



# Lake Controller on the iPad

**Easy and intuitive, with the “feel” of analog faders and controls, Lake Controller is now available via the ultra-portable iPad.**

## Introduction

Since the launch of iPad, many audio professionals have been looking for a way to run Lake Controller on this small, cost-effective, and remarkably ingenious hardware platform. Unfortunately, the full Lake Controller software application is designed to run only on a Windows OS. However, at Lab. gruppen we have tested various VNC remote desktop solutions. As a result we now can offer remote access of Lake Controller using iPad, retaining full functionality of all touchscreen-controllable features.

## How It Works

Lake Controller on iPad utilizes Virtual Network Computing (VNC), a graphical desktop sharing and remote control system based on the RFB (remote frame buffer) protocol.

A VNC system consists of a client (the iPad), a server (the Windows host computer), and a communication protocol.

VNC Server is a software program that enables the Windows computer (server) to share its screen, and for a remote client to take control of it. The VNC client (or viewer) is the program that interacts with the server from the iPad using the shared screen interface.

The VNC protocol (RFB) is elegantly simple, based on one graphic primitive from server to client (example: place a rectangle of pixel data at the specified X,Y position) for screen information. Event messages are carried from client to server for remote control.



TECHNOLOGY REFERENCE NOTE

## Software requirements

In addition to Lake Controller, the following are needed:

**VNC Server for the Windows host for Lake Controller:** *RealVNC* (by RealVNC Ltd) available from <http://www.realvnc.com/> for \$30.00, free for Windows XP. This is the VNC Server for the PC Windows computer.

**VNC Client for iPad:** *ezDesktop VNC* (by Anteclea Inc.) available from Appstore for \$9.99.

\* Other software combinations may work as well.

## Setup and configuration

Follow these step-by-step instructions:

1. **Client:** Enter Appstore from your iPad and download ezDesktop VNC and RDP. This is a free app with a time-limited VNC connection. With the VNC Remote Desktop "In App Purchase", full access is granted for \$9.99.
2. **Server:** From your Windows computer go to <http://www.realvnc.com/products/download.html> and download the appropriate VNC server depending on your OS and requirements. For Windows XP based systems the Free Edition version is sufficient; Windows 7 requires the Personal Edition at a cost of \$30.00.
3. Run the installation. Start the VNC Server and configure:
  - a. Authentication tab: It is recommended to set a VNC Password Authentication.
  - b. Capture Method tab: Select the "Use VNC hooks to track changes".
  - c. Desktop tab: Remove wallpaper. Remove background pattern and disable user interface effects.
4. **Lake Controller:** For Lake Controller to run smoothly and effectively on the VNC Client, a few Command Line Options must be entered to the Lake Controller shortcut. (For full description please see section 21, Command Line Options, in the Lake Controller Operation Manual).
  - a. Right click on Lake Controller shortcut in Start menu. (Shortcut to "C:\Program Files\Lake\Lake Controller vX.Y\Lake Controller.exe" where X is the major version and Y is the minor version."
    - b. On the Target line, add the following after the Lake Controller shortcut target: **emulation fullscreen nodbclick systemmem**
5. Set the screen resolution on the computer running VNC Server to 1024 x 768 for optimum resolution match with iPad.
6. **For Windows 7**, Disable Windows Aero Themes
  - a. Right click on desktop and choose "Personalize".
  - b. Scroll down and select the Windows 7 Basic or Windows Classic theme.
7. Connect the VNC Client on the iPad to the VNC Server on the computer by entering the computer's IP address in the VNC Client.
8. **Done!** You are now ready to interact with your Lake devices with Lake Controller via the iPad client!

