



# Whyte

Digital innovation made easy

## IRS PRODUCT BROCHURE



A British brand you can trust



PRO-TAP

RED COMPLIANT



[www.whytetechnologies.com](http://www.whytetechnologies.com)

# CONTENTS

About Whyte Technologies	4
<b>Series F</b> Whyte Fibre Optic	7
<b>Series D</b> dSCR Multiswitches	19
<b>Series DRP</b> Remote Powered dSCR Multiswitches	25
<b>Series 5</b> Quattro and Wideband Compatible	32
<b>Series 5 Lite</b> Multiswitches	47
<b>Series 9</b> Multiswitches	51
<b>Series 17</b> Multiswitches	58
<b>Series A</b> Distribution Amplifiers	65
Power Supplies & Accessories	73



[www.whyte technologies.com](http://www.whyte technologies.com)

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

Copyright © Whyte Technologies - March 2024

# Whyte Technologies

Whyte Technologies is a leader in the research, design and manufacture of TV and Satellite Distribution products. Our roots lie firmly in the field of signal analysis and in the research and design of signal processing and reception systems.

We develop industry leading products that are innovative, reliable, robust and compact. At the same time our products are extremely cost effective, whilst ease of installation provides further reduction in costs resulting in an excellent return on investment.

At Whyte Technologies, we believe in higher quality and better value. Firmly etched in our organisations culture is the practise of Kaizen:

## ***JAPANESE FOR THE PHILOSOPHY OF CONTINUOUS IMPROVEMENT:***

### **RESEARCH**

Through ground level research we understand the challenges faced by IRS installation engineers. IRS installation engineers require products that adapt from simple to complex installations, that are easy to install, and convenient to service. Real life on-site scenarios may differ to in-house system plans; hence flexibility is needed.

### **DESIGN**

Through cutting edge design and innovation, our R&D team addresses these issues. We challenge conventional practise and implement our visions into new and innovative quality products.

### **MANUFACTURE**

We don't just manufacture products that work. We are committed to quality and reliability. Central to achieving this is Whyte Technologies' Quality Controlled Manufacturing System. This system reflects the uniform manner in which we apply our ethos and core beliefs to our manufacturing process, which extends from procurement of components right through to the final products assembled in our factories.

### **KAIZEN**

The philosophy of continuous improvement; quite simply the way in which we maintain the lead in the technological development and manufacture of satellite and terrestrial signal distribution equipment.



### **MISSION STATEMENT**

Whyte Technologies was founded on the ideal of designing and manufacturing TV and Satellite reception equipment that is leading edge, innovative and cost effective. In addition to this, our primary objective is to educate and provide unrivalled support to our end users, trade outlets and our industry as a whole, that is quite simply second to none. Honesty and integrity is embedded in our culture and our goal is to be the nations favourite TV and Satellite reception equipment evidenced by maintaining majority market share.

### **VISION STATEMENT**

Through the innovative products that we manufacture and the service and support that we provide, our customers feel confident in achieving a reliable and profitable installation every time. From the planning stage and all the way through to the installation, our customers are assured that technical assistance and support is always at hand which results in a stress free and pleasant customer experience.





### **What is Trunk EQ?**

We are all too aware of the age-old issue of slope. In the case of Taps, the satellite L band spectrum (950 - 2150MHz) becomes increasingly sloped with the addition of each Tap into an IRS trunk. Till now IRS engineers have used slope control that's built into amplifiers to counteract this, but this can only go so far in correcting the issue. With the introduction of Wideband (WB) LNB's the issue of slope has been exacerbated as the WB spectrum is, as the name suggests, even wider at 290MHz - 2340MHz!

The disparity of Digital Channel Power (DCP) between transponders in band should not exceed 10dB. Unfortunately, we see more than this level of disparity off-air at the LNB. Add to that the slope incurred and with the addition of each Tap slope can quickly become a major problem.

To address this issue Whyte Technologies created a new range of 5 wire WB/Quattro Taps with Trunk EQ. Developed by Whyte Technologies, Trunk EQ is an inbuilt Trunk Equaliser that provides equal through loss at all frequencies between 290MHz - 2340MHz which results in no slope being introduced.

## **PRO-TAP**

Developed by Whyte Technologies, a Pro-Tap is an in-built "Protean Tap" which enables the installer to easily select tap attenuation of 0, -10 or -20dB whilst still maintaining a trunk through loss of only 4dB. IRS System pre-planning is virtually not required as tap loss settings are selected at the commissioning stage.



WSCR516



WSCR504



WSCR506



WSCR508



WSCR512

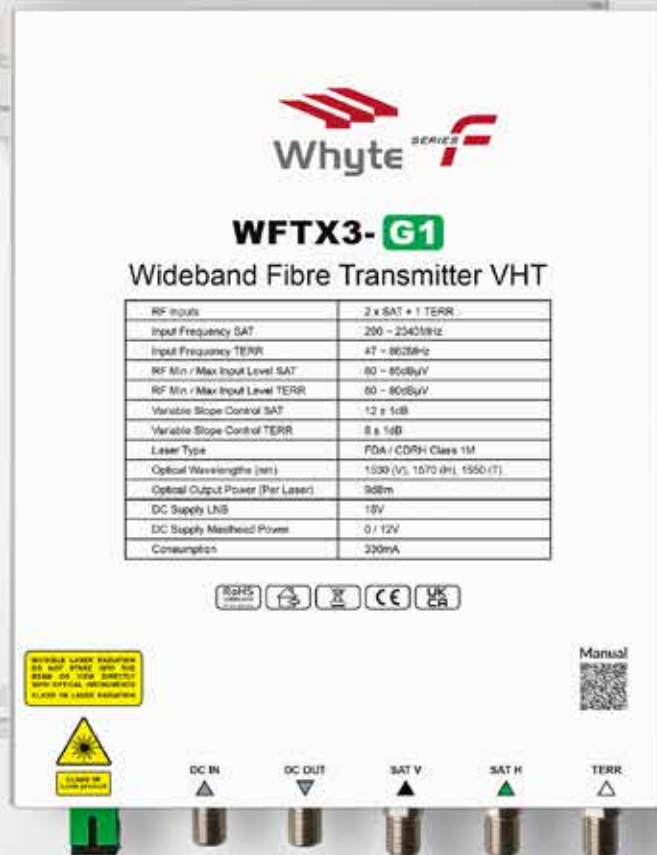


WSCR516



## CONTENTS

Series F Whyte Fibre Optic Transmitter	9
Series F Whyte Fibre Optic Receivers	11
Series F Whyte Fibre Optic Quattro Receiver	13
Series F Whyte Fibre Optic dSCR Multiswitches	14
Series F Configuration Examples	15



## Fibre Optic Transmitters



Fibre Optic WB Receivers

Fibre Optic dSCR Multiswitches

Fibre Optic Quattro Receivers

# Series F Whyte Fibre Optic Transmitters

## WFTX3-G1



- 4 Year Warranty
- Single laser per Input
- Wideband SAT Input
- Full band TERR Input
- Variable Slope Control
- RF and Laser Indicators
- Multiple mounting options
- Ultra Low MER Degradation <0.2dB
- Satellite and Terrestrial Optical Transmitter
- 9dBm Optical Power supporting 64-Way split

The Whyte WFTX range of Optical Fibre Transmitters offer an efficient quality solution for Fibre IRS systems. Whyte Optical Transmitters utilise a single laser per input which are multiplexed (CWDM) for a single optical output. This configuration ensures minimum signal degradation. The V and H SAT inputs are compatible with all Wideband LNB's and will accept any signals within the 290~2340MHz range. The TERR input 47 ~ 862MHz supports FM, DAB and DTT.

The WFTX3-G1 features DC in and DC Output, Laser On/Off switches for V, H & TERR, Variable Slope Control for V, H and TERR and Masthead Power switch for enabling/disabling 12V DC at the TERR RF input. The WFTX3-G1 is a three-laser CWDM device.

Dual wideband satellites can be supported using the loop-in loop-out function (two transmitters) WFTX3-G1 and WFTX2-G2 and their matching receivers. Each individual path is supported by Variable Slope Control (VSC) and can be adjusted to present the flattest output for your Fibre IRS system.

When combined with other products from the Whyte Series F range, large scale FTTH (Fibre To The Home), FTTC (Fibre To The Cabinet) and FTTB (Fibre To The Block) Fibre IRS systems can be successfully implemented.



MODEL	WFTX3-G1
RF Inputs	2x SAT + 1 TERR / 75Ω Female F-Type
Input Frequencies SAT	290 ~ 2340MHz
Input Frequencies TERR	47 ~ 862MHz
RF Input Sequence	V, H, T (left to right)
RF Min/Max Input Level SAT	60 ~ 85dBμV
RF Min/Max Input Level TERR	60 ~ 80dBμV
SAT Input Return Loss	>10dB
TERR Input Return Loss	>8dB
Variable Slope Control SAT	0 (Flat) to 12 ±1dB
Variable Slope Control TERR	0 to 8 ±1dB
RF Input Isolation	>30dB (port to port)
RF Input Status	Below Min Input LED = Off
Laser type	FDA/CDRH Class 1M
Optical Output (SC APC)	1
Optical Wavelengths	1530nm (V), 1570nm (H), 1550nm (T)
Optical Output Power (Per Laser)	9dBm
Optical Output On/Off	Switch (per laser)
Optical Output Status	LED (per laser)
Maximum Optical Splits	x64
DC Supply LNB H & V	18V DC
DC Supply Masthead Power MHP	12V DC (switchable)
DC Input	18V DC
DC Indicator	LED On / Off
DC Output (Aux)	18V rated to 2.5A
Consumption	330mA
Operating Temperature Range	-10 to 50°C
Dimensions L x W x H (mm)	148 x 190 x 36
Weight	1130g

# Series F Whyte Fibre Optic Transmitters

## WFTX2-G2



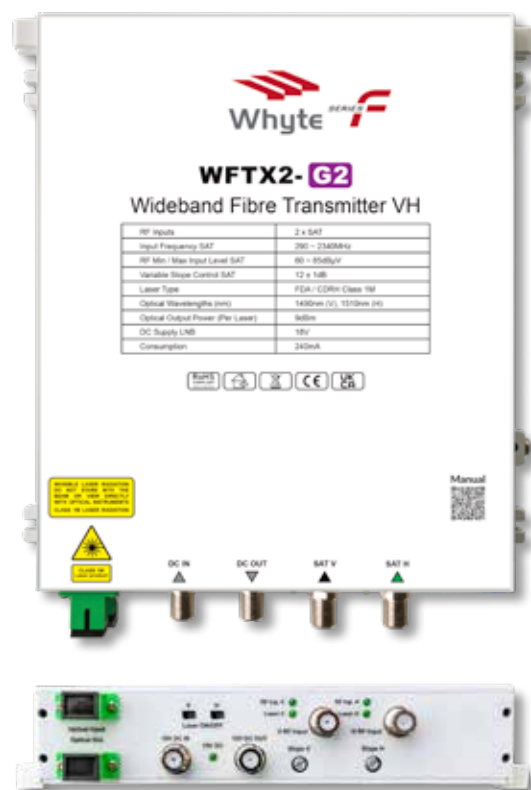
- 4 Year Warranty
- Single laser per input
- Wideband SAT Input
- Variable Slope Control
- RF and Laser Indicators
- Multiple mounting options
- Satellite Optical Transmitter
- Ultra Low MER Degradation <0.2dB
- 9dBm Optical Power supporting 64-Way split

The Whyte WFTX range of Optical Fibre Transmitters offer an efficient quality solution for Fibre IRS systems. Whyte Optical Transmitters utilise a single laser per input which are multiplexed (CWDM) for a single optical output. This configuration ensures minimum signal degradation. The V and H SAT inputs are compatible with all Wideband LNB's and will accept any signals within the 290~2340MHz range.

The WFTX2-G2 features DC in and DC Output, Laser On/Off switches for V and H, Variable Slope Control for V and H SAT Inputs. The WFTX2-G2 is a two-laser CWDM device.

Dual wideband satellites can be supported using the loop-in loop-out function (two transmitters) WFTX3-G1 and WFTX2-G2 and their matching receivers. Each individual path is supported by Variable Slope Control (VSC) and can be adjusted to present the flattest output for your Fibre IRS system.

When combined with other products from the Whyte Series F range, large scale FTTH (Fibre To The Home), FTTC (Fibre To The Cabinet) and FTTB (Fibre To The Block) Fibre IRS systems can be successfully implemented.



MODEL	WFTX2-G2
RF Inputs	2x SAT / 75Ω Female F-Type
Input Frequencies SAT	290 ~ 2340MHz
RF Input Sequence	V, H (left to right)
RF Min/Max Input Level SAT	60 ~ 85dBμV
SAT Input Return Loss	>10dB
Variable Slope Control SAT	0 (Flat) to 12 ±1dB
RF Input Isolation	>30dB (port to port)
RF Input Status	Below Min Input LED = Off
Laser type	FDA/CDRH Class 1M
Optical Input (SC APC)	1 For optical input from WFTX3-G1
Optical Output (SC APC)	1
Optical Wavelengths	1490nm (V), 1510nm (H)
Optical Output Power (Per Laser)	9dBm
Optical Output On/Off	Switch (per laser)
Optical Output Status	LED (per laser)
Maximum Optical Splits	x64
DC Supply LNB H & V	18V DC
DC Input	18V DC
DC Indicator	LED On / Off
DC Output (Aux)	18V rated to 2.5A
Consumption	240mA
Operating Temperature Range	-10 to 50°C
Dimensions L x W x H (mm)	148 x 190 x 36
Weight	1100g



# Series F Whyte Fibre Optic Receivers

## WFRXVHT-G1 | WFRXVH-G2



- 4 Years Warranty
- Optical Input LED indicators
- Powered via the SAT Outputs
- Ultra Low MER Degradation <0.2dB
- SC APC Fibre Input / Output connector
- WB SAT V, H & TERR Output (WFRXVHT-G1)
- WB SAT V & H (WFRXVH-G2)

WFRXVHT-G1 and WFRXVH-G2 are Wideband Optical Receivers from the Whyte Series F Range. When used with a Whyte Fibre Optic Transmitter, signal degradation between the RF source (the LNB) and the Wideband Optical Receiver is a mere 0.2dB MER. A Tri-colour LED indicator per laser wavelength indicates the optical input status of the receiver.

The Whyte Series F wideband receivers connect directly to all Whyte Series D dSCR Multiswitches and Series 5WB Amplifiers, Taps and Splitters providing a convenient, compact, and robust solution. These wideband fibre receivers are line powered via the SAT outputs.

The WFRXVHT-G1 and WFRXVH-G2 receivers can be linked together (loop-through) enabling two satellites (Wideband) and terrestrial to be received over one fibre using five laser wavelengths. This configuration requires two Whyte Fibre Optic Transmitters that are also interconnected via the Optical Loop-through.



MODEL	WFRXVHT-G1	WFRXVH-G2
Optical Input/Output	SC APC	SC APC
RF Outputs	3 (V & H Wideband SAT + TERR)	2 (V & H Wideband SAT)
Optical Wavelengths	1530nm – 1550nm – 1570nm	1490nm - 1510nm
Frequency Range	47 – 862MHz / 290 – 2340MHz	290 – 2340MHz
Optical Input Level	0 ~ -14dBm	0 ~ -14dBm
Optical Input Levels LED	Low, Nominal and High	Low, Nominal and High
RF Output Level TERR	76dBμV ±6dB	-
RF Output Level Wideband SAT	83dBμV ±3dB	83dBμV ±3dB
RF Return Loss	>10dB	>10dB
RF Output Connector Type	75Ω F Type (Female)	75Ω F Type (Female)
Power Indicator	Green LED	Green LED
DC Supply	Via SAT Outputs (18V DC)	Via SAT Outputs (18V DC)
Power Consumption Max @ 18V DC	220mA	160mA
Dimensions L x W x H (mm)	140 x 72 x 38	140 x 60 x 38
Weight	354g	236g



# Series F Whyte Fibre Optic Quattro Receiver

## WFRXQT-G1



- 4 Year Warranty
- Powered via SAT Output or DC Input
- Tri-Colour optical input state LED indicators
- RF Output SAT 80dBμV TERR 70dBμV
- SC APC Fibre Input / Output connectors
- Quattro RF output VL – HL – TERR – VH – HH
- Single laser per path technology for lowest signal degradation
- Easy interfacing to Whyte Series 5, 5WB and D for local RF groups



The WFRXQT-G1 is an Optical Quattro Receiver providing VL, HL, TERR, VH and HH outputs which can be directly connected to Whyte dSCRs, Amplifiers, Taps, Splitters, and Legacy Multiswitches with the supplied push fit couplers.

The Whyte Fibre Quattro receiver is ideal for Fibre to the riser scenarios where local RF groups of IRS system hardware provide signals to the apartment. The fibre backbone connectivity makes system planning easier and more convenient for your major installation projects, negating the problems of coaxial loss over great distances.

Powering options include DC Input or Trunk power. The optical loop through enables the reception of a second satellite with an additional group 2 (G2) fibre transmitter and matching receiver. Super Hybrid systems in combinations of Wideband and Quattro are easily supported through selecting the Whyte fibre products to match you needs.

MODEL	WFRXQT-G1
Optical Input / Output	SC / APC
Optical Input Wavelengths	1530nm - 1550nm - 1570nm
RF Outputs	5 (VL, HL, TERR, VH, HH)
Frequency Range	88 - 862MHz / 950 - 2150MHz
Optical Input Power (per laser)	-2 ~ -14dBm
Optical Input Power Indicator	LED Per Laser Wavelength
Output level SAT (AGC)	80 ±3dBμV
Output level TERR (AGC)	75 ±dBμV
Return loss	>10dB
RF Output Connector Type	75Ω F type (Female)
Power Consumption Max @18V DC	560mA
Powering 18V DC	Via DC In or SAT RF Outputs
Power Indicator	Green LED
Dimensions L x W x H (mm)	168 x 158 x 43
Weight	492g

# Series F Whyte Fibre Optic dSCR Multiswitches

## WFDSCR2-G1 & WFDSCR4-G1



- 4 Year Warranty
- DC Input / Output
- Tri-Colour optical input state LED indicators
- dSCR / Legacy Output SAT 85dBμV TERR 75dBμV
- 2-Way and 4-Way models
- Separate TERR only Output 78 ±1dBμV
- SC APC Fibre Input / Output connectors
- Single laser per path technology for lowest signal degradation



The optical dSCR multiswitch range from Whyte provides access to Sky Q, Legacy, TV and Radio services. The dedicated TERR Output can be amplified and/or split to provide additional TERR sources to bedrooms. Designed for use with the Whyte Fibre Optic product range these are typically used as home terminal units within a fibre to the home (FTTH) IRS system.

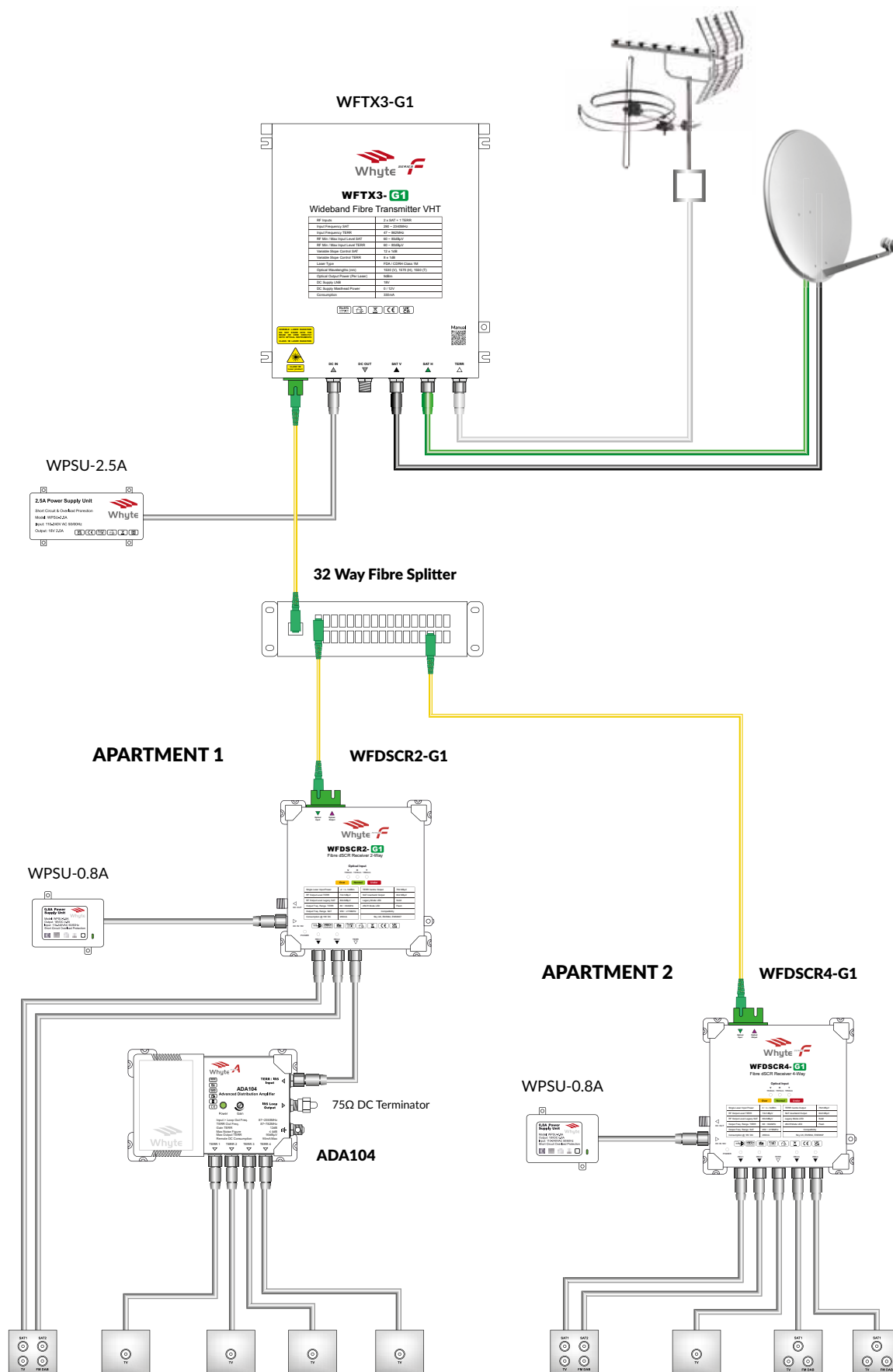
Whyte optical dSCRs feature a DC Output for powering additional devices in the apartment. Ideal for the Whyte Advanced Distribution Amplifier (ADA) providing cost effective additional Terrestrial outlets in the apartment.

For maximum flexibility these fibre dSCR receivers feature an optical loop-through so that Group 2 (G2) receivers can be connected enabling dual satellite reception.

MODEL	WFDSCR2-G1	WFDSCR4-G1
Optical Input/Output	SC / APC	SC / APC
RF Outputs	3 (2x dSCR / Legacy / TERR + 1x TERR)	5 (4x dSCR / Legacy / TERR + 1x TERR)
Optical Input Wavelengths	1530nm - 1550nm - 1570nm	1530nm - 1550nm - 1570nm
RF Frequency Range	88 - 862MHz / 950 - 2150MHz	88 - 862MHz / 950 - 2150MHz
Optical Input Power (per laser)	-2 ~ -14dBm	-2 ~ -14dBm
Optical Input Power Indicator	LED Per Laser Wavelength	LED Per Laser Wavelength
RF Output dSCR / Legacy / TERR	84 ±1dBuV / 80 ±3dBuV / 74 ±1BuV	84 ±1dBuV / 80 ±3dBuV / 74 ±1BuV
RF TERR Only Output	78±1dBμV	78±1dBμV
dCSS / dSCR Userbands	2 x 16	4 x 16
Legacy Mode LED	Solid Green	Solid Green
dSCR Mode LED	Flashing Green	Flashing Green
Return loss	>10dB	>10dB
RF Output Connector Type	75Ω F type (Female)	75Ω F type (Female)
Switching Commands	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
Compatibility	Sky UK - EN50494 - EN50607	Sky UK - EN50494 - EN50607
Power Consumption Max @18V DC	240mA	260mA
Power Indicator	Green LED	Green LED
Dimensions L x W x H (mm)	168 x 158 x 43	168 x 158 x 43
Weight	480g	492g

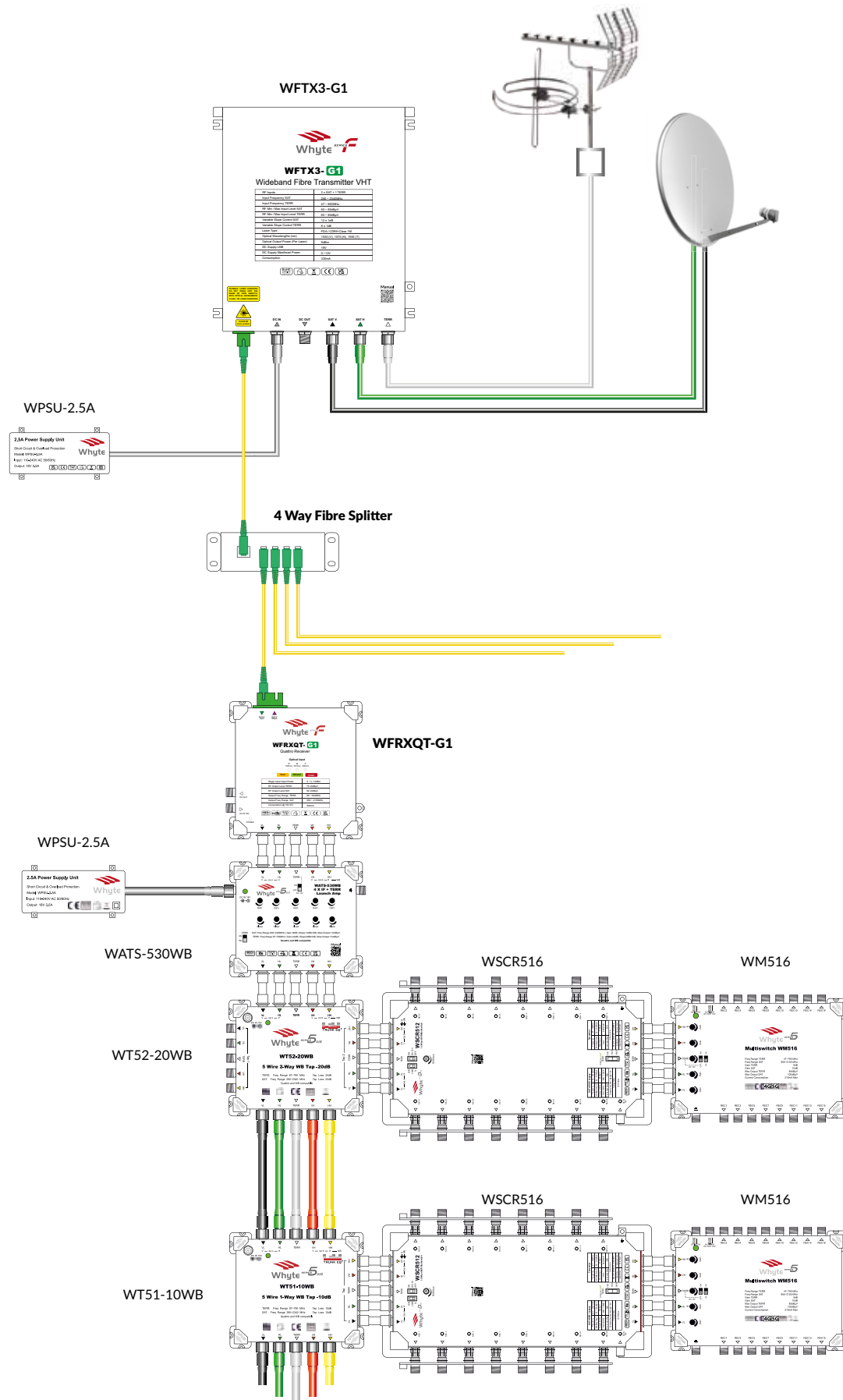
## Series F Configuration Example

## FTTH - FIBRE IRS TO THE HOME



# Series F Configuration Example

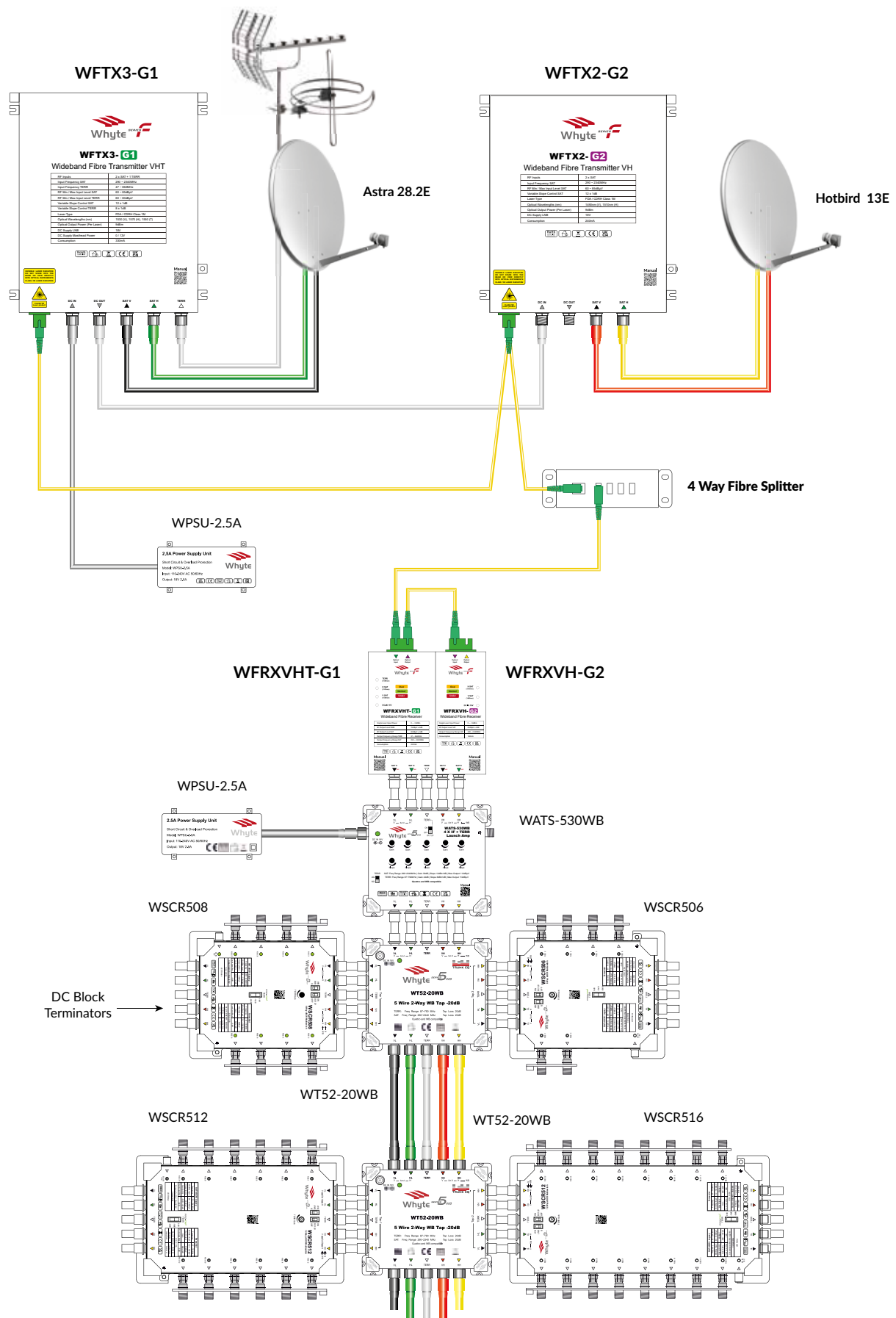
## FTTB - HYBRID FIBRE IRS





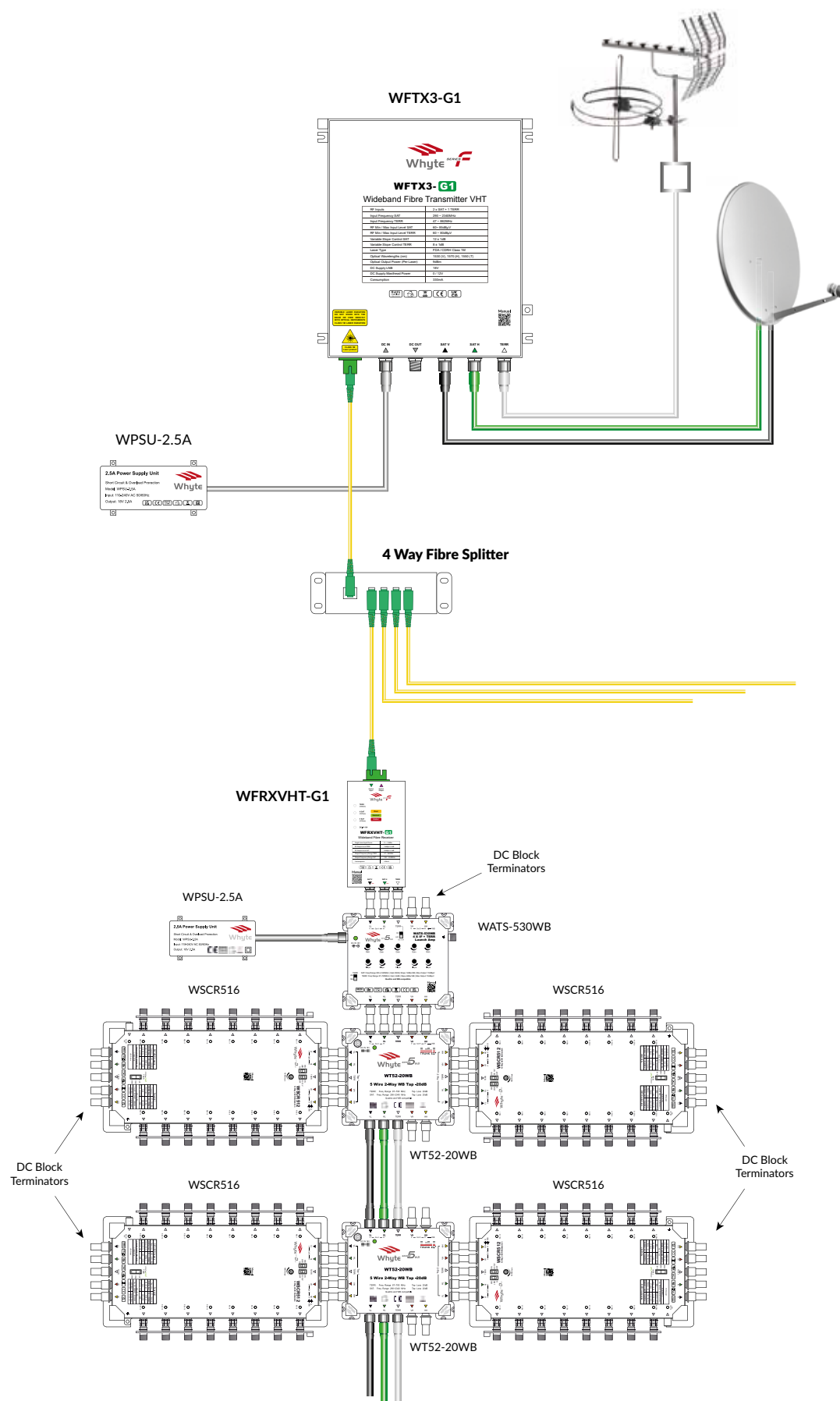
## Series F Configuration Example

## FTTB - DUAL SAT + TERR FIBRE IRS TO THE BLOCK



## Series F Configuration Example

## FTTB – WIDEBAND SAT + TERR IRS





## CONTENTS

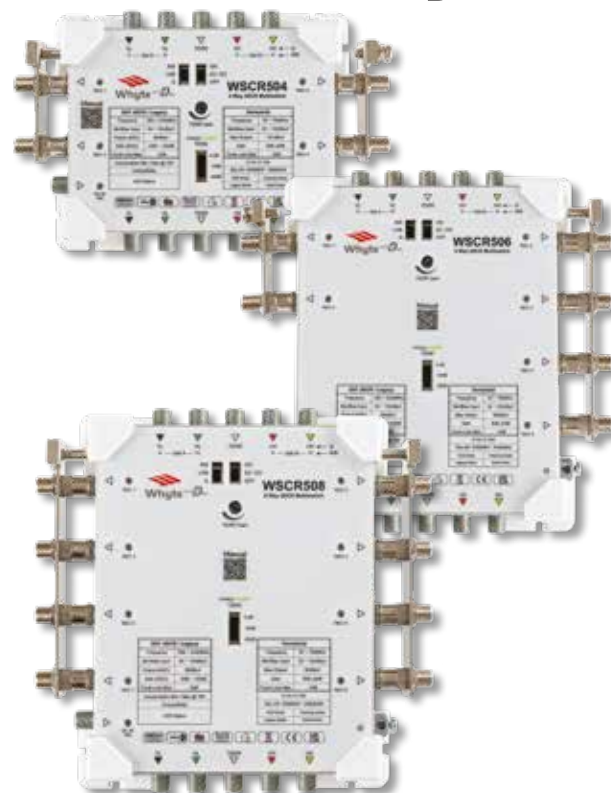
[illegible]

# Series D dSCR Multiswitches

## WSCR504 | WSCR506 | WSCR508



- 4 years warranty
- High Output Power 89dBμV dSCR / 85dBμV Legacy (AGC)
- Extremely low power consumption (Min / Max) 0.1A/0.15A
- Comes complete with Earth Bars fitted
- TERR Gain Control and Pro-Tap Attenuation switch
- Small form factor
- Features Trunk EQ
- Switchable 12V DC to TERR Input
- Uncomplicated DC powering options
- Easy Integration with all Whyte IRS products
- Highly efficient fanless cooling technology
- Compatible with Quattro & WB LNB's
- 2 Sat reception using 2 x WB LNB's



MODEL		WSCR504	WSCR506	WSCR508
Frequency Range	SAT Wideband	290 - 2340MHz	290 - 2340MHz	290 - 2340MHz
	SAT Quattro	950 - 2150MHz	950 - 2150MHz	950 - 2150MHz
	TERR	87 - 790MHz	87 - 790MHz	87 - 790MHz
Dual Satellite Reception	SAT Wideband (2x WB LNB)	YES	YES	YES
Trunk Inputs (F-Type Female)		4 SAT + 1 TERR	4 SAT + 1 TERR	4 SAT + 1 TERR
Trunk Outputs (F-Type Female)		4 SAT + 1 TERR	4 SAT + 1 TERR	4 SAT + 1 TERR
Tap Outputs (F-Type Female)		4	6	8
Gain	SAT	-5dB ~ +25dB (AGC)	-5dB ~ +25dB (AGC)	-5dB ~ +25dB (AGC)
	TERR	8dB ±2dB	8dB ±2dB	8dB ±2dB
Gain Control	SAT / TERR	AGC / 15dB	AGC / 15dB	AGC / 15dB
Input Levels Min / Max	SAT	64 - 104dBμV *	64 - 104dBμV *	64 - 104dBμV *
	TERR	52 - 102dBμV	52 - 102dBμV	52 - 102dBμV
Trunk Through Loss	SAT / TERR	<-5dB	<-5dB	<-5dB
Return Loss	SAT Trunk Input / Output	>10dB / >10dB	>10dB / >10dB	>10dB / >10dB
	TERR Trunk Input / Output	>8dB / >8dB	>8dB / >8dB	>8dB / >8dB
	Tap Output	>8dB	>8dB	>8dB
Max Output Level	SAT dSCR / Legacy	89dBμV / 85dBμV (AGC)	89dBμV / 85dBμV (AGC)	89dBμV / 85dBμV (AGC)
	TERR	101dBμV	90dBμV	90dBμV
Protean Tap™ (Attenuation Switch)	TERR	0 / -10 / -20dB	0 / -10 / -20dB	0 / -10 / -20dB
Isolation	Trunk Port to Port	>36dB	>36dB	>36dB
	Tap Port to Port	>43dB	>43dB	>43dB
Trunk DC Pass	SAT (per trunk)	YES (2A Max)	YES (2A Max)	YES (2A Max)
	TERR	NO	NO	NO
Impedance		75Ω	75Ω	75Ω
Compatibility (Auto Switching)		Legacy / SKY UK dSCR / EN50607 / EN50494		
Switching Commands	Legacy	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
	dSCR	DiSEqC	DiSEqC	DiSEqC
dSCR/Legacy Mode Indication (per port)		LED (dSCR Flash)	LED (dSCR Flash)	LED (dSCR Flash)
Power Supply Voltage		18V DC	18V DC	18V DC
Powering	Via DC In	YES	YES	YES
	Via SAT Trunks	YES	YES	YES
	Via Apartment	NO	NO	NO
Power Consumption Min / Max @ 18V		0.1A / 0.15A	0.1A / 0.15A	0.1A / 0.15A
Power Indication		LED	LED	LED
Masthead Supply (switchable)	TERR Input Only	12V DC 100mA	12V DC 100mA	12V DC 100mA
Earth Terminal Bars (Tap Outputs)		Fitted	Fitted	Fitted
Earth Lug		Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core
Dimensions including Earth Bars W x L x H (mm)		190 x 126 x 43	190 x 190 x 43	190 x 190 x 43
Weight		540g	660g	710g

\*The typical transponder loading of Astra-2 28.2° east requires derating the maximum input level to 83dBμV measured at the most powerful transponder in band/polarity.

# Series D dSCR Multiswitches

## WSCR512 | WSCR516

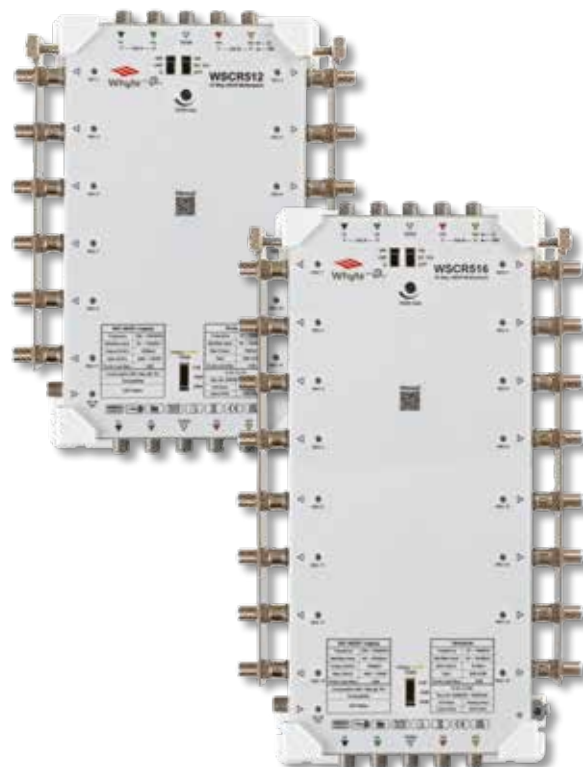


The new 2nd Generation Cascadable dSCR Multiswitch range from Whyte offers substantial enhancements such as higher power output, even lower power consumption, a small form factor and Trunk EQ. The range now boasts 4, 6, 8, 12 and 16-way models. This alongside low loss trunks and high TERR gain make the Whyte Series D range the most versatile and easy to install dSCR Multiswitch available.

Clever cast aluminium housing design means the dSCR Multiswitch can be orientated horizontally without the risk of overheating.

Each subscriber output provides Sky Q, Legacy, TV and Radio services. Satellite subscriber signal levels in both Legacy and dSCR mode are automatically set via AGC.

Terrestrial signal levels are controlled via a manual Gain Control and a selectable Pro-Tap™ which permits a wide range of TERR input signals levels from 50 to 108dBμV. The reception of 2 satellites can be facilitated with 2 Wideband LNB's when WB mode is selected. The unit can be powered directly via the DC Input Port or be remotely powered via the trunk lines.



PRO-TAP

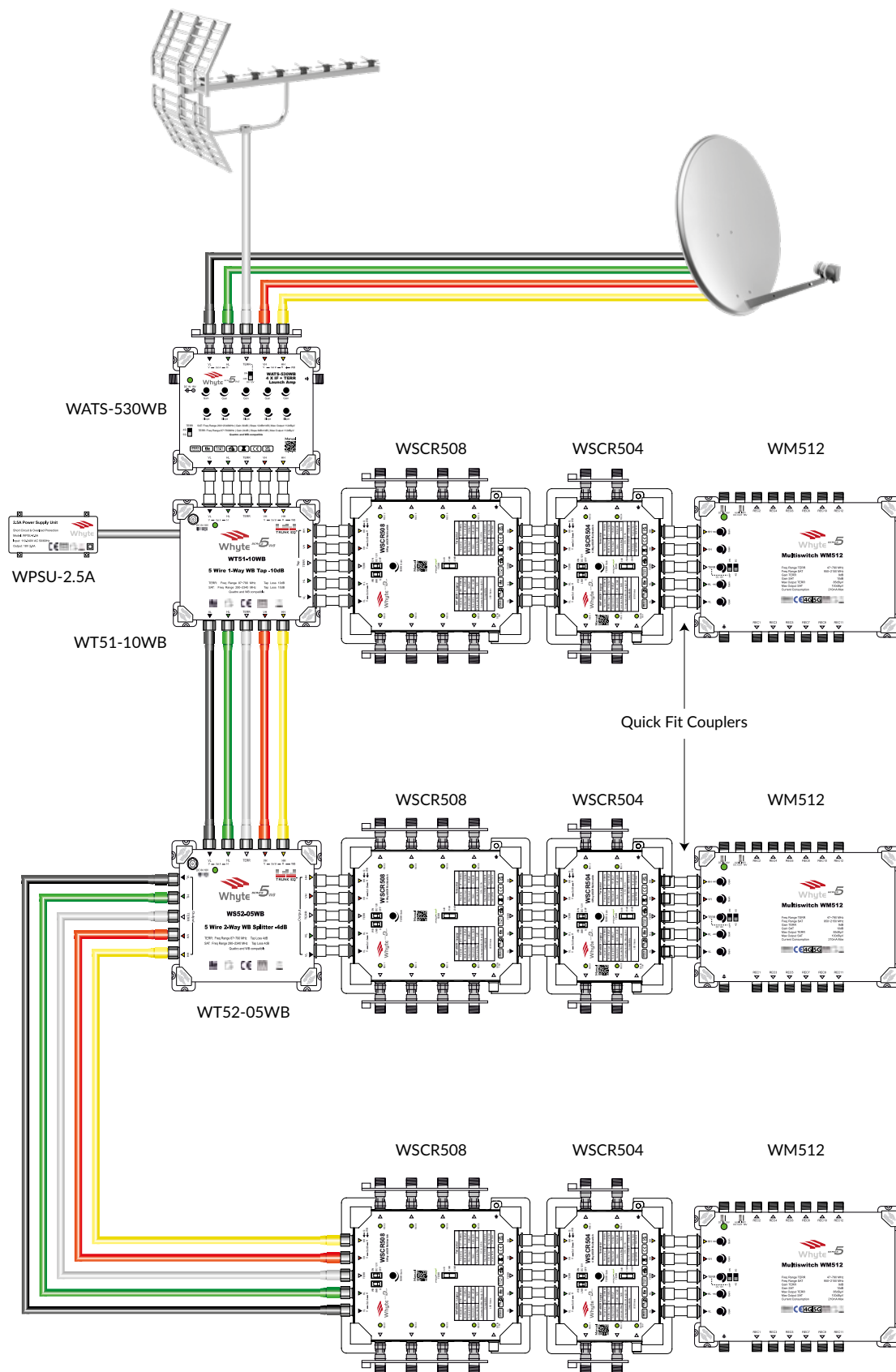


MODEL		WSCR512	WSCR516
Frequency Range	SAT Wideband	290 - 2340MHz	290 - 2340MHz
	SAT Quattro	950 - 2150MHz	950 - 2150MHz
	TERR	87 - 790MHz	87 - 790MHz
Dual Satellite Reception	SAT Wideband (2x WB LNB)	YES	YES
Trunk Inputs (F-Type Female)		4 SAT + 1 TERR	4 SAT + 1 TERR
Trunk Outputs (F-Type Female)		4 SAT + 1 TERR	4 SAT + 1 TERR
Tap Outputs (F-Type Female)		12	16
Gain	SAT	-5dB ~ +25dB (AGC)	-5dB ~ +25dB (AGC)
	TERR	8dB ±2dB	8dB ±2dB
Gain Control	SAT / TERR	AGC / 15dB	AGC / 15dB
Input Levels Min / Max	SAT	64 - 104dBμV *	64 - 104dBμV *
	TERR	52 - 102dBμV	52 - 102dBμV
Trunk Through Loss	SAT / TERR	<-5dB	<-5dB
Return Loss	SAT Trunk Input / Output	>10dB / >10dB	>10dB / >10dB
	TERR Trunk Input / Output	>8dB / >8dB	>8dB / >8dB
	Tap Output	>8dB	>8dB
Max Output Level	SAT dSCR / Legacy	89dBμV / 85dBμV (AGC)	89dBμV / 85dBμV (AGC)
	TERR	90dBμV	87dBμV
Protean Tap™ (Attenuation Switch)	TERR	0 / -10 / -20dB	0 / -10 / -20dB
Isolation	Trunk Port to Port	>36dB	>36dB
	Tap Port to Port	>43dB	>43dB
Trunk DC Pass	SAT (per trunk)	YES (2A Max)	YES (2A Max)
	TERR	NO	NO
Impedance		75Ω	75Ω
Compatibility (Auto Switching)		Legacy / SKY UK dSCR / EN50607 / EN50494	
Switching Commands	Legacy	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
	dSCR	DiSEqC	DiSEqC
dSCR/Legacy Mode Indication (per port)		LED (dSCR Flash)	LED (dSCR Flash)
Power Supply Voltage		18V DC	18V DC
Powering	Via DC In	YES	YES
	Via SAT Trunks	YES	YES
	Via Apartment	NO	NO
Power Consumption Min / Max @ 18V		0.1A / 0.15A	0.1A / 0.15A
Power Indication		LED	LED
Masthead Supply (switchable)	TERR Input Only	12V DC 100mA	12V DC 100mA
Earth Terminal Bars (Tap Outputs)		Fitted	Fitted
Earth Lug		Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core
Dimensions including Earth Bars W x L x H (mm)		190 x 255 x 43	190 x 318 x 43
Weight		880g	1300g

\*The typical transponder loading of Astra-2 28.2° east requires derating the maximum input level to 83dBμV measured at the most powerful transponder in band/polarity.

## Series D dSCR Configuration Example

## HYBRID IRS

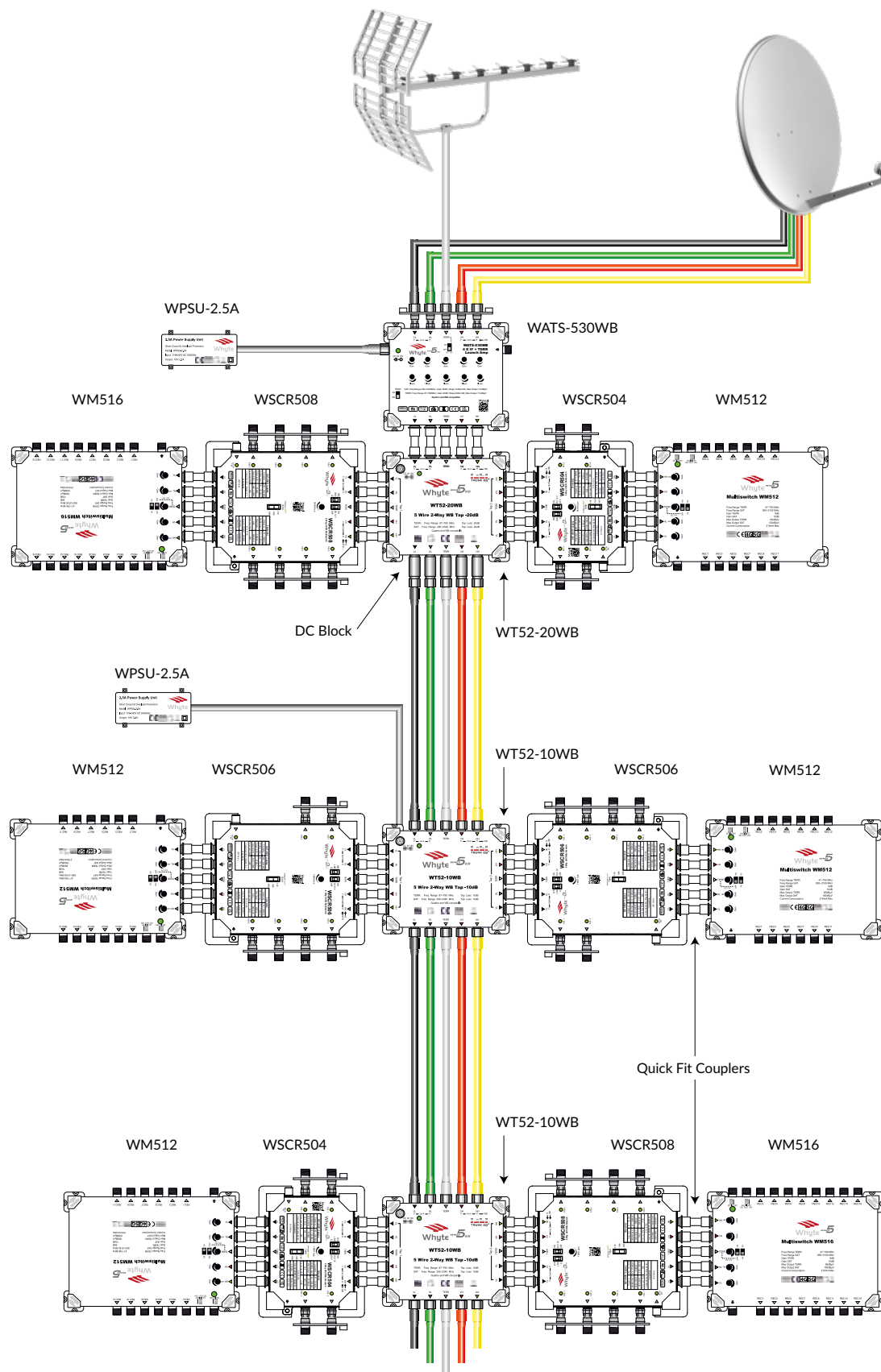




# Series D dSCR Configuration Example

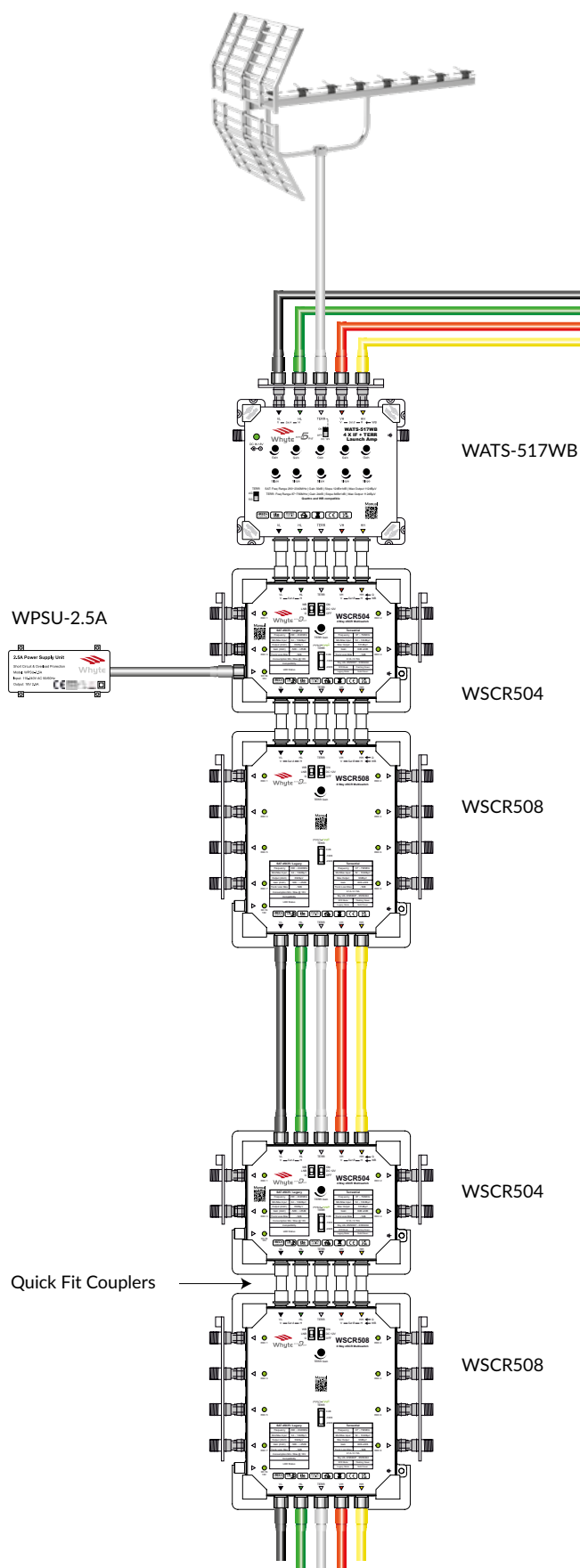
## HYBRID IRS

HYBRID *IRS*



# Series D dSCR Configuration Example

## dSCR CASCADE





## CONTENTS

Series DRP Remote Powered dSCR Multiswitches	26
Whyte Smart Apartment Power Supply Unit	28
Series DRP Configuration Examples	30

# Series **DRP** Remote Powered dSCR Multiswitch

## WSCR504RP



- 4 Years Warranty
- Small Form Factor
- Features Trunk EQ
- Comes complete with Earth Bars
- Remote Powered dSCR Multiswitch
- 2 SAT Reception using 2x WB LNB's
- Switchable 12V supply on TERR input
- Compatible with Quattro and WB LNB's
- High Output Power 89dBμV dSCR / 85dBμV Legacy (AGC)
- High Gain TERR with Gain Control & Pro-Tap™ Attenuation Switch



**PRO-TAP**

**(RED)**  
COMPLIANT

The Whyte WSCR504RP is a remote powered dSCR multiswitch designed specifically for installations where no landlords power is available. The WSCR504RP retains all the features and performance of the conventional Series D range of dSCR multiswitches. These performance features easily facilitate the cascading of several units due the low loss trunks, TERR gain control and Pro-Tap.

Each subscriber output provides SkyQ, Legacy SAT, TV and Radio Services. Satellite subscriber signal levels in both Legacy and dSCR mode are automatically set via AGC.

The power is provided remotely via the REC port which powers only that particular port, the trunk and any amplifier, legacy multiswitch or LNB connected. The WSCR504RP can not be powered via the trunk therefore any additional WSCR504RP's within the system will not be powered and added to the load. This ensures that no individual apartment will experience apartment PSU overload.

When used with the WPSU-SAP1/SAP2 Smart Apartment PSU's from Whyte, customer support is reduced and customer satisfaction is increased as the IRS system will function correctly irrespective of building occupancy or type of set-top-box (if any) used by the resident.

MODEL	WSCR504RP
Freq. Range SAT Quattro / WB	950 - 2150 / 290 - 2340MHz
Freq. Range TERR	87 - 790MHz
Dual Satellite Reception (2x WB LNB)	YES
Trunk Inputs /Outputs (F-Type Female)	4 SAT + 1 TERR
Tap Outputs (F-Type Female)	4
Gain SAT	-5dB ~ +25dB (AGC)
Gain TERR	8dB ±2dB
Gain Control TERR / SAT	15dB / AGC
Input Levels Min / Max ~ SAT / TERR	64 - 104dBμV * / 52 - 102dBμV
Trunk Through Loss SAT / TERR	< -5dB
Max Output Level SAT / TERR	89dBμV dSCR / 85dBμV Legacy (AGC) / 101dBμV TERR
Protean Tap™ (TERR Attenuation Switch)	0 / -10 / -20dB
Impedance	75Ω
Compatibility (Auto Switching)	Legacy / Sky UK / EN50607 / EN50494
dSCR User Bands Per Port	16
Masthead Supply (switchable)	12V DC 100mA
Power Consumption Min / Max @ 18V	0.1A / 0.28A
Supply voltage	18V DC
Power via Apartment / Via Trunk	Yes / No
Dimensions L x W x H (mm)	192x127x43

\*The typical transponder loading of Astra-2 28.2° east requires derating the maximum input level to 83dBμV measured at the most powerful transponder in band/polarity.

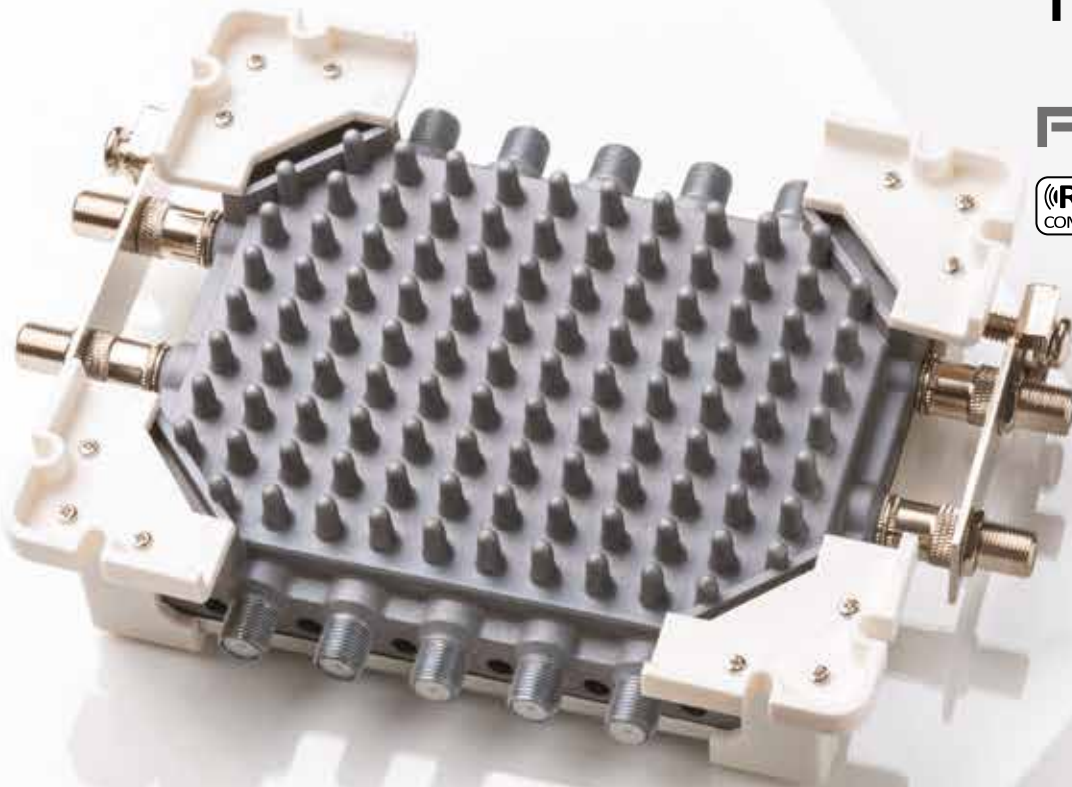
**TRUNK EQ**

**PRO-TAP™**

**(RED)**  
COMPLIANT

**DiSEqC 2.0**

**lte**  
FILTER



**Whyte** SERIES **DRP**

Remote Powered dSCR multiswitch designed specifically  
for installations where no landlords power is available

# Whyte Smart Apartment Power Supply Unit

## WPSU-SAP1 | WPSU-SAP2

- 4 Years Warranty
- Comes in 1 Feed or 2 Feed versions
- The World's First Smart Apartment PSU
- Compatible with all Legacy and dSCR STB's
- Provides 22W Power @ 14/18V Per Channel
- Can be installed as a set back Apartment PSU or in the Electrical Cupboard



The WPSU-SAP1 and WPSU-SAP2 are the worlds first Smart Apt PSU's. Customer support is reduced, and customer satisfaction is increased as the IRS system will function correctly irrespective of building occupancy or type of set-top (if any) is used by the resident. A Smart Apt PSU must be fitted in to every apartment irrespective of whether satellite services are required or not.

They are available in 1 and 2 feed versions and are compatible with both legacy and dSCR Set Top Boxes. When connected to a legacy STB, voltage switching commands (13/18V) are relayed by the dynamic PSU. In the absence of STB LNB voltage, the Smart Apt PSU will provide 14V to maintain the IRS System functional in circumstances when the occupants require TERR services only.

The Smart Apt PSU's can be set back locally near the TV or fitted discretely in an electrical cupboard.

MODEL	WPSU-SAP1	WPSU-SAP2
Channels	Single Channel (Single feed)	Dual Channel (Dual feed)
AC Input Voltage	100 - 240V AC 50/60Hz	100 - 240V AC 50/60Hz
DC Input Voltage (STB Generated)	13/18V DC	14V DC
Output Voltage	14/18V DC (Determined by STB Input)	18V DC Output
Output Wattage	22W	2 x 22W
Current Overload Protection	Yes (30W ±10%)	Yes (30W ±10%)
Use as Masthead PSU	Compatible	Compatible
RF Frequency Pass	87 - 2340MHz	87 - 2340MHz
22kHz Control Tone Pass	Legacy, DiSEqC, SKY UK, EN50607 & EN50494	Legacy, DiSEqC, SKY UK, EN50607 & EN50494
RF Through Loss	<1dB	<1dB
RF Interfaces	F-Type (Female 75Ω)	F-Type (Female 75Ω)
Mains Lead (UK Mains Plug with 3A Fuse)	Figure of 8 C13 Cord 1m	Figure of 8 C13 Cord 1m
Dimensions L x W x H (mm)	116 x 120 x 43	116 x 120 x 43
Weight	234g	276g





**WPSU-SAP2**  
Dual Channel



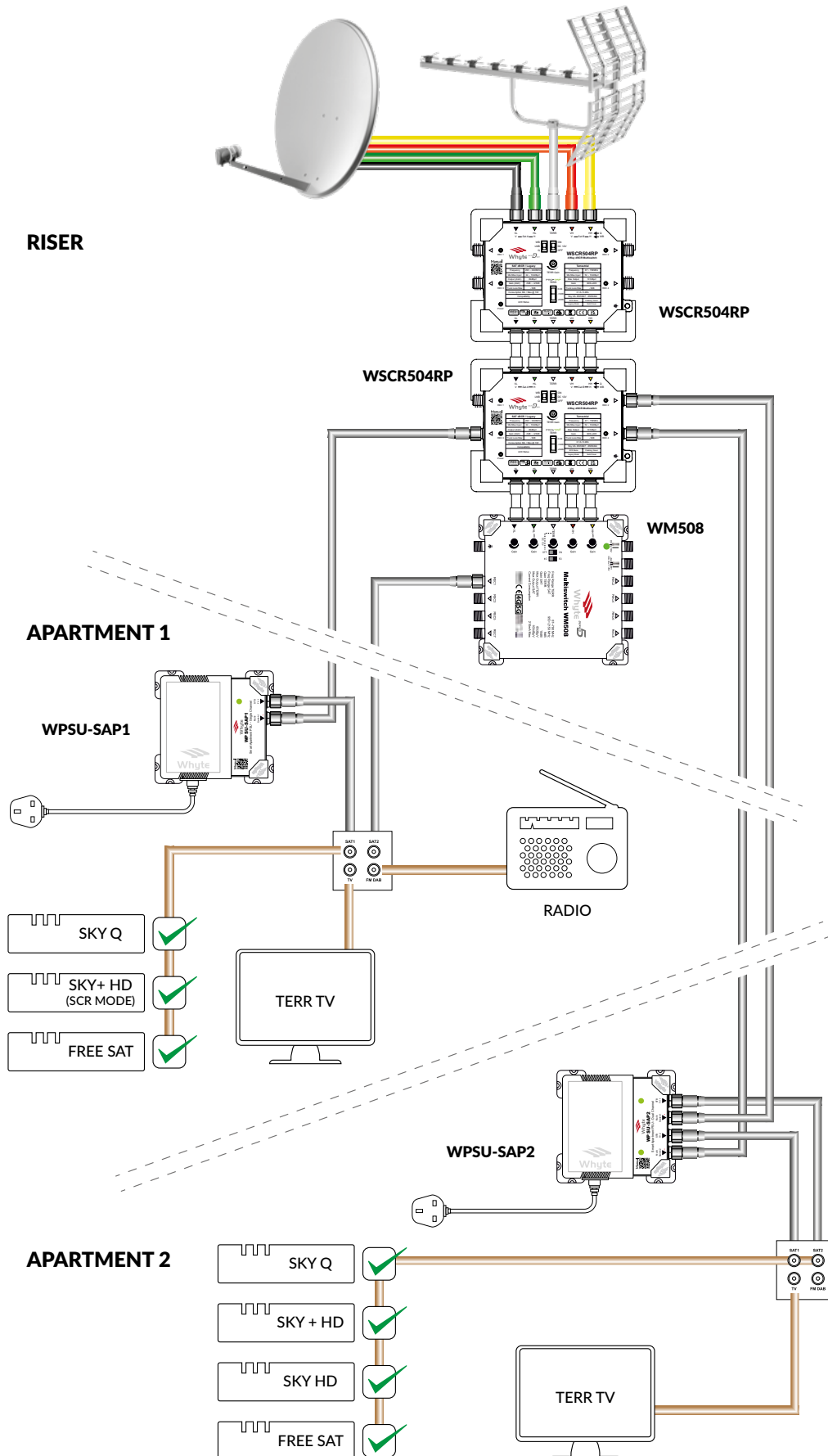
**WPSU-SAP1**  
Single Channel



**Smart Apartment Power Supply Unit**

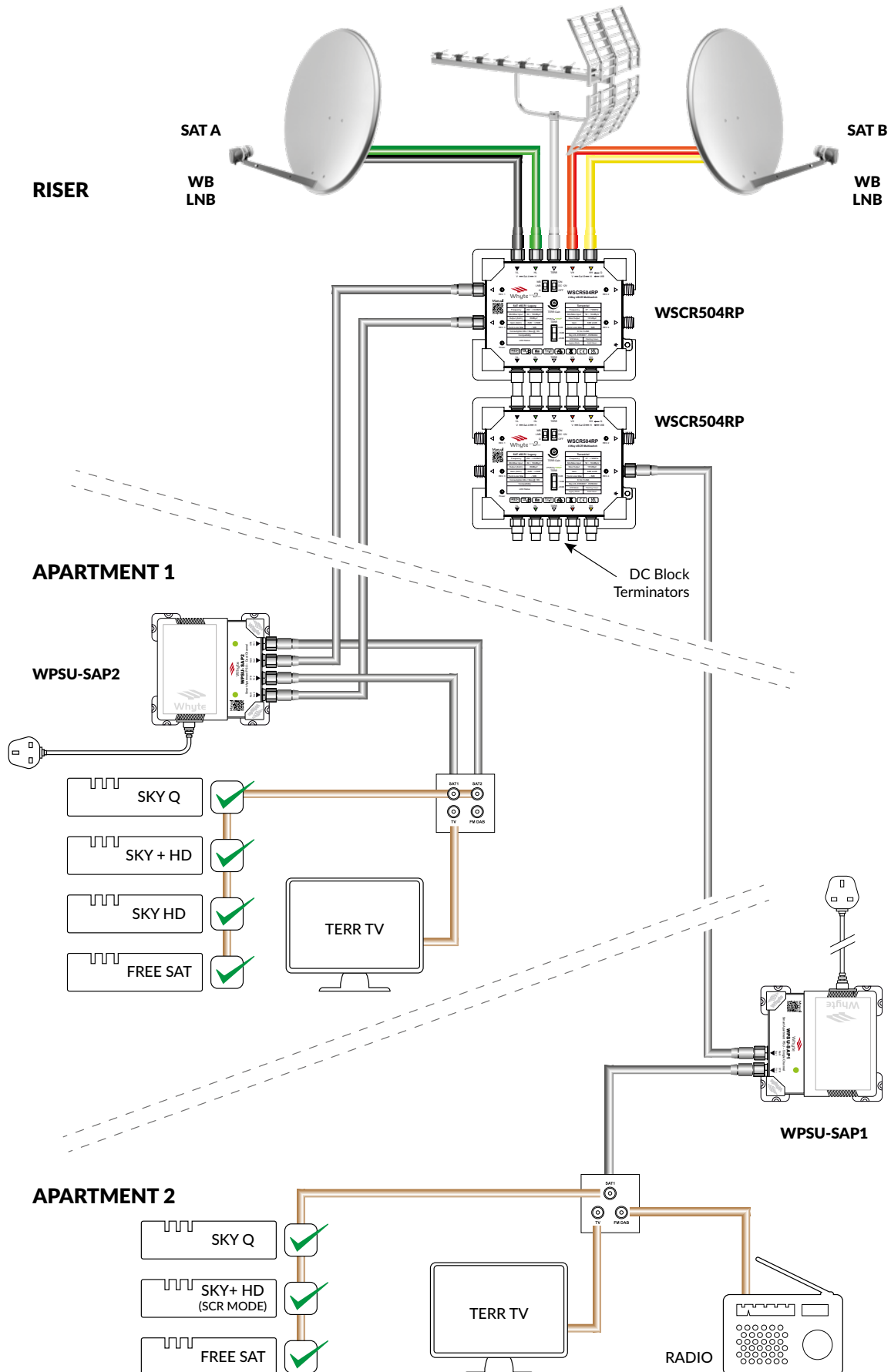
# Series **DRP** Configuration Example

## HYBRID IRS - POWERED FROM THE APARTMENT



# Series **DRP** Configuration Example

## 2 SAT IRS SYSTEM - POWERED FROM THE APARTMENT

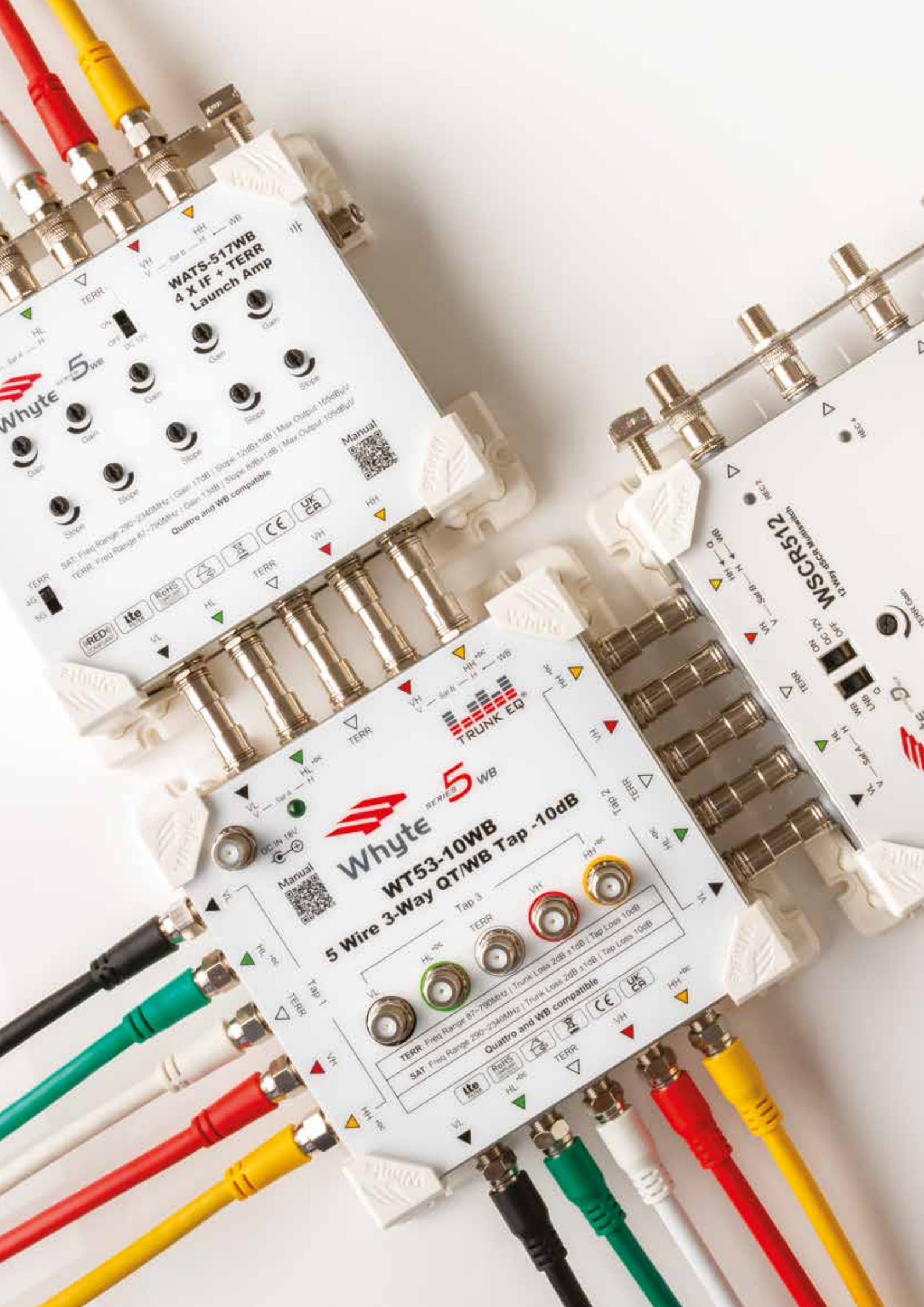




## CONTENTS

Series 5 Launch Amplifiers	34
Series 5 Taps & Splitters	36
Series 5 Multiswitches	42
Series 5 Configuration Examples	44





# Series 5 WB Launch Amplifiers

## WATS-517WB | WATS-530WB

### Quattro and Wideband Compatible



- RED Compliant
- 4 Years Warranty
- 4G/5G Selectable Filter
- Gain control on all inputs
- Slope control on all inputs
- Comes with input earth bar
- Quattro and WB Compatible
- 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 a 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.

This RED Compliant Launch Amplifier range comes fitted with selectable 4G/5G filtering. Each input comes with independent Gain and Slope Control for easy set up.



**((RED))**  
COMPLIANT

MODEL		WATS-517WB	WATS-530WB
Frequency	SAT	290 - 2340MHz	290 - 2340MHz
	TERR	87 - 790MHz	87 - 790MHz
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	YES
TERR 12V DC Supply (switchable)		100mA	100mA
Input/Output Return Loss	SAT	>8dB	>8dB
	TERR	>8dB	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB) EN50083-3	105dBμV	112dBμV
	TERR (IMA <sup>3</sup> -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 <sup>2</sup> core	Up to 6mm <sup>2</sup> 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

# Series 5 Launch Amplifiers

## WATS-517



- 4 Years Warranty
- RED Compliant
- Gain Control on all inputs
- Slope Control to all inputs
- Comes with input Earth Bar
- 4G/5G Selectable filters
- Colour coded inputs & outputs
- Switchable 12V DC Supply to Terrestrial input
- SAT GAIN 17dB TERR GAIN 13dB
- 18V Auxiliary Input injects power to the HL & HH trunk lines



The RED Compliant Whyte Series 5 Launch Amplifiers are compact and powerful and may be utilised as Launch Amplifiers or Line Amplifiers. They can be powered directly via the 18V Auxiliary Input or line powered via the HH and HL trunk lines.

This range of RED Compliant Launch Amplifiers come complete with a selectable 4G/5G filter, whilst gain and slope control all inputs makes commissioning easy.

MODEL		WATS-517
Frequency	SAT	950 - 2150MHz
	TERR	87 - 790MHz
Inputs (F-Type Connector)		4 SAT + 1 TERR
Outputs (F-Type Connector)		4 SAT + 1 TERR
Gain	SAT	>17dB
	TERR	>13dB
Gain Control	SAT	10dB ±2dB
	TERR	10dB ±2dB
Slope Control	SAT	8dB ±1dB
	TERR	8dB ±1dB
4G/5G Filter (switchable)		YES
TERR 12V DC Supply (switchable)		100mA
Input/Output Return Loss	SAT	>8dB
	TERR	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB) EN50083-3	105dBμV
	TERR (IMA <sup>3</sup> -60dB) EN50083-5	108dBμV
LNB Power Supply Max		2A
Trunk DC Pass	SAT (per trunk)	YES 2A Max
	TERR	NO
Powering	Via DC In	YES
	Via SAT Trunks (HL + HH)	YES (HL + HH)
Input Earth Terminal Bar		YES
Earth Lug (F-Type connector with clamp)		Up to 6mm <sup>2</sup> core
Power Indication		LED
Power Consumption		150mA Max
Dimensions including Earth Bars W x L x H (mm)		158 x 154 x 43
Weight		470g



# Series 5 WB Taps

**WT51-10WB | WT51-20WB**

**Quattro and Wideband Compatible**



MODEL		WT51-10WB	WT51-20WB
Frequency	SAT	290 - 2340MHz	290 - 2340MHz
	TERR	87 - 790MHz	87 - 790MHz
Inputs (F-Type Connector)		4 SAT + 1 TERR	4 SAT + 1 TERR
Outputs (F-Type Connector)		2x 4 SAT + 2x TERR	2x 4 SAT + 2x TERR
DC Input (Injection of DC applied to)		All SAT Trunks & Tap	All SAT Trunks & Tap
DC Pass Trunk to Tap	SAT	YES	YES
	TERR	NO	NO
DC Pass Trunk to Trunk	SAT	YES	YES
	TERR	NO	NO
Trunk Through Loss	SAT	2dB $\pm$ 1dB	2dB $\pm$ 1dB
	TERR	2dB $\pm$ 1dB	2dB $\pm$ 1dB
Tap Loss	SAT	10dB	20dB
	TERR	10dB	20dB
Fixed Slope Taps		YES	YES
Trunk EQ		YES	YES
Isolation		>30dB	>30dB
Max Current Pass (Trunk/Trunk Trunk/Tap)		2A	2A
Power Indication		LED	LED
Dimensions W x L x H (mm)		156 x 150 x 43	156 x 150 x 43
Weight		360g	360g

# Series 5 Taps

## WT51-20



- Inbuilt LTE filter
- 4 Years Warranty
- LED power indicator
- Colour coded inputs and outputs
- Tap outputs on top of unit for easy access
- Comes with high quality colour coded leads included
- Auxiliary 18V Input injects power to HL & HH trunk cables
- Taps and Splitters can be connected together to create a multitude of splitters with varying attenuation levels

Whyte Series 5 Taps & Splitters are a range of 5 wire passive devices that distribute Satellite and Terrestrial Signals. The range includes 1 way, 2 way and 3 way Taps with either a 10dB or 20dB tap off and a 2 way Splitter. For ease of installation, each unit comes complete with high quality colour coded 600mm F-type leads.

This enables the Multiswitches to be positioned either side of the Tap or Splitter, and to be orientated vertically or horizontally depending on available space.



MODEL		WT51-20
Frequency	SAT	950 - 2150MHz
	TERR	87 - 790MHz
Inputs (F-Type Connector)		4 SAT + 1 TERR
Outputs (F-Type Connector)		2x 4 SAT + 2x TERR
DC Input (Injection of DC applied to)		HL + HH SAT
DC Pass Trunk to Tap	SAT	YES
	TERR	NO
DC Pass Trunk to Trunk	SAT	YES
	TERR	NO
Trunk Through Loss	SAT	2dB ±1dB
	TERR	2dB ±1dB
Tap Loss	SAT	20dB
	TERR	20dB
Fixed Slope Taps (SAT)		4dB
Isolation		>30dB
Max Current Pass (Trunk/Trunk Trunk/Tap)		2A
Power Indication		LED
Dimensions W x L x H (mm)		156 x 136 x 43
Tap Leads Included		YES - 1 Set
Weight		376g

# Series 5 WB Taps & Splitter

**WT52-10WB | WT52-20WB | WS52-05WB**



## Quattro and Wideband Compatible

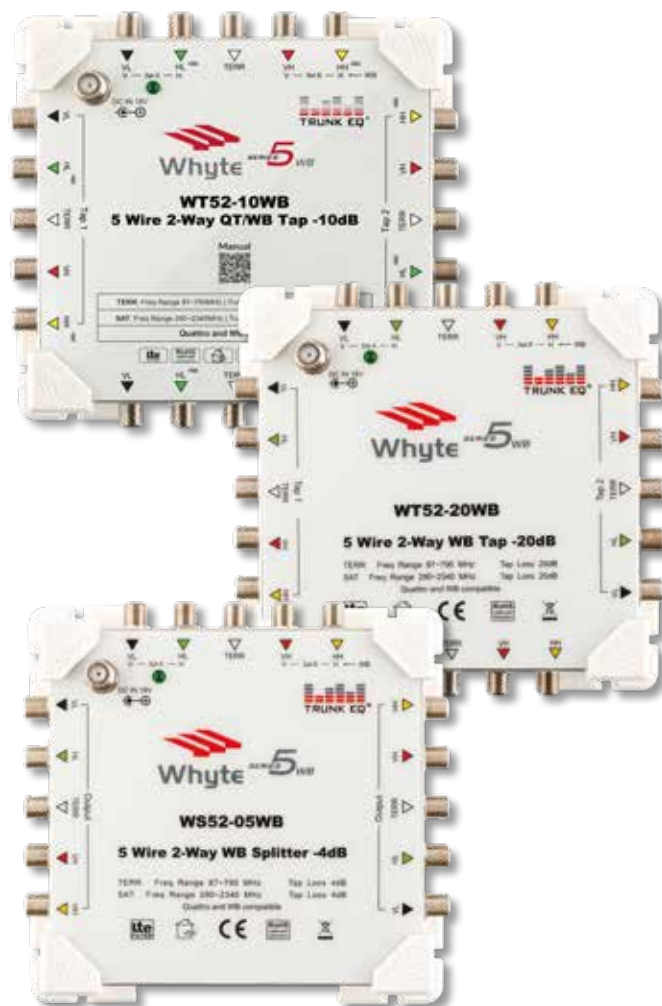
- High Isolation
- Inbuilt LTE filter
- 4 Years Warranty
- Features Trunk EQ
- LED power indicator
- Quattro and WB Compatible
- Colour coded inputs and outputs
- Tap outputs on side for easy push fit
- Auxiliary 18V Input injects power to all SAT lines

A range of passive, 5 wire WB and Quattro compatible Taps and Splitters. The Whyte Series 5 WB range of Taps are available in 1-way and 2-way with 10dB or 20dB Tap attenuation as well as a 2-way Splitter.

The Series 5 WB Taps and Splitter can be directly connected to Series 5 and Series D dSCR Multiswitches using the supplied push fit connectors which reduces installation time.

The Whyte Series 5 WB Taps and Splitter feature our intelligent trunk equalisation technology Trunk EQ for flat trunk output.

This industry first enables longer cascades to be created for Quattro or Wideband IRS distribution systems.



MODEL		WT52-10WB	WT52-20WB	WS52-05WB
Frequency	SAT	290 - 2340MHz	290 - 2340MHz	290 - 2340MHz
	TERR	87 - 790MHz	87 - 790MHz	87 - 790MHz
Inputs (F-Type Connector)		4 SAT + 1 TERR	4 SAT + 1 TERR	4 SAT + 1 TERR
Outputs (F-Type Connector)		3x 4 SAT + 3x TERR	3x 4 SAT + 3x TERR	2x 4 SAT + 2x TERR
DC Input (Injection of DC applied to)		All SAT Trunks & Tap	All SAT Trunks & Tap	All SAT Trunks & Tap
DC Pass Trunk to Tap	SAT	YES	YES	YES
	TERR	NO	NO	NO
DC Pass Trunk to Trunk	SAT	YES	YES	~
	TERR	NO	NO	~
Trunk Through Loss	SAT	2dB ±1dB	2dB ±1dB	~
	TERR	2dB ±1dB	2dB ±1dB	~
Tap Loss	SAT	10dB	20dB	4dB ±1dB
	TERR	10dB	20dB	4dB ±1dB
Fixed Slope Taps		YES	YES	YES
Trunk EQ		YES	YES	YES
Isolation		>30dB	>30dB	>30db
Max Current Pass (Trunk/Trunk Trunk/Tap)		2A	2A	2A
Power Indication		LED	LED	LED
Dimensions W x L x H (mm)		156 x 150 x 43	156 x 150 x 43	156 x 150 x 43
Weight		396g	396g	364g

# Series 5 Taps & Splitter

## WT52-20 | WS52-05



- Inbuilt LTE filter
- 4 Years Warranty
- LED power indicator
- Colour coded inputs and outputs
- Tap outputs on top of unit for easy access
- Comes with high quality colour coded leads included
- Auxiliary 18V Input injects power to HL & HH trunk cables
- Taps and Splitters can be connected together to create a multitude of splitters with varying attenuation levels

Whyte Series 5 Taps & Splitters are a range of 5 wire passive devices that distribute Satellite and Terrestrial Signals. The range includes 1 way, 2 way and 3 way Taps with either a 10dB or 20dB tap off and a 2 way Splitter. For ease of installation, each unit comes complete with high quality colour coded 600mm F-type leads.

This enables the Multiswitches to be positioned either side of the Tap or Splitter, and to be orientated vertically or horizontally depending on available space.



MODEL		WT52-20	WT52-05
Frequency	SAT	950 - 2150MHz	950 - 2150MHz
	TERR	87 - 790MHz	87 - 790MHz
Inputs (F-Type Connector)		4 SAT + 1 TERR	4 SAT + 1 TERR
Outputs (F-Type Connector)		3x 4 SAT + 3x TERR	2x 4 SAT + 2x TERR
DC Input (Injection of DC applied to)		HL + HH SAT	HL + HH SAT
DC Pass Trunk to Tap	SAT	YES	YES
	TERR	NO	NO
DC Pass Trunk to Trunk	SAT	YES	~
	TERR	NO	~
Trunk Through Loss	SAT	2dB ±1dB	~
	TERR	2dB ±1dB	~
Tap Loss	SAT	20dB	4dB ±1dB
	TERR	20dB	4dB ±1dB
Fixed Slope Taps (SAT)		4dB	4dB
Isolation		>30dB	>30db
Max Current Pass (Trunk/Trunk Trunk/Tap)		2A	2A
Power Indication		LED	LED
Dimensions W x L x H (mm)		156 x 136 x 43	156 x 136 x 43
Tap Leads Included		YES - 2 Sets	YES - 1 Set
Weight		418g	376g

# Series 5 WB Taps

## WT53-10WB

### Quattro and Wideband Compatible

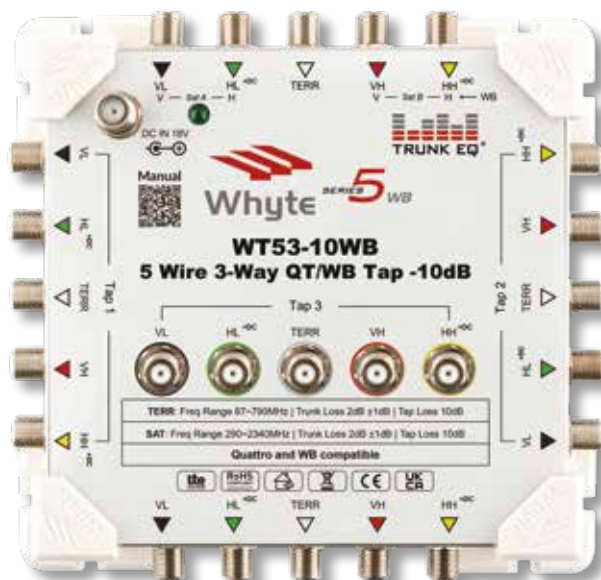
- High Isolation
- Inbuilt LTE filter
- 4 Years Warranty
- Features Trunk EQ
- LED power indicator
- Quattro and WB Compatible
- Colour coded inputs and outputs
- Tap outputs on side for easy push fit
- Auxiliary 18V Input injects power to all SAT lines

A range of passive, 5 wire WB and Quattro compatible Taps and Splitters. The Whyte Series 5 WB range of Taps are available in 1-way and 2-way with 10dB or 20dB Tap attenuation as well as a 2-way Splitter.

The Series 5 WB Taps and Splitter can be directly connected to Series 5 and Series D dSCR Multiswitches using the supplied push fit connectors which reduces installation time.

The Whyte Series 5 WB Taps and Splitter feature our intelligent trunk equalisation technology Trunk EQ for flat trunk output.

This industry first enables longer cascades to be created for Quattro or Wideband IRS distribution systems.



MODEL		WT53-10WB
Frequency	SAT	290 - 2340MHz
	TERR	87 - 790MHz
Inputs (F-Type Connector)		4 SAT + 1 TERR
Outputs (F-Type Connector)		4x 4 SAT + 4x TERR
DC Input (Injection of DC applied to)		All SAT Trunks & Tap
DC Pass Trunk to Tap	SAT	YES
	TERR	NO
DC Pass Trunk to Trunk	SAT	YES
	TERR	NO
Trunk Through Loss	SAT	2dB ±1dB
	TERR	2dB ±1dB
Tap Loss	SAT	10dB
	TERR	10dB
Fixed Slope Taps		YES
Trunk EQ		YES
Isolation		>30dB
Max Current Pass (Trunk/Trunk Trunk/Tap)		2A
Power Indication		LED
Dimensions W x L x H (mm)		156 x 150 x 43
Weight		430g

# Series 5 Taps

## WT53-20



- Inbuilt LTE filter
- 4 Years Warranty
- LED power indicator
- Colour coded inputs and outputs
- Tap outputs on top of unit for easy access
- Comes with high quality colour coded leads included
- Auxiliary 18V Input injects power to HL & HH trunk cables
- Taps and Splitters can be connected together to create a multitude of splitters with varying attenuation levels



Whyte Series 5 Taps & Splitters are a range of 5 wire passive devices that distribute Satellite and Terrestrial Signals. The range includes 1 way, 2 way and 3 way Taps with either a 10dB or 20dB tap off and a 2 way Splitter. For ease of installation, each unit comes complete with high quality colour coded 600mm F-type leads.

This enables the Multiswitches to be positioned either side of the Tap or Splitter, and to be orientated vertically or horizontally depending on available space.

MODEL		WT53-20
Frequency	SAT	950 - 2150MHz
	TERR	87 - 790MHz
Inputs (F-Type Connector)		4 SAT + 1 TERR
Outputs (F-Type Connector)		4x 4 SAT + 4x TERR
DC Input (Injection of DC applied to)		HL + HH SAT
DC Pass Trunk to Tap	SAT	YES
	TERR	NO
DC Pass Trunk to Trunk	SAT	YES
	TERR	NO
Trunk Through Loss	SAT	2dB ±1dB
	TERR	2dB ±1dB
Tap Loss	SAT	20dB
	TERR	20dB
Fixed Slope Taps (SAT)		4dB
Isolation		>30dB
Max Current Pass (Trunk/Trunk Trunk/Tap)		2A
Power Indication		LED
Dimensions W x L x H (mm)		156 x 150 x 43
Tap Leads Included		YES - 3 Sets
Weight		460g



# Series 5 Multiswitches

WM508 | WM512



MODEL		WM508	WM512
Frequency Range	SAT	950 - 2150MHz	950 - 2150MHz
	TERR	87 - 790MHz	87 - 790MHz
4G/5G Switch		YES	YES
Input (F-Type Female)		4 SAT + 1 TERR	4 SAT + 1 TERR
Tap Outputs (F-Type Female)		8	12
Gain	SAT	≥10dB	≥10dB
	TERR	≥8dB	≥8dB
Gain Control	SAT	11dB ±2dB	11dB ±2dB
	TERR	11dB ±2dB	11dB ±2dB
Return Loss	SAT Trunk Input / Output	>10dB / >10dB	>10dB / >10dB
	TERR Trunk Input / Output	>8dB / >8dB	>8dB / >8dB
	Tap Output	>8dB	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB)	100dBμV	100dBμV
	TERR (IMA <sup>3</sup> -60dB)	>85dBμV	>85dBμV
Isolation	Trunk-Trunk	>33dB	>33dB
	Cross-Polar	≥25dB	≥25dB
	Tap-Tap (SAT)	>30dB	>30dB
	Tap-Tap (TERR)	>30dB	>30dB
	Rejection	≥25dB	≥25dB
Impedance		75Ω	75Ω
Switching Commands	Legacy	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
Power Supply Voltage		18V DC	18V DC
Powering	Via DC In	YES	YES
	Via HL & HH Input	YES	YES
Auxiliary DC Output (F-Type Female)		YES	YES
Power Consumption (Max) @ 18V		210mA	210mA
Power Indication		LED	LED
Trunk Max Current Pass (per Line)		2A	2A
Masthead Supply (Switchable)	TERR Input Only	12V DC 100mA	12V DC 100mA
Earth Terminal Bars (Tap Outputs)		YES	YES
Earth Lug		Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core
Dimensions with Earth Bars W x L x H (mm)		150 x 182 x 43mm	214 x 182 x 43mm
Weight		674g	896g



# Series 5 Multiswitches

## WM516 | WM524 | WM532

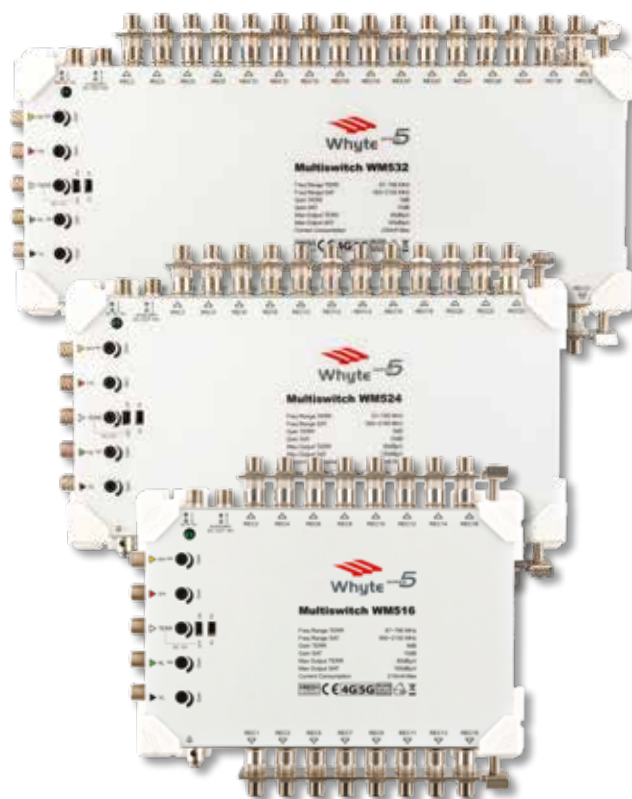


- RED Compliant
- 4 Years Warranty
- LED power indicator
- Gain Control on all inputs
- Comes with Earth Bars fitted
- Sat Gain 10dB TERR gain 8dB
- DC input and DC output ports
- Colour coded inputs and outputs
- Switchable 12V DC supply to TERR input
- 4G/5G switchable high rejection LTE filters
- Line Powered or powered directly using Whyte PSU

The Whyte Series 5 Multiswitch range is universally flexible and is designed to be used in small, medium to large Integrated Reception Systems (IRS). Whyte Multiswitches can be used as Standalone Multiswitches when powered directly via the 18V Auxiliary Input by using a Whyte 0.8A Power Supply Unit (WPSU-0.8A).

Large scale integrated reception systems can easily be created by using Series 5 Amplifiers, Taps and Splitters.

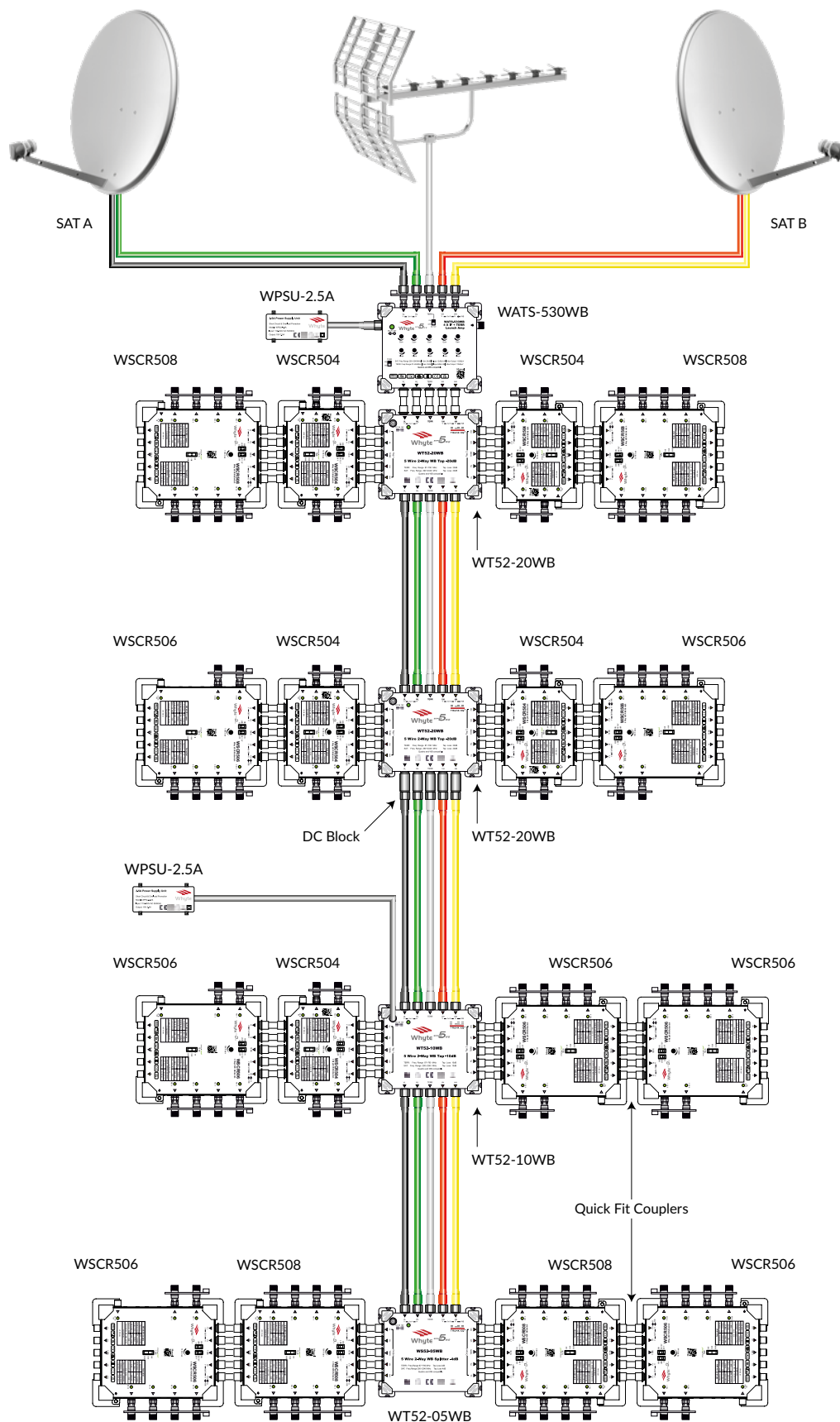
The Series 5 Multiswitch range can be directly connected to the Whyte dSCR range to easily create hybrid IRS Systems.



MODEL		WM516	WM524	WM532
Frequency Range	SAT	950 - 2150MHz	950 - 2150MHz	950 - 2150MHz
	TERR	87 - 790MHz	87 - 790MHz	87 - 790MHz
4G/5G Switch		YES	YES	YES
Input (F-Type Female)		4 SAT + 1 TERR	4 SAT + 1 TERR	4 SAT + 1 TERR
Tap Outputs (F-Type Female)		16	24	32
Gain	SAT	≥10dB	≥10dB	≥10dB
	TERR	≥8dB	≥8dB	≥8dB
Gain Control	SAT	11dB ±2dB	11dB ±2dB	11dB ±2dB
	TERR	11dB ±2dB	11dB ±2dB	11dB ±2dB
Return Loss	SAT Trunk Input / Output	>10dB / >10dB	>10dB / >10dB	>10dB / >10dB
	TERR Trunk Input / Output	>8dB / >8dB	>8dB / >8dB	>8dB / >8dB
	Tap Output	≥8dB	≥8dB	≥8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB)	100dBμV	100dBμV	100dBμV
	TERR (IMA <sup>3</sup> -60dB)	>85dBμV	>85dBμV	>85dBμV
Isolation	Trunk-Trunk	>33dB	>33dB	>33dB
	Cross-Polar	≥25dB	≥25dB	≥25dB
	Tap-Tap (SAT)	>30dB	>30dB	>30dB
	Tap-Tap (TERR)	>30dB	>30dB	>30dB
	Rejection	≥25dB	≥25dB	≥25dB
Impedance		75Ω	75Ω	75Ω
Switching Commands	Legacy	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
Power Supply Voltage		18V DC	18V DC	18V DC
Powering	Via DC In	YES	YES	YES
	Via HL & HH Input	YES	YES	YES
Auxiliary DC Output (F-Type Female)		YES	YES	YES
Power Consumption (Max) @ 18V		210mA	230mA	230mA
Power Indication		LED	LED	LED
Trunk Max Current Pass (per Line)		2A	2A	2A
Masthead Supply (Switchable)	TERR Input Only	12V DC 100mA	12V DC 100mA	12V DC 100mA
Earth Terminal Bars (Tap Outputs)		YES	YES	YES
Earth Lug		Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core
Dimensions with Earth Bars W x L x H (mm)		214 x 182 x 43mm	278 x 182 x 43mm	342 x 182 x 43mm
Weight		950g	1240g	1512g

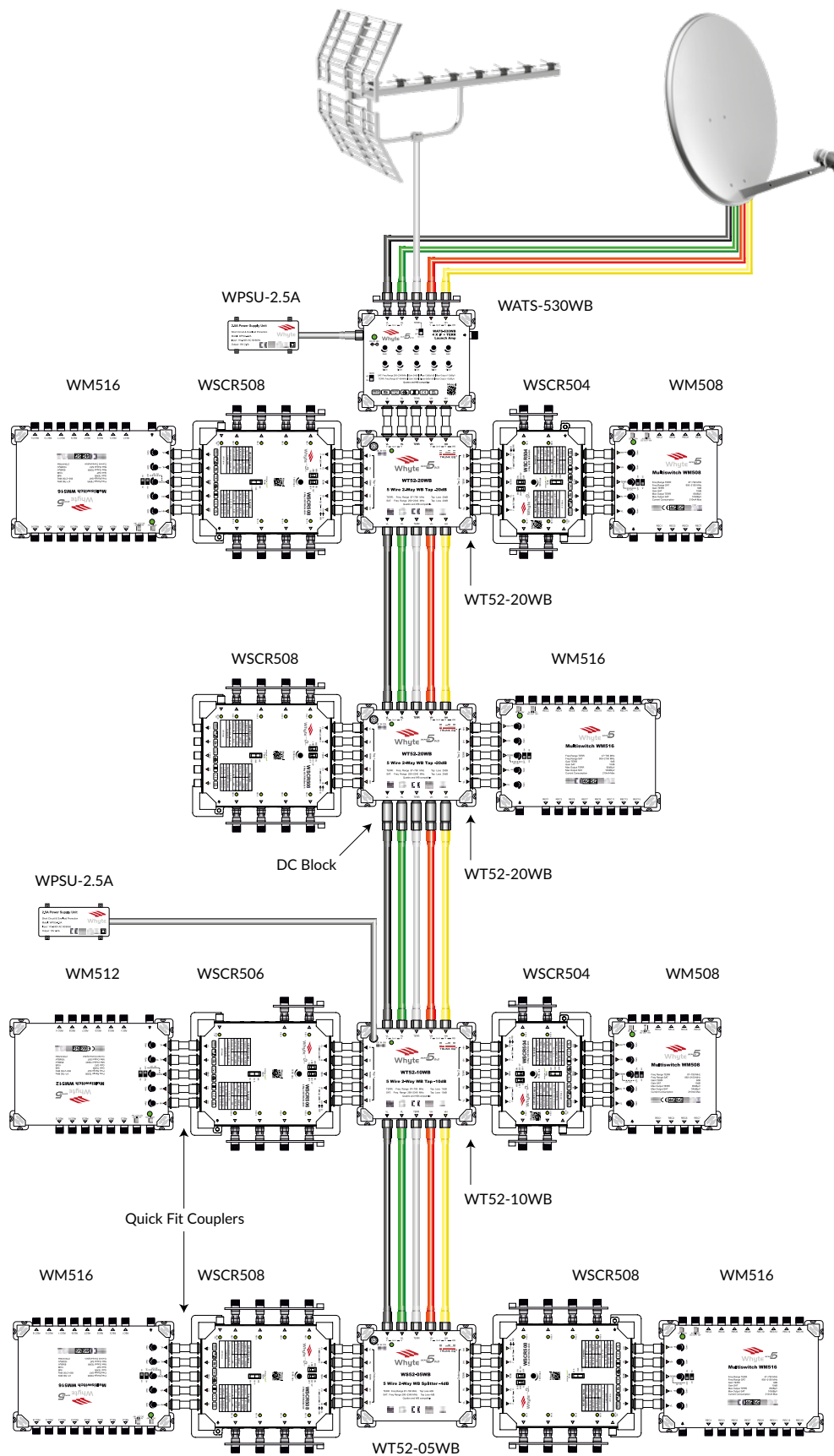
## Series 5 WB Configuration Example

## Dual SAT Wideband IRS



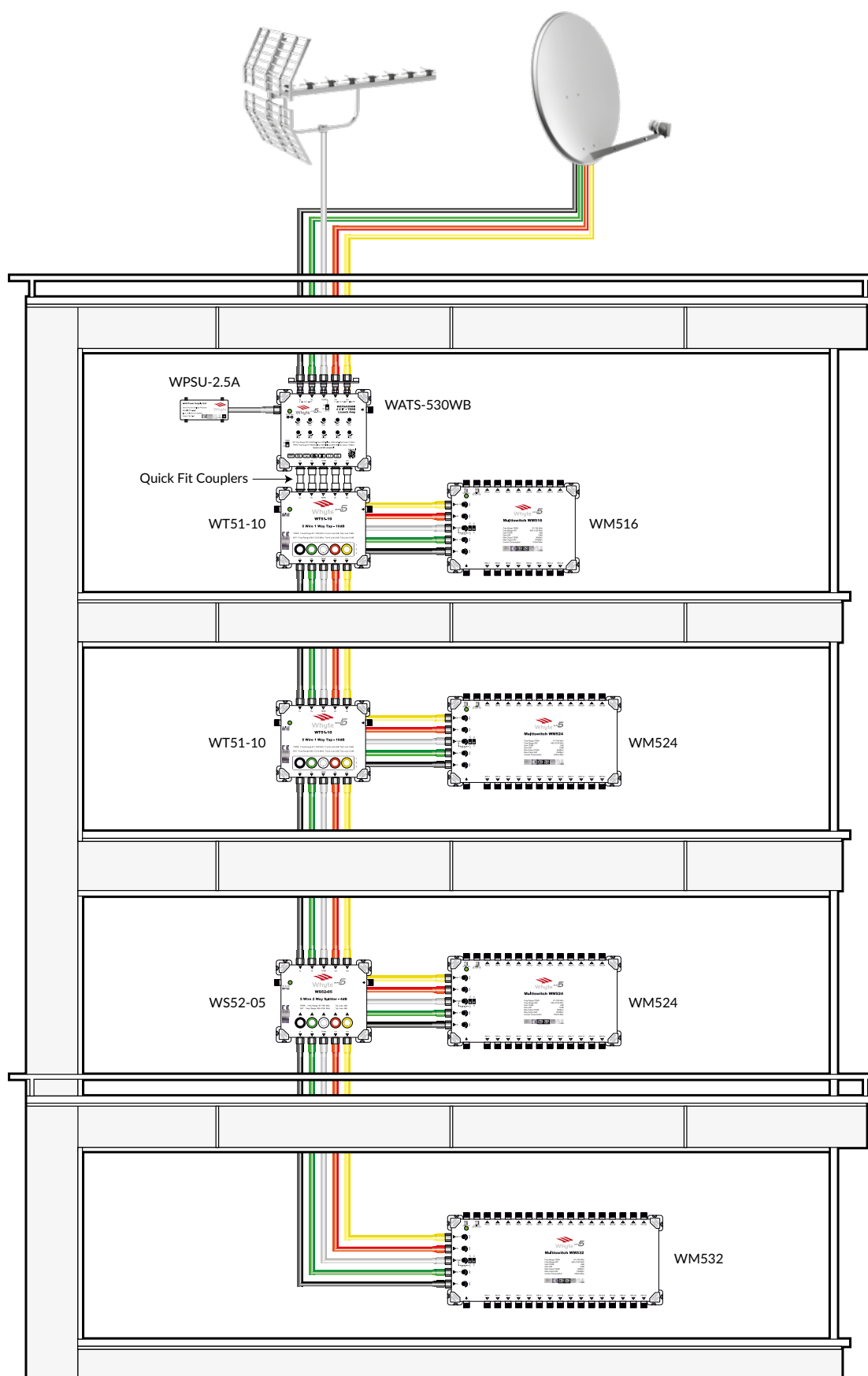
## Series 5 Configuration Example

## Quattro Hybrid IRS



# Series 5 Configuration Example

## SERIES 5 LEGACY IRS





## CONTENTS

Series 5Lite Multiswitches	48
Series 5Lite Configuration Examples	50

# Series 5 Lite Multiswitches

WM508L | WM512L



Supplied with Power Unit (WP-0.8A)

**(RED)**  
COMPLIANT

MODEL		WM508L	WM512L
Frequency Range	SAT	950 - 2150MHz	950 - 2150MHz
	TERR	87 - 790MHz	87 - 790MHz
Input (F-Type Female)		4 SAT + 1 TERR	4 SAT + 1 TERR
Tap Outputs (F-Type Female)		8	12
Gain	SAT	2 ±2dB	2 ±2dB
	TERR	10 / 0 ±2dB	10 / 0 ±2dB
Return Loss	SAT Trunk Input	>8dB	>8dB
	TERR Trunk Input	>8dB	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB)	100dBμV	100dBμV
	TERR (IMA <sup>3</sup> -60dB)	>85dBμV	>85dBμV
Isolation	Trunk-Trunk	≥28dB	≥28dB
	Cross-Polar	≥25dB	≥25dB
	Tap-Tap (SAT)	≥25dB	≥25dB
	Tap-Tap (TERR)	≥23dB	≥23dB
	Rejection	≥20dB	≥20dB
Impedance		75Ω	75Ω
Switching Commands	Legacy	13 / 18V / 22kHz	13 / 18V / 22kHz
Power Supply Voltage		18V DC	18V DC
Powering	Via DC In	YES	YES
Power Consumption (Max) @ 18V		100mA	100mA
Power Indication		LED	LED
18V DC 800mA PSU Included (WPSU-0.8A)		YES	YES
Masthead Supply (Switchable)	TERR Input Only	12V DC 100mA	12V DC 100mA
Earth Lug		Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core
Dimensions with Earth Bars W x L x H (mm)		150 x 150 x 43mm	214 x 150 x 43mm
Weight		402g	546g

# Series 5 Lite Multiswitches

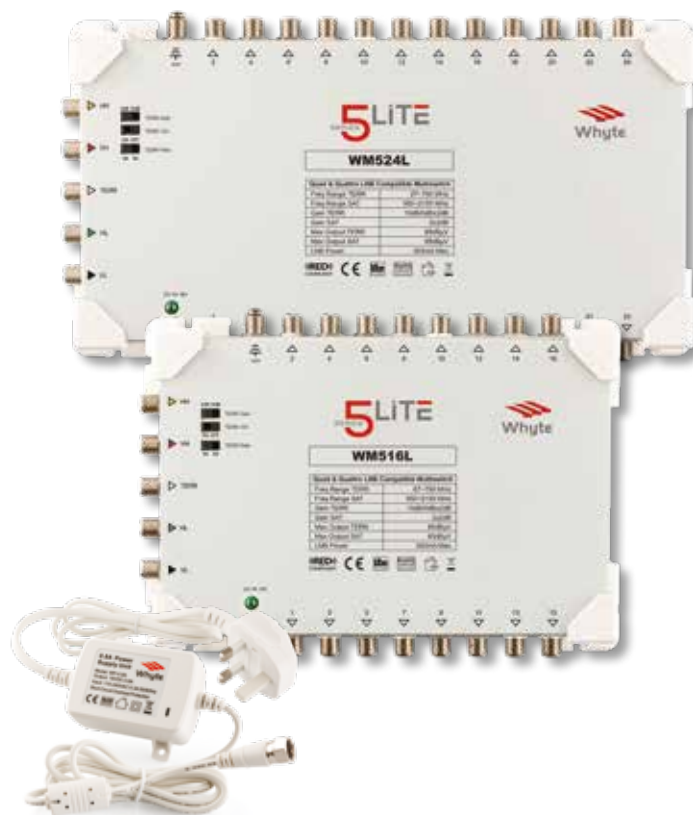
## WM516L | WM524L



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

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 WM532L is fixed 4G LTE filtration.

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.

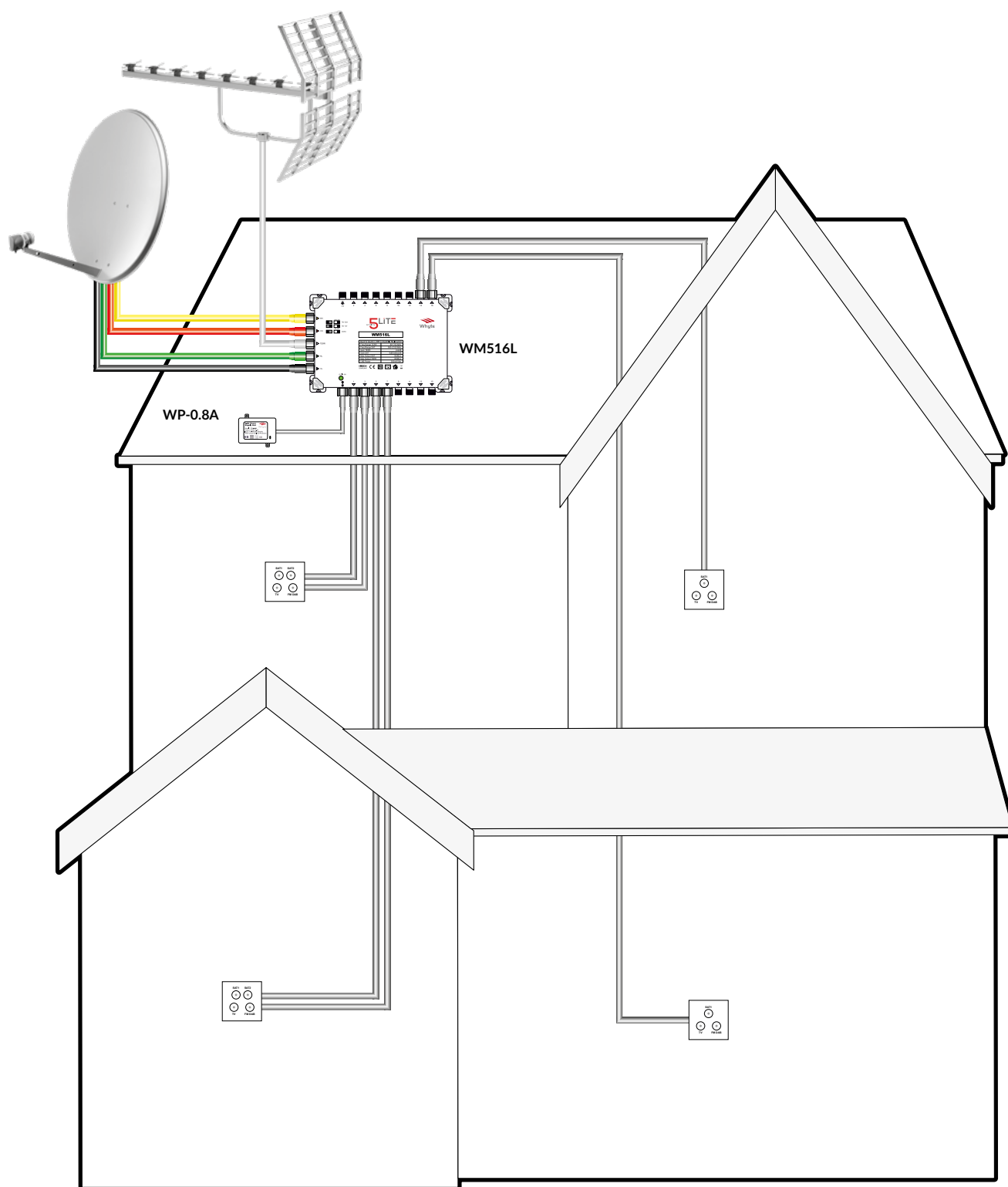


MODEL		WM516L	WM524L
Frequency Range	SAT	950 - 2150MHz	950 - 2150MHz
	TERR	87 - 790MHz	87 - 790MHz
Input (F-Type Female)		4 SAT + 1 TERR	4 SAT + 1 TERR
Tap Outputs (F-Type Female)		16	24
Gain	SAT	2 ±2dB	2 ±2dB
	TERR	10 / 0 ±2dB	10 / 0 ±2dB
Return Loss	SAT Trunk Input	>8dB	>8dB
	TERR Trunk Input	>8dB	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB)	100dBμV	100dBμV
	TERR (IMA <sup>3</sup> -60dB)	>85dBμV	>85dBμV
Isolation	Trunk-Trunk	≥28dB	≥28dB
	Cross-Polar	≥25dB	≥25dB
	Tap-Tap (SAT)	≥25dB	≥25dB
	Tap-Tap (TERR)	≥23dB	≥23dB
	Rejection	≥20dB	≥20dB
Impedance		75Ω	75Ω
Switching Commands	Legacy	13 / 18V / 22kHz	13 / 18V / 22kHz
Power Supply Voltage		18V DC	18V DC
Powering	Via DC In	YES	YES
Power Consumption (Max) @ 18V		100mA	130mA
Power Indication		LED	LED
18V DC 800mA PSU Included (WPSU-0.8A)		YES	YES
Masthead Supply (Switchable)	TERR Input Only	12V DC 100mA	12V DC 100mA
Earth Lug		Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core
Dimensions with Earth Bars W x L x H (mm)		214 x 150 x 43mm	278 x 150 x 43mm
Weight		566g	726g



# Series 5 Lite Configuration Example

## SERIES 5 LITE IN THE HOME





## CONTENTS

Series 9 Launch Amplifiers	52
Series 9 Taps & Splitters	53
Series 9 Multiswitches	54
Series 9 Configuration Examples	56

# Series 9 Launch Amplifier

## WATS-930



- Compact size
- RED Compliant
- 4 Years Warranty
- Gain Control to all inputs
- Slope Control to all inputs
- Comes with Earth Bars fitted
- Colour coded inputs & outputs
- LTE Filter rejects 4G interference
- 9 x SAT + 1 x TERR Input & Outputs
- Switchable 12V DC Supply to Terrestrial input
- 18V Auxiliary Input powers the amplifier & injects power to the HL & HH trunk



The RED Compliant Whyte WATS-930 is a 8 x SAT and 1 x Terrestrial Launch Amplifier that is compact and powerful. It may be utilised as a Launch Amplifier or as a Line Amplifier, and can be powered directly via the 18V Auxiliary Input or line powered via the HH and HL trunk lines.

For ease of installation, the WATS-930 Launch Amplifier can be connected directly to a cascade of Series 9 Multiswitches using F-type couplers.

MODEL	WATS-930	
Frequency	SAT	950 - 2150MHz
	TERR	87 - 790MHz
Inputs (F-Type Connector)	8 SAT + 1 TERR	
Outputs (F-Type Connector)	8 SAT + 1 TERR	
Gain	SAT	>30dB
	TERR	>24dB
Gain Control	SAT	15dB ±2dB
	TERR	10dB ±2dB
Slope Control	SAT	8dB ±2dB
	TERR	8dB ±2dB
4G Internal Filter	YES	
TERR 12V DC Supply (switchable)	100mA	
Input/Output Return Loss	SAT	>8dB
	TERR	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB) EN50083-3	112dBμV
	TERR (IMA <sup>3</sup> -60dB) EN50083-5	112dBμV
LNB Power Supply Max	2A	
Trunk DC Pass	SAT (per trunk)	YES 2A Max
	TERR	NO
Powering	Via DC In	YES
	Via HL + HH SAT Trunks	YES
Input Earth Terminal Bar	YES	
Earth Lug (F-Type connector with clamp)	Up to 6mm <sup>2</sup> core	
Power Indication	LED	
Power Consumption	380mA Max	
Dimensions with Earth Bars W x L x H (mm)	172 x 153 x 43	
Weight	640g	

# Series 9 Taps & Splitter

## WT91-10 | WS92-05



- Compact size
- 4 Years Warranty
- 8 SAT + 1 TERR Inputs
- 2 x 8 SAT + 1 TERR Outputs
- Colour coded inputs & outputs
- LTE Filter rejects 4G interference
- Green LED indicates DC power present
- 18V Auxiliary Input injects power to the HL & HH trunk lines
- Comes with 9 F-Type couplers for easy connection to all Series 9 products

The Whyte Series 9 Splitter WS92-05 is a passive device designed to be used with the Whyte Series 9 IRS Multiswitch Range.

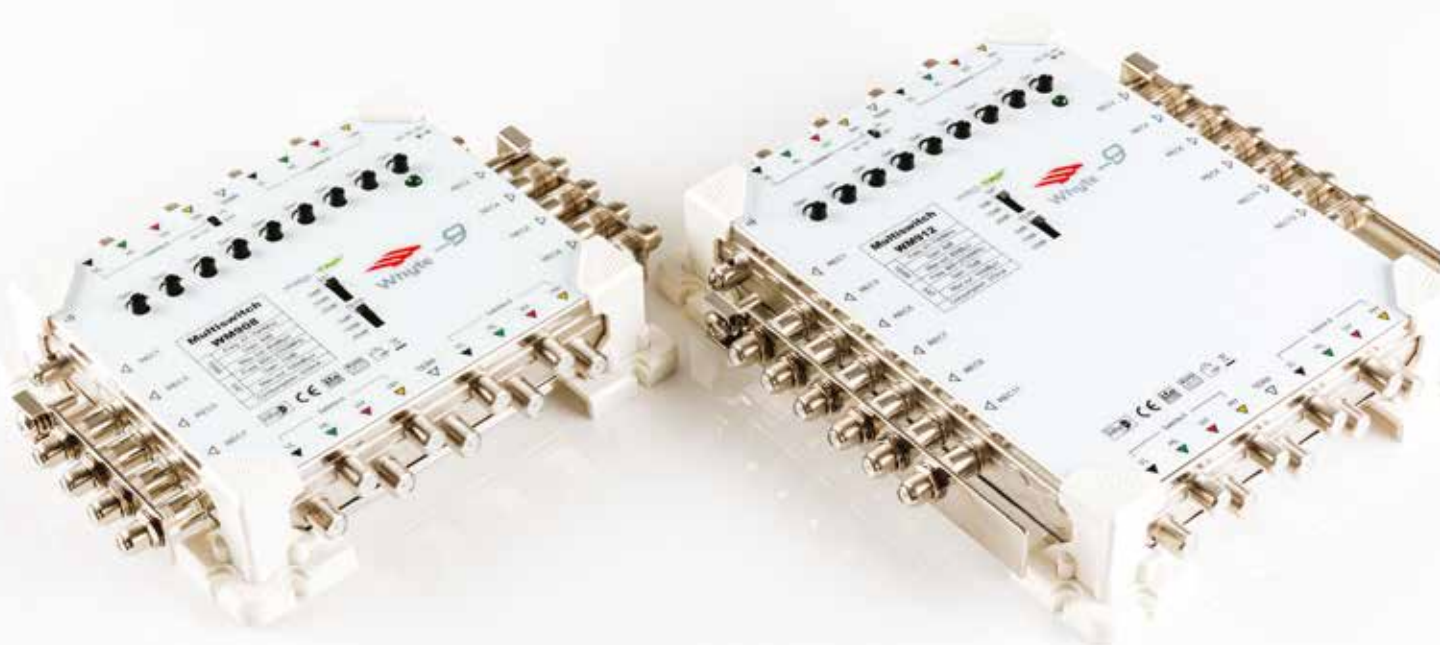
The WT91-10 10db Tap enables further flexibility for your system design. The WS92-05 Splitter and WT91-10 Tap comes with 9 F-type Couplers for quick & easy insertion in to a cascade of Series 9 Multiswitches.



MODEL		WT91-10	WS92-05
Frequency	SAT	950 - 2150MHz	950 - 2150MHz
	TERR	87 - 790MHz	87 - 790MHz
Inputs (F-Type Connector)		8 SAT + 1 TERR	8 SAT + 1 TERR
Outputs (F-Type Connector)		2x 8 SAT + 2x TERR	2x 8 SAT + 2x TERR
DC Input (Injection of DC applied to)		SAT Trunk HL + HH	SAT Trunk HL + HH
DC Pass Trunk to Tap	SAT	YES	YES
	TERR	NO	NO
DC Pass Trunk to Trunk	SAT	YES	~
	TERR	NO	~
Trunk Through Loss	SAT	2dB ±1dB	~
	TERR	2dB ±1dB	~
Tap Loss	SAT	10dB	4dB ±1dB
	TERR	10dB	4dB ±1dB
Fixed Slope Tap (SAT)		4dB	4dB
Isolation		>30dB	>30db
Max Current Pass (Trunk/Trunk Trunk/Tap)		2A	2A
Power Indication		LED	LED
Dimensions W x L x H (mm)		175 x 175 x 43	175 x 175 x 43
Weight		514g	480g

# Series 9 Multiswitches

WM908 | WM912



PRO-TAP

((RED))  
COMPLIANT

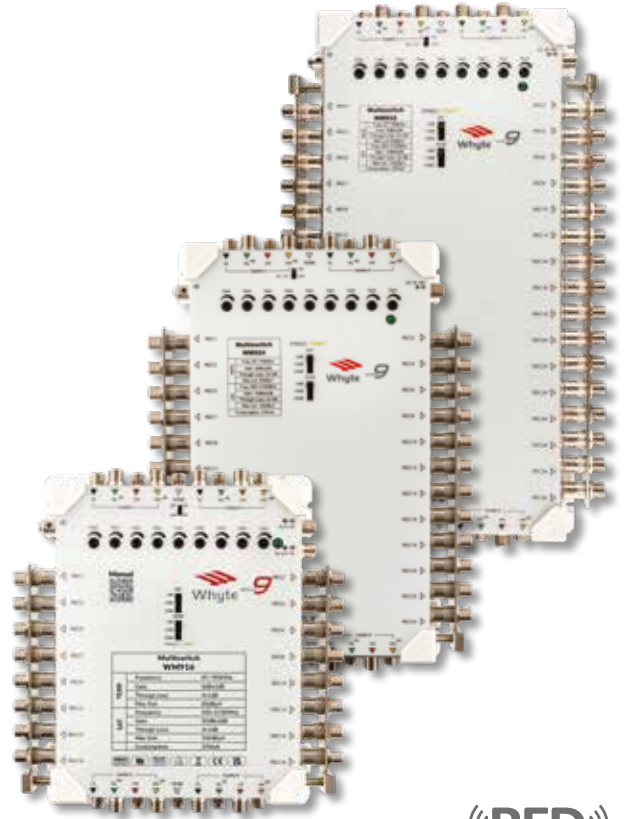
MODEL		WM908	WM912
Frequency Range	SAT	950 - 2150MHz	950 - 2150MHz
	TERR	47 - 790MHz	87 - 790MHz
Input (F-Type Female)		8 SAT + 1 TERR	8 SAT + 1 TERR
Tap Outputs (F-Type Female)		8	12
Gain	SAT	≥10dB	≥10dB
	TERR	≥8dB	≥8dB
Gain Control	SAT	10dB ±2dB	10dB ±2dB
	TERR	10dB ±2dB	10dB ±2dB
Pro Tap™ Attenuation Select		0 / -10 / -20dB	0 / -10 / -20dB
Return Loss	SAT Trunk Input / Output	>10dB / >10dB	>10dB / >10dB
	TERR Trunk Input / Output	>8dB / >8dB	>8dB / >8dB
	Tap Output	>8dB	>8dB
Max Output Level	SAT (IMA³ -35dB)	95dBμV	95dBμV
	TERR (IMA³ -60dB)	>85dBμV	>85dBμV
Isolation	Trunk-Trunk	>28dB	>28dB
	Cross-Polar	≥25dB	≥25dB
	Tap-Tap (SAT)	>25dB	>25dB
	Tap-Tap (TERR)	>21dB	>21dB
	Rejection	≥20dB	≥20dB
Impedance		75Ω	75Ω
Switching Commands	Legacy	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
Power Supply Voltage		18V DC	18V DC
Powering	Via DC In	YES	YES
	Via HL & HH Input	YES	YES
Power Consumption (Max) @ 18V		330mA	330mA
Power Indication		LED	LED
Trunk Max Current Pass (per Line)		2A	2A
Masthead Supply (Switchable)	TERR Input Only	12V DC 100mA	12V DC 100mA
Earth Terminal Bars (Tap Outputs)		YES	YES
Earth Lug		Up to 6mm² core	Up to 6mm² core
Dimensions with Earth Bars W x L x H (mm)		205 x 150 x 43mm	205 x 224 x 43mm
Weight		762g	1036g

# Series 9 Multiswitches

## WM916 | WM924 | WM932



- RED Compliant
- 4 Years Warranty
- Gain Control on all inputs
- Comes with Earth Bars fitted
- SAT gain 10dB / TERR gain 8dB
- Colour coded inputs and outputs
- Line Powered cascading Multiswitch
- LED Power Indicator & Inbuilt 4G LTE filter
- Switchable 12V DC Supply to Terrestrial input
- Uses receiver power to reduce demands on PSU
- Use as standalone when powered with a Whyte PSU
- Separate SAT & TERR Pro-Taps™ for ease of installation
- Comes with 9 F-Type couplers for easy connection to all Series 9 products
- Use Whyte Series 9 Launch Amplifiers & Splitters to build large scale IRS Systems



PRO-TAP

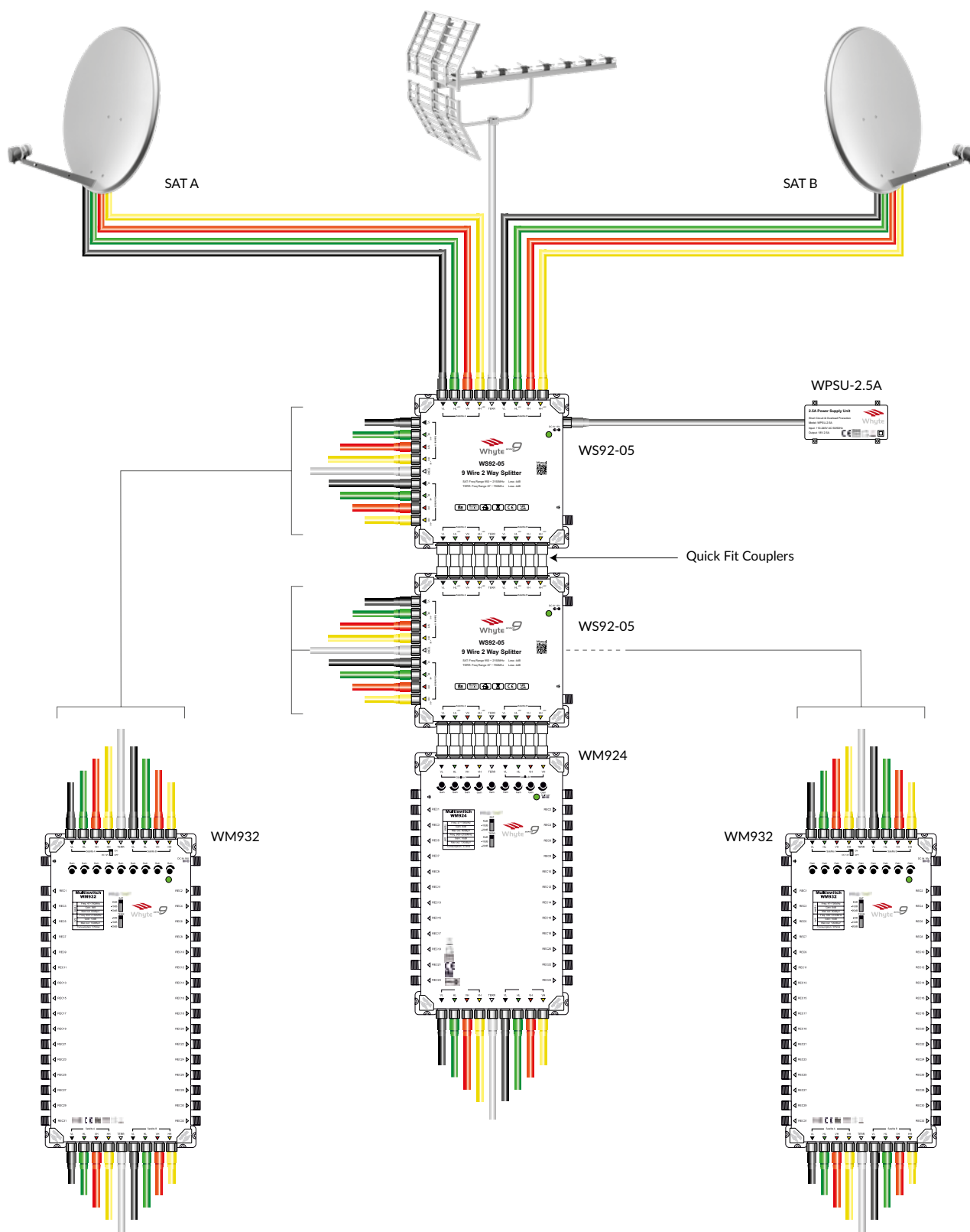
((RED))  
COMPLIANT

Whyte Series 9 is a range of 9 wire line powered Cascading Multiswitches. The Whyte Series 9 range comes fitted with Pro-Tap™ Technology. Developed by Whyte Technologies, a Pro-Tap is an in-built "Protean Tap" which enables the installer to easily select tap attenuation of 0, -10 or -20dB whilst still maintaining a trunk through loss of only 4dB. IRS System pre-planning is virtually not required as tap loss settings are selected at the commissioning stage.

MODEL		WM916	WM924	WM932
Frequency Range	SAT	950 - 2150MHz	950 - 2150MHz	950 - 2150MHz
	TERR	87 - 790MHz	87 - 790MHz	87 - 790MHz
Input (F-Type Female)		8 SAT + 1 TERR	8 SAT + 1 TERR	8 SAT + 1 TERR
Tap Outputs (F-Type Female)		16	24	32
Gain	SAT	≥10dB	≥10dB	≥10dB
	TERR	≥8dB	≥8dB	≥8dB
Gain Control	SAT	10dB ±2dB	10dB ±2dB	10dB ±2dB
	TERR	10dB ±2dB	10dB ±2dB	10dB ±2dB
Pro Tap™ Attenuation Select		0 / -10 / -20dB	0 / -10 / -20dB	0 / -10 / -20dB
Return Loss	SAT Trunk Input / Output	>10dB / >10dB	>10dB / >10dB	>10dB / >10dB
	TERR Trunk Input / Output	>8dB / >8dB	>8dB / >8dB	>8dB / >8dB
	Tap Output	>8dB	>8dB	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB)	95dBμV	95dBμV	95dBμV
	TERR (IMA <sup>3</sup> -60dB)	>85dBμV	>85dBμV	>85dBμV
Isolation	Trunk-Trunk	>28dB	>28dB	>28dB
	Cross-Polar	≥25dB	≥25dB	≥25dB
	Tap-Tap (SAT)	>25dB	>25dB	>25dB
	Tap-Tap (TERR)	>21dB	>21dB	>21dB
	Rejection	≥20dB	≥20dB	≥20dB
Impedance		75Ω	75Ω	75Ω
Switching Commands	Legacy	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
Power Supply Voltage		18V DC	18V DC	18V DC
Powering	Via DC In	YES	YES	YES
	Via HL & HH Input	YES	YES	YES
Power Consumption (Max) @ 18V		370mA	370mA	370mA
Power Indication		LED	LED	LED
Trunk Max Current Pass (per Line)		2A	2A	2A
Masthead Supply (Switchable)	TERR Input Only	12V DC 100mA	12V DC 100mA	12V DC 100mA
Earth Terminal Bars (Tap Outputs)		YES	YES	YES
Earth Lug		Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core
Dimensions with Earth Bars W x L x H (mm)		205 x 224 x 43mm	205 x 278 x 43mm	205 x 340 x 43mm
Weight		1098g	1412g	1738g

# Series 9 Configuration Example

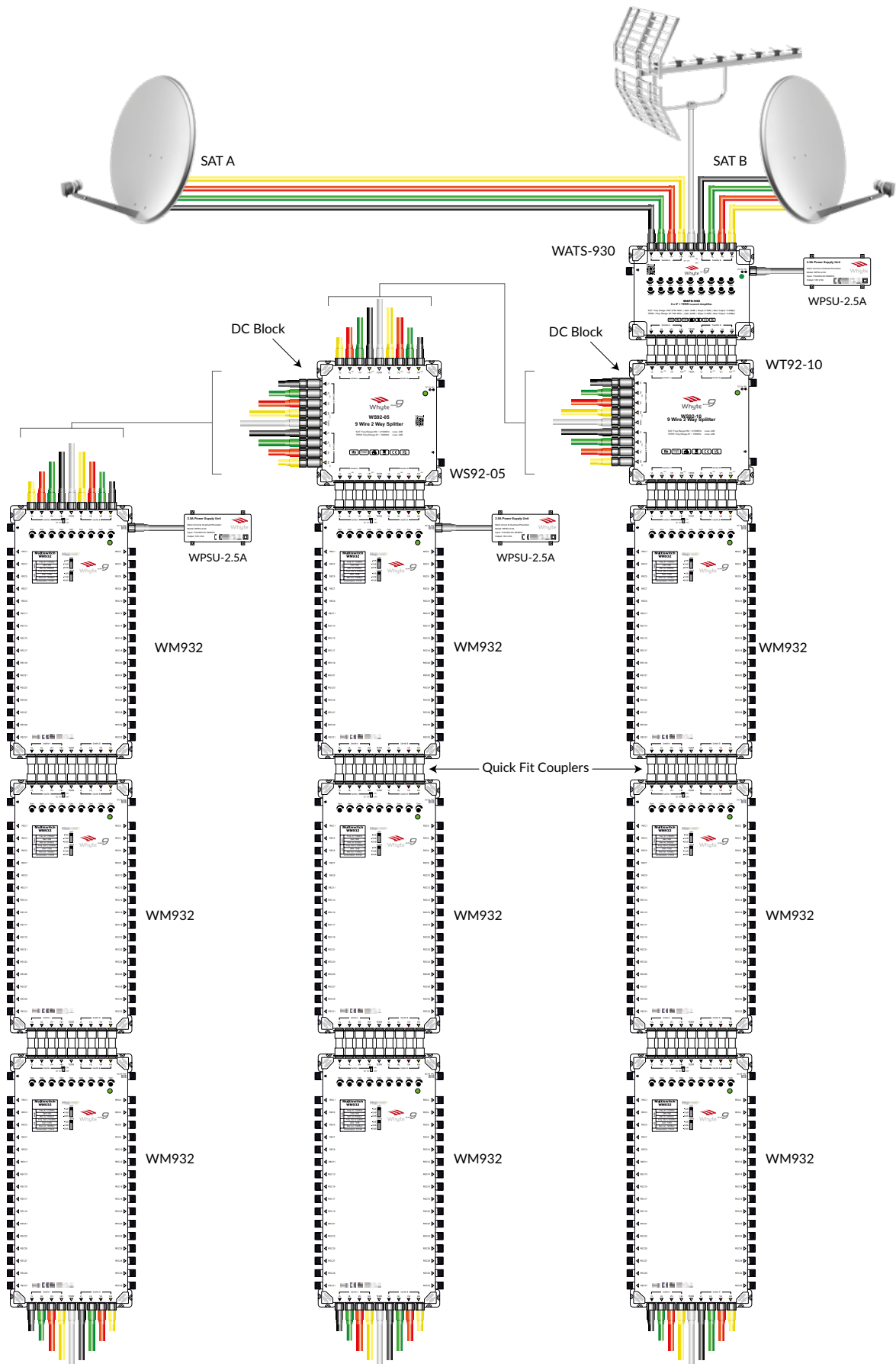
## 3 X 9 WIRE MULTISWITCHES IN STAR CONFIGURATION





# Series 9 Configuration Example

## 9 WIRE MULTI-TRUNK CASCADE





## CONTENTS

Series 17 Launch Amplifiers	59
Series 17 Splitters	60
Series 17 Multiswitches	61
Series 17 Configuration Examples	63

# Series 17 Launch Amplifier

## WATS-1730



- Compact size
- 4 Years Warranty
- Gain Control to all inputs
- Comes with input Earth Bar
- Slope Control to all inputs
- Colour coded inputs & outputs
- LTE Filter rejects 4G interference
- 16 x SAT + 1 x TERR inputs & outputs
- Switchable 12V DC Supply to Terrestrial input
- 18V Auxiliary Input powers the amplifier & injects power to the HL & HH trunk



The Whyte WATS-1730 is a 16 x SAT and 1 x Terrestrial Launch Amplifier that is compact and powerful. It may be utilised as a Launch Amplifier or as a Line Amplifier, and can be powered directly via the 18V Auxiliary Input or line powered via the HH and HL trunk lines. For ease of installation, the WATS-1730 Launch Amplifier can be connected directly to a cascade Series 17 Multiswitches using F-type couplers.

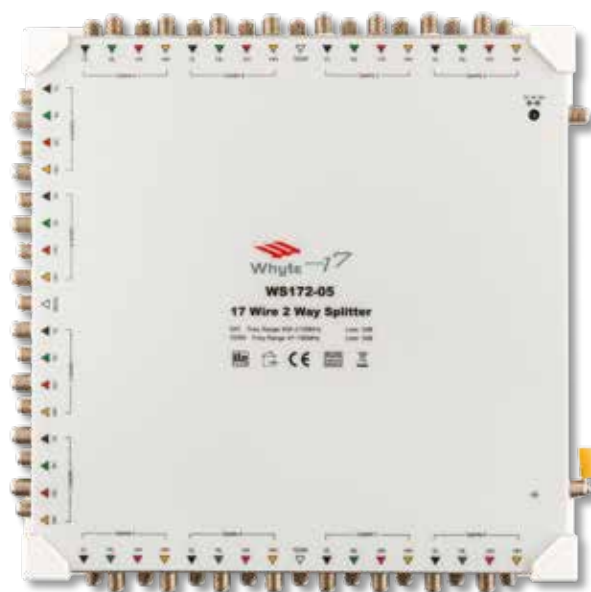
MODEL		WATS-1730
Frequency	SAT	950 - 2150MHz
	TERR	47 - 790MHz
Inputs (F-Type Connector)		16 SAT + 1 TERR
Outputs (F-Type Connector)		16 SAT + 1 TERR
Gain	SAT	>30dB
	TERR	>24dB
Gain Control	SAT	15dB ±2dB
	TERR	10dB ±2dB
Slope Control	SAT	8dB ±2dB
	TERR	8dB ±2dB
4G Internal Filter		YES
TERR 12V DC Supply (switchable)		100mA
Input/Output Return Loss	SAT	>8dB
	TERR	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB) EN50083-3	112dBμV
	TERR (IMA <sup>3</sup> -60dB) EN50083-5	112dBμV
LNB Power Supply Max		2A
Trunk DC Pass	SAT (per trunk)	YES 2A Max
	TERR	NO
Powering	Via DC In	YES
	Via HL + HH SAT Trunks	YES
Input Earth Terminal Bar		YES
Earth Lug (F-Type connector with clamp)		Up to 6mm <sup>2</sup> core
Power Indication		LED
Power Consumption		680mA Max
Dimensions including Earth Bars W x L x H (mm)		154 x 274 x 43
Weight		1054g

# Series 17 Splitter

## WS172-05



- Compact size
- 4 Years Warranty
- 2 x 16 SAT + 2 TERR Outputs
- Colour coded inputs & outputs
- LTE Filter rejects 4G interference
- 16 x SAT inputs & 1 x TERR input
- Green LED indicates DC power present
- 18V Auxiliary Input injects power to the HL & HH trunk lines
- Comes with 17 F-Type couplers for easy connection to Series 17 Multiswitches & Amplifiers



The Whyte Series 17 Splitter is a passive device designed to be used with the Whyte Series 17 IRS Multiswitch Range. The WS172-05 Splitter comes with 17 F-type Couplers for quick & easy insertion in to a cascade of Whyte Series 17 Multiswitches.

MODEL		WS172-05
Frequency	SAT	950-2150MHz
	TERR	87-790MHz
Inputs (F-Type Connector)		16 SAT + 1 TERR
Outputs (F-Type Connector)		2x 8 SAT + 2x TERR
DC Input (Injection of DC applied to)		SAT Trunk HL + HH
DC Pass Trunk to Tap	SAT	YES
	TERR	NO
DC Pass Trunk to Trunk	SAT	~
	TERR	~
Trunk Through Loss	SAT	~
	TERR	~
Tap Loss	SAT	4dB±1dB
	TERR	4dB±1dB
Fixed Slope Tap (SAT)		4dB
Isolation		>30db
Max Current Pass (Trunk/Trunk Trunk/Tap)		2A
Power Indication		LED
Dimensions W x L x H (mm)		278 x 278 x 43
Weight		1360g

# Series 17 Multiswitches

## WM1712



PRO-TAP

MODEL		WM1712
Frequency Range	SAT	950 - 2150MHz
	TERR	87 - 790MHz
Input (F-Type Female)		16 SAT + 1 TERR
Tap Outputs (F-Type Female)		12
Gain	SAT	≥10dB
	TERR	≥8dB
Gain Control	SAT	10dB ±2dB
	TERR	10dB ±2dB
Pro Tap™ Attenuation Select		0 / -10 / -20dB
Return Loss	SAT Trunk Input / Output	>10dB / >10dB
	TERR Trunk Input / Output	>8dB / >8dB
	Tap Output	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB)	100dBμV
	TERR (IMA <sup>3</sup> -60dB)	>90dBμV
Isolation	Trunk-Trunk	>28dB
	Cross-Polar	≥23dB
	Tap-Tap (SAT)	>25dB
	Tap-Tap (TERR)	≥20dB
	Rejection	≥20dB
Impedance		75Ω
Switching Commands	Legacy	13/18V / 22kHz / DiSEqC
Power Supply Voltage		18V DC
Powering	Via DC In	YES
	Via HL & HH Input	YES
Power Consumption (Max) @ 18V		450mA
Power Indication		LED
Trunk Max Current Pass (per Line)		2A
Masthead Supply (Switchable)	TERR Input Only	12V DC 100mA
Earth Terminal Bars (Tap Outputs)		YES
Earth Lug		Up to 6mm <sup>2</sup> core
Dimensions with Earth Bars W x L x H (mm)		308 x 224 x 43mm
Weight		1448g

# Series 17 Multiswitches

## WM1716



- 4 Years Warranty
- Gain Control on all inputs
- Comes with Earth Bars fitted
- SAT gain 10dB / TERR gain 8dB
- Colour coded inputs and outputs
- LED Power Indicator & 4G LTE filter
- Line Powered Cascading Multiswitch
- Switchable 12V DC Supply to Terrestrial input
- Uses receiver power to reduce demands on PSU
- Use as standalone when powered with a Whyte PSU
- Separate SAT & TERR Pro-Taps™ for ease of installation
- Comes with 17 F-Type couplers for easy connection to Series 17 Multiswitches, Splitters & Amplifiers



Whyte Series 17 is a range of 17 wire line powered Cascading Multiswitches. The Whyte Series 17 range comes fitted with Pro-Tap™ Technology.

Developed by Whyte Technologies, a Pro-Tap is an in-built "Protean Tap" which enables the installer to easily select input tap losses of 0, -10 or -20dB whilst still maintaining a trunk through loss of only 4dB. IRS System pre-planning is virtually not required as tap loss settings are selected at the commissioning stage.

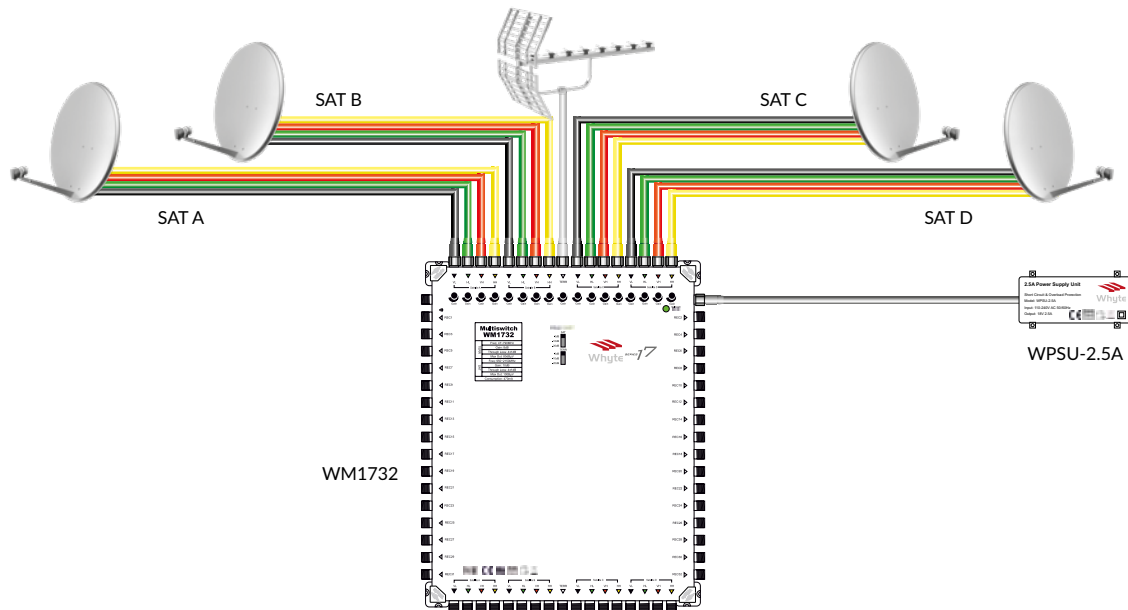
## PRO-TAP

MODEL	WM1716	
Frequency Range	SAT	950 - 2150MHz
	TERR	87 - 790MHz
Input (F-Type Female)		16 SAT + 1 TERR
Tap Outputs (F-Type Female)		16
Gain	SAT	≥10dB
	TERR	≥8dB
Gain Control	SAT	10dB ±2dB
	TERR	10dB ±2dB
Pro Tap™ Attenuation Select		0 / -10 / -20dB
Return Loss	SAT Trunk Input / Output	>10dB / >10dB
	TERR Trunk Input / Output	>8dB / >8dB
	Tap Output	>8dB
Max Output Level	SAT (IMA <sup>3</sup> -35dB)	100dBμV
	TERR (IMA <sup>3</sup> -60dB)	>90dBμV
Isolation	Trunk-Trunk	>28dB
	Cross-Polar	≥23dB
	Tap-Tap (SAT)	>25dB
	Tap-Tap (TERR)	≥20dB
	Rejection	≥20dB
Impedance		75Ω
Switching Commands	Legacy	13/18V / 22kHz / DiSEqC
Power Supply Voltage		18V DC
Powering	Via DC In	YES
	Via HL & HH Input	YES
Power Consumption (Max) @ 18V		450mA
Power Indication		LED
Trunk Max Current Pass (per Line)		2A
Masthead Supply (Switchable)	TERR Input Only	12V DC 100mA
Earth Terminal Bars (Tap Outputs)		YES
Earth Lug		Up to 6mm <sup>2</sup> core
Dimensions with Earth Bars W x L x H (mm)		308 x 224 x 43mm
Weight		1500g

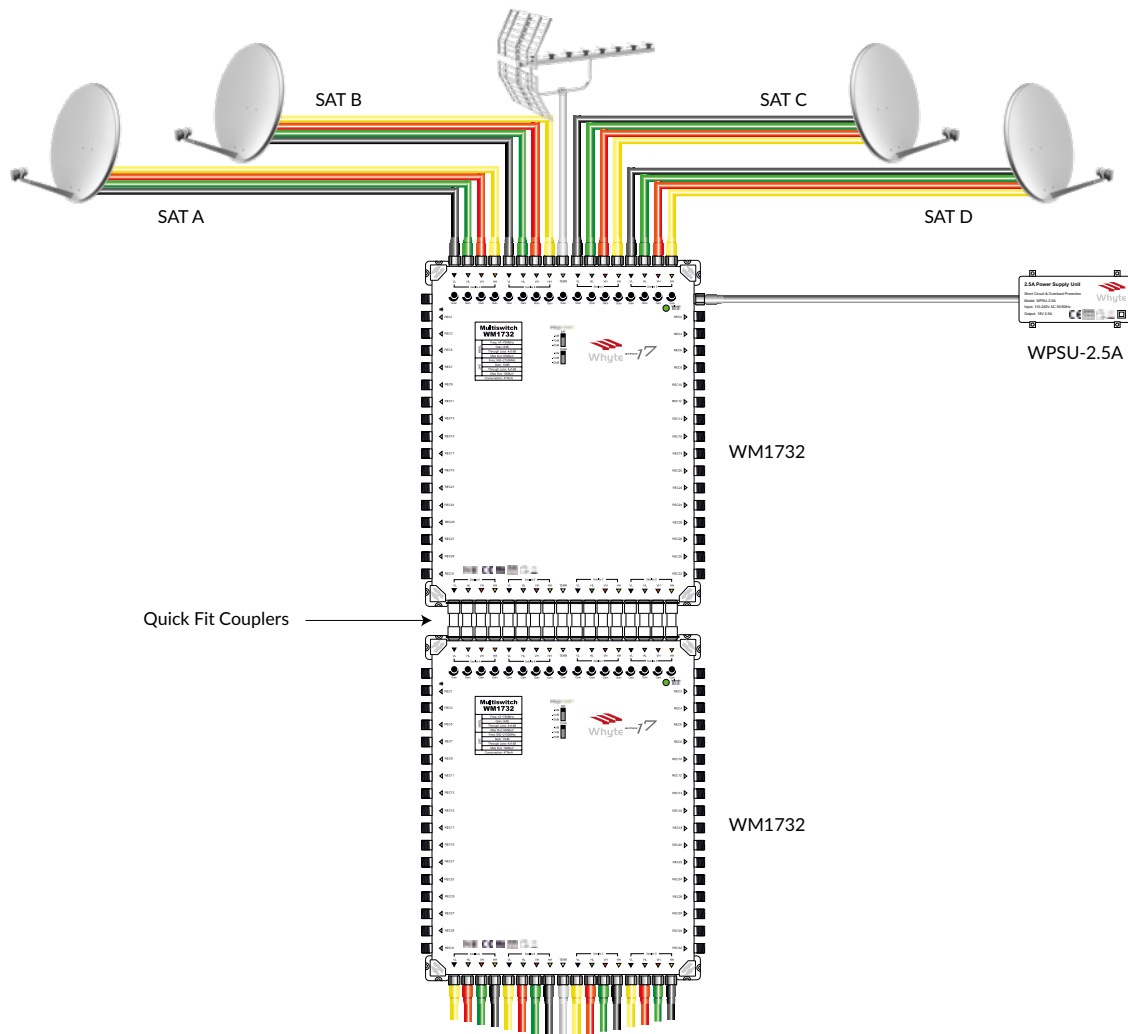


# Series 17 Configuration Example

## 17 WIRE MULTISWITCH STANDALONE

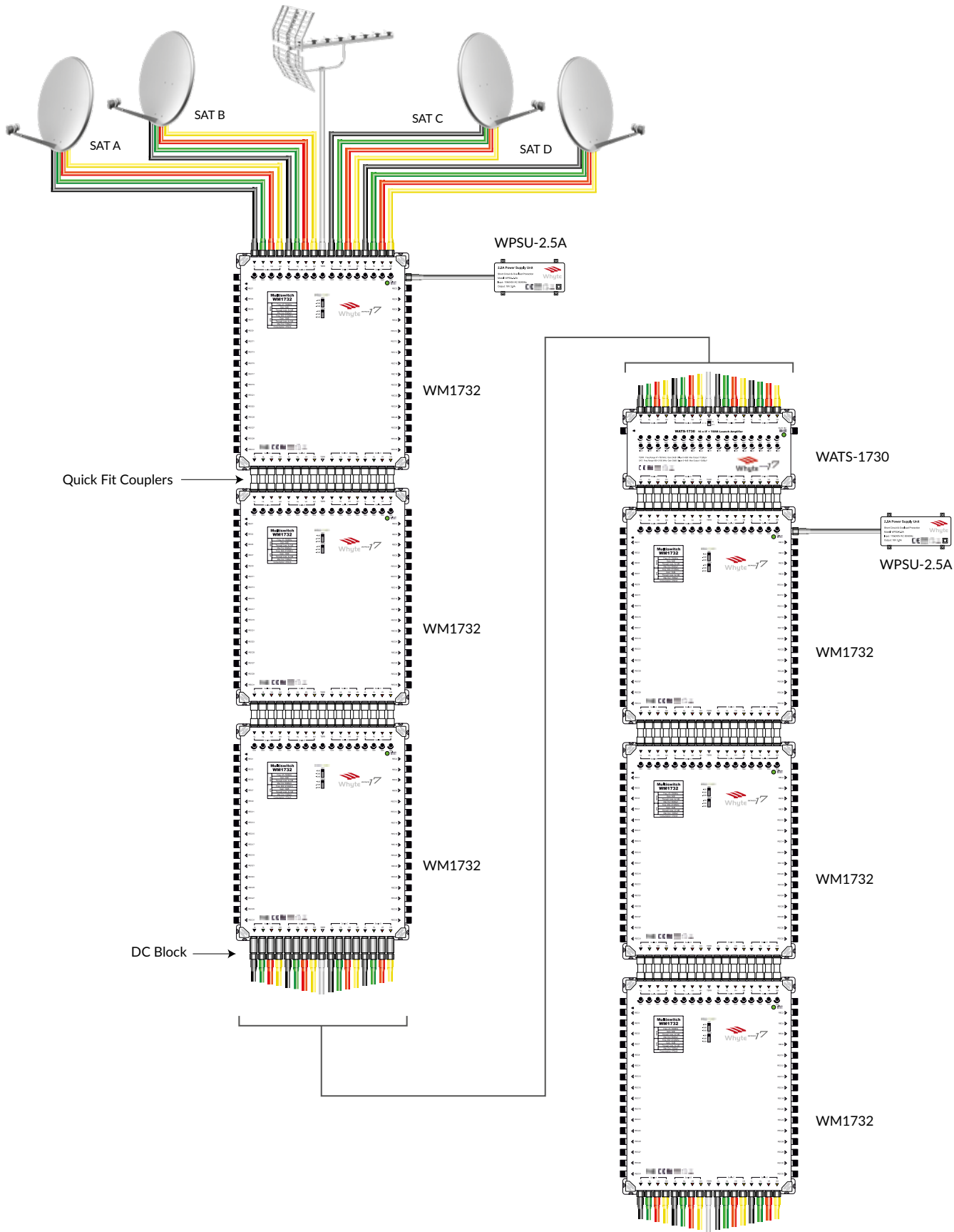


## 2 X 17 WIRE MULTISWITCH IN CASCADE



## Series 17 Configuration Example

## 17 WIRE SINGLE TRUNK CASCADE





## CONTENTS

Series A Distribution Amplifiers	66
Series A Configuration Examples	68

# Series A Distribution Amplifiers

## ADA102 | ADA104 | ADA106



- Cascadable
- Gain Control
- LTE Filter (4G)
- RED Compliant
- IRS Loop-Through
- 4 Years Warranty
- Internal power supply
- Ultra-Low Noise  $\leq 4\text{dB}$
- Remote Powering via TERR outputs
- 10dB ~ 12dB Gain (depending on model)
- Adequate cable clearance for routing underneath
- Models available include 2, 4, 6, 8, 12 and 16-way output
- High Quality all metal construction Distribution Amplifier

A comprehensive range of RED Compliant, all metal construction professional Advanced Distribution Amplifiers with IRS Loop-through. This enables Whyte Series A Distribution Amplifiers to be connected directly to a Multiswitch subscriber output whereby the SAT and TERR/RADIO signals are passed through the Distribution Amplifier before terminating at the outlet plate. The TERR/RADIO signals are amplified before being distributed to the TERR & RADIO outlets.

The Whyte Series A Distribution Amplifiers are available in sizes ranging from 2-Way to 16-Way. The IRS Loop-through can also be used to cascade multiple units to create large scale Master Antenna TV systems (MATV).

When used as a standard TERR and RADIO Distribution Amplifier, the Whyte range of Distribution Amplifiers offer a professional, low noise, high gain solution.



MODEL	ADA102	ADA104	ADA106
TERR Frequency Range	87MHz ~ 782MHz	87MHz ~ 782MHz	87MHz ~ 782MHz
TERR/IRS Input (F-Type Female)	1	1	1
TERR Tap Outputs (F-Type Female)	2	4	6
SAT Loop Through (F-Type Female)	1 x 87~ 2350MHz	1 x 87~ 2350MHz	1 x 87~ 2350MHz
RED Compliance	Class 3	Class 3	Class 3
TERR Gain	10dB	10dB	10dB
Max Output TERR (IMA3 -60dB)	90dBuV	90dBuV	90dBuV
Max Noise Figure	$\leq 4\text{dB}$	$\leq 4\text{dB}$	$\leq 4\text{dB}$
SAT Through Loss	4dB	4dB	4dB
Impedance	75 $\Omega$	75 $\Omega$	75 $\Omega$
Loop Through Passing	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
Mains Operation	230V AC	230V AC	230V AC
Remote DC Powering (via TERR outputs)	12V DC	12V DC	12V DC
Remote DC Consumption	40mA Max	40mA Max	100mA Max
Power Indicator	LED	LED	LED
Earth Lug	Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core
Dimensions W x L x H (mm)	168x116x43	168x116x43	200x116x43
Weight	332g	340g	450g

# Series A Distribution Amplifiers

## ADA108 | ADA112 | ADA116

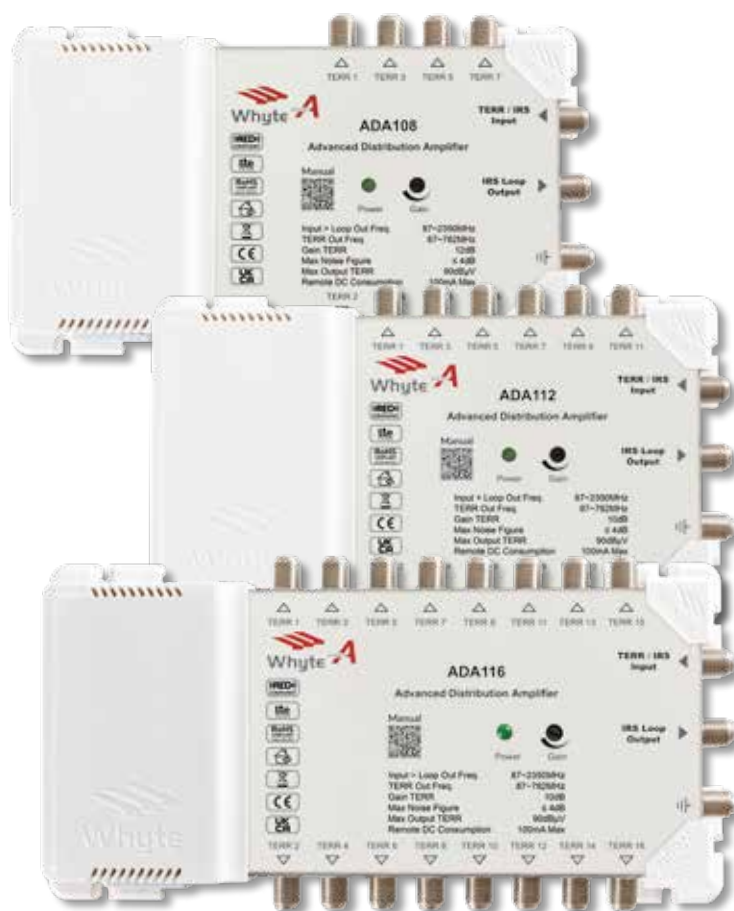


- Cascadable
- Gain Control
- LTE Filter (4G)
- RED Compliant
- IRS Loop-Through
- 4 Years Warranty
- Internal power supply
- Ultra-Low Noise  $\leq 4\text{dB}$
- Remote Powering via TERR outputs
- 10dB ~ 12dB Gain (depending on model)
- Adequate cable clearance for routing underneath
- Models available include 2, 4, 6, 8, 12 and 16-way output
- High Quality all metal construction Distribution Amplifier

A comprehensive range of RED Compliant, all metal construction professional Advanced Distribution Amplifiers with IRS Loop-through. This enables Whyte Series A Distribution Amplifiers to be connected directly to a Multiswitch subscriber output whereby the SAT and TERR/RADIO signals are passed through the Distribution Amplifier before terminating at the outlet plate. The TERR/RADIO signals are amplified before being distributed to the TERR & RADIO outlets.

The Whyte Series A Distribution Amplifiers are available in sizes ranging from 2-Way to 16-Way. The IRS Loop-through can also be used to cascade multiple units to create large scale Master Antenna TV systems (MATV).

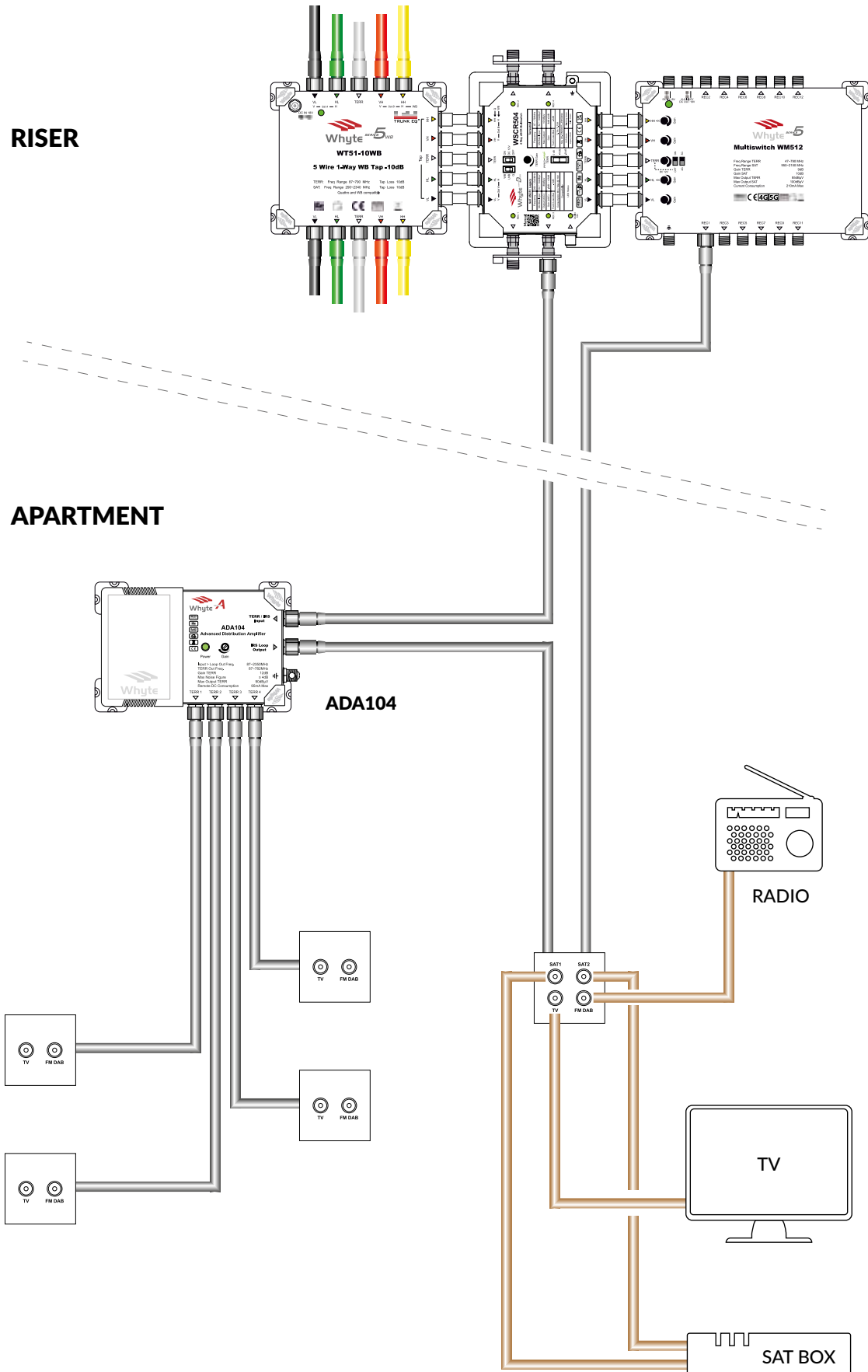
When used as a standard TERR and RADIO Distribution Amplifier, the Whyte range of Distribution Amplifiers offer a professional, low noise, high gain solution.



MODEL	ADA108	ADA112	ADA116
TERR Frequency Range	87MHz ~ 782MHz	87MHz ~ 782MHz	87MHz ~ 782MHz
TERR/IRS Input (F-Type Female)	1	1	1
TERR Tap Outputs (F-Type Female)	8	12	16
SAT Loop Through (F-Type Female)	1 x 87~ 2350MHz	1 x 87~ 2350MHz	1 x 87~ 2350MHz
RED Compliance	Class 3	Class 3	Class 3
TERR Gain	10dB	10dB	10dB
Max Output TERR (IMA3 -60dB)	90dBuV	90dBuV	90dBuV
Max Noise Figure	$\leq 4\text{dB}$	$\leq 4\text{dB}$	$\leq 4\text{dB}$
SAT Through Loss	4dB	4dB	4dB
Impedance	75 $\Omega$	75 $\Omega$	75 $\Omega$
Loop Through Passing	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
Mains Operation	230V AC	230V AC	230V AC
Remote DC Powering (via TERR outputs)	12V DC	12V DC	12V DC
Remote DC Consumption	100mA Max	100mA Max	100mA Max
Power Indicator	LED	LED	LED
Earth Lug	Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core	Up to 6mm <sup>2</sup> core
Dimensions W x L x H (mm)	200x116x43	200x116x43	232x116x43
Weight	458g	472g	528g

# Series A Configuration Example

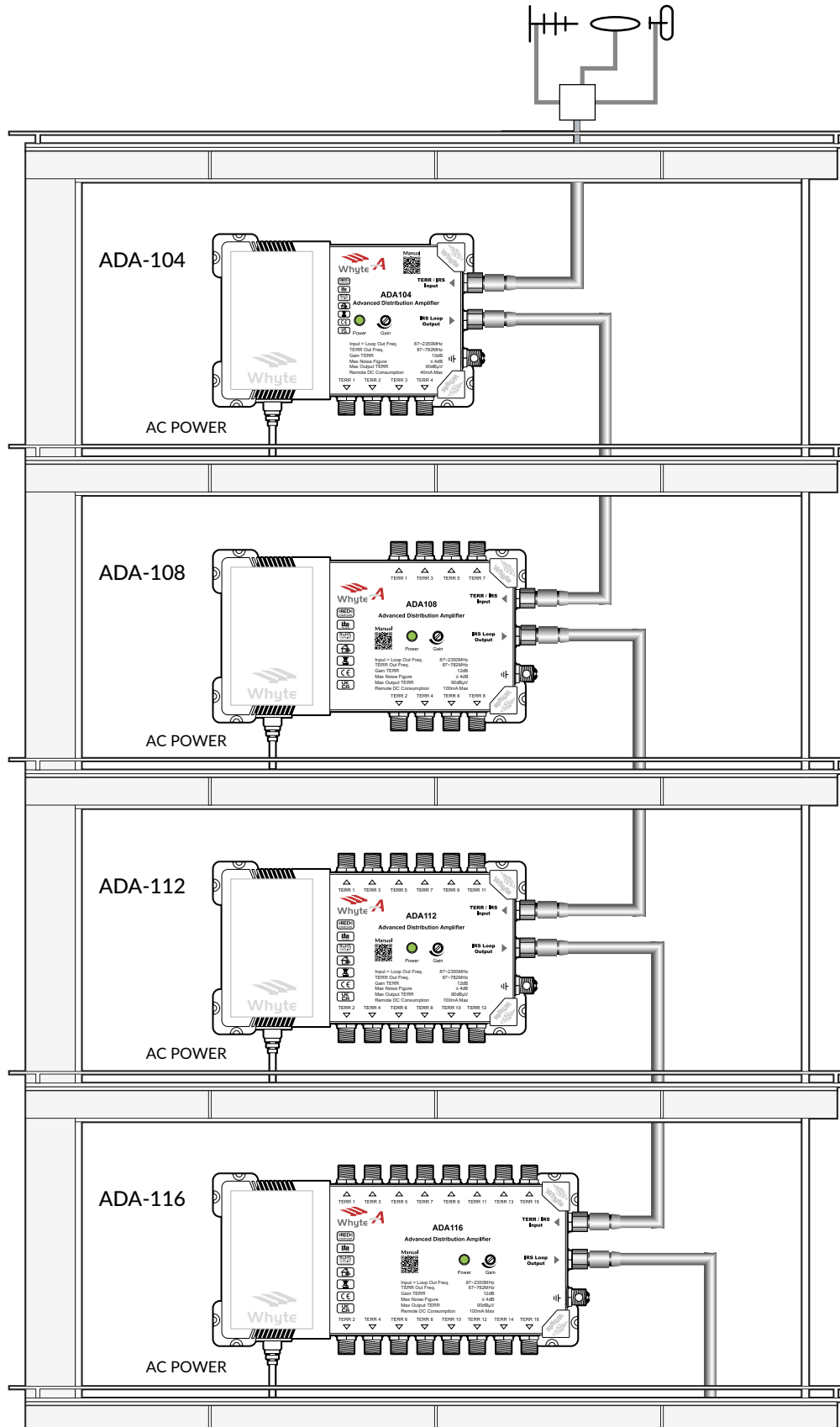
## APARTMENT DISTRIBUTION AMPLIFIER





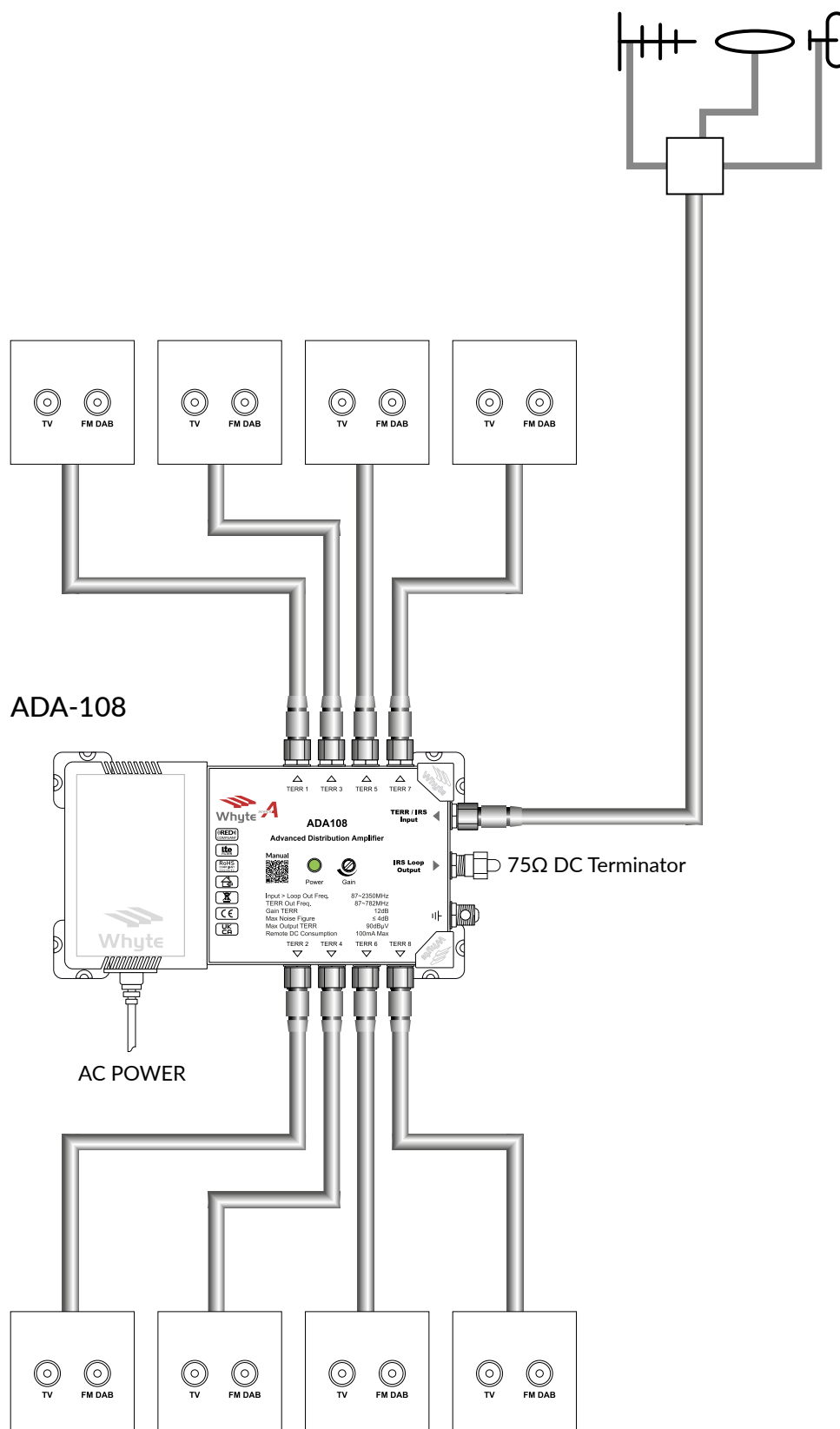
# Series A Configuration Example

## CASCADE MATV SYSTEM



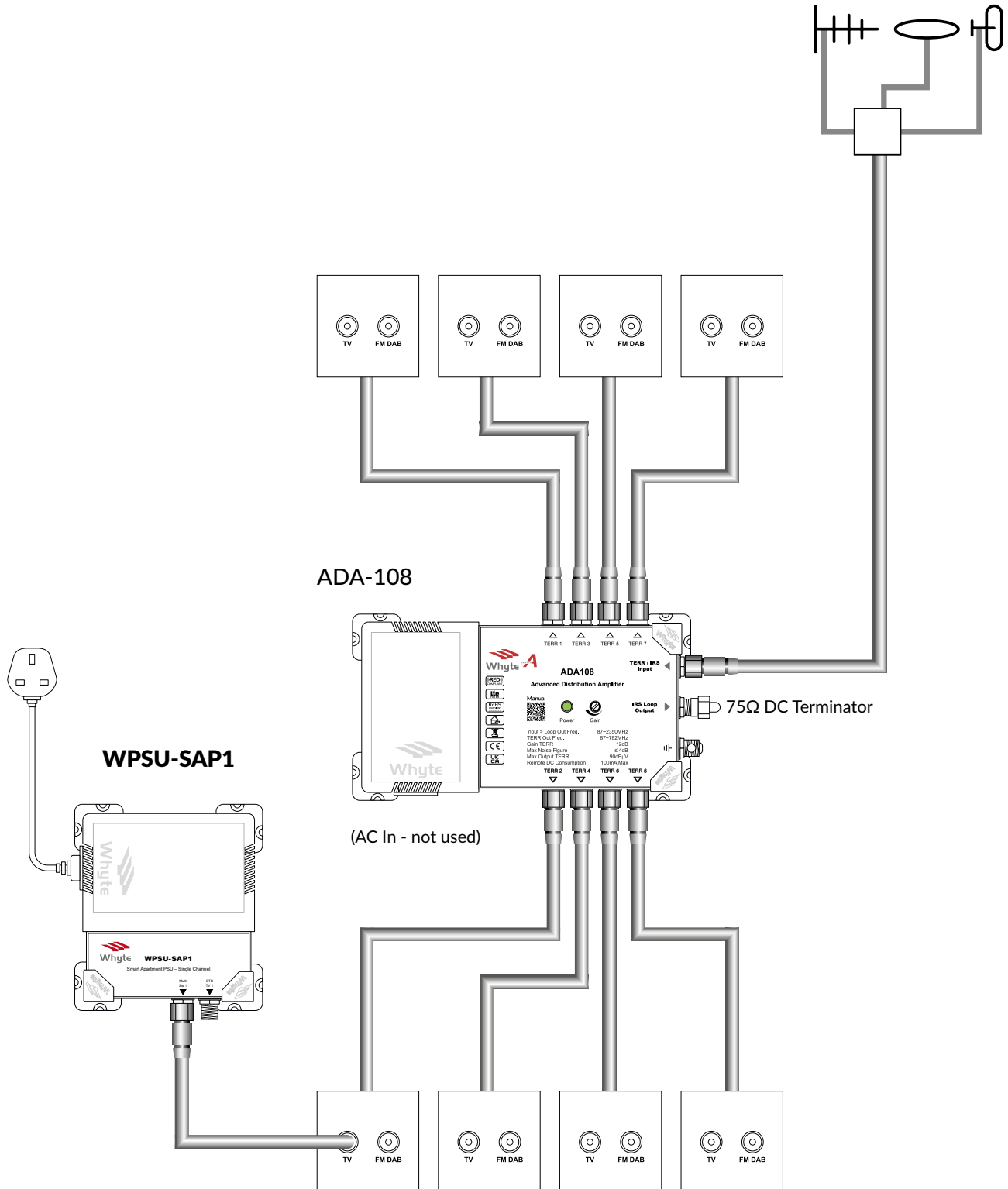
## Series A Configuration Example

## MATV SYSTEM (AC POWER)



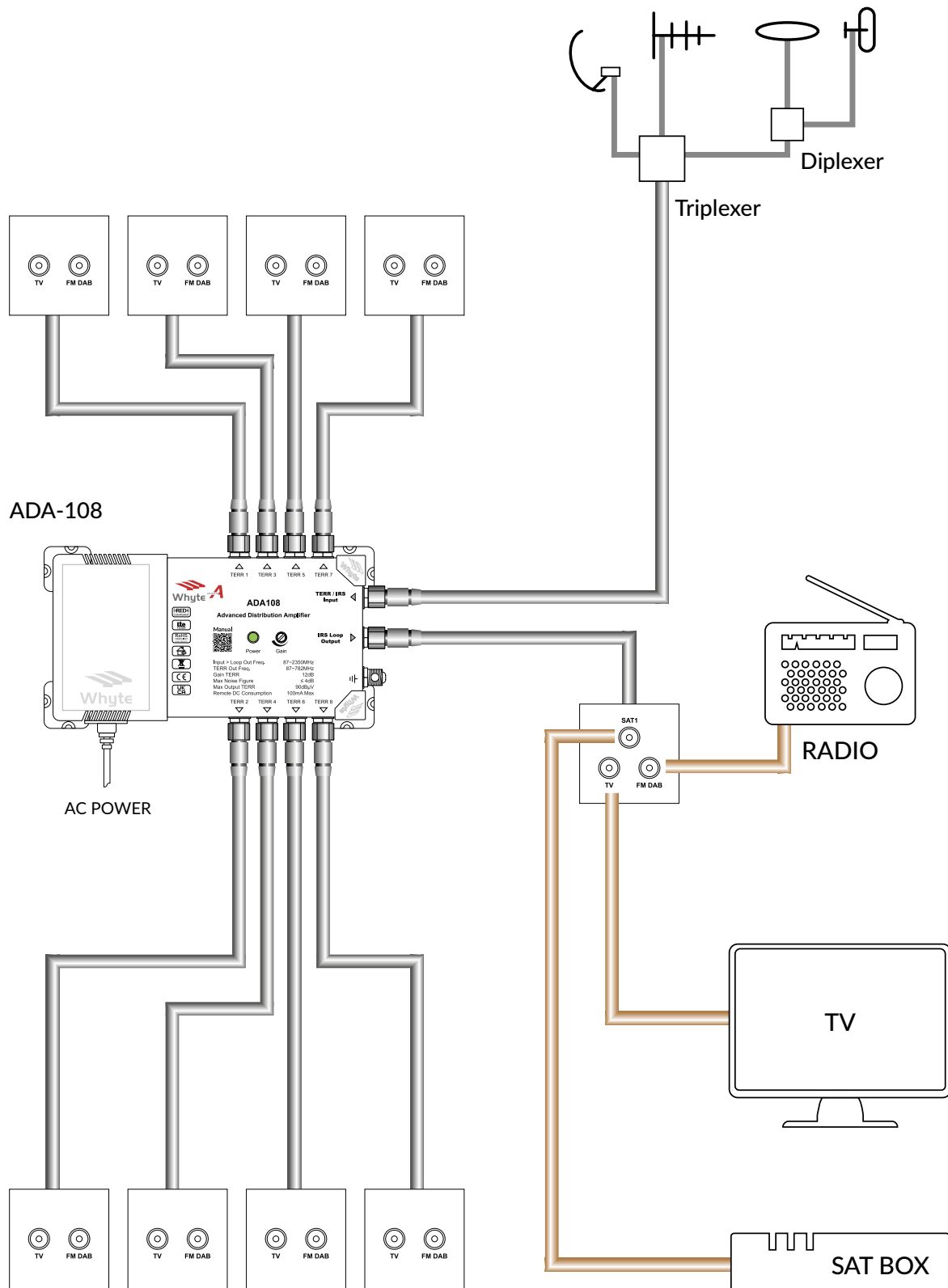
# Series A Configuration Example

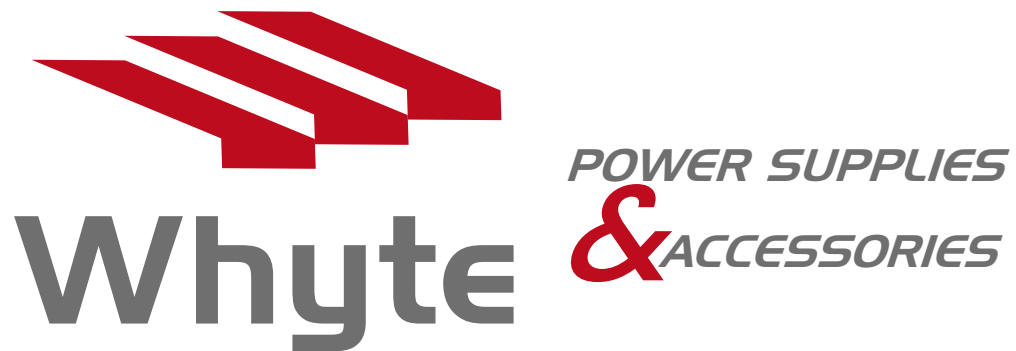
## MATV SYSTEM (DC REMOTE POWER)



# Series A Configuration Example

## SINGLE SAT + MATV (AC POWER)





## CONTENTS

Whyte Power Supplies	74
Earth Bars Sets	76
Connectors & Leads	77

# Whyte Smart Apartment Power

## WPSU-SAP1 | WPSU-SAP2

- 4 Years Warranty
- Comes in 1 Feed or 2 Feed versions
- The World's First Smart Apartment PSU
- Compatible with all Legacy and dSCR STB's
- Provides 22W Power @ 14/18V Per Channel
- Can be installed as a set back Apartment PSU or in the Electrical Cupboard



The WPSU-SAP1 and WPSU-SAP2 are the worlds first Smart Apt PSU's. Customer support is reduced, and customer satisfaction is increased as the IRS system will function correctly irrespective of building occupancy or type of set-top (if any) is used by the resident. A Smart Apt PSU must be fitted in to every apartment irrespective of whether satellite services are required or not.

They are available in 1 and 2 feed versions and are compatible with both legacy and dSCR Set Top Boxes. When connected to a legacy STB, voltage switching commands (13/18V) are relayed by the dynamic PSU. In the absence of STB LNB voltage, the Smart Apt PSU will provide 14V to maintain the IRS System functional in circumstances when the occupants require TERR services only.

The Smart Apt PSU's can be set back locally near the TV or fitted discretely in an electrical cupboard.

MODEL	WPSU-SAP1	WPSU-SAP2
Channels	Single Channel (Single feed)	Dual Channel (Dual feed)
AC Input Voltage	100 - 240V AC 50/60Hz	100 - 240V AC 50/60Hz
DC Input Voltage (STB Generated)	13/18V DC	14V DC
Output Voltage	14/18V DC (Determined by STB Input)	18V DC Output
Output Wattage	22W	2 x 22W
Current Overload Protection	Yes (30W ±10%)	Yes (30W ±10%)
Use as Masthead PSU	Compatible	Compatible
RF Frequency Pass	87 - 2340MHz	87 - 2340MHz
22kHz Control Tone Pass	Legacy, DiSEqC, SKY UK, EN50607 & EN50494	Legacy, DiSEqC, SKY UK, EN50607 & EN50494
RF Through Loss	<1dB	<1dB
RF Interfaces	F-Type (Female 75Ω)	F-Type (Female 75Ω)
Mains Lead (UK Mains Plug with 3A Fuse)	Figure of 8 C13 Cord 1m	Figure of 8 C13 Cord 1m
Dimensions L x W x H (mm)	116 x 120 x 43	116 x 120 x 43
Weight	234g	276g



# Whyte Power Supplies

## 0.8A POWER SUPPLY UNIT (WPSU-0.8A)

- 4 Years Warranty
- 80cm mains lead with UK plug
- 0.8A 18V IRS Power Supply Unit
- Fixing tags suitable for wall mounting
- 120cm DC lead with heavy duty F-connector
- Suitable for single Multiswitches or small IRS systems
- Heavy duty designed for continuous use at full rating
- Power can be conveniently inserted in to any Whyte Multiswitches, Taps, Splitters and Amplifiers



## 2.5A POWER SUPPLY UNIT (WPSU-2.5A)

- 4 Years Warranty
- 80cm mains lead with UK plug
- 2.5A 18V IRS Power Supply Unit
- Fixing tags suitable for wall mounting
- Suitable for medium to large IRS Systems
- 120cm DC lead with heavy duty F-connector
- Heavy duty designed for continuous use at full rating
- Power can be conveniently inserted in to any Whyte Multiswitches, Taps, Splitters and Amplifiers



MODEL	WPSU-08.A	WPSU-2.5A
Input Voltage	110 - 240V AC 50/60Hz	110 - 240V AC 50/60Hz
Inputs Current	0.3A / 240V AC	1A / 240V AC
Output Current	18V DC	18V DC
Outputs Current (continuous use)	0.8A	2.5A
Main Leads (BS1363 UK Mains plus 3A fuse)	Fixed Cord 95cm	C13 Cord 93cm
DC Lead (F Connector)	120cm	120cm
Current Overload Protection	1.3A	4.3A
Operating Temperature	-20°C to 50°C	-20°C to 50°C
Dimensions W x L x H (mm)	72 x 70 x 22	110 x 70 x 33
Weight	206g	398g

# Earth Bar Sets

## MULTISWITCH EARTH BARS

**WEB-08W | WEB-12W | WEB-16W | WEB-24W | WEB-32W**

- 4 Years Warranty
- Hi-grade chrome plated solid steel bar
- Compatible with all Whyte Legacy Multiswitches
- Quality chrome plated brass quick fit connectors
- Fast Earth Cable termination does not require crimp ring terminal
- Can be used with the Whyte Series 5 Lite range of Standalone Multiswitches



## INPUT EARTH BAR

**WEB-05W**

- 4 Years Warranty
- Hi-grade chrome plated solid steel bar
- Quality chrome plated brass quick fit connectors
- Can be used with the Whyte Series 5, Series 5WB and Lite range
- Fast Earth Cable termination does not require crimp ring terminal



# Connectors & Leads

## QUICK FIT COUPLERS

### MOD-30004

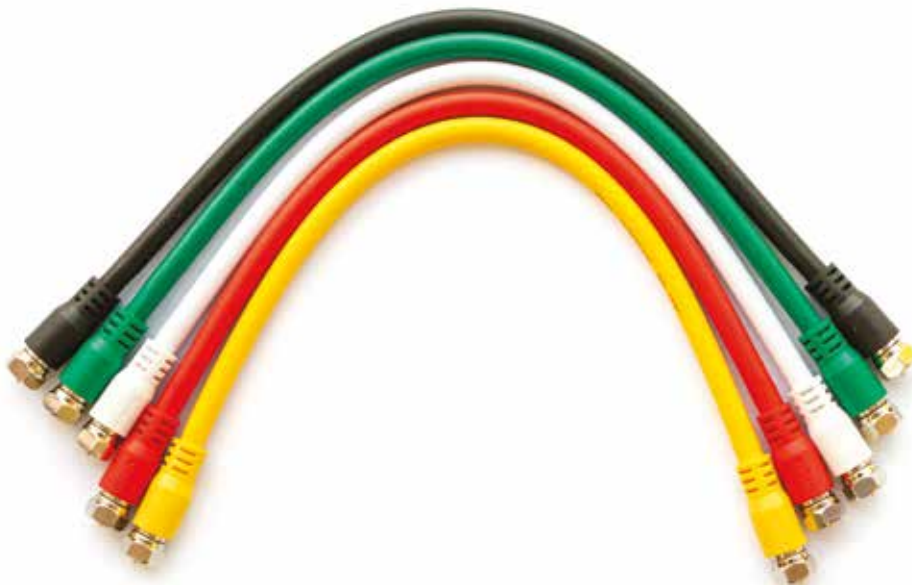
- 4 Years Warranty
- Quality chrome plated brass quick fit connectors
- Can be used with the Whyte Multiswitches, Taps and Amplifiers
- Fast Earth Cable termination does not require crimp ring terminal



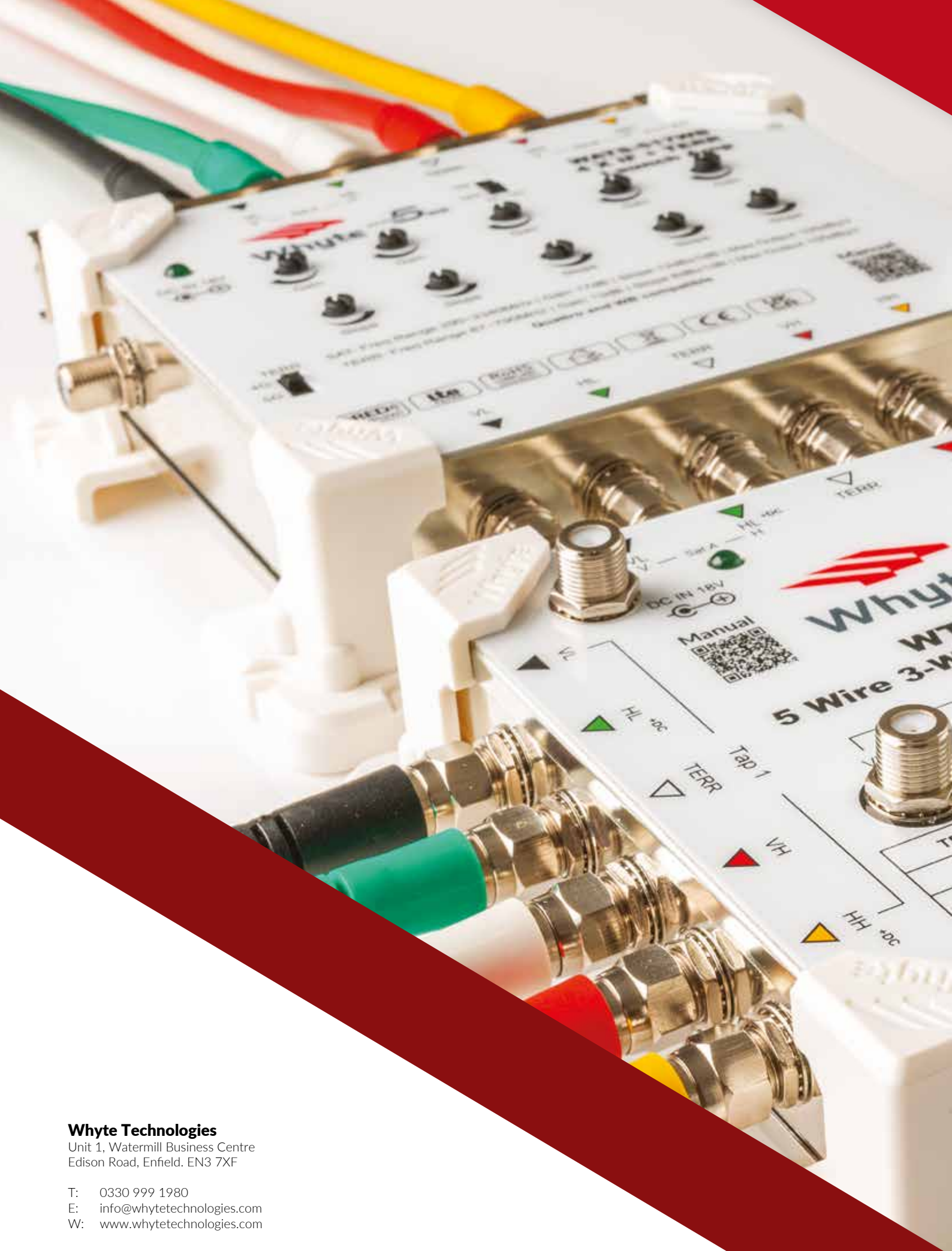
## 5 WIRE TAP & TRUNK LEADS

### WTL-5X30 (300mm) | WTL-5X60 (600mm)

- 4 Years Warranty
- Available in 2 lengths (300mm / 600mm)
- 5 colour coded F-connector leads per pack
- Max Attenuation at 790MHz = 0.53dB max
- Max Attenuation at 2150MHz = 1.2dB max
- High quality low loss cable and F-Connectors
- Handy for connecting Taps to Multiswitches and other uses in IRS System installations







## Whyte Technologies

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

T: 0330 999 1980  
E: [info@whytetechnologies.com](mailto:info@whytetechnologies.com)  
W: [www.whytetechnologies.com](http://www.whytetechnologies.com)

