

**Please read this
document carefully
before installation!**

ADSL Loop Extender Power Supply

AEC-B4P-D48

Installation Manual

Version:002

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Preface

This manual provides information on how to use this product. To make the best use of this product, read this manual thoroughly before use. Please keep this manual handy for ease of reference.

- The contents of this document may be changed in the future, without prior notice.
- This booklet was created with thorough attention to the content. If, however, you have a question, spot an error, or find a description lacking, please refer to the end of this booklet for information on how to contact us.
- All brand names and trademarks are the property of their respective owners.

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General Description

ADSL technology has great advantages in terms of bandwidth and performance; however, long loops can create difficulties providing consistent broadband services.

ADSL Loop Extender can extend the coverage of ADSL lines. It will provide systems with higher performance-to-cost ratio, improve the equipment utilization rate, optimize the network. This product will allow you to double the number of subscribers that you can reach while offering more consistent high bandwidth services to your existing customers.

ADSL Loop Extender is an active element installed in the outside loop plant. It operates as an amplifier and equalizes the signal. Generally, it is span-powered. You can use the ADSL Loop Extender Power Supply to provide the span-power.

AEC-B4P-D48 is one type of the Power Supply. It can convert DC48V to 4x DC116V. It can support one AER800-8P-O, or 4 AER800-1Ps, or 4 AER800-2Ps.



AER800-8P



AEC-B4P-D48

Benefits

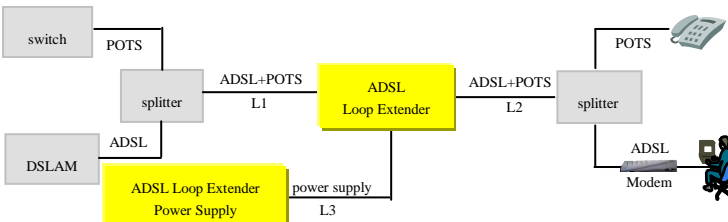
- ★ Double the customers you can reach.
- ★ Deliver 2-10 times the bandwidth.
- ★ Avoid customer loss due to broadband service unavailability caused by extra long distance.
- ★ Improve service quality.
- ★ Comprehensive over-voltage protection.
- ★ Easy to install, deploy and maintain.
- ★ Fully compatible with ADSL/ADSL2+ systems.
- ★ Fully compatible with analog voice.

Technical Specifications

Table 1 – Technical Specifications of AEC-B4P-D48

Operating Environment	Temperature	-35°C ~ +50°C
	Relative Humidity	5% ~ 95% (Non-condensing)
Input Voltage	DC -48V (-36V ~ -72V)	
Output Voltage	DC 116V	
Output Current	Less than 50mA	
Fuse Rating	2A	
Output Port	4	
Dimension	480 mm×160 mm×44mm	

Application



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Figure 1 ADSL Loop Extender power supply Application Diagram

L1: The signal wire pair connecting ADSL Loop Extender to DSLAM.

L2: The signal wire pair connecting ADSL Loop Extender to Modem.

L3: The power wire pair connecting ADSL Loop Extender to power supply.

ADSL Loop Extender with remote power supply from central office, additional copper line required to power the Extender.

Installation Environment

Before installation, the DC 48V power supply and reliable ground connection should be assured. The customer should order the corresponding type of power supply according to the available power source.

If any difficulties are encountered during the installation process, contact supplier.

Installation Procedure

UNPACK

Unpack equipment carefully; check for completeness against the purchase order. Notify supplier if items are missing.

Note: Save packing material. All equipment returned must be packed in the original packing material.

Inspect equipment for shipping damage, including bent or loose hardware, and broken connectors.

If equipment was damaged in transit, contact supplier.

BEFORE INSTALLING THE POWER SUPPLY

Attention: ADSL Loop Extender's power supply should **NOT** be turned on until the Extender installation is finished. When the power supply wire is active, wires carry DC 116V. Do not touch wire A and wire B simultaneously, or allow wires to contact anything!

Install the power supply

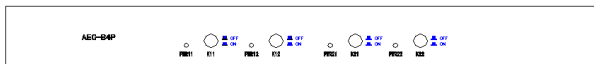


Figure 2 the front panel of AEC-B4P-D48

In figure 2, the indicators PWR11~PWR22 indicates the status of the equipment. After power supply is connected, press the button K11~K22, and the corresponding PWR indicator should be solid on. Flashing indicator indicates short circuits or over-current alarm condition.



Figure 3 the back panel of AEC-B4P-D48

In figure 3, the outlet J1 and J2 are the 116V output terminal. You can get 2× 116V(no polarized) from each outlet. You can connect DC48V through the 2× 3-core power cord.

Table 2- the Description of the buttons, indicators and outlets

Buttons, Indicators and Outlets				description
K11	PWR11	J1		First group and first output.
		A11	B11	
K12	PWR12	J2		First group and second output.
		A12	B12	
K21	PWR21	J3		Second group and first output.
		A21	B21	
K22	PWR22	J4		Second group and second output.
		A22	B22	

PWR11~PWR22 indicators should be solid on. Flashing indicator indicates short circuits or over-current alarm condition.

① Connect the power supply cable

If the ADSL Loop Extender is installed in a remote location without local power available, an additional copper pair(L3 as shown in Fig. 1) is required for power. The supply voltage will pass through power converter and feed to this additional pair.

② Ground

Connect the power supply ground.

③ Connect power cord(do not apply power yet)

The supplied accessories include power cord for DC 48V. Connect it to the DC 48V power source with good connection.

Attention: ADSL Loop Extender’s power supply should NOT be turned on until the Loop Extender installation is finished.

Troubleshooting

Table 3 AEC-B4P-D48 Troubleshooting

Problem Description	Possible Reason	Suggested Resolution
Equipment does not work after power-up. Status LED is OFF.	Power supply cable is not correctly connected.	Check power supply cable connection.
Power indicator flashes.	Power output circuitry fails.	Check whether the connection is shorted. Or check whether the connection between Extender and Modem is OK.
Output is OK but the Extender does not work.	Power output cable connection is error or short.	Correct the power output connection or check cable. Or check whether the distance between DSLAM, Extender, Modem is proper.