

H.264 on ARM

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FastVDO's H.264 Baseline Profile Decoder demonstration on Series 60 Mobile Platform

Scope: This document describes the contents of .sis file, installation procedure for FastVDO's H.264 Baseline Profile decoder, and the steps to run the demonstration software on Series 60 mobile device.

Target devices: All devices supporting Series 60 Mobile Platform with ARM 9 processor. This installation has been tested for the following devices -- Nokia 6600, Nokia 6630, Sony Ericsson P900, Nokia N-Gage, Nokia 7610, Nokia 3600. It might work well with other untested devices also.

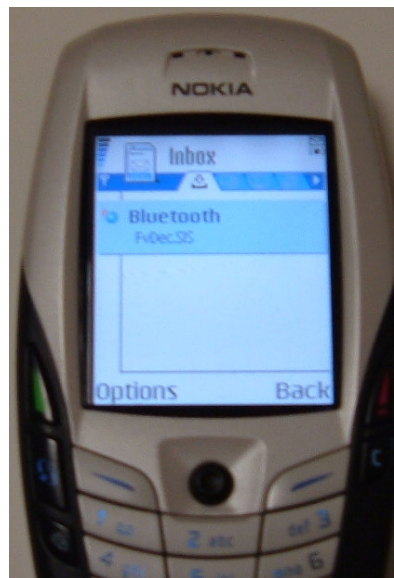
Contents: The installer provided contains FastVDO's H.264 Baseline Profile decoder and 4 test streams encoded at 3 different bit rates.

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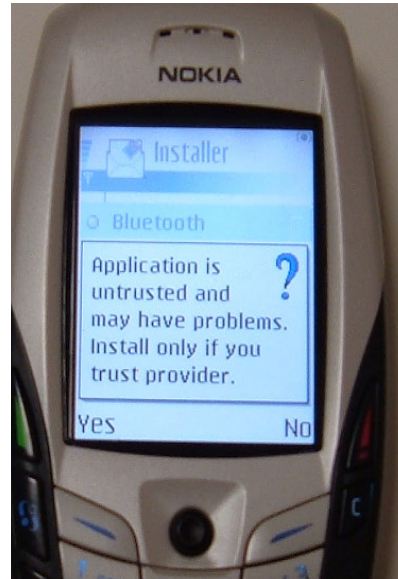
Installation procedure:

To install the FastVDO's H.264 Baseline Profile decoder demonstration software on your mobile device, please follow the procedure given below.

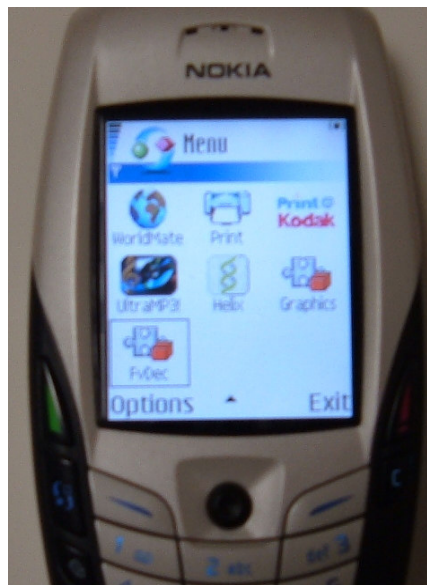
1. Initiate the transfer of **FvDec.SIS** file onto your mobile device via Bluetooth® or Infrared. The device will receive the installation file as a message.



2. Select the message. This will start the installation of the software. You will receive a warning saying that the content is not from a trusted source. Select to continue.

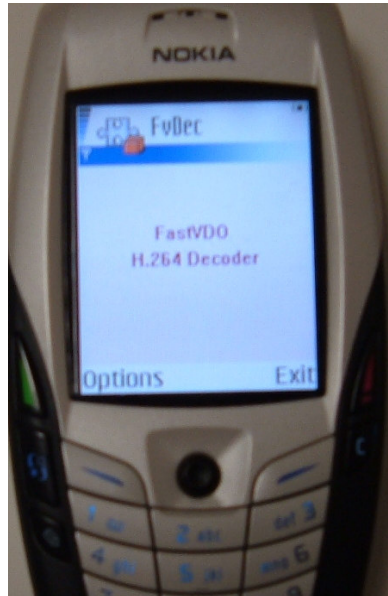


3. The installation will create an “FvDec” icon in the **Menu**.

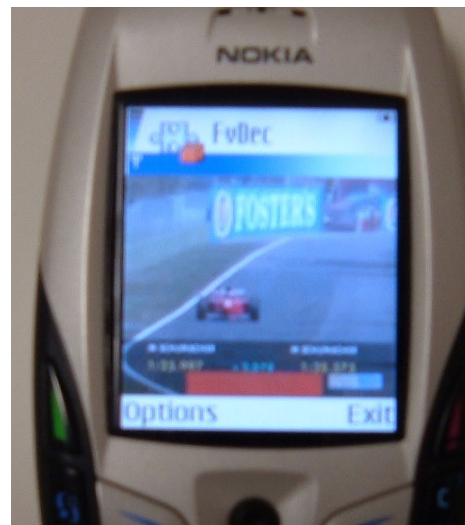
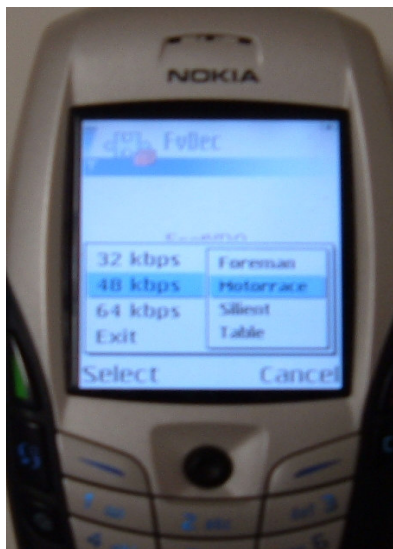


Demonstration procedure:

1. Select the **FvDec** icon from the **Menu** to start the FastVDO H.264 Baseline profile decoder demonstration software.



2. In the **Options** menu Choose any of the bit-rates (**32 kbps/48 kbps/64 kbps**).
3. In the next menu choose one of the H.264 compressed video file for playback.



H.264 Baseline Profile Decoder for Mobile Devices - Specification

Characteristics	Comments
Input format	ISO/IEC 14496-10 compliant H.264 Baseline Profile video stream
Output format	YUV 420 planar/24-bit RGB/16-bit RGB
Memory Requirements	QCIF Video: $20 + 45 * (\text{Number of Reference Frames} + 1)$ Kbytes
Computational Complexity	43 Mcycles/sec for decoding QCIF stream @ 15fps @ 32kbps* *ARM9TDMI zero wait state memory
Core Supported	ARM9T, ARM9E
OS Supported	Symbian OS 6.0, Series 60

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