

SPECIFICATIONS

	OBH-21	OBH-21SE
Output power	> 10 mW into 30W to 300W loads	As per OBH-21
Headphone Impedance	30W to 300W	As per OBH-21
Total Harmonic Distortion	< 0.01% at 1 kHz	< 0.005% at 1 kHz
Signal to noise ratio	> 70 dB	> 70 dB
Power consumption	< 4 VA	< 6 VA
Power supply requirement	24V DC, 150mA, centre positive	24V DC, 150mA
Preferred Power supply	OBH-1 (un-regulated)	OBH-2 (regulated)
Size	180 x 100 x 66 mm	As per OBH-21
Weight (Nett)	360 g	As per OBH-21
Recommended Power Supply	OBH-1	OBH-2

	OBH-15	MM	MC	OBH-18
Gain		37 dB	56 dB	37 dB
Frequency Response		20 Hz to 20 kHz \pm 0.25 dB	As per MM	As per OBH-15 MM
Signal to Noise Ratio		- 83 dB	- 75 dB	-83 dB
Total Harmonic Distortion		< 0.03%	< 0.05%	< 0.03%
R1AA deviation		\pm 0.5%	\pm 0.5%	\pm 0.5%
Output		250 mV	250 mV	250 mV
Output Impedance		<100 Ω	<100 Ω	<100 Ω
Input sensitivity / impedance		3.5 mV/ 47 K Ω / 220 pF	As per MM	As per OBH-15 MM
Input sensitivity / impedance		0.5 mV/ 1000 W / 3300 pF	As per mm	
Overload margin		22 dB	20 dB	25 dB
Mates well with MM cartridges			2.5mV-5mV output	2.5mV-5.5mV output
Mates well with MC cartridges		0.5 mV - 1 mV output		
Dimensions		180 x 100 x 66 mm	As per MM	As per OBH-15
Recommended Power Supply		OBH-2 220-240V 50Hz or 110-120V 60Hz		OBH-1

OBH-22	
Input Impedance	< 20 kW
Output Impedance	20 kW
Separation	> 80 dB's @ 1kHz
Attenuation	0 - 90 dB's
Inputs	3 Stereo pairs, inc Tape
Outputs	2 Stereo pairs, 1 fixed, 1 variable
Relay Muting Factor	> 90dB's
Power Requirements	24v @ 60 mA
Power Consumption	2W max
DC Connector Type	2.1 mm female DC jack
Input & Mute indication	2 LED
Size	150 x 100 x 66 mm
Weight	610 g
Recommended Power Supply	OBH-1 220-240V 50Hz or 110-120V 60Hz
Supplied with Creek ARC53 System Remote Handset	



OBH SERIES

PRODUCT

CATALOGUE

Designed and manufactured in England

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HEADPHONE AMPLIFIERS



Creek headphone amplifiers eliminate the need to use a full size amplifier for boosting the power when only headphones are used. An average output level CD player or tuner can be connected directly to the input of the headphone amplifier.

Creek's OBH-21 & OBH-21SE incorporate advanced circuitry utilising professional standard operational amplifiers. The discrete transistor technology used in earlier model Creek headphone amplifiers has been replaced by high-grade integrated circuits providing a capability to drive different types and impedances of headphones without problem.

There are two 1/4" (6.3mm) stereo headphone jacks on the front panel of both models. The output level is regulated by the volume control on the front panel. When using the OBH-21 one source can be amplified as the headphone amplifier has only one stereo input. It has stereo phono sockets (RCA jacks) on the rear panel for input from any line level source, together with a DC power jack. In common with all electrical appliances, the OBH-21 requires a power source. A custom power supply is provided, which must be connected to the unit via the DC inlet (2.1mm positive centre pin power jack) on the rear panel. The power supply may vary depending on country of use.

The SE version features internally advanced circuitry to split the power supply from a single positive to a split positive/negative supply, which allows circuits to be DC coupled and to eliminate capacitors. Higher grade components are used in the SE version. It also features two pairs of stereo Phono sockets (RCA jacks) on the rear panel for input from any line level source and chain linking to another product in a tape loop circuit. The DC power jack for connection to a custom OBH high-grade power supply adaptor is also located on the rear panel.

The OBH-21 can also be used in conjunction with other Creek OBH series products. It also functions with a stand-alone pre-amplifier or integrated amplifier without headphone output, connected in the tape loop.

PHONO PREAMPLIFIERS

With modern amplifiers expected to cater for so many new devices, the Phono capability has frequently been one of the features to disappear. Creek Audio has always been aware of the benefits of vinyl - that is why it continues to provide a number of Phono stage options.

The OBH-15 Phono pre-amp can drive long cables, due to its low output impedance. It has combined the high quality discrete semiconductor circuitry of the earlier Creek OBH-8 and OBH-9 input and gain stages, and added improved open loop gain by cascading them, prior to the selector switch and combined passive RIAA circuit.

Separate Burr-Brown professional grade low-noise op-amps are used for each channel to buffer the output signal and provide a very low impedance drive to any pre-amp or integrated amplifier. The OBH-15 can switch from moving magnet to moving coil cartridges, via a simple push button on the rear panel.

As the OBH-15 has two input circuits, optimised for each type of cartridge it allows for the connection of two turntables. A high gain MC version, for low output MC cartridges, is available to order. The OBH-15 has a built-in high performance power supply regulator circuit which makes it immune from power supply fluctuations so, it can be used with the unregulated OBH-1 6 Watt power supply. It will sound better with the regulated 12 Watt OBH-2, which is available as an option.



Internally, the OBH-15 has been built to the highest standards using a glass-fibre double sided, plated through hole PCB and very high-grade components. The OBH-15 looks the part too! Designed to complement the Creek range of amplifiers, tuners and CD players, the OBH range features an impressive 4mm thick solid aluminium front panel in a silver finish. The remainder of the 150mm deep extruded aluminium case is painted black, so the product all but disappears.

The function of the OBH-18 is to boost the level and correct the frequency response of a low level signal coming from a moving magnet phono pick-up on a conventional turntable. The signal required by most modern amplifiers is described as being 'LINE' level, which is, in technical terms, between 200 and 500 milli-Volts with a flat frequency response. Unless your amplifier has a specific 'Phono' or Disc input, the level will be too low and the frequency response will be wrong. The OBH-18 is designed to boost the signal and introduce an R.I.A.A. frequency response characteristic.



PASSIVE PREAMPLIFIER



The function of the Creek OBH-22 passive pre-amplifier is to provide input selection and volume adjustment to a Hi-Fi system from an armchair, via infra-red remote control. The unit can also be controlled directly from the front panel.

The OBH-22 consists of a high quality motorised volume potentiometer, and two stereo relays which select the desired input plus tape output, together with a muting relay that can short the signals to ground. A built-in micro-controller decodes the infra-red signals transmitted by the handset and translates them into commands which activate the motorised potentiometer and the muting and input selection relays. After each operation, the micro-controller turns itself off to avoid any possibility of interfering with the main music signal. LED's are used to indicate the status and mode of operation.

The OBH-22 is purely passive and does not introduce any gain or distortion into the signal path. It is therefore suitable to be used as a control pre-amplifier, provided the sensitivity of the power amplifier that is being used is high enough to be driven directly from the source. i.e. CD player or tuner etc.

The volume control can be operated manually at any time, whether the OBH-22 is powered or not, but without power only Line 1 can be utilised.