LDL102RR & LDL104RR

Line Powered Compact Distribution Amplifiers

Introduction

The name Labgear has been associated with quality signal distribution since 1932 and the current range of amplifiers continues to uphold that tradition.
All LDL amps can carry analogue and digital TV and radio, DAB, Freeview, DVB-T and DVB-T2 HD TV signals and have:

- Improved gain flatness delivering a better balance across the performance range
- Lower noise figure for optimised signal quality
- Greater signal handling capacity to cope with more channels
- Better impedance matching and therefore improved signal transfer from amp to cable
- Labgear amplifiers use F-type coaxial connectors for better matching and security

These fully screened 2 and 4 way compact aerial amplifiers have an IR return path to enable channel changing from remote locations and are compatible with Labgear and other Digilink remote control systems. This makes them ideal for use in Sky™ digital satellite home installations, where the output from a digibox can be distributed to several rooms with the capability for full remote control of the Sky™ box from these rooms. The amplifiers are also designed to be line powered by the RF2 output from satellite receivers.

The LDL compact amplifiers are compliant with the Radio Equipment Directive 2014/53/EU and meet harmonised standard EN 303 354 for product Type D Class 0, they are suitable for digital TV signal distribution of Ch21-60 from a receiver or from an aerial fitted with a 4G filter in the UK and EIRE.

General Safety Precautions

To Prevent Overheating

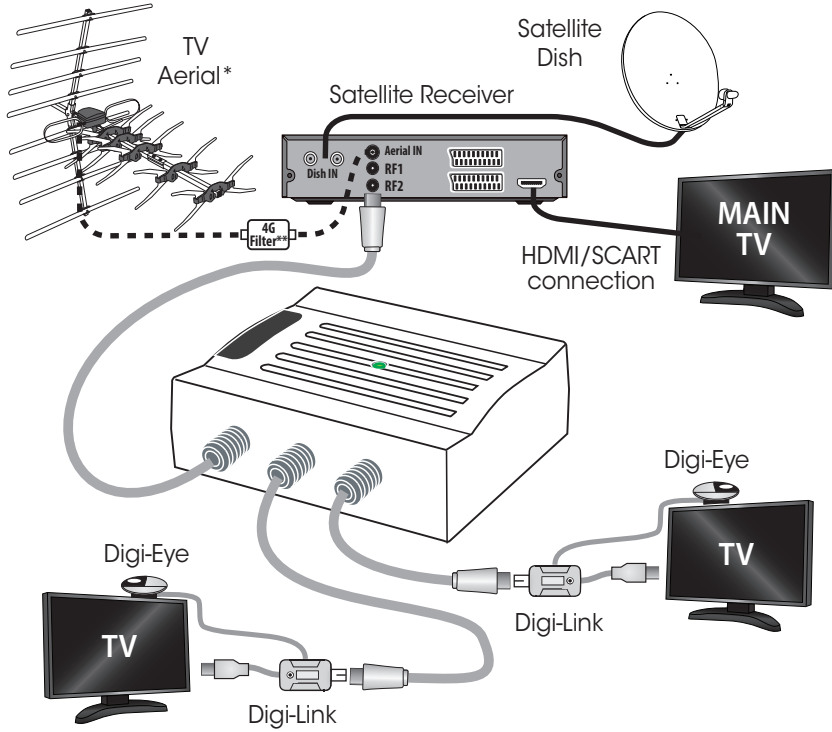
The recommended clearances and other precautions given in these instructions must be observed to prevent overheating. In addition, units should not be positioned where they are likely to become covered by curtains, fabric or insulating material. The amp should not be left resting on a carpet.

Other precautions

These appliances are not waterproof, they are intended for indoor use only and must not be positioned where they could be exposed to dripping or splashing water. Objects containing liquids should not be placed on or near the amplifier.
To prevent fire, make sure the unit and attached cabling is installed well away from naked flames.

Mains Plug

Your amplifier is supplied with a standard mains plug already fitted, if you need to change the plug use a competent professional (ELECSA or NICEIC) to make the connection.
If you need to change the fuse use a 3 Amp fuse to BS1362 carrying the ASTA or BSI approved mark and refit the plastic fuse carrier.



*To distribute terrestrial TV channels over RF2 you will require a TV aerial connected to the "Aerial In" socket on the satellite receiver

**Install a 4G filter if required

	LDL102RR	LDL104RR
Number of inputs/outputs	1/2	1/4
Frequency Range	UHF 470-790MHz	
Gain per port	18dB	14dB
Noise Figure	Typical <3.0dB	Typical <3.0dB
Max. output level (IMA3 -60dB)	96dBuV	92dBuV
Isolation between outlets	12dB	10dB
Return Path range	5-30MHz	
Return Path Gain	6dB	6dB
Power for DigiLink eyes	9V 15mA short circuit protected	
RED, EMC and LVD	Compliant	
Power required	9V DC 50mA (min) via input from RF2	
Dimensions	77(W) × 92(L) × 27(H)mm	77(W) × 104.5(L) × 27(H)mm

Applications

These amplifiers are principally designed to boost and distribute the signal from the RF2 output of a satellite receiver. When using these amplifiers with a Sky Digibox, the amplifier must be fed from the RF OUT-2 socket of the Digibox. However if the RF2 Channel is set to 59 or above (68 is usually the default channel) you will need to reset it to a channel from 21-58 in the Digibox Setup Menu.

To view satellite RF2 output TVs require an analogue tuner.

Later Digibox models such as the Sky+HD 2TB are not fitted with an RF OUT2 output and you will need an I/O converter such as the Labgear MRX600K to distribute signals from the Digibox to other TVs as well as a 9V or 12V DC 100mA power supply plugged into the power socket on the side of the amplifier.

The LDL compact amplifiers are also suitable for digital TV signal distribution Ch21-60 with the addition of a separate DC power supply. If you are affected by 4G interference in your area you may need a Ch60 filter (currently available from at800 free of charge).

Resetting the RF Channel on a Digibox

1. Switch on your Sky™/Sky+™/ Sky+ HD™ receiver and view on your main television.
2. Press the SERVICES button on your Sky™ remote.
3. Select SYSTEM SETUP option (for SKY+ HD there is no SYSTEM SETUP option press 0 instead).
4. Press the following buttons in sequence: 0, 1, SELECT (for SKY+ HD this is a hidden option and does not appear on screen). You should now see the installers' menu.
5. Select the RF channel number option and key in a new channnel number from 21-58 and select 'Power On'. Make a note of the channel number you choose as you may need it when tuning your other TVs.

Installation

Important note: please read the General Safety Precautions before installing this amplifier.

Location

Try to choose a location for the amplifier which is convenient for cable runs to the system outlets but which is not too far from the aerial. Select a cool, dry, well ventilated area which is free of any risk of dripping or splashing water. Stand on a stable flat surface (not a carpet or insulating material) or fix to a wall or sturdy upright (screws not provided). Do not allow the amp to hang on the cables.

Ensure that there is adequate space to ensure cables are not kinked when connecting (minimum 120mm radius recommended) and that above and on the free sides of the amp there is at least 25mm for ventilation. Do not cover.

Electricity supply

Each unit is supplied with a fitted mains plug with 3A fuse, if this is not suitable get a competent professional (ELECSA or NICEIC) to make the connection with an isolating switch to allow it to be disconnected when necessary.

Signal connections

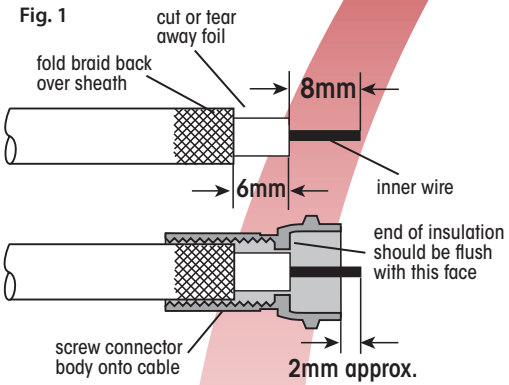
Input and output connections to the amp are made using F-type (IEC 60169-24) connectors.

Connections can be made using a tool for crimp or compression connectors or by hand with twist-on connectors (see Fig.1 opposite).

Ensure that the correct size connector is used to match the size of the coax cable.

Make sure that the external connections are adequately weatherproofed to prevent water ingress which could damage your amplifier.

Fig. 1



2 –Year Guarantee

Your amplifier is guaranteed against faulty components or poor workmanship for a period of two years from the date of purchase. This guarantee does not cover accidental or malicious damage (Including damage from natural causes such as lightning) and will be invalidated by installation or use other than in accordance with these instructions, repair or attempted repair other than by the manufacturer, or opening or removal of the case. This does not affect your statutory rights.

Labgear Reserve the right to modify their designs or specifications, In the light of future developments, without prior notice. Performance figures quoted are typical and subject to normal manufacturing and service tolerances.

This product is intended for use within the UK and Eire.

Declaration of Conformity

Hereby, Labgear declares that this amplifier for TV broadcast reception in domestic premises is in compliance with the Radio Equipment Directive 2014/53/EU.
The full Declaration of Conformity is available by contacting the following internet address: www.labgear.co.uk/DoC

Technical Support

For further help, advice or information visit

Our website www.labgear.co.uk

Technical team www.labgear.co.uk/technical

Email: technical@labgear.co.uk

or **live chat** during office hours via our website

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Freeview

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Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority for recycling advice.

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