

# **USER MANUAL**



ENGLISH

# Silent Disco Transmitter

**V1** 

Product code: D1820

# 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
- 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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# 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 Silent Disco Transmitter
- FM antenna (installed)
- AC power adapter (1,5 m)
- Padded case
- User manual



Fig. 01

# 1.2. Intended Use

This device is intended for professional use as an audio transmitter. It is suitable for indoor use only.

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.	
X	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 of the device.

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The information label contains the following symbols:



This device is designed for indoor use.

X

This device shall not be treated as household waste.



# 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.



# 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.

- 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 audio transmitter. It is suitable for indoor use only.

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 DAP Silent Disco Transmitter is a compact stereo audio transmitter for setting up a silent disco. It supports 3 channels in the 863–865 MHz range. A display on the front shows the selected channel. The DAP Silent Disco Transmitter is intended for use with the DAP Silent Disco Headphones (D1821).

# 3.1. Front View



3.2. Back View



- 01) 7-segment LED display
- 02) Channel selector
- 03) 4P4C connector (for keypad)
- 04) FM antenna

Fig. 02

- 05) DC input connector, 12 V DC
- 06) Power LED indicator
- 07) RCA connector IN (L)
- 08) RCA connector IN (R)
- 09) Power switch (OFF/LOW/HIGH)



# 3.3. Product Specifications

Model:	Silent Disco Transmitter				
Electrical:					
Input voltage:	12 V DC				
Power consumption:	3,1 W				
AC power adapter:					
Input voltage:	100–240 V AC, 50/60 Hz				
Input current:	1 A				
Output voltage:	12 V DC				
Output current:	500 mA				
Radio specifications:					
System:	UHF/RF				
Modulation:	FM				
Frequency range:	863–865 MHz				
Frequency response:	30–20000 Hz				
Number of channels:	3				
Channel frequencies:	• Channel 1 (863,1 MHz)				
	• Channel 2 (863,7 MHz)				
	Channel 3 (864,9 MHz)				
Channel separation:	> 50 dB				
Distortion:	< 1 %				
Operation distance: 200 m (LOW), 450 m (HIGH)					
Physical:					
Dimensions:	115 x 130 x 35 mm (L x W x H) (without the antenna)				
Weight:	0,3 kg				
Operation and control:					
Display:	7-segment LED display				
Channel selection:	yes				
Connections:					
Power connections:	DC input connector				
Stereo input connections:	2 x RCA				
Keypad input connection:	4P4C connector				
Construction:					
Housing:	Aluminum				
Color:	Silver				
IP rating:	IP20				
Thermal:					
Minimum ambient temperatu	ret₀: 0°C				
Maximum ambient temperatu					

DAP

# 3.4. Compatibility



Attention Product compatibility

The Silent Disco Transmitter is designed to be operated only with the Silent Disco Headphones. The Silent Disco Headphones are not supplied with the Silent Disco Transmitter.

You need to purchase the Silent Disco Headphones separately. Contact your Highlite International dealer for more information.

Product code: D1821 (Silent Disco Headphones)

# 3.5. Optional Accessories

You can additionally purchase a keypad to control the color of the LEDs of the paired headphones. Contact your Highlite International dealer for more information.

Product code: D1822 (Keypad for LED Control)

### 3.6. Dimensions





# 4. Setup and Operation

# 4.1. Installation Site Requirements

- The device can be used only indoors.
- The device must be placed on a flat surface.
- 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.

# 4.2. 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.

### 4.3. Setup Example

This is a typical setup example with a Silent Disco Transmitter, a number of Silent Disco Headphones, a Keypad for LED Control, and a DJ mixer.

Make sure that there is a clear line of sight between the transmitter and each person wearing the headphones.







# Silent Disco Transmitter

# 4.4. Connecting an Audio Device

Connect an audio device, for example a dj mixer or a media player, to the **RCA connectors IN (07)** and **(08)** of the device with RCA cables.

# 4.5. Connecting a Keypad

The keypad is not supplied with the device. Contact your Highlite International dealer for more information.

Product code: D1822 (Keypad for LED Control)

Connect the keypad to the **4P4C connector (03)** on the device. For more information refer to the user manual of the keypad.

When the keypad is connected to the device, the decimal point on the **7-segment LED display (01)** lights up.



Channel 3 is selected and the keypad is connected to the device.

### 4.6. Switching On/Off and Output Selection

With the **power switch (09)** you can switch off and on the device and select the transmitter power output.

- OFF: Switch off the device
- LOW: Switch on the device and select low output. Use this setting for a transmission distance of max. 200 m
- HIGH: Switch on the device and select high output. Use this setting for a transmission distance of max. 450 m

When you switch on the device, the **power LED indicator (06)** lights up and the **7-segment LED display (01)** shows the following:



After 2 s the **7-segment LED display (01)** shows the selected channel. See **4.7. Channel Selection** on page 12 for more information.

#### Notes:

- Switch off the device from the **power switch (09)** when the device is not in use.
- The mains plug is used as a disconnect device. Disconnect the AC power adapter from the socketoutlet to disconnect the device from the power supply.
- If the headphones are very close to the device, do not select HIGH output when you switch on the device.



# Silent Disco Transmitter

# 4.7. Channel Selection

The device has 3 channels. You can select a channel with the channel selector (02).

Press the **channel selector (02)** to select a channel. The **7-segment LED display (01)** shows the selected channel.



Channel 1 is selected.



Channel 2 is selected.



Channel 3 is selected.

When the respective channel is selected, the channel LED indicators on the Silent Disco Headphone light up as follows:

- Channel 1 (863,1 MHz) blue
- Channel 2 (863,7 MHz) red
- Channel 3 (864,9 MHz) green

You can change the color for each channel or switch off the LEDs with the Keypad for LED Control (product code: D1822). The keypad is not supplied with the device. You can purchase it additionally. Contact your Highlite International dealer for more information.

#### Note:

The device can operate only on one channel. You cannot switch between the channels during operation. If you want to use all 3 channels at the same time in one setup, you need to use 3 Silent Disco Transmitters.







# 5. 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	No power to the device	<ul> <li>Makes sure that power is switched on and cables are plugged in</li> </ul>
	The headphones are switched off or not functioning correctly	<ul> <li>Make sure that the headphones are switched on and the battery is charged</li> <li>Change the headphones</li> </ul>
No sound	Channel selection	<ul> <li>Make sure that the transmitter is transmitting an audio signal on the channel selected on the headphones</li> <li>Make sure that the transmitter and the headphones are on the same channel</li> </ul>
	The volume is too low	<ul> <li>Turn up the volume on the headphones</li> <li>Make sure that the volume of the connected device is turned up</li> </ul>
	The connected device is not playing audio	Make sure that the connected device     is switched on and operates correctly
Poor sound quality	The distance between the device and the headphone is too big	<ul> <li>Shorten the distance between the device and the headphones</li> <li>Make sure that there are no obstructions between the device and the headphones</li> </ul>
	The connected device is not functioning correctly or the audio is of poor quality	Try another audio source

# 6. Maintenance

# 6.1. Preventive Maintenance



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

#### 6.1.1. Basic Cleaning Instructions

To clean the device, follow the steps below:

- 01) Disconnect the device from the electrical power supply.
- 02) Clean the device with a soft, lint-free cloth.



#### Attention

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

# 6.2. 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.

# 7. Deinstallation, Transportation and Storage

- Disconnect power supply before deinstallation.
- Use the original packaging to transport the device, if possible.
- Clean the device before storing. Follow the cleaning instructions in chapter 6.1.1. Basic Cleaning Instructions on page 13.
- Store the device in the original packaging, if possible.

# 8. 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.

# 9. Approval



Hereby, Highlite International declares that the device Silent Disco Transmitter, product code D1820, is in compliance with Directive 2014/53/EU (RED – Radio Equipment Directive).

The full text of the EU declaration of conformity is available at the respective product page on the website of Highlite International (<u>www.highlite.com</u>).



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