



SERIES **5**LITE

Multiswitch

INSTRUCTION MANUAL

WM508L | WM512L | WM516L | WM524L | WM532L



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In the interest of continuous improvement,
all specifications of products within this brochure are
subject to change without notice.

CONTENTS

Safety	3
Precautions	3
Guarantee	3
General Description	4
Product Description	5
Technical Description	6
Installation Instructions	6
Example Configuration	9
Specifications	10

SAFETY

The Whyte Series 5 Lite Multiswitches are intended for indoor use only. Do not install the Multiswitch in damp, humid, hot or dusty areas.

Switch off and remove the power supply when making connections to the Multiswitch to avoid damaging the unit.

Always earth bond the Multiswitch using the Earth Bonding Lug and/or the Earth Terminal Bars to a suitable earth bonding point using minimum 4mm² diameter earth cable.

PRECAUTIONS

To ensure trouble free operation:

Do not remove the cover of the Multiswitch or disassemble it as this will invalidate the guarantee.

The female F connectors on this unit were designed for use with '100' type coaxial cable with a centre core diameter of 1mm². When using larger 125 or 167 cables, you must ensure that suitable F connectors with reducing pins are used otherwise damage to the unit will occur which will invalidate the guarantee.

Do not over tighten the F connectors (finger tight only).

GUARANTEE

All Whyte products are guaranteed for a period of 4 years from the date of purchase against defects. Within this guarantee period, Whyte Technologies will repair or replace the faulty product. In the unlikely event, please return any faulty products to your dealer.

The Guarantee will be deemed as void if the serial number on the product is removed, damaged or illegible. The Guarantee excludes defects caused by incorrect use, accidental damage, disassembly, water/fire/lightning damage or lack of ventilation.

GENERAL DESCRIPTION

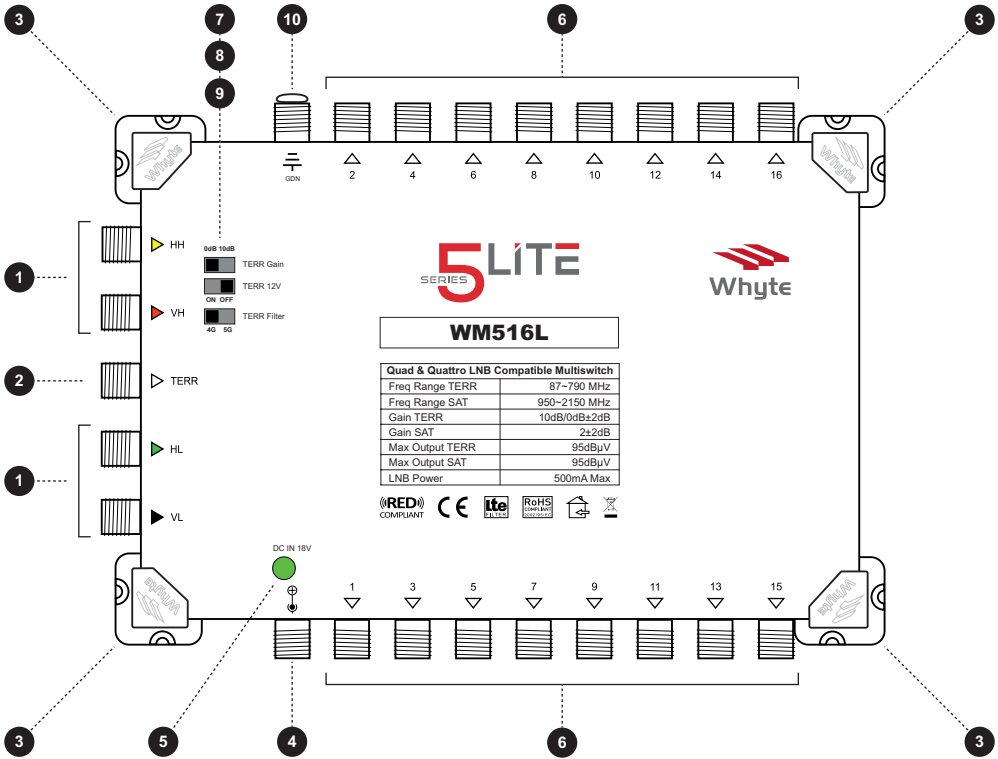
The Whyte Series 5 Lite Multiswitch range is ideal for SAT and TERR distribution in domestic installations and small apartment blocks. This high quality Multiswitch is compatible with Quad or Quattro LNB's and comes in a range of models including 8, 12, 16, 24 and 32-Way output. The Whyte Series 5 Lite range is RED compliant and has a built in selectable 4G/5G filter for excellent rejection of LTE signals.

The Whyte Series 5 Lite range features superior low-noise performance and comes complete with a separate Power Supply Unit. This enables these Multiswitches to be powered locally or remotely, via an extended coaxial cable. In addition, there is a TERR gain switch and a switchable 12V supply to power a masthead amplifier where required.

Features include:

- RED Compliant
- Quad and Quattro LNB compatible
- Hi quality Standalone Multiswitch with 4 years warranty
- Industry leading performance at a competitive price
- Switchable 4G/5G Filter
- Colour coded inputs
- Selectable 4G/5G filter
- LED power indicator
- Includes separate Power Supply Unit with F-Type DC Lead
- Switchable 12V supply to power Mast Head Amplifier
- Adequate clearance to route cables under the Multiswitch

PRODUCT DESCRIPTION



- 1. SAT Inputs
- 2. TERR Input
- 3. Corner Brackets
- 4. Auxiliary 18V Input
- 5. LED Power Indicator
- 6. Subscriber Outputs
- 7. TERR Gain Switch
- 8. TERR 12V Switch
- 9. 4G/5G Filter Switch
- 10. Earth Lug

Model WM516L shown for illustrative purpose only

TECHNICAL DESCRIPTION

Whyte Series 5 Lite Multiswitches are compatible with Quad and Quattro LNB's. The inputs are colour coded for ease of installation which is especially useful when using a Quattro LNB. For convenience, existing satellite dishes which are already fitted with a Quad LNB may be used, whereby the drop cables can be connected to the SAT inputs in no particular order.

The Series 5 Lite range is RED Compliant and provides a nominal gain of 2dB(\pm 2dB) for Satellite and 10dB(\pm 2dB) Terrestrial Reception. To facilitate the reception of FM and DAB radio at the outlets, the FM and DAB aerials must be combined with the Terrestrial TV Aerial using a Triplexer. The combined signals are then connected the TERR input of the Multiswitch.

A high rejection switchable 4G/5G filter is fitted to avoid interference from LTE signals. If required, a Terrestrial mast amplifier can be powered via the multiswitch by setting the 12V switch to the "ON" position. If a mast amplifier is not being used, this switch must be left in the "OFF" position. The TERR gain can be set to 0dB or 10dB via the TERR Gain Switch.

The Power Supply Unit provided must be connected to the 18V DC Input. This will power the Multiswitch as well as provide power to the Satellite LNB inputs. A maximum of 500mA LNB power is available which enables the use of a line powered launch amplifier if required.

If a local mains supply is not available such as in lofts and outdoor cabinets, the Power Supply Unit may be conveniently fitted elsewhere whereby the 18V DC F-Type lead can be extended using coaxial cable.

INSTALLATION INSTRUCTIONS

MOUNTING THE MULTISWITCH

Select a suitable location to install the Multiswitch. Do not install the Multiswitch in damp, humid, hot or dusty areas. Using the screw slots on the Corner Brackets, secure the Multiswitch using the supplied fixing screws or other fixing to suit the relevant wall surface or cabinet.

CONNECTING THE SAT & TERR INPUT CABLES

Use a suitably sized Satellite Dish to provide adequate signal levels from the satellite being received. Ensure that the Satellite Drop Cables are connected correctly in the corresponding order with respect to the LNB and the Multiswitch SAT inputs (Quattro LNB only). Ensure that the F Connectors are properly sealed against water ingress.

If a Composite Cable (multi core coaxial cable) has been used, ensure that the outer jacket is not facing upwards and cannot collect rain water. Check the Terrestrial Drop Cable and ensure that this has also been sealed against water ingress. If a Triplexer has been used to combine FM and DAB aerials with the UHF Terrestrial Aerial, ensure that this is also water tight. Ensure that all drop cables have drip loops prior to their entering the building.

Connect the SAT and TERR drop cables to the corresponding Satellite & TERR Inputs of the Multiswitch.

CONNECTING THE SUBSCRIBER CABLES

Terminate the Subscriber Cables with good quality F Connectors and connect to the Subscriber Outputs. The F Connectors should be fitted to the coaxial cable correctly, ensuring that the centre core protrudes 3mm above the F Connector body. See figure 3 (on page 8). Ensure that you do not exceed the bending radius of the Coaxial Cable being used.

The Subscriber Cables may be arranged either side of the Multiswitch before being terminated and connected. If required, the Subscriber Cables may be arranged to one side of the Multiswitch, with the cables passing under the Multiswitch before being terminated and connected to the Subscriber Outputs on the opposite side. See figure 4 (on page 8). Always use approved high quality coaxial cable.

EARTH BONDING

Earth bond the Multiswitch to the Earth Bonding Lug using minimum 4mm² Earth Bonding Cable. Make sure that the Earth Bonding Cable is connected directly to the building's PME (Protective Multiple Earthing) point. Matching Whyte Technologies Earth Bonding bars for your Multiswitch are available from Whyte Technologies distributors.

CONNECTING THE POWER SUPPLY UNIT (PSU)

The PSU must be fixed to the relevant wall surface using the appropriate fixings. Connect the DC F-type lead to the 18V DC Input of the Multiswitch.

Once all connections have been made, connect the plug to a 240V AC (110V AC) socket to power up the Multiswitch. If a local mains supply is not available such as in lofts and outdoor cabinets, the Power Supply Unit may be conveniently fitted elsewhere whereby the 18V DC F-Type lead may be extended using coaxial cable.

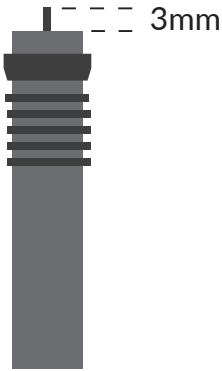


Figure 3

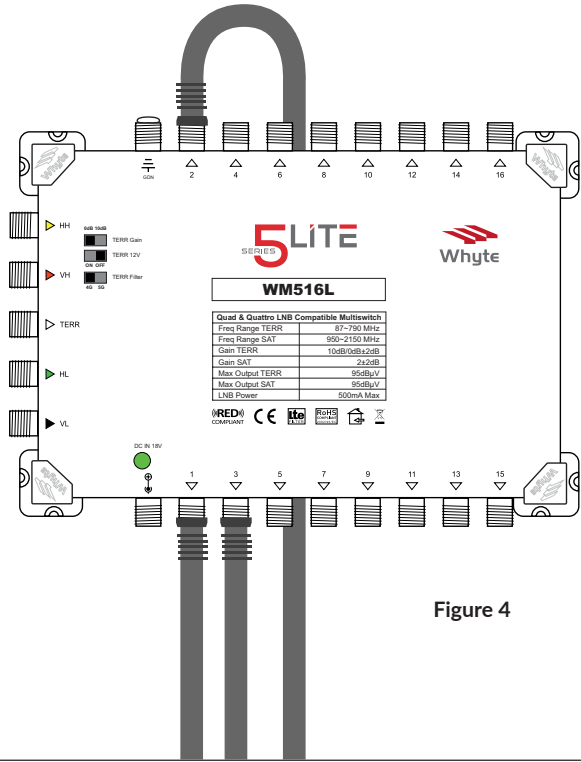
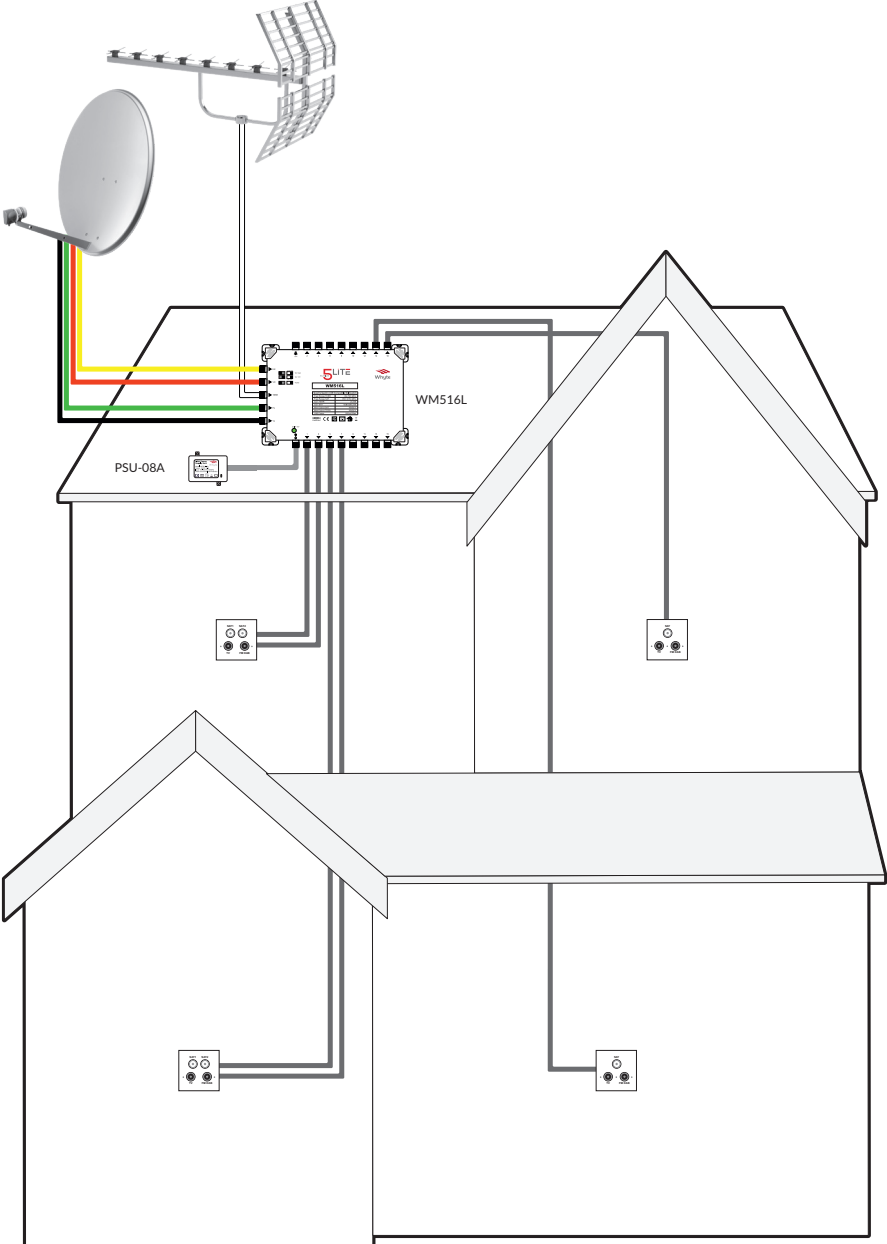


Figure 4

EXAMPLE CONFIGURATION



SPECIFICATIONS:

WM508L

MODEL	WM508L	
Frequency Range	SAT	950-2150MHz
	TERR	87-790MHz
4G/5G Switch RED Compliant		YES
Input (F-Type Female)		4 SAT + 1 TERR
Tap Outputs (F-Type Female)		8
Gain	SAT	2±2dB
	TERR (switchable gain)	10dB/0dB±2dB
Return Loss	SAT Trunk Input	>11dB
	TERR Trunk Input	>8dB
	SAT Tap Output	>11dB
	TERR Tap Output	>10dB
Max Output Level	SAT (IMA ³ 35dB)	95dBμV
	TERR (IMA ³ 60dB)	95dBμV
Isolation	Trunk-Trunk Input	≥65dB
	Cross-Polarity Tap	≥30dB
Impedance		75Ω
Switching Commands		13/18V / 22kHz
Power Supply Voltage		18V DC
Powering	Via DC In	YES
Current Consumption (Max) @ 18V		190mA
Power Indication		LED
18V DC 800mA PSU Included (WP-0.8A)		YES
Masthead Power Supply (Switchable)	TERR Input Only	12V DC 100mA
Earth Lug		Up to 6mm ² core
Dimensions WxLxH (mm)		161 x 152 x 43mm
Weight		398g

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WM512L	WM516L	WM524L	WM532L
950-2150MHz	950-2150MHz	950-2150MHz	950-2150MHz
87-790MHz	87-790MHz	87-790MHz	87-790MHz
YES	YES	YES	YES
4 SAT + 1 TERR	4 SAT + 1 TERR	4 SAT + 1 TERR	4 SAT + 1 TERR
12	16	24	32
2±2dB	2±2dB	2±2dB	2±2dB
10dB/OdB±2dB	10dB/OdB±2dB	10dB/OdB±2dB	10dB/OdB±2dB
>11dB	>11dB	>11dB	>11dB
>8dB	>8dB	>8dB	>8dB
>11dB	>11dB	>11dB	>11dB
>10dB	>10dB	>10dB	>10dB
95dBμV	95dBμV	95dBμV	95dBμV
95dBμV	95dBμV	95dBμV	95dBμV
≥65dB	≥65dB	≥65dB	≥65dB
≥30dB	≥30dB	≥30dB	≥30dB
75Ω	75Ω	75Ω	75Ω
13/18V / 22kHz	13/18V / 22kHz	13/18V / 22kHz	13/18V / 22kHz
18V DC	18V DC	18V DC	18V DC
YES	YES	YES	YES
190mA	190mA	200mA	190mA
LED	LED	LED	LED
YES	YES	YES	YES
12V DC 100mA	12V DC 100mA	12V DC 100mA	12V DC 100mA
Up to 6mm ² core	Up to 6mm ² core	Up to 6mm ² core	Up to 6mm ² core
234 x 152 x 43mm	234 x 152 x 43mm	288 x 152 x 43mm	352 x 152 x 43mm
530g	554g	696g	840g



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