

USER MANUAL

ENGLISH V1.0



SC-5.2 Source Control

Product code: D1540



Preface

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
- Intended and non-intended use of the device
- Installation and operation 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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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:

- DAP SC-5.2 Source Control
- Screwless terminal block plugs (2 pairs)
- Schuko to Power Pro True cable (1,5 m)
- Remote control
- User manual



1.2. Intended Use

This device is intended for professional use as an audio input selector. It can be installed only indoors. This device 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 parts of the device are in bold lettering, for example: "turn the **adjustment** handle (05)". References to chapters are hyperlinked
- 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.

Indicates an imminently hazardous situation which, if not avoided, will result in death or DANGER serious injury. WARNING serious injury. CAUTION moderate injury. **Electrical hazard**

Indicates a potentially hazardous situation which, if not avoided, could result in death or

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

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

Important Read and observe the instructions in this document.



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 mounting bracket.

The information label contains the following symbols:



This device is designed for indoor use.



This device shall not be treated as household waste.



Read and follow the instructions in the user manual before installing, operating or servicing the device.



This device falls under IEC protection class I.

DAP

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 any parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within the reach of children. Packaging material is a potential source of danger for children.



DANGER

Electric shock caused by dangerous voltage inside

There are areas inside the device where dangerous touch voltage may be present.

- Do not open the device or remove any covers.
- Do not operate the device if the covers or the housing are open. Before operation, check if the housing is firmly closed and all screws are tightly fastened.
- Disconnect the device from the electrical power supply before service and maintenance, and when the device is not in use.



DANGER

Electric shock caused by short-circuit

This device falls under IEC protection Class I.

- Make sure that the device is electrically connected to ground (earth). Connect the device only to a socket-outlet with a ground (earth) connection.
- Do not cover the ground (earth) connection.
- Do not let the power cable come into contact with other cables. Handle the power cable and all connections with the mains with caution.
- Do not modify, bend, mechanically strain, put pressure on, pull or heat up the power cable.
- Make sure that the power cable is not crimped or damaged. Examine the power cable periodically for any defects.
- Do not immerse the device in water or other liquids. Do not install the device in a location where flooding may occur.
- Do not use the device during thunderstorms. Disconnect the device from the electrical power supply immediately.



Attention Power supply

• Before connecting the device 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 device.

• Make sure that the cross-sectional area of the extension cords and power cables is sufficient for the required power consumption of the device.



Attention General safety

- Do not shake the device. Avoid brute force when installing or operating the device.
- If the device is dropped or struck, disconnect the device from the electrical power supply immediately.
- 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.
- If the device fails to work properly, discontinue use immediately.



Attention For professional use only This device must be used only for the purposes it is designed for.

This device is designed to be used as an audio input selector. Any incorrect use may lead to hazardous situations and result in injuries and material damage.

- This device is not suitable for households.
- 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. Installation and maintenance may be carried out 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 installation, service and maintenance 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 avoid hazards associated with the installation, service and maintenance 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.



Figure 2

3. Description of the Device

The SC-5.2 Source Control is a stereo audio input selector. The device can be operated manually, with the included IR remote control or with an optional wall panel (SC-WP1). The device is equipped with 3 unbalanced audio line inputs (with gold-plated RCA connectors), 1 balanced audio line input with a terminal plug (suitable for long cable runs) and a summed mono audio input for the wall panel (SC-WP1). The terminal output connector provides a balanced stereo audio signal.

3.1. Front view



- 01) Push button switch (ON/OFF) with backlight
- 02) IR sensor
- 03) IR extender connector IN (3,5 mm jack)
- 04) Mute LED indicator (red)
- 05) 8 volume LED indicators (green)
- 06) Volume control
- 07) Remote LED indicator (amber)
- 08) LED indicator (amber): Source 5
- 09) 4 LED indicators (amber): Sources 1–4
- 10) 4 source selection buttons: Sources 1-4

3.2. Back View



- 11) 3,5 mm terminal connectors IN, balanced (left/right) Source 1
- 12) RCA connectors IN, unbalanced (left/right) Source 2
- 13) RCA connectors IN, unbalanced (left/right) Source 3
- 14) RCA connectors IN, unbalanced (left/right) Source 4
- 15) 3,5 mm terminal connectors OUT, balanced (left/right)
- 16) RJ45 wall panel connector IN (a summed mono audio input for a 5th source via the wall panel)
- 17) RJ45 connector IN (for RS232/RS485-compatible devices)
- 18) DIP switch (no function)
- 19) Power Pro connector IN, 100–240 V AC, 50/60 Hz

3.3. Product Specifications

Model:	SC-5.2 Source Control
Inputs:	
Stereo inputs	4
Stereo input connector	RCA unbalanced 3,5 mm / Terminal block
Balanced stereo input maximum level	15,5 dBu
Stereo input impedance	300000 Ω
Outputs:	
Main outputs	1
Main output connector	Terminal block
Audio Specifications:	
THD level	< 0,05 %
Frequency response minimum	20 Hz
Frequency response maximum	20000 Hz
Electrical Specifications and Connections	:
Power supply	100–240 V AC, 50–60 Hz
Power connector IN	Power Pro Blue
Mechanical Specifications:	
Height	55 mm
Width	167 mm
Length	210 mm
Housing	Aluminum die-cast
Color	Black
Weight	1 kg
IP rating	IP20 (indoor use only)
Product Properties:	
LED Indicators	Channel select / Output level / Power / Mute / Remote
Thermal Specifications:	
Maximum ambient temperature	40 °C
Minimum ambient temperature	0 °C
Included Items:	
Included cables	Power Pro Cable

3.4. Optional Accessories

You can additionally purchase the following accessories:

- <u>D1541</u> SC-WP1 Wall Panel Black
- D1542 SC-WP1 Wall Panel White



3.5. **Dimensions**





4. Installation and Setup

4.1. Warnings and Precautions



Attention Connect all data cables before supplying power. Disconnect power supply before connecting or disconnecting data cables.

4.2. Ambient Conditions

- The device can be used only indoors.
- The maximum ambient temperature t_a = 40 °C must never be exceeded.
- The relative humidity must not exceed 50 % with an ambient temperature of 40 °C.

4.3. Setup Example

This figure shows an example of a typical setup with 5 sources, a wall panel, and an output device. For more information refer to Connecting Devices (see <u>4.4. Connecting Devices</u> on page 11).





4.4. Connecting Devices

4.4.1. Connecting Source Devices

You can connect 4 stereo audio sources to the device: Source 1, Source 2, Source 3, and Source 4 through the input connections.

Note:

If you want to connect an external 5th source, you need to use a wall panel (see <u>4.4.3. Connecting a Wall</u> <u>Panel</u> on page 11). Source 5 can be selected only from the wall panel.

The device has 2 types of input connections:

- balanced 3,5 mm terminal connectors with terminal block plugs (left/right), and
- unbalanced RCA connectors (left/right).

Use the balanced 3,5 mm terminal connector for Source 1 to connect a remote source to the device. The input is optimized for longer cable runs due to its higher CMRR (common mode rejection ratio).

To connect a source to the balanced 3,5 mm terminal connectors:

- 01) Connect the output cables of the source device to a pair of screwless terminal block plugs supplied with the device. Make sure that the wire polarity is correct.
- 02) Insert the screwless terminal block plugs into the 3,5 mm terminal connectors IN (11).

Use the unbalanced RCA connectors for Sources 2-4 to connect sources that are close to the device.

Connect the source to one of the RCA connectors IN (12/13/14).

4.4.2. Connecting Output Devices

You can connect an active speaker or a setup with an amplifier and speakers to the device to output the audio signal of the sources.

- 01) Connect the cable of the speaker or the amplifier to a pair of screwless terminal block plugs supplied with the device. Make sure that the wire polarity is correct.
- 02) Insert the screwless terminal block plugs into the 3,5 mm terminal connectors OUT (15).

4.4.3. Connecting a Wall Panel

You can control the device remotely via a wall panel. The wall panel is not supplied with the device (see <u>3.4.</u> <u>Optional Accessories</u> on page 8).

Use a CAT-5/CAT-5E/CAT-6 cable to connect the wall panel to the RJ45 wall panel connector IN (16).

Note:

The summed mono audio input via the wall panel can be switched between line level and phone level. For more information refer to the user manual of the wall panel.

4.4.4. Connecting an IR Sensor Extender

In the event that it is not possible to control the device with the supplied IR remote control as there is no direct line of sight to the **IR sensor (02)**, you can install an IR sensor extender. The IR sensor extender is not supplied with the device.

Connect the cable of the IR sensor extender to the IR extender connector IN (03).

4.5. Connecting to Power Supply



DANGER

Electric shock caused by short-circuit

The device accepts AC mains power at 100–240 V and 50/60 Hz. Do not supply power at any other voltage or frequency to the device.

This device falls under IEC protection class I. Make sure that the device is always electrically connected to the ground (earth).

Before connecting the device to the socket-outlet:

- Make sure that the power supply matches the input voltage specified on the information label on the device.
- Make sure that the socket-outlet has ground (earth) connection.

Connect the device to the socket-outlet with the power plug.

5. Operation

5.1. Safety Instructions for Operation



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

This device is intended for professional use as an audio input selector. It can be installed only indoors. This device is not suitable for households.

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



Attention Power supply

Before connecting the device 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 device.

5.2. Switching ON/OFF

The device has a power switch.



- Press the **push button switch (01)** in ON position to switch on the device. The backlight turns on.
- Press the **push button switch (01)** in OFF position to switch off the device. The backlight turns off.

Make sure that the device is switched off from the **push button switch (01)** when the device is not in use.



5.3. Control Modes

The device can be controlled:

- manually (see <u>5.3.1. Manual Control</u>)
- with the IR remote control (see 5.3.2. Remote Control), or
- with the optional wall panel (see the user manual of the wall panel).

5.3.1. Manual Control

5.3.1.1. Source Selection

You can connect 4 stereo audio sources to the device: Source 1, Source 2, Source 3, and Source 4 through the input connections, and a 5th source via the optional wall panel.

Press one of the **source selection buttons (10)** to select a connected source device (Sources 1–4). The **LED indicator (09)** for the respective source lights up.

Note:

The 5th source connected via the wall panel can be selected only from the wall panel. When Source 5 is selected, the **LED indicator (08)** lights up.

5.3.1.2. Adjusting the Volume

The device has an infinite rotary encoder with an integrated push switch to control the volume at the output.

- Turn the **volume control (06)** clockwise to increase the output level. The **8 volume LED indicators (05)** light up one after the other from left to right with the increase of the volume.
- Turn the volume control (06) counterclockwise to decrease the output level. The 8 volume LED indicators (05) turn off one after the other from right to left with the decrease of the volume.

Note:

It takes more than one detent of turns with the **volume control (06)** to make the next or the previous LED indicator light up or turn off, as the number of internally available volume adjustment steps is bigger than 8.

5.3.1.3. Mute

During operation you can mute the output with the volume control (06).

- Press the volume control (06) to mute the output. The mute LED indicator (04) lights up.
- When the output is muted, press the **volume control (06)** again to clear the mute status. The volume returns to the last setting and the **mute LED indicator (04)** turns off.

5.3.2. Remote Control

The device can be operated with an IR remote control. The remote control is included in the delivery.



DANGER

Do not ingest battery, chemical burn hazard.

The remote control contains a coin cell battery. If the coin cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.

The battery is already installed in the remote control. It is protected against discharge by a transparent plastic foil. Remove the plastic foil before using the remote control for the first time.

When replacing the battery, make sure that the polarity is correct. Incorrect polarity may damage the remote control.

5.3.2.1. Functions of the Remote Control Buttons





Figure 7

5.3.2.2. Remote Control Operation

To operate the device with the remote control:

- 01) Select a source. The **LED indicator (09)** for the respective source lights up. You can select only Sources 1–4 with the remote control.
- 02) Increase/decrease the volume at the output for the selected source or mute the source. For more information about the LED indicator statuses refer to Manual Operation (see <u>5.3.1. Manual Control</u> on page 13).

Note:

After pressing a button on the remote control for the first time, the **remote LED indicator (07)** lights up. After 10 s of inactivity the **remote LED indicator (07)** turns off.



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	
he device does not unction at all	No power to the device	 Make sure that power is switched on and cables are plugged in 	
	Internal fuse is blown	Contact your Highlite International dealer	
No sound	The volume is set to minimum	Increase the volume	
The device does not respond to the remote control	The remote control is outside of the range of the IR sensor	 Make sure that there is a clear line of sight between the remote control and the IR sensor 	
	The battery in the remote control is depleted	Change the battery in the remote control	

7. Maintenance

7.1. Safety Instructions for Maintenance



DANGER Electric shock caused by dangerous voltage inside

Disconnect power supply before servicing or cleaning.

7.2. Preventive Maintenance



Attention Before use, examine the device visually for any defects.

Make sure that:

- The housing is not damaged.
- The power cable is not damaged and does not show any material fatigue.



7.2.1. Basic Cleaning Instructions

To clean the device, follow the steps below:

- 01) Disconnect the device from the electrical power supply.
- 02) Allow the device to cool down for at least 5 minutes.
- 03) Clean the device with a soft, lint-free cloth.



Attention

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

8. Deinstallation, Transportation and Storage

- Use the original packaging to transport the device, if possible.
- Clean the device before storing (see 7.2.1. Basic Cleaning Instructions on page 16).
- 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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Check the respective product page on the website of Highlite International (<u>www.highlite.com</u>) for an available declaration of conformity.





