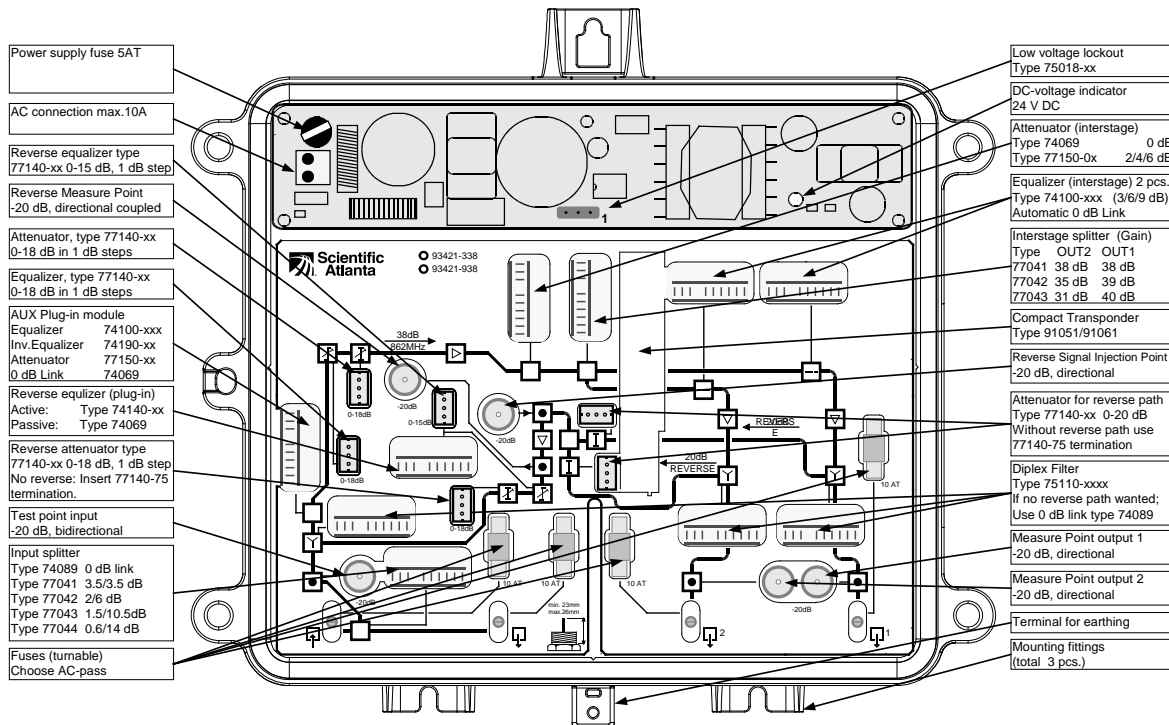




Compact Amplifier Type 93421 Installation Instructions



Application

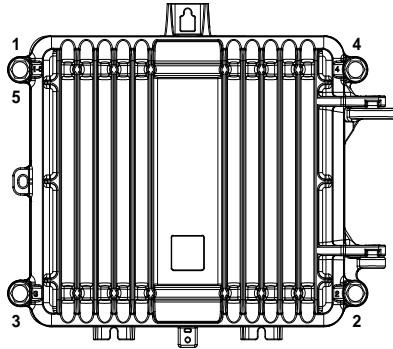
The Compact Amplifier type 93421 has two active outputs and is used in trunk and distribution applications. The amplifiers can be monitored via the Compact Transponder and TNCS. The housing is suitable for outdoor mounting.

Mounting

The node is mounted perpendicularly with the cable inlet at the bottom in order to secure natural ventilation during operation. To ensure a proper seal, tighten the bolts in sequence as shown in the section titled **Mounting Sequence**. Use a 13 mm wrench for the screw in the lid and torque to 7 Nm.

Compact Amplifier Type 93421 Installation Instructions

Mounting Sequence



Plug-in Units

Input Splitter

Link type 74089 is applied if the loop port is not used. Splitters with a bridger provide the largest attenuation at the amplifier input.

Diplex Reverse Filters

Three diplex reverse filters type 75110 with the requested filter frequency are used. If the reverse path is not used, three links type 74089 are mounted.

AUX Plug-in Field (Equalizer, Attenuator)

In order to adjust the amplifiers to the cable, it may be necessary to insert an equalizer type 74100-xxx or an inverse equalizer type 74190-xx at the input. If no equalization/attenuation is requested, 0 dB link type 74069 is inserted.

Input Equalizer and Attenuator 3-pin

Use type 77140-xx (0-18 dB in 1 dB step) to select attenuation and equalizing at the input.

Interstage Attenuator

The gain can be adjusted with an interstage attenuator type 74150-0x (2, 4, or 6 dB) in order to minimize the influence on the system values. Use link type 74069 for 0 dB.

Interstage Splitter for Gain Definition

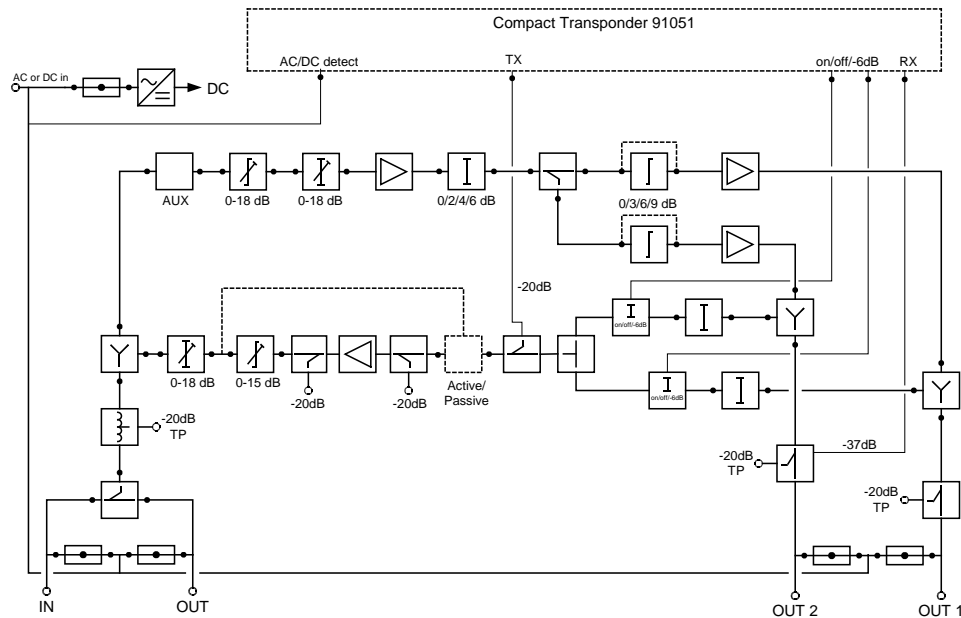
If an asymmetric splitter (bridger) is used, the low gain port is obtained at output 2 (OUT 2).

Compact Amplifier Type 93421 Installation Instructions

Interstage Equalizer

The amplifier can be adjusted without an equalizer because of the automatic 0 dB link. The equalizer is mounted and the output level has now been pre-equalized.

Block Diagram of A93421 Signal Path (RF and Current Path)



Reverse Path

With active reverse path, equalizer type 74140-xx is placed in the plug-in field for reverse path equalizer. With passive reverse path, a link type 74069 is placed in the plug-in field. In this case, reverse path equalizer and reverse path test points cannot be used.

Output Equalizer and Attenuator 3-pin

Use type 77140-xx (0-18 dB in 1 dB step) to select attenuation and use type 77140-xx (0-15 dB in 1 dB step) to select equalizing at the output.

If the reverse path transmission is not used, a termination type 77140-75 is mounted in the reverse path output attenuation plug-in field.

Compact Amplifier Type 93421 Installation Instructions

Input Attenuator 3-pin

In order to add further attenuation in the reverse path, an attenuator type 77140-xx (0-20 dB in 1 dB step) is mounted in the plug-in field. If no attenuation is requested, type 77140-00 is mounted. If a termination of the reverse path is requested, type 77140-75 is mounted (only necessary if diplex filters have been mounted).

Compact Transponder Type 91051

With this transponder it is possible to monitor the amplifier output level, temperature, and power supply. Furthermore, the built-in reverse 3-state switches can be controlled.

Remote Power Supply 24-65 V AC (or 35-90 V AC)

The amplifier is supplied with 24-65 V AC either via a coaxial cable (max. 7 A) or directly at the AC input (max. 10 A). On delivery, the ports are equipped with isolation fuses.

Caution: *Permanently exceeding the maximum remote supply current may cause damage to the product.*

Undervoltage Lock Out

For all remote supplied power supplies an undervoltage lock out type 75018 can be obtained that switches off the power supply if the voltage drops below the rated value. Damage in the network due to the increased power consumption can be avoided.

Accessories

F-test adaptor	A71004
Fuse 5 AT	A38011
Fuse 10 AT	A38016

For Information

If You Have Questions

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.



Cisco Systems, Inc.
5030 Sugarloaf Parkway, Box 465447
Lawrenceville, GA 30042

678 277-1120
800 722-2009
www.cisco.com

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