Whyte

SERIES 5 LITE

MULTISWITCH
INSTRUCTION MANUAL

MODELS:

WM508L

WM512L

WM516L

WM524L

WM532L

CE

CONTENTS

SAFETY

The 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 4mm^2 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 1mm^2. When using larger CT125 or CT167 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

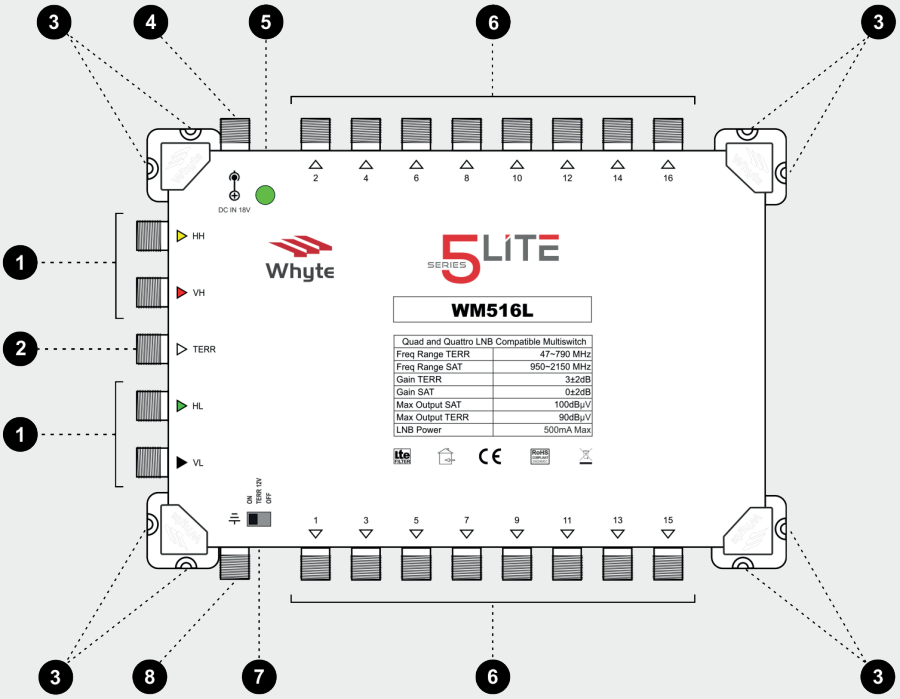
All Whyte products are guaranteed for a period of 24 months from the date of purchase.

GENERAL DESCRIPTION

The Whyte Series 5 Lite Standalone Multiswitch range is designed for domestic installations as well as for small apartment blocks. The range is compatible with both Quad and Quattro LNB's and comes in sizes ranging from 8 way to 32 way. Features include:

- Hi quality Standalone Multiswitch with 2 years warranty
- Industry leading performance at a competitive price
- Includes separate Power Supply Unit with F-Type DC Lead
- Gain SAT 0dB TERR 3dB
- Switchable12V supply to power Mast Head Amplifier
- Colour coded inputs
- LED power indicator
- Inbuilt Hi-Rejection LTE 4G filter
- 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 (REC) Outputs
7. TERR 12V Switch
8. Earth Lug

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 5 Lite range provides a nominal gain of 0dB(±2dB) for Satellite and 3dB(±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 LTE filter is fitted to avoid interference from 4G 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 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 appropriate fixing screws and wall plugs 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 CAI approved high quality coaxial cable.

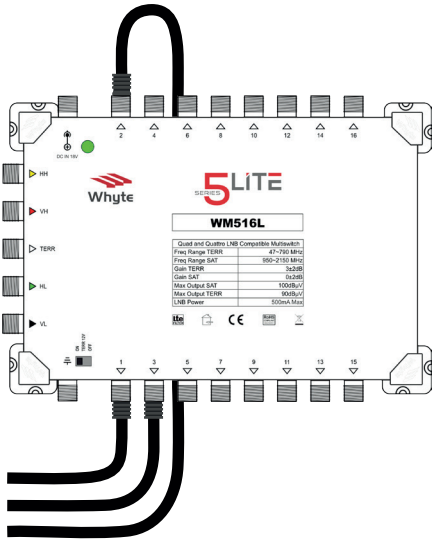


Figure 4

Figure 3

EARTH BONDING

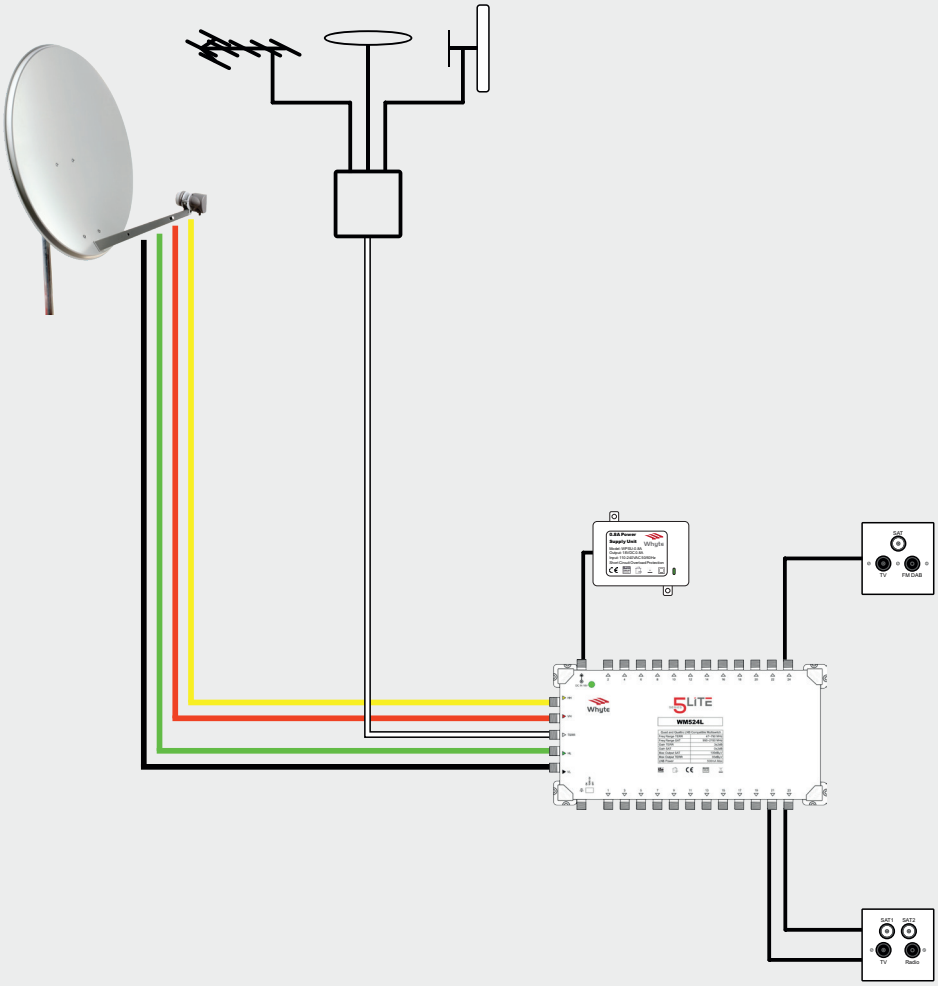
Earth bond the Multiswitch to the Earth Bonding Lug using minimum 4mm^2 Earth Bonding Cable. Make sure that the Earth Bonding Cable is connected directly to the building's PME (Protective Multiple Earthing) point.

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 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.

EXAMPLE APPLICATION



SPECIFICATIONS

Model		WM508L	WM512L	WM516L	WM524L	WM532L
Frequency	Satellite	950-2150MHz	950-2150MHz	950-2150MHz	950-2150MHz	950-2150MHz
	Terrestrial	47-790MHz	47-790MHz	47-790MHz	47-790MHz	47-790MHz
Inputs (F Connectors)		4 SAT+1 TERR	4 SAT+1 TERR	4 SAT+1 TERR	4 SAT+1 TERR	4 SAT+1 TERR
Outputs (F Connectors)		8 Tap Outputs	12 Tap Outputs	16 Tap Outputs	24 Tap Outputs	32 Tap Outputs
Gain	SAT	0±2dB	0±2dB	0±2dB	0±2dB	0±2dB
	TERR	3±2dB	3±2dB	3±2dB	3±2dB	3±2dB
TERR 12V DC Supply (switchable)		100mA	100mA	100mA	100mA	100mA
Isolation	Trunk-Trunk	≥28dB	≥28dB	≥28dB	≥28dB	≥28dB
	Cross-Polar	≥25dB	≥25dB	≥25dB	≥25dB	≥25dB
	Tap-Tap (SAT)	≥25dB	≥25dB	≥25dB	≥25dB	≥25dB
	Tap-Tap (TERR)	≥23dB	≥23dB	≥23dB	≥23dB	≥23dB
	Rejection	≥20dB	≥20dB	≥20dB	≥20dB	≥20dB
Output Level	SAT (IMA³-35dB)	100dBµV	100dBµV	100dBµV	100dBµV	100dBµV
	TERR (IMA³-60dB)	>90dBµV	>85dBµV	>85dBµV	>85dBµV	>85dBµV
Switching Voltage		15±0.8V	15±0.8V	15±0.8V	15±0.8V	15±0.8V
LNB Power Max		500mA	500mA	500mA	500mA	500mA
Switching Commands		13V-18V 13V22k-18V22K	13V-18V 13V22k-18V22K	13V-18V 13V22k-18V22K	13V-18V 13V22k-18V22K	13V-18V 13V22k-18V22K
Current Consumption (DC In)		100mA Max	100mA Max	100mA Max	130mA Max	130mA Max
Dimensions (mm)		187x151x43	187x215x43	187x215x43	187x279x43	187x343x43
Weight		450g	550g	600g	700g	950g

Whyte

SERIES 5 LITE

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