# Labgear

LDA204K, LDA2061K & LDA2081K

4,6 & 8 Way 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 LDA amps can carry analogue and digital TV and radio, DAB, Freeview, DVB-T and DVB-T2 HD TV signals and have:

- More efficient Switch-Mode Power Supplies which run cooler
- 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



- Class 1 filtering to provides a typical 40dB protection from interference from 4G and 5G signal transmissions
- · Labgear amplifiers use F-type coaxial connectors for better matching and security

The fully screened general purpose 4, 6+1 and 8+1-out amplifiers feature separate inputs for VHF (Band III TV, FM and DAB digital radio) and UHF (Freeview, DVB-T and DVB-T2 HD digital TV). The 6+1 and 8+1-out amplifiers also have automatic line powering on the UHF input to power a masthead pre-amplifier (KIT125VK) for fringe reception areas or if you have a long cable run from aerial to amplifier.

The 6+1 and 8+1-out amplifiers have FULL (17dB) output which can either be used for very long cable runs or via a signal splitter to feed up to 8 further points.

All LDA amplifiers are compliant with the Radio Equipment Directive 2014/53/EU and meet harmonised standard EN 303 354 for product Type D, Class 1.

### **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.

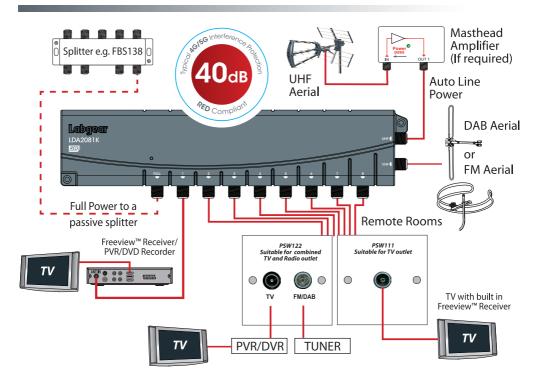
To prevent fire, make sure the unit and attached cabling is installed well away from naked flames.

#### Mains Plua

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.

# Labgear Typical Installation and Specifications





	LDA204K	LDA2061K	LDA2081K
Number of inputs/outputs	2/4	2/6 + Full	2/8 + Full
Frequency Ranges	VHF 87-230MHz, UHF 470-694MHz		
Gain per port	10dB	10dB/17dB Full	10dB/17dB Full
Gain flatness	+/-1dB	+/- 1dB	+/-1dB
Noise Figure	Typical <4.0dB	Typical <4.0dB	Typical <4.0dB
4G protection Class 3	Typical -40dB	Typical -40dB	Typical -40dB
Isolation between outlets	20dB	20dB	20dB
Max. output level (IMA3 -60dB)	95dBµV	84dBµV	84dBµV
Return Loss Input/Output	>8dB/>8dB	>8dB/>8dB	>8dB/>8dB
Auto Line Power on UHF	N/A	12V=50mA	
RED, EMC and LVD	Compliant		
Built-in Power Supply	220-240V~50Hz at <3W		
Dimensions	165 x 30.5 x 69mm	0.5 x 69mm 265 x 30.5 x 69mm	

# Applications, and Installation



# **Applications**

These amplifiers are designed to boost and distribute the signal from an outdoor aerial. Aerials that are fitted indoors may have compromised performance with both lower signal levels and a higher pick-up of noise.

LDA amps are fitted with a Class 1 4G/5G filter however if you wish to receive TV on Channel 60 vou should use a Labaear LDL DiaiLink Class 0 amplifier, vou may also need a Channel 60 4G filter (currently available from at 800 free of charge).

LDA amps do not have an IR return path to enable channel changing from remote locations.

### Installation

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

Please Note: If the "FULL" power socket is not being used it must be terminated with the  $75\Omega$  terminator supplied.

### 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.

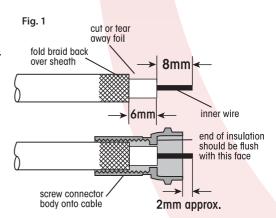
# Signal connections

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.



# Labgear Guarantee and Technical Support



### 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 rece<mark>ption in do</mark>mestic 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





Standard: EN 303 354

**Product Type:** D Signal Distribution Amplifiers 1 Mitigates 4G/5G interference Filter Class:

Suitable for digital TV signal distribution Ch21-48 in the UK and FIRE.

## **Technical Support**

For further help, advice or information visit Our website www.labaear.co.uk Technical team www.labgear.co.uk/technical Email: technical@labaear.co.uk or live chat during office hours via our website

# Labgear

Philex House, London Road, Bedford MK42 0NX www.labgear.co.uk



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



EU Distributor: Philex Electronic Ireland Ltd. Robwyn House, Corrintra Castleblayney, Co. Monaghan, A75 YX76, Ireland