

# **DIR-806A**

# **Product Highlights**

# **HIGH SPEED**

Total wireless connection rate up to 750Mbps

### **DUAL BAND**

Simultaneous operation in 5GHz band and 2.4GHz band, 802.11a/b/g/n/ac compatible

## IPV6 SUPPORT1

All needed functions for up-to-date networking



# Wireless AC750 Dual Band Router

## Wireless Interface

Using the DIR-806A device, you are able to quickly create a high-speed wireless network at home or in your office, which lets computers and mobile devices access the Internet virtually anywhere (within the operational range of your wireless network). Simultaneous activity of 2.4GHz band and 5GHz band allows performing a wide range of tasks. The router can operate as a base station for connecting wireless devices of the standards 802.11a, 802.11b, 802.11g, 802.11n, and 802.11ac (at the wireless connection rate up to 733Mbps²).

### **Secure Wireless Connection**

The router supports multiple functions for the wireless interface: several security standards (WEP, WPA/WPA2), MAC address filtering, WPS, WMM.

#### **Advanced Capabilities of Wireless Network**

Transmit Beamforming technology allows to flexibly change the antennas' radiation pattern and to redistribute the signal directly to wireless devices connected to the router.<sup>3</sup>

Support of guest Wi-Fi network allows you to create a separate wireless network with individual security settings and maximum rate limitation. Devices connected to the guest network will be able to access the Internet, but will be isolated from the devices and resources of the router's LAN.<sup>4</sup>

<sup>1</sup> Only for DIR-806A/B1 and DIR-806A/C1.

<sup>2</sup> Up to 300Mbps for 2.4GHz and up to 433Mbps for 5GHz.

<sup>3</sup> For DIR-806A/A1 only.

<sup>4</sup> For DIR-806A/C1 only.

## DIR-806A Wireless AC750 Dual Band Router



### Security

The wireless router DIR-806A includes a built-in firewall. The advanced security functions minimize threats of hacker attacks, prevent unwanted intrusions to your network, and block access to unwanted websites for users of your LAN.

Built-in Yandex.DNS service protects against malicious and fraudulent web sites and helps to block access to adult content on children's devices.<sup>5</sup>

#### Easy configuration and update

You can configure the settings of the wireless router DIR-806A via the user-friendly web-based interface (the interface is available in several languages).

The configuration wizard allows you to quickly switch DIR-806A to one of the following modes: router (for connection to a wired or wireless ISP), access point, repeater, or client, and then configure all needed setting for operation in the selected mode in several simple steps.<sup>6</sup>

Also DIR-806A supports configuration and management via D-Link Click'n'Connect mobile application for Android smartphones.<sup>7</sup>

You can simply update the firmware: the router itself finds approved firmware on D-Link update server and notifies when ready to install it.

<sup>5</sup> Only for DIR-806A/B1 and DIR-806A/C1.

<sup>6</sup> Only for DIR-806A/B1 and DIR-806A/C1.

<sup>7</sup> For DIR-806A/A1 only.



# **Specifications**

	DIR-806A/C1	DIR-806A/B1	DIR-806A/A1
			BIR GOOA/AT
	2 N. V. T	200 FS 1000	
Hardware			
Processor	MT7620A	(580MHz)	RTL8881AQ (520MHz)
RAM	64MB	, DDR2	64MB, DDR2
Flash	8ME	3, SPI	4MB, SPI
Interfaces		10/100BASE-TX WAN port 4 10/100BASE-TX LAN ports	
LEDs	POWER 2.4G WLAN 5G WLAN INTERNET WPS		Operating mode WLAN Internet 4 LAN LEDs
Buttons	WPS/RESET button to set up wireless connection and restore factory default settings		
	ON/OFF button to power on/power off –		
Antenna	Three external detachable antennas	Three external non-detachable antennas	Two external detachable antennas
		5dBi gain	
МІМО	2 x 2 (for 2.4GHz)		
Power connector	Power input of	connector (DC)	Micro-USB 2.0 type A port
Software			
WAN connection types			
PPPoE	+	+	+
IPv6 PPPoE	+	+	-
PPPoE Dual Stack	+	+	-
Static IP / Dynamic IP	+	+	+
Static IPv6 / Dynamic IPv6	+	+	-
PPPoE + Static IP / Dynamic IP	+	+	+
PPTP/L2TP + Static IP	+	+	+
PPTP/L2TP + Dynamic IP	+	+	+



	DIR-806A/C1	DIR-806A/B1	DIR-806A/A1
Network functions			
DHCP server/relay	+	+	+
DHCPv6 server (Stateful/Stateless), IPv6 prefix delegation	+	+	-
DNS relay	+	+	+
Support of DNSv6 AAAA records	+	+	-
Dynamic DNS	+	+	+
Static IP routing	+	+	+
Static IPv6 routing	+	+	-
IGMP Proxy	+	+	+
RIP	+	+	+
Support of UPnP IGD	+	+	+
Support of VLAN	+	+	+
WAN ping respond	+	+	+
Support of SIP ALG	+	+	+
Support of RTSP	+	+	+
Built-in UDPXY application	+	+	_
Autonegotiation of speed, duplex mode, and flow control/Manual speed and duplex mode setup for each Ethernet port	+	+	-
Firewall functions			
Network Address Translation (NAT)	+	+	+
Stateful Packet Inspection (SPI)	+	+	+
IP filter	+	+	+
IPv6 filter	+	+	-
MAC filter	+	+	+
URL filter	+	+	+
DMZ	+	+	+
Prevention of ARP and DDoS attacks	+	+	+
Virtual servers	+	+	+
Built-in Yandex.DNS web content filtering service	+	+	-



	DIR-806A/C1	DIR-806A/B1	DIR-806A/A1
VPN			
IPSec/PPTP/L2TP/PPPoE pass-through	+	+	+
IPSec tunnels	+	+	-
Management			
Local and remote access to settings	TELNET/WEB	(HTTPS, HTTP)	TELNET/WEB (HTTP)
Multilingual web-based interface for configuration and management	+	+	+
Support of Click'n'Connect application for Android smartphones	-	-	+
Notification on connection problems and auto redirect to settings	+	+	-
Firmware update via web-based interface	+	+	+
Automatic notification on new firmware version	+	+	+
Saving/restoring configuration to/from file	+	+	+
Support of remote logging	+	+	+
Automatic synchronization of system time with NTP server and manual time/date setup	+	+	+
Ping function	+	+	+
Traceroute utility	+	+	+
TR-069 client	+	+	+
SNMP manager	+	_	_
Wireless Module Parameters			
Standards	IEEE 802.11a/n/ac IEEE 802.11b/g/n		
Frequency range	2400 ~ 2483.5MHz 5150 ~ 5350MHz 5650 ~ 5725MHz		2400 ~ 2483.5MHz 5150 ~ 5350MHz
Wireless connection security			
WEP	+	+	+
WPA/WPA2 (Personal/Enterprise)	+	+	+
MAC filter	+	+	+
WPS (PBC/PIN)	+	+	+



# DIR-806A Wireless AC750 Dual Band Router

	DIR-806A/C1	DIR-806A/B1	DIR-806A/A1
Advanced functions			
Support of client mode	+	+	+
WMM (Wi-Fi QoS)	+	+	+
Information on connected Wi-Fi clients	+	+	+
Advanced settings	+	+	+
Support of MBSSID	+	+	+
Guest Wi-Fi	+	-	-
Periodic scan of channels, automatic switch to least loaded channel	+	-	-
Support of TX Beamforming	-	-	802.11n (2.4GHz)
Transmitter output power	IEEE 802.11b: 1, 2, 5.5, and 11Mbps IEEE 802.11g: 6, 9, 12, 18, 24, 36, 48, and 54Mbps IEEE 802.11n (2.4GHz/5GHz): from 6.5 to 300Mbps (from MCS0 to MCS15) IEEE 802.11ac (5GHz): from 6.5 to 433Mbps (from MCS0 to MCS9)		
802.11a	15dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps		15dBm at 6, 9, 12, 18, 24, 36, 48Mbps 14dBm at 54Mbps
802.11b	15dBm at 1, 2, 5.5, 11Mbps		
802.11g	15dBm at 6, 9, 12, 18, 24, 36, 48, 54Mbps		
802.11n	2.4GHz, HT20/HT40 15dBm at MCS0~15 5GHz, HT20/HT40 15dBm at MCS0~15		
802.11ac	15dBm a 14.5dBm VH 15dBm a 14.5dBm : VH 15dBm a	t MCS0~7 at MCS8 IT40 t MCS0~7 at MCS0~7 at MCS8~9 IT80 t MCS0~7 at MCS0~7	HT20 15dBm at MCS0/1/2/3/4/5/6/7 HT40 15dBm at MCS0/1/2/3/4/5/6/7 VHT80 15dBm at MCS0/1/2/3/4/5/6/7 14dBm at MCS8 13dBm at MCS9

	DIR-806A/C1	DIR-806A/B1	DIR-806A/A1
Receiver sensitivity			
802.11a	-93dBm at 6Mbps -92dBm at 9Mbps	-82dBm at 6Mbps -81dBm at 9Mbps	
	-91dBm at 12Mbps -90dBm at 18Mbps	-79dBm at 12Mbps -77dBm at 18Mbps	
	-86dBm at 24Mbps	-74dBm at 24Mbps	
	-84dBm at 36Mbps		at 36Mbps
	-79dBm at 48Mbps		at 48Mbps
	-77dBm at 54Mbps	-05dBM 8	at 54Mbps
802.11b	-98dBm at 1Mbps -95dBm at 2Mbps -93dBm at 5.5Mbps -90dBm at 11Mbps	-79dBm at 1, 2, 5.5, 11Mbps	-84dBm at 1Mbps -84dBm at 2Mbps -82dBm at 5.5Mbps -79dBm at 11Mbps
802.11g	-91dBm at 6Mbps	-82dBm	at 6Mbps
	-90dBm at 9Mbps		at 9Mbps
	-88dBm at 12Mbps		at 12Mbps
	-86dBm at 18Mbps -84dBm at 24Mbps		at 18Mbps at 24Mbps
	-81dBm at 36Mbps		at 36Mbps
	-76dBm at 48Mbps	-66dBm at 48Mbps	
	-74dBm at 54Mbps	-65dBm a	at 54Mbps
802.11n	2.4GHz, HT20	HT20	2.4GHz, HT20
	-90dBm at MCS0	-82dBm at MCS0	-91dBm at MCS0
	-89dBm at MCS1	-79dBm at MCS1	-88dBm at MCS1
	-87dBm at MCS2 -84dBm at MCS3	-77dBm at MCS2 -74dBm at MCS3	-86dBm at MCS2 -83dBm at MCS3
	-81dBm at MCS4	-70dBm at MCS4	-79dBm at MCS4
	-77dBm at MCS5	-66dBm at MCS5	-75dBm at MCS5
	-75dBm at MCS6	-65dBm at MCS6	-74dBm at MCS6
	-74dBm at MCS7	-64dBm at MCS7	-73dBm at MCS7
	2.4GHz, HT40	HT40	-88dBm at MCS8
	-88dBm at MCS0 -86dBm at MCS1	-79dBm at MCS0 -76dBm at MCS1	-85dBm at MCS9 -83dBm at MCS10
	-84dBm at MCS2	-74dBm at MCS2	-80dBm at MCS11
	-81dBm at MCS3	-71dBm at MCS3	-76dBm at MCS12
	-77dBm at MCS4	-67dBm at MCS4	-72dBm at MCS13
	-74dBm at MCS5	-63dBm at MCS5	-71dBm at MCS14
	-72dBm at MCS6	-62dBm at MCS6	-70dBm at MCS15
	-70dBm at MCS7	-61dBm at MCS7	2.4GHz, HT40
	5GHz, HT20 -92dBm at MCS0		-88dBm at MCS0 -85dBm at MCS1
	-91dBm at MCS1		-83dBm at MCS2
	-90dBm at MCS2		-80dBm at MCS3
	-86dBm at MCS3		-76dBm at MCS4
	-84dBm at MCS4		-72dBm at MCS5
	-78dBm at MCS5		-71dBm at MCS6
	-77dBm at MCS6 -75dBm at MCS7		-70dBm at MCS7 -85dBm at MCS8
	5GHz, HT40		-82dBm at MCS9
	-90dBm at MCS0		-80dBm at MCS10
	-89dBm at MCS1		-77dBm at MCS11
	-87dBm at MCS2		-73dBm at MCS12
	-84dBm at MCS3		-69dBm at MCS13
	-79dBm at MCS4		-68dBm at MCS14

	DIR-806A/C1	DIR-806A/B1	DIR-806A/A1
	-76dBm at MCS5		-67dBm at MCS15
	-75dBm at MCS6		5GHz, HT20
	-73dBm at MCS7		-82dBm at MCS0
			-79dBm at MCS1
			-77dBm at MCS2
			-74dBm at MCS3
			-70dBm at MCS4
			-66dBm at MCS5
			-65dBm at MCS6
			-64dBm at MCS7
			5GHz, HT40
			-79dBm at MCS0
			-76dBm at MCS1
			-74dBm at MCS2
			-71dBm at MCS3
			-67dBm at MCS4
			-63dBm at MCS5
			-62dBm at MCS6
			-61dBm at MCS7
802.11ac	VHT20	VHT20	HT20
	-92dBm at MCS0	-82dBm at MCS0	-82dBm at MCS0
	-91dBm at MCS1	-79dBm at MCS1	-79dBm at MCS1
	-90dBm at MCS2	-77dBm at MCS2	-77dBm at MCS2
	-86dBm at MCS3	-74dBm at MCS3	-74dBm at MCS3
	-84dBm at MCS4	-70dBm at MCS4	-70dBm at MCS4
	-79dBm at MCS5	-66dBm at MCS5	-66dBm at MCS5
	-77dBm at MCS6	-65dBm at MCS6	-65dBm at MCS6
	-76dBm at MCS7	-64dBm at MCS7	-64dBm at MCS7
	-71dBm at MCS8	-59dBm at MCS8	HT40
	VHT40	VHT40	-79dBm at MCS0
	-90dBm at MCS0	-79dBm at MCS0	-76dBm at MCS1
	-89dBm at MCS1	-76dBm at MCS1	-74dBm at MCS2
	-87dBm at MCS2	-74dBm at MCS2	-71dBm at MCS3
	-84dBm at MCS3	-71dBm at MCS3	-67dBm at MCS4
	-81dBm at MCS4	-67dBm at MCS4	-63dBm at MCS5
	-76dBm at MCS5	-63dBm at MCS5	-62dBm at MCS6
	-74dBm at MCS6	-62dBm at MCS6	-61dBm at MCS7
	-73dBm at MCS7	-61dBm at MCS7	VHT80
	-68dBm at MCS8	-56dBm at MCS8	-76dBm at MCS0
	-66dBm at MCS9	-54dBm at MCS9	-73dBm at MCS1
	VHT80	VHT80	-71dBm at MCS2
	-85dBm at MCS0	-76dBm at MCS0	-68dBm at MCS3
	-84dBm at MCS1	-73dBm at MCS1	-64dBm at MCS4
	-83dBm at MCS2	-71dBm at MCS2	-60dBm at MCS5
	-80dBm at MCS3	-68dBm at MCS3	-59dBm at MCS6
	-76dBm at MCS4	-64dBm at MCS4	-58dBm at MCS7
	-72dBm at MCS5	-60dBm at MCS5	-53dBm at MCS8
	-70dBm at MCS6	-59dBm at MCS6	-51dBm at MCS9
	-68dBm at MCS7	-58dBm at MCS7	
	-63dBm at MCS8	-53dBm at MCS8	
	-61dBm at MCS9	-51dBm at MCS9	



## DIR-806A Wireless AC750 Dual Band Router

	DIR-806A/C1	DIR-806A/B1	DIR-806A/A1	
Modulation schemes				
802.11a	BPSK, QPSK, 16QAM, 64QAM with OFDM			
802.11b		DQPSK, DBPSK, DSSS, CCK		
802.11g	BF	BPSK, QPSK, 16QAM, 64QAM with OFDM		
802.11n	BPSK, QPSK, 16QAM, 64QAM with OFDM			
802.11ac	BPSK, QPSK, 16QAM, 64QAM, up to 256QAM with OFDM			
Physical Parameters				
Dimensions (L x W x H)	192 x 108 x 30 mm (7.56 x 4.25 x 1.18 in)	192 x 108 x 30 mm (7.56 x 4.25 x 1.18 in)	116 x 81.7 x 21.5 mm (4.57 x 3.22 x 0.85 in)	
Weight	240 g (0.53 lb)	240 g (0.53 lb)	390 g (0.86 lb)	
Operating Environment				
Power	Output: 12V DC, 0.5A		Output: 5V DC, 1.2A	
Temperature	Operating: from 0 to 40 °C Storage: from -20 to 65 °C			
Humidity	Operating: from 10% to 90% (non-condensing) Storage: from 5% to 95% (non-condensing)			
Delivery Package	· 			
	Router DIR-806A Power adapter DC 12V/0.5A Ethernet cable "Quick Installation Guide" (brochure)		RouterDIR-806A Power adapter DC 5V/1.2A Ethernet cable "Quick Installation Guide" (brochure)	



# **Ordering Information**

DIR-806A/C1 DIR-806A/B1

Wireless AC750 Dual Band Router





DIR-806A/A1

Wireless AC750 Dual Band Router

