



Field Reporter User Guide

This LiveCast User Guide describes the use of Nokia E71x for remote live video streaming.

Installation

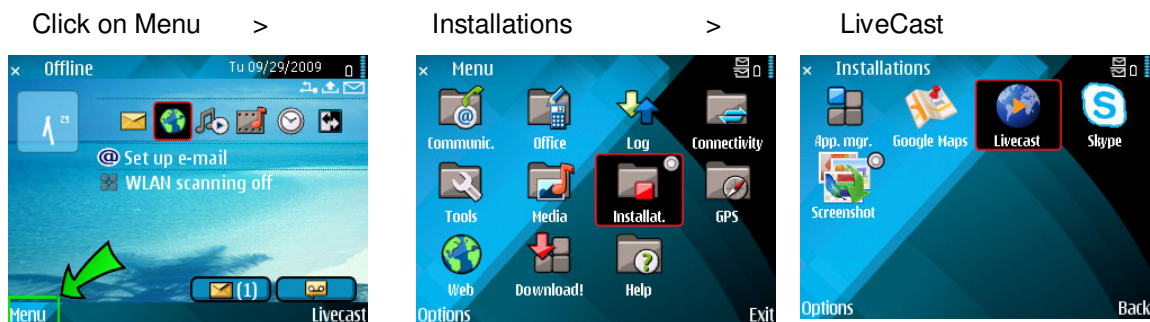
Installation of LiveCast software follows typical Nokia application installation procedures.

- 1.) Check the date, time and year are set correctly.
- 2.) Select Menu > Settings icon > App.Mgr. icon > select Options > select Settings > set Software Installation to ALL, and set Online Storage to OFF.
- 3.) Launch the E71x web browser



- 4.) Go To <http://ent.livecast.com/dl/livecast.sis>
- 5.) Install application.

Launch LiveCast Application



Overview

LiveCast software requires initial setup before starting to stream. After initial setup is completed, subsequent streams can be started directly from this standby screen by pressing the center button between the keypad and screen.

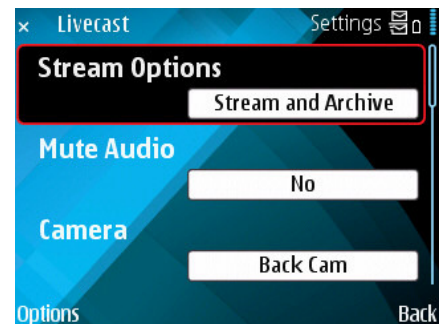


Initial Setup

Initial setup procedures are all accessible from the **Options** Menu on your Nokia E71x. Set as following:

Settings

- Stream Options – Stream and Archive
- Mute Audio – No
- Camera – BackCam
- Quality – High 128 kbps
- Location Information – Default Location
- Default Access Point – this should be preset by carrier
- Proxy Settings – No Proxy
- Local Archive storage – Phone Memory
- Prompt For Billable events – No
- Show Privacy Statement – No
- Server – ent.livecast.com

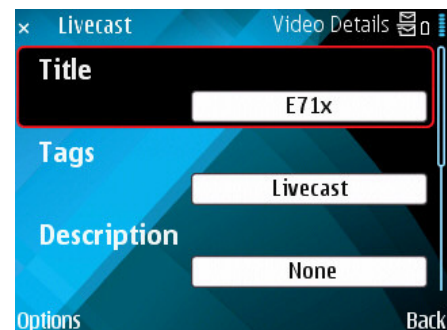


When completed, select **Back**.

Video Details

Video Details is where you enter the title and other information about your Webcast before you start streaming. You can always add or edit video information later, simply go to your Livecast account (see **My Online Account > My Video**).

(If you don't enter a title before streaming, one will be automatically created)



When completed, select **Back**.

Login Info

The first time you stream with LiveCast software you need to enter your username and password. These credentials will be saved, so re-entering this data is not required for subsequent streaming.

When completed, select **Back**.
You are now ready to start streaming!

Start Streaming

Here's the fun part! After the first time you set up LiveCast with your log-in information, you can just press the center button from the main screen. To stop the stream, press the same center button.

NOTE:

Start streaming 30 seconds prior to event to ensure all video is captured. Also stream for 30 seconds past the end of event to ensure all video data is transmitted.



Shows the duration of streaming.

Volume Meter. Into yellow is fine. Into red is not.

Status Line.
C0... indicates connecting.
S5 indicates streaming.
S6 indicates data overrun.

Framerate and bitrate are also shown.

Displays Public or Private video .
Comments On allows Dispatch operator to send messages to field reporter.

NOTE: Momentary S6 state is fine. If S6 state is constant and numbers after bitrate continue to climb in negative numbers, then data overrun likely to cause end of streaming. Recommendation is to stop stream, select lower bit rate and re-start.

Special Features

The Nokia E71x comes with zoom and dual camcorder capabilities.

Zoom In

Zoom Out

Pressing the Number Key and 5 switches between back and front cameras.

Best Practices

Here are some hints for field reporters to get best results.

Video Quality

Best video quality is achieved when selected bit rate and actual bit rate are close to being the same. Selecting a higher bit rate on the phone will yield better quality video only if there is that much bandwidth available from the carrier, otherwise it will result in lower or stuck framerates.

For example, selecting 300 kbps in Settings and only having 140 kbps bandwidth will result in a very low frame rate, whereas selecting 128 kbps in Settings with 140 kbps bandwidth will result in optimum framerate (15 fps max. for Nokia E71x).

Recommendation is to do a Stream Only test on location prior to event at 300 kbps and view the status line to see the actual bandwidth available. This usually takes 15 seconds of streaming to stabilize the bandwidth. After noting the average bandwidth available, stop the stream. Change setting to Stream and Archive and elect the appropriate bitrate. Re-Start stream when ready.

CPU usage on phones affects video quality. Two typical causes of lower quality video are lighting and camera movement. Low light consumes more CPU and will result in lower framerate. Moving the phone fast also will result in a lower framerate. Best results are obtained with a steady hand.

Audio Quality

Phone microphones are designed specifically for close proximity use, and therefore do not yield good results when used for distances over 3 inches.

Use an alternate mic whenever possible. A Bluetooth or wired headset are recommended. Nokia phones are fussy and require Nokia brand Bluetooth and wired headsets. A Bluetooth headset allows maximum portability and can be held as a standard mic would for interviews. Follow headset instructions when setting up Bluetooth headset.

Starting and Stopping

Due to the nature of data delivery over carrier networks, we recommend starting the stream 30 seconds before the event and stopping 30 seconds after the event.

This will allow the stream to be established in time for the event, and ensures there the end of the event is fully captured.

Contact:

Tony Randall
tr@livecast.com
cell: 778-227-7245
office: 604-844-2263 ext. 4#