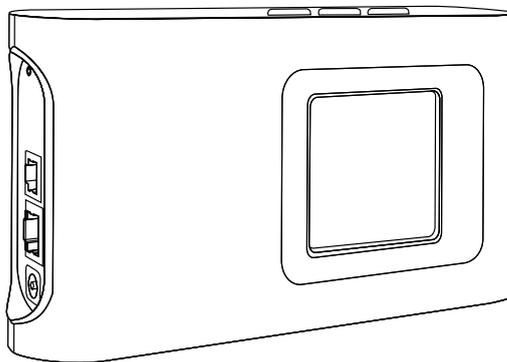


# XSB<sup>®</sup>Box R4v

user manual  
version 1.1





# Welcome

Discover the advantages of HSDPA and use the XSBoxR4v for high speed internet! Use mobile DSL speed to surf the internet, to read and write emails, for fast downloads or to access your company network anywhere where HSDPA is available. Connect one or more PCs or laptops to your XSBoxR4v - wireless using WLAN or via a network cable. You can connect an analogue telephone, thus making mobile telephony possible. The integrated firewall and the adjustable WLAN radio encryption make surfing safe.

## Speed

Use HSDPA for mobile DSL speed to surf the internet on your PC or laptop.

## Flexibility

XSBoxR4v enables you to set up internet access quickly and easily from the most diverse places - at home, in the office or on the road; a power source is all you need. Mobile project teams can thus set up their usual network environment anywhere.

## Networking

The XSBoxR4v is configured so that you can use internet access with several devices at the same time, such as laptop, PDA or PC. Furthermore it is possible to exchange data amongst the devices connected. Thus it is simple and safe to synchronise emails from your laptop to your PC, using either LAN or WLAN - the XSBoxR4v is already prepared for this. All computers which are connected to the XSBoxR4v form a network and each computer can access the data and printers which are authorised in the network.

## Security

The XSBoxR4v offers comprehensive security functions. On the one hand they are protected against attacks from the internet by the integrated firewall. On the other hand the XSBoxR4v offers comprehensive protection for the WLAN network. WEP, WPA1, WPA2 und WPA1+2 encryptions are available. Thus you have more flexibility to decide which protection is best for you (the particular support depends on your computer's WLAN interface).

## Simple installation

There are only a few steps involved in installing your XSBoxR4v, then you can start immediately: Insert your SIM card, connect to the power supply and enter your SIM card PIN number. Check the HSDPA/GPRS reception quality: six bars show excellent reception. Should you need to improve reception quality, then move the position of your XSBoxR4v. Enjoy surfing the internet!

## Flexible configuration

The administration interface is the central contact point for the configuration of your XSBoxR4v. All you need to access the administration interface is a browser on your computer, no additional software needs to be installed. You can log on comfortably using the protected administration interface and change for example the security settings for WLAN or your IP address. Each configuration step is supported by a context sensitive help function. It is possible to reset the XSBoxR4v at anytime back to factory settings.

## All-in-one device

XSBoxR4v is a real multi-talent. It unites a WLAN access point, a router/a bridge, a firewall, a DHCP server, a telephone connector and a HSDPA/GPRS modem in one device. Power consumption is approximately 5W.

## Scope of delivery

- XSBoxR4v
- Power supply with connecting cable for electricity network (220 - 230 V/50 Hz)
- LAN cable (Length 3m)
- CD Rom

# Safety instructions

Please observe the following instructions when handling and using XSBoxR4v to prevent damage to yourself and to the device.

## Switching on

Do not switch on your XSBoxR4v in places where the use of mobile telephones and mobile radio devices is forbidden, where malfunctions or danger may occur.

## Power supply

Use only the power supply supplied with your XSBoxR4v. Interference errors in mobile devices can occur, which could affect the connection performance and quality.

## Hospitals/ medical devices

Please note all instructions and bans. Switch off your XSBoxR4v device when you are close to medical devices. The use of radio devices, including XSBoxR4v, could possibly interfere with the functionality of medical devices which are not sufficiently shielded. Contact a doctor or the medical device manufacturer to establish whether the device is sufficiently shielded against external high frequency energy. Switch off your device in health centres and hospitals. Please note further the relevant regulations in the institution. Hospitals or also other health institutions could possibly use devices which react sensitively to external high frequency energy. Hearing aids could possibly be affected by mobile devices. In the case of interference it is recommended to increase the distance between the hearing aid and XSBoxR4v. To avoid interference please follow the recommendations of each manufacturer of heart pacemakers. These recommendations are in agreement with the independent research and the recommendations of Wireless Technology Research.

## Persons with a pacemaker should:

- always keep a distance of at least 20cm between XSBoxR4v and the pacemaker when XSBoxR4v is switched on and
- switch off your XSBoxR4v immediately if you suppose that interference could happen.

## Aeroplanes

The device may not be used during flights in an aeroplane. Switch off the device before entering an aeroplane. Usage of mobile telecommunications devices on board can be dangerous for the operation of the aeroplane.

## Petrol stations

Do not use the XSBoxR4v at petrol stations. Do not use the device near to fuel or chemicals.

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## XSBoxR4v

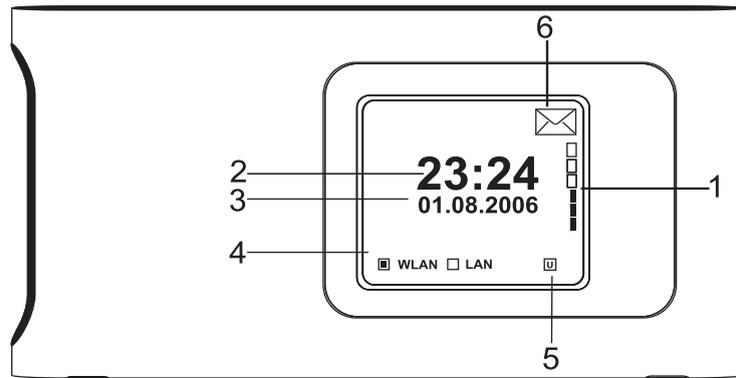
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# Operating elements and connectors

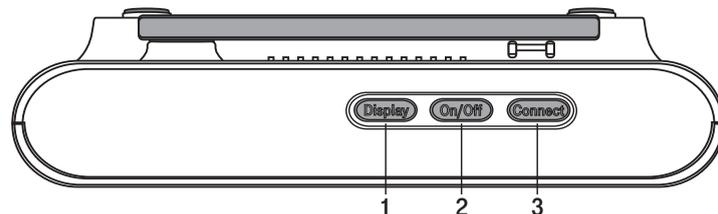
## LCD display

1. Bar indicators of network reception quality U or G  
The more bars shown, the better the reception. Boxes with black background show activity.
2. current time - shown in 24 hour format
3. current date in format: DD.MM.YYYY
4. Status indicator for local network connection to computer: WLAN or LAN
5. Status indicator for network availability and kind: G or U (G = GPRS/EDGE, U = UMTS/HSDPA)
6. Indication of SMS receipt



## Keys

1. This key serves to regulate the brightness of the display.
2. You can switch the device on and off here.
3. Use this key to manually establish or disconnect the online connection.



## Reset key

When the XSBoxR4v is standing up, the reset key can be found in a small hole above the telephone jack.

The following functions are available depending on how long the reset key is pressed for:

- XSBoxR4v reboot (quick press)
- Reset factory settings (see also *“Resetting factory settings” on page 30*).

## LAN connection

The LAN connection serves to connect the XSBoxR4v to a PC/laptop by means of a network cable. The **menu point 4 of the section LCD display** described above shows the connection type between your XSBoxR4v and a connected PC/laptop. In this case the box for LAN has a black background when both the XSBoxR4v and your computer are switched on.

## Power supply

Put the smaller end of the power supply in this connector (the SIM card must be inserted before set-up).

# Instructions for use

## General

- XSBoxR4v is a device which is designed for use only in heated, dry and dust-free buildings. The device may not be mounted or set up in a place which is exposed to direct sunlight or direct heat impact. The slits and vents serve to ventilate the device. These vents should not be covered. The device should not come into contact with fire or flames and may not be used in areas with a potentially explosive atmosphere.
- The device must not come into contact with liquids, as this could lead to electric shocks, short-circuits or destruction of the device.
- Do not open the housing of XSBoxR4v. Warranty claims become void on unauthorised opening of the housing or improper repairs. In addition this could lead to damage for the user and for the device.
- The device should not be installed during a thunder storm and should be disconnected from the electricity network.

## LAN cabling

XSBoxR4v cabling can be extended without a problem. Cables in the appropriate length can be bought at computer trade shops. However please note the following instructions.

- Use a so-called Cross-Link network cable 10BT with STP (Shielded Twisted Pair = shielded), should you wish to connect your computer directly to the XSBoxR4v without using a switch or hub.
- Use a network cable 10BT, 1:1-wired and with STP (Shielded Twisted Pair = shielded), should you wish to operate the XSBoxR4v on a switch or hub.
- Maximal cable length is 100 m.

## Wireless Local Area Network (WLAN)

Both WLAN standards IEEE 802.11b and IEEE 802.11g have been developed by the Institute of Electrical and Electronic Engineers (IEEE). The 802.11b technology can reach a transmission rate of up to 11 Mbit/s, 54 Mbit/s are possible with the 802.11g technology.

The XSBoxR4v supports both standards. WLAN adapters, which are based on one of these standards can establish connections to XSBoxR4v. Coverage within WLAN depends very much on the WLAN adapter used as well as the structural conditions. WLAN devices with differing standards can establish a connection simultaneously and in parallel to the XSBoxR4v. XSBoxR4v has an internal WLAN antenna, which is not visible on the housing.

### Administration interface

The XSBoxR4v administration interface can be reached with a browser. Enter this address in the address line of your browser: **http://192.168.0.1**. The browser must be JavaScript and CSS enabled (e.g. Microsoft Internet Explorer from version 5.5 or Mozilla Firefox).

**Note:** Please configure your browser so that Javascript is enabled.

### DHCP server

XSBoxR4v has its own DHCP server. This is activated in the factory settings. Every computer which is connected hereto will be allocated an IP address from the DHCP server. It is possible to allocate fixed IP addresses directly to the network set-up for computers, which are connected to the XSBoxR4v. The following IP addresses are reserved and may not be used, as the operating mode depends upon these:

- 192.168.0.1
- 192.168.0.10 up to 192.168.0.200

**Note:** Should the XSBoxR4v be used in a network, then no other DHCP server should be operated in this network.

### Initial setup

It is possible to operate the XSBoxR4v with a PC/laptop and/or an analogue telephone.

Setup the XSBoxR4v in an appropriate place, which fulfils the following criteria:

- The place must be dry and free of dirt with no exposure to direct sunlight.
- Should you wish to connect the device to your computer using a network cable, then please note the maximum cable length is 100m and choose a place close to your computer.
- Place the device in central place in the office or at home with good HSDPA/UMTS/EDGE/GPRS coverage, should you wish to connect one or more computers using wireless WLAN connections to the XSBoxR4v.
- Ensure there is enough distance to potential interference sources such as microwaves or electrical devices with a large metal housing.
- You can use the drill template supplied to wall mount the XSBoxR4v (*see also "Drilling measurements" on page 56*).

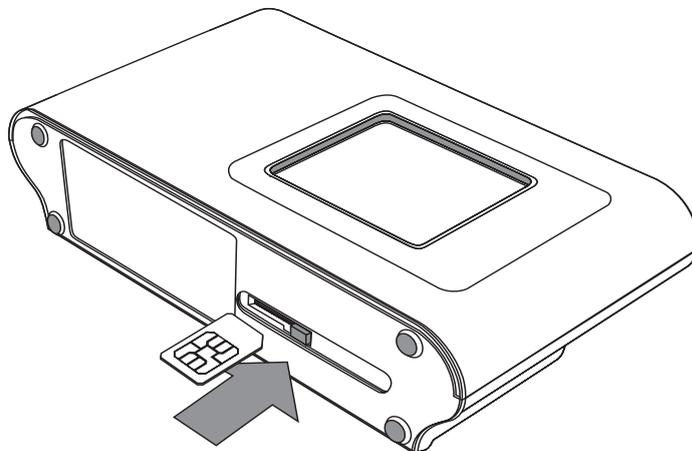
### Positioning XSBoxR4v

Position the XSBoxR4v as close to the window as possible.

Reception is best there.

### Inserting SIM card

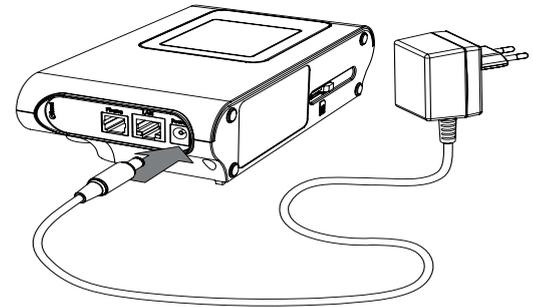
Push the SIM card completely into the slot on the device base until it locks.



## Connecting to power supply

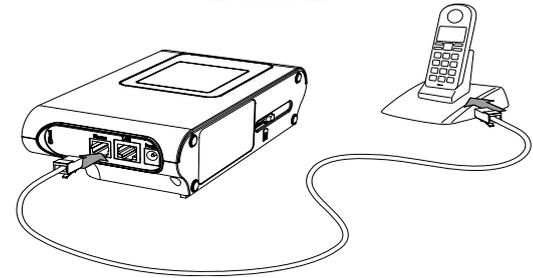
Always use only the original XSBoxR4v power supply. Other power supplies could damage or destroy the device. 4G Systems disclaims all liability if other power supplies are used.

First place the small plug in the upper round port on the XSBoxR4v. Then insert the large plug in to the power outlet. Initialisation could take 60 - 90 seconds.



## Initial setup only with telephone

Plug the telephone cable into the jack marked Phone on the XSBoxR4v. Status and error messages can be seen on the display of the XSBoxR4v.



## Activating SIM card

1. Pick up the telephone receiver.
2. **Please enter PIN** is shown on the display. And you can hear a peep tone in addition to the dial tone.
3. Press the **#** key, enter **your PIN** and confirm with the **#** key.
4. Should the PIN be correct, you will hear a confirmation tone and the **time, date and network reception bars** will appear on the display. Should the PIN be incorrect, you will hear a warning tone and the following information will appear on the display: **Incorrect PIN. X more attempts.**

**Note:** Should the SIM card PIN be entered wrongly three times, then the SIM card will be blocked for your security. The SIM card can be unblocked by entering the PUK (Personal Unblocking Key). You will have received both the PIN and the PUK with your mobile contract (see also "Unblock SIM card" on page 28).

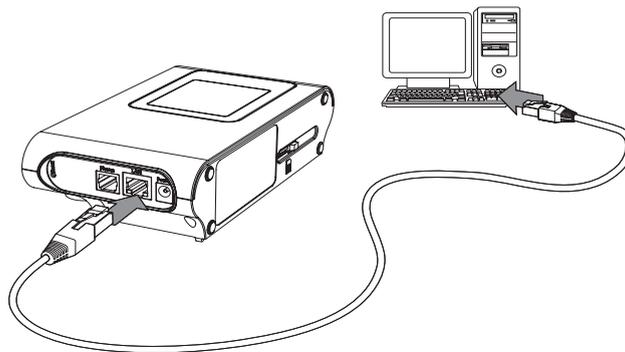
# Initial setup with PC and telephone

## Connecting PC/laptop to the XSBoxR4v

You have two possibilities:

- **LAN** (Network cable).  
Plug one end of the network cable into the XSBoxR4v (the network jack is above the power jack). Plug then the other end of the cable into your PC or laptop.
- **WLAN** (wireless).

**Note:** You do not need to switch on your PC first in order to plug in the network cable.



## Network setup

See the user manual for further details on setting-up a network on your computer or your operating system's help texts. (see also "Network setup" on page 21)

## Starting the setup assistant

- Log on to the XSBoxR4v's **administration interface**. Enter the following address in your browser's address line: **http://192.168.0.1** or use the **log-in link** on the CD supplied.
- You will be requested to change your password the first time you log in to the administration interface.

The user name is always admin and cannot be changed. Enter **your new password** in the fields marked **new password** and confirm **new password** and click **OK**.

## Setup assistant - Step 1

For the first initialisation, you need the PIN number for the SIM card which is inserted in the device. Your PIN is included in the personal documents received with your SIM card contract. Activate the SIM card. Enter the SIM card PIN number

in the fields marked **Enter your PIN code** and **Repeat SIM card PIN code**. Click on **Continue**.

**Note:** The SIM card automatically chooses the fastest available network connection. The PIN remains stored in the XSBoxR4v. Should you exchange the SIM card, then you must enter the new PIN.

## The setup assistant - Step 2

### ■ **Mobile interface activated**

Once you have activated the mobile interface: **automatic**, the device will in future automatically connect to the internet/intranet when the PC/laptop is booted.

### ■ **Disconnect on inactivity**

Should you not use the online connection during the time preset, then the connection will be disconnected to save cost.

## Setup assistant - Step 3

It is very important that the encryption for your network is activated, as it is otherwise not protected against misuse. Unexpected cost could arise for you as a result.

### ■ **WLAN network name (SSID)**

The SSID is the name with which the device identifies itself in the wireless network. You can then select this name on your computer to be connected to the device.

### ■ **SSID Broadcast**

The device usually sends its SSID to offer itself to client computers. It is possible to switch this off to increase security. In this case, the SSID known to you must then be entered manually on the client computer.

### ■ **Encryption**

It is imperative to encrypt WLAN data traffic, in order to avoid third parties connecting to your device via WLAN or tapping into your data traffic. The safest methods are in this order: WPA 1+2, WPA 1, WEP 128 Bit, WEP 64 Bit. You should set-up the safest method supported by your computer. Incidentally the current Windows and Mac OS versions support both WPA 1+2. For simple access the XSBoxR4v is delivered from the factory without encryption.

## XSBoxR4v

### ■ Key

You still need to choose a key once you have decided which encryption to use. When using WPA method, you can register either a password (e.g. mustermann) or a hexadecimal string as the key.

**Note:** You should activate the WPA1+2 encryption in order to guarantee the highest possible protection. Furthermore we warn you of the fact that an unencrypted connection can create high cost as anyone from outside can use your network.

## Setup assistant - Step 4

### Security level

The security level enables you to decide in favour of a certain pre-set security configuration. These configurations have a bearing on which type of data traffic the device allows, e.g. WWW or FTP services, Email etc. Should you need a detailed configuration of these security settings, then you can later extend the selected basic settings in the menu **security** (see also "Security settings" on page 33).

**Note:** Should the PIN query on your SIM card be deactivated, please highlight the field ignore PIN/SIM error and do not enter anything under "set-up assistant - step 1" on page 18.

Click then on the button **finish**.

**Note:** Once you have activated the encryption in the setup assistant - Step 3, then you must configure the encryption in your operating system's control panel and continue from here (see also "Step 5 - Configure encryption for your computer" on page 24).

## Access point setup (APN)

### Administration interface >> Mobile >> Access point

Enter the access point which you have received from your mobile operator in the field named HSDPA/UMTS/EDGE/GPRS access point (APN).

## SMS service centre setup

### Administration interface >> SMS Centre >> SMS Settings

Enter the telephone number of the service centre (SMS broadcast), which you have received from your mobile operator, in the field named SMS Service Centre Number.

## Voicemail setup

### Administration interface >> SMS Centre >> Voicemail

Enter your voicemail telephone number which you have received from your mobile operator in the field named Voicemail number.

**You have now finished configuring your XSBoxR4v.**

You can now close your browser to leave the administration interface or you can enter the desired web address in the address line of your browser to surf in the internet. The internet connection will automatically be disconnected should it not be used for a long time. You can see the HSDPA/UMTS/EDGE/GPRS connection status under

### Administration interface >> Status >> Mobile

**Note: Firmware Update:** We are constantly further developing the XSBoxR4v and would like you to profit from these optimisations and new features. We suggest you check whether a new firmware update is available to be downloaded, then to download and install it at regular intervals (*see also "Firmware Update" on page 31*).

# Network setup

You can connect your PC/laptop to the XSBBoxR4v either by using WLAN (wireless) or over a network cable.

In this section you will find the following instructions:

- Setting-up WLAN connection
- Setting-up a LAN connection

Please read the user documentation of the relevant manufacturer, should you use an operating system other than Microsoft Windows XP™ (Service Pack 2) or Microsoft Internet Explorer 5.5 or higher.

## WLAN connection setup

The PC/laptop you wish to connect to must support either the WLAN standard IEEE 802.11b or IEEE 802.11g in order to connect to the XSBBoxR4v over WLAN. Should your PC/laptop not support either of these standards, then you can extend your computer with an external WLAN adapter (e.g. based on USB) or with an internal WLAN plug-in card.

The following steps are necessary in order to use a WLAN connection between your PC/laptop and the XSBBoxR4v:

1. Configure WLAN connection
2. Establish WLAN connection
3. Deactivate proxy server
4. Configure encryption for the XSBBoxR4v
5. Configure encryption for your PC/laptop

**Note:** The following description for setting-up a WLAN connection is described here exemplarily for the WLAN-Adapter Intel® PRO/Wireless 2200BG Network Connection. Should you use a different WLAN adapter or a WLAN card, then please read in addition the user documentation from the relevant manufacturer.

## Step 1 - Configure WLAN connection

### START >> System control >> Network connections

1. Click with the right-hand mouse button on **wireless network connection** and select the entry properties in the context menu.
2. The dialogue **Wireless network connection properties** appears.
3. Ensure that the control box **Internet protocol (TCP/IP)** is activated in the register **General**.
4. Highlight the **internet protocol (TCP/IP)**, and click on the button **Properties**. The dialogue **Internet Protocol properties (TCP/IP)** will appear.
5. Activate the option field **get IP address automatically** in the **General** register (Standard setting)
6. and click on the button **OK**.
7. Click in the dialogue **Wireless network connection properties** on the button **Close**.
8. you will then be requested to reboot the computer again if necessary.

## Step 2 - Establish WLAN connection

### START >> System control >> Network connections

1. Click with the right-hand mouse button on **wireless network connection** and select the entry **Show available wireless networks** in the context menu.
2. The dialogue **Wireless network connection** appears.
3. Highlight the **wireless network XSBoxR4v** and click on the button **connect**.
4. It will take approximately 10 seconds until the connection between your PC/laptop and the XSBoxR4v is established.

### Step 3 - Deactivate proxy server

#### Internet Explorer >> Extras >> Internet options >> Connections

If you use a proxy server to access the internet, please deactivate it.

**Note:** The following description is described here exemplarily for the procedure in Microsoft Internet Explorer. Should you use a browser, then please read the relevant user documentation.

1. Click on the button **properties** in the area **LAN settings**.
2. The dialogue **Properties for local network (LAN)** appears.
3. Deactivate the following control boxes:
  - **Automatic setting search**
  - **Use proxy server for LAN.**
4. In order to save the configuration, click on the button **OK**.
5. Close the dialogue **Internet options** by clicking on the button **OK**.

### Step 4 - Configure encryption for the XSBoxR4v

#### Administration interface >> Security >> Encryption

(see also "Administration interface log-in" on page 27)

**Note:** The WPA encryption should be favoured ahead of the WEP encryption. Thus the following description is exemplarily written for the configuration of WPA encryption.

1. Select the entry **WPA1+2** from the selection list **encryption mechanism**.
2. Activate the option field **Pass phrase** in the area **WPA settings**.
3. Enter a user-defined string in the field **Key** or select one of the four generated keys. The string serves to dynamically create a WPA code (eg. mustermann).

**Caution!** Please make note of the string entered. You will need this in the next step for configuring your PC/laptop.

4. Click on the button **OK**. The encryption is now activated for the XSBoxR4v, however not for your computer. Therefore the WLAN connection is disrupted between the devices. Your browser could show the message **The document contains no data**.

## Step 5 - Configure encryption for your computer

### START >> System control >> Network connections

1. With the right-hand mouse button click on **wireless network connections** and select the entry **Properties** in the context menu.
2. The dialogue **Wireless network connection properties** appears.
3. Click on the register **wireless networks**.
4. Highlight the entry **XSBBoxR4v** in the area **preferred networks** and click on the button **Properties**.
5. The dialogue **XSBBoxR4v properties** appears.
6. Carry out the following settings in this dialogue:
  - Select the entry **WPA-PSK** in the selection list **Network authentication**.
  - Select the entry **AES** in the selection list **data encryption**.
  - Enter the string in both the **network key** and **confirm network key** fields, as chosen in the *previous step for encryption of the XSBBoxR4v*.
7. Click on the button **OK**. Click on the button **close** in the **wireless network connection properties** dialogue. Encryption for the XSBBoxR4v and your computer is now activated. The WLAN connection between the devices will now be automatically established.

**Note:** A double click on the encrypted wireless network XSBBoxR4v could request you to enter your individual key. Further connection settings then take place automatically.

# LAN connection setup

The following steps are necessary to use a LAN connection between your PC/laptop and the XSBBoxR4v:

1. Connect network cable
2. Configure LAN connection
3. Deactivate proxy server

## Step 1 - Connect network cable

- Plug one of the network cable ends into the appropriate connector on your PC.
- Plug the other end in to the jack marked LAN on the XSBBoxR4v.

## Step 2 - Configure LAN connection

**START >> System control >> Network connections**

1. With the right-hand mouse button click on **LAN connection** and select the entry **Properties** in the context menu.
2. The dialogue **LAN connection properties** appears.
3. Ensure the control box **Internet protocol (TCP/IP) is activated** on the register **General**.
4. Highlight **Internet protocol (TCP/IP)** and click on the button **Properties**.
5. The dialogue **Internet protocol properties (TCP/IP)** appears.
6. Activate the option field **get IP address automatically** in the **General** register (Standard setting) and click on the button **OK**.
7. Click in the dialogue **LAN connection properties** and click on the button **Close**.
8. You will then be requested to reboot the computer again if necessary.

## Step 3 - Deactivate proxy server

### Internet Explorer >> Extras >> Internet options >> Connections

Should you use a **proxy server** for internet access, please **deactivate** this.

**Note:** The following description is described here exemplarily for the procedure in Microsoft Internet Explorer™. Should you use a different browser, then please read the relevant user documentation.

1. Click on the button **properties** in the area **LAN settings**.
2. The dialogue **Properties for local network (LAN)** appears.
3. **Deactivate** the control box: **Use Proxy server for LAN**
4. **Activate** the control box: **Automatic settings search**
5. In order to **save** the configuration, click on the button **OK**.
6. Close the dialogue **Internet options** by clicking on the button **OK**.

# Administration

The XSBBoxR4v is configured and managed using the administration interface. No installation is necessary on your PC/laptop in order to be able to work with the administration interface. All you need is a browser.

## Administration interface log-in

You log-in to the XSBBoxR4v's administration interface as follows:

1. Start your browser.
2. Enter **http://192.168.0.1** into your browser's address line and confirm by pressing **ENTER**.

**Note:** Should you have allocated another IP address for the XSBBoxR4v, please enter this address here.

3. You will be requested to change the password the first time you log in to the administration interface. The **user name** is **admin** and can not be changed. Enter your **new password** in the field marked **New password** and **confirm new password** and click **OK**.
4. From now on you will log in with the user name **admin** and your **new password**.

**Note:** The password may have a maximum of 50 characters. Please be aware of case sensitivity in password. For example "**password**" and "**Password**" are different passwords for the XSBBoxR4v.

## Administration interface log-off

### Administration interface >>

Simply close your browser to leave the administration interface.

## Disconnecting from the internet

### Administration interface >>

You can disconnect from the internet at anytime simply by pressing the button **disconnect**, which can be found in the bottom of the status bar.

## Change password

### Administration interface >> password

You should change the password regularly in order to avoid unauthorised access to your device.

1. Enter your **current password** in the field marked **old password**.
2. Enter your **new password** in the field marked **new password, confirm new password** and click **OK**.

**Note:** Please select your password carefully. The password should contain letters, numbers and special characters. It may be up to 50 characters long. Should you forget your password once it has been changed, then please reset the XSBoxR4v back to factory settings.

## Change the SIM card PIN

### Administration interface>> Mobile >> change PIN

1. Enter the **current PIN** in the field marked **PIN Code**.
2. Enter the **new PIN** in the fields marked **New PIN Code** and **Confirm new PIN Code** and click **OK**.

**Note:** You must re-enter your PIN after the following actions:

- exchanging SIM card inserted
- installing new firmware
- Changing inserted SIM card PIN
- resetting XSBoxR4v back to factory settings

## Unblock SIM card

### Administration interface >> Mobile >> entering PUK

1. Enter your **SIM card PUK** in the fields marked **PUK Code** and **Confirm PUK Code**.
2. Enter the **new PIN** in the fields marked **New PIN Code** and **Confirm new PIN Code** and click **OK**

**Note:** If you have entered your SIM card PIN incorrectly three times, then the SIM card will be blocked. You can remove the block by entering the PUK (Personal Unblocking Key)

## XSTBoxR4v

### Automatic disconnection

#### Administration interface >> Mobile >> connection

The XSTBoxR4v is configured from the factory in such a way that the online connection must be established manually. You have however the possibility for the online connection to be established automatically. The connection will then be automatically disconnected after 8 minutes inactivity. (the automatic disconnection timing can be automatically adjusted to suit your needs). The session is considered inactive when e.g. no access to web sites takes place or no data traffic occurs. The connection is then automatically re-established as soon as activity occurs:

- Enter the time span after which inactivity the connection should be automatically disconnected in the field marked **disconnect after not being used** (maximum 999 minutes, 0 minutes = continuous **connection**) and click **OK**.

**Note:** Should you use a programme on your PC/laptop which automatically establishes a connection to the internet in the background, then this is data traffic and the connection will not be disconnected. Additional cost can occur through this.

It is recommended to switch off the internet connection if the internet is not being used. This makes it impossible also for programmes to connect to the internet in the background. The XSTBoxR4v is configured from the factory in such a way that the internet connection manually requests the online connection on appropriate activity on your computer, (e.g.: should you call up a website in your browser).

### Access point Configuration (APN)

#### Administration interface >> Mobile >> Access point

You have access to the internet through the **access point (APN = Access Point Name)** of the XSTBoxR4v. You can freely configure the **access point**:

- Enter the **identification** of the **new access point** in the field marked **HSDPA/UMTS/EDGE/GPRS access point (APN)** (you received this information in the personal data from your mobile operator) and click **OK**.

### Time and date setup

#### Administration interface >> Tools >> Time

The XSTBoxR4v stores the **current time** and the **current date**. You can manually enter the time and date or synchronise using the so-called **Network Time Protocol (NTP)**.

**Manually** setting time and date:

1. Enter the **appropriate data** in the fields marked **Time** and **Date**.
2. Click on the button **Manual time/date**.

Obtaining time and date **automatically** using **NTP**:

1. Enter the **desired NTP server** in the field marked **Primary NTP Server** and **optionally** in the field marked **Secondary NTP Server**.
2. Click on the button **change configuration**.
3. Click on the button **Time query**.

**Note:** A connection to the internet will be established.

## Rebooting XSBoxR4v

**Administration interface >> Tools >> reboot**

- Click on the button **reboot** and after the security enquiry click **OK**.

**Note:** Rebooting the XSBoxR4v takes approximately 60 seconds. Should you recall the administration interface then you must re-enter your user name and password.

## Resetting factory settings

You can reset the XSBoxR4v back to its factory settings (so-called reset). In doing so all user defined settings are deleted including the password for the administration interface. The reset function can be called up either using the administration interface or by holding down the reset button directly on the device for at least 5 seconds.

Reset (Software)

**Administration interface >> Tools >> Reset**

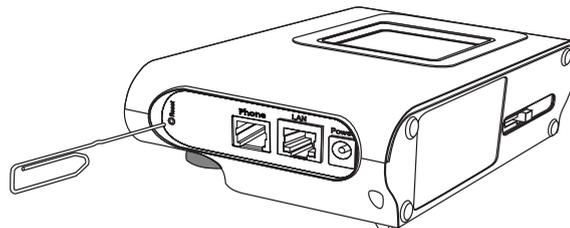
1. Click on the button **start reset**.
2. Confirm the following security enquiry by clicking the button **OK**.
3. The **settings made by you** for the XSBoxR4v will be **deleted**. The device will then be automatically rebooted.

## XSBoxR4v

### Reset (Hardware)

To reset the device you need a sharp implement, e.g. a paper clip. Insert the sharp implement carefully into the small hole found on the left hand side of the telephone jack when the device is horizontal. Press the rest button for at least 5 seconds with the sharp implement.

**Note:** The reset takes approximately 60-90 seconds until the device reboots.



### Perform a self-test

#### Administration interface >> Tools >> Diagnosis

The XSBoxR4v can implement a **self-test** if necessary. This test checks primarily the establishment of the internet connection. Select the **diagnosis method**, the destination (computer name, IP Address or Internet address) and click the button **Perform Test**.

### Firmware Update

#### Administration interface >> Tools >> Firmware

Download the update file from <http://www.4g-systems.com> and store this on your PC/laptop.

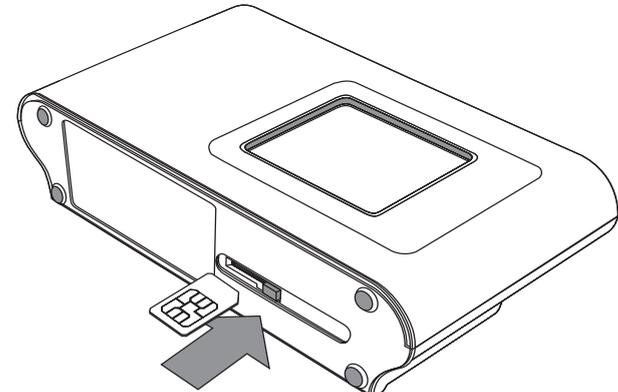
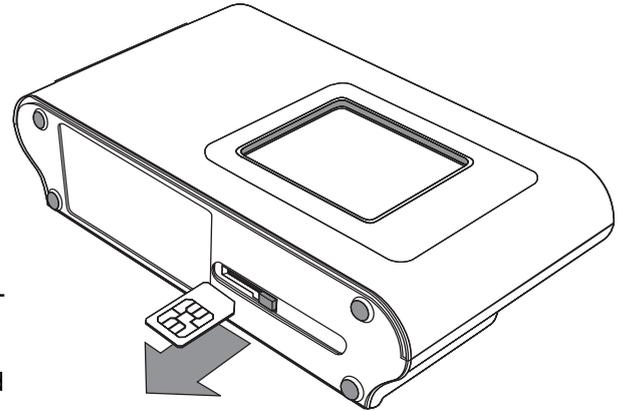
1. Select the **update file** which you have downloaded by using the button **search**. You can also enter the path to the file location manually in the field.
2. Click on **Start update** and wait until the firmware update installation has finished. The XSBoxR4v will be automatically rebooted.

**Caution!** The installation of the firmware update is a critical procedure. Ensure the update file is completely downloaded and is not damaged. In addition it is important that the XSBoxR4v is not switched off during the updates.

**Note:** The firmware update installation resets the XSBoxR4v back to factory settings. All user defined settings (e.g. new password) are lost.

## Exchange SIM card

1. Unplug the power supply from the wall socket and from the device.
2. The SIM card slot is on the base of the device. Move the SIM card sliding catch carefully to the right until the SIM card is released.
3. Remove the SIM card.
4. Insert the new SIM card. To do this move the SIM card slot catch carefully to the right and insert the SIM card in the slot. The SIM card contacts must face upwards, the SIM card must lock into place. Once the SIM card is completely inserted, the sliding slot catch is back in the same position as before.
5. Plug the XSB0xR4v power supply into the wall socket and plug the small end into the XSB0xR4v's round Power input.
6. Open the administration interface:  
**Administration interface >> Mobile >> enter PIN**
7. Enter the **PIN for the newly inserted SIM card** in the fields marked **PIN** and **Confirm PIN** and click **OK**.



# Security settings

## Basic protection through firewall

The XSBoxR4v is equipped with a firewall and is configured from the factory so that a basic protection for your data is given even whilst connecting your PC/laptop. It prevents internet access to the XSBoxR4v and thus to your PC/laptop. You can deactivate the XSBoxR4v's firewall if necessary. (**Administration interface >> Security >> Firewall**). The port forwarding is determined through firewall rules internally in the system.

## Firewall rules

### Administration interface >> Security >> Firewall

The XSBoxR4v's firewall is rule-based. The rules determine the incoming and outgoing data flow. Basically the firewall is thus configured that unauthorised incoming data connections from the internet are blocked and outgoing data connections to the internet are allowed. This configuration enables free navigation on web sites.

**Caution!** These basic security settings do not guarantee connection protection between the XSBoxR4v and your PC/laptop. This is especially important if you use a WLAN connection.

## Network Address Translation (NAT)

The XSBoxR4v supports NAT. NAT describes the decoupling of the public IP address and the private IP address range. All PCs/laptops in your network can together use one public IP address through NAT. This IP address is allocated to the XSBoxR4v over the network. It is the only IP address which is visible for third parties outside of your network. (e.g. in internet). The local IP addresses, which the XSBoxR4v's DHCP server allocates to the computers in your network remain private and cannot be reached from the internet. Thus they are protected from external attacks.

## Denial-of-Service attack (DoS)

DoS attacks flood your network with more enquiries than it can deal with. Even though this kind of attack cannot damage your PCs/laptops, such DoS attacks still lead to network operation slowdown or stop. The XSBoxR4v automatically blocks the attacks. You need not set-up any firewall rules for incoming data traffic.

## Limiting out-going services

Firewall factory settings are configured so that all out-going services are allowed. You can however configure it in such a way that only certain out-going services are activated. Service which are not specified can then not be used by your network users.

This is how to limit out-going services:

1. Activate next to Services the option field **Allow the following outgoing services**.
2. Click on the button **Add service**.
3. Describe the service you wish to activate in the fields marked **Name, Type, Start Port** and **End Port**.
4. Click on the button **OK**.
5. Add further services in this way to the list if desired.
6. Click on the button **OK**.

## Additional protection with encryption

Your data is transmitted in plain text in computer networks if it is not encrypted.

This does not depend whether you use a LAN or a WLAN connection. Anyone who has access to your network can read and manipulate these data files. You can minimise this security risk by using encryption software. Your data files are then automatically transformed into an indecipherable form. The XSBoxR4v supports two encryption types for WLAN connections:

- WPA (WiFi Protected Access)
- WEP (Wired Equivalent Privacy)

**Note:** If your PC/laptop supports die WPA encryption (eg. WPA1, WPA2, WPA1+2), then this should be preferred over WEP encryption. If you are not sure which standards your PC/laptop supports then please contact your computer manufacturer.

In addition the XSBoxR4v offers you the following possibilities to increase the security of your WLAN access:

- Change the SSID
- Deactivate the SSID transmission
- Access control over MAC addresses

### WPA encryption

#### Administration interface >> Security >> Encryption

WPA encryption protects your network from unauthorised access. It works in a similar way to WEP encryption, however it has dynamic encryption keys which change.

To configure WPA encryption you can choose between WPA1, WPA2 and WPA1+2.

In general WPA1+2 are to be preferred:

1. Enter any string in the field marked **key** (e.g. mustermann).
2. Click on the button **OK**.  
The WLAN connection to the XSB0xR4v is disconnected. The list of available wireless network connections already shows, that it is a WPA encrypted wireless network.
3. Reconnect to your PC/laptop using WLAN and enter the **key generated** in your PC/laptop.

### WEP encryption

#### Administration interface >> Security >> Encryption

WEP encryption arranges for a key to be generated which is disclosed to all network participants and which is used for data encryption and decryption. The encryption code should be regularly changed in order for WEP efficiency to be retained. This is how to configure WEP encryption:

1. Select the entry **WEP 152** from the selection list **Encryption mechanism**.
2. This is the highest security level for WEP, which allows the most secure encryption. Enter any string in the field marked **Pass phrase** (e.g. mustermann). The pass phrase serves to generate a **WEP key** automatically. The string entered may be up to 31 characters long and may not include space characters.
3. Click on the button **Create key**. Your pass phrase will be converted hexadecimal. The length of the key generated depends on the security level:
  - WEP 64: 10 characters
  - WEP 128: 26 characters
  - WEP 152: 31 characters

4. Make **note** of the **key generated** and click on the button **OK**.  
The WLAN connection to the XSBoxR4v is disconnected. The list of available wireless network connections already shows, that it is a WEP encrypted wireless network.
5. Reconnect to your PC/laptop using WLAN and enter the **key generated** in your PC/laptop.

## Changing SSID

### Administration interface >> WLAN >> Connection

The SSID (Service Set Identifier) is the XSBoxR4v's WLAN network identification. From the factory the SSID is **XSBoxR4v**.

You should change the SSID in order to avoid mix up between boxes which use the same SSID and are placed nearby each other. Changing the SSID means you avoid accidentally connecting to an XSBoxR4v close-by.

How to change the SSID:

1. Enter the **desired identification** in the field marked **SSID**. The SSID may be up to 31 characters long; it can contain letters and numbers. The SSID is case sensitive.
2. Make a **note of the SSID** and click on the button **OK**.  
The WLAN connection to the XSBoxR4v is disconnected. The new SSID is shown in the list of available wireless network connections.

## Deactivating SSID transmission

### Administration interface >> WLAN >> Connection

By default the XSBoxR4v transmits the SSID.

This means the WLAN network is easy to find on the computer in order to connect to it. You can however switch off the SSID transmission if you know the XSBoxR4v's SSID and you don't want it to be visible for other users.

**Caution!** Deactivate the SSID transmission only then when you have already been successful in establishing a connection between the XSBoxR4v and your computer. Deactivation should be the last step planned.

How to deactivate the SSID transmission:

1. 1. Activate the option field Off next to SSID Broadcast
2. 2. Click on the button OK.  
The WLAN connection to the XSBoxR4v could be disrupted. In this case enter the SSID known to you in the field marked SSID.

### Controlling Access with the help of address filters

#### Administration interface >> Security >> WLAN address filter

Each PC/laptop, which is connected to the XSBoxR4v over the WLAN interface or over LAN, has a clear MAC address (Media Access Control); these addresses are defined by the device manufacturer. You can control the access of devices to the WLAN network of the XSBoxR4v by adding the relevant MAC address to the filter lists. You need the MAC addresses of the computers connected in order to compile filter lists. These are usually found on a sticker on the built-in WLAN card. If in doubt contact your PC/laptop manufacturer. How to control access using filter lists:

1. If you wish to allow or refuse the computer access, then activate the option field marked **Allowed addresses** or **Blocked Addresses** next to **Active Filter lists**.
2. Click on **Add address**. Enter the **Computer MAC Address** for which you would like to allow or refuse access.
3. Click on the button **OK**.
4. The **MAC address** will be added to the appropriate **filter list**.
5. Add further **MAC addresses** to the **filter lists** in this way if desired.

## Settings for experts

This section and the configuration possibilities described herein are directed at network administrators. Changing fixed IP addresses. You can change the fixed IP address of the XSBoxR4v, which is used for access over LAN or WLAN. Factory setting for the IP address is **192.168.0.1**.

### Change fixed IP addresses

#### Administration interface >> IP address

1. Activate the option field **Static** next to **Address**.
2. Enter the **desired configuration** in the fields **IP Address**, **IP Subnetwork mask** and **IP Broadcast Address**.
3. Click on the button **OK**.

The connection to the XSBoxR4v's administration interface is disrupted as the IP address has changed. Should you wish to access the administration interface in future, then you must enter the new IP address in your browser's address line.

**Note:** Please be aware that the IP address area of the DHCP server is automatically changed when the static IP address is changed. This takes place to avoid IP address conflicts.

### Configure DHCP Server

The XSBoxR4v contains an integrated DHCP server. This server dynamically allocates an IP address to computers connected to the network. The IP address area of the DHCP server has the factory settings

**192.168.0.1** to **192.168.0.200**.

You can change the DHCP server IP address range or switch off the DHCP server. Furthermore you can configure the DHCP server so that certain computers which are connected to the XSBoxR4v are always allocated the same IP address. This is useful for example if you wish to address this computer using the IP address.

### Dynamic IP addresses

#### Administration interface >> DHCP Server >> Dynamic Addresses

1. Highlight the **desired entry** and click on **edit** or, should you wish to **create a dynamic address area** then **Add**.
2. Enter the **desired IP addresses** in the fields marked **IP range**.
3. Click on the button **OK**.  
The connection to the XSBoxR4v's administration interface is disrupted.
4. Please enter the **new IP address** in your browser's address line.

## XSBoxR4v

### Static IP addresses

#### Administration interface >> DHCP Server >> Static addresses

1. Click on the button **Add**.
2. Enter the **MAC address of the computer connected to the XSBoxR4v** in the field marked **MAC Address**, to which you would like to allocate a **static IP address**.
3. Enter the **last numbers of the IP address** which you would like to allocate to the computer in the field marked **give IP address**. The first part of the IP address which you allocate is pre-set by the XSBoxR4v's IP address, as IP addresses must derive from the **same address range**.
4. Click on the button **OK**.  
You can change the **given static IP address**. Highlight the appropriate entry in the list and click on the button **Edit**. In order to delete a given IP address, highlight the relevant entry in the list and click on the button **Delete**.

### Configure dynamic DNS

#### Administration interface >> Tools >> DynDNS

You can configure the service DynDNS with the XSBoxR4v. You can select a domain name and DynDNS assigns this name to the allocated dynamic HSDPA/UMTS/EDGE/GPRS IP address. It is thus possible that enquiries from the internet are forwarded to your dynamic HSDPA/UMTS/EDGE/GPRS IP address. If an internet connection is established using the device, then this IP address is automatically conveyed to DynDNS every time a HSDPA/UMTS/EDGE/GPRS connection is established, thus also if XSBoxR4v is rebooted. How to configure the dynamic DNS:

1. Enter your data in the fields marked **Domain Name**, **Login** and **Password**.
2. Click on the button **OK**.

**Note:** You need a user account at [www.dyndns.org](http://www.dyndns.org) in order to use the DynDNS service.

## Configure port forwarding

### Administration interface >> Security >> Port Forwarding

You can determine the service which should be forwarded to a computer in your local network from the internet.

**Note:** Port forwarding is only possible if the XSBoxR4v 's firewall is activated.

1. Click on the button **Add service**.
2. Enter **your data** in the fields.
3. Click on the button **OK**.

## Select WLAN channel

### Administration interface >> WLAN >> Channel selection

You can select a WLAN channel and thus determine which WLAN frequency is used by the XSBoxR4v for sending and receiving. Connection speed between the XSBoxR4v and PCs/laptops connected over WLAN can be improved if a channel with good transmission quality is selected.

- If you want the XSBoxR4v to automatically choose the channel with the best transmission quality, then click on **automatic channel selection** and then click on **OK**.  
The **automatic channel selection** checks the quality of all available channels one after another; this procedure takes approximately 12 seconds. Should the connection between PC/laptop and the XSBoxR4v be disrupted, simply reconnect.
- If you would like to **appoint the channel yourself**, choose the desired entry from the selection list **manual channel selection**. Click on the button **OK**.

## Adjust WLAN Signal strength

### Administration interface >> WLAN >> Signal strength

You can change the coverage of your WLAN network by adjusting the WLAN signal strength.

- Select the desired value from the selection list signal strength. 100 % means full WLAN signal strength, 25 % means minimum WLAN signal strength. The WLAN interface also transmits a very low output at 25%. If you do not wish to use the WLAN interface, deactivate the interface under:

**Administration interface >> WLAN >> Connection**

## **XSBBoxR4v**

# Diagnosis tools

The XSBBoxR4v contains various diagnosis tools with which the status of the device and the internet connection can be checked.

## Status of the XSBBoxR4v

### Mobile

**Administration interface >> Status >> Mobile**

Here you can find all the information about XSBBoxR4v's network status and online access.

### WLAN

**Administration interface >> Status >> WLAN Access point**

Here you will find information about XSBBoxR4v's WLAN access point.

### DHCP Server

**Administration interface >> Status >> DHCP Server**

Here you will find information about XSBBoxR4v's DHCP server and about the MAC and IP addresses of the PCs/laptops connected.

### Security.

**Administration interface >> Status >> Security**

Here you will find information about WEP and WPA encryption of the WLAN connections.

## Tools

**Administration interfaces >> Tools >> Firmware**

Here you can update the firmware which is installed on the XSBBoxR4v. In addition you can reboot the XSBBoxR4v using the web interface.

## Ping Diagnosis

### Administration interface >> Tools >> Diagnosis

You can determine whether you are able to set up a connection to the internet from your XSBoxR4v with help from the Ping Diagnosis.

1. Enter an internet address in the destination field (Computer name or IP Address) (e.g. [www.google.de](http://www.google.de)).
2. Click on the button Perform test.
3. You will get a message whether the Ping test was successful.

## Trouble shooting

If you have problems to access the XSBoxR4v's administration interface, try the following measures:

**Note:** The following description is described here for the procedure under Microsoft Windows XP™ (Service Pack 2). Should you use a different operating system, then please read the relevant user documentation.

What should you do if you have forgotten the XSBoxR4v's IP address?

1. Start your browser.
2. Enter **http://192.168.0.1** in the address line of the browser and confirm the entry with **ENTER**. This is the **pre-set factory setting IP address** for the XSBoxR4v. Should your browser show an error message after a short time, then the IP address is no longer valid as it has been changed in the administration interface.
3. If you have **forgotten** the **current IP address**, then **reset to factory settings** (see also "Resetting factory settings" on page 30).

What is to be done if you have forgotten your password?

If you have forgotten the password for the administration interface, then you have to **reset the XSBoxR4v to factory settings**(see also "Resetting factory settings" on page 30).

## Delete temporary internet files

### Internet Explorer >> Extras >> Internet options >> General

1. Click on the button **Delete files**. The dialogue **Delete files** appears.
2. Activate the selection box **Delete all offline content** and click on the button **OK**.
3. Close the dialogue **Internet options** by clicking on the button **OK**.

### Activate JavaScript in your browser

**Internet Explorer >> Tools >> Internet options >> Security**

1. Highlight the symbol **Internet** and click on the button **Custom level**.
2. Activate the option field **Activate** under **active Scripting** and click on the button **OK**.
3. Close the dialogue **Internet options** by clicking on the button **OK**.

### Configure your computer to fetch dynamic IP addresses.

**START >> Control panel >> Network connections**

1. Click with the right-hand mouse button on **LAN connection** and select the entry **properties** from the context menu.
2. Ensure that the control box **Internet protocol (TCP/IP)** is activated on the register **general**.
3. Highlight **Internet protocol (TCP/IP)** and click on the button **Properties**.
4. Activate the following option field on the register **General**:
  - **Obtain IP address automatically**
  - **Obtain DNS Server address automatically**
5. Click on the button **OK** to store the configuration. You could possibly be requested to reboot your computer.

### Identifying your computer's IP address.

**START >> Programs >> accessories >> command prompt**

1. Enter **ipconfig** in the window and confirm your entry with **ENTER**. The IP address issued must be between 192.168.0.10 and 192.168.0.200 or in the IP address range set by you (see also "Configure DHCP Server" on page 38).
2. Reboot your computer and the XSBoxR4v if this isn't the case.

Check whether the WLAN card is correctly installed on your computer.

**START >> System control >> System >> Hardware**

1. Click on the button **Device Manager**. The dialogue **Device Manager** appears.
2. Open the entry **Network adapter**.
3. Double click on your **WLAN or WiFi card entry**. Your WLAN or WiFi card is correctly installed if the message **device ready** appears in the area **Device status**.
4. Click on the button **OK**.

# Telephoning

You can immediately make phone calls once an analogue telephone has been connected to the XSBBoxR4v and the PIN has been entered. This section describes the use of telephone functions.

**Note:** XSBBoxR4v does not support fax machines

1. Pick up the telephone receiver.  
The device checks the GSM signal strength. The signal strength is shown by the bar indicator on the XSBBoxR4v's display. You will here a dial tone if the signal is good.
2. Enter the desired telephone number in the usual way.

**Note:** The telephone connected to XSBBoxR4v must support dual tone multi frequency (DTMF).

## Activate SIM card

1. Pick up the telephone receiver.
2. **Please enter PIN** appears on the display and you can hear an **broken dial tone**.
3. Press the **#**-key, **enter your PIN**, and confirm with the **#**-key.
4. Should the **PIN entered** be **correct**, you will hear a **confirmation tone** and the **time, date** and **network signal strength bars** will appear on the display.
5. Should the **PIN entered** be **incorrect**, you will hear a **warning tone** and the following hint will appear on the display:  
**wrong PIN. X attempts left**
6. Ring off.

**Note:** Should the SIM card PIN be entered wrongly three times, then the SIM card will be blocked for your security. The SIM card can be unblocked by entering the PUK (Personal Unblocking Key). You will have received both the PIN and the PUK with your mobile contract.

## Unblocking SIM card

1. Pick up telephone receiver.
2. **Please enter PUK** appears on the display and you will hear a **broken dial tone**.
3. Press **#**, **your PUK**, **\***, **your new PIN**, **#**.

4. Should the **PUK entered** be **correct**, you will hear a **confirmation tone** and the **time, date** and **network signal strength bars** will appear on the display.
5. Should the **PUK entered** be **incorrect**, you will hear a **warning tone** and the following hint will appear on the display:  
**wrong PUK. X attempts left**
6. Ring off.

**Note:** Should you enter the PUK incorrectly 10 times, then the PUK will be blocked.

## Changing SIM card PIN

1. Pick up the telephone receiver and wait for the **dial tone**.
2. Enter the key sequence **#999\***.
3. Enter the **old PIN**.
4. Press the **\***-key.
5. Enter the **new PIN** (you can freely select a four to eight digit number).
6. Press the **\***-key.
7. Enter the **new PIN** again to confirm.
8. Press the **#**-key, and wait for the **confirmation signal**
9. Ring off

## Emergency call

Emergency calls can also be made with a blocked SIM card or without a SIM card. The XSBoxR4v supports the **international emergency call number 112 (GSM standard)**.

## Caller identification

### In-coming calls

You can see the telephone number of the person calling you on your telephone's display thanks to call identification and a telephone which is equipped accordingly. (CLIP enabled and with a display). The precondition for this is that the caller has not suppressed his caller identification.

## XSBoxR4v

### Out-going calls

Your telephone number also appears on the display of the person you are calling. Should the person being called not answer the telephone, then he can simply call you back at the touch of a button, as your telephone number remains stored in the caller list. You can suppress your caller ID being displayed either in general or for certain calls.

Show caller ID	#31#
Suppress caller ID	*3131*
Suppress caller ID for next call	*31#, enter desired number

### Service: Call forward (CF)\*

\*not supported by all mobile network operators

All in-coming calls can be automatically forwarded to a connection of your choice. You have the following options:

- **CF immediate:** immediately
- **CF-20:** after 20 seconds
- **CF-busy:** should the line be busy
- **CF device switched off:** when your XSJackT2 is switched off

All numbers are permitted when entering the desired number to activate call forwarding except blocked numbers.

**Note:** Should CF immediate be activated on your connection, then you will hear a special dial tone. The versions CF-20, CF-busy and CF-device switched off can be activated simultaneously - each to a different number.

**CF-immediate** has priority over the other three versions and cannot be overwritten by one of the other three versions. In order to switch on another CF after activating CF-immediate, first deactivate CF-immediate and then switch on the new CF.

#### Activate call forward

CF-immediate	*21#, desired number, #
CF-20	*61#, desired number, #
CF-busy	*67#, desired number, #
CF-device switched off	*62#, desired number, #

#### Deactivate call forward

CF-immediate	#21#
CF-20	#61#
CF-busy	#67#
CF-device switched off	#62#
deactivate all CFs	#22#

## Service: Call waiting, call hold, three party conference \*

\*not supported by all mobile network operators

These functions enable you to remain reachable for others even during phone calls.

Activate call waiting	*43#
Deactivate call waiting	#43#
Reject call waiting	R0
Finish original connection	Put receiver down, wait for ringing, pick up receiver
Hold call, accept 2nd call	R2
Call hold	R2
Hold call, connect 2nd call	R, wait for dial tone, dial number
Finish active connection	R1
Three party conference (connect participants)	R3

**Note:** Your telephone needs to have an R key (hold key with hook-flash-function between 170 and 310 ms flash time) and it must be activated by your mobile operator in order to use these services. You basically have 30 seconds to react to a call waiting before the caller is dismissed. Once you have put the receiver down and should the caller still be in the line, then a ringing sound is heard to remind you of an active call waiting.

# SMS Centre

The XSBoxR4v contains an SMS administration interface which enables you:

- To have an overview of SMS received
- To use an editor form for sending SMS
- To set up the SMS Broadcast

**Note:** Should the SMS functionality of your XSBoxR4v be limited or lead to errors, then we recommend you to download and install the most recent firmware update (see also "Firmware Update" on page 31).

## Register "SMS mailbox"

**Administration interface >> SMS Centre >> SMS Mailbox**

A complete overview of the SMS received can be found here. You can use this to do the following with SMS already received:

- Answer; opens the register write SMS with recipients already listed.
- Forward; opens the register write SMS with the text which is to be forwarded.
- Delete; deletes the highlighted SMS.

## Register "write SMS "

**Administration interface >> SMS Centre >> write SMS**

You can compose SMS with this form based editor and enter the telephone number of the recipient in the upper form field. Press the button Send SMS to send the SMS.

**Note:** Only numbers between 0 -9 can be entered in the form field marked telephone number, special characters (e.g.: ! § & = # \* + @, etc.) lead to error messages. Sending SMS to more than one recipient is possible, however a separator comma or semicolon must be entered between each telephone number.

Example: 0171012345678; 0151123456789.

## SMS Centre set-up

### **Administration interface >> SMS Centre >> SMS configuration**

Enter the service centre telephone number (SMS broadcast) in the field marked SMS service centre number, which you have received from your mobile operator.

## Voicemail set-up

### **Administration interface>> SMS Centre >> Voicemail**

Enter your voicemail telephone number in the field marked Voicemail number, which you have received from your mobile operator.

# Appendix

## Specification/Technical data

### Areas of use

- Complete solution for private sector, ideal for households without DSL
- In business sector for VPN secured access to emails and intranet - for complete teams, also on the road
- In public sector for a fast installation of a temporary infrastructure - for trade fairs, folk festivals and other such events
- In the infrastructure sector as a fall back solution: Over the Air, for DSL and ISDN

### Features

- Internet access using HSDPA/UMTS/EDGE/GPRS
- Telephone function using GSM mobile
- Only one SIM card for internet and telephone
- Security through integrated firewall
- WLAN encryption (WEP and WPA1/2)
- Multiple Access for up to 253 users
- Access using WLAN and Ethernet
- Administration with PIN/PUK administration
- SMS function: Send, receive, forward
- Automatic system diagnosis (Watchdog)
- Factory Default Fallback for hardware and software reset

- Router with unlimited VPN pass through
- High system security and high permanent operation security
- Extensive WLAN coverage
- Low power consumption
- Suitable for stationary and mobile use

### Frequency bands

- HSDPA/UMTS: 2100 MHz
- EDGE/GPRS/GSM: 900/1800 MHz
- WLAN: 802.11b/g 2.4/2,5 GHz

### Data rates

- HSDPA: up to 1.8 Mbit/s DL & 384 KB/s UL
- UMTS: up to 384 KB/s, DL & UL
- EDGE: up to 237 KB/s, DL & 118 KB/s UL
- GPRS: up to 85.6 KB/s, DL & 42.8 KB/s UL
- WLAN: up to 54 MB/s (802.11b/g), DL & UL

### Security

- WLAN:
- WEP 64/128/154
- WPA 1+2
- 802.11x/EAP
- MAC Access Control Lists
- Router:

## **XSTBoxR4v**

- Firewall
- Stateful-Packet-Inspection,
- NAT
- Port Forwarding
- System:
  - Automatic self diagnosis (Watchdog)
  - Factory Default Fallback for hardware and software reset

## **Telephone**

- Make and receive calls
- Calling Line ID Presentation (CLIP)

## **Router**

- DHCP Server
- DynDNS Client
- VPN Pass through unlimited
- Ethernet/USB/WLAN Bridge

## **Antenna**

- HSDPA/UMTS/EDGE/GPRS/GSM folding antenna: Frequency range 900 to 2100 MHz
- WLAN: internal: Frequency range 2400 to 2500 MHz

## **Administration**

- Configuration and status message over browser and LCD display
- Updatable

- Firmware update via software upload

### Compatibility

- Independent of operating system used (e.g. Microsoft, Apple, Linux)
- Can be operated with all popular browsers (e.g. Microsoft Internet Explorer, Mozilla Firefox, Apple Safari)

### Connections

- Ethernet 10/100 Base-T over RJ45 jack
- Analogue telephone over RJ-11 jack

### Network connection

- WLAN or over cable
- VPN compatible
- Always on, Network Re-connect

### Short Message Service (SMS)

- Send
- Receive
- Forward

### Operating environment

- Working temperature: 0 to 40 degrees centigrade
- Humidity: 0% to 70%

### System requirements

- Ethernet 10/100 BaseT Port or 802.11b/g WLAN
- Browser
- TCP/IP Protocol Stack

## **XSBoxR4v**

### **Housing**

- Measurements (W/D/H): 185 x 49 x 100 mm
- Weight: 350 g

### **Design**

- Attractive polycarbonate housing in various models
- Suitable for desktop set-up and for wall mounting um

### **Status indicators**

- UMTS/GSM signal strength on LCD display
- Device status on LCD display

### **Power consumption**

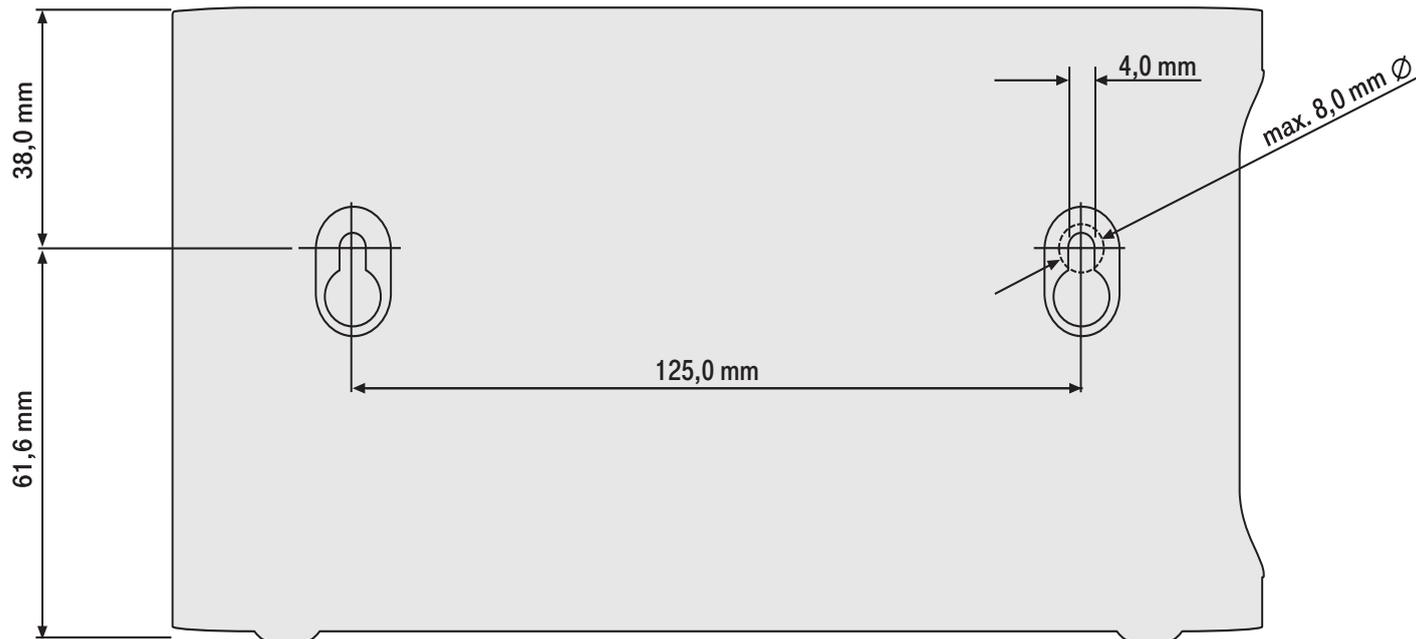
- Operating voltage 220-230 V/50 Hz

### **Standards supported**

- Europe CE
- GCF Type Approval
- WiFi© certified WLAN module

## Drilling measurements

(Proportions are not true to scale)



### Information about conformity

4G Systems GmbH declares herewith, that XSBoxR4v fulfils the basic requirements in accordance with TS 51.010-1 (GSM/GPRS), EN 301 511, EN 301 908-1 (R&TTE Regulatory Radio Testing), EN 301 489-1, EN 301 489-7, EN 301 489-24 (EMC Testing), EN 60950 (Safety Testing) and other relevant provisions of the Directive 1999/5/EG. A copy of the original CE declaration of conformity can be found under the following internet address: <http://www.4g-systems.com>



### Disposal information

The European directive which became effective on February 13th 2003 and which was implemented in the Federal Republic of Germany on August 18th 2005 for the prevention of electronic and electrical waste has led to a considerable change in the handling of electrical devices at the end of their useful lives. The fundamental reason for this directive is the prevention of electronic and electrical waste. This includes waste management strategies that focus on reuse, recycling, reconditioning or other forms of recycling of such waste to reduce waste materials.

The use of the symbol (  ) indicates that this product may not be treated as household waste. You are responsible for disposing of all your electrical and electronic waste correctly in the appropriate disposal service e.g. recycling ground. . By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the natural resources, environment and human health which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of electronic and electrical waste, please contact your local city office, your household waste disposal service, the shop where you purchased the product or the product manufacturer.



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