ASANTÉ

Asanté*Talk*

Ethernet to LocalTalk

Converter

User's Manual

Quick Start Guide

This section will guide you in setting up your Asanté*Talk* to your Macintosh computer. Follow the steps below to set up a direct connection or LAN connection with the Asanté*Talk*:

ASANTÉ*TALK* DIRECT CONNECTION TO THE ETHERNET EQUIPPED MACINTOSH™
(Yellow cable - direct connection)

1. Open the side door to expose the ports found inside your computer.
2. Locate the Ethernet port inside the computer. Plug the yellow direct connect cable into the computer's Ethernet port.
3. Plug the other end of the yellow direct connect cable into the Asanté*Talk*.
4. Plug the power adapter into the Asanté*Talk* and then into a power outlet.
5. Plug the white mini din-8 to mini din-8 cable into the Side B of the Asanté*Talk*.
6. Plug the other end of the mini din-8 cable into your LocalTalk® printer or computer.

ASANTÉ*TALK* LAN CONNECTION TO THE ETHERNET EQUIPPED MACINTOSH
(Silver cable - LAN connection)

1. Open the side door to expose the ports found inside your computer.
2. Locate the Ethernet port inside the computer. Plug a standard LAN cable into the computer's Ethernet port. Plug the other end of the standard LAN cable into a hub or switch.
3. Plug the silver LAN cable into the Asanté*Talk*'s Ethernet port. Plug the other end of the silver LAN cable into a switch or hub.
4. Plug the power adapter into the Asanté*Talk* and then into a power outlet.
5. Plug the existing LocalTalk network connection into Side B of the Asanté*Talk*.
6. If you have an network connection (i.e. cable modem, DSL, or T1 line) that connects your system to the Internet, you will need to temporarily disconnect it from the network in order to set up the Asanté*Talk* and your printer.

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Chapter 1 Introduction

Asanté*Talk* is designed to allow Apple Macintosh systems using the on-board Apple Ethernet adapter to communicate with existing LocalTalk devices such as printers and other Macintosh computers.

The Asanté*Talk* connects a LocalTalk network (or printer) and an Ethernet network (or your computer). After you have installed it on both networks, devices on the two networks will be able to communicate through the Asanté*Talk*.

1.1 Package Contents

Before beginning the installation process, check the package contents against the items listed here. If any items are found to be missing, contact your dealer immediately.

- 1 Asanté*Talk* converter

- 1 yellow RJ45 UTP crossover Ethernet cable

- 1 silver RJ45 UTP Ethernet cable

- 1 din-8 to din-8 serial cable

- 1 power supply
- User's Manual (this document)

1.2 Installation Steps

Follow the steps below to connect your Asanté*Talk* converter:

1. Connect the Asanté*Talk* to your LocalTalk network or printer.
2. Connect the Asanté*Talk* to your computer or existing Ethernet network.
3. (Optional) Configure your computer to communicate over Ethernet.

Attaching the AsantéTalk to your LocalTalk network

Connect a LocalTalk adapter to the din-8 port on the Asanté*Talk*. Then, connect your LocalTalk cable to the LocalTalk port on the adapter.

See the Quick Start Guide (p. 2) for more information.

1. The Asanté*Talk* supports a maximum of eight (8) devices plus the Asanté*Talk*, or nine (9) nodes maximum.
2. The LocalTalk network must be configured as a "bus" network.
3. The LocalTalk network must be properly terminated at both ends of the LocalTalk cable.

   Note: LocalTalk adapters/connectors from approved sources may be used.

   - LocalTalk network configurations wired as a "star" or "modified star" are not supported.

   Note: It is recommended that the Asanté*Talk* be installed as the first device in the LocalTalk network. The LocalTalk connector on the Asanté*Talk* must also include a LocalTalk Terminator, which is normally included with the LocalTalk con-

nector kit. The installation of each LocalTalk device on the Lo-calTalk network segment requires a LocalTalk adapter for proper communication. The LocalTalk network segment may include any combination of printers and computer systems on LocalTalk. The last device in the LocalTalk network chain must include a terminating resistor.

Ethernet Installation Process

Asanté*Talk* includes a 10Mbps Ethernet connection--making instal-lation to new or existing networks simple. Asanté*Talk* was designed with Apple computers in mind, where simple network operation and printing is required with LocalTalk printers.

Attaching the Asanté*Talk* to your Ethernet network

To create an Ethernet network with your computer system, Asanté includes two Ethernet cables.

The first cable is **YELLOW** in color and is designed as an industry-standard "crossover" cable. This cable is used for communicating from the computer directly to the Asanté*Talk*.

The second Ethernet cable is **SILVER** in color and is wired as an industry-standard 10BaseT Ethernet cable. This cable is used when connecting the Asanté*Talk* to an Ethernet switch or Ethernet hub. Installation may require a longer Ethernet cable. Please follow IEEE Ethernet cabling requirements for wiring and installation.

Attaching the Asanté*Talk* directly to your computer

The yellow crossover cable is used to establish the physical net-work connection when the configuration consists of the Asanté*Talk* and the computer. To connect this cable, simply insert one end of the cable into the RJ45 female cable connector. The other end of the yellow cable will attach to the RJ45 port on the Asanté*Talk*. In-sert the cable end into the appropriate connector.

- During boot up, the computer will attempt to auto-negotiate with any attached Ethernet device. To eliminate auto-negotiation problems, make sure the Asanté*Talk* is pow-ered up before booting the computer

Attaching the Asanté*Talk* to Your Existing Ethernet Network

The Asanté*Talk* may be added to an existing network using the **SILVER** cable. This cable is wired as a straight-through cable and is used to establish a network connection to a port on an Ethernet switch or Ethernet hub.

To connect this cable, simply connect the RJ45 connector to any available port on the Ethernet switch or Ethernet hub. Insert one end of the cable into the RJ45 female cable connector.

Note: Do not install this cable or any other straight-thru 10BaseT cable to a hub or switch uplink port.

The other end of the silver cable will attach to the RJ45 port on the Asanté*Talk*. Insert the cable end into the connector.

If a longer Ethernet cable is required, follow predefined IEEE Ethernet wiring requirements for wiring 10BaseT RJ45 cables.

Ethernet Installation Guidelines

1. A maximum distance of 100 meters (330 feet) for an individual Ethernet cable drop must be maintained.
2. Ethernet 10BaseT requires adherence to IEEE 802.3 Wiring Guidelines.
3. The Asanté*Talk* may be connected to an Ethernet switch or Ethernet hub.
4. Asanté*Talk* does not support auto-negotiation. Ethernet switches or hubs must be able to turn off or disable this feature for proper operation.

1.3 Configure Your Computer for Ethernet Communication

Follow the steps below to establish an Ethernet connection to your Macintosh:

1. Set your AppleTalk control panel to show "Connect via: Ethernet."
2. Set your TCP/IP control panel to:

   - **Modem**, if you connect to the Internet using the computer's modem

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- **Ethernet**, if you connect to the Internet using your Local Area Network

Note: See the documentation that came with your computer if you need more information.

1.4 Asanté*Talk* Power-Up

Asanté*Talk* takes approximately 15 seconds to come up on a network. It automatically detects the presence of LocalTalk devices and registers them as nodes on the Ethernet network.

After the Asanté*Talk* is active on the Ethernet network, any LocalTalk nodes that are connected to the LocalTalk segment of the network will appear within the Apple Macintosh Chooser. Those nodes will be able to utilize server resources on either Ethernet or LocalTalk (if operating systems are close) and AppleTalk capable printers on the LocalTalk side of the network.

1.5 Asanté*Talk* LEDs

The four (4) LEDs on the Asanté*Talk* indicate activity on the Ethernet and LocalTalk networks. The LEDs are shown on the table below:

LED Name	Purpose
PWR	Power
TX	Transmit
RX	Receive
LI	Link Integrity

Table 1--Four LEDs

1.6 Supported Printers

Asanté*Talk* will support AppleTalk printers, provided that the individual printers are configured with a LocalTalk communications port. For AppleTalk compatibility information, consult your printer manufacturer.

Each LocalTalk printer must be connected to the Asanté*Talk* with an approved LocalTalk adapter. The LocalTalk network must be properly terminated with two (2) terminating resistors.

1.7 Supported Apple Computer Systems

- Asanté*Talk* will support Apple Computer Macintosh systems designed with a built-in LocalTalk communications port
- Each LocalTalk Macintosh must be connected to the Asanté*Talk* with an approved LocalTalk adapter and the LocalTalk network must be properly terminated

Chapter 2 Specifications

The following is a list of the Asanté*Talk* converter's specifications:

Devices Supported

> Apple Macintosh computers with built-in Ethernet ports (for example, iMac, eMac, G3, and G4) running AppleTalk (and all LocalTalk compatible printers), with Mac OS 7.6, 8.x, 9.1, 9.2.1, OS X, OS X.1, and OS X.2

Maximum Cable Distance

> RJ45 Port:
>
> 100 meters (328 feet) on unshielded twisted-pair (UTP) cable

LEDs

> Power, Transmit, Receive, and Link Integrity

Dimensions

> 4.5" x 2.6" x 1" (114.3 x 66.0 x 25.4 mm)

Power Supply

> 115 VAC at 30 watts
> 60Hz (220 V available)

Standards Compliance

> IEEE 802.3 Ethernet specifications for Unshielded Twisted Pair (10BaseT) media, AppleTalk Phase 2 protocol

Support

> Limited Lifetime Warranty, free technical support

Chapter 3 Frequently Asked Questions

This chapter covers frequently asked questions regarding the Asanté*Talk*.

Asanté*Talk* Power-Up Sequence

Q: Is there an approved power-up sequence for the Asanté*Talk*?

A: Yes. In general, turn on all LocalTalk devices first: printers, laptops and desktop computers. After these are all functioning, do EITHER of the following:

> If the Asanté*Talk* will be connected to an existing Ethernet network, connect the silver Ethernet cable to a hub, bridge, or router, and power up the Asanté*Talk*. If the Asanté*Talk* will be connected to a computer, connect the yellow crossover cable to both Asanté*Talk* and computer, power up the Asanté*Talk*, THEN power up the computer.

Q: All my devices are on the same power strip. When I start up my computer in the morning, it doesn't "see" my printer. Why?

A: For each LocalTalk device to be accessible via Asanté*Talk*, ALL LocalTalk devices--including the printer and computer systems-- must be powered up first. This will enable the Asanté*Talk* to see each LocalTalk node.

Q: How long does it take for the Asanté*Talk* to power up?

A: It takes approximately 15 seconds for Asanté*Talk* to boot and become an active node.

Q: Why can't my PowerBook be seen on the LocalTalk network when I plug it into the network in the morning?

A: During its power-up sequence, the Asanté*Talk* polls the Local-Talk network for any available nodes. Nodes that are added after the Asanté*Talk* is powered on may not be seen. Power off the Asanté*Talk* for 30 seconds, then reconnect power to resolve this problem.

Q: During the boot process of the computer (when connected directly to the Asanté*Talk)*, the green LED labeled "LI" (Link Integrity) on the Asanté*Talk* will flash repeatedly. What causes this?

A: The Asanté*Talk* is attempting to auto-negotiate with the computer. Asanté*Talk* does not support Ethernet auto-negotiation. Always power up the Asanté*Talk* BEFORE booting the computer.

LocalTalk Network Topology

Q: Will every printer with a Mini din-8 connector (round) work with the Asanté*Talk*?

A: No. Only LocalTalk capable printers will work, even though they have a similar connector.

Q: Can I use the Asanté*Talk* serial cable on an AppleTalk compatible printer?

A: No. The Asanté*Talk* serial cable connector is designed for serial printers and for connecting a LocalTalk computer to the Asanté*Talk*. It was not designed to establish a LocalTalk network, nor was it designed to communicate with a printer that supports the AppleTalk protocol.

Q: What cabling should I use to connect my AppleTalk printer to the Asanté*Talk*?

A: LocalTalk connector kits are available for building a LocalTalk network. One connector must be provided for each LocalTalk device. If a single printer should be attached to a computer, for example, two LocalTalk connectors would need to be provided; one for the Asanté*Talk*, and one for the AppleTalk printer.

Q: What is the difference between LocalTalk and AppleTalk?

A: LocalTalk topology refers to the physical cabling used to connect the network devices. AppleTalk protocol compatibility refers to the software language the devices (computers and printers) use to communicate with each other.

Q: Is LocalTalk topology different from Ethernet topology?

A: Yes. LocalTalk topology employs a "bus" or "daisy chain" wiring

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scheme. Ethernet employs a "star" wiring scheme.
Q: How is a "star" topology different from a "bus" topology?

A: A "Star" topology requires that all cable runs terminate at a central point such as a hub, bridge or router. 10BaseT Ethernet is the most common Ethernet used with AppleTalk. A "bus" or "daisy chain" topology (such as a LocalTalk network uses) connects several devices in a row. It requires termination at the beginning and end of the "bus" for proper communication to occur.

Q: Does Asanté*Talk* support LocalTalk connection devices that utilize a "star" topology?

A: No. While some makers of LocalTalk connection devices utilize a "star" topology configuration, the Asanté*Talk* complies with the LocalTalk "bus" topology specification.

Q: Does it matter where the Asanté*Talk* resides in the LocalTalk network topology?

A: Yes. The Asanté*Talk* should ALWAYS be at the beginning of the LocalTalk network topology, and should be properly terminated.

Q: What port do I plug the LocalTalk connector into on my LocalTalk Macintosh?

A: If your Macintosh has a Network Control Panel, you should select LocalTalk Built-in and plug your LocalTalk adapter connector into the Printer port. If your Macintosh is running Open Transport and has an AppleTalk Control Panel, you can select either the Printer or Modem port. Connect the LocalTalk adapter into the port that will be used for communication. (**Note** – This will NOT work with the iMac – it does not have a Local-talk printer port!)

Q: How many LocalTalk devices can I attach to the Asanté*Talk*?

A: The Asanté*Talk* will support up to 8 additional Local-talk devices.

Ethernet Questions

Q: What do the LEDs (lights) on my Asanté*Talk* mean?

A: The four LEDs on the Asanté*Talk* help you with diagnostics. The

solid Power LED shows that the unit is receiving power. The solid green LI (or Link Integrity) LED indicates that a valid connection has been made between the Asanté*Talk* and another Ethernet device. The RX and TX LEDs blink when traffic is received from (RX) or transmitted to (TX) the Ethernet portion of the network.

Q: Why isn't there a solid green LI (Link Integrity) light after I've plugged in my Ethernet cable?

A: Possibly for 2 reasons: 1) you are using the wrong cable. The yellow cable must be used to attach the Asanté*Talk* to an Ethernet computer. The silver cable must be used to attach the Asanté*Talk* to an existing Ethernet network; 2) the cable may be defective or the wrong type. If possible, use the appropriate cable supplied with your Asanté*Talk*. If not, use a standard IEEE Ethernet Category 3 or 5 Ethernet cable.

Q: Is the LocalTalk topology style different from Ethernet topology?

A: Yes. LocalTalk topology employs a "bus" or "daisy chain" wiring scheme. Ethernet employs a "star" wiring scheme.

Q: How is a "star" topology different from a "bus" topology?

A: A "star" topology requires that all cable runs terminate at a central point such as a hub, bridge, or router. 10BaseT Ethernet is the most common Ethernet used with AppleTalk. A "bus" or "daisy chain" topology (such as a LocalTalk network uses) connects several devices in a row. It requires termination at the beginning and end of the "bus" for proper communication to occur.

Q: Could I use the yellow Ethernet cable to connect the Asanté*Talk* to a switch, hub, or bridge?

A: No. The yellow Ethernet cable that is supplied with the Asanté*Talk* is a crossover cable and will not work when connected to a port on a switch, hub, or bridge.
Q: Could I use the silver cable to connect my computer to the Asanté*Talk*?

A: No. The silver cable is designed to connect the Asanté*Talk* to a port on a switch, hub, or bridge. To connect the Asanté*Talk* to a computer, use the yellow cable that was provided with the Asanté*Talk*.

Q: What type of Ethernet cable do I need to connect the Asanté*Talk* to a switch, hub, or bridge?

A: An Ethernet cable that is wired as a standard IEEE 10BaseT cable is required. The cable must be a Category 3 or 5 type and not exceed an overall length of 100 meters or 328 feet.

Q: I just connected an Apple computer to the Asanté*Talk* via Ethernet. Why don't I see my LocalTalk printers or systems?

A: After connecting the yellow cable to the Asanté*Talk* and the computer, the computer must be configured for the proper connection method. To verify or configure the setting, if using OS 7.6 through OS 9.2.2, simply open the control panel device named "AppleTalk." For proper operation, the "Connect Via" selection must be set to **Ethernet**. If using OS 10, go to the Network Pane, set **Show** to the Ethernet port, click on the **AppleTalk** tab, click the box **Make AppleTalk Active**, and then click **Apply Now**.

Q: When I switch to Ethernet in my AppleTalk control panel, it takes awhile before it switches. Is this normal?

A: Yes. When making the Ethernet selection, the system will poll the Ethernet network and may hesitate for a few moments; this is normal. When it finishes switching, save the configuration, then go to the "Chooser" and select the appropriate resource icon.

Q: Is the Asanté*Talk* a router?

A: No. Asanté*Talk* is simply a LocalTalk to Ethernet converter that allows the Apple iMac or other Macintosh systems utilizing the EtherTalk protocol on Ethernet to print and share files with Apple-Talk protocol-compatible systems or printers on LocalTalk.
Q: Will the Asanté*Talk* process TCP/IP?

A: No. Because the Asanté*Talk* is not a router, it will not pass IP packets.

Q: If Asanté*Talk* is not a router how do I establish zones within my Ethernet network?

A: Any router, including a Windows NT server, that has been properly configured is capable of establishing zones for the network. Both hardware and software routers are available that allow EtherTalk and LocalTalk traffic. The Asanté*Talk* will reflect any zones created by a router. Consult your network administrator for more information. However, since there is no utility to control the Asanté*Talk*, there is no way to determine what zone it will show up in if there is more than one zone.

AppleTalk Protocol Compatibility

Q: What is AppleTalk protocol compatibility?

A: AppleTalk protocol is the "language" used by devices within an Apple network. One of the features of AppleTalk is that devices can be "shared" (accessed by multiple users). This protocol is not dependent upon the type of topology (physical connections) used in the network.

Q: What types of devices does Asanté*Talk* support?

A: The Asanté*Talk* supports all AppleTalk-compatible computers and printers. However, since Apple Computer™ continues to change it's implementation of AppleTalk, it is possible that there may be incompatibilities between older and newer versions of operating systems that are completely unrelated to the Asanté*Talk*.

Q: How can I tell if my printer is AppleTalk compatible?

A: A sure way is to contact the printer manufacturer. A quick way to tell is by looking at the kind of icon that is used to access the printer. If the Apple LaserWriter icon is used to access the printer, it is an AppleTalk compatible printer. Most third-party AppleTalk printer icons will have a little cable hooking into the icon. The letters "AT" will also appear. Another way is to click on the printer icon. If the printer name shows up on the righthand side of the "Chooser" window, it is an AppleTalk-compatible printer. If you are requested to choose either the printer or modem port, it is a serial printer and cannot be shared.

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Q: Which driver should I use to access my AppleTalk printer?

A: Some printers utilize Apple's LaserWriter icon. Others, such as HP and Epson, provide both serial drivers and AppleTalk drivers for their printers. Consult your printer manufacturer for the correct drivers to use.

Chapter 4 Troubleshooting

This chapter looks at some common problems with setup and configuration of the Asanté*Talk* and offers some solutions. If you cannot resolve your problem after trying the following solutions, contact Technical Support for assistance (see Appendix A: Online Warranty Registration and Card).

4.1 Most Common Problems and Questions

The following section describes the most common problems associated with setup and installation of the Asanté*Talk* converter.

1. The Asanté*Talk* must be the last LocalTalk device powered up under any configuration.

   - Completely connect and power up all LocalTalk devices and wait until all LocalTalk devices are fully ready, then power up the Asanté*Talk*. Wait at least 30 seconds and then check to see if network resources are available
   - If devices on the LocalTalk side of the bridge are turned off, the Asanté*Talk* must also be powered down. When the LocalTalk devices are to be used again, allow them to be completely powered up before turning the Asanté*Talk* back on
   - The Asanté*Talk* works best if it and all LocalTalk devices are always left powered up
   - Devices on the Ethernet side of the network do not have this restriction

2. Not all printers will work with the din-8 to din-8 cable provided with the Asanté*Talk*.

   - Some printers require that you employ LocalTalk connectors between the printer and the Asanté*Talk*. LocalTalk connectors must be purchased separately
   - A LocalTalk connector is a box that appears something like this:

- Two LocalTalk connectors are REQUIRED. One of these connectors must be plugged into the Asanté*Talk* via the attached din-8 cable. The other must be plugged into the printer's din-8 connection. A phone cord (RJ11) must then be connected between the two LocalTalk connectors. A terminator must then be plugged into the spare phone jack on each end of the daisy chain (at the first and last Local-Talk connector). The phone cord and a terminator will come with each LocalTalk connector
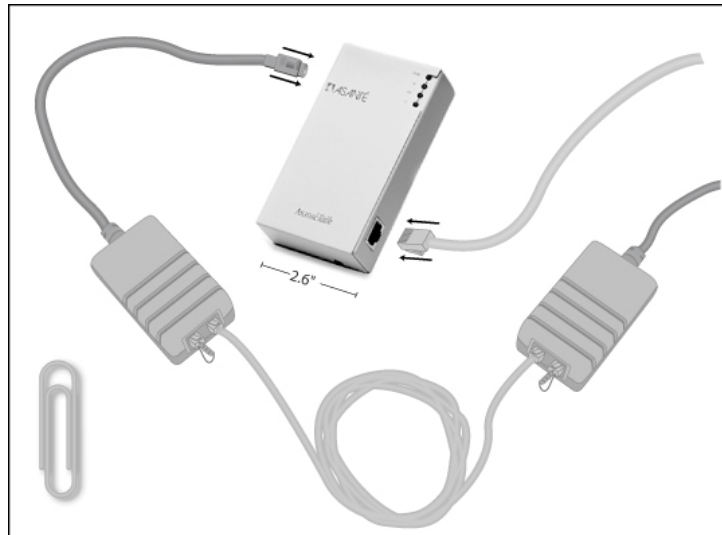
- "Star LocalTalk" connectors ARE NOT compatible with the Asanté*Talk*. "Star LocalTalk" connectors have only one RJ11 phone jack, instead of two
- Asanté recommends that LocalTalk connectors be used with any printers not manufactured by Apple. HP printers specifically require the use of LocalTalk connectors. Apple's Color StyleWriter Series also requires LocalTalk connectors

3. The printer must be LocalTalk capable.

- Some printers only have serial, not LocalTalk, functionality. Serial and LocalTalk connections use the same din-8 port. The printer MUST BE LocalTalk capable to work with the Asanté*Talk*
- On some printers, LocalTalk is an option that must be purchased separately. This option must be installed for the printer to work with the Asanté*Talk*
- To verify your printer's features, please check with the manufacturer. The following URLs may be helpful:

http://www.info.apple.com/info.apple.com/applespec/
applespec.taf
http://www.hp.com/cposupport/nonjsnav/prhome.html
http://www.epson.com/support/instans/prselmac.html

4. The yellow Ethernet cable versus the silver Ethernet cable.

- The yellow Ethernet cable is a crossover cable. As such, it is for use when the Asanté*Talk* is plugged directly into the Ethernet port of a Mac
- The silver Ethernet cable is a straight-through cable. It is to be employed when connecting the Asanté*Talk* into an Ethernet hub or switch
- If the correct cable is used, the "LI" LED on the Asanté*Talk* will light

5. Multiple LocalTalk devices and the Asanté*Talk*.

- When attaching more than one LocalTalk printer or computer, LocalTalk connectors must be used to "daisy chain" the devices together
- One LocalTalk connector must be plugged into each LocalTalk device, including the Asanté*Talk*. Phone cables (RJ11) must then be used to go from one device to the next in a straight line. The devices at the two ends of the chain must have a terminator plugged into the spare RJ11 phone jack. The Asanté*Talk* MUST BE one of these two devices at the end. *In other words, the LocalTalk connector plugged into the Asanté*Talk *must have the terminator in one of its RJ11 phone jacks*
- All RJ11 cables must be at least 6 feet long
- Star configurations or passive star configurations are NOT compatible with the Asanté*Talk*. For this reason, the Asanté*Talk* cannot be in the middle of a daisy chain configuration
- Multiple Asanté*Talk* units cannot be added to the same LocalTalk daisy chain. If you need to add multiple Ethernet Macs to a LocalTalk daisy chain, you must connect the Ethernet devices to a hub and then connect one Asanté*Talk* between the hub and the LocalTalk network

- The Asanté*Talk* can have a MAXIMUM of 8 LocalTalk devices (computers and printers) attached to its LocalTalk port

6. AppleTalk drivers versus serial drivers.

   - If you select the driver for your printer in the Chooser and it asks you to choose either the printer or modem port, you are not using the correct driver. This is the serial driver. For the Asanté*Talk* to function, you must use the printer's AppleTalk driver. If you do not have the AppleTalk driver for your printer, please contact the printer's manufacturer

7. File sharing between computers.

   - Power-up procedures followed for printers must also be followed with computers on the LocalTalk side of the bridge
   - Sharing must be set up on all computers that need to be accessed on the network. Sharing is a feature of the MacOS, so Apple must be contacted for further information and help
   - Macs running MacOS 8.5.1 cannot share files with Macs that are not running Open Transport. This again is a MacOS issue, so Apple must be contacted for further information and help (Mac OS 7.6 was the first to use Open Transport natively. Mac OS 7.5.3 has an optional or Custom install for adding Open Transport. Mac OS 7.5 and older can only use Classic Networking.)

8. Asanté*Talk* versus Micro AsantéPrint.

   - The Micro AsantéPrint is an older version of the Asanté*Talk,* with some additional features and some limitations
   - The Micro AsantéPrint is better suited for large networks with AppleTalk zones. It includes a software program that allows you to select into which zone the device and its printers will appear
   - The Micro AsantéPrint will not work when connected to an auto-sensing port or computer. Thus, it cannot be connected directly to an iMac, Blue & White G3, or a 10/100 hub or switch
   - The Micro AsantéPrint is for printers only. LocalTalk computers are not supported for file sharing

9. I still cannot see my printer or computer!

- If, after following all of these instructions, the printer or Lo-
  calTalk computer is still not accessible by the network,
  something is probably physically wrong with the setup
- By the process of elimination, you need to test the
  Ethernet cables, the din-8 to din-8 cable, or the LocalTalk
  connectors--including the phone (RJ11) cable and the ter-
  minators. For example, plug the printer directly into a Mac
  that has a printer port using the same LocalTalk cabling
  and see if the printer is accessible
- Use the Ethernet cable to connect to some other Ethernet
  device to test its functionality
- If all the cables prove to be functioning, then the
  Asanté*Talk* itself may be defective. Contact Asanté's Tech-
  nical Support

4.2 Basic Configuration Instructions

This section provides step-by-step instructions for three configura-
tion scenarios. If you cannot find your solution here, contact Techni-
cal Support (see Appendix A: Online Warranty Registration and
Card).

A Macintosh Computer with one printer

Follow the steps below to configure a Macintosh computer and one
printer:

1. Power up the Mac.
2. Take the YELLOW Ethernet cable and connect one end into
   the Ethernet port of the Mac. Plug the other end into the
   Asanté*Talk*.
3. Take the din-8 cable and plug one end into the printer. Plug the
   other end into the Asanté*Talk*.
4. Power up the printer. Wait until printer is completely warmed up
   and ready to print.
5. Take the din-8 cable and plug one end into the printer. Plug the
   other end into the Asanté*Talk*.
6. Plug the power transformer into the Asanté*Talk*. On occasion,
   the Mac may also need to be restarted after powering up the
   Asanté*Talk*.

7. Wait 30 seconds.
8. Go to the AppleTalk control panel of the Mac. Make sure it is set to "connect via Ethernet."
9. On the Asanté*Talk*, the power and "LI" LEDs should now be lit.
10. Go to the "Chooser" in the Mac. Select the appropriate Apple-Talk driver for your printer. The window to the right should then show your printer. For questions on which driver should be selected, please contact your printer's manufacturer.
11. Proceed with printer setup as outlined by the printer's manufacturer.

A Macintosh computer and one printer using LocalTalk connectors

Note: To decide when LocalTalk connectors are required instead of the din-8 to din-8 cable, please see note 2 of the Most Common Problems Section (p. 21).

Follow the steps below to configure one Macintosh and one printer using LocalTalk connectors:

1. Power up the Mac.
2. Take the YELLOW Ethernet cable and connect one end into the Ethernet port of the Mac. Plug the other end into the Asanté*Talk*.
3. Plug one LocalTalk connector into the din-8 port of the Asanté*Talk*. Plug another LocalTalk connector into the din-8 port of the printer. Connect the two LocalTalk connectors together with the phone cable that came with the LocalTalk connector. In the spare phone jack of each LocalTalk connector, plug in the terminator.
4. Power up the printer. Wait until the printer is completely warmed up and ready to print.
5. Plug one LocalTalk connector into the din-8 port of the Asanté*Talk*. Plug another LocalTalk connector into the din-8 port of the printer. Connect the two LocalTalk connectors together with the phone cable that came with the LocalTalk connector. In the spare phone jack of each LocalTalk connector, plug in the terminator.
6. Plug the power transformer into the Asanté*Talk*. On occasion, the Mac may also need to be restarted after powering up the Asanté*Talk*.
7. Wait 30 seconds.

8. Go to the AppleTalk control panel of the Mac. Make sure it is set to "connect via Ethernet."
9. On the Asanté*Talk*, the power and "LI" LEDs should now be lit.
10. Go to the "Chooser" in the Mac. Select the appropriate Apple-Talk driver for your printer. The window to the right should then show your printer. For questions regarding which driver should be selected, please contact your printer's manufacturer.
11. Proceed with printer setup as outlined by the printer's manufacturer.

The Asanté*Talk*, an Ethernet hub/switch, and one printer

Follow the steps below to configure the Asanté*Talk*, an Ethernet hub or switch, and one printer:

1. Plug Asanté*Talk* into the Ethernet hub/switch with the SILVER Ethernet cable.
2. Power up a Mac that is also connected to the Ethernet hub/switch.
3. Go to the AppleTalk control panel of the Mac. Make sure it is set to "connect via Ethernet."
4. Connect the printer to the Asanté*Talk* using either the din-8 to din-8 cable or LocalTalk connectors as described in item number 5 above.
5. Power up the printer. Wait until printer is completely warmed up and ready to print.
6. Connect the printer to the Asanté*Talk* using either the din-8-din-8 cable or LocalTalk connectors as described above.
7. Plug the power transformer into the Asanté*Talk*.
8. Wait 30 seconds.
9. On the Asanté*Talk*, the power and "LI" LEDs should now be lit.
10. Go to the "Chooser" in the Mac. Select the appropriate Apple-Talk driver for your printer. The window to the right should then show your printer. For questions regarding which driver should be selected, please contact your printer's manufacturer.
11. Proceed with printer setup as outlined by the printer's manufacturer.

4.3 Asanté*Talk* and OS X

The Asanté*Talk* will work with OS X (and OS 9.2). You will need to set your printer up by selecting AppleTalk devices in the **Utilities/ Print Center/Add printer** selection screen. Asanté has been conducting intensive research with OS 10.x and OS 9.2.x compatibility with our products. The following sections describe notable issues and their solutions for using the Asanté*Talk* with these operating systems.

Apple File Services (AFS)

The biggest change in the OS is to the Apple File services protocol that makes some legacy devices (such as older AppleTalk printers) unusable. OS 10.x and OS 9.2.x do not support Apple File Protocol (AFP) over AppleTalk. Instead, they use AFS.

This change will cause problems when talking to workstations running a previous version of the legacy Macintosh OS, and devices designed for operation with AFP. Some older AppleTalk printers are not supported by the release of OS 10 (and this may be true of OS 9.2 as well). We have found that our office's LaserWriter 4/600 is fully supported, but our older LaserWriter NTR is not functional using the LaserWriter 8 drivers supplied with the OS 10.x version. If your printer is not working and you are using these versions of the OS, then it is possible that the printer might not be supported by the current release of this OS.

Driver/Preference Conflict

There is an apparent driver/preference conflict between the OS 9.2.2 and the Asanté*Talk*. The solution requires the removal of several preferences in order to allow printing to proceed with various printer drivers. In these instances, the printer can be seen from the printer Utilities, but will not print. The problem can be resolved by removing the following extensions:

- IdleTime
- N2MP3

    Note: True Finder Integration Control Panel from Stuffit is also recommended for removal, by Apple, to fully address this issue.

See Apple's Discussion pages (discussions.info.apple.com), under **Mac OS Mac OS 9 Discussions Mac OS 9.2—9.2.2 Usage**, and search for related printing items.

Unregistered Addresses

If you continue to experience problems after addressing the above issues, it is likely to be caused by a common error that is a function of the Asanté*Talk* using registered addresses for devices that have been restarted (such as when there has been a power outage). These new addresses are unregistered and this is what causes the failure to find the other devices. Follow the steps below to resolve this issue:

1. Make sure that the yellow cable is used from the workstation to the Asanté*Talk*.
2. If using a hub, make sure that the silver cable is used, and that its connection to the hub is through a numbered port (not the uplink port).
3. Use the serial cable from the Asanté*Talk* to the printer. You can move the cables without powering down any devices, as they do not carry any voltage.
4. With the Asanté*Talk* attached to the LocalTalk network, and with all other devices powered on, power down the Asanté*Talk* for about 5 seconds.
5. Plug the power back in, and in about 40 seconds, everything should show up in **Chooser**.

If these steps do not work, continue with the following:

6. Leave all Asanté*Talk* cables in place and shut down all systems attached to the LocalTalk chain, including the Asanté*Talk*.
7. If you have a cable or DSL modem, disconnect the modem from your hub.
8. Leaving the Asanté*Talk* off, individually restart the devices attached to the LocalTalk string. Allow the workstations to come fully to the desktop and all the printers to completely cycle and print (if enabled) the status page.
9. Restart the Asanté*Talk*.
10. From the Ethernet workstation, select the **Apple Share** icon from **Chooser**. You should see the attached systems on the LocalTalk chain and should also be able to print to the remote printers.

If these steps do not work, continue with the following:

11. Power down the Asanté*Talk* and remove the printer cable.
12. Power up the Asanté*Talk*.
13. While the TX light is flashing, attach the printer cable back into the Asanté*Talk*.
14. After waiting 1 minute, re-attach your cable or DSL modem (if used) to the hub.

These procedures ought to resolve this problem and it is recommended that you now leave the Asanté*Talk* powered up to avoid having to reconfigure its set up. If the printer still does not show up, please contact Asanté technical support at www.asante.com/support.

AsantéTalk Ethernet to LocalTalk Converter

Appendix A Online Warranty Registration and Card

Before contacting Asanté's Technical Support, please register your product online at www.asante.com/support/registration.html or by using the card below. By doing so, you will be entitled to special offers, up-to-date information and important product bulletins.

ASANTÉ

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL   PERMIT NO. 4195   SAN JOSE CA

POSTAGE WILL BE PAID BY ADDRESSEE

REGISTRATION CARDS
ASANTE TECHNOLOGIES INC
821 FOX LANE
SAN JOSE CA 95131-9882

Name

Title

Company

Address 1

Address 2

City

State

Zip/Postal

Country

Phone

Fax

Email

Date of purchase

Asanté Part Number

Product Serial Number

Please seal with tape, not staple or paperclip

1) What is your organization's primary business?

- ☐ Advertising Agency/ Public Relations
- ☐ CAD/CAM
- ☐ Graphic Arts Services
- ☐ Multimedia/Video
- ☐ Sales
- ☐ Finance
- ☐ College/University
- ☐ Higher Education
- ☐ K-12
- ☐ Manufacturing
- ☐ Medical/Dental
- ☐ Printers
- ☐ Prepress
- ☐ Publishing
- ☐ Transportation
- ☐ Corporate/In-plant, Non-commercial In-house Graphic Services
- ☐ Other

2) My primary job function is (Check only one):

- ☐ Business Management (President, Owner, VP, etc.)
- ☐ Communications/ Publishing Management
- ☐ Educational Management
- ☐ Management Information Systems (MIS)
- ☐ Graphic Arts/ Design Management
- ☐ Production Management
- ☐ Department Supervision/ Management

3) What is your influence on purchasing decisions?

- ☐ Authority to evaluate and purchase
- ☐ Evaluate and recommend

4) Have you previously purchased an Asanté product?

- ☐ Yes
- ☐ No

If yes, which product?
_____

5) Where did you purchase the product?

- ☐ Reseller
- ☐ Direct from Asanté
- ☐ Distributor
- ☐ Mail Order
- ☐ Web
- ☐ Other

6) Types of workstation operating systems:

- ☐ Mac OS
- ☐ Windows 95/98
- ☐ Windows® NT/2000
- ☐ Linux
- ☐ UNIX
- ☐ MS DOS
- ☐ Solaris
- ☐ Other

7) Number of nodes on your network:

- ☐ 2-10
- ☐ 10-50
- ☐ 50-100
- ☐ 100-500
- ☐ 500+

8) Type of network:

- ☐ LocalTalk
- ☐ Ethernet
- ☐ Fast Ethernet
- ☐ Gigabit Ethernet
- ☐ FDDI
- ☐ ATM

9) Type of network operating systems:

- ☐ Novell NetWare
- ☐ Microsoft NT/2000
- ☐ AppleTalk/MacLAN Connect
- ☐ AppleShare
- ☐ UNIX/Linux

10) Types of network management software:

- ☐ IntraSpection
- ☐ AsantéView
- ☐ SunNet Manager
- ☐ IBM NetView
- ☐ Optivity
- ☐ HP OpenView
- ☐ Other

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ASANTÉ

AsantéTalk Ethernet to LocalTalk Converter
User's Manual

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