Telia F1 Router User Guide



Dear customer,

Thank you for choosing the fast and high-quality Telia Internet and / or TV "Interactive GALA". We wish you a pleasant experience and productive work!

This guide will help you to install the Telia high-speed Internet service on your own. The information contained herein is sufficient to enable you to connect the resulting equipment to the Internet and to install the required software on your personal computer (PC). This equipment package is also suitable for installing the Telia Smart TV service, so if you have also purchased a TV service, you will find a description of its installation in the TV package installation instructions.

TERMS AND ABBREVIATIONS

PC	personal computer
CPU	Central Processing Unit
FTTx	Fiber to the x - technology for data transmission via fiber optic cable
IP	Internet protocol
IPTV	interactive television
LAN	Local Area Network - (local) computer network
OS	Operating System
RAM	Random Access Memory
SDD	Solid State Disk
SSID	Service Set Identifier - the name of the wireless network
STB	Set-top box (IPTV set-top box in this document)
ТСР	Transmission Control Protocol
TV	Television
UTP	Unshielded Twisted Pair - unshielded twisted pair (Ethernet network cable)
WAN	Wide Area Network - in this case the TELIA Internet Network
WiFi	Wireless fidelity –wireless technology
WLAN	Wireless LAN is a wireless computer network

WPA WiFi protected Access - Wi-Fi Protected Access, the latest variant of WPA3, the most common being WPA2.

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1. PACKAGE CONTENTS

The box must contain the following items:

No.	Description
1	Telia F1 router
2	El. power adapter
3	Ethernet cable with red connectors.
4	Safety instructions and regulatory information in 8 languages (Booklet A6)
5	Quick installation guide in 8 languages (leaflet)
6	3 stickers with WiFi login information

2. ROUTER

The Telia F1 (Technicolor EWA1330) Router (hereinafter referred to as the Router) is a device designed to provide Internet and IPTV services over fiber access.



2.1. Telia F1 / Technicolor EWA1330 specification

Features	Description
WAN	FTTx: 2.5GE
LAN	3x 1GE and 1x 2.5GE
USB	1x USB master 3.0
IP telephony (SIP)	There is no
WiFi	2.4 GHz IEEE 802.11b / g / n / ax 4x4
	5 GHz IEEE 802.11a / n / ac / ax 4x4
RAM / FLASH	512 MB / 512 MB
CPU	Cortex B53 ARMv8 2x1.5 GHz (64-bit)
Functions	IPv4 / IPv6, DHCP server / relay / client, DNS, NAT / PAT, firewall, WiFi6, DLNA / SAMBA file sharing
IPTV	Through all LAN sockets
Limitations	It is not possible to configure static IP address
	Printer server / sharing feature is not supported.

3. TECHNICAL REQUIREMENTS

To that using equipment for internet access For your service to work well, your PC must meet the following requirements:

- a) We recommend using at least 2.4GHz tactical frequency processor (CPU);
- b) We recommend using at least 8GB of working memory (RAM);
- c) A (Ethernet) network card is required for wired communication. Multi-Gigabit recommended (10G / 5G / 2.5G / 1G / 100M / 10M);
- d) To use high-speed wireless, you need a modern adapter that supports the WiFi6 (802.11ax) standard.
- e) The maximum data transfer speed when connecting a computer with a cable via the Ethernet port is up to 2Gbps, the speed obtained via the WiFi6 standard wireless port depends on the capabilities of the wireless adapter and other connection conditions. At close proximity to the Telia F1 it is realistic to get 600 Mb/s (e.g. Samsung Galaxy S20) or even 1000 Mb/s (e.g. Xiaomi Mi 11). Detailed information on wireless speeds and factors is provided in Appendix 2, "Factors Affecting WiFi Speed."
- f) The Services will operate independently of the operating system (OS) you use.
- g) the router must be provided with a constant power supply of $^{\sim}$ 230 V, 50 Hz;

To achieve a speed of 2 Gb/s with a cable, there are higher computer requirements:

- 1. CPU must be 4.2 GHz or faster;
- 2. RAM 8GB and more;
- 3. SDD technology hard drive is required.

4. EQUIPMENT PORTS AND LAMPS

4.1. Router ports



No.	Description
А	USB 3.2 port for DLNA / file sharing needs
В	1-4 (four) yellow LAN ports for PC, set-top box, etc. facilities. Physical speed of ports 1-3 of 1Gb/s, 4 port physical speed up to 2.5Gb/s
С	WAN up to 2.5Gb/s (physical link speed) network port (red color) designed for fiber optic access
D	−-C++el. adapter socket
E	Φ on / off button
F	Reset button to restore the factory settings

4.2. Router LEDs and buttons

	No.	Description
	G	Status LED (也)
	н	Internet LED (@)
G 8	I	WiFi LED (令)
@ • •	J	WPS pairing button (🌮)
J (j)	к	WiFi .button (奈)

Status LED (心):

Color	Condition	Meaning
Green	Solid	Power is on and there is a physical connection to the Ethernet WAN port
Orange	Solid	The router system is loading
	Blinking	The router is in software change mode
Red	Solid	System power-up test (self test) in progress
0	ff	The router is turned off / no power

Internet LED (@):

К-

Color	Condition	Meaning	
Green	Solid	Internet is working, no data is being sent/received.	
	Blinking	The Internet is working and data is being sent/received.	
Red	Solid	No internet connection	
(Dff	Router is off or Internet is provided in Bridge mode	

WiFi LED (🐬):

Color	Condition	Meaning
Green	Solid	WiFi connection is enabled, working in WPA mode, but no data is being sent/received
	Blinking	Wi-Fi is on, WPA is running, and data is being sent/received
Orange	Blinking	WPS pairing in progress
D. d	Solid	WiFi is working but it is open / insecure, no data is being sent/received
Rea	Blinking	WiFi is working but it is open / insecure, data is being sent/received
0	ff	WiFi is off

Press and hold for 5 seconds to turn on (off) the WiFi connection. hold the button, release to check if the WiFi LED is on (off).

5. INSTALLATION OF EQUIPMENT

Router is shipped fully operational. All you need to do is connect the wires correctly.

Here are some tips to help you connect your home equipment to your router

- Keep the router in a location that allows you to monitor the status of LED indicators when working with the PC.
- try to place the router in an open space the router, like any electrical appliance, heats up and needs ventilation;
- keep in mind that any physical obstacle (walls, furniture) suppresses the router's WiFi interface signal;
- the Ethernet cable in the package may be shorter than the distance between the router, PC, and STB in your home (office), so you may need to purchase longer patch cable(s).

5.1. Fiber Optic Internet Service Installation (WAN Port)



Connect the wires as shown in the diagram

- 1 Use an Ethernet cable to connect the router's WAN (red) port to the fiber optic converter.
- **2** Connect the device to the computer with the yellow connectors using the Ethernet cable. Purpose of ports:
 - The WAN (red) port is used to connect the router to the Telia fiber optic network.
 - Ports 1-4 (yellow) are for computers, IPTV set-top boxes and other Ethernet devices.
 - The USB port is for USB devices like external hard drives.

3 Take the power supply unit found in package and plug it into power outlet and routers power feeding interface.

4 Press the power button (\oplus) at the back. After a few minutes the LEDs (\oplus and @) should glow green on the front panel. When both of these LEDs are green, the Internet should work.

If not, check the connections made in the previous steps. If you are using a WiFi connection, the wireless light should be on (令).

If everything is connected correctly, but the Internet still does not work, contact your service provider.

6. COMPUTER TCP/IP SETTINGS

Computer TCP/IP settings for Windows 2000 / XP / Vista / 7 / 8 users

• Check the TCP/IP settings on your personal computer (PC):

Open the network settings window by pressing - Start> Run, enter ncpa.cpl and click OK. In the case of Windows 8, type ncpa.cpl just on the Home screen (Metro).

• In the window that opens, select the Local Area Connection icon that belongs to the network card you are connecting to the Internet, i.e. make sure that it is not, for example, the icon that belongs to the dial-up modem (for older PCs only).

V	Vindows 2000
🖭 Network and Dial-up Connections	_ I X
File Edit View Favorites Tools Advanced Help	4.9
← BOOL + → + 1 Q Search + 1 Folders (3 History 4 4 × 20) 1 +	
Rodress P Network and Dial-up Connections	<u> </u>
Network and Dial- up Connections	Windows XP
This folder contains network	WIIIdows XF
connections for this computer, a Network Connection a wizard to help you create a ne Connection.	
To create a new connection, clc Make New Connection.	<u>₩</u> ∰ ⇔
To open a connection, click its ice 🔤 Create a new connectors 🛛 🐨 Local Area Connection 2 Exables Financial	
To access settings and compone	Windows Vista
and then dick Properties.	Windows 7
To identify your computer on the Unterest Tradientory	
Identification.	el + All Control Panel Items + Network Connections + + 4+ Search Network C P
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2 storets	Organize 🕶 Connect To Disable this network device ᠉ 📓 🐨 🛄 🔞
	Ethernet in.telecom.it Intel(R) 82579LM Gigabit Network
	3 items 1 item selected

When you open the menu with the right mouse button, selectProperties. In the window that opens, select Internet Protocol (TCP/IP) (for Windows 7 and Windows 8, select the IPv4 version) and click the Properties button;

• In the window that opens, select the TCP/IP settings: Obtain an IP address automatically and Obtain DNS server address automatically. (If the settings are already there, you don't need to change anything.)

Windows XP

eneral Advanced	General Atternate Configuration
Connect using: Broadcom NetXtreme Gigabit Etherne Configure	You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
This connection uses the following items:	Obtain an IP address automatically
Regis Protocol (IEEE 802.1x) v2.3.1.9	O Use the following IP address:
C * AEGIS Protocol (IEEE 802.1x) v3.2.0.3	IP address.
M 3 Internet Protocol (TCP/IP)	Subnet mark.
<	Default galeway:
hstall Uninstal Properties	Obtain DNS server address automatically
Transmission Control Protocol/Internet Protocol. The default	O Use the following DNS server addresses:
wide area network protocol that provides communication across diverse interconnected networks.	Preferred DNS server
Show inno in publication area when connected	Alternate DNS server.
Notify me when this connection has limited or no connectivity	Advanced

Windows Vista, Windows 7 ir Windows 8

General Alternate Configuration	
You can get IP settings assigned a	sutomatically if your network support
this capability. Otherwise, you nee for the appropriate IP settings.	ad to ask your network administrator
Dbtain an IP address automa	atically
- Uge the following IP address:	
IP address:	112 - 11 - S
Sybnet mask:	
Default gateway:	
Obtain DNS server address ar	utomatically
O Use the following DNS server	addresses:
Preferred DNS server:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
A REAL PROPERTY OF A REAL PROPER	
Alternate DNS server:	4 41 4
	General Alternate Configuration You can get IP settings assigned a this capability. Otherwise, you nee for the appropriate IP settings. © Uge the following IP address: IP address: Signet mask: Default gateway: © Uge the following DNS server Uge the following DNS server

• click the OK button and close the open windows. If a message appears asking you to restart your PC, do so.

7. WIRELESS COMMUNICATION

The device is provided to customers with a fully configured and securely encrypted wireless port. The wireless channel is protected by a WPA-WPA2 password, which you can find by reading the sticker on the body of the device:

Wifi-name- the name of your home wireless network.

Wifi password- password to connect to your home wireless network.

Wifi QR code- connecting a smartphone (or tablet) to a wireless connection by scanning a QR code.



The router has two wireless access points:

The 5 GHz access point provides extremely high transmission speeds, is less sensitive to interference, and allows IEEE 802.11a/n/ac/ax wireless devices to be connected.

The 2.4 GHz access point allows you to connect IEEE 802.11b/g/n/ax wireless devices. Use this access point for wireless devices that do not support 5 GHz.

NOTE The wireless connection can be turned on and off with the WiFi button on the front of the router (♠). Pressing and holding the button for 5 sec. turn off the wireless connection by repeatedly holding for 5 sec. you will reconnect.

You can connect to an access point by:

- Automatically using WPS:
 - a Press the WPS button on your wireless device.
 - **b** If you are prompted to select your access point from the list on the wireless device, select the item that uses the Network name (Wifi-name), printed on the rear label of the router.
 - **c** Briefly press the WPS button **O**located on the front of the router.
 - d WiFi LED (奈) starts flashing orange.
 - e after no more than two minutes WiFi LED (奈) is:
 - green: WPS pairing is successful.
 - flashing red: WPS pairing has failed.
- Manually:

Configure your wireless device using the Network name (Wifi-name) and Wireless Code (Wifi- password), printed on the router label (back side).

7.1. Connect to WiFi with QR code

Wifi QR code- you can scan it on your smartphone (or tablet) with the built-in QR code reader in the WiFi connection area. This feature only works on Android devices.

To use wireless, make sure your computer has a wireless adapter installed and turned on (most laptops have built-in wireless adapters). If you do not have such an adapter in your computer, you will need to purchase and install it before using the wireless connection. For instructions on installing and configuring the wireless adapter, see the instructions for the adapter you purchased.

Note. For more information on wireless speeds and factors, see Appendix 2, "Factors Affecting WiFi Speed".

8. CONNECT TO YOUR HOME WIRELESS NETWORK AND THE INTERNET

Click ^{••} [•] [•] (Start / Run), enter **ncpa.cpl** and press **OK**. **Windows 8** case search (home screen *Metro*) enter **ncpa.cpl**.

Programs (1) 🚳 ncpa.cpl See more results ncpa.cpl × In the additional window that opens, you will see the detected available wireless networks. Choose your Network name (indicated on the rear label of the router) and press the button Currently connected to: in.telecom.lt Internet access Dial-up and VPN TEO VPN

Note. If you do not see your wireless network name (SSID) in the

In the dialog, enter Wireless password (indicated on the rear label of the device).

Press the button **OK**.

If the internet service does not work properly after connecting the wires, though, the Status and Internet LEDs are green, check the computer's TCP/IP settings. Computer TCP/IP settings Windows Vista, Windows 7, Windows XP and Windows 2000 users can check this way:



2

З

Connect.

In the window that opens, select the wireless adapter installed on your computer(Wireless Network Connection) and right-click. In the menu that opens, select Connect / Disconnect.

window, make sure that WiFi LED is (奈) is green.

Note. In older versions of Windows, a button Connect.

COMMENTS

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	Tella-49	4020	llee	
	TEO-69	092	liter	
	OpenNe	et	311	
	TEO-69	0952	llee	
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	Оре	n Network and	Sharing Center	
Cor	nnect to a Networ	rk		x
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Cor Type	nnect to a Networe the network	rk security key		×
Cor Type Se	nnect to a Networ e the network curity key:	rk security key		×
Cor Type Se	nnect to a Networ e the network curity key:	rk security key •••••• V Hide characters		×
Type	nnect to a Networ e the network curity key:	rk security key •••••• Ø <u>H</u> ide characters		×

HomeRun

Shut down 🕨

49

^

~

E

Click 💶 + 🔳 (Start / Run), enter ncpa.cpland press OK. Windows 8 case search (home screen Metro) enter ncpa.cpl.

In the window that opens, select the icon Local Area Connection, which belongs to the network card through which you connect to the Internet. On the right When you open the menu with the mouse button, select Properties. In the window that opens, select Internet Protocol (Windows 7 and Windows 8 are IPv6 and IPv4 - select IPv4) and press the button Properties.

0

In the window that opens, select the TCP/IP settings: Obtain an IP address automatically and Obtain DNS server address automatically (*Domain Name Service-* Domain Names Office). If the settings are already in place, nothing needs to be changed. Press the button OK and close open windows. If a message appears asking you to restart your computer, do so.

Detailed user manual, recommendations on how to choose the right TCP/IP setting for other OS, configure the wireless connection can be found online at pagalba.Telia.It

eneral	Alternate Configuration				
You car this cap for the	n get IP settings assigned a bability. Otherwise, you nee appropriate IP settings.	automatically if ed to ask your	your n networ	etwork s k adminis	upports strator
00	otain an IP address automa	atically			
OU	e the following IP address:				
IP a	ddress:				
Sybr	net mask:				
<u>D</u> efa	ult gateway:		4	4	
(i) (i)	tain DNS server address a	utomatically			
- © U:	e the following DNS server	addresses:			
Pref	erred DNS server:				
Alter	nate DNS server:				
v	alidate settings upon exit			Ad <u>v</u> a	nced

9. CONFIGURE THE ROUTER USING A BROWSER

If you want, you can change the router settings (for example, the wireless settings). Follow these steps:

Launch your web browser and go toenter the address <u>http://192.168.1.1</u> and press the Enter key. The router's WEB interface opens.

Leave in the first box **User**, and enter the password in the second and click **Sign In**. The router will check your account and reload the page.

Note: The login password is written on the back of the router's label as the "Web admin password."

	Sign in User Vour password
he default Pass	Cancel Sign in The standard Username is 'Administrator'. word is printed on the bottom of the MediaAccess Gateway (ACCESS KEY).
	© Technicolor 2020



You can now change the settings to suit your needs.

Note. The wireless network name (SSID) and router for the wireless connection you can change the password yourself on the self-service website <u>https://www.telia.lt/mano</u>

• When connected, the initial WEB page of the router will open.

🥏 Telia			Administrator
	Simplified guided view	Advanced interface	
	© Technicolo	or 2020	

Selecting the Advanced interface gives you more control.

When connecting for the first time, the following options will be offered:

Change Access Key		
NowRemind me laterDo not remind me again		
	Close	

- If you want to change the WEB admin password now, select "Now".
- If you want to defer changing your password to a later time, select "Remind me later";
- If you do not want to change your password and do not want reminders, select "Do not remind me again".

Note: The factory password (Web admin password) is unique to each device and is not displayed elsewhere on the router sticker, so the password cannot be changed.

🥏 Telia			User -
System Info Version Damson (19.4)	Broadband Ethernet connected	Internet Access DHCP on WAN IP is 78.62.210.209 and netmask is 255.255.252.0 IPv6 Connecting	Wireless • Telia-494020(2.4 GHz & 5 GHz) • Guest-494020(2.4 GHz & 5
Local Network DHCP enabled Gateway IP is 192.168.1.1 and netmask is 255.255.255.0 IPv6 Disabled	Devices 2 Ethernet devices connected 1 Wi-Fi device connected	WAN Services 1 port forwarding rule is defined 0 UPnP rules are active	Firewall Firewall level: medium
Diagnostics	Sharing Samba Filesharing disabled DLNA disabled 	Parental Controls Site blocking disabled site blocking rules are defined Access control enabled TOD rules are created 	VPN Server • VPN server disabled • clients are connected
• DMZ is disabled	ETH Linespeed LAN 1 LINE SPEED auto LAN 2 LINE SPEED auto LAN 3 LINE SPEED auto LAN 4 LINE SPEED auto WAN LINE SPEED auto		

In the initial window we see the following cards:

- System Info- provides information about the router (Global Information), system date / time (Time Management), router administration tools - Restart / Reset / Semi-Reset (Configuration);
- o Broadband- the current connection status is displayed;
- Internet Access- provides information about the received Internet settings, its status and the possibility to update the DHCP IP address (Release and Renew);
- Wireless- provides wireless connection information and the ability to change settings: network name (SSID), WiFi password and many other connection settings, as well as enable / disable Guest WiFi;
- Local Network- Possibility to change lan and guest configuration: IP address / subnet and shared IP address ranges. If necessary, disable the DHCP server. Static IP-MAC address associations (Add new static lease) can also be described;
- **Devices** provides a list of all devices connected to the local network;
- WAN Services Ability to manage Port forwarding and UPnP functions;
- Firewall there are options: change the firewall level, enable / disable IPv4 / IPv6 ping;
- o Diagnostics ability to perform router and network diagnostics;
- o Sharing Ability to manage SAMBA file sharing and DLNA media sharing settings;
- **Parental Controls** Ability to block / allow WEB pages (Parental Control), restrict LAN devices' access to the Internet on certain days and hours of the week in 15 minute increments (Access Control).
- VPN Server Ability to configure L2TP VPN server settings.
- **DMZ** Possibility to configure pseudo bridge.
- o ETH Linespeed to control the physical speed of WAN and LAN ports (Auto / 100 Mb/s).

10. RESTORE FACTORY SETTINGS

This feature is on the System Info tab in the Configuration section.

Restart Device	2 Restart
Factory Defaults	4 Reset
	🕈 Semi-Reset

This function will reset all configuration except user settings.

11. CHANGE WIRELESS SETTINGS

Note. If you were able to connect successfully over the wireless connection and the connection is working properly, we recommend that you do not change the settings. Settings should only be changed if necessary.

Click the Wireless tab to view and / or change WiFi settings

On the left side of the window, select the area you want to view / change; In the configuration window you can control:

- a) Radio
- b) AP
- c) WPS

In the radio section you can view a number of parameters, some of which you can change:

- disable / enable 2.4 GHz or 5 GHz radio module (Enable: ON / OFF)
- Choose what standards the radio module will work with (Standard)
 2.4GHz has two choices of 802.11b/g/n or 802.11b/g/n/ax
 5Ghz also has 2 options for 802.11a/n/ac or 802.11a/n/ac/ax



Radio	AP	WPS			
RA	DIO'S		Enabled		
2.4 5 (4 GHz GHz		Frequency band	5GHz	
			Antenna	4x4	
			MAC address	d6:35:1d:49:40:28	
			Standard	802.11a/n/ac/ax	~
			Speed	173.3Mbps	
			Region	EU	
			Current channel	auto	

Wireless

Telia-494020(2.4 GHz & 5 GHz)

Guest-494020(2.4 GHz & 5)

In the AP section you can:

- separate frequencies / networks (Split: ON)
- turn the wireless connection on and off (State: ON / OFF);
- change wireless network name (SSID name)
- change the security level (Security Mode: WPA2-PSK / WPA2-WPA3-PSK). WPA3 is more secure, but older WiFi devices don't work with WPA3, leaving WPA2 compliant.
- change password (Wireless Password)

Note. We suggest choosing a password of at least 12 characters, a combination of uppercase and lowercase letters and numbers, and it is also advisable to use other characters (@, #, ,%, ^, & etc.) that are difficult for others to guess. This will allow you to have a sufficiently secure network.

If you have changed the SSID and / or WiFi password, you can also generate a QR code here, which will make it easier for you to connect to WiFi with Android devices (**Generate QRCode**).

Wireless		hide advar
Radio AP WPS		
NETWORKS		
Home	Steering Enabled	
Guest	2.4 GHz and 5 GHz Split Corr	
	State 📴 🔿	
	SSID Telia-494020	
	Security Mode WPA2-PSK V	
	Wireless Password Yw6RTydTHY6Mp98f	
	Access Control List	
	ACL mode Disabled V	
	QR Code	
	Generate QRCode	

In the WPS section you can: initiate WPS pairing by pressing the button

WP	SP	BC

C Trigger

- If you want to entertain your guests via Wi-Fi but do not want their WiFi devices to access your LAN, activate the Guest access point:
 - a. in the AP section, select Guest under Home
 - b. then click at the top / right of the window Show advanced
 - c. State change to ON
 - d. if you want to change the network name (SSID) and / or password
 - e. and, by generating a QR code right here, you will be able to "feed" the guest on the Internet.
 - f. Remember to save the configuration by clicking the Save button.

12. LAN IP / SUBNET CHANGE, DHCP SERVER MANAGEMENT, IP RESERVATION

In the main menu, click on the name Local Network. In the additional window that will appear, you will be able to change and configure the following functions:

12.1. Disabling the DHCP Server

The server can be turned off at DHCP Settings by changing the DHCP Server ON => OFF.

12.2. Changing the LAN subnet

- To change the internal network subnet (for example, to 192.168.0.x), you need to do the following:
 - In the Local Device IPv4 address field, enter the required device IP address (for example, 192.168.0.1).

Note. If you change the IP address of the Technicolor equipment (to eg 192.168.0.1), you will lose control of the WEB. To continue managing / configuring the equipment, you must log in with a new IP address (e.g. <u>http://192.168.0.1</u>), and update the connection to the Technicolor equipment so that the computer obtains an IP address from the subnet again.

If you have disabled the local DHCP server, you must configure your network connection with a static IP address. If the subnet remains unchanged (192.168.1.x), configure the network adapter's IP address to 192.168.1.10 (or another free IP address that does not conflict with the IP address of the client and / or Technicolor equipment). If you have changed the LAN subnet (for example, to 192.168.0.x), configure the IP address to 192.168.0.10 (or another free IP address).

 If you want to change the modes of IP addresses shared by computers, click show advanced. On the DHCP Pool LAN, you can enter the start address

oca	Net	work
-000		

LAN INTERFACES	Global Information	I
guest	Local Device IPv4 address	192.168.0.1
	IPv6 state DHCP Settings	OFF
	DHCP Server	
	Hostname	MAC address
		Cancel Save

- and end address of the IP field and change the Lease time of the dynamic IP address as required.
- After entering the desired settings, save the changes with the Save button.

12.3. Static IP address binding on a LAN DHCP server

• Static leases area, click the Add new static lease button. Additional configuration fields for the static IP address will then appear.

 Entory the name of the 	LAN INTERFACES	Global Information			
Enter: the name of the	lan				
equipment - Hostname;	guest				
physical address of the		Local Device IPv4	192.168.11.1		
equipment - MAC address;		address			
desired IP address - IP.		IPv6 state	OFF		
Note. If you do not know the		DHCP Settings			
MAC address of the device, and					
the device is connected during					
configuration, then the MAC		DHCP Server			
address field makes it easy to		Static leases			
find it by name, currently					
assigned IP address, or by part		Hostname	MAC address	IP	
of the MAC address.					
• After entering the		Host132	40:d3:ae:99:b6:a4	v 192.168.11.132 v	×
information in the					
appropriate fields, save the			O Add new stat	lic lease	
configuration with the					
button					

13. COMPUTERS CONNECTED TO THE INTERNAL NETWORK

In the mainin the window, click the name Devices. An additional window will open showing the information of all devices connected to your network in two sections: Global Information or Devices List

Devices		🙄 refresh data
Global Information Devices List		
Devices		
1	2	0
🤶 WiFi	🐴 Network	∲ USB
🔶 Wifi-2.4GHz	Unknown-00: 🗸	
🛜 Wifi-5GHz	Unknown-fc:d 🗸	
MINMNKXM2 V		
Global Information Devices List		

Devices

Status	Device Type	Hostname	IPv4	MAC Address	Interface	Connected Time	Expires In
•		MINMNKXM2	192.168.1.224	F0:d5:bf:b5:b3:f0	wireless - 5GHz - Ian - Telia-494020	1 hour 1 minute 29 seconds	55 minutes
•		Unknown-00:02:9b:c2:9a:1a	192.168.1.185	00:02:9b:c2:9a:1a	Ethernet Port3	2 days 0 hours 54 minutes 24 seconds	54 minutes
•		Unknown-fc:d5:d9:b5:61:56	192.168.1.222	Fc:d5:d9:b5:61:56	Ethernet Port4	2 days 0 hours 36 minutes 25 seconds	54 minutes

The grouped information is more visual, but let's use a list for more detailed data. If something doesn't fit in the window, let's

•

scroll for it.

14. PORT FORWARD CONFIGURATION

- In the main window, click on the name WAN Services;
- In the window that opens, click "show advanced";
- Click the "Add new IPv4 port mapping" button;
- Specify the name of the rule (Name);
- Select Protocol: TCP, UDP TCP / UDP;
- Select WAN port and LAN port. If the application / port is not listed, select Custom and enter the port number (range) manually. Possible values 065535.
 The port range is specified in colons, for example, 8001: 8010, WAN and LAN port values may differ, but the number of

ports must match, for example, WAN port 8001: 8010 to LAN port 81:90 will be described correctly, and WAN port 8001: 8010 to LAN port 81:85 will result an error;

- If you want to protect the port routing rule so that it only works from 1 remote IP address, enter the Source IP;
- Select Destination IP from the list. If you do not find the LAN device you want, select Custom and enter the IP address manually. If your LAN device obtains an IP address automatically (DHCP),
- When all fields are correct, click

Port Mapping		
IPv4 Port forwarding table		

	Name	Protocol	WAN port	LAN port	Source IP	Destination IP	Destination MAC	
	Test	TCP	8001:8010	81:90	213.190.32.43	Galaxy-A5-2017 (192.168.11.132) [40:d3:ae:99:b6:a4]	40:d3:ae:99:b6:a4	
Add new IPv4 port mapping								

15. UPNP CONFIGURATION

- In the main window, click on the name WAN Services;
- In the additional window that appears, click "show advanced" at the top right.
- You will then find UPnP settings and currently active port forwarding in the same window below.
- UPnP Enabled ON indicates that the function is activated;
- Note. Telia F1 in factory configuration UPnP and NAT-PMP settings are off.
- Click the Save button to save the changes.

UPnP

UPnP Enabled	OFF		
NAT-PMP Enabled	OFF		
Secure Mode Enabled			
Datamodel Version	1		~
	Nata: Data	madal version 4 may	

Note: Datamodel version 1 may be required for older applications.

16. ROUTER AND NETWORK DIAGNOSTICS

- In the main window, click on the name Diagnostics;
 - In the additional window that appears, you will find three sections:
 - Ping & Traceroute- you will be able to take Ping and Traceroute tests;
 - o Connection- automatic communication check is performed;
 - Network- statistics for each slot are displayed;
 - Igmpproxy- IP multicast information is displayed.

17. USB CONNECTION

You can use the Samba Filesharing and DLNA functions by connecting the appropriate USB device.

17.1. DLNA / SAMBA configuration

Go to the Content Sharing tab and you will be able to manage Samba Filesharing and DLNA:

Samba Filesharing - the ability to exchange files on a local home network;

DLNA- a standard that allows electronic devices on a local home network to exchange digital information with each other.

Note. Click show advanced to manage additional Samba Filesharing features.

17.2. File sharing on your local home network

To use the File Sharing / Samba feature, you need:

- Connect a USB disk (USB memory, USB hard disk) to the USB port;
- On the computer, type in the Windows Explorer window (for example, in the Computer window) \\192.168.1.1\usbdisk

Note. If you changed the LAN subnet Local Device IP address using Section 16, then you must type the IP address that you entered in the Local Device IP address field (for example, if you changed from 192.168.1.1 to 192.168.0.1, then you need to type<u>\192.168.0.1\usbdisk</u>).

• Then press the Enter key.



Note. You can also connect to a USB drive after entering<u>\\technicolor</u>, but in this case you will be asked to enter a login and password:

username: admin

password: ******** (the password is written on the router's back label Web admin password)



• After completing the above points, you will be taken to your connected USB drive. **Note**. You can change other Samba settings by clicking Show advanced in the Content Sharing window.

Disable file sharing

- To disable or re-enable the File Sharing / Samba feature, click Content Sharing in the router's main window.
- In the additional window that appears next to General status, change the status of the Samba function.

Note. You can change other Samba settings by clicking Show advanced in the Content Sharing window. DLNA - This is a standard that allows electronic devices on a local home network to exchange digital information with each other, e.g. music, photos, videos.

To use DLNA Media Sharing, you need:

- Connect a USB drive (USB flash drive, USB hard drive) to the router's USB port;
- Open the Media Player on your computer (for example, Windows Media Player). If you want to use DLNA on mobile devices, you will need to download a DLNA player (e.g. BubbleUPnP UPnP / DLNA for Android users; All Connect Play & Stream for Apple and Android users)
- Because the DLNA function is activated automatically, the Technicolor DLNA Server name will appear shortly;
 Note. If you changed the DLNA name in the router settings, the name you entered in the DLNA name field will appear. The DLNA name can be changed by selecting Content Sharing >> Show advanced.



• By clicking on the name, you will be able to view the photos, videos and audio recordings on your connected USB drive.

17.3. DLNA on / off

To turn off the DLNA feature, find DLNA Enabled on the Sharing tab

DLNA Enabled

and change the status from ON to OFF.

Conversely, to enable the DLNA function, change DLNA Enabled from OFF to ON.

18. PARENTAL CONTROLS

To restrict Internet access to LAN devices, go to the Parental Controls tab. In this card you can:

• Block unwanted websites.

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- a. *Parental Control*, In the Site Blocking area, the page blocking function must be enabled, i.e. change the parameter Enabled from OFF to ON;
- b. Then you need to enter the sites you want to block:
 - i. Click the Add New Site button
 - ii. enter the site
 - iii. *Device* select Single to block the site for one LAN device, then select the MAC Address of that device from the list, leave All to block the site for all LAN devices
 - iv. After entering the data, press the button

Note. If blocking webpages didn't work for your computer or other device, try disconnecting it and reconnecting it to your home or network wired or wireless connection.

- Restrict Internet access to LAN devices on certain days / hours of the week.
 - a. Time of Day Access Control In the area, click the Add New Rule button

b. Configure the limited			Time of day acce	ss con	trol
	days an week fo	d hours of the r the selected	Enabled	ON	
	LAN dev	vice (MAC	MAC address	24:18	:1d:d7:f7:60
	in Mode		Mode	Bloc	k v
			Start Time	14:00	
c.	Save wit	th the Save	Stop Time	19:45	j
	button.			The	Gateway will block/allow all the time if none of the days are selected
			Day of week	🖉 Mo	n. 🖉 Tue. 🖉 Wed. 🖉 Thu. 🖉 Fri. 📄 Sat. 📄 Sun.
				Save	Cancel
	We will followin	get the g result:			
	Time of	day access contro			
	Status	Hostname	Start Time Stop Time	Mode	Day of week
	۲	Galaxy-A5-2017	14:00 19:45	block	Mon.♥ Tue.♥ Wed.♥ Thu.♥ Fri.□ Sat.□ Sun.
				0	Add New Rule

1. APPENDIX. QUESTIONS AND ANSWERS

What if the equipment doesn't work and I can't connect to the Internet?

• Check that you have connected the wires correctly and configured the TCP/IP settings on your computer, and repeat the steps from step 5 again;

• if you have completed all of the above steps and are still unable to log in to the Internet, try restarting the computer;

• if you have checked all the points and still cannot connect to the Internet, contact customer service by phone: 1817 - private customers, 1816 - business customers.

2. APPENDIX. FACTORS AFFECTING WIFI SPEED

The main reasons why users can't take full advantage of WiFi speeds are:

1. Negative Impact of Neighboring WiFi Devices

Due to the development of the Internet, many apartment residents use WiFi devices in their apartment. As a result, ether in the 2.4 GHz band is highly contaminated. This is because only 3 WiFi channels - 1, 6, 11, or 2, 7, 12, or 3, 8, 13 - do not overlap in this range. will interfere with each other. Therefore, it is necessary to reboot the WiFi router - turn off / on the power so that the router can select a freer channel again when it starts up. This will help if the ether is clean enough or there are free channels. Often the air is busy over the entire range and there is no option to select a free channel.

2. Insufficient WiFi signal level

When using a WiFi connection in an open area, the zone of sufficient signal level can be up to 60 meters.

Various obstacles between WiFi devices block the signal, which reduces the speed of data exchange on the wireless home network, as well as the speed of the Internet. It is possible that the connection becomes unreliable - it breaks or crashes altogether.

Obstacles	Signal suppression,%		
Window	5% - 6%		
Window with metallized glass (film, mesh inside the glass)	8% -12%		
Wooden wall, partition or door	15% - 20%		
Inner wall (15 cm)	25% - 30%		
Concrete floor (floor / ceiling)	25% - 40%		
Capital wall (30 cm)	30% - 40%		
Monolithic reinforced concrete floor	30% - 40%		

3. Adverse effects of domestic appliances

A number of home appliances operate in the 2.4 GHz WiFi band and create strong interference to the WiFi connection during their operation. These include microwave ovens, security sensors, baby monitors, radio microphones and telephones, wireless security camcorders. Not only the customer, but also the appliances in the neighboring apartments may interfere.

4. Intensive usage of P2P (Torrent) over WiFi may also produce a negative effect

P2P applications may take up the entire WiFi channel, and other applications or even a VPN connection may run very slowly or stop working altogether. A torrent application running on a client computer, even without receiving content, can overload the processor of the WiFi router and thus have a negative effect on the quality of the connection.

5. Incompatibilities between the software version and / or configuration of the WiFi router and client WiFi adapter drivers

The problem may be with the client's outdated WiFi adapter driver software version. Always use the latest version of the software, follow the manufacturer's recommendations. Do not blindly change the settings of the WiFi adapter, as you may experience low speed or unstable connection problems after unconfiguring the WiFi adapter.

6. Other computer(s) negative impact

A home / office network often has multiple computers running at the same time. This situation can, under certain conditions, adversely affect wireless and Internet speeds:

- A network computer using intensive P2P degrades communication to all users on the local network, no matter how they connect to the network;
- A networked computer using intensive P2P over WiFi impairs connectivity not only for its WiFi network users but also for neighbors using the same WiFi channel;

- A network computer infected with a virus also impairs communication on all computers on the network;
- A user working intensively away from the WiFi router when the signal level is close to the limit may degrade the quality of the WiFi connection to other users connected to this WiFi router, as the WiFi router will have to send additional / retransmitted data packets to the remote client, thus occupying excess data and thereby contaminating the ether and loading the router's processor;
- Many computers that are simultaneously connected to the router's WiFi gateway and are actively sending data are unable to use high-quality WiFi due to the router's CPU load (especially applicable for older routers).