

# **The Intelligent Network Box**

# **User's Guide**



Regulatory model number: UNICORN

# Avision Inc.

manual-en-250-0973-E-nbox-v200

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#### FCC Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### IC Notice:

Operation is subject to the following two conditions:

1) This device may not cause interference and

2) This device must accept any interference, including interference that may cause undesired operation of the device.

# CE

#### **European Union Regulatory Notice**

Products bearing the CE marking comply with the following EU Directives:

- Low Voltage Directive 2006/95/EC
- EMC Directive 2004/108/EC
- Restriction of the use of certain hazardous substances (RoHS) Directive 2011/65/EU

This product satisfies the Class B limits of EN55022, EN55024, safety requirements of EN 60950 and ROHS requirements of EN50581.

### Product Safety Guide

Please clearly read all these instructions, and follow all instructions and warnings before installing and using the device.

The following indications are used in this document to obviate any chance of accident or damage to you and/or the device.

<sup>≜</sup> MARNING	Indicates potentially hazardous situations, which if instructions are not followed, could result in death or serious injury.
riangle caution	Indicates a potentially hazardous situation which, if instructions are not followed, may result in minor or moderate injury or damage to property.

#### <sup>▲</sup> WARNING

- Use only the USB cable that came with your device and avoid abrasions, cuts, fraying, crimping, and kinking. Using any other USB cable could cause fire, electrical shock, or injury.
- Place the device close enough to the computer so that the interface cable can easily reach between the device and the computer.
- Do not place or store the device:
  - Outdoors
  - Near excessive dirt or dust, water, or heat sources
  - In locations subject to shocks, vibrations, high temperature or humidity, direct sunlight, strong light sources, or rapid changes in temperature or humidity
- Do not use the device with wet hands.
- Never disassemble, modify, or attempt to repair the device or device option by yourself, except as specifically explained in the device's documentation. This could cause fire, electrical shock, or injury.
- Unplug the device and the USB cable, and refer servicing to qualified service personnel under the following conditions:
  - Liquid has entered the device.
  - Object has entered the device.
  - The device has been dropped, or the case has been damaged.
  - The device does not operate normally (i.e. appearance of smoke, strange smell, odd noise, etc.), or exhibits a distinct change in performance.
- Unplug the device and the USB cable before cleaning.

# **▲** CAUTION:

- Do not locate the device on rackety or aslope tables. Do not locate the device on unstable surface. The device may fall down and this may result in injury.
- Do not place heavy objects on the unit. It may cause unbalance and the device may fall down. This may result in injury.
- Store the AC Power cord/USB cable bundled out of the reach of children to avoid the risk of injury.
- Keep plastic bags bundled out of the reach of children to avoid the danger of suffocation.
- If you are not going to use the device for a long period, unplug the USB cable from the electrical outlet.

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# 1. Overview

# 1.1 Introduction

By connecting the Network Box to your scanner, your scanner\* can be converted into a network device to let other computers scan a document and receive a scanned image in the LAN.

\* Only available for selected Avision scanner models. Check with Avision's web site (www.avision.com) for complete supported models.

# 1.2 Package Contents

#### Standard package items for Network Box:



 $\ast$  To ensure quality support and service, please register the product from Avision's web site at www.avision.com.  $\ast$ 

# 1.3 Ports and LED



Item	Name	Description
1	24VDC OUT Port	Used to connect the power cable (included) to the scanner.
2	USB Port	Used to connect the USB cable (included) to the scanner. The USB port is used to transfer data only. It is not able to supply power.
	Power LED	Turns <b>green</b> when the box is powered on.
3	Status LED	Indicates connection mode or operational status.
	Wi-Fi/LAN LED	Available only for the Wi-Fi version.

# Status LED Light

The color and flashing frequency indicates the connection type and status.

LED Color	Status	Description
Orange	Solid	Wired LAN mode with scanner connecting to the Network Box
	Blinking	Ethernet cable disconnecting to the Network Box
Green	Solid	Wired LAN mode with scanner disconnecting to the Network Box
Red	Solid	Firmware updating



Item	Name	Description				
4	LAN Port	Used to connect the LAN cable to the Network Box for wired network connection.				
5	5VDC 1.5A Port	For scanner without a 24VDC power jack, use this port to connect the box to a USB power adapter via a Micro USB cable.				
6	24VDC IN Port	Used to connect the power adapter that comes with the scanner to the Network Box.				
7	WPS Button	Available only for the Wi-Fi version.				
8	Reset Button	Restore to factory default settings. To reset the Network Box, use a pen to press and hold this button for about 5 seconds. Release the button and then the <b>orange</b> LED turns off. Wait for at least 60 seconds until the <b>orange</b> LED starts blinking (without connecting the ethernet cable) or turns solidly on (with ethernet cable connecting to Network Box).				

# 2.1 Precautions

- Keep the product out of direct sunlight. Direct exposure to the sun or excessive heat may cause damage to the unit.
- Do not install the product in a humid or dusty place.
- Place the product securely on an even, flat surface. Tilted or uneven surfaces may cause mechanical or paper-feeding problems.
- Retain the product box and packing materials for shipping purposes.

# 2.2 Connect Network Box to the Scanner



a: The supplied power cable

**b:** The supplied USB cable

- 1. Plug one end of the supplied power cable (a) to the power jack of the scanner and the other end to the port marked "24VDC OUT" of the Network Box.
- 2. Connect the square end of the supplied USB cable **(b)** to the USB port of the scanner and the rectangle end to the USB port of the Network Box.

# 2.3 Connect Network Box to Power



**C:** The power adapter that comes with the scanner

Connect the small end of the power cable (c) that comes with the scanner to the port marked "24VDC IN" of the Network Box and the other end to a power outlet.

# 2.4 Connect to the Ethernet Cables

In wired network mode, your computer is connected to Network Box through Ethernet cables.





- 1. Plug one end of the network cable (d) to the available port of the switching hub of your LAN. Plug the other end to the LAN port of your computer.
- 2. Plug one end of the network cable (e) to the available port of a switching hub of your LAN. Plug the other end to the LAN port of the Network Box.

#### **Before You Begin!**

• Make sure the LAN cables have been connected properly on your switching hub **FIRST** and then connect the power of the Network Box. Otherwise, other computers in the network may obtain IP address from the box and therefore may not connect to the internet.

## 3.1 Scan From A Wired Computer

Before operating the network scanner, to install the latest scanner driver is not required. Instead, it is necessary to download and install the useful network tool – [**Virtual Scanner Link**] from Avision's web site on http://www.avision.com to help you search and connect the scanner in the network.

 Start [Virtual Scanner Link] by choosing Start>All Programs>Avision Virtual Scanner>Virtual Scanner Link. The main window will be displayed and the scanners in your network will be searched automatically. In a few seconds, the result including the scanner model and Network Box's IP address will be displayed as shown.

<b>∲</b> ¥irtual Scanne	r Link			×
Virtual So	anner Link	ĸ	Refresh	Settings
Vendor	Model Name	<ul> <li>Device Name</li> </ul>	Mac Address	IP Address
AVISION	XXXXX	Network Box	2C18AE00E174	<u>10.1.23.30</u>
AVISION	XXXXX	Network Box	2C18AE00E17C	<u>10.1.23.83</u>
		Connect Disc	mnect 1.0.0.2483	8 2014/12/31 13:48

2. Choose the scanner you wish to connect and then press [Connect]. If connection is successful, a connection mark will be displayed as shown.

	r Link			×	<u>&lt;</u>			ier Link			×
Virtual So	anner Lin	k	Refresh	Settings	1		Virtual S	canner Lin	k	Refresh	Settings
Vendor	Model Name	Device Name	Mac Address	IP Address		_ /	Vendor	Model Name	Device Name	Mac Address	IP Address
AVISION	XXXX	Network Box	2C18AE00E174	<u>10.1.23.30</u>			🌖 🕹 NOISI 🔥	XXXX	Network Box	2C18AE00E174	<u>10.1.23.30</u>
AVISION	XXXX	Network Box	2C18AE00E17C	<u>10.1.23.83</u>			AVISION	XXXX	Network Box	2C18AE00E17C	<u>10.1.23.83</u>
		Connect Disc	onnect 1.0.0.248	38 2014/12/31 13:48				[	Connect Dis	connect 1.0.0.24	338 2014/12/31 13:48

#### Note:

- The network scanner can be used by one user at a time. If the network scanner is being used by other user, you will be prompted with a message to connect the scanner later. When the scanner is available, you will also be prompted with a message to connect the scanner and start scanning your document.
- If the network scanner has not been found, it is probably the scanner and your computer are not in the same sub network (LAN). In this case, you can assign a specific IP address of the scanner to let [Virtual Scanner Link] automatically search the scanner. Click the [Option] button, type your IP address on the [Searching Address] field (1), then click the [+] button (2) and finally click [OK] (3) to complete.

I Options			X
<u>Settings</u>	Language:	English 🗸	]
About	Searching Time:	5	(5~20 sec.)
	(1) Searching Address	192.168.121.58	+ (2
		10.1.23.57	-
	(3)	OK Cancel	

- Searching Time: When the program is launched, it automatically searches the scanner in the network in 5 seconds (default). The searching time can be changed from a range of 5 to 20 seconds.
- If the [Virtual Scanner Link] program has been closed and then launched again, [Virtual Scanner Link] will automatically search and connect the network scanner it has previously connected to.
- After the scanner has been connected successfully, launch your TWAIN-compliant image-editing software application such as Avision Capture Tool by choosing Start>All Programs>Avision xxx Scanner>Avision Capture Tool (xxx indicates your scanner model).
- 4. A [Select Scanner Model] dialog box appears. Choose your scanner model and click [OK].

If more than one scanner on the network, a [**Network Scanner**] dialog will be prompted. Choose your desired scanner with correct MAC address and click [**OK**].

**5.** The main window of Avision Capture Tool appears. Press [**Scan**] to start scanning. In a second, the scanned image will be displayed.



#### Important:

When using the bundled software Avision Capture Tool to scan, you may be prompted with the message "Can not find scanner". Please wait a while and try again as the scanner may be warming up or communicating with Network Box.

# Use the Embedded Web Page

The embedded web page of Network Box allows you to display basic information, change your connection type and other settings.

### 4.1 View Network Box's Web Page

1. Open your browser.

4.

2. Type the IP address of the connected Network Box on the URL address. For example, http://10.2.23.30

The IP address can be obtained from the window of [Virtual Scanner Link]. (Refer to the preceding section 3.1 <u>Scan From A Wired Computer</u> to use the [Virtual Scanner Link].)

Ø٧	irtual Scanner	Link				3	×
v	irtual Sca	anner Link		Re	fresh	Settings	
	Vendor	Model Name	🔺 Device Name	Mac Addres	35	IP Address	
•	AVISION	XXXX	Network Box	2C18AE001	3174	<u>10.1.23.30</u>	
	AVISION	XXXX	Network Box	2C18AE00F	E17C	10.1.23.83	7
			Connect	Disconnect	1.0.0.24838	2014/12/31 13:48	

#### Alternatively,

You may simply click the IP Address on the window of the Virtual Scanner Link.

3. Enter admin as your login name and password, then the web page of Network Box will be displayed. (If required, you may change the user name and the password later on the [Network] page.)

YSTEM Status	IVI			
YSTEM PW Version AD_10.9			Status	TATUS
		VD_109	FW Version	YSTEM
Wan IP 10.1.23.135		0 1 23 135	Wan IP	IETMORK
Language English +		inglish ~	Language	

# 4.2 The Status Page

The [**Status**] page includes the following information:

Name	Description
FW Version	Displays current firmware version.
WAN IP	Displays IP address.
Language	Displays current language for the web page. Choice: English, Chinese

Avision	
STATUS	Status FW Version AD_1.0.9
NETWORK	Wan IP 10.1.23.135
TOOLS	Language English v

# 4.3 The System Page

The [System] page includes the following options:

Name	Description
Factory Default	Restore settings to factory default.
Reboot	Restart Network Box. The orange LED light turns off first then blinking and finally solidly on.



### To restore settings to factory default,

- 1. Press the [Factory Default] button. A [Confirmation] dialog box appears.
- 2. Press [Yes] to complete the settings.
- 3. The orange LED light turns off.
- 4. Wait for about 60 seconds until the orange LED light turns solidly on.

### Alternatively,

You may press the [Reset] button on Network Box to restore settings to default.

- 1. Use your pen to press and hold the [**Reset**] button for about 5 seconds. Release the button and then the orange LED light turns off.
- 2. Wait for about 60 seconds until the orange LED light turns solidly on.

# 4.4 The Network Page

The [**Network**] page includes the following options:

Name	Description
Device Name	Displays current network name for Network Box. You may type your desired name on the field and then click [ <b>Apply</b> ] to complete.
Timeout	Timeout for the connected network scanner: The allowable connection time after your last action. Range: 10 ~ 3,600 seconds. (Default is 0). If 0 second is set, this means no restriction on the connection time. If 300 seconds (5 minutes) is set, this means the network scanner will be disconnected 5 minutes after your last action.
Connection Type	Choice: <b>DHCP (default), Static</b> DHCP: Choose <b>DHCP</b> to obtain IP/subnet/gateway addresses automatically provided by the DHCP server. Static: Choose <b>Static</b> to assign your designated IP address. Type IP address on the following fields such as IP address, Subnet Mask, Gateway IP, Primary DNS, and Secondly DNS. DNS: Domain Name Server
Login	Displays current login user name for the web page. You may type your desired password on the password field and then click [ <b>Apply</b> ] to complete.

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STATUS	Networ	rk	
SYSTEM	Device Name	MB	Apply
NETWORK	Time Out(sec)	0	Apply
TOOLS	Connect Type	DHCP -	Apply
	Login		
	Account	admin	
	Password		Apply

# 5. Troubleshooting

# 5.1 Q&A

## How to update the latest firmware of Network Box?

To download the latest firmware,

- 1. Obtain and download the latest firmware to your USB flash drive from Avision's web site at http://www.avision.com.
- 2. Disconnect the USB cable connecting Network Box and the scanner.
- 3. Plug your USB flash drive containing the latest firmware file to the USB flash drive of Network Box.
- 4. Connect the power cord to the port marked "24VDC IN".
- **5**. The LED light turns solidly on in red color when the firmware is updating.
- 6. After about 3 minutes when the firmware has been successfully updated, the red LED light will be off and the status LED light resumes to its original status.

# 5.2 Technical Service

Before contact Avision, please prepare the following information:

- Scanner serial & revision number (located on the bottom of the scanner);
- Hardware configuration (e.g., your host CPU type, RAM size, free disk space, display card, interface card);

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