

IN-Route P52

/ IEEE 802.11 b/g/n mobile Wifi router (WPA & WPA2 encryption)

/ Internal powerbank to recharge your USB device (5200 mAh capacity)

/ NAS function for USB mass storage devices and wireless sharing

/ 3 in 1 DSL Router, 3G Router and Wifi repeater

/ The portable wireless solution designed for travelers



IN_{P52}
Route



Android



iPhone



LINUX



Mac OS



Windows

IN **PS2**
Route

Quick-Installation Guide

IN-Route P52 Wireless Router / NAS / Power Bank

The following topics will be shortly explained in this Quick-Installation Guide:

1.	SAFETY WARNINGS.....	2
2.	INTRODUCTION.....	3
3.	INSTALLATION.....	7
3.1	ROUTER MODES (Access Point, Bridge or Router).....	12
3.2	NAS (Network Attached Storage).....	16
3.3	POWERBANK (5200mAh).....	17
4.	SPECIFICATION.....	18
5.	WARRANTY & DISPOSAL.....	19



Your Manufacturer of Network and Security Equipment

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1 | SAFETY WARNINGS

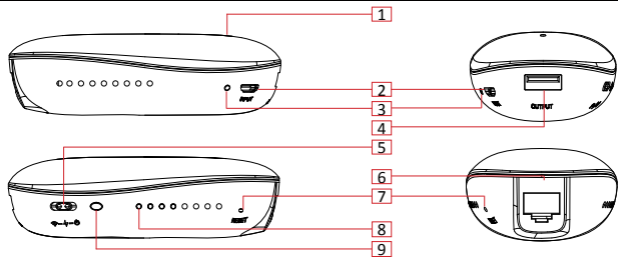
Please read the following safety instructions carefully and keep them in a safe place.




- » Make sure the device is not operated near any hot surfaces.
- » This device shall not be used by people (including children) with limited physical, sensory and mental capabilities. Only a trained person that knows how to use the device carefully can use the device.
- » Children should be supervised to make sure they don't play with the device.
- » If the device casing is damaged, it can only be replaced by the manufacturer or the customer service person or a similar qualified person to avoid any damage to you and the device.
- » Never do any repairs by yourself. By opening the device the warranty will automatically expire. If any repair is needed, please contact your INSTAR Service Center.
- » When cleaning the adaptor, please never place the device in water.
- » The router will get slightly hot during charging / discharging.
- » This device is for indoor use only!
- » Never install the device near explosive or flammable substances.
- » Don't use the device for any other purpose that it isn't made for.
- » INSTAR does not give any warranty if you use any third party firmware.

CE-Conformity



This device suits the basic requirements of the European regulations for electromagnetic compliance (2004/108/EC) and the low voltage regulations (2006/95/EC).



- | | | |
|----|--|--|
| 1a | Power Indicator Blue | The blue LED indicates that the device is powered on and ready for operation. |
| 1b | Network Indicator Turquoise | The green LED will start flashing when the router operates in AP or Bridge Mode - turning the constant blue light turquoise. |
| 1c | Storage Network Indicator Green | The blue LED will start flashing when the router detects a USB storage device and will switch on the NAS function. The constant green light will be overlain by the flashing blue LED. |
| 2 | Micro USB Charging Port | Use the cable that came with the device to recharge it (Charging time approx. 6h) |
| 3 | Charging Indicator | Lights up when the device is charging |
| 4 | USB-Port | Use this port to charge your mobile device or plug in a mass storage for use as a NAS. |
| 5 | Power Button | Choose to deactivate the device  , activate the charging service  or activate both the charging and the router  |
| 6 | Network Connector | RJ45 connector to connect the device with a router or modem via a LAN cable. |
| 7 | Reset | Keep the reset pressed for 10s to go back to the factory defaults. |
| 8 | Charge Level | see #6 |
| 9 | Battery Button | Press to display the charge level. |

What is the IN-Route P52?

The INSTAR IN-Route P52 is designed to be your travel companion. Whether you stay in a hotel that only offers a LAN cable to access the internet with your tablet, whether you are on the road and just ran out of batteries on your smartphone or you just want to share the content of your USB thumbdrive with your friends - the IN-Route P52 is the solution to your problem.

The INSTAR IN-Route line offers a plug-and-play mobile **wireless solution** to share information between mobile devices. We offer you a **NAS solution** for your USB mass storage devices, as well as a **power bank** to recharge your cell phone or your compact camera - easily doubling most of your devices stamina to get through a day's work. The IN-Route P52 - a small package with a great impact.

What are the key features?

- Turn your wired network into a smartphone / tablet friendly wireless environment.
- Connect your wireless devices to stream/share media.
- Attach your USB storage to make it's content available on your network
- Extent your existing Wifi in repeater mode.
- Use the 5200 mAh internal battery to charge external USB devices like smartphones and compact cameras.
- Access your mobile internet through an external 3G dongle

Interconnect your devices when you have no internet access:



Used as a wired AP or wireless bridge between your wireless devices and the internet:



Plug in your USB storage to share files with other network devices:



Recharge your mobile devices on the road:



Use as a mobile access point for your wireless devices
via an external 3G dongle:



What is in the box?



- 1 x IN-Route P52 Wireless Router / NAS / Power Bank
- 1 x USB Charging Cable
- 1 x THIS Installation Guide

How to charge the IN-Route P52?

When you press the battery button (see #6, page 3) and the battery indicator (see #7) between the power and the reset button shows a low charge, use the USB charging cable (above) in the charging port (see #2) to connect your IN-Route P52 with a USB power source e.g. the USB port of your laptop.

Charge Indicator:

- 1 LED = 0~25%
- 2 LED = 26~50%
- 3 LED = 51~75%
- 4 LED = 76~100%



1



Please make sure that the device is fully charged before continuing. You can press the battery indicator button to check the charge level in a 25% interval (4 indicator lights). Refer to the previous chapter for information on how to charge the routers batteries.

2



Unplug all cables and switch the device into router mode (see page 4 #5) and wait for the status LED to turn turquoise (blue + green LED). The Wifi network will now be initialized - wait for max. 5min to connect your mobile device to the IN-Route's network.

3



The router's Wifi network default name (SSID) is **IN-Route P52**. You can login with the default password **12345678**. Your device has to be set to automatically receive an IP address from your IN-Route (**DHCP**). This is the default setting on most devices. Please refer to the troubleshooting chapter if your device is configured with a static IP address.

4



Open your default browser and type in the IN-Route's IP into the address bar - the default address is **192.168.169.1**. This will load the router's web user interface. Please refer to the complete user manual on wiki.instar.com for a detailed description of the web user interface.

Modes of Operation & Troubleshooting

- 1** Use the Wired AP mode when you are at home or a public place - hotel, restaurant, etc. and have access to a LAN cable. Set up the needed router mode first! Then plug in the cable to the router. Depending on the network you want to connect your IN-Route to you will need to choose between the ADSL, DHCP or Static IP Mode.



To activate the Wired AP mode, go to Network/Router Mode and choose your connection type - ADSL for your DSL modem, DHCP for dynamically assigned IP - **this is most likely the mode that you need if you connect to local router (like in a hotel room or at home)** - or a Static IP address. Apply the setting - then connect your LAN cable. The green LED on top will start to flash after a reboot, turning the status light turquoise. You can now connect devices to your IN-Routes Wifi network and have access to existing local area network.

- 2** The Wireless Bridge (Repeater) mode allows the router open a new independent WLAN while connecting to an existing wireless network with the same channel and encryption for internet access.



To activate the Wireless Bridge mode, go to Network/Repeater. Use the scan button to search for your main Wifi network, type in your password and apply. The green LED on top will start to flash signalling the Wifi activity.

3

3G#

The 3G mode allows you to use a 3G USB modem connected to your IN-Route to access your mobile internet with the router as an access point. Set up the router mode first before plugging in the 3G dongle!

System

3G Settings

Network

Press the mobile data card information to establish an internet connection with the help of a 3G

Details

 Automatic Detection

 Manual Provider Input

WiFi Settings

Internet Service Provider:

Repeater

3G Settings

1



If you cannot connect to your router anymore, check the charge indicator to see if the battery is still full. **Unplug all cables and switch the router on.** You will not be able to connect to the router during its boot process - **please wait (max. 5min) for the green LED to light up** on top of the router (it will turn the already blue light into a turquoise colour). Now try if you can connect to the its Wifi network.

2



If step one doesn't solve the problem, **press the reset button** - to the right of the battery indicator - for 15s until the blue LED on top switches off for a second - signalling a reboot.

Please restart the router manually - *switch it off and then on again* - if only the green LED comes on. Repeat this step if you don't see a change in the signalling LEDs.

3



The blue LED will switch back on when the device reboots. Please wait for the green LED to light up in addition - giving the status LED a turquoise colour. The router is now in operation and you should see the Wifi network with the default name (SSID) **IN-Route P52**. Use your browser to login to the router's user interface with the default password **12345678**.

The router is set to automatically assign a IP addresses to new wireless devices by default (**DHCP**). If your PC is configured with a static IP address or the routers default was changed, please refer to the following guide to change your PC's configuration your PC accordingly.

Most common PCs, Smartphones and Apple devices are already set to be assigned an IP address by your network router. **Please skip this section** if your are able to sign in to your IN-Route network and open the routers web user interface with your browser (s. section **3.1** for details).

How to configure your PC if you can't connect to the IN-Rout's web user interface?



Network and Sharing Center



Adapter Settings



Adapter Properties

1. Please open your network and sharing center by right-clicking the network connection symbol.
2. Click on "*Change Adapter Settings*" in the upper left.
3. Depending on how you want to access your IN-Route, please right-click either your Ethernet or Wifi adapter and choose properties.
4. Select "*Internet Protocol Version 4 (TCP/IPv4)*" at the bottom of the list and click on **Properties**.



1. Please write down (or screenshot) the active configuration - you might have to reset your connection to those parameters to re-enter your local network!
2. Afterwards choose to either **optain an IP and DNS server address automatically** (DHCP) or type in the following default configuration for your IN-Route P52:

TCP / IPv4 Properties


IP Address: 192.168.169.x

(The last octet "x" can be chosen between 2 and 254. Make sure that every device in your network has a unique address!)

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.169.1

Preferred DNS Server: 192.168.169.1

You should now be able to access the IN-Route's web user interface. Slide the Power button (see #5, page 3) to the 3rd position  to activate the router mode of the device and wait 10s for the router to boot. Use your PC or wireless device to search for the Wifi network and connect using the default login:



Default Network Name (SSID) : IN-Route P52

Default Wifi Password : 12345678


Now open your default internet browser and type in the default IP address **192.168.169.1** to access the routers web user interface and log in with **admin / instar** .



Please refer to the next chapter for more details.

I - Wired Access Point

Use the AP mode if the device is connected by LAN cable to an internet router and you want to share this access wirelessly with multiple devices. You can also use this mode when you don't have access to a local network and want to interconnect multiple devices to share files.

1. Slide the Power button (see #5, page 3) to the 3rd position  to activate the Router mode of the device. Wait 10s for the router to boot.
2. Plug in a Ethernet cable into the devices network connector (see #6, page 3) and connect the other end with a free LAN port on your internet router.
3. Use your laptop or mobile device to search the routers wireless network and connect using the default password:

Default Network Name (SSID) : IN-Route P52

Default Wifi Password : 12345678

4. Now open your default internet browser and type in the default IP address to access the routers web user interface.

Default IP Address : 192.168.169.1

5. To login to the user interface use the default user and password:

Default User : admin


Default Password : instar

6. Navigate to *System / Mode* to activate the DSL Router Mode.
 7. Navigate to *Network / Wifi Setup* to change the networks SSID and default password.
-

Reconnect your device with the new login credentials and repeat this step with all your wireless devices.

II - Wireless Bridge

Use the Bridge mode if you want the device to connect an existing Wifi network and to extent this network broadcasted with a new network name (SSID) and a different Wifi password. This method creates two individual networks for two user groups of user sharing one internet access.

1. Slide the Power button (see #5, page 3) to the 3rd position  to activate the Router mode of the device. Wait 10s for the router to boot.
2. Use your laptop or mobile device to search the routers wireless network and connect using the default password:

Default Network Name (SSID) : **IN-Route P52**

Default Wifi Passphrase : **12345678**

3. Now open your default internet browser and type in the default IP address to access the routers web user interface.

Default IP Address : **192.168.169.1**

4. To login to the user interface use the default user and password:

Default User : **admin**


Default Password : **instar**

5. Navigate to *System / Mode* to activate the WLAN Repeater.
6. Navigate to *Network / Wifi Repeater* to enter your 1st routers Wifi login credentials and new name and passphrase for the Bridge network.

You can now access the new Bridge network with the above set login credentials.

III - DSL Router

Use the DSL Router mode if the device is connected by LAN cable to a DSL or cable modem. The device will work as a regular router giving you access to the internet through it's wireless network.

1. Slide the Power button (see #5, page 3) to the 3rd position  to activate the Router mode of the device. Wait 10s for the router to boot.
2. Plug the Ethernet cable from your modem into the devices network connector (see #6, page 3).
3. Use your laptop or mobile device to search the routers wireless network and connect using the default password:

Default Network Name (SSID) : **IN-Route P52**

Default Wifi Password : **12345678**

4. Now open your default internet browser and type in the default IP address to access the routers web user interface.

Default IP Address : **192.168.169.1**

5. To login to the user interface use the default user and password:

Default User : **admin**


Default Password : **instar**

6. Navigate to *System / Mode* to activate the DSL Router Mode.
 7. Navigate to *Network / WAN Setup* to enter your login credentials for your internet access (PPoE, static or dynamic IP access) .
-

Entering your internet account credentials allows the device to access the internet through your modem. You can now use the internet access with it's wireless network.

IV - 3G Router

Use the 3G Router mode if the device is connected to a 3G dongle through its USB port (s. #9, page 3). The device will work as a regular router giving you access to the internet through it's wireless network.

1. Slide the devices Power button (see #5, page 3) to the 3rd position  to activate the Router mode of the device. Wait 10s for the router to boot.
2. Plug the 3G dongle into the devices USB port (see #9, page 3).
3. Use your laptop or mobile device to search the routers wireless network and connect using the default password:

Default Network Name (SSID) : **IN-Route P52**

Default Wifi Password : **12345678**

4. Now open your default internet browser and type in the default IP address to access the routers web user interface.

Default IP Address : **192.168.169.1**

5. To login to the user interface use the default user and password:

Default User : **admin**


Default Password : **instar**

6. Navigate to *System / Mode* to activate the 3G Router Mode.
 7. Navigate to *Network / 3G Settings* to enter your login credentials for your 3G internet access.
-

Entering your internet account credentials allows the device to access the internet through your modem. You can now use the internet access with it's wireless network.

Network Attached Storage (NAS) 3.2

You can attach a USB mass storage like a flashdrive, USB HDD or a USB card reader to the devices USB port (s. #9, page 3) to use it as a network storage.

1. Slide the devices Power button (see #5, page 3) to the 3rd position  to activate the Router mode of the device. Wait 10s for the router to boot.
2. Plug the USB storage into the devices USB port (see #9, page 3).
3. Use your laptop or mobile device to search the routers wireless network and connect using the default password:

Default Network Name (SSID) : **IN-Route P52**

Default Wifi Password : **12345678**

4. Now open your default internet browser and type in the default IP address to access the routers web user interface.

Default IP Address : **192.168.169.1**

5. To login to the user interface use the default user and password:

Default User : **admin**


Default Password : **instar**

6. Navigate to *System / File Explorer* to access the storages file directory.

This represents an easy way to share your stored files with multiple host devices or to set up a simple backup server to be used for team collaborations.

3.3 POWER BANK (5200 mAh)

More and more mobile devices are compatible to USB charging devices like the IN-Route P52. Carrying your own small powerbank with you can often double your mobiles battery life.

1. Plug the USB charging cable that came with your mobile device into the IN-Route's USB port (see #9, page 3).
2. Slide the devices Power button to the 2nd position  to activate the Charging mode of the Power Bank. The attached mobile device should start charging automatically. Press the battery button (see #6, page 3) to check the power banks remaining battery level.

4 | SPECIFICATION

Hardware

Chipset (SoC)	Ralink RT5350F Router-on-a-Chip
CPU Core	360 MHz MIPS® 24K™ with 32 KB I-Cache/16 KB D-Cache
Memory	EM63A165 256Mbit (32MB) SDRAM
Flash Storage	W25Q32BV 32Mbit (4MB)
WiFi	Embedded 1T1R 2.4G CMOS RF Embedded 802.11n 1T1R MAC/BBP 2 dBi Signal Strength / Channel Width: 20MHz (72Mbps) / 40MHz (150Mbps)
WiFi Standards	IEEE 802.11 b/g/n @ 2.4-2.4835GHz
Interfaces	1 x RJ45 10/100 Mbps LAN Port 1 x MicroUSB Port for Charging (5V / 1.8A max. Input) 1x USB 2.0 Host Interface (5V / 1A Output)
Ethernet	Embedded 10/100 Mbps Ethernet Switch
Battery	Capacity 2x2600mAh ICR18650 3.7V Charging Current Input / Output 1A
Physical Dimensions	101 x 49.5 x 31mm
Weight	135.6g

Operation

Operating Temperature	5°C to 40°C
Storage Temperature	0°C to 60°C
Operating Humidity	5% to 90% Non-condensing
Storage Humidity	5% to 90% Non-condensing

PC System Requirements

Supported Operating Systems	Windows XP / Vista / 7 / 8, Mac OS, Linux, iOS, Android
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WARRANTY

INSTAR offers a 2-year warranty on its products. During this time you can send in your device for a free repair. This **excludes** devices with custom made firmware or any other software that has not been approved by INSTAR. The warranty is only valid for the original hardware parts of the device.

If you are contacting our Service Team please keep the model and serial number ready (you can find it on the back of your device).

If you want to send in your device for repair, please use the RMA form that came with the device. If you don't have this form you can also download it from www.instar.de or contact the INSTAR Service Team.

Disposal of old electrical appliances

The European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE), requires that old household electrical appliances must not be disposed of in the normal unsorted municipal waste stream. Old appliances must be collected separately in order to optimize the recovery and recycling of the materials they contain and reduce the impact on human health and the environment. The crossed out "wheeled bin" symbols on the product reminds you of your obligation, that when you dispose of the appliance it must be separately collected. Consumers should contact their local authority or retailer for information concerning the correct disposal of their old appliance.



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You can find your INSTAR SERVICE CENTER at the following destination:

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