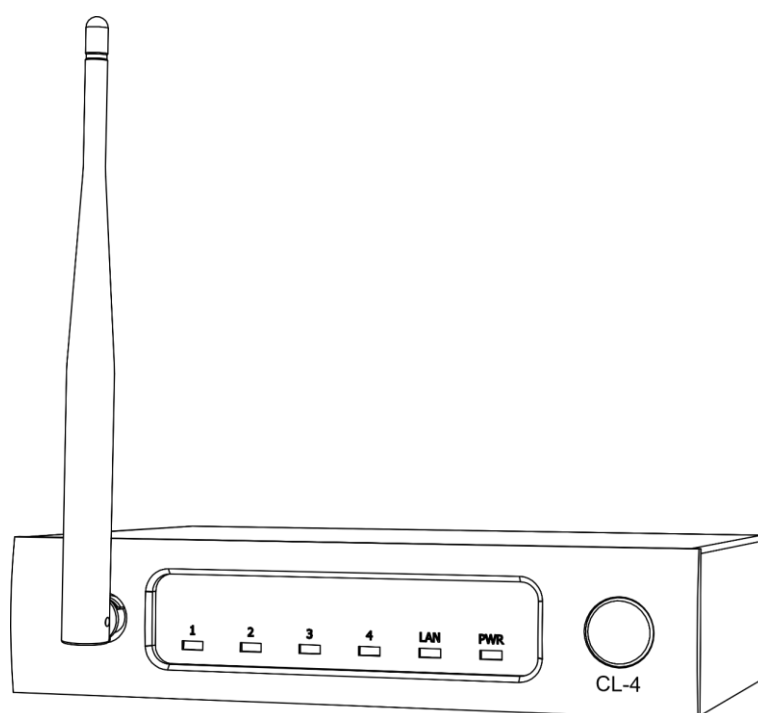


# DAP

## USER MANUAL



ENGLISH

**Odin CL-4 Connect**

**V2**

Product code: D3915

### Preface

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Thank you for purchasing this DAP product.

The purpose of this user manual is to provide instructions for the correct and safe use of this product.

Keep the user manual for future reference as it is an integral part of the product. The user manual shall be stored at an easily accessible location.

This user manual contains information concerning:

- Safety instructions
- Installation and operation of the device
- Intended and non-intended use of the device
- Maintenance procedures
- Troubleshooting
- Transport, storage and disposal of the device

Non-observance of the instructions in this user manual may result in serious injuries and damage of property.

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Design and product specifications are subject to change without prior notice.

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Highlite International and its authorized service providers are not liable for any injury, damage, direct or indirect loss, consequential or economic loss or any other loss arising from the use of, or inability to use or reliance on the information contained in this document.

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## 1. Introduction

### 1.1. Before Using the Product



**Important**  
Read and follow the instructions in this user manual before installing, operating or servicing this product.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

After unpacking, check the contents of the box. If any parts are missing or damaged, contact your Highlite International dealer.

Your shipment includes:

- Odin CL-4 Connect
- AC power adapter
- User manual

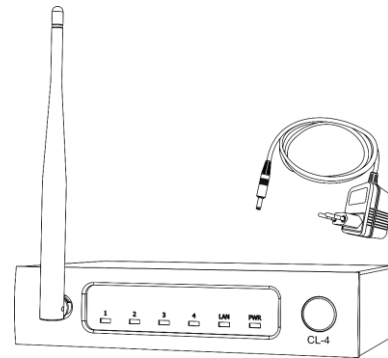


Fig. 01

### 1.2. Intended Use

This device is intended for professional use as an Ethernet hub. It is suitable only for indoor use. It is not suitable for households.

Any other use, not mentioned under intended use, is regarded as non-intended and incorrect use.

### 1.3. Text Conventions

Throughout the user manual the following text conventions are used:

- Buttons: All buttons are in bold lettering, for example "Press the **UP/DOWN** buttons"
- References: References to chapters and parts of the device are in bold lettering, for example: "Refer to **2. Safety**", "press the **power switch (03)**"
- 0–255: Defines a range of values
- Notes: **Note:** (in bold lettering) is followed by useful information or tips

### 1.4. Symbols and Signal Words

Safety notes and warnings are indicated throughout the user manual by safety signs.

Always follow the instructions provided in this user manual.



**DANGER**

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING**

Indicates an imminently hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION**

Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury.



**Attention** Indicates important information for the correct operation and use of the product.



**Important** Read and observe the instructions in this document.



**Electrical hazard**



Provides important information about the disposal of this product.

## 1.5. Symbols on the Information Label

This product is provided with an information label. The information label is located on the bottom plate of the device.

The information label contains the following symbols:



This device shall not be treated as household waste.



Caution. Risk of electric shock. Do not open.

## 2. Safety



**Important**  
**Read and follow the instructions in this user manual before installing, operating or servicing this product.**

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual.

### 2.1. Warnings and Safety Instructions



**DANGER**  
**Danger for children**

For adult use only. The device must be installed beyond the reach of children.

- Do not leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach. Packaging material is a potential source of danger for children.



**DANGER**  
**Electric shock caused by short-circuit**

This device is delivered with an AC power adapter. Incorrect handling of the AC power adapter may result in hazardous situations.

- Use only the AC power adapter delivered with the device.

- Do not wrap the power cable around the power adapter or any other object. This can damage the internal wires.
- Do not cover the power adapter with anything when it is plugged into the socket-outlet. This may cause overheating.
- Do not expose the power adapter to water or other liquids.

Do not use the power adapter:

- If it shows signs of overheating, for example the plastic is damaged
- If the AC input pins show signs of corrosion or overheating
- If the power cable is damaged or shows signs of material fatigue



**Attention**  
**Power supply**

Before connecting the AC power adapter to the power supply, make sure that the current, voltage and frequency match the input voltage, current and frequency specified on the information label on the AC power adapter.



**Attention**  
**General safety**

- Do not shake the device. Avoid brute force when installing or operating the device.
- If the device is exposed to extreme temperature variations (e.g. after transportation), do not switch it on immediately. Let the device reach room temperature before switching it on, otherwise it may be damaged by the formed condensation.



**Attention**  
**This device shall be used only for the purposes it is designed for.**

This device is intended for professional use as an Ethernet hub. It is suitable only for indoor use. It is not suitable for households. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

This device does not contain user-serviceable parts. Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.



**Attention**  
**Do not expose the device to conditions that exceed the rated IP class conditions.**

This device is IP20 rated. IP (Ingress Protection) 20 class provides protection against solid objects greater than 12 mm, such as fingers, and no protection against harmful ingress of water.

## 2.2. Requirements for the User

This product may be used by ordinary persons. Maintenance and installation may be carried by ordinary persons. Service shall be carried out only by instructed or skilled persons. Contact your Highlite International dealer for more information.

Instructed persons have been instructed and trained by a skilled person, or are supervised by a skilled person, for specific tasks and work activities associated with the service of this product, so that they can identify risks and take precautions to avoid them.

Skilled persons have training or experience, which enables them to recognize risks and to avoid hazards associated with the service of this product.

Ordinary persons are all persons other than instructed persons and skilled persons. Ordinary persons include not only users of the product but also any other persons that may have access to the device or who may be in the vicinity of the device.

## 3. Description of the Device

The Odin CL-4 Connect is an Ethernet hub used to create a network between a computer and the Odin Line Array System. The hub has 4 RC NET ports to which you can connect up to 12 Odin speaker units per port and one uplink port to connect the device to a computer or a router. You can create a network via the Wi-Fi or via LAN. The network allows you to configure the editable DSP presets of the Odin Line Array System with the Odin CL-4 Editor software.

### 3.1. Views

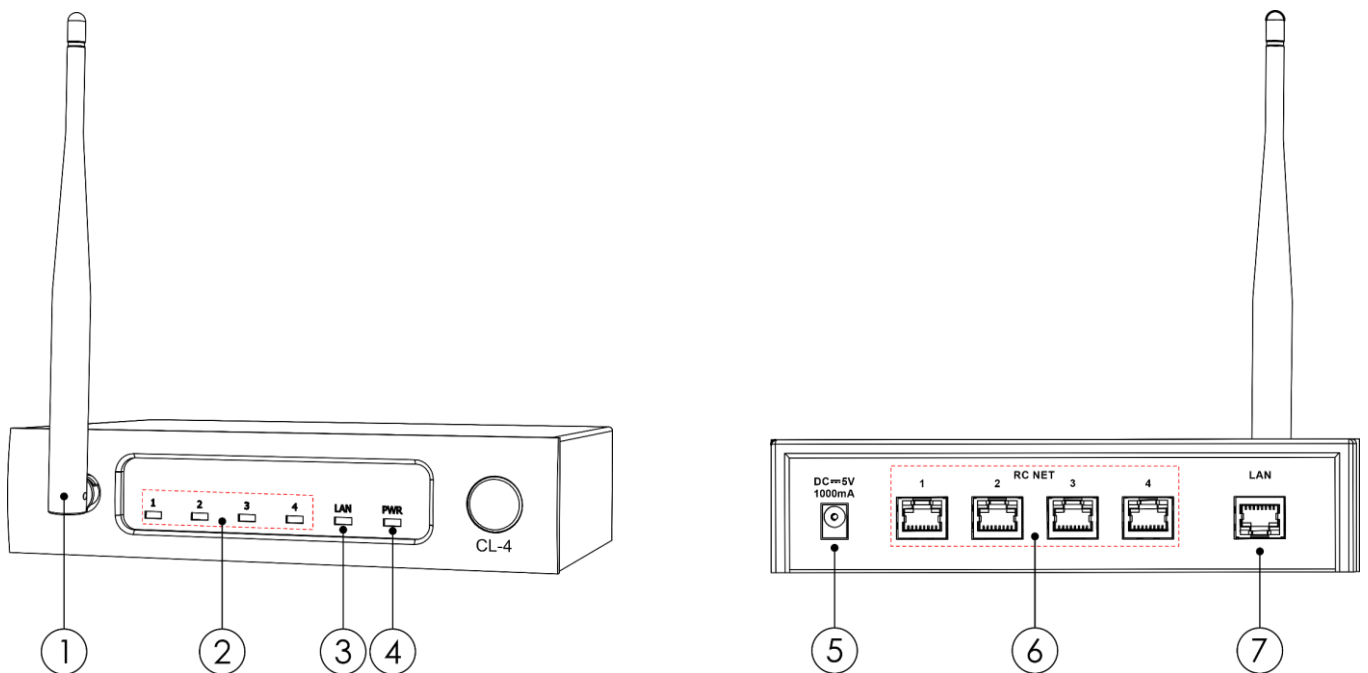


Fig. 02

- 01) Antenna
- 02) LED indicators for ports 1–4
- 03) LAN connection LED indicator
- 04) Power LED indicator

- 05) DC connector, 5 V DC 1 A
- 06) RC NET ports 1–4 (RJ45 connectors)
- 07) LAN port (RJ45 connector)

## 3.2. Product Specifications

Model:	Odin CL-4 Connect
<b>Electrical:</b>	
Input voltage:	5 V DC
Input current:	1 A
Power consumption:	5 W
Protection class:	Class III
<b>Physical:</b>	
Dimensions:	197 x 135 x 46 mm (L x W x H), without the antenna
Weight:	1 kg (with the antenna)
<b>Operation and control:</b>	
Control panel:	6 LED indicators
Display:	No
Wireless module:	2,4 GHz
Transmission rate:	57600 Bd
<b>Connections:</b>	
Power connection:	DC connector IN
Uplink port:	1 x RJ45 LAN port with 2 built-in LED indicators
Network ports:	4 x RJ45 RC NET ports with 2 built-in LED indicators
<b>AC power adapter:</b>	
Input voltage:	100–240 V AC, 50/60 Hz
Input current:	0,3 A
Output voltage:	5 V DC
Output current:	1 A
Protection class:	Class II
<b>Construction:</b>	
Housing:	Metal
Color:	Black
IP rating:	IP20
Cooling:	Natural heat dissipation
<b>Thermal:</b>	
Ambient temperature $t_a$ :	From -10 °C to 40 °C

## 3.3. Software

The Odin CL-4 Editor is a free software program developed by Highlite International. You can download the software from the Odin CL-4 Connect product page on the website of Highlite International. The software allows you to configure the editable DSP presets of the Odin Line Array System.

Product page for downloading the software and the user manual of the software: [D3915](#)



### 3.4. Dimensions

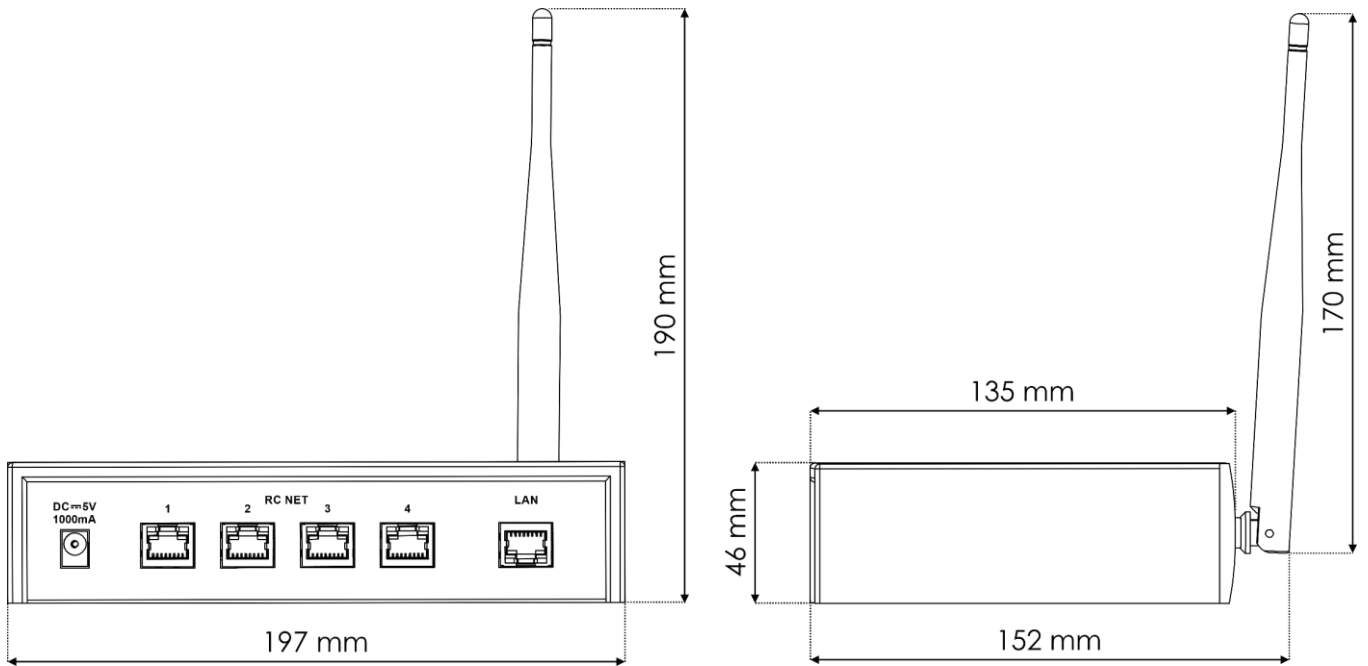


Fig. 03

## 4. Installation

### 4.1. Safety Instructions for Installation



**Attention**  
Make sure there is enough space for ventilation around the device.

Do not install near equipment that produces heat, for example amplifiers.

### 4.2. Installation Site Requirements

- The device must be installed only indoors.
- The device can be placed on a flat surface.
- The maximum ambient temperature  $t_a = 40\text{ °C}$  must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.

### 4.3. Connecting to Power Supply



**Attention**  
Incorrect handling of the AC power adapter may result in hazardous situations

This device is delivered with an AC power adapter. Incorrect handling of the AC power adapter may result in hazardous situations.

- Connect the device to the socket-outlet with the delivered AC power adapter. Use only the AC power adapter delivered with the device.
- Make sure that the socket-outlet is easily accessible.
- Disconnect the AC power adapter from the socket-outlet when the device is not in use.

## 5. Setup

Before setting up a network with the Odin CL-4 Connect you need first to configure the device. You can connect the device via Wi-Fi or via LAN to a computer or a laptop and configure its settings via the web browser.

### 5.1. Connecting to a Computer via Wi-Fi

The Odin CL-4 Connect can be connected to a computer, laptop, tablet or smartphone with a wireless module.

To connect the device to a computer or a laptop via Wi-Fi, follow the steps below:

- 01) Power the device. See **4.3. Connecting to Power Supply** on page 8 for more information. The **power LED indicator (04)** will light up in red.
- 02) Put the **antenna (01)** in upright position.
- 03) Turn on the Wi-Fi on your computer or laptop.
- 04) Open the list with available Wi-Fi networks on your computer or laptop.
- 05) Select "ODIN CL-4" from the list.
- 06) Connect to "ODIN CL-4". The password is "T-8A!Odin!S-18A". To change the password refer to **5.3. Configuration via Web Browser** on pages 10–12 for more information.

**Note:** If the device is reset to the default factory settings, the default SSID is "CL-4" and the default password is "12345678".

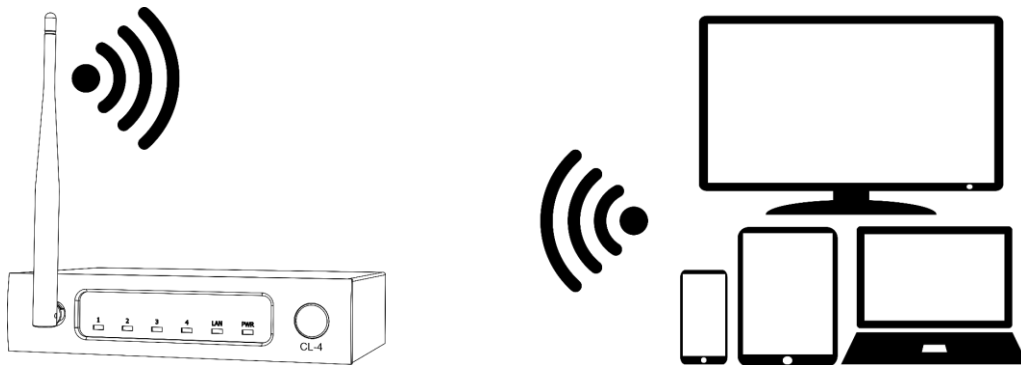


Fig. 04

### 5.2. Connecting to a Computer via LAN

To connect the device to a computer or a laptop via LAN, follow the steps below:

- 01) Use a UTP CAT-5/CAT-5E/CAT-6 cable to connect the **LAN port (07)** of the device to the RJ45 port on your computer/laptop.
- 02) Power the device. See **4.3. Connecting to Power Supply** on page 8 for more information. The **power LED indicator (04)** will light up in red.
- 03) Assign a static IP address to your computer/laptop in the range 10.10.100.xxx with a Subnet mask 255.255.255.0.

**Note:** The default IP address of the device is 10.10.100.254.



Fig. 05

## 5.3. Configuration via Web Browser

The Odin CL-4 Connect can be configured via a web interface. To connect the device to a web browser follow the steps below:

- 01) Connect the Odin CL-4 Connect to a laptop/computer. Refer to **5.1. Connecting to a Computer via Wi-Fi** or to **5.2. Connecting to a Computer via LAN** on page 9 for more information.
- 02) Open the Internet browser on your computer/laptop.
- 03) Enter the IP address of the device into the address bar of the browser. The static default IP address of the device is 10.10.100.254.
- 04) Press Enter on the keyboard of the computer/laptop to open the web interface in the browser.
- 05) Enter the log-in details when prompted:
  - Log-in account: admin
  - Password: admin

**Note:** You can change the password after you log in.

The web interface offers the following configuration sections:

- Mode selection
- AP Interface settings
- STA Interface settings
- Application settings
- Device management

There are two buttons under each section of the web interface: **Apply** and **Cancel**.

- Click the **Apply** button to save the changes you made in the respective section.
- Click the **Cancel** button to cancel the changes.

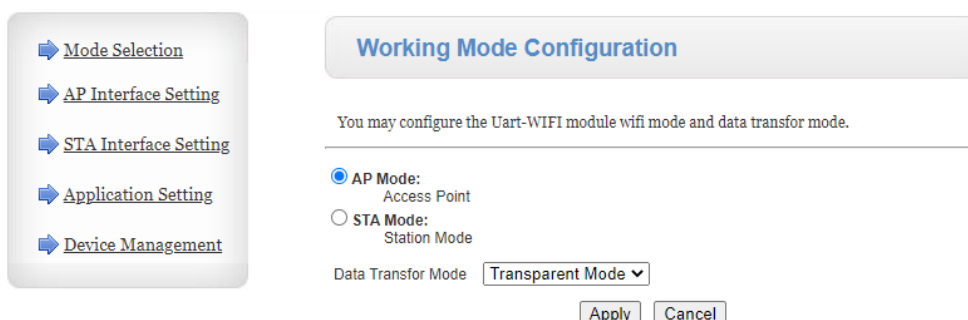
### 5.3.1. Mode Selection

In this section you can configure the working mode of the device.

- 01) Select AP mode or STA mode.
  - AP mode (Access point): to connect the device to the network via Wi-Fi
  - STA mode (Station mode): to connect the device to the network via LAN

**Note:** If you select STA mode, this will disable the wireless connection. To enable the wireless connection, connect the device via LAN to the computer/laptop and select AP mode.

- 02) Click **Apply** to confirm your choice.



- 03) Click on **Device Management**.
- 04) Click on **Restart** in the Restart Module section to reboot the device.

## 5.3.2. AP Interface Settings

In this section you can configure the following settings:

- Wireless network: network mode, SSID, frequency channel
- CL-4: security mode
- WPA: WPA algorithms, pass phrase
- LAN Setup: IP address, Subnet mask, DHCP type

- [Mode Selection](#)
- [AP Interface Setting](#)
- [STA Interface Setting](#)
- [Application Setting](#)
- [Device Management](#)

### AP Interface Setting

AP Interface Setting such as SSID, Security...

Wireless Network	
Network Mode	11b/g/n mixed mode ▼
Network Name(SSID)	CL-4 <span style="float: right;">Hidden <input type="checkbox"/></span>
BSSID	98:D8:63:BF:BD:B8
Frequency (Channel)	AutoSelect ▼
Wireless Distribution System(WDS)	WDS Configuration

CL-4	
Security Mode	WPA-PSK ▼

WPA	
WPA Algorithms	<input type="radio"/> TKIP <input checked="" type="radio"/> AES <input type="radio"/> TKIPAES
Pass Phrase	12345678

LAN Setup	
IP Address(Default DHCP Gateway)	10.10.100.254
Subnet Mask	255.255.255.0
DHCP Type	Server ▼

## 5.3.3. STA Interface Settings

In this section you can configure the following settings:

- STA Interface Parameters: AP's SSID, MAC address, security mode, encryption type, and pass phrase
- WAN Connection Type
- DHCP Mode: host name

- [Mode Selection](#)
- [AP Interface Setting](#)
- [STA Interface Setting](#)
- [Application Setting](#)
- [Device Management](#)

### STA Interface Setting

You could configure STA interface parameters here.

STA Interface Parameters	
AP's SSID	HF-A11x_AP <span style="float: right;">Search...</span>
MAC Address (Optional)	
Security Mode	WPAPSK ▼
Encryption Type	AES ▼
Pass Phrase	12345678

WAN Connection Type: DHCP(Auto config) ▼

DHCP Mode	
Hostname(Optional)	HF-A11

## 5.3.4. Application Settings

In this section you can configure the following settings:

- UART Settings: baud rate, data bits, parity, stop, CTSRTS
- UART AutoFrame Settings
- Network Settings: mode, protocol, port, max TCP number, TCP time out

- ➔ [Mode Selection](#)
- ➔ [AP Interface Setting](#)
- ➔ [STA Interface Setting](#)
- ➔ [Application Setting](#)
- ➔ [Device Management](#)

### Wifi-Uart Setting

You could configure the Uart parameters and network parameters of the wifi-uart application.

Uart Setting	
Baudrate	57600 ▾
Data Bits	8 ▾
Parity	None ▾
Stop	1 ▾
CTSRTS	Disable ▾

Apply Cancel

UART AutoFrame Setting	
UART AutoFrame	Disable ▾

Apply Cancel

Network Setting	
Mode	Server ▾
Protocol	TCP ▾
Port	5000
Server Address	10.10.10.100
MAX TCP Num. (1-32)	32
TCP Time out (MAX 600 s)	300

Apply Cancel

### 5.4. Connecting Speaker Units

To connect the speaker units to the device, follow the steps below:

- 01) Use a UTP CAT-5/CAT-5E/CAT-6 cable to connect one of the **4 RC Net ports (06)** of the device to the RJ45 data connector IN on the Odin speaker unit.
- 02) Connect the RJ45 data link connector LINK of the Odin speaker unit to the RJ45 data connector IN on the 2<sup>nd</sup> Odin speaker unit with a UTP CAT-5/CAT-5E/CAT-6 cable.
- 03) Repeat step 2 to connect the rest of the Odin speaker units. You can connect up to 12 Odin speaker units per port to the device.

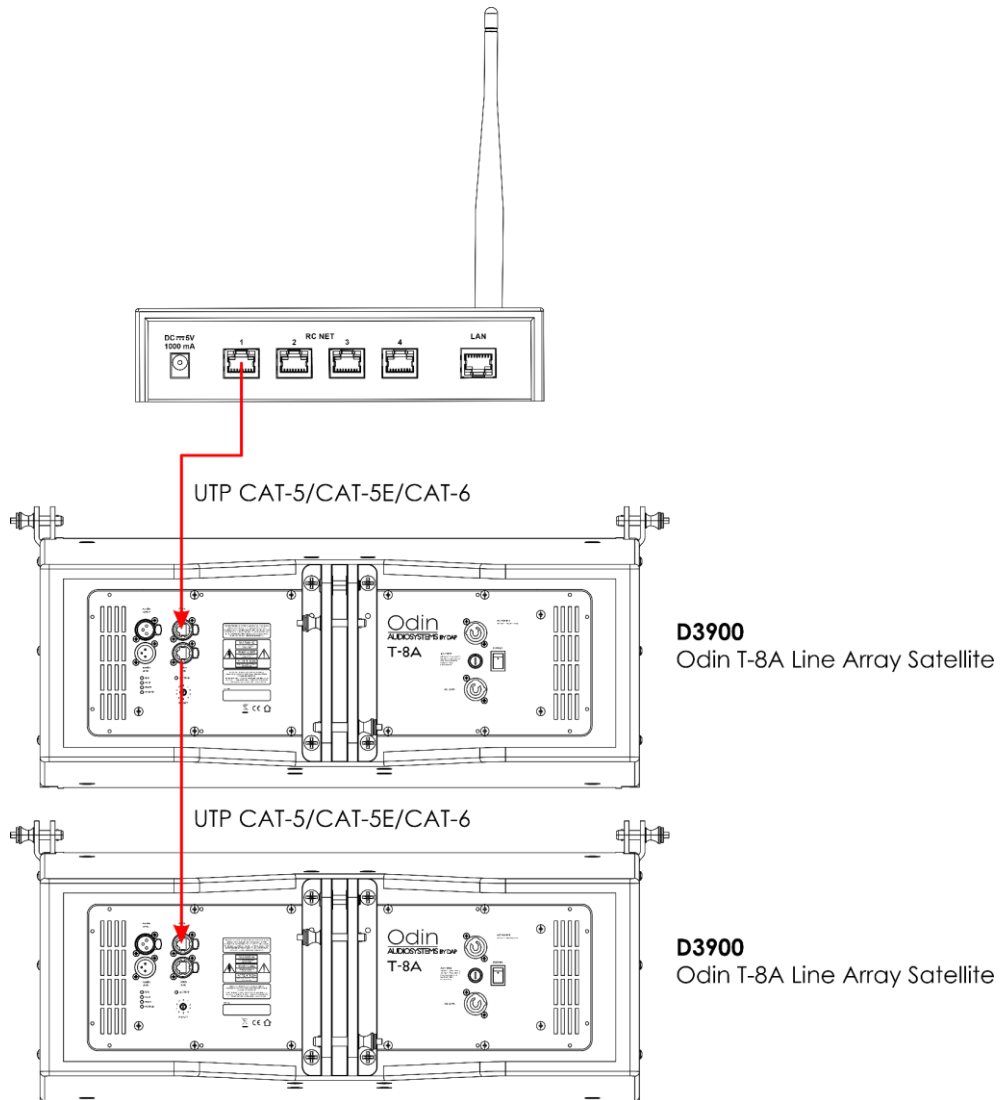


Fig. 06

**Note:** The total Ethernet cable length must not exceed 100 m.

### 5.5. Network Setup Examples

With the Odin CL-4 Connect you can create a network between a computer/laptop and the Odin Line Array System. You can connect up to 12 Odin speaker units per port to the device. The network allows configuration of the editable DSP presets of the Odin Line Array System with the Odin CL-4 Editor software.

#### 5.5.1. Network Setup via Wi-Fi

In a network setup via Wi-Fi the Odin CL-4 Connect is connected via Wi-Fi to the computer/laptop.

- 01) Connect the device to a computer or a laptop via Wi-Fi. See **5.1. Connecting to a Computer via Wi-Fi** on page 9 for more information.
- 02) Configure the settings of the device if necessary. See **5.3. Configuration via Web Browser** on pages 10–12 for more information.
- 03) Connect the Odin speaker units to the device. See **5.4. Connecting Speaker Units** on page 13 for more information.

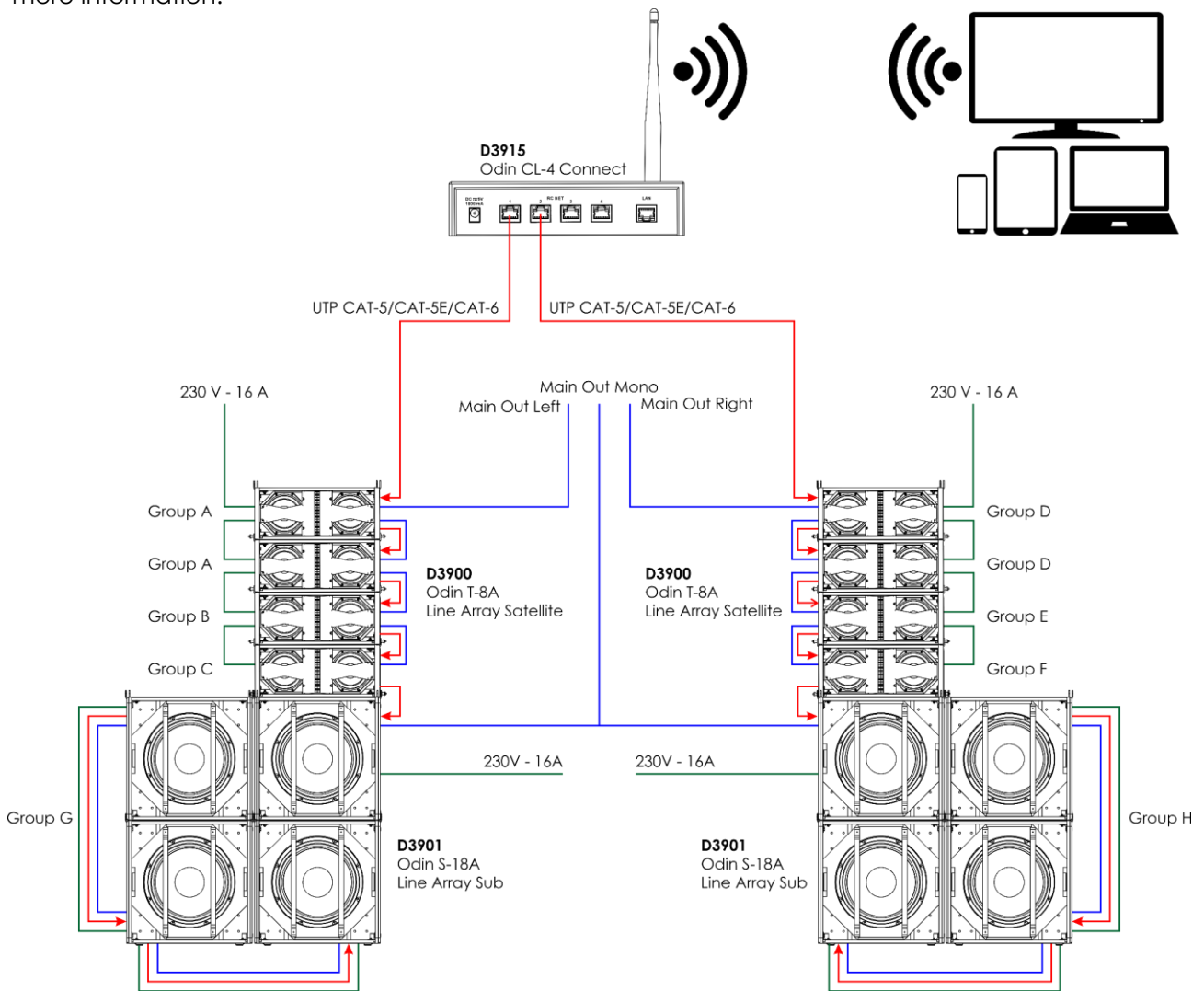


Fig. 07

**Note:** The total Ethernet cable length must not exceed 100 m.

## 5.5.2. Network Setup via LAN

In a network setup via LAN the Odin CL-4 Connect is connected via a router to the computer/laptop.

- 01) Use a UTP CAT-5/CAT-5E/CAT-6 cable to connect the **LAN port (07)** of the device to one of the RJ45 ports on your router.
- 02) Connect your computer or a laptop to the router using a UTP CAT-5/CAT-5E/CAT-6 cable.
- 03) Configure the settings of the device. See **5.3. Configuration via Web Browser** on pages 10–12 and **5.5.2.1. Configuration Settings** on page 15 for more information.
- 04) Connect the Odin speaker units to the device. See **5.4. Connecting Speaker Units** on page 13 for more information.

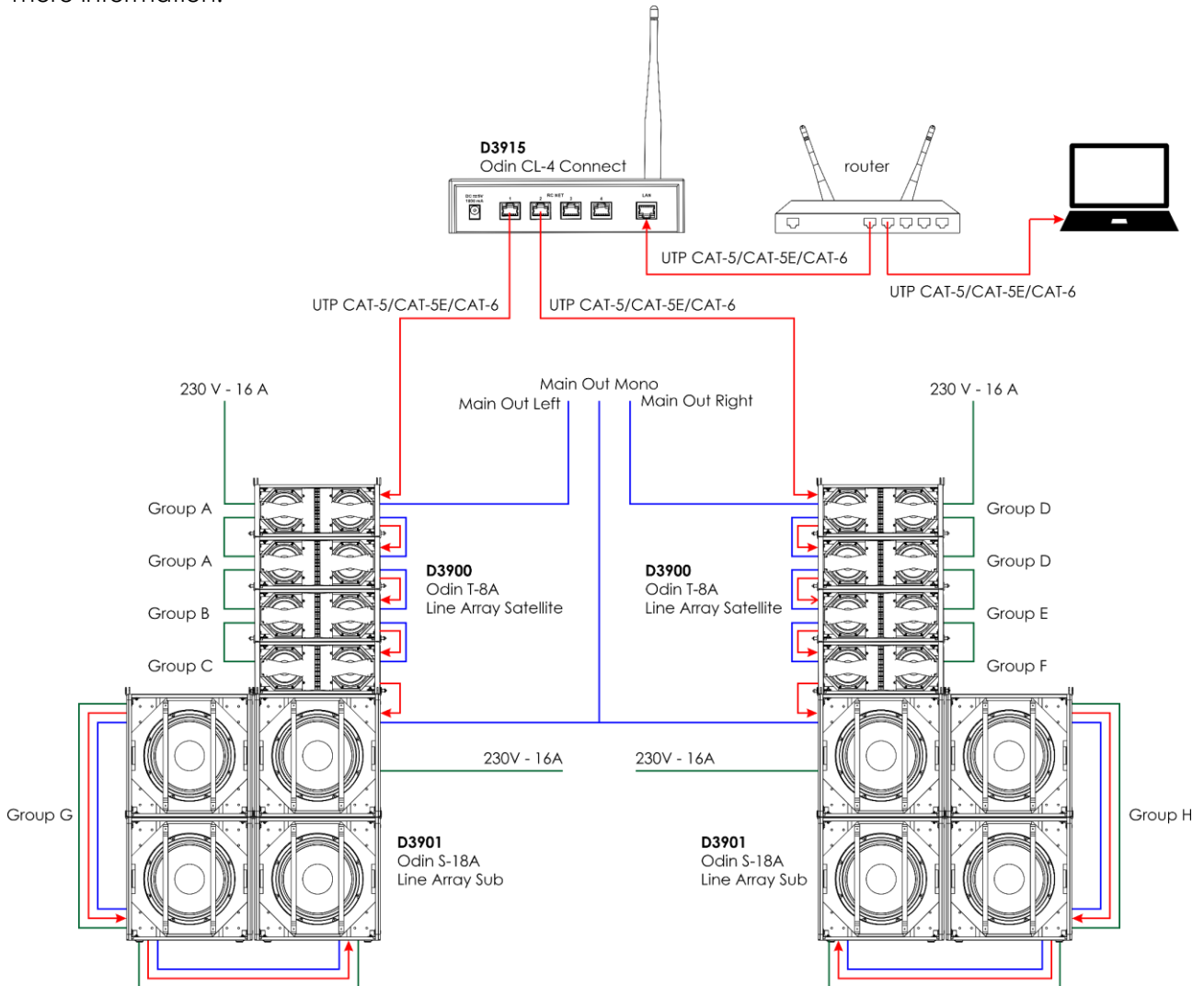


Fig. 08

**Note:** The total Ethernet cable length must not exceed 100 m.

### 5.5.2.1. Configuration Settings

When you create a network via LAN using a router, make sure that the following settings of the Odin CL-4 Connect are correctly configured:

- Select STA mode in Mode Selection. See **5.3.1 Mode Selection** on page 10 for more information.
- Disable the DHCP function of the device under the LAN Settings in AP Interface Settings. See **5.3.2. AP Interface Settings** on page 11 for more information.
- Change the IP address of the device under the LAN Settings in AP Interface Settings. See **5.3.2. AP Interface Settings** on page 11 for more information. Use the IP address assigned by the DHCP server.

**Note:** Make sure that all devices in the network have unique IP address in the same range.



## 5.6. Connecting the Software

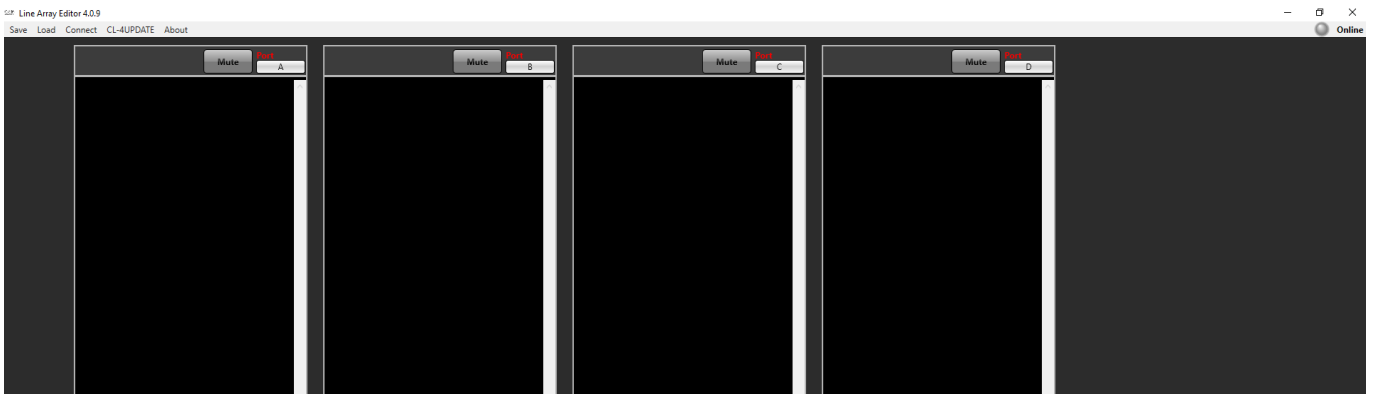
The Odin CL-4 Editor is a free software program developed by Highlite International. You can download the software from the Odin CL-4 Connect product page on the website of Highlite International.

For more information about installing the software and working with the program refer to the user manual of the software. You can download the user manual of the Odin CL-4 Editor from the Odin CL-4 Connect product page on the website of Highlite International.

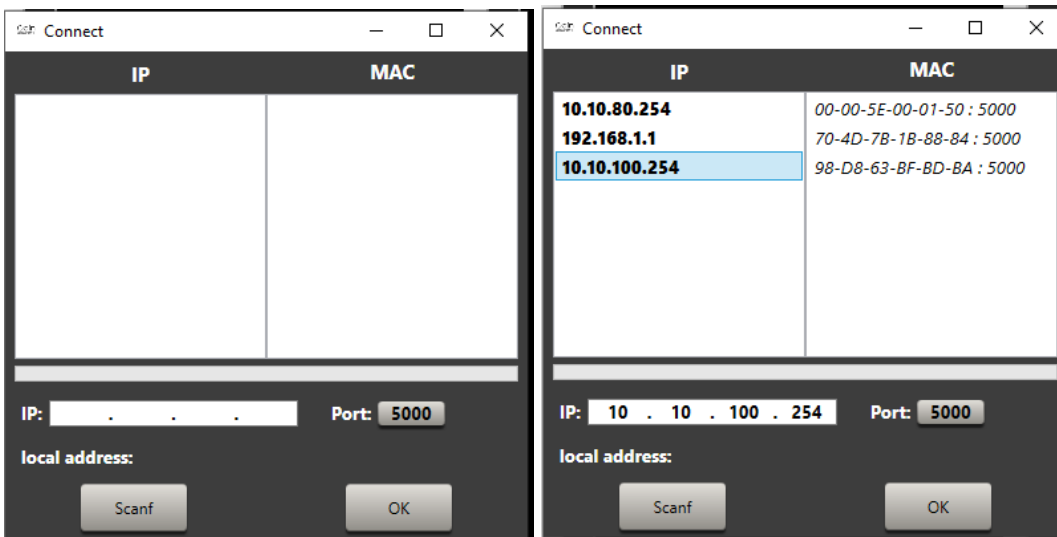
Product page for downloading the software and the user manual of the software: [D3915](#)

To connect the device to the software:

- 01) Open the Odin CL-4 Editor software.
- 02) Click **Connect** on the top menu.



- 03) In the pop-up window click **Scanf** to scan for available devices. A list with the IP addresses of all devices in the network will appear.



- 04) Select the IP address of the Odin CL-4 Connect.
- 05) Click **OK** to confirm the selection. The software is now connected. At the top right corner of the window a green circle shows the online status of the program. If the circle is gray, the software is not connected.



## 6. Troubleshooting

This troubleshooting guide contains solutions to problems which can be carried out by an ordinary person. The device does not contain user-serviceable parts.

Unauthorized modifications to the device will render the warranty void. Such modifications may result in injuries and material damage.

Refer servicing to instructed or skilled persons. Contact your Highlite International dealer in case the solution is not described in the table.

Problem	Probable cause(s)	Solution
The device does not function at all and the Power LED indicator is off	No power to the device	<ul style="list-style-type: none"> <li>Check if the device is connected to the power outlet with the AC power adapter</li> </ul>
No data transfer	The Ethernet cables are not correctly connected	<ul style="list-style-type: none"> <li>Disconnect all Ethernet cables and reconnect them</li> </ul>
	The device is not correctly connected to the network	<ul style="list-style-type: none"> <li>Check the connection and the settings and correct, if necessary</li> </ul>
Bad data transfer	The total Ethernet cable length exceeds 100 m	<ul style="list-style-type: none"> <li>Reduce the total Ethernet cable length for the whole setup</li> </ul>

## 7. Maintenance

### 7.1. Preventive Maintenance



**Attention**

Before use, examine the device visually for any defects.

#### 7.1.1. Basic Cleaning Instructions

To clean the device, follow the steps below:

- 01) Switch the device off.
- 02) Clean the device with a soft, lint-free cloth.



**Attention**

- Do not immerse the device in liquid.
- Do not use alcohol or solvents.

### 7.2. Corrective Maintenance

The device does not contain user-serviceable parts. Do not open the device and do not modify the device.

Refer repairs and servicing to instructed or skilled persons. Contact your Highlite International dealer for more information.

## 8. Deinstallation, Transportation and Storage

---

- Use the original packaging to transport the device, if possible.
- Clean the device before storing. Follow the cleaning instructions in chapter **7.1.1. Basic Cleaning Instructions** on page 17.
- Store the device in the original packaging, if possible.

## 9. Disposal

---

### Correct disposal of this product



### Waste Electrical and Electronic Equipment

This symbol on the product, its packaging or documents indicates that the product shall not be treated as household waste. Dispose of this product by handing it to the respective collection point for recycling of electrical and electronic equipment. This is to avoid environmental damage or personal injury due to uncontrolled waste disposal. For more detailed information about recycling of this product contact the local authorities or the authorized dealer.

## 10. Approval

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Hereby, Highlite International declares that the device is in compliance with RTTE Directive 1999/5/EC (RTTE – Radio and Telecommunications Equipment Directive).

The full text of the EU declaration of conformity is available at the respective product page on the website of Highlite International ([www.highlite.com](http://www.highlite.com)).

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