



### 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/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 water. 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 3Amp 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). 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 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 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](http://www.philex.com/support)**



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 12 and 16 way TV and FM/DAB amplifiers are fully compatible with Labgear DigiLink remote control systems. This makes them ideal for use in 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 box for any room on the system.

The addition of a number of MRX955 DigiLink remote 'eyes' in the relevant rooms completes the installation. Alternatively the products may be used as traditional 'aerial amplifiers' without making use of the infrared capability.

Separate inputs are provided for UHF TV (470-790 MHz) and for FM/DAB (88-230 MHz). Remote capability is provided over a 5-15 MHz RF return path.

All amplifier outputs are line powered at 9V DC to supply remote infra-red receivers. The line power at any output(s) can be short-circuited safely, without affecting the operation of any other output(s).

Both units are also suitable for direct amplification of digital terrestrial TV (Freeview™) signals and the UHF input can be connected directly to a UHF antenna instead of a satellite receiver. When connected directly to a UHF aerial a built in filter removes any signals from Lte 800 4G mobile phone transmitters picked up by the attached aerial.

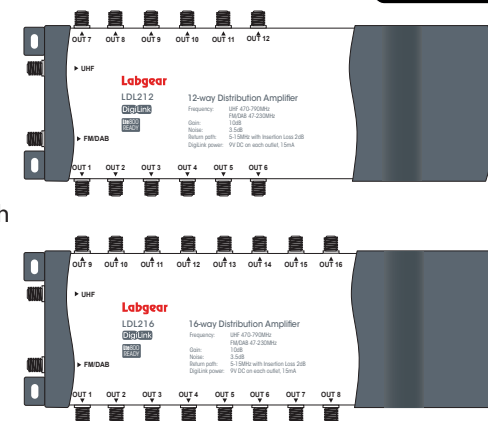
**Please Note:** These amplifiers are NOT COMPATIBLE with the Labgear Handylink Remote control extender system (MRX120). These amplifiers do not provide line-power for masthead preamplifiers.

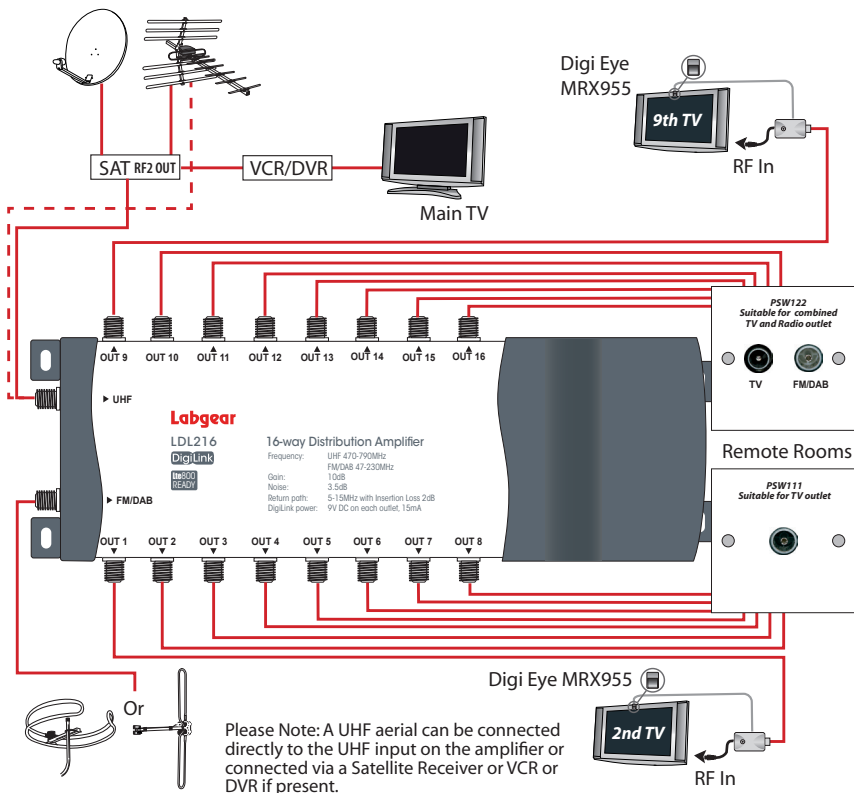
**Applications** - Example application diagram is shown on page 2.

Applications include the following:

- Simple multipoint distribution of radio and TV signals, without remote control. This will allow quick and easy addition of an IR control at a later date;
- Use in conjunction with a Sky Digibox or other unit with an IR-return enabled RF output. An MRX955 DigiLink room kit will be required for each room from which remote control is needed (because the Digibox can decode the IR return signals directly, this application does not require any base unit or IR re-emitters).

**Please Note:** when using these amplifiers with a Sky Digibox, the amplifier must be fed from RF OUT-2 socket of the Digibox. However if the RF Channel is set to 61 or above (68 is usually the default channel) you will need to reset it to a channel from 21-60 in the Digibox Setup Menu (see bottom of page 3). Later Digibox models such as the Sky+HD 2TB are not fitted with an RF OUT2 output and you will need an I/O link to distribute signals from the Digibox to other TVs.





	LDL216	LDL212
No of Inputs	2	
No of Outputs	16	12
Return Path Frequency Range	5-15MHz	
Return Path Gain	-2dB	
Frequency Range	UHF: 470-790MHz FM/DAB: 47-230MHz	
UHF/FM/DAB Gain per port	10dB	
Max Out put level (IMA3-60dB). EN50083-5	>108dBuv	
Noise Figure	<3.5dB	
Return Loss Input/Output	10dB/10dB	
Isolation	25dB	
All Ports IR Enabled	9V 15mA short circuit protected	
Built-in Power Supply	220-240V~50Hz	
Dimensions	340 x 120 x 55mm	

**Installation**

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

**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 best 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. The fixing location should allow adequate access to the equipment for wiring and maintenance. Clearance of at least 25mm should be allowed around the right hand side of the unit for ventilation. More clearance will be needed on the other sides 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 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 3 Amp fuse to BS1362 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**

Input and output signal connections are made using f type (IEC 60169-24) connectors. Good quality plugs should be used, preferably of the crimp on type. Attention is drawn to the need to maintain DC continuity throughout the system for correct operation of infra-red remote control functions.

**Resetting 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 channel number from 21-58. Make a note of the channel number you choose as you may need it when tuning your other TVs.