



WB IRS LAUNCH AMPLIFIER INSTRUCTION MANUAL

WATS-517WB | WATS-530WB

((RED))
COMPLIANT



www.whytetechnologies.com

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	8
Example Configuration	12
Specifications	14

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 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 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 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 WB Launch Amplifier is a 5 wire Satellite and Terrestrial IRS Launch Amplifier with the option of Quattro or Dual Wideband LNB input.

Features include:

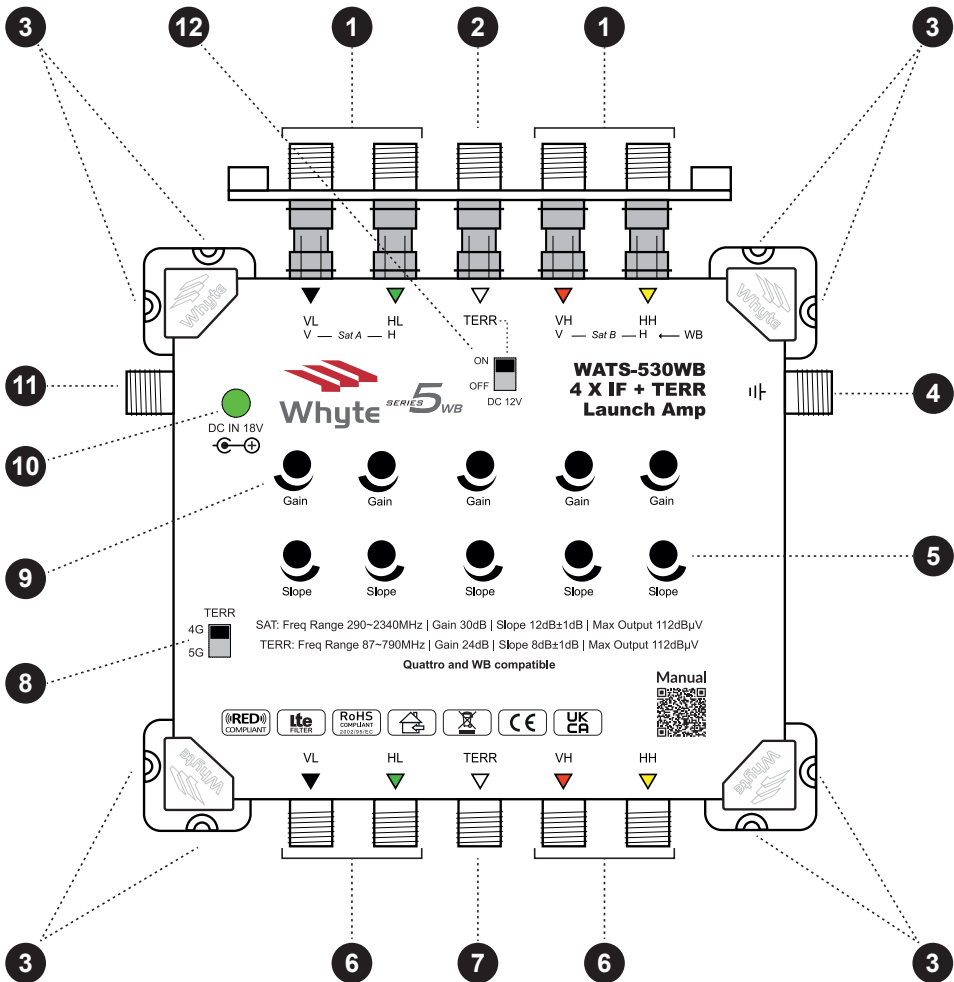
- 4G/5G Filter
- RED compliant
- 4 Years Warranty
- Gain control on all inputs
- Slope control on all inputs
- Comes with input earth bar
- Colour coded inputs and outputs
- Switchable 12V DC Supply to Terrestrial Input
- 18V Auxiliary Input injects power to all SAT lines
- Can be powered via any/all SAT inputs or outputs
- SAT gain >17dB / TERR gain >13dB (WATS517WB)
- SAT gain >30dB / TERR gain >24dB (WATS530WB)

The Whyte WATS-517WB / WATS-530WB Series 5 WB Launch Amplifiers may be used for conventional IRS distribution (Quattro LNB) or as part of Wideband IRS System (WB LNB) where up to two wideband LNB's can be connected to the input.

The Whyte WB Amplifier range can be used as Launch Amplifiers or Line Amplifiers thanks to their flexible powering options.

Powerful 4G/5G filtering provides ultra-high rejection of LTE interference.

PRODUCT DESCRIPTION



- 1. Inputs SAT
- 2. Input Terrestrial (TV/Radio)
- 3. Corner Mounting Brackets
- 4. Earth Terminal Lug
- 5. Gain Controls
- 6. Output SAT
- 7. Output TERR
- 8. 4G/5G Terrestrial Filter
- 9. Slope Controls
- 10. LED Power Indicator
- 11. Auxiliary DC Input
- 12. TERR 12V DC Switch

INSTALLATION INSTRUCTIONS

MOUNTING THE LAUNCH AMPLIFIER

Select a suitable location to install the Launch Amplifier. Do not install the Launch Amplifier 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 Launch Amplifier SAT inputs. 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 the 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 Launch Amplifier.

EARTH BONDING

Earth bond the Launch Amplifier to the Earth Bonding Lug and/or to the Earth Terminal Bar using minimum 4mm² Earth Bonding Cable. It is best practise to earth bond across the Earth Bars of all components within a single IRS System using a single unbroken Earth Bonding Wire. To achieve this, strip away 3cm of the insulation of a length of 4mm² Earth Bonding Wire. See Figure 1.

Unscrew the Earth Bolt on the Earth Terminal Bar to provide enough clearance to wrap the Earth Bonding Wire around the Earth Bolt. See Figure 2.

Tighten the Earth Bolt and route the Earth Bonding Wire to all other Earth Terminal Bars and terminate as detailed above. Make sure that the Earth Bonding Cable is connected directly to the building's PME.

Figure 1



Figure 2



CONNECTING THE POWER SUPPLY UNIT (PSU)

Calculate the total current consumption of the Launch Amplifiers, LNB and any Series 5 Multiswitches that make up the complete IRS System. The current consumption of the Series 5 Launch Amplifier range can be found in the Specification section of this manual.

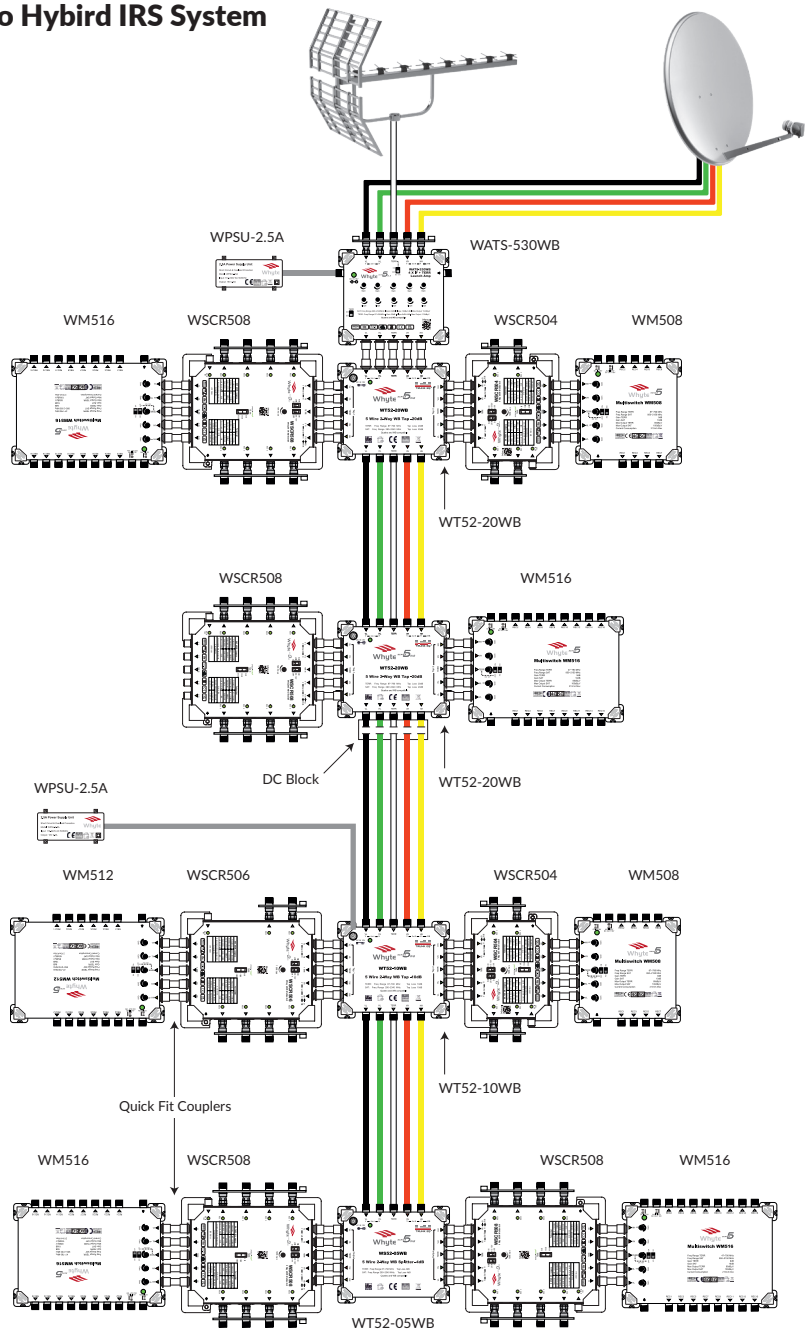
If in doubt, assume the current consumption of each LNB to be 200mA max (0.2A). Connect a suitable Whyte PSU to the Auxiliary 18V DC Input. If more than one PSU is required, the additional PSU(s) may be connected to any other Multi switch, Launch Amplifier, Tap or Splitter within the system.

When all connections have been made, connect the PSU to a 240V socket to power up the IRS System.

It is highly advisable to isolate and hence divide the system in to DC Groups containing only a single PSU per group, by using F-type DC blockers (not supplied).

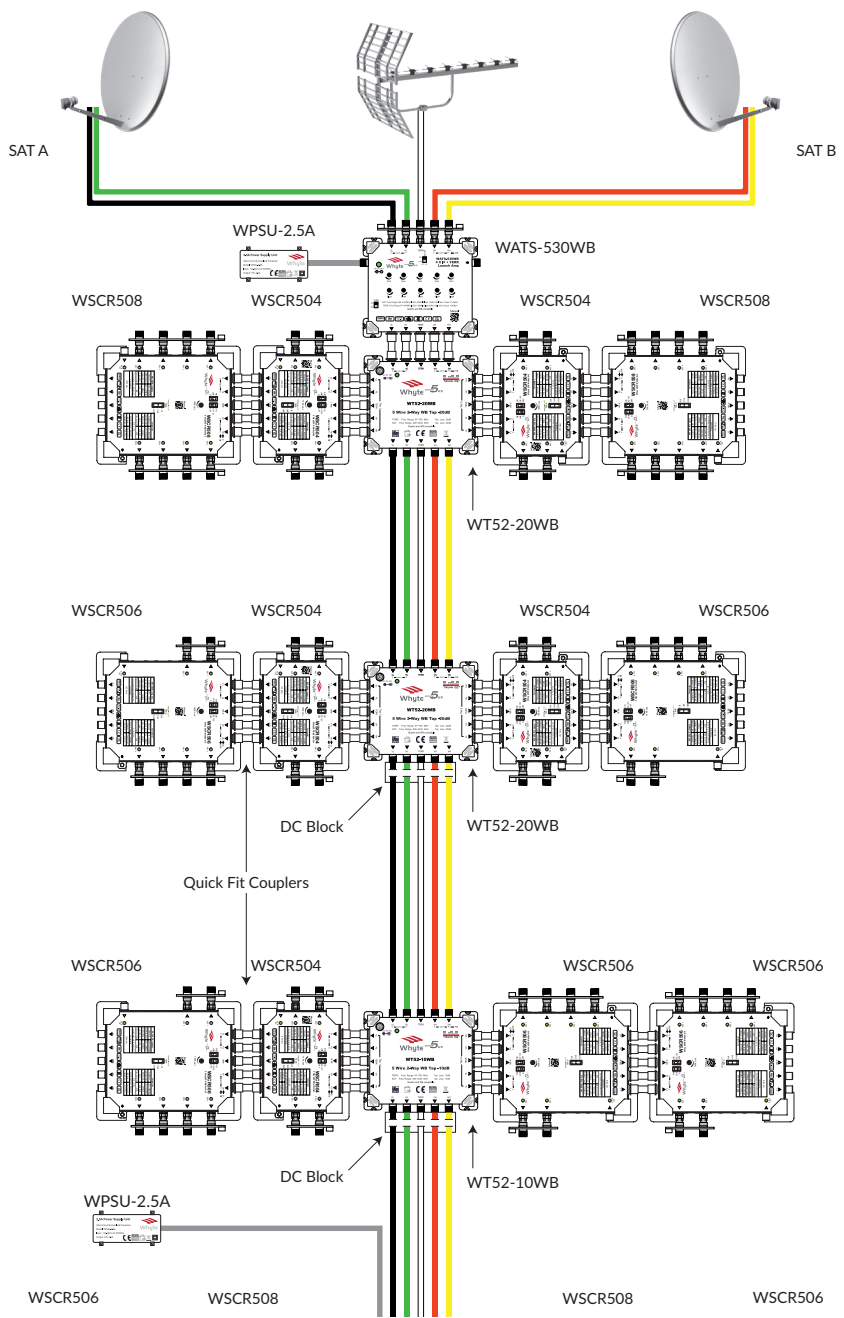
EXAMPLE CONFIGURATION

Quattro Hybrid IRS System

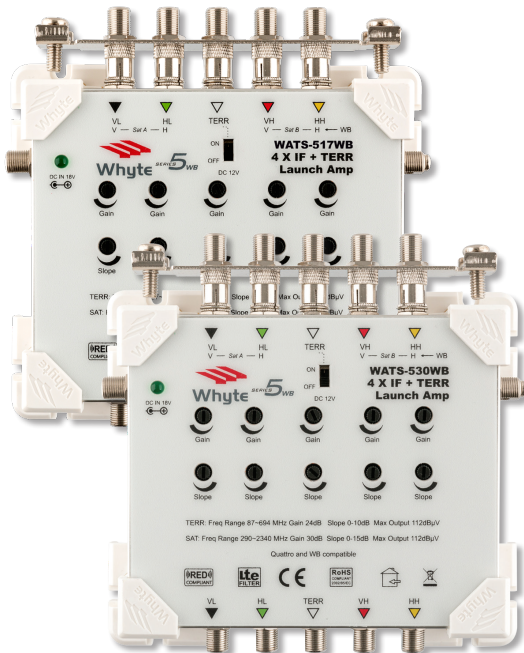


EXAMPLE CONFIGURATION

Quattro Hybrid IRS System



- 4 Years Warranty
- RED compliant
- SAT gain >17dB / TERR gain >13dB (WATS517WB)
- SAT gain >30dB / TERR gain >24dB (WATS530WB)
- Comes with input earth bar
- Gain control on all inputs
- Slope control on all inputs
- Switchable 12V DC Supply to Terrestrial Input
- LTE Filter rejects 5G interference
- Colour coded inputs and outputs
- 18V Auxiliary Input injects power to all SAT lines
- Can be powered via any/all SAT inputs or outputs



The Whyte WATS-517WB / WATS-530WB Series 5 WB Launch Amplifiers may be used for conventional IRS distribution (Quattro LNB) or as part of Wideband IRS System (WB LNB) where up to two wideband LNB's can be connected to the input.

The Whyte WB Amplifier range can be used as Launch Amplifiers or Line Amplifiers thanks to their flexible powering options.

Powerful internal 5G filtering provides ultra-high rejection of LTE 5G interference. 5G ready, suitable for terrestrial channels 21-48 only.

(RED)
COMPLIANT

MODEL		WATS-517WB (coming soon)	WATS-530WB
Frequency	SAT	290-2340MHz	290-2340MHz
	TERR	87-782MHz	87-694MHz
Inputs (F-Type Connector)		4 SAT + 1 TERR	4 SAT + 1 TERR
Outputs (F-Type Connector)		4 SAT + 1 TERR	4 SAT + 1 TERR
Gain	SAT	>17dB	>30dB
	TERR	>13dB	>24dB
Gain Control	SAT	10dB±1dB	15dB±1dB
	TERR	10dB±1dB	15dB±1dB
Slope Control	SAT	12dB±1dB	12dB±1dB
	TERR	8dB±1dB	8dB±1dB
4G/5G Switchable Filter		YES	NO (5G Only)
TERR 12V DC Supply (switchable)		100mA	100mA
Input/Output Return Loss	SAT	>8dB	>8dB
	TERR	>8dB	>8dB
Max Output Level	SAT (IMA ² -35dB) EN50083-3	105dBµV	112dBµV
	TERR (IMA ² -60dB) EN50083-5	105dBµV	112dBµV
LNB Power Supply Max		2A	2A
Trunk DC Pass	SAT (per trunk)	YES 2A Max	YES 2A Max
	TERR	NO	NO
Powering	Via DC In	YES	YES
	Via SAT Trunks	YES	YES
Input Earth Terminal Bar		YES	YES
Earth Lug (F-Type connector with clamp)		Up to 6mm ² core	Up to 6mm ² core
Power Indication		LED	LED
Power Consumption		150mA Max	290mA Max
Dimensions with earth bar (mm)		158 x 150 x 43	158 x 150 x 43
Weight		470g	470g



Unit 1, Watermill Business Centre. Edison Road, Enfield. EN3 7XF

Tel: 0330 999 1980 | info@whytetechnologies.com | www.whytetechnologies.com

