

## SPECIFICATION

### STANDARD

OUTPUT POWER	> 10 mW into 30 to 300 loads
HEADPHONE IMPEDANCE	30 to 300
THD	< 0.01% at 1 kHz
SIGNAL TO NOISE RATIO	> 70 dB
POWER CONSUMPTION	< 4VA
POWER SUPPLY	24V DC 150 mA
DIMENSIONS	180 x 100 x 66mm (7.4 x 4 x 2.6 ")
WEIGHT	570 gms (20 ozs)

### SPECIAL EDITION

OUTPUT POWER	> 10 mW into 30 to 300 loads
HEADPHONE IMPEDANCE	30 to 300
THD	< 0.005% at 1 kHz
SIGNAL TO NOISE RATIO	> 70 dB
POWER CONSUMPTION	< 6VA
POWER SUPPLY	24V DC 250 mA
DIMENSIONS	180 x 100 x 66mm (7.4 x 4 x 2.6 ")
WEIGHT	570 gms (20 ozs)

## WARRANTY

If within two years of the purchase date your OBH product proves to be defective for any reason other than accident, misuse, neglect, unauthorised modification or fair wear and tear, Creek Audio Ltd will, at its discretion, replace the faulty parts without charge for labour or return carriage within the U.K. This warranty is valid only within the U.K. and given in addition to statutory rights. Service enquiries outside the U.K. should be addressed first to the supplying dealer and or Creek distributor/importer. Warranties granted in these countries are entirely at the discretion of the distributor.

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# Creek OBH 21/21SE Headphone Amplifier



## Operating Instructions

Thank you for purchasing the OBH 21/21SE headphone amplifier. You are now in possession of a state-of-the-art product. The functions and operation of the OBH 21/21SE are extremely simple. The following notes are provided to explain all aspects of its design and use.

The OBH 21 is a miniature audio amplifier, designed specifically to drive two pairs of low to medium impedance (30 to 300 ) headphones from a line level source. The OBH 21SE is a high end version using more expensive components. It is more efficient to have a small amp do this rather than waste the power of a full size one when only driving headphones.

The OBH 21 and 21SE are compatible with any source at line level. For example the average output level of a CD player can be connected directly to the input of the OBH 21/21SE just as it could also be used in conjunction with a stand-alone pre-amplifier or integrated amplifier which doesn't have a headphone socket.



## INPUT AND OUTPUT CONNECTION

The OBH 21/21SE is not designed to be connected to the high level speaker output of an integrated or power amplifier. Output level is controlled by the high quality volume control on the front panel.

The OBH 21/21SE has two pairs of stereo phono sockets (RCA jacks) on the rear panel. The first pair is the input from any line level source direct from the source or via the tape output of an amplifier. The second pair of sockets marked 'output' are to chain link the signal on to the next component in the system. Therefore the OBH 21/21SE can be driven from the Tape Output of an amplifier and the second set of sockets can be used to link the signal to the Tape Recorder input.

## POWER SUPPLY REQUIREMENTS

In common with all electrical appliances, the OBH 21/21SE requires a power supply.

The requirement for the OBH 21/21SE is for 24 Volts DC at 150 mA. A custom Creek power supply (Creek-Uni) has been provided and this must be connected via the DC inlet on the rear panel of the OBH 21/21SE.

The power supply which has been provided is a switchable supply with a universal input range of 100 – 240 Volts. The Creek-Uni power supply is supplied with a pack of universal plug fittings to adapt for Europe, U.K. and the Far East, USA and Australia. Choose the correct fitting for your country of use and simply snap in place.

## NOTE

Due to the circuitry charging up it is normal to hear a small thump through the headphones during switch-on.

It is necessary for the OBH 21/21SE to be 'burned in' for at least 24 hours before its full sound quality potential can be realised. The on/off switch is located on the rear panel. As the OBH 21/21SE draws very little power it may be left switched on permanently.

## INSTALLATION AND OPERATION

Connect the Creek Uni power supply adaptor to the mains socket. Find a suitable place for the OBH 21/21SE and plug the DC power lead into the rear panel DC jack socket.

Connect a pair of high quality interconnect cables from the output of the source to the input sockets on the rear of the OBH 21/21SE.

There are several wiring options.

### OPTION A

Connect directly from the output of a CD player to the input of the headphone amplifier

### OPTION B

Connect the output of the CD player to the input of the headphone amplifier (as in Option A) Then connect the output of the headphone amplifier to the input of a stereo amplifier.

### OPTION C

Connect the output of a CD player to the input of a stereo amplifier. Connect the output of the stereo amplifier to the input of the headphone amplifier (as in Option B). Then connect the output of a tape deck to the input of the stereo amplifier and the output of the headphone amplifier to the input of the tape deck.

Plug the headphones into the socket on the front panel. If you are using the OBH 21/21SE with two pairs of headphones, the output from each socket will be identical. However, if you are using only one pair of headphones, the impedance on each socket will be different. This feature is designed to give a better match with your particular headphones.

Try each socket to determine the best results.

Push the On/Off button on the rear panel to power up the headphone amplifier. The small green LED on the front panel will light when it is ready for use.