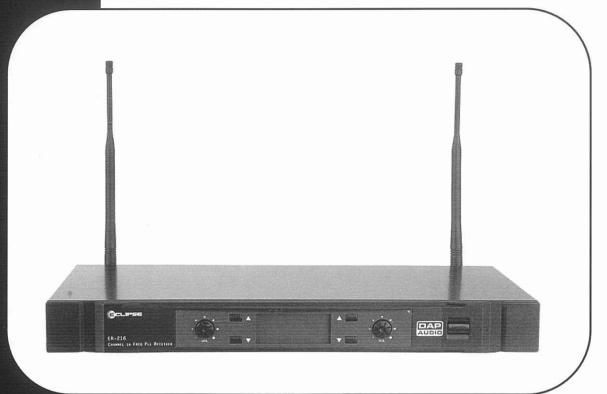


# **ER-216B**

ORDERCODE D143061B ORDERCODE D143082B



Highlite International B.V.

Vestastraat 2 6468 EX Kerkrade The Netherlands

SHOWELECTRONICS FOR PROFESSIONALS

# Congratulations!

You have bought a great, innovative product from DAP Audio.
The DAP Audio ER-216 brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated show, this product provides the effect you need.

You can rely on DAP Audio, for more excellent audio products. We design and manufacture professional audio equipment for the entertainment industry. New products are being launched regularly. We work hard to keep you, our customer, satisfied. For more information: <a href="mailto:iwant@dap-audio.info">iwant@dap-audio.info</a>

You can get some of the best quality, best priced products on the market from DAP Audio. So next time, turn to DAP Audio for more great audio equipment.

Always get the best -- with DAP Audio!

Thank you!



# DAP Audio

# DAP Audio ER-216™ Product Guide

Warning	
Unpacking Instructions	
Safety Instructions	
Operating Determinations	
Return Procedure	
Claims	
Description of the device	E
Features	
Overview	
Frontside	
Backside	ć
LCD Display	6
Installation	
Attaching the 19" flaps	7
Set Up and Operation	
Paris On evaluate	
Basic Operations	
Selecting channels	
Locking	
Adjusting Squelch level	8
Approval	
Approval	۷
CE Certificate	10
Connection Cables	12
Maintenance	13
Troubleshooting	13
Product Specification	14



# CAUTION!



Keep this system away from rain and moisture!

# FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

**Unpacking Instructions** 

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Your shipment includes:

- 1x DAP ER-216B receiver
- 1x AC-adapter DC12V/600mA
- 2X Antenna
- 2X 19" Flap
- User manual

Safety Instructions

Every person involved with the installation, operation and maintenance of this system has to:

be qualified

follow the instructions of this manual



CAUTION! Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!



Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the system.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the system are not subject to warranty.

This system contains no user-serviceable parts. Refer servicing to qualified technicians only.

### IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the nonobservance of this manual or any unauthorized modification to the system.

- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never leave any cables lying around.
- Do not connect this system to a dimmerpack.
- Do not switch the system on and off in short intervals, as this would reduce the system's life.
- Do not open the device and do not modify the device.
- Only use system indoor, avoid contact with water or other liquids.
- Avoid flames and do not put close to flammable liquids or gases.

- Always disconnect power from the mains, when system is not used.
- Only handle the AC-adaptor by the plug. Never pull out the adaptor by tugging the cord.
- Make sure you don't use the wrong kind of cables or defective cables.
- Make sure that the power adaptor matches the voltage and current stated on the rear panel.
- Make sure that the power adapter housing and cord is not damaged.
- Please turn off the power of all equipment before making connections to other devices.
- If system is dropped or struck, disconnect the power adaptor immediately. Have a qualified engineer inspect for safety before operating.
- If the system has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your system. Leave the system switched off until it has reached room temperature.
- If your Dap Audio device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Dap Audio dealer for service.
- Repairs, servicing and electric connection must be carried out by a qualified technician.

# **Operating Determinations**

If this system is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.

Any other operation may lead to dangers like short-circuit, burns, electric shock, etc.

# **⚠** Return Procedure **⚠**

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail <a href="mailto:aftersales@highlite.nl">aftersales@highlite.nl</a> and request an RMA prior to shipping the device. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack the device, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

# Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

- 1) Your name
- 2) Your address
- 3) Your phone number
- 4) A brief description of the symptoms

#### Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a device is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

# Description of the device

#### **Features**

The ER-216B is a wireless receiver from Dap Audio.

- 2 Frequencies available: 614-638 MHz: ordernr.: D143061B 822-846 MHz: ordernr.: D143082B
- 2 channel 16 Freq. PLL Receiver
- Preset 16 selectable UHF channels
- Diversity technology permits minimum dropouts in the RF link.
- Noise mute and pilot tone squelch circuit eliminate unwanted signal and noise interference
- LCD Display
- 19" /1HE rack metal housing
- Lock-on function is provided.
- Equipped with unbalanced AF Output and balanced XLR outputs (RX1 & RX2).
- Tuned antennas extend the effective range of the wireless link.

# Overview

# **Frontside**



Fig. 1

- 1) Volume Control 1
- 2) Up / Down Channel LEFT
- 3) LCD Display
- 4) Up / Down Channel RIGHT
- 5) Volume Control 2
- Power On/Off

#### **Backside**

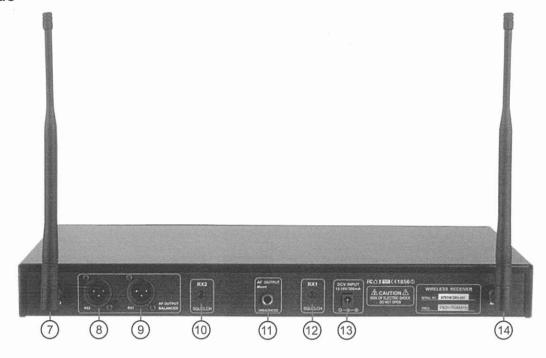


Fig. 2

- 7) Antenna A
- 8) AF Balanced XLR Output RX2
- 9) AF Balanced XLR Output RX1
- 10) RX2 Squelch
- 11) AF Unbalanced Mixed Output
- 12) RX1 Squelch
- 13) DC Input 12-18V/300mA center positive
- 14) Antenna B

# **LCD** Display

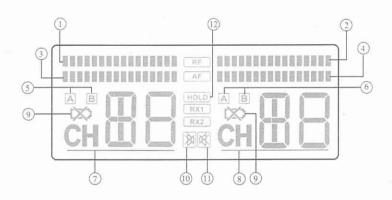


Fig. 3

- 1) RF incoming signal level of RX1
- 2) RF incoming signal level of RX2
- 3) AF incoming signal level of RX1
- 4) AF incoming signal level of RX2
- 5) Diversity of RX1 (antenna A or B active)
- 6) Diversity of RX2 (antenna A or B active)
- 7) Channel display of RX1
- 8) Channel display of RX2
- Low battery status of transmitter
- 10) Mute status of RX1
- 11) Mute status of RX2
- 12) Setting lock-on mode

### Installation

Remove all packing materials from the ER-216B. Check that all foam and plastic padding is removed. connect all cables.

Always disconnect from electric mains power supply before cleaning or servicing. Damages caused by non-observance are not subject to warranty.

# Attaching the 19" flaps







Fig. 4

# Set Up and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

- Plug one end of AC/DC adapter cable to DC input socket in the rear panel of the receiver, and plug 1) Power output Connector the other end into an AC outlet (step 1 in Fig. 5)
- 2) Audio Output Connector Connect one end of the AF output cable to the AF output socket in the rear panel, then plug another end to the "MIC IN" input socket of a mixer or amplifier (Step 2 in Fig. 5) The receiver is equipped with balanced XLR output and unbalanced 6.3mm output, choose the proper way of use.

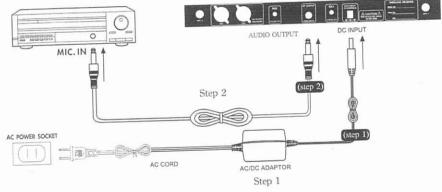


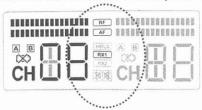
Fig. 5

- 3) Turn the receiver on by pushing the power (6) button.
- 4) Adjust the AF output level for both receivers using the volume (1,5) controls.

# **Basic Operations**

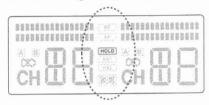
### Selecting channels

Press the Up or Down button till the RX1 starts flashing, and again press the Up / Down button to select a suitable channel from the pre-set 16 channels. Later the RX1 stops flashing, the receiver will store the channel automatically meanwhile presents the channel no. Repeat the action for RX2.



#### Locking

After selecting channel, repress the Up and Down buttons till the HOLD starts flashing simultaneously. The current setting is saved in memory while switching the receiver off.



### **Adjusting Squelch level**

With the squelch level control in the rear panel, you can adjust the squelch at a suitable level. If the level is set too high, the transmission range will be reduced.

# **Approval**

The DAP D143061B and the D143082B are Class II wireless devices.

D143061B: 614-638MHz for use in:

Austria, Belgium, Denmark, France, Italy, Luxemburg, Netherlands,

Poland, Sweden, Turkey, Switzerland, Turkey.

D143082B: 822-846 MHz for use in:

Germany.

#### **Exclusion of liability**

The frequency tables in this publication are made according to national laws and regulations. The frequencies are checked on a regular basis. We don't take any responsibility for eventual discrepancies between our listed frequencies and the frequencies actually approved in a given country. We strongly suggest you to inform in your own country or region for any changes or adaptions regarding the allowed frequencies.

Be aware that in some countries, you are only allowed to partly use the frequency range of the device or use the frequency range of the device as a secondary user. If your country is not listed above it is still possible that there are exceptions. Therefore, we strongly advise you to consult your local authority as listed below:

#### Telecoms & Postal Regulatory Authorities in Europe

Austria: Rundfunk und Telekom Regulierungs-GmbH

Belgium: Belgian Institute of postal services and telecommunications (BIPT) www.bipt.be

Czech Republic: Czech Telecommunication Office

Denmark: National Telecom Agency

Finnland: Finnish Communications Regulatory Authority (FICORA)

France: Autorité de Régulation des Télécommunications (ART)

Germany: Die Bundesnetzagenturie

Greece: National Telecommunications Commission (EET)

Hungary: Communication Authority (HIF) Iceland: Post and Telecom Administration (PTA)

Ireland: Commission for Communications Regulation (ComReg)

Italy: Italian Communications Authority (AGC) Latvia: Telecommunication State Inspection Liechtenstein: Office for Communications (AK)

Lithuania: Radio Administration

Luxemboura: Institut Luxembouraeois des Télécommunications (ILT)

Netherlands: Onafhankelijke Post en Telecommunicatie Autoriteit (OPTA)

Agentschap Telecom

Ministry of Economic Affairs

Norway: Norwegian Post and Telecommunications Authority (NPT)

Poland: Urzad Regulacji Telekomunikacji (URT)

Portugal: Autoridad Nacional De Comunicações (ICP-Anacom)

Slovenia: Agencija za telekomunikacije, radiodifuzijo in pošto

www.rtr.at

www.ctu.cz www.tst.dk

www.ficora.fi

www.art-telecom.fr

www.bundesnetzagentur.de

www.eett.gr

www.hif.hu

www.pta.is

www.comreg.ie

www.agcom.it

www.vei.lv www.ak.li

www.rrt.lt

www.etat.lu/ILT

www.opta.nl

www.agentschap-telecom.nl

www.ez.nl

www.npt.no

www.urt.gov.pl

www.anacom.pt

www.atrp.si



# **DECLARATION OF CONFORMITY**

### **Supplier Details**

Name

Highlite International BV

Address

Vestastraat 2 6468EX Kerkrade The Netherlands

#### Product Details

Product Name

ER-216B 2Ch 16 Freq PLL 614-638MHz Receiver Black

Ordercode

D143061B

**Trade Name** 

DAP AUDIO

# Applicable Standards Details

R&TTE Directive: 1999/5/EC

Radio Spectrum Matter:

EN 300 422-2 V1.2.2 (2008-03)

Emmission/Immunity:

EN 301 489-1 V1.8.1 (2008-04) EN 301 489-9 V1.4.1 (2007-11)

Low voltage Directive: 2006/95/EC

EN 60065:2002+A1:2006+A11: 2008

# Supplementary Information

The conformity to above standards is verified by ETC.

# Declaration

I hereby declare under our sole responsibility that the product mentioned above to which this declaration relates complies with the above mentioned s t a n d a r d s a n d D i r e c t i v e s Name

Issued Date

S. ildiz

Aug. 5, 2010

Highlite International BV. Vestastraat 2, 6468 EX Kerkrade, The Netherlands

Signature of representative



# **DECLARATION OF CONFORMITY**

#### Supplier Details

Name

Highlite International BV

Address

Vestastraat 2 6468EX Kerkrade The Netherlands

#### **Product Details**

**Product Name** 

ER-216B 2Ch 16 Freq PLL 822-846 Receiver Black

Ordercode

D143082B

Trade Name

DAP AUDIO

# Applicable Standards Details

R&TTE Directive: 1999/5/EC

Radio Spectrum Matter:

EN 300 422-2 V1.2.2 (2008-03)

Emmission/Immunity:

EN 301 489-1 V1.8.1 (2008-04) EN 301 489-9 V1.4.1 (2007-11)

Low voltage Directive: 2006/95/EC

EN 60065;2002+A1;2006+A11; 2008

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#### Declaration

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**Issued Date** 

S. ildiz

Okt. 13, 2010

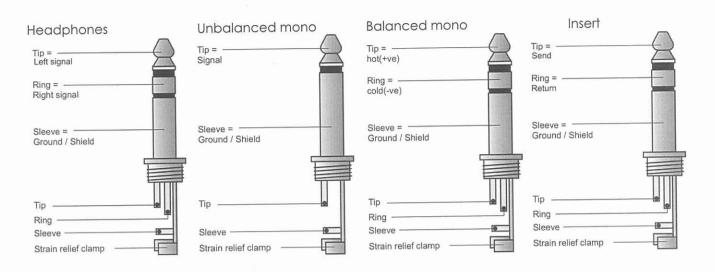
Highlite International BV. Vestastraat 2, 6468 EX Kerkrade, The Netherlands

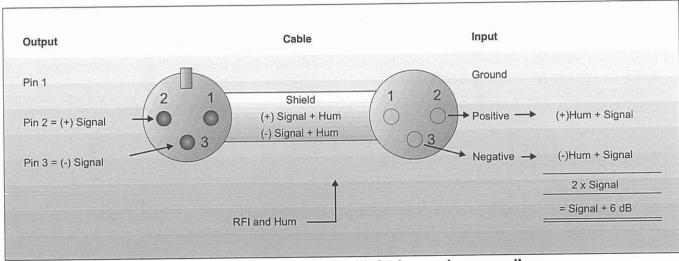
Signature of representative

# **Connection Cables**

Take care of your cables, always holding them by the connectors and avoiding knots and twists when coiling them: This gives the advantage of increasing their life and reliability.

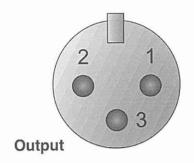
Periodically check your cables. A great number of problems (faulty contacts, ground hum, discharges, etc.) are caused entirely by using unsuitable or faulty cables.





Compensation of interference with balanced connections

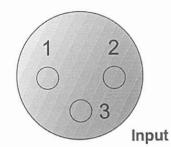
#### Balanced use with XLR connectors



1 = Ground / Shield

2 = hot (+ve)

3 = cold (-ve)



For unbalanced use PIN 1 and PIN 3 have to be bridged

### Maintenance

The DAP Audio ER-216B requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Do not use alcohol or solvents.

Keep connections clean. Disconnect electric power, and then wipe the audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

# **Troubleshooting**

DAP Audio ER-216B

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

- 1. If the device does not operate properly, unplug the device.
- 2. Check power from the wall, all cables, connections, etc.
- 3. If all of the above appears to be O.K., plug the unit in again.
- 4. If nothing happens after 30 seconds, unplug the device.
- 5. Return the device to your DAP Audio dealer.

# **Product Specification**

Frequency Preparation:

PLL Synthesised Control

Carrier Frequency Range:

614-638MHz 814-846MHz

Frequency Stability:

±0,005%

S/N Ratio:

 $> 100 \, dB$ 

Display:

LCD

Display Contents:

Channel, antenna A/B, RF/AF, Level meter, Battery indicator

Controls:

Power On/Off, Channel selector, Audio Level

Audio Output Level:

-12 dB

AF Output Impedance:

600 Ohm

Squelch:

Pilot Tone & Noise Mute

Operation Voltage:

12-18VDC, 500 mA

Output Connector:

2 Balanced XRL socket, 1 Unbalanced 6,3 mm socket

Dimensions:

483 x 232 x 45 mm (LxWxH)

Weight:

2,0 Kg



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



Website: www.Dap-audio.info Email: service@highlite.nl