

General Safety Precautions

Disconnect Device

The mains plug is used as the disconnect device, the disconnect device must be positioned so that it remains readily operable.

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/fabrics or thermal insulation materials in a roof space or similar building void. The unit should not be left resting on a carpet.

Other Precautions

These appliances are not waterproof. They are for indoor use only and must not be positioned where they could be exposed to dripping or splashing liquids. Objects containing liquids should not be placed on or near the appliance. To prevent risk of fire, keep the unit and attached wiring well away from naked flames.

Fitted Mains Plug

These appliances are supplied with a standard fixed plug already fitted. If this is not suitable, refer to the instructions below. If you need to change the fuse in this plug, a 3 Amp fuse to BS1362 carrying the ASTA or BSI approved mark must be used. Always re-fit the plastic fuse carrier when replacing the fuse.

Changing the Plug

If the fitted mains plug is not suitable for the socket outlet in use, it should be cut off and an appropriate new plug fitted. Any instruction supplied with the plug should be followed. The Brown wire must be connected to the live (L) terminal of the plug and the Blue wire to the neutral (N) terminal. Neither wire should be connected to the earth (E) terminal of a 3 pin plug (this appliance does not require an earth connection to the 3 pin plug). Ensure that the cord grip in the plug is correctly used and clamps the sheath of the cord firmly.

Fuse Rating: If the new plug is a fused type, the fuse fitted should be rated at no more than 3 Amp. **Caution:** The old plug should be disposed of promptly since it would be dangerous if plugged into a live socket.

2 -Year Guarantee

Your distribution unit 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 open or removal of the case. This does 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

For further information or any queries please contact

Customer Careline: 08457 573 479

(Local rate – UK only)

Technical Support: www.philex.com/support

4



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



Installation Instructions

Introduction

These fully screened general-purpose 4, and 8 way amplifiers are ideal for distributing TV, FM, DAB radio, Satellite and CCTV signals. There are separate inputs for each of these signal sources. All outputs have a return path, are IR enabled and compatible with Digilinks.

The LDU604G and LDU608G have a switch which should be set to 'SAT' if a satellite receiver is included in the system, or switched to 'UHF & CCTV' if only using the UHF/CCTV inputs (this links the downlink and uplink).

Both units are suitable for digital terrestrial TV (Freeview™) signals and also incorporate a filter to remove any signals from LTE 800 4G mobile phone transmitters picked up by an attached UHF antenna.

Applications

All antenna cables should be cabled direct to the loft (using PF100 or similar digital cable) where they are individually connected to the Home Distribution Unit. The unit combines the FM, DAB, UHF TV, CCTV, LNB 1 and LNB 2 signals together and distributes them via the down link to the Master point. LNB 1 has a dedicated input and output.

1. Satellite - The wiring diagram on page 2 shows how to make connections. The cable from the DOWNLINK OUT on the HDU feeds into the TRIPLEXED INPUT on the rear of the main outlet plate, if you are fitting SKY+™ or Sky HD™ a second connection from LNB 1 OUT is fed down to the Master point on a separate cable, straight through to the SAT 2 INPUT on the back of a Quad outlet plate (PSW351T or PSW241) or to a separate single F outlet (PSW111) if preferred.

To view satellite RF and TV signals from other outlets a return feed needs to be run from the RF2 output of the digital satellite receiver to the UPLINK IN socket of your HDU. This can be made via a combination socket that has an integrated coax RETURN socket (PSW351T or PSW242T) or by fitting a separate single coax RETURN socket (PSW111).

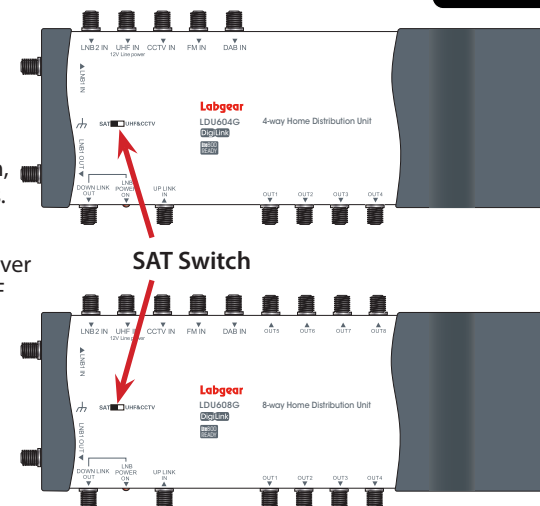
There are several different options for outlet plates at your Master point - see the table on page 2 and choose an outlet or a combination of outlets according to your requirements and according to what outlets are already in place.

2. Radio - the FM and DAB signals are split internally to feed both the Downlink and the remote rooms. This does not apply to the UHF TV signal, this must come from the Uplink.
3. The CCTV input needs to be modulated. If CCTV is not required terminate input with the plug supplied.

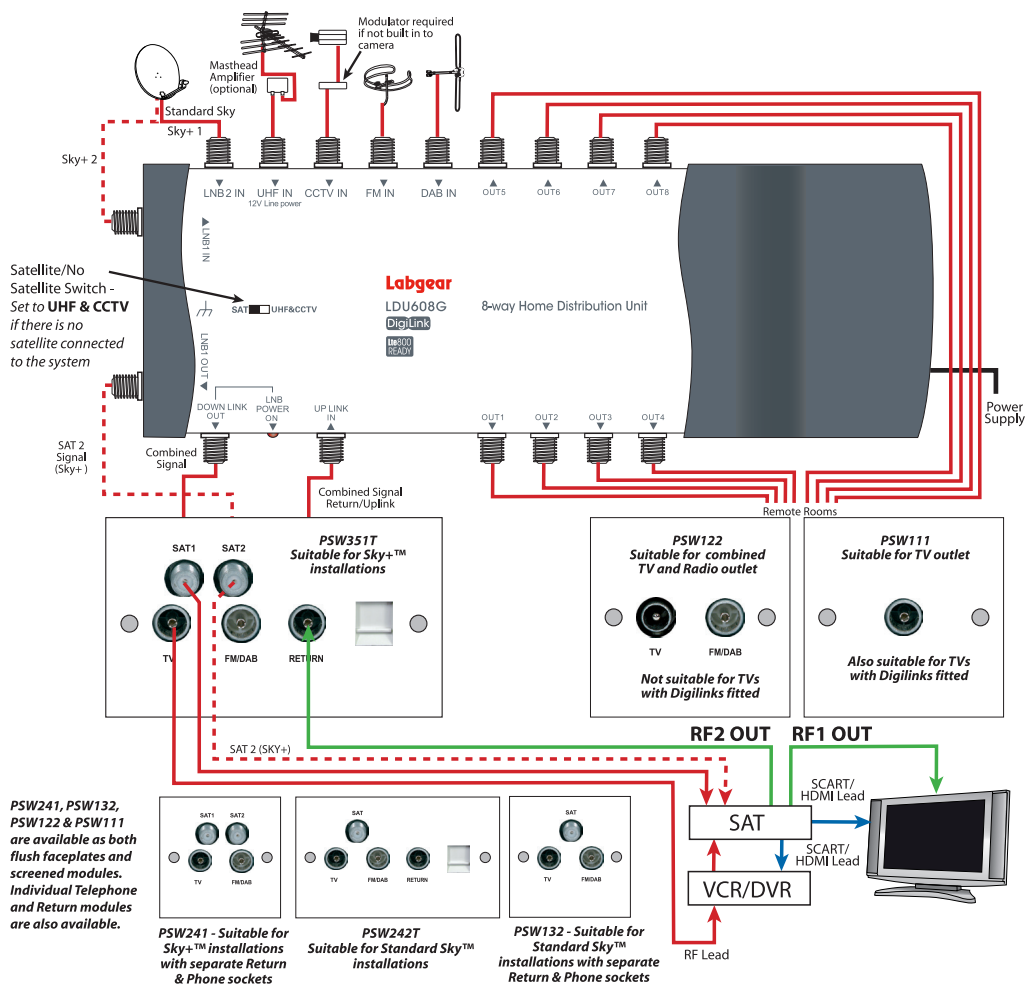
Note: Both LDU distribution units have a 6mm² Earth Connection to comply to EN 50083-1. These products must use non-isolated fully screened outlet plates (such as the PSW range).

Installation

Important note: attention is drawn to the General Safety Precautions Panel on page 4 which contains advice referring to safe installation and operation of these products.



LDU608G Labgear TV Distribution System



PSW241, PSW132, PSW122 & PSW111 are available as both flush faceplates and screened modules. Individual Telephone and Return modules are also available.

PSW241 - Suitable for Sky+™ installations with separate Return & Phone sockets

PSW242T Suitable for Standard Sky™ installations

PSW132 - Suitable for Standard Sky™ installations with separate Return & Phone sockets

	TV	FM/DAB	Sky+™	Sky™	Return	Phone
PSW351T	✓	✓	✓	✓	✓	✓
PSW241	✓	✓	✓	✓		
PSW242T	✓	✓		✓	✓	✓
PSW132	✓	✓		✓		
PSW113			✓			
PSW122	✓	✓				
PSW111	✓					

Location

Choose a location for the amplifier from which it is convenient to run cables from the antennas and to the system outlets. Typical examples of suitable locations are a loft space or a cupboard. In weak signal areas it is helpful to keep the antenna cables as short as possible. Select a cool, dry location to install the amplifier. This means a location where the ambient temperature will remain between -10°C and +40°C, and which is free from risk of dripping or splashing water etc. The fixing location should allow adequate access to the equipment for wiring and maintenance. Clearance of at least 25mm should be allowed around the top and right hand side of the unit for ventilation. More clearance will be needed under and to the left of the amplifier to allow access for cables.

Fixing

The amplifier should be fixed to a wall or other suitable hard surface, using suitable screws and masonry plugs (not supplied). The amplifier should not be left supported by its own wiring, nor should it be left resting on a carpet or other insulating and/or inflammable surfaces.

Electricity Supply

Fixed wiring and connection of the electrical supply to these products should be carried out in accordance with BS7671 (IEE Wiring Regulations). Each amplifier is supplied with a fitted 13A mains plug. If this is not suitable, see the General Safety Precautions Panel on page 4. As an alternative to the use of plug and socket connection, the amplifier may be connected to the supply using a switched fused connection unit BS 1363-4. A 3A fuse to BS 1362 should be fitted in the fused connection unit. If the power unit is connected to the supply other than by means of its fitted fused plug or a fused connection unit, it must be protected by a non-time delayed fuse or a type B MCB at the distribution board of rating not exceeding 6A. An isolating switch should be provided near to the unit to allow it to be disconnected from the supply when necessary.

Signal Connections

It is recommended that all F-type connectors are of the crimp type, as screw on connectors do not comply with the CAI codes of practice. Contact the CAI for clarification.

Specifications

	LDU604G	LDU608G
Number of Inputs	6	6
Number of Outputs	4	8
Gain to outputs	±6dB	±6dB
Noise figure	4dB	4dB
Gain/Loss to Downlink:		
FM 88-108MHz	-5dB	-5dB
DAB 217-230MHz	-6dB	-6dB
UHF 470-790MHz	+2dB	+2dB
CCTV 470-862MHz	+2dB	+2dB
SAT 1 950-2300MHz	-2dB	-2dB
SAT 2 950-2300MHz	-3dB	-3dB

	LDU604G	LDU608G
LNB rejection in UHF	>35dB	>35dB
Uplink Gain 470-790MHz	8dB	8dB
Return Path	3-10MHz	3-10MHz
Return Path Gain	-2dB	-2dB
All port IR enabled	9V/15mA	
LNB Line Power	20V/400mA	
UHF Line Power	12V/40mA	
f- connectors	IEC 60169-24	
Power requirements	230VAC~50Hz	250mA typical