

Installation Instructions

AT B-300 (CC: 555-300BA)

Introduction

This information is to be used in the installation of the AT B-300. A typical installation example is given.

FCC Certification

NOTE:

This device complies with all FCC Part 15 rules and regulations. Operation is subject to the following conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received including interference that may cause undesired operation.

This device complies with Part 68 of the FCC rules and regulations. On the underside of this equipment is a label that contains, among other information, the FCC registration number for this equipment. If requested, provide this information to your telephone company.

If your AT B-300 NT1 causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advanced notice isn't practical, you will be notified as soon as possible. You will be advised of your right to file a complaint with the FCC if you believe it is necessary.

Your telephone company may make changes in its facilities, equipment, operations, or procedures that could effect the operation of your equipment. If they do, you will be given advanced notice so as to give you an opportunity to maintain uninterrupted service.

Conforms to ANSI/UL STD.1950

INSTALLATION INSTRUCTIONS

2

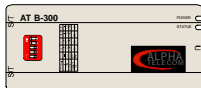
WIRING

3

Installation Restrictions and warnings

- Never install telephone wiring during a lightning storm
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface
- Use caution when installing or modifying telephone lines
- Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement or near a swimming pool
- Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning
- Do not use the telephone to report a gas leak in the vicinity of the leak
- The registration jack USOC, Facility Interface codes, and Service order codes are as follows: USOC, RJ49C; FIC, 02IS5; SOC, 6.0N

Connectors



S/T-Interface Connectors

3	RX+	4	TX+
5	TX-	6	RX-
7	-VDC	8	RETURN

U-Interface Connector

5	RING	4	TIP
7	-VDC	8	RETURN

Termination and Bus Timing

The S/T bus timing is the most significant setting for the Fixed Timing (Short) or Adaptive Timing (Point-to-Point or Extended) bus configurations. Default Setting for 100 ohms and Adaptive Timing Bus is: **OFF-OFF-OFF-ON-ON**

Setting	1	2	3	4	5
0	Off	Off	Off	Off	Off
50	On	On	On	On	On
100	Off	Off	Off	On	On
Adaptive	Off	—	—	—	—
Fixed	On	—	—	—	—

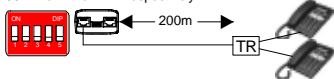
Wiring configuration

The AT B-300 supports the point to point or point to multipoint configuration on an extended or short passive bus at the S/T-Interface. Combinations of these settings and the wiring requirements of the installation, determine the configuration for the line.

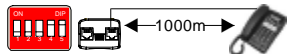
Default Configuration:

The manufacturer's default DIP Switch configuration will work on almost all installations.

Application#1: For the Extended Passive Bus, no more than four terminals can be attached and each terminal must be the same distance away from the NT1, within 10 meters tolerance, to a maximum of 200 meters divided by the number of terminals. For example two terminals could be 85m and 95m from the NT1 respectively.

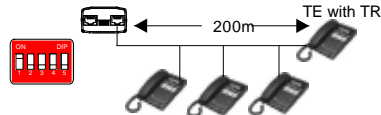


Application#2: For the Point-to-Point Bus, only one TE device can be connected to the NT1 with the internal 100 ohm TR set to ON. The maximum distance between NT1 and TE is 1000m (3300ft).

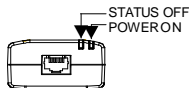


Short Bus Configuration:

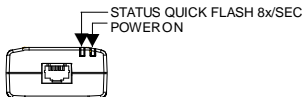
This covers cases where there are unknown, random, or uneven distances between the NT1 and Terminal Equipment (TE). This requires more than one TE, and the distance between the TE and the NT1 must be greater than 10 meters. Solution: Verify the distance between any two terminals is at most 50 meters. The farthest terminal must be within 200 meters of the NT1, and it must have its own Termination Resistors (TR), or have a TR wired into the line just before the terminal. Up to eight terminals can be supported in this configuration.



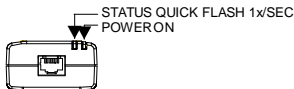
Connect the NT1 to a power supply and to an active ISDN U-Interface Line. The POWER LED will illuminate Green and stay ON indicating the AT B-300 NT1 has power.



The STATUS LED will flash Green eight times per second while synchronizing with the ISDN line.



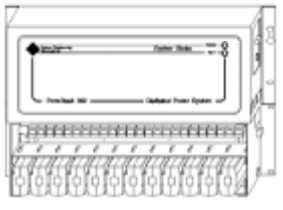
The STATUS LED should flash once per second to indicate the S/T-Interface is synchronizing.



Synchronization has been obtained when the STATUS LED is ON. If the LED does not flash at all, or does not slow to once per second, there could be a problem with the ISDN line. If the LED does not stay ON, this indicates a possible problem on the CPE side. Verify cables, termination settings, and/or bus setting to be correct according to the application of the NT1.

The AT B-300 is compatible for installation in the PowerRack300 Series units.

The AT B-300 are "Hot Swappable" NT1's. This allows for the insertion or removal of the NT1 without having to power off the rack mount unit. For further details on the PowerRack300, follow the manufacturer's installation guide or instructions.



Powering

The AT B-300 can be powered by a separate AC Power Source, supplying 34 to 56.5VDC, normally connected to Pin 7 and Pin 8 of the U-Interface Connector.

ISDN terminals connected to the S/T-Interface Connector can be powered from the same source using Pin 7 and Pin 8 of the S/T-Interface Connectors.

Certified to CAN/CSA STD.C22NO.950

ETL/ETLC Notice

This device complies with all ETL and ETLC safety requirements.

Industry Canada Information

Notice: The Industry Canada label identifies certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The department does not guarantee the equipment will work to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions might not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

User should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority or electrician, as appropriate.