

# InvizBox Go User Manual

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# 1 Device Description

This section will give you an overview of the InvizBox Go device.



#### 1.1 Start/Stop Button

The start/stop button is in fact the logo on the top part of the casing. In order to press that button, just press the logo on the casing until you feel the button being pressed underneath (this gets easier with a bit of practice). In order to know if you've successfully pressed that button, keep an eye on the battery lights which will come on (or off).

# 1.2 Charging the InvizBox Go

One side of the InvizBox Go is dedicated to the battery and charging. On that side of the casing, you can find:

- a micro USB port which you can use to charge your InvizBox Go
- a battery shaped LED display to let you know the battery state

#### 1.3 Using the InvizBox Go as a charger

On the other side of the InvizBox Go casing you can find a USB port. This port is used when you're using your InvizBox Go as a charger.

Just plug your usual devices to this port to charge them.

# 1.4 Wi-Fi LED display

Also on the non charging side, you can find a Wi-Fi shaped LED display. The purpose of this display is to keep you informed on the networking state of the InvizBox Go.

<b>?</b>	Solid green indicates everything is secure using VPN or Tor
<b>?</b>	Solid orange indicates behind captive portal or in WiFi extender mode
<b>?</b>	Solid red indicates no secure connection, requires user intervention
?	Flashing orange indicates connected to network but not secure yet
?	Red/Orange flashing cannot determine status, reboot recommended

# 2 First Connection to the InvizBox Go

# 2.1 Starting the InvizBox Go

In order to start your InvizBox Go (or stop), you need to press the top part of the casing where the InvizBox Logo is. Under the case, there is a button which once pressed will start your device.

Within a couple of seconds after having pressed that button (keep it pressed for about 2s), the Wi-Fi LED will be green, indicating that the device is booting.

That light will then switch off until the device can determine in which state its networking is. For example, until the setup is complete, that light will be red (indicating that the InvizBox Go is not connected to any network).

# 2.2 Connecting to the InvizBox Go

In order to connect to the InvizBox Go, you will need to identify the Wi-Fi hotspot that it is running and connect to it. Initially, that network will be called "InvizBoxGo".

Just connect your phone or computer to that network as you would normally connect to any Wi-Fi network.

#### 2.3 Accessing the InvizBox Go interface

Now that you are connected to your InvizBox Go, you need to access the Administration Interface.

- Some operating systems automatically identify that the hotspot requires a setup and will give you a link to the setup page automatically. If this is the case, don't hesitate to use that link.
- On most devices, you will need to open your favourite browser and go to http://inviz.box
- Some devices are unable to access that URL, if it is the case for you, you will then need to go to http://10.153.146.1

At any stage, you can access the InvizBox Go administration interface using http://inviz.box (http://10.153.146.1 for some of you). And therefore, I would recommend that you bookmark that page as you will need to access it when you want to change network or VPN Location in the future.

Now that you have accessed the Administration Interface, you are ready to go through the Installation Wizard as described in the next section.

# 3 Installation Wizard

This section will help you complete the Installation Wizard which is a once off process on your InvizBox Go.

#### 3.1 Welcome Page

On this page, you just have to click on the "Let's Go" button to proceed with the rest of the wizard.

Note that by clicking "Let's Go" on this page, you are accepting the Acceptable Use Policy (box cannot be unticked since if you're not willing to accept that Agreement, you cannot go any further and should stop using the device).



#### 3.2 Account Details Page

On this page, you have to enter your VPN account details. You will not see this page if your VPN credentials are already flashed on your InvizBox Go.

These are VPN username and password that you use to connect to VPN.

Once you have input your VPN username and password, click Next to go to the next page of the wizard.

If you have entered in the wrong details on this page, then your InvizBox Go will not have a VPN connection and will block traffic while it is in VPN mode (this is the default mode). You can enter your account details again after you have finished the wizard. This can be done by returning to the "Account Details" page of the Administration Interface in the InvizBox Go section of the menu.

INVIZBOX	
Account Details	
	Enter your InvizBox VPN account details below
	VPN Username : my_identifier
	VPN Password :
	Previous Next
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#### 3.3 Choose Network Page

On this page, you have to select a network to connect to.

The InvizBox Go will perform a scan of all networks available to you and list them in order of how strong their signal is. It also adds information regarding the fact that these networks require a password or not.

There is a green refresh icon beside the networks which can be clicked to perform another scan for networks if the network you're looking for is not in the list.

As the InvizBox Go scans for networks, your device may disconnect you. If this is the case, simply reconnect to the InvizBox Go Wi-Fi hotspot to continue.

After having selected your network of choice, you will be prompted to enter its password. No passwords are required for "Open" networks.

You can also select "Connect to Hidden Network" and enter the name of the network to connect to a hidden network.

Once you have chosen a network and (if necessary) entered the password for it, click Finish to go to the final wizard page.

If you have entered in the wrong password on this page, then you will need to connect to the network again once you have finished the wizard. This can be done by returning to the "Choose Network" page of the Administration Interface in the InvizBox Go section of the menu.

INVIZBOX		
Choose Network	ς.	
	Select the WiFi hotspot to connect to:	
	Wi-Fi Network	
	WiFi Password	
	Minimum of 8 characters	
	Previous Finish	
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## 3.4 Wizard Complete Page

Congratulations, you have set up your device and are ready to access the Internet through a secure router.

The next page you get to is the Status Page which is the main page of the Administration Interface and will show you the main information related to your InvizBox.

INVIZBOX		
Wizard Complete		
	CO Success!	
	Your InvizBox device is now fully set up.	
	Let's access the Status Page.	
	Status Page	
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# 4 Using the InvizBox Go (Basic Mode)

Once you have completed the Installation Wizard (see previous section if you haven't), it becomes simpler to use the InvizBox Go.

#### 4.1 Authorization Required (Login Page)

Now that you have set up your InvizBox Go (using the Installation Wizard), you will be required to login in order to reach the administration interface.

The Administrator Password to use on this page is typically the same password as the one used to connect to the Wi-Fi hotspot (you can change it in the Hotspot Page). If you haven't changed it, it is still the one that was provided to you on a card inside the packaging - labelled *InvizBox Go Wifi Password*.)

INVIZBOX	
	Authorization Required
	Administrator Password
	Most likely your WiFi password
	Login

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#### 4.2 Basic Mode Menu

When you first login to the InvizBox Go administration interface, you will find that you can navigate to different pages using a menu (collapsible if you're using a small screen such as a phone, in which case you will have to click the menu button first).

Some areas of the menu will expand/collapse as you click on them and this will allow you to reach the pages you're looking for.

The Basic Mode Menu contains a link to the Choose Network Page which you have already used during the initial wizard as well as some new ones which we will look into in more detail below.

The menu will look something like this (in this example, the user is currently on the VPN Location Page):



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## 4.3 Status Page

The Status page is quickly going to become your "go to" page as it will provide you with a way to quickly understand in which state your InvizBox Go is. It will also provide you with quick links access to the most used configuration changes (such as connecting to a network, getting to a Captive Portal, changing VPN Location or changing Privacy Mode).

In the image below, we can see what the most important sections are starting from the top of the page:

- **Privacy Mode**: This will indicate if you're running in VPN, Tor or Wifi Extender mode (a button to change Mode is present)
- InvizBox Status: This will describe in which state your InvizBox Go is and if you're connected to VPN, it will add to which city you are connected to. The different statuses include:
  - No Internet Connection device is not connected to a network
  - Behind Captive Portal device is connected but behind a captive portal (login/registration page)
  - No VPN Connection device is connected and in VPN Mode but has not established a VPN connection
  - Secure Connection VPN Active device is in VPN Mode and secure
  - No Tor Connection device is connected and in Tor Mode but has not established a Tor connection
  - Secure Connection Tor Active device is in Tor Mode and secure
  - Wifi Extender Mode (no VPN or Tor) device is in Wifi Extender Mode
  - *Error with Internet Connection* device is unable to determine the networking state (for example during a DNS failure)
- Internet Status: This will indicate if you device is connected to a Wi-Fi network (a button to choose a network is present)
- VPN Connection: This will indicate if your VPN connection is established (a button to change VPN Location is present)

If you use InvizBox VPN, you will see a VPN Subscription area with information about your subscription:

- Expiration Date: When you subscription is set to expire.
- Automatic Renewal: Whether your subscription is set to renew automatically.
- **Registration**: Whether you have an InvizBox account. You will also see a button to either go to your account or to register for an account.

Following this important area, you will find more information that could be relevant to you as it describes you InvizBox Go as a router.

The sections are as follow:

- System: This will show the following details:
  - Current Firmware Version: the firmware version currently running
  - Factory Reset Version: the firmware version the device would revert to when reset
  - Hostname: the device hostname
  - *MAC Address*: a unique hardware identifier assigned to your device network interface controller when manufactured.
  - Model: the device hardware model
  - Kernel Version: the version of the kernel that the device is running
  - Local Time: the date and time currently on the device
  - Uptime: how long has the device been running
- Memory: an overview of the device memory usage
- Swap: an overview of the device swap space
- Network: an overview of the network configuration on the device
- Active DHCP Leases: a list of connected devices
- Support: a link to our InvizBox Go support page

		AUTO REFRESH ON
Status		
		Inviz Pox Status
Privacy Mode	VPN	Choose Mode
InvizBox Status		No VPN Connection
Internet Status	•	Choose Network
VPN Subscriptic	'n	
Expiration Date	Not available yet	
Automatic Renewal	Not available yet	
Registration	Not available yet	
System		
Current Firmware Version	4.0.13	
Factory Reset Version	Unknown	
Hostname	65710ba46085	
	Status InvizBox Status Privacy Mode InvizBox Status Internet Status Internet Status VPN Subscriptio Expiration Date Automatic Renewal Registration System Current Firmware Version Factory Reset Version Hostname	StatusInvizBox StatusPrivacy ModeVPNInvizBox StatusImage: Comparing the statusInvizBox StatusImage: Comparing the statusInternet StatusImage: Comparing the statusExpiration DateNot available yetAutomatic RenewalNot available yetRegistrationNot available yetRegistrationNot available yetSystemImage: Comparing the statusCurrent Firmware Version4.0.13Factory Reset VersionUnknownHostname65710ba46085

#### 4.4 VPN Location Page

On this page, you can choose the location and protocol you want your VPN connection to use.

For example, the default location is the closest to you physically when you did the original setup. This means you will appear as if you are located in that city when browsing the internet.

If there are multiple VPN servers at your chosen location, then there will be a dropdown to select a certain VPN server. There will also be a Random button beside the VPN server dropdown. Click the Random button to select a server at random.

Once you have updated your VPN location, server and/or protocol, click Save to apply the changes.

INVIZBOX		
Status	VPN Location	
InvizBox Go		
VPN Location	Choose your VPN configuration:	
Choose Network		
Privacy Mode	Choose Country:	
Hotspot	UK Ý	
Account Details	Choose Protocol:	
🕞 Logout	OpenVPN over UDP port 443	
🖋 Expert Mode		
	Save	
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# 4.5 Privacy Mode Page

On this page, you will be able to switch between three Privacy Modes:

- VPN: this is the standard mode and therefore the one that you set up in the Installation Wizard. This mode will allow you to use your VPN account and select your VPN Location.
- **Tor**: this is a mode where the InvizBox Go will connect to the internet through the Tor network. If you want to configure it further, you will have to go into Expert Mode
- Wi-Fi Extender: this mode will act as a simple Wi-Fi extender without adding any security or privacy element to the connection

INVIZBOX			
Status	Privacy Mode		
InvizBox Go			
VPN Location	Select your privacy mode:		
Choose Network			
Privacy Mode	Choose Privacy		
Hotspot	VPN Tor Wifi Extender		
Account Details			
🕩 Logout			
✓ Expert Mode	© 2020 InvizBox. All rights reserved. / LuCi + OpenWRT		

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#### 4.6 Hotspot Page

On this page, you can modify the name of the Wi-Fi hotspot that your InvizBox Go creates (default value being InvizBoxGo which you've experienced throughout the initial setup process). You can also deal with some settings for the Wi-Fi hotspot.

You can also modify the password used to connect to that Wi-Fi hotspot (default value was provided to you on a card with your InvizBox Go device).

Once you have entered your a new value for one or both of those fields, click Save to update your credentials (those modified values will be forgotten following a reset and would have to be entered manually again - do not lose your original card).

**Important Note**: every time a new password is set on this page, the administrator password will also be set to that value (That administrator password can subsequently be changed to a different value in the Administration Page).

Checking 'Hidden SSID' will hide the Wi-Fi hotspot. Devices will then only be able to connect by entering the hotspot name and password on their device as it will not show up in Wi-Fi scans.

Checking 'Wireless Isolation' will isolate devices connected to the hotspot so that they are not able to see each other.

INVIZBOX				
Status	Hotspot			
InvizBox Go				
VPN Location	Name the InvizBox Go Wifi Hotspot			
Choose Network				
Privacy Mode	Hotspot Name			
Hotspot	InvizBoxGo			
Account Details	Hotspot Password			
🕞 Logout	Password (18)			
	Minimum of 8 characters			
🖋 Expert Mode	Confirm Password			
	Password (19)			
	This password is also used in the Administration UI.			
	Hidden SSID			
	Wireless Isolation			
	0			
	Save			
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# 4.7 Account Details Page

On this page, you can enter modified VPN credentials (username and password).

Your initial username and password have been stored on your device. Their values are either the original credentials flashed on the InvizBox Go, or else the credentials entered as part of the wizard during setup.

If you get new credentials, you can enter them on this page. Once you have entered your modified VPN credentials, click Save to update them on your InvizBox Go.

If a VPN connection is successfully established with these credentials, then they will be flashed to your device. Otherwise they will be forgotten following a reset and would have to be entered manually again. You can also see our support page for more details on how to flash VPN credentials to your device.

INVIZBOX		
Status	Account Details	
InvizBox Go	Account Dotaile	
VPN Location	Enter your InvizBox VPN account details below	
Choose Network		
Privacy Mode	VPN Username :	
Hotspot	my_identifier	
Account Details	VPN Password :	
🕞 Logout	۲	
🗲 Expert Mode		
	Save	
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## 4.8 Logout Link

This is a link that when clicked will log you out of your current session in the administration interface.

#### 4.9 Expert Mode Link

This is a link that will enable the Expert Mode Menu and therefore give you access to those advanced configuration pages.

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# 5 Expert Mode

If you want to set some more advanced settings or get access to more advanced features (i.e. also risk getting your device in a non working state - no worries, it's always recoverable with a reset!). You can switch to the Expert Mode from the menu.

#### 5.1 Expert Mode Menu

The Expert Mode menu contains all the pages from the Basic Mode Menu as well as a new set of pages.

The menu will look something like this:



# 5.2 Tor Configuration Page

This page is found in the **InvizBox Go** section and can be used to configure Tor. There are four sections in that page:

#### 5.2.1 Tor Status

The Tor status section allows you to:

- Restart the tor service on the InvizBox Go
- Stop the tor service on the InvizBox Go
- Get a new identity

It also details the current Tor status on the InvizBox Go. Click the refresh icon beside any section to get up to date information.

#### 5.2.2 Bridge Configuration

The Bridge Configuration section allows you to setup a set of bridges to be used by the Tor service.

#### 5.2.3 Proxy Configuration

The Proxy Configuration section allows you to setup your proxy settings for the tor service.

#### 5.2.4 Country Options

The Country Options section allows you to select your exit nodes geographically when using the tor service.

#### 5.3 Tor Advanced Page

The Tor Advanced page gives you the ability to completely overwrite the torrc (Tor Configuration) file and set up your own settings for the tor service on the InvizBox Go.

This should only really be used by advanced Tor users.

# 5.4 DNS Page

The DNS page allows you to change which DNS provider you wish to use on the InvizBox Go. This is used for the InvizBox Go itself as well as all devices connected to the InvizBox Go while in WiFi Extender mode.

#### 5.5 Captive Portal Page

The Captive Portal page has information about whether your InvizBox Go has detected that it is behind a captive portal or not.

If your device has detected that it is behind a captive portal, this page will display a button that can be used to activate the captive portal. If it has not detected that it is behind a captive portal but a VPN or Tor connection has not been established, there will be an option to allow non-secure traffic through your InvizBox Go in case it is in fact behind a captive portal. There are many reasons why your VPN or Tor has not established a connection, so this option should only be used when you know that your InvizBox Go is behind a captive portal.

# 5.6 System Page

The System page will show you some standard system properties such as time, timezone, ntp settings, language or UI design.

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We recommend that you do not modify any of these settings as some of them can be critical to the device or the UI working correctly.

## 5.7 Administration Page

The Administration Page allows you to change the administator password and manage the SSH service.

To change the administrator password (also root password on the device), you will need to enter the new password twice and save. From then on, the administrator password on the device will be set to that value (UI and root when using SSH). It is important to note that doing this does not change the Wi-Fi password used for the InvizBox Go network (The opposite being true - see Hotspot Page).

To enable/disable SSH access to your InvizBox Go, you can administer the dropbear settings here.

To simply enable SSH access (port 22 with password authentication), just click the **Add** button in the "Dropbear Instance" section of the page and Save.

To disable SSH, remove all sections listed in the "Dropbear Instance" section of the page.

Using the SSH-Keys section, you can also set up your device to use public key authentication when using SSH.

# 5.8 Backup / Flash Firmware Page

This page will allow you to Backup your settings (and reload them) as well as flash a new firmware using a binary file.

# 5.9 System Log Page

This page will allow you to access the latest entries in the system log

# 5.10 Kernel Log Page

This page will allow you to access the latest entries in the kernel log

# 5.11 Update Log Page

This page will allow you to access the latest entries in the update log as well as start an update process (if you do so, it takes a couple of minutes before the log entries become visible - you can refresh the page every once in a while to see if any progress was made). There is no need to click that link multiple times.

# 5.12 Reboot Page

The Reboot page provides you with a button to perform a reboot of the OS.

#### 5.13 Adblock Page

The Adblock page allows you to turn adblock on/off. When on, your InvizBox Go will stop ads from reaching your device by blacklisting (blocking) requests that are made to well known ads repositories.

#### 5.14 Wireless Page

The Wireless page provides a more in-depth view of the Wi-Fi interfaces. Most of these fields will not work if modified.

# 5.15 Diagnostics Page

The Diagnostic page allows you to use diagnostic tools such as Ping, Traceroute, Nslookup.

#### 5.16 Realtime Graphs Section

This section consists of four pages which will all allow you to see the progression of some particular values of your system over time. Here are the pages:

- Load This will graph the load on your device
- Traffic This will graph the network activity per interface
- Wireless This will graph the signal, noise and bitrate of your wireless
- Connections This will graph the currently active network connections

#### 5.17 Basic Mode Link

This is a link that will enable the Basic Mode Menu and therefore simplify your UI down to the pages that really matter if you're a normal user of the InvizBox Go.

# 6 Networking Management

#### 6.1 Supported Networks and Encryptions

The InvizBoz Go will only be able to scan and connect to 2.4GHz Wi-Fi networks (5GHz networks are not supported).

The InvizBox Go will always choose psk-mixed and ccmp when setting up its hotspot.

## 6.2 Storing and Reconnecting to Networks

Each time the user will select a network in the Choose Network Page, the SSID and passsword (if any) will be stored on the InvizBox Go.

When not connected, the InvizBox Go will regularly scan for available networks (except if there was recent activity in the UI in order not to break connectivity). If during its scanning, it encounters a known SSID, it will attempt to reconnect to it using the stored credentials.

# 7 Troubleshooting/Support

See http://invizbox.com/support for answers to FAQs and to log a support ticket if you have an issue which is not covered by the technotes there.