



MATV Lanuch Amplifiers

INSTRUCTION MANUAL

WLA115-C1 | WLA115-C3



www.whytetechnologies.com

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

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SAFETY

Whyte MATV Launch Amplifiers 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 MATV Launch Amplifier 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 of a fault, please return any faulty products through your distributor.

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

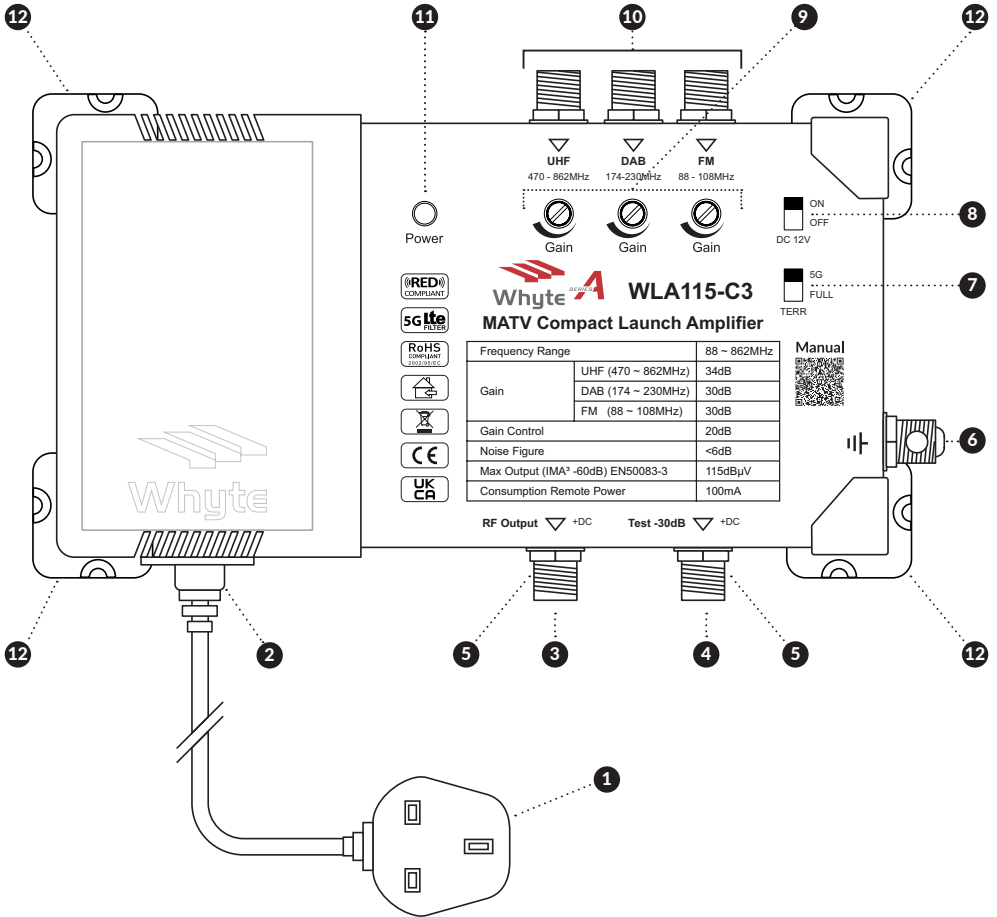
GENERAL DESCRIPTION

The Whyte Series A WLA115-C1 and WLA115-C3 are compact, energy efficient, high performance MATV Launch Amplifiers designed for use in extensive MATV distribution systems for Terrestrial, DAB and FM signals.

Features include:

- RED Compliant
- 4 Year Warranty
- 5G/Full Band Selectable Filter
- Variable Gain Control
- 12V DC Masthead Supply
- Remote Power via RF Outputs
- 34dB Gain UHF
- Maximum UHF Output 115dB μ V
- AC Mains Input
- Low Power Consumption

PRODUCT DESCRIPTION



- 1. AC Power Cord
- 2. AC Mains Input
- 3. Main RF Output
- 4. Test RF Output -30dB
- 5. Remote DC Power Input
- 6. Earth Lug
- 7. 5G / Full Band UHF Filter
- 8. 12V Masthead Power ON/OFF
- 9. UHF, DAB and FM Gain Controls
- 10. UHF, DAB and FM Inputs
- 11. LED Power Indicator
- 12. Corner Brackets

Model WLA115-C3 shown for illustrative purpose only

TECHNICAL DESCRIPTION

The Whyte Series A WLA115-C1 and WLA115-C3 are compact, energy efficient, high performance MATV Launch Amplifiers. Ideal for TERR only distribution situations such as residential homes, hotels, and student accommodations. The selectable Class 1 5G LTE filter enables the rejection of unwanted interferers from mobile data services.

The remote power options via either the Main or Test RF outputs make these MATV Launch Amplifiers incredibly flexible. A switchable 12V DC on the amplifier UHF input is convenient for powering other masthead products.

The ultra-low energy consumption and sharp filtration are the key features of Whyte MATV products.

INSTALLATION INSTRUCTIONS

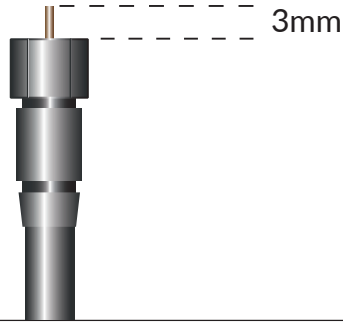
MOUNTING THE LAUNCH AMPLIFIER

Select a suitable location to install the Launch Amplifier. Do not install the Distribution Amplifier in damp, humid, hot, or dusty areas. Using the screw slots on the corner brackets and transformer housing secure the Distribution Amplifier using the supplied fixing screws or other fixing to suit the relevant wall, surface, or cabinet.

CONNECTING RF INPUTS TO THE LAUNCH AMPLIFIER

Ensure that all drop cables have drip loops prior to their entering the building. Connect the TERR drop cables to the corresponding TERR Inputs of the Launch Amplifier. The diagram in (Figure 2) shows an ideal F-Type coaxial connector configuration.

Figure 2



Ideal centre core conductor length relative to the nut edge

Ensure your Terrestrial Antennas provide adequate signal levels from the FM, DAB and Terrestrial transmitter being received. Keep in mind that there will be signal losses within coaxial cable and the introduction of slope over distance. Ensure that the drop cables are connected correctly in the corresponding order with respect to the Launch Amplifier input. If an external masthead amplifier has been used a selectable 12V DC supply is available at the UHF RF input.

EARTH BONDING

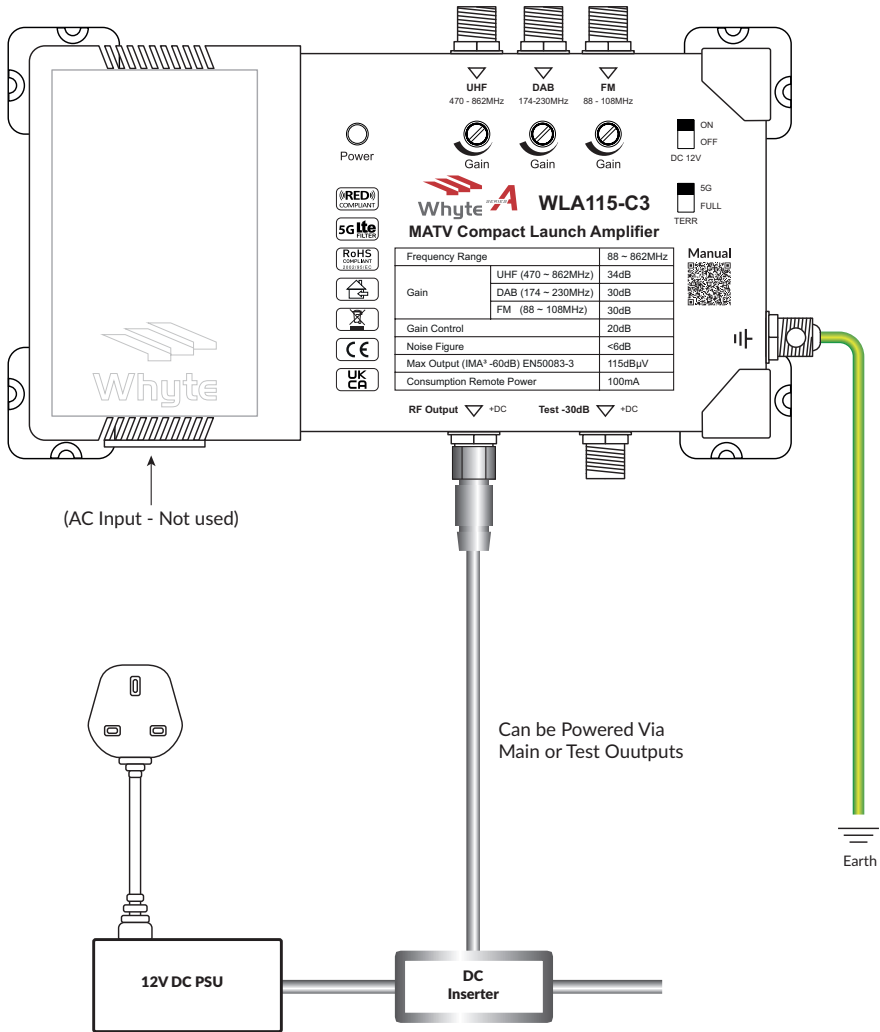
Earth bond the Launch Amplifier to the Earth Bonding Lug and using minimum 4mm² Earth Bonding Cable. It is best practise to earth bond across all devices using a single unbroken Earth Bonding Wire. Make sure that the Earth Bonding Cable is connected directly to the building's PME (Protecting Multiple Earthing).

USING THE INTERNAL AC POWER SUPPLY

Where a 230V UK AC socket outlet is available the Launch Amplifier can be plugged in to provide power to the amplifier circuit. An AC cord with 3A fused BS1363 moulded UK mains plug is supplied.

DC POWER OPTIONS

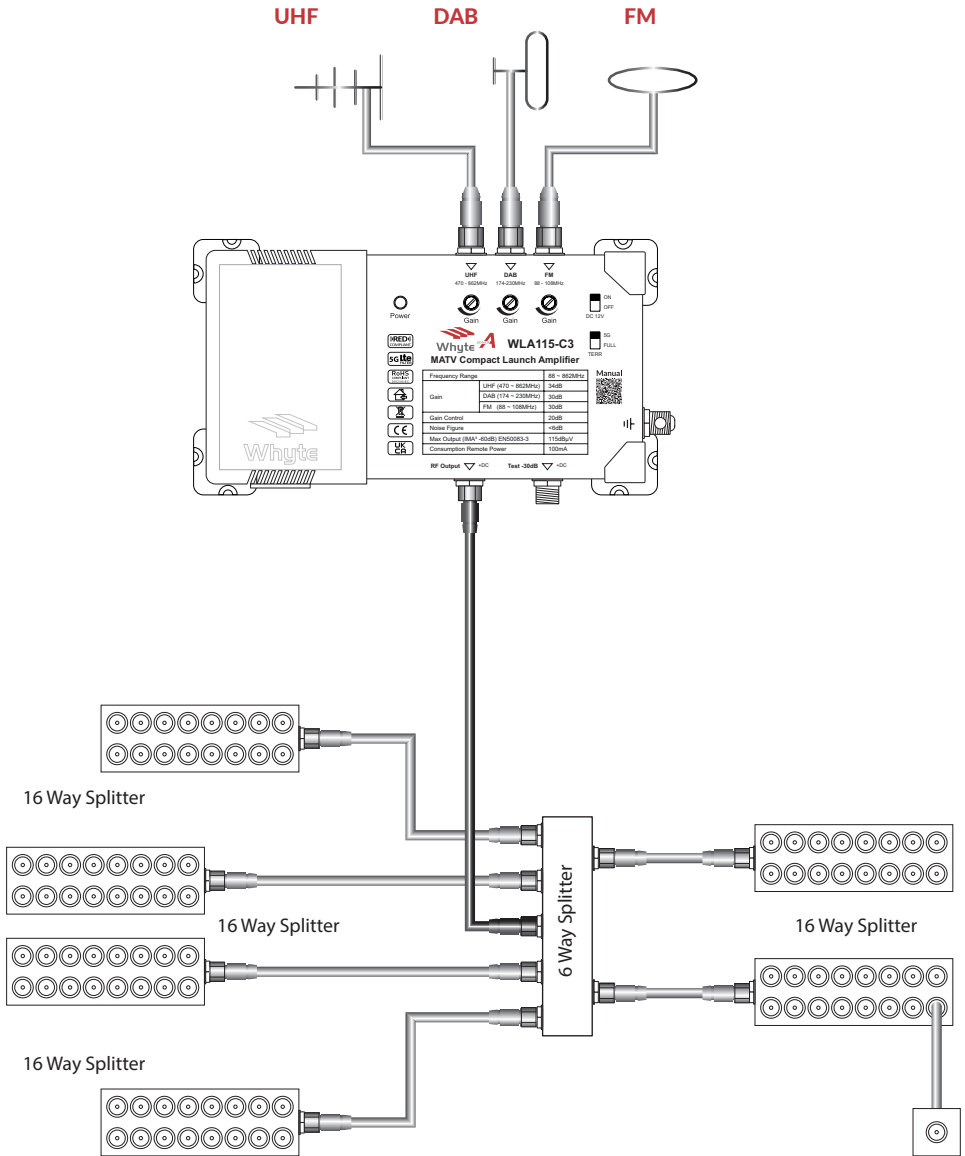
MATV (DC Remote Power)



Model WLA115-C3 shown for illustrative purpose only

EXAMPLE CONFIGURATION

96 Point Terrestrial distribution



Model WLA115-C3 shown for illustrative purpose only

SPECIFICATIONS:

WLA115-C1

MATV Lanuch Amplifier - Single Input

MODEL	WLA115-C1
Single Input	UHF, DAB, FM (Combined signals)
FM Frequency	88 ~ 108 MHz
DAB, III Frequency	174 ~ 230 MHz
UHF	470 ~ 862 MHz
Frequency Range	88 ~ 862 MHz
Classification (filter) selector	Class 0, Class 1 (Switchable 5G / Full Band)
Gain	UHF 34, DAB 30, FM 30, (dB)
Gain adjustment FM, DAB	20dB
Gain adjustment UHF (DTT)	20dB
Noise Figure	<6dB
Return loss Input/Output	≤10dB
Outputs	Combined UHF, DAB, FM (Main & Test)
Output level (Max.)	UHF: 115dB μ V
Test Output	-30dB Attenuation
Connectors	F-Type Female
Earth terminal type	Screw 6mm ² hole
Power supply voltage	230AC / 50Hz
Power Consumption	100mA
Power Indicator	Green
Remote power supply	12V DC @ 100mA Switchable (Masthead)
Remote DC Input (12~18V DC)	Via RF Output or Test Output
Working temperature °C	-10 to +55
Protection	IP20 Internal use only
Dimensions (mm)	200 x 116 x 46

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SPECIFICATIONS:

WLA115-C3

MATV Lanuch Amplifier - Three Input

MODEL	WLA115-C3
Three Inputs	UHF, DAB, FM (Separate signals)
FM Frequency	88 ~ 108 MHz
DAB, III Frequency	174 ~ 230 MHz
UHF	470 ~ 862 MHz
Frequency Range	88 ~ 862 MHz
Classification (filter) selector	Class 0, Class 1 (Switchable 5G / Full Band)
Gain	UHF 34, DAB 30, FM 30 (dB)
Gain adjustment FM, DAB	20dB
Gain adjustment UHF (DTT)	20dB
Noise Figure	<6dB
Return loss Input/Output	≤10dB
Outputs	Combined UHF, DAB, FM (Main & Test)
Output level (Max.)	UHF: 115dB μ V
Test Output	-30dB Attenuation
Connectors	F-Type Female
Earth terminal type	Screw 6mm ² hole
Power supply voltage	230AC / 50Hz
Power Consumption	100mA
Power Indicator	Green
Remote power supply	12V DC @ 100mA Switchable (Masthead) UHF Input
Remote DC Input (12~18V DC)	Via RF Output or Test Output
Working temperature °C	-10 to +55
Protection	IP20 Internal use only
Dimensions (mm)	200 x 116 x 46

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