

FC658181 HTA104 DISTRIBUTION AMPLIFIER



INTRODUCTION

The Hills HTA104 distribution amplifier has been designed for domestic and commercial applications. It is a four-way splitter amplifier for “off air” Free to air television signals

Features

Shielded Enclosure: The electronics within the HTA104 are shielded by a purpose-designed diecast enclosure and connections, this helps reduce any ingress of stray signals to a minimum.

“F” connectors on all ports

Filters: The HTA104 has an Input Filter to reduce transients and electronic noise, which generally occurs below 30MHz.

Power On Indicator: An LED is visible when power is applied to the HTA104.

Hum Rejection: On - board linear regulators mean that power supply hum is not evident.

The power is provided by a +12Vdc regulated plug pack, or alternatively by a +14Vdc@150mA power supply Injector (Sold separately).

The +14Vdc injectors can be connected to any or all of the 4 Output ports.

SPECIFICATIONS

Frequency Response		
VHF bands	45 – 230 MHz	~ 11 dB
UHF bands	520 – 870 MHz	~ 12 dB
Maximum Input	91 dB μ V (retaining 60 dBc intermodulation fidelity – DIN45004/ AS1367)	
Maximum Output	103 dB μ V (retaining 60 dBc intermodulation fidelity – DIN45004/ AS1367)	
Noise Figure	<6.0 dB	
All RF Connections	F-type	
Power Supply	12 – 16 Vdc@150mA (acceptable)	
Power Connector	2.1mm DC Jack, +ve tip	
Sealing	IP55	
Standards and Compliance	C-tick approved, AS1053	

APPLICATIONS

A typical domestic application is to “provide the amplification and distribution of TV signals to 4 TV outlets in the home.”

If the Power Injector option is used, there is no need for a GPO in the roof space.

A typical commercial application is to “provide the amplification and distribution of TV signals to four separate townhouses with a common TV antenna system.”

When the “line powering” option is used, there is no need for “community power” to be available.

With this option a power supply Injector would be required in each townhouse.

In a commercial application when any of the four residents are home and their power supply / injectors are “ON”; the amplifier will be “ON”.

In the event one of the residents turns their power off the amplifier is still “ON”, this is because it is been fed by the other power supply / injectors from the other residents. If everyone turns their power off then no power will be provided to the amplifier and the amplifier will not work.

The HTA104 can also be used to provide DC line power (nominally +12Vdc) for a masthead amplifier such as the Hills LNDA or similar masthead amplifier.

The “Input Line Power” switch on the front of the device selects this option.

Note: If no pre-amplifier or masthead amplifier is connected then the switch must be “OFF”

INSTALLATION NOTES

It is important to use the correct F type connector for the selected cable.

Please follow the connector manufacturer’s instructions to achieve the best quality connection.

Coaxial cable should be cut to the correct length.

Coiling unused cable, cable kinks and damage may result in unwanted interference and degradation of frequency response.

Coaxial cable runs for inputs and outputs should be kept separate.

Do not install the amplifier in unventilated spaces where temperatures may be extreme.

The temperatures range in which the amplifier should operate is 0°C to 55°C.

In areas where cables may be damaged by birds conduit cable protection is recommended.

When line powering the HTA104: some wall sockets and splitters are fitted with DC or mains blocking capacitors making them unsuitable for use between the power supply injector and the HTA104.

In such instances it may be possible for a technician to rectify this or to install a different wall socket that doesn’t have such a limitation.

The HTA104 is supplied with a +12Vdc regulated plug pack.

If a different Power Supply / Power Injector is used, care should be taken to ensure the voltage level (at the amplifier), is between the levels of 12 to 16 Vdc.

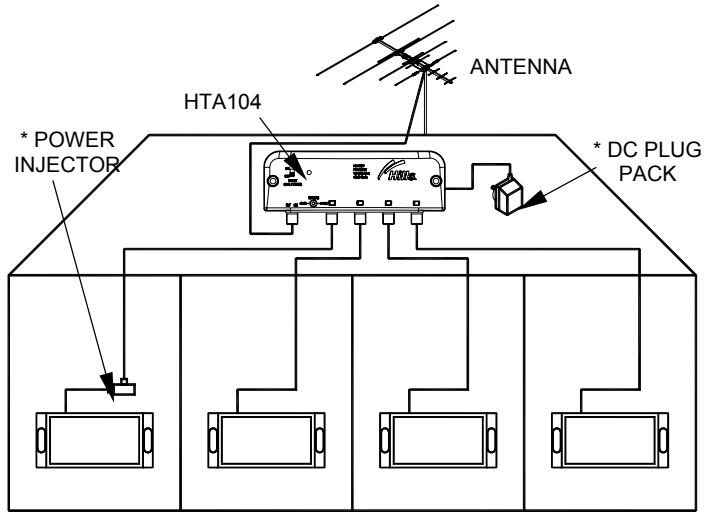
The power supply should provide 150mA of current to the amplifier under all conditions.

No power selection is required.

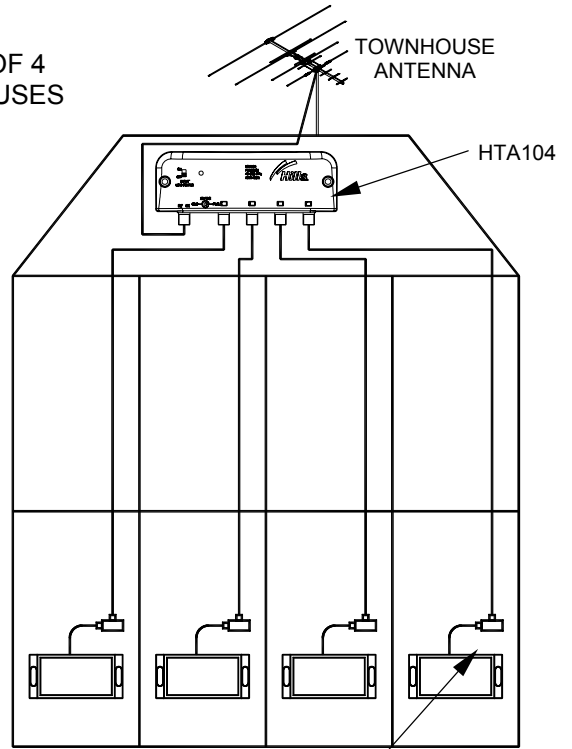
If power is applied to either the DC input connection or to any of the line-powered outputs, then the amplifier will be automatically be “ON”.

INSTALLATION LAYOUT

HOUSE



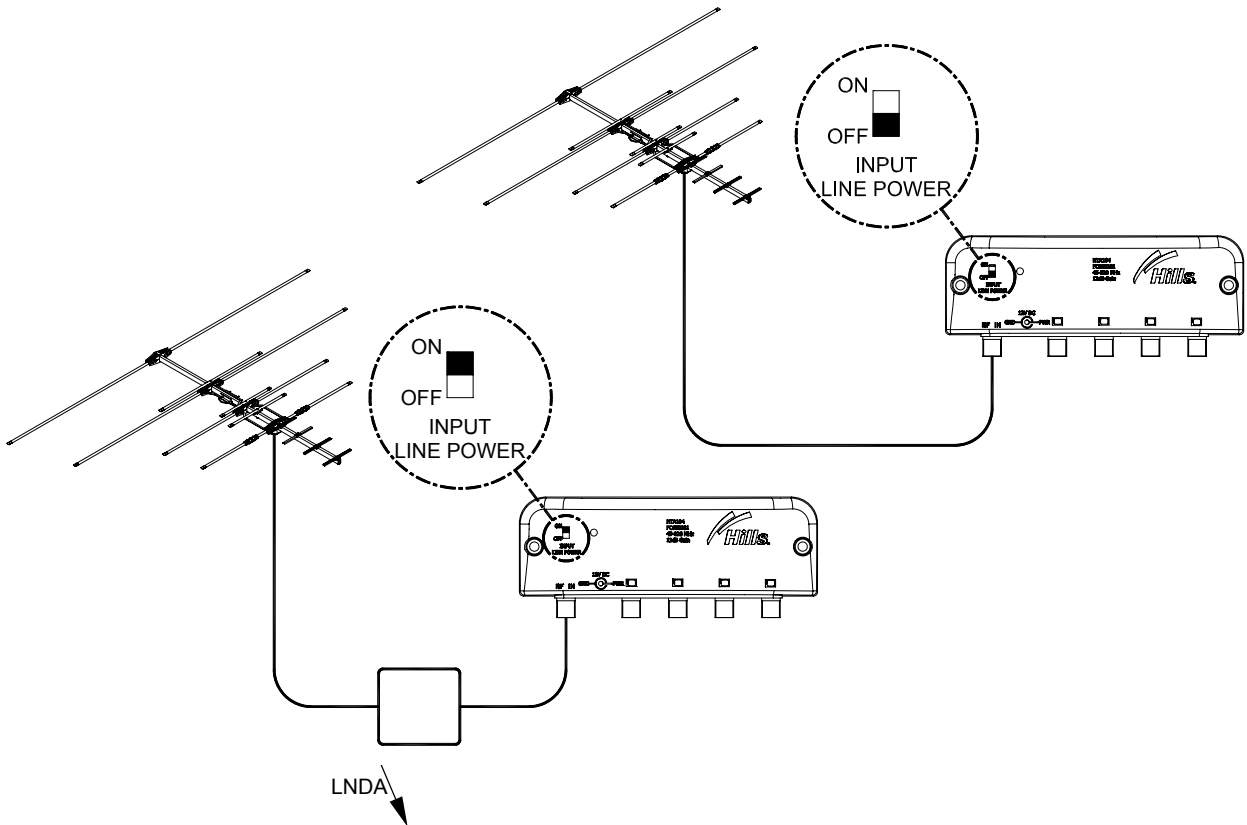
BLOCK OF 4 TOWNHOUSES



* NOTE: EITHER DC PLUG PACK **OR** POWER INJECTOR.

4 x POWER INJECTOR

SWITCH SELECTION



PACKING LIST

This package contains a Hills HTA104 Amplifier (FC658181), +12Vdc Regulated Plug Pack, and this instruction sheet.

Note: F-type Cable Connectors will be required for the installation.

RG6 cables use BC2092 "F" connectors
RG59 cables use BC2090 "F" connectors
RG6 Quad Coaxial Cable 100 metre roll - BC46062

PRODUCT GUARANTEE

Hills Industries Limited undertake that if the product has failed to operate correctly due to faulty workmanship or defective material it will be repaired or replaced free of charge for a period of 12 (twelve) months from the date of purchase given fair wear and tear. This guarantee is additional to any rights of remedies conferred on the consumer by the Trade Practices Act or State Laws. Designs, specification and colours depicted are subject to change without notice.

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