power and sensor adapter harness  
Power harness  
Sensor harness

1 camera, camera adapter harness  
Power / Sensor adapter harness  
Power / Sensor / GPS adapter harness  
Video out camera harness  
16GB SDHC Card  
32GB SDHC Card  
DVR Monitor  
Monitor to view Nitro 404 configuration screen  
SDHC Card reader

### NiTRO™ 404 - GPS 32GB or 16GB SDHC Card

32GB or 16GB SDHC Card  
One, Two, Three or Four cameras as ordered (includes 30' camera harness)  
Camera adapter harness as per cameras ordered  
Power and sensor adapter harness with GPS  
GPS antenna assembly  
Power harness  
Sensor harness

Nitro Series Basic Download Kit  
Remote Control  
Video Out Camera harness  
BNC to RCA adapter  
CD with Manual and MAXView  
Nitro Series Intermediate Download kit  
Basic Download kit plus  
Video alignment adapter  
Second video cable  
Advanced Series Download Kit  
Intermediate Download kit plus  
12V Monitor



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