ThinkGear Connector User Guide

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The NeuroSky® product families consist of hardware and
software components for simple integration of this biosensor
technology into consumer and industrial end-applications.
All products are designed and manufactured to meet consumer
thresholds for quality, pricing, and feature sets. NeuroSky
sets itself apart by providing building block component
solutions that offer friendly synergies with related and complementary
technological solutions.

Contents

Introduction to the ThinkGear Connector

ThinkGear™ Connector (TGC) is a program that runs in the background on your Windows PC and Mac, allowing special games and applications to react to your state of mind as they're detected by the headset with NeuroSky's ThinkGear sensor. No configuration is required -- just pair your headset with your computer, launch ThinkGear Connector, and start using TGC-enabled applications!

Installation

ThinkGear Connector is automatically installed when you install the MindWave™ Application Compact Disc. If necessary, the installer will prompt you to install .NET Framework 3.5 or 4.0 based on its version.

ThinkGear Connector can also be downloaded as a standalone application from this link: http://developer.neurosky.com/docs/doku.php?id=thinkgear_connector_tgc

Using the Connector

Windows XP/Vista/7/8/8.1/10

Starting the Connector

> **Important:** Before starting up ThinkGear Connector, make sure to pair your headset with your computer. For pairing instructions, refer to the documentation that came with your headset.

ThinkGear Connector can be run from the **Start** menu, by navigating to **Programs**->**NeuroSky (or NeuroSky->MindWave Mobile)**->**Utilities**, and then clicking on the **ThinkGear Connector** icon.
When ThinkGear Connector is running, an icon will appear in the System Tray. This is the default state of ThinkGear Connector.

Running TGC-Enabled Applications

When a ThinkGear Connector-enabled application tries to connect, ThinkGear Connector will **automatically** search for and connect to the paired headset. While ThinkGear Connector is searching for the headset, an hourglass icon will be shown in the System Tray.

If the search was successful and ThinkGear Connector was able to connect to a headset, a notification bubble will appear, and the System Tray icon will change to a bright-blue "brain" icon.

However, if the search was unsuccessful, ThinkGear Connector will display a notification bubble stating the error, and the System Tray icon will change to a red

exclamation.

To ask the ThinkGear Connector to try to connect to a headset again, you can click on the notification bubble, click the "Retry headset connection" item in the right-click menu, or click the appropriate button in the Preferences panel.

> **Important:** If ThinkGear Connector was unable to connect to a headset, please ensure the following:
>
> - The headset's battery has enough charge and is turned on
> - The headset is paired with your computer
>
> If you are still having problems connecting to the headset, refer to the Troubleshooting guide.

Mac OS X 10.7/10.8/10.9/10.10

Starting the Connector

> **Important:** Before starting up ThinkGear Connector, make sure to pair your headset with your computer. For pairing instructions, refer to the documentation that came with your headset.

ThinkGear Connector can be run from the **Applications** folder, by navigating to **MindWave(or MindWave Mobile)**->**Utilities**, and then clicking on the **ThinkGear Connector** icon. When ThinkGear Connector is running, an icon will appear in the Menu Bar. This is the default state of ThinkGear Connector.

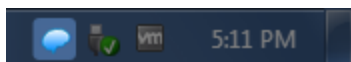## Running TGC-Enabled Applications

When a ThinkGear Connector-enabled application tries to connect, ThinkGear Connector will **automatically** search for and connect to the paired headset. While ThinkGear Connector is searching for the headset, an hourglass icon will be shown in the System Tray.
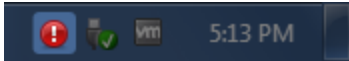
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To ask the ThinkGear Connector to try to connect to a headset again, you can click on the notification bubble, click the "Retry headset connection" item in the right-click menu, or click the appropriate button in the Preference->Troubleshooting section(this only apply to windows).

Important: If ThinkGear Connector was unable to connect to a headset, please ensure the following:

- The headset's battery has enough charge and is turned on
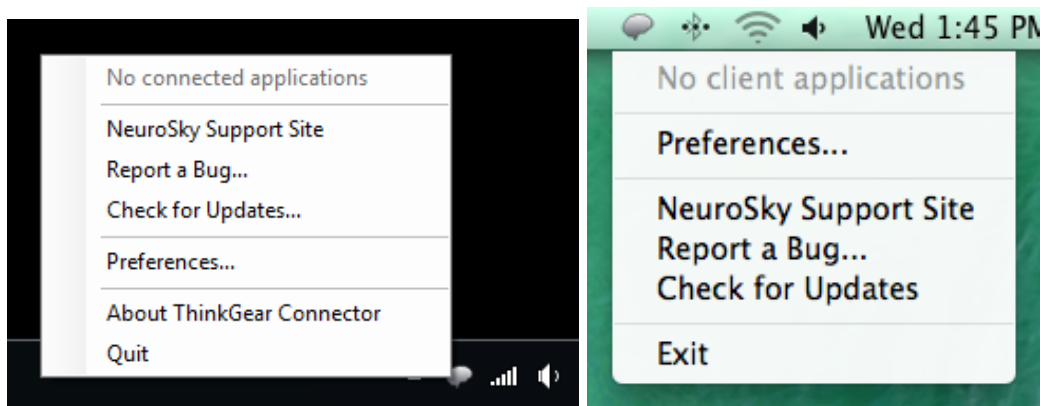- The headset is paired with your computer

If you are still having problems connecting to the headset, refer to the Troubleshooting guide.

Configuration

System Tray

By right-clicking on the System Tray icon, you can quickly be notified of the status of ThinkGear Connector, as well as perform a variety of actions.

Item	Description
Status	Display the number of applications connected to ThinkGear Connector (figure shows no active connection)
Retry headset connection	Attempt to connect to the headset again. This only shows up when there was a failed connection attempt
NeuroSky Support Site	Open a browser window to the [NeuroSky support site](#)
Report a Bug...	Open up your e-mail client to report a bug to NeuroSky
Check for Updates...	Checks online for any updates to ThinkGear Connector, and notifies the user if there is.
Preferences...	Open up the **Preferences** panel
About ThinkGear Connector	Open up a panel showing miscellaneous information about ThinkGear Connector (e.g. version numbers)
Quit	Quit ThinkGear Connector

Preferences Panel

By opening the Preferences panel, you can configure a number of operating and startup options.
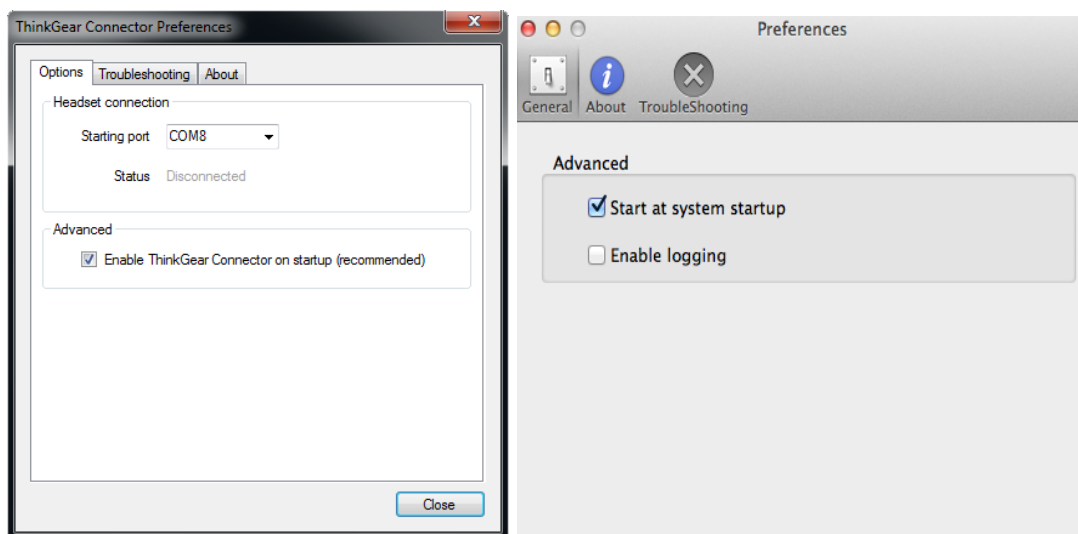
Item	Description
Starting port	Specifies the default serial port searched by ThinkGear Connector
Status	Show the status of the headset connection
Enable ThinkGear Connector on startup	If checked, ThinkGear Connector will also be started when Windows starts up

Troubleshooting

ThinkGear Connector doesn't seem to be able to connect to my headset
1.Check that the headset is turned on and paired to your computer, then retry the connection attempt several times by either clicking on the error notification balloon, or by clicking *Retry connection* in the Preferences panel. If that doesn't work, re-pair the headset, then restart ThinkGear Connector.

2. Another uncommon but possible cause of TGC being unable to connect is that TGC may not have been able to completely or properly install itself due to an overly-aggressive Antivirus or Firewall program that prevented part of the installation.

For Windows users, please follow these steps:
1. Uninstall the MindWave software by going to Add/Remove devices, and removing the "NeuroSky MindWave" software.
2. Next, restart the computer and disable all Antivirus and Firewall programs.
3. Finally, re-install the MindWave software.

For Mac users, please follow these steps:
1. Disable all Antivirus and Firewall programs.
2. Next, re-install the MindWave software.

If this does not resolve the issue, please see the following article:
http://support.neurosky.com/kb/mindwave/thinkgear-connector-is-disconnecting-often
http://support.neurosky.com/kb/mindwave/cant-find-mindwave-or-cant-connect-mindwave-to-application

ThinkGear Connector won't start properly, because it wasn't able to listen on the desired port.
If you see an error message trying to start ThinkGear Connector, restart your computer and try starting ThinkGear Connector again.