Whyte ADA102 A Series Advanced Distribution Amplifier Instruction Manual

Contents

Whyte ADA102 A Series Advanced Distribution Amplifier

SAFETY

- The Whyte Series A Distribution Amplifiers are intended for indoor use only.
- Do not install the Distribution Amplifier in damp, humid, hot, or dusty areas.
- Switch off the source of power when making connections to the Distribution
- Amplifier to avoid damaging the unit.
- Always earth bond the Distribution Amplifier using the Earth Bonding Lug to a suitable Earth Bonding point using up to 6mm2 core earth cable.

PRECAUTIONS

To ensure a trouble-free operation of your Whyte Distribution Amplifier: Do not remove the cover of the Distribution Amplifier or dissemble it, as this will invalidate your guarantee. The female F-Type connectors on this unit were designed for use with ‘100’ type coaxial cable with a center core diameter of 1mm2. When using larger diameter ‘125’ or ‘165’ coaxial cables, you must ensure that suitable IF 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 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 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/lightening damage or lack of ventilation

GENERAL DESCRIPTION

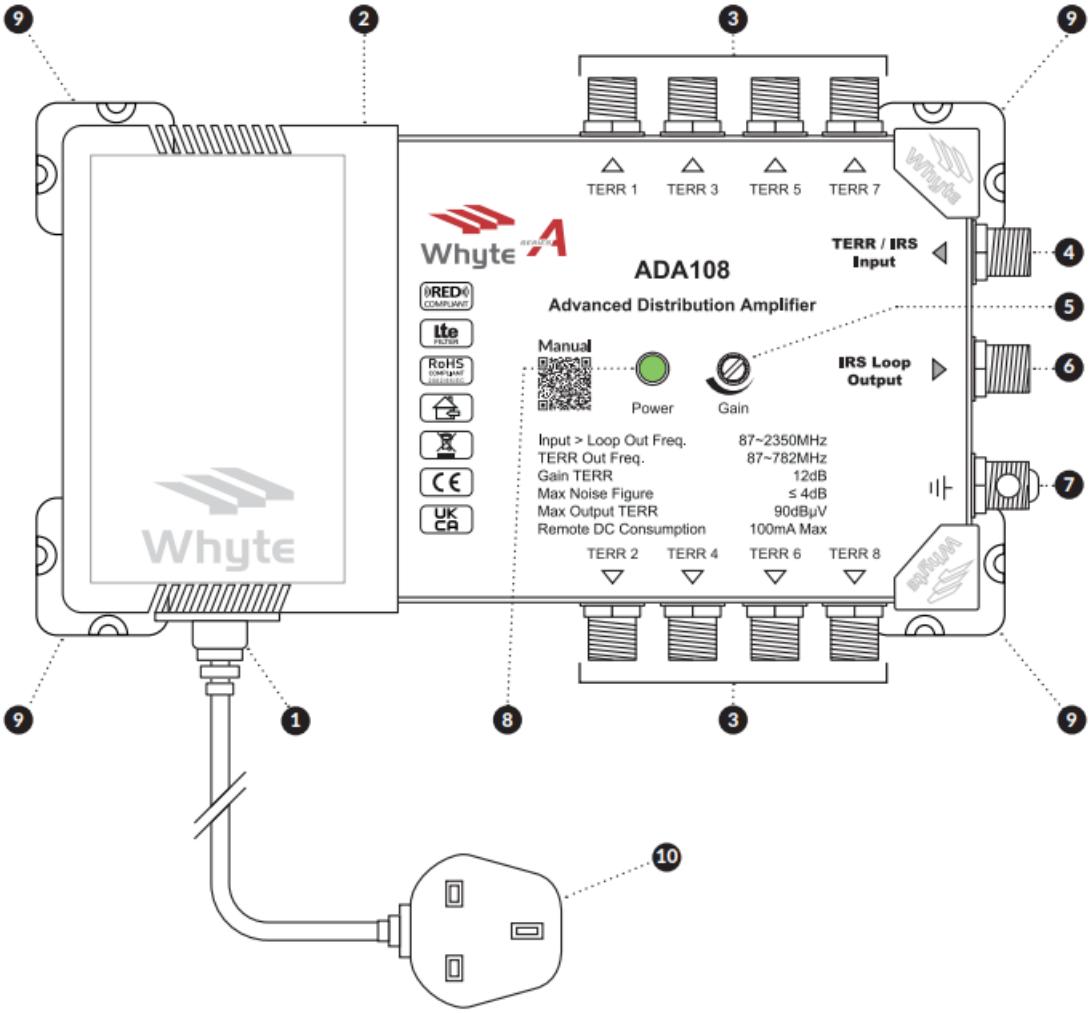
A comprehensive range of RED-compliant, professional Advanced Distribution Amplifiers with IRS Loop-through. This enables Whyte Series A Distribution Amplifiers to be connected directly to a Multiswitch subscriber output

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.

Features include:

- RED Compliant
- Ultra-Low Noise ≤4dB
- 10dB ~ 12dB Gain (depending on model)
- Gain Control
- IRS Loop-Through
- Cascadable
- LTE Filter (4G)
- High-Quality Distribution Amplifier with a 4-year guarantee
- Internal power supply
- Remote Powering via all outputs
- Adequate cable clearance for routing underneath
- Models available include 2, 4, 6, 8, 12 and 16-way output

PRODUCT DESCRIPTION



1. AC In Power Cord
2. Transformer Housing
3. Subscriber Outputs
4. TERR / IRS Input
5. Gain Control
6. IRS Loop Output
7. Earth Lug
8. LED Power Indicator
9. Corner Brackets
10. UK Mains Plug

TECHNICAL DESCRIPTION

- The Whyte Series A Advanced Distribution Amplifier has been designed to meet the requirements of the modern Integrated TV & Satellite Integrated Reception System.
- The range features an IRS Loop-through which enables Whyte Series A Distribution Amplifiers to connected directly to a Multiswitch subscriber output.
- The IRS Loop through is passive and passes all frequencies between 87MHz to 2340MHz. The IRS Loop-through permits 22kHz tone as well as DiSEqC commands to be passed backwards. Hence the ADA 100 series Advanced Distribution Amplifiers are compatible with both legacy and dSCR Multiswitches.

Used as a Terrestrial TV and Radio Distribution Amplifier (MATV), the ADA provides unrivalled low noise, high gain performance and reliability. This RED compliant

- Distribution Amplifier includes a high rejection 4G Filter and features a 15dB Gain Control which ensures that the ADA100 can be applied to most any signal level scenario.
- The unit can be powered via the AC mains lead supplied or, in the absence of mains supply can be remotely powered via any of the TERR Outputs using a suitable PSU (not included).

INSTALLATION INSTRUCTIONS

MOUNTING THE DISTRIUTION AMPLIFIER

Select a suitable location to install the Distribution 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.

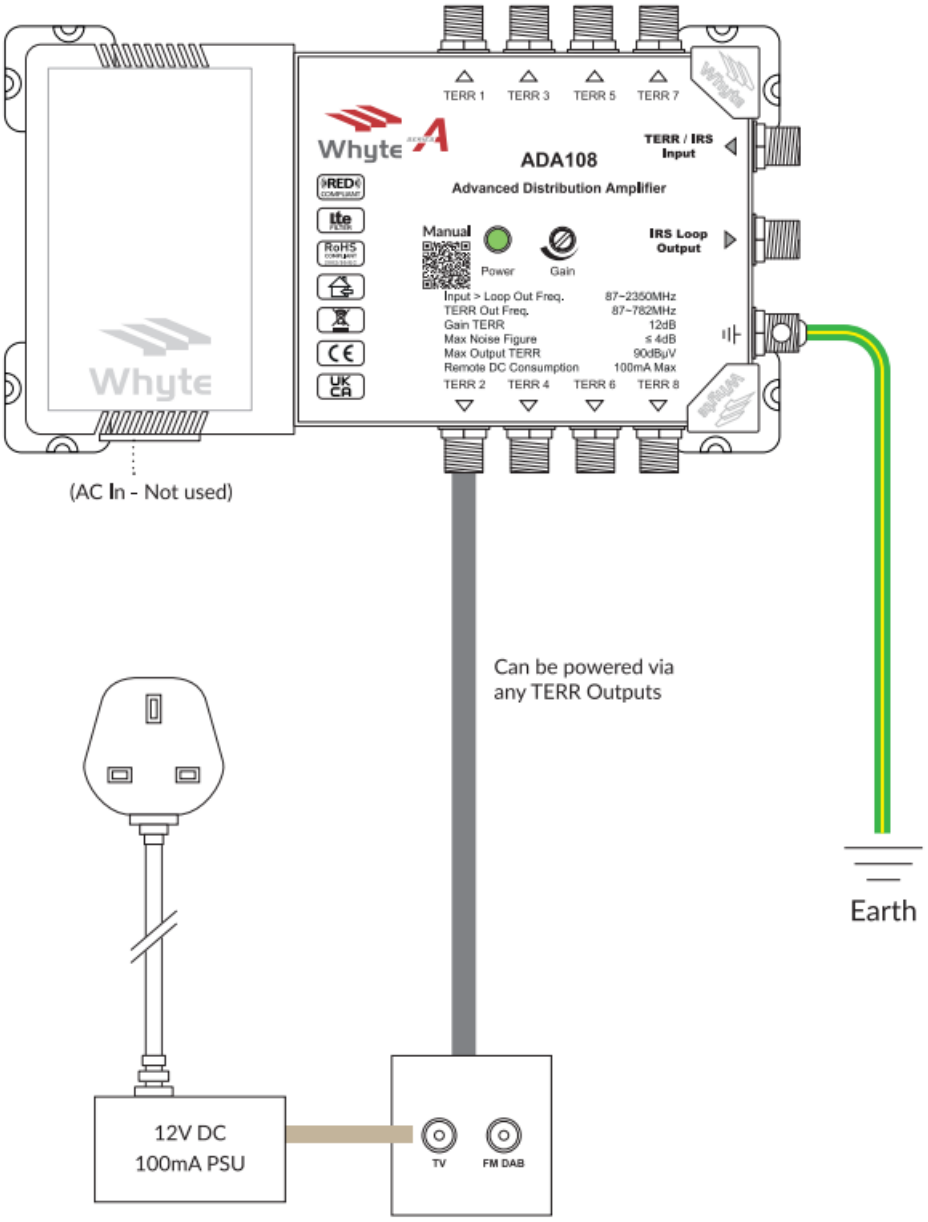
EARTH BONDING

Earth bond the Distribution Amplifier to the Earth Bonding Lug using minimum 6mm2 Earth Bonding Cable. Make sure that the Earth Bonding Cable is connected directly to the buildings PME (Protective Multiple Earthing) point.

USING THE INTERNAL AC POWER SUPPLY

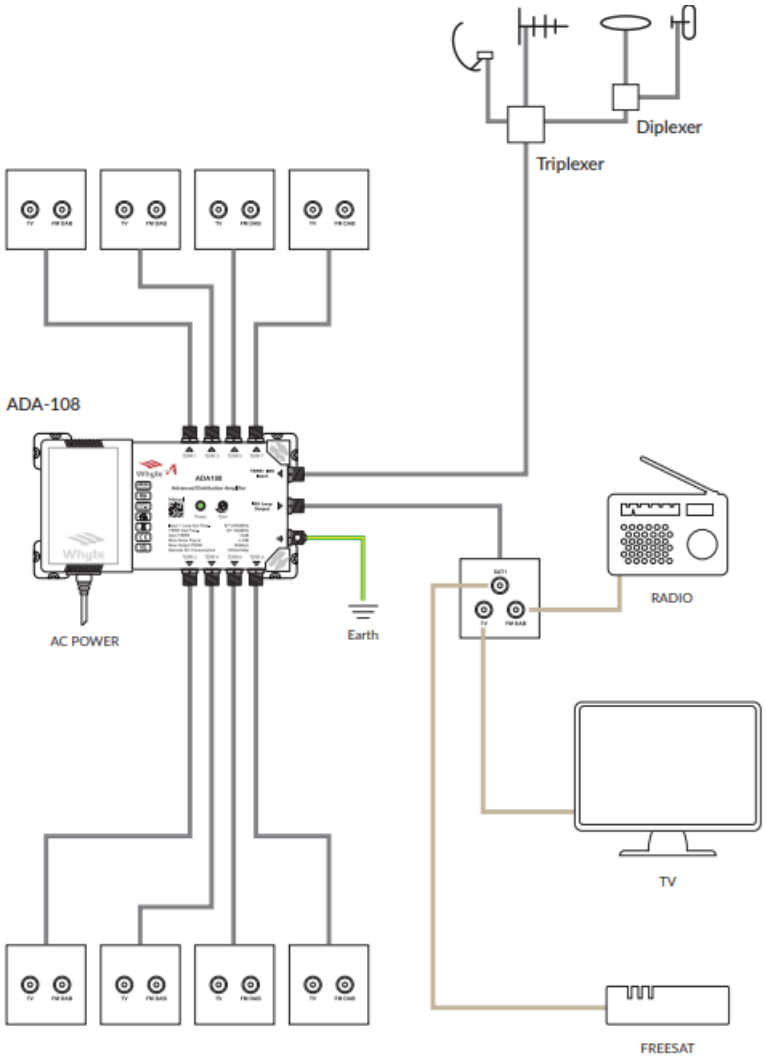
Where a 230V UK AC socket outlet is available the Distribution Amplifier can be plugged in to provide power to the amplifier circuit. AC cord with 3A fused BS1363 moulded UK mains plug included.

DC POWER OPTIONS

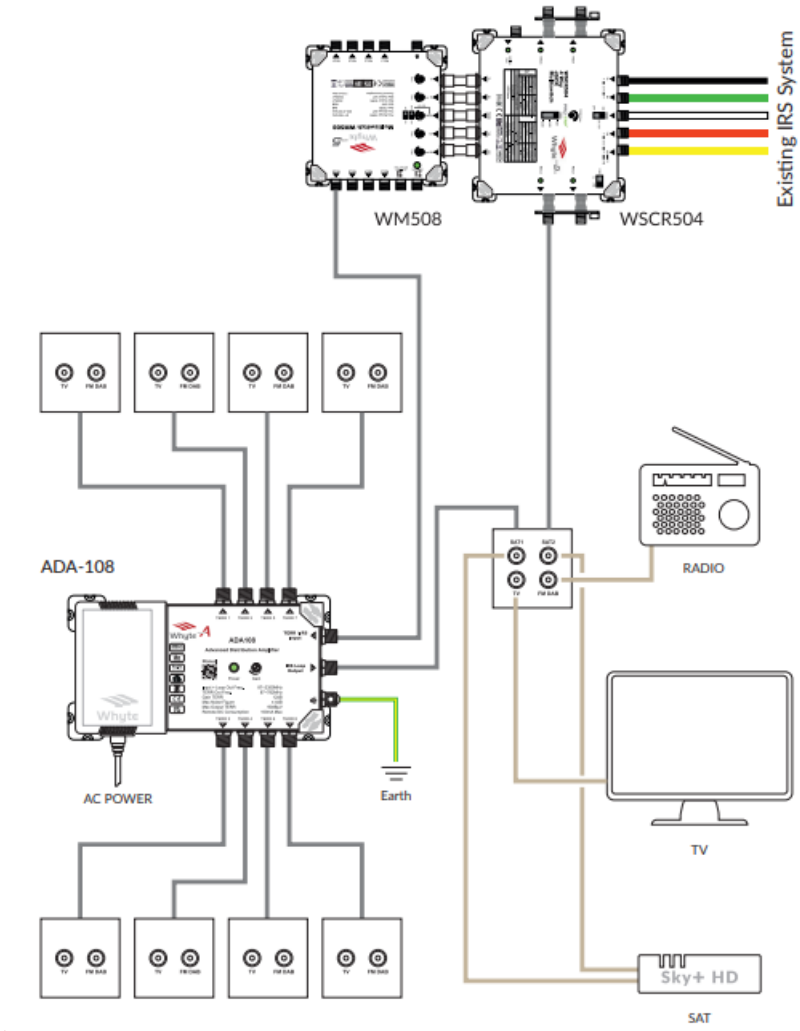


EXAMPLE CONFIGURATION

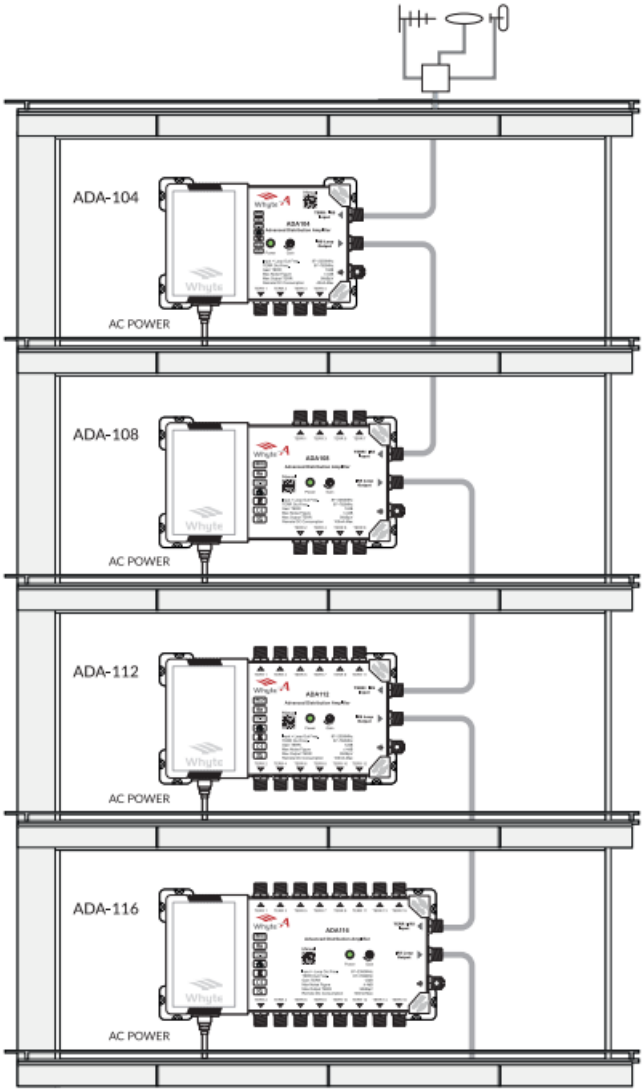
Single SAT + MATV (AC Power)



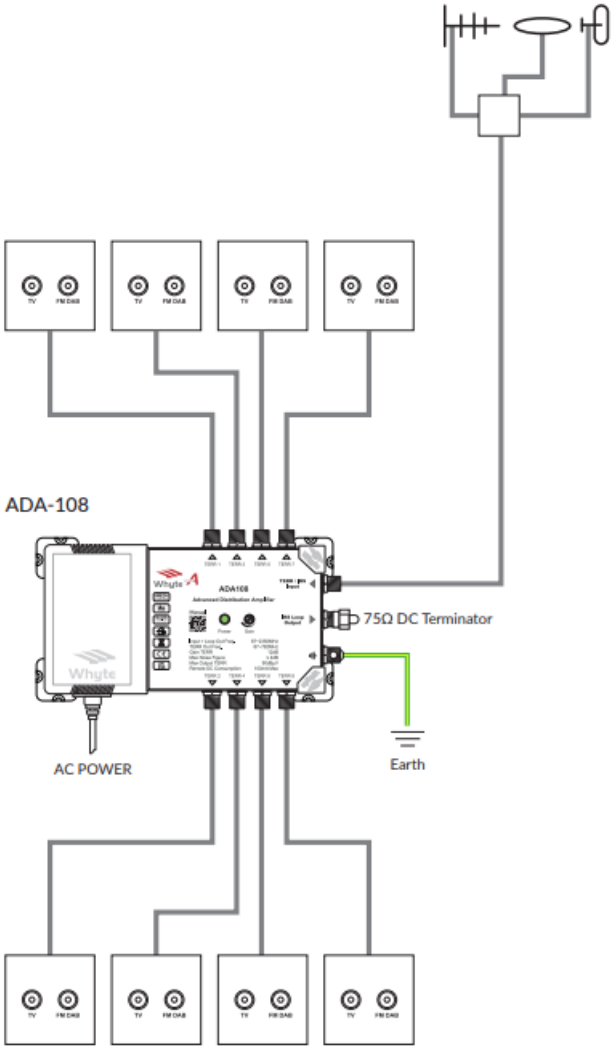
Apt TERR Distribution via IRS (AC Power)



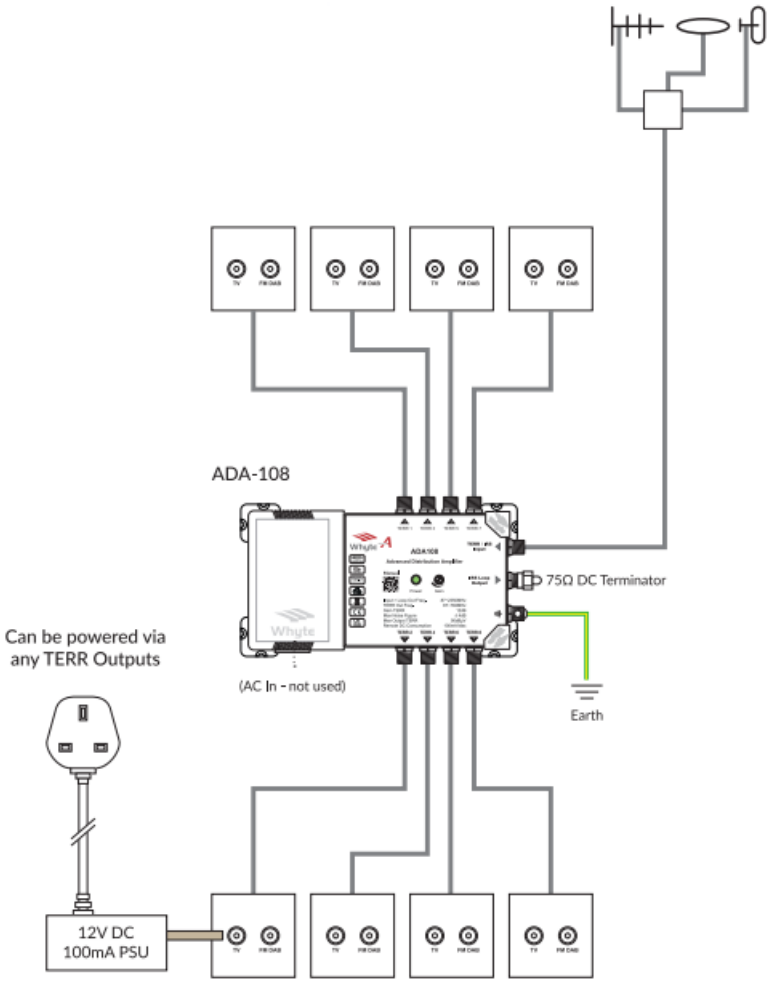
Cascading MATV System



MATV (AC Power)



MATV (DC Remote Power)



SPECIFICATIONS

ADA102 | ADA104

MODEL	ADA102	ADA104
TERR Frequency Range	87MHz ~ 782MHz	87MHz ~ 782MHz
TERR/IRS Input (F-Type Female)	1	1
TERR Tap Outputs (F-Type Female)	2	4
SAT Loop Through (F-Type Female)	1 x 87~ 2350MHz	1 x 87~ 2350MHz

RED Compliance	Class 3	Class 3
TERR Gain	12dB	10dB
Max Output TERR (IMA3 -60dB)	90dBuV	90dBuV
Max Noise Figure	≤4dB	≤4dB
SAT Through Loss	4dB	4dB
Impedance	75 Ω	75 Ω
Loop Through Passing	13/18V / 22kHz / DiSEqC	13/18V / 22kHz / DiSEqC
Mains Operation	230V AC	230V AC
Remote DC Powering (via TERR outputs)	12V DC	12V DC
Remote DC Consumption	40mA Max	40mA Max
Power Indicator	LED	LED
Earth Lug	Up to 6mm2 core	Up to 6mm2 core
Dimensions W x L x H (mm)	168x116x43	168x116x43
Weight	332g	340g

ADA106	ADA108	ADA112	ADA116
87MHz ~ 782MHz	87MHz ~ 782MHz	87MHz ~ 782MHz	87MHz ~ 782MHz
1	1	1	1
6	8	12	16
1 x 87~ 2350MHz	1 x 87~ 2350MHz	1 x 87~ 2350MHz	1 x 87~ 2350MHz
Class 3	Class 3	Class 3	Class 3
10dB	12dB	10dB	10dB
90dBuV	90dBuV	90dBuV	90dBuV
≤4dB	≤4dB	≤4dB	≤4dB
4dB	4dB	4dB	4dB
75 Ω	75 Ω	75 Ω	75 Ω
13/18V/22kHz/DiSEqC	13/18V/22kHz/DiSEqC	13/18V/22kHz/DiSEqC	13/18V/22kHz/DiSEqC
230V AC	230V AC	230V AC	230V AC
12V DC	12V DC	12V DC	12V DC

100mA Max	100mA Max	100mA Max	100mA Max
LED	LED	LED	LED
Up to 6mm2 core	Up to 6mm2 core	Up to 6mm2 core	Up to 6mm2 core
200x116x43	200x116x43	200x116x43	232x116x43
450g	458g	472g	528g

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Documents / Resources

	Whyte ADA102 A Series Advanced Distribution Amplifier [pdf] Instruction Manual ADA102, ADA104, ADA106, ADA108, ADA112, ADA116, A Series Advanced Distribution Amplifier, ADA102 A Series Advanced Distribution Amplifier, A Series, Advanced Distribution Amplifier, Distribution Amplifier, Amplifier

References

- Whyte Technologies – Digital innovation made easy