Increase the power of the WIFI

Question asked by e-mail: sometimes I work in difficult conditions and I want to know if it is possible to improve the WIFI power of the box?

The numerous tests made in situation and the user feedbacks allow us to say that the WIFI power of the RTS DMX 512 box is often superior to the values announced in the technical documentation.

However, in certain configurations of use (outside, important distance of the control desk, bad environment for the waves) he can be reassuring to be able to improve the power of the WIFI signal and thus his impact. We tested several WIFI repeaters which settle perfectly well this task.

We use the model TL-WR710N of TP-LINK and the following explanations take it as example.

🔴 It is necessary to get back first of all all the data of connections of the router installed in the RTS DMX 512 box: SSID, IP address, MAC address and WEP key.

The SSID, the IP address and the WEP key are indicated on the label stuck on the case as well as on the documentation delivered with.

The MAC address is a physical address of the router fixed during its manufacturing. The manipulation which follows will allow you to obtain it.
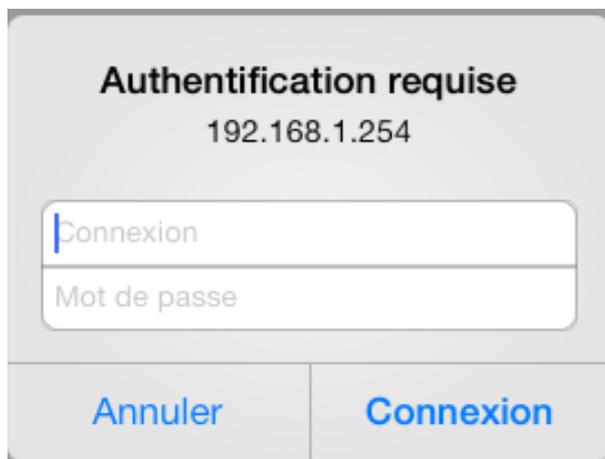
Plug the box and connect the iPad or a computer with the router RTS DMX.

Once the iPad is connected on the network of the box, launch an Internet browser (Safari for example) and to seize: 192.168.1.254 in the address bar. It is about the default IP address of the router of the box.

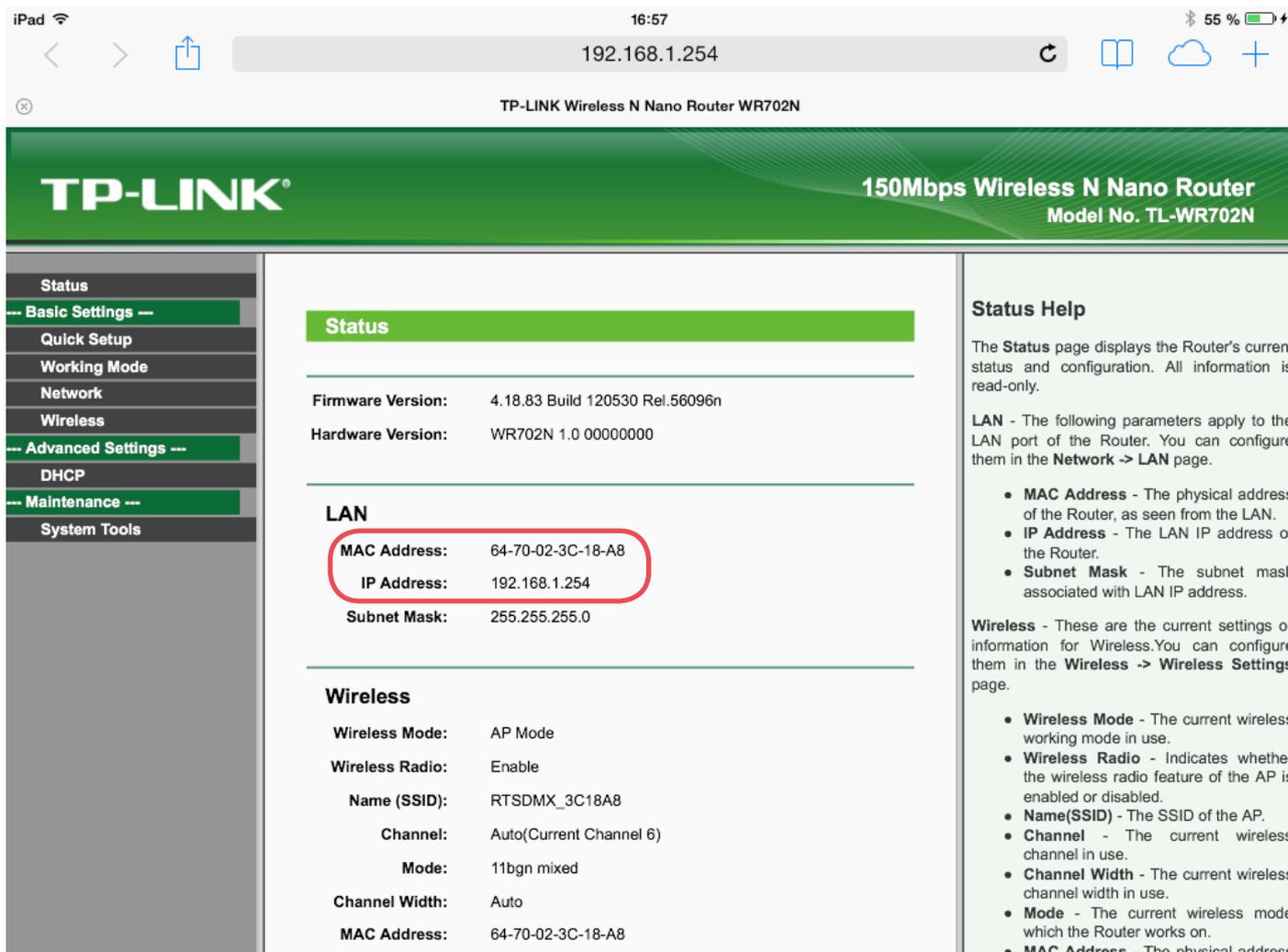Seize the name of connection «admin» and the password «admin».

The browser is then going to load the administration page of the router. Be carefull to change no settings without a real knowledge of networks because the slightest involuntary modification can prevent the use of the application.

The screen which opens then presents the useful information for the continuation, of which the MAC address of the router.

Once this manipulation ended, to avoid any confusion, to disconnect the RTS DMX 512 box.

🔴 It is necessary to configure at the moment the repeater with the data connection of the RTS DMX router. According to the models, it can be made by the WIFI but most of the time, the configuration will have to be made by connecting the repeater with a computer by an Ethernet cable.

Plug the repeater and connect the computer or the tablet by following the indications of the manufacturer. For the TP-LINK repeater, the IP address by default is 192.168.0.254.

Modify the settings of the device

1-by choosing the mode repeater;

2-by indicating the SSID and the MAC address of the router;

3-by settling the IP address of the repeater to 192.168.1.253 (address recommended to work with the RTS DMX 512 box);

4-by configuring the WEP key of the box.

According to the models of repeaters, the order of the operations can change.

Verify attentively that the settings are in accordance with specification and plug the RTS DMX 512 box. The presence of the repeater is transparent for the iPad.

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Status
Quick Setup
Working Mode
Network
Wireless
- Wireless Settings
- Wireless Security
- Wireless MAC Filtering
- Wireless Advanced
- Wireless Statistics
DHCP

Wireless Settings

Repeater Mode:	◉ Universal Repeater ◯ WDS Repeater
Wireless Name of Root AP:	RTSDMX_3C18A8
MAC Address of Root AP:	64-70-02-3C-18-A8
Region:	France ▼
Warning:	Ensure you select a correct country to conform local law. Incorrect settings may cause interference.

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Working Mode
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- Wireless Advanced
- Wireless Statistics
DHCP
USB Settings
System Tools

Wireless Security

◯ Disable Security

◯ WPA/WPA2 - Personal(Recommended)

Version:	WPA2-PSK ▼
Encryption:	AES ▼
Wireless Password:	24192446
	(You can enter ASCII characters between 8 and 63 or Hexadecimal characters between 8 and 64.)
Group Key Update Period:	0 Seconds (Keep it default if you are not sure, minimum is 30, 0 means no update)

◯ WPA/WPA2 - Enterprise

Version:	Automatic ▼
Encryption:	Automatic ▼
Radius Server IP:	
Radius Port:	1812 (1-65535, 0 stands for default port 1812)
Radius Password:	
Group Key Update Period:	0 (in second, minimum is 30, 0 means no update)

◉ WEP

| Type: | Automatic ▼ |
| WEP Key Format: | Hexadecimal ▼ |

Key Selected	WEP Key	Key Type
Key 1: ◉	52756E5469	64bit ▼
Key 2: ◯		Disabled ▼
Key 3: ◯		Disabled ▼
Key 4: ◯		Disabled ▼

We do not recommend using the WEP encryption if this device operates in 802.11n mode due to the fact that WEP is not supported by 802.11n specification.

(Save)

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Status
Quick Setup
Working Mode
Network
Wireless
DHCP
- DHCP Settings
- DHCP Client List
- Address Reservation
USB Settings
System Tools

DHCP Settings

DHCP Server:	⦿ Disable ⦿ Enable
Start IP Address:	192.168.1.100
End IP Address:	192.168.1.199
Address Lease Time:	1 minutes (1~2880 minutes, the default value is 120)
Default Gateway:	192.168.1.253 (Optional)
Default Domain:	(Optional)
Primary DNS:	0.0.0.0 (Optional)
Secondary DNS:	0.0.0.0 (Optional)

Save