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## Mobile Video: A History and Guide

Mobile video devices are the ultimate way to capture and share spontaneous moving moments. Mobile devices, unlike camcorders, are always with you, meaning you can not only record occasions like a wedding or a birthday party, but also capture fleeting moments like a great morning sunrise on the way to work or a baby's first word. And mobile video not only allows you to catch these instants, you can also share them with the world as they happen.

### Mobile Video: A History

Nokia premiered video recording on mobile devices back in 2002 with the launch of the groundbreaking Nokia 3650 which could record up to 15 seconds of video. By 2004 and the Nokia 7610, mobile video functionality had reached 10 minutes and now also included a Movie Director function that turned film footage into personal movies by combining clips, adding music, text or animated graphics.

2005 saw Nokia launch the Nokia N90, a device optimized for imaging, with ability to record up to one hour of high quality video thanks to MPEG-4, a new compression standard.

2006 witnesses a major breakthrough in mobile video with the launch of the Nokia N93, a device offering uncompromised digital camcorder and phone functionality that is set to trigger a revolution in spontaneous video capture:

- Records up to 90 minutes of DVD-like quality video at 30 frames per second on a 2GB miniSD card
- 3x optical zoom with video stabilization
- Carl Zeiss Vario-Tessar lens
- High definition 2.4" display
- Direct TV out connectivity
- High speed 3G and WLAN for wireless connectivity



Carl Zeiss Optics

### Mobile Video: A Guide

#### 1. Capture

**Camera, action:** when you want the camera to start rolling, the dedicated capture, zoom and flash keys on the Nokia N93 mean all the functions you need are at your fingertips, so there's no risk of missing that once-in-a-lifetime moment. You can get started in an instant just by unfolding and twisting the main display of your Nokia N93. There's also an active camera toolbar which displays all the features you need – from exposure value to color tones.

**Twist and shoot:** the innovative form factor of the Nokia N90 and the Nokia N93 is optimized for moving image capture. With just a flick of the wrist, you can hold the device as you would a camcorder, viewing your subject on the landscape screen as you film.



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**Film like a pro:** while you're busy filming, the technology inside the Nokia N93 is working to give you the best possible results. The MPEG-4 VGA video capture at 30 frames per second offers DVD-like video quality that, until now, has only been available on dedicated camera/camcorder devices. Combine this with superior Carl Zeiss optics for crisp, detailed images and you're guaranteed brilliant quality videos every time.

**Ready for your close up:** zoom in on your subject with the Nokia N93's 3x optical zoom to bring the action into full view.

**Super sound:** when you're capturing a moving image you also want to be able to capture the sound to really bring it to life. Stereo audio recording on the Nokia N93 means your videos will sound as good as they look.

**Smoothly does it:** filmmakers need a steady hand but sometimes holding the camera perfectly still is tricky. The Nokia N93 has digital video stabilization enabling smooth, motion-blur free mobile movies.

## 2. View

Be your own movie critic and view your masterpieces wherever you are.

**View on the move:** if you can't wait to get home to view your mobile videos or you want to show you friends what you have been doing, simply flip your Nokia N93 into view mode. You can then relive your memories on the vibrant 2.4" QVGA 262,144 color display, complete with light sensor and super-wide 160° viewing angle.



**Back to back movies:** had a busy day's filming? Then view your photos and video clips in a sequence when you break for the day. Flip your device into view mode, select Slide Show and watch all of the magic moments from your day unfold before your eyes.

## 3. Edit

With the in-built and in-box editing facilities on the Nokia N93, you decide what film ends up on the cutting room floor.

**Edit on the move:** the Nokia N93 is a mobile editing suite meaning you can oversee the director's cut wherever you are. The Edit function on the device allows you to combine and trim clips, insert images and sound clips for that added bit of drama, or add effects like color or slow motion to really bring your film to life.

**Hollywood excellence:** for more advanced editing functions, transfer your videos to your PC and edit using Adobe Premiere Elements 2.0 software which comes bundled with the Nokia N93. To get started:

1. Go to Add Media, select your video file and drag to the Timeline. Select several files if you want to transition several clips together.
2. To trim clips, select the razor icon in the Timeline menu and apply to your clip on the Timeline.
3. To add a soundtrack, choose Add Media, select your audio file (MP3 etc) and drag to the Timeline.
4. In the Effects and Transition window there are options to transition videos together and add visual and audio effects. Simply choose your effect, drag onto your clip in the Timeline and then activate from the Properties window.

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5. In Transition you can join two clips together via effects like 3D motions, dissolving, sliding or wiping.
6. Visual Effects includes options like blur, pixelate or ripple.
7. Audio Effects features sound effects including reverb or pitch shifter.

If you want to share your videos on the Internet or via email, Adobe Premiere Elements 2.0 allows you to export your video to a different file format such as QuickTime or Windows Media.

#### 4. Share

**Premiere your masterpieces:** round up your friends and debut your mobile movies on your TV with the Nokia N93's TV-out capability – super easy to use and perfect for impressing friends. Or make use of the built-in WLAN (WiFi) and UPnP\* connectivity and wirelessly stream your video to your compatible TV or media server.

**Share far and wide:** with the Nokia N93 you'll have ready to use video clips that you can share via MMS, email, or by uploading them directly from the device to compatible blogs.



**DVD distribution:** with the Adobe Premiere elements 2.0 software that comes with the Nokia N93, you can create DVDs and even add menu and templates to ensure you wow your audience with professional looking results.

The first step is to transfer your movies to your PC; with the Nokia N93 you can choose to transfer them wirelessly over Bluetooth, with the hot swap miniSD card or via USB 2.0. Whichever you choose, Nokia XpressTransfer makes it easy.

Then creating a DVD is simple:

1. Right click on the Media Window, select add media from files and then the file to be used
2. Select the video thumbnails and drag and drop to the timeline window
3. Click on the DVD icon, select DVD templates and add DVD markers for each scene change
4. Press Export and select DVD from the menu
5. Place a DVD-R disc in the DVD drive and press Burn



#### 5. Store

**Archive films:** with a massive internal memory of up to 50 MB which is expandable with a hot-swap miniSD card of up to 2 GB, the Nokia N93 means you can save plenty of content on the go, up to 90 minutes of high quality video in fact. Nokia XpressTransfer makes it easy to automatically transfer your videos to PC via WLAN or USB for safe keeping.

\*Current TVs and stereo systems can be UPnP-enabled with a separately available media link device.