

PARTNER™ AND
PARTNER™ PLUS
Communications Systems

Release 2



PARTNER™
PRODUCT SALES
GUIDE

PARTNER™
and
PARTNER™ Plus
Communications Systems

Release 2

Product Sales Guide



Table of Contents

	Page #
1.0 Executive Summary	5
2.0 The Market for Small Business Communications Systems	9
2.1 Customer Attitudes	10
2.2 Customer Characteristics	12
2.3 Customer Needs	14
3.0 PARTNER and PARTNER Plus Product Overview	17
3.1 Basic Characteristics	17
3.2 PARTNER and PARTNER Plus Features	25
3.2.1 Making and Receiving Calls	25
3.2.2 Managing Telephone-Based Communications	29
3.2.3 Managing the System	35
3.2.4 Controlling Telecommunications Costs	39
3.3 PARTNER and PARTNER Plus Release 2 System Components and Performance	41
3.3.1 System Components	41
3.3.2 Performance	45
3.4 PARTNER and PARTNER Plus Release 2 Adjuncts and System Interfaces	45
3.4.1 Adjuncts and Other Support Devices	45

3.4.2	Interfaces With Other Systems	52
3.5	PARTNER and PARTNER Plus Release 1 vs. Release 2	53
3.6	AT&T Product Matrix	54
3.7	Compatibility Between Release 1 and Release 2	58
3.7.1	PARTNER	58
3.7.2	PARTNER Plus	58
3.8	Growth and Upgrade	58
3.8.1	PARTNER Growth and Upgrade	59
3.8.2	PARTNER Plus Growth and Upgrade	60
4.0	PARTNER and PARTNER Plus Positioning	63
4.1	What PARTNER and PARTNER Plus Bring to AT&T GBS	63
4.2	What PARTNER and PARTNER Plus Bring to Small Business Customers	64
4.2.1	Equipment Connections	64
4.2.2	Management Control	65
4.2.3	Messaging	65
4.2.4	Mobility	65
4.2.5	Reliability	66
4.2.6	Network Connections: PARTNER Plus Behind Centrex	66
5.0	Selling PARTNER and PARTNER Plus	67
5.1.	Bundling - "Growing" Your Customer	67
5.2	Cost Justification	68
5.2.1	Cost of Interface Devices	68

	Page #	
5.2.2	Cost of Dedicated Lines	68
5.2.3	Network Costs	69
5.2.4	Opportunity Costs	69
5.3	Sample Selling Scenarios	69
5.3.1	Company A: Care Providers	70
5.3.2	Company B: Information Managers	72
5.3.3	Company C: Producer/Distributor	74
5.3.4	Company D: Project Professionals	76
5.3.5	Company E: Service Deliverer	77
5.3.6	Company F: Walk-In Merchant	78
5.4	Selling With Confidence	80
5.5	Competition	82
5.5.1	PARTNER/PARTNER Plus Competitive Position	82
5.5.2	Sources of Information on Competing Products	84
5.5.3	Key Competitors	85
5.6	Price Element Codes	89
5.7	Availability	91
5.8	Warranty	91
6.0	For Additional Information	93
	Appendix 1: Basic Telecommunications Terms	95
	Appendix 2: Product Shots	101

Trademark Acknowledgments

AT&T, Merlin, Spirit, and Music on Hold are registered trademarks and PARTNER, PARTNER Plus, MLS-6, MLC-6, MLS-12, MLS-12D, and MLS-34D are trademarks of AT&T.

Every effort has been made to properly represent vendors' trademarks. Products cited in the text, but not listed here, may be trademarks of their respective vendors.

1.0 Executive Summary

The PARTNER™/PARTNER™ Plus product line has been introduced to meet the basic telephone system needs of small business customers with 2-24 extensions. These customers generally fall into six basic categories: care providers, information managers, producers/distributors, project professionals, service deliverers, and walk-in merchants.

Because their businesses are small, PARTNER/PARTNER Plus prospects tend to have low call volume, fairly low long-distance bills, simple call processing requirements, and a “face-to-face” style of doing business. They regard the purchase of a communications system as a major purchase, and generally speak to more than one vendor. While potential PARTNER/PARTNER Plus buyers may not necessarily perceive a strong direct relationship between company profitability and the company’s phone system, they do want certain features, and they wish to improve how they handle telephone-related business functions. They are considering a communications system purchase because their present system is difficult to use, is at or near capacity, or never really met their needs. It is not unusual for these customers to be unaware that AT&T has products that can fulfill their requirements.

Currently in Release 2, PARTNER and PARTNER Plus communications systems can improve the quality of service users provide their customers; reduce or control the costs of using the network; streamline operations; and provide flexibility, upgradability, and reliability. Upgrading from Release 1 to Release 2 is extremely simple because of built-in forward and backward compatibility.

The most important feature of PARTNER and PARTNER Plus is tip/ring compatibility. This allows a customer to connect industry-standard equipment without installing additional dedicated lines or using expensive adapters. Since PARTNER and PARTNER Plus are modular, they are simple to install, program, maintain, and upgrade. They are backed by high-quality customer support. PARTNER and PARTNER Plus are protected during power outages.

Most potential customers for a PARTNER communications system are primarily interested in a simple system that provides easy call handling and basic features such as Last Number Redial, Privacy, Auto Dialing, System Speed Dialing, Conferencing, Hold, Transfer, and In Range-Out of Building capability.

PARTNER Plus prospects are the larger companies in the small business market, and they are looking for a somewhat more sophisticated, albeit still simple, system that includes Dialing Restrictions, Intercom Paging, Do Not Disturb, Fax Management, Night Service, and support for adjuncts such as doorphones and music-on-hold. Some PARTNER Plus customers may wish to use their systems in conjunction with Centrex. This is not unusual, since PARTNER Plus can fill certain Centrex feature gaps, and many businesses are now using a key system such as PARTNER Plus “behind” Centrex.

The preceding feature descriptions are by no means complete. A full description of PARTNER and PARTNER Plus features is included in Section 3 of this document.

PARTNER and PARTNER Plus have been extremely successful since their introduction in 1989. While there are

competing systems in the marketplace, PARTNER and/or PARTNER Plus hold the edge in several significant areas, such as enhanced tip/ring functionality, multilingual display, fax management, customer documentation, and upgradability/expandability.

2.0 The Market for Small Business Communications Systems

- Company A, a well-established group of four physicians in private practice, occupies a suite of offices in a building that houses several other professional practices as well.
- Company B is an executive-level employment agency that swaps electronic resumes and job availability information via computer with similar agencies in other geographical areas.
- Company C is a small, family-owned manufacturer of signs. The firm has its administration and management in one building and its factory space in a second building on the same property.
- Company D is a relatively new, two-room operation headed by a promising young architect with a small part-time staff.
- Company E provides catering services within a 50-mile radius of its kitchen facilities. The firm is a moderate-sized business with a solid and growing customer base.
- Company F is a children's clothing retailer with its sales floor, inventory storage, and office space in one location.

Although these businesses are clearly very different from one another, they all have at least one thing in common. Their telecommunications needs can be met affordably and conveniently with an AT&T PARTNER or PARTNER Plus communications system.

AT&T GBS introduced the PARTNER and PARTNER Plus systems to serve customers with 2-24 extensions. These customers fall into six basic categories:

- Care providers
- Information managers
- Producers/distributors
- Project professionals
- Service deliverers
- Walk-in merchants

It is estimated that there may be as many as 400,000 potential customers in the PARTNER/PARTNER Plus target market.

Response to the initial PARTNER/PARTNER Plus release was outstanding, with more than 37,000 systems sold between 10/90 and 7/91. Currently in Release 2, PARTNER and PARTNER Plus have become even more beneficial. They continue to offer small businesses flexibility and simplicity, along with features that once were reserved for purchasers of larger, more complex and more expensive systems.

2.1 Customer Attitudes

While the attitudes of potential customers for PARTNER and PARTNER Plus are not all alike, market research, focus groups, observations by sales personnel, and feedback from existing customers reveal several patterns.

(1) Some members of the target market do not perceive the telephone as having a significant role in satisfying their customers, nor do they instinctively feel that the telephone can directly help increase revenue and growth. However,

they do want certain features, and they wish to improve how they handle telephone-related business functions.

(2) When making a purchase they classify as “major,” such as a communications system, most small business customers feel it is prudent to comparison shop. Although prospects in this segment may profess to be unwilling to pay for a reputation for service, they *do* expect excellent service.

(3) In most instances, the decision-maker is the business owner or a high-level manager who is likely to ask the advice of peers or family members involved in the business, the receptionist, or the owner’s executive secretary. The decision to buy a system can be made spontaneously, or it can take up to three months.

(4) Frequently, customers who own and/or operate small businesses are unaware that AT&T provides an affordable system that is small and simple enough to meet their needs.

(5) Owners of very small businesses (2-4 sets) frequently feel more at ease buying equipment at a retail establishment such as a Phone Center store. Research suggests that these customers may be uncomfortable with traditional face-to-face sales situations.

(6) GBS focus groups have helped define certain sales approaches that turn off potential PARTNER and PARTNER Plus customers. Because the majority of small business people are looking for a simple system, they may misinterpret some PARTNER/PARTNER Plus features, such as the displays and LEDs, as too complex. Furthermore, the fact that a user card is provided and a videotape is available for ongoing training may cause customers to feel the system might not be easy to use. It is important

that sales representatives emphasize how simple the basic system is. The more sophisticated features should be presented as complements to the system.

2.2 Customer Characteristics

PARTNER and PARTNER Plus customers share *similar communications patterns*, even though they may be involved in dissimilar businesses and have different expectations about what a communications system can do for them.

Because their businesses are small, PARTNER and PARTNER Plus prospects have:

- Low call volume
- Fairly low long-distance bills
- Simple call processing requirements
- A “face-to-face” style of doing business

Retailers, manufacturers, business service providers, and wholesalers find PARTNER and PARTNER Plus systems particularly attractive.

PARTNER and PARTNER Plus customers are categorized by *how* their businesses operate, not what their businesses do. Therefore, it isn't necessary for you to learn all about a prospect's industry to be able to assess the needs of his/her company.

Care providers are professional firms or practices that provide a personal service to clients or patients, usually on-site by appointment. A care provider's office generally has a waiting area with a receptionist and one or more separate

areas in which the professional consults with the client or patient.

Medical, dental, and veterinary practices; psychologists' offices; and counseling services are examples of *care providers*.

Information managers use technologies to exchange, deliver, or manage information. In general, they search and analyze information and act as intermediaries between buyers and sellers.

Credit and collection agencies; data processing services; employment agencies; discount stock brokers; title search companies; travel agencies; and telemarketing bureaus *manage information*.

Producers and distributors sell or distribute products that they either manufacture, process and/or assemble themselves, or obtain from other suppliers. While these companies may have small, on-premises showrooms or offices, they generally do business in a warehouse or factory environment.

Fabricators; paper mills; durable goods manufacturers; restaurant supply companies; food processors; and commercial printers are businesses that fall into the *producer/distributor* category.

Project professionals are companies with specialists who provide continuing services over an extended period. While project professionals may meet with their clients at off-premises locations, often meetings take place at the firm's location. There is frequent telephone contact between professionals and their clients while a project is under way.

Accounting, architectural, insurance, and consulting groups; advertising agencies; and law practices are typical *project professionals*.

Service deliverers employ professionals and/or skilled workers who perform some kind of labor or service at a customer site, or make pickups and deliveries. Even if a service deliverer has an office, customers seldom transact business there.

Caterers; home health care services; home improvement contractors; lawn care companies; movers; and pest control firms are typical *service deliverers*.

Walk-in merchants sell goods or services to customers who visit the seller's premises. Frequently, these firms have a public area and a separate storeroom, office, and/or work area.

Auto dealers; movie theaters; pharmacies; quick-print shops; restaurants; and retail stores form the *walk-in merchant* category.

Some potential PARTNER and PARTNER Plus customers may be in more than one of these groups. This simply makes PARTNER and PARTNER Plus even more useful to them and provides the AT&T sales representative with more selling leverage.

2.3 Customer Needs

Small business customers want a simple communications system that requires little or no user training. *Their major concern is that a system be easy to use.* Other stated or implicit objectives include:

- Improving the quality of service they provide their customers
- Reducing and/or controlling the costs of using the network
- Making their businesses run more smoothly
- Providing flexibility, upgradability, and reliability

Many potential customers for PARTNER and PARTNER Plus systems are ready to change systems because their present system:

- Is difficult to use
- Is at or near capacity
- Never really met their needs

Others have not used a “communications system” before and may be making do with a combination of single-line telephones and dedicated lines.

In either case, a small business without a PARTNER or PARTNER Plus system is missing opportunities to improve customer service, enhance productivity, and manage telecommunications costs.

3.0 PARTNER and PARTNER Plus Product Overview

3.1 Basic Characteristics

PARTNER and PARTNER Plus are key telephone systems that provide customer-controlled access to lines.

PARTNER and PARTNER Plus are digital *key telephone systems*. Key systems have phones with multiple buttons and lights (LEDs), permitting the user to access system-supported features and select outgoing/incoming telephone lines directly. Key system LEDs prevent unnecessary disruptions by allowing users to see which lines are already active.

The enhanced tip/ring feature means connectivity without additional network costs or adapters.

The most important feature of PARTNER and PARTNER Plus systems is *tip/ring compatibility*. This allows customers to connect equipment, such as answering machines, facsimile machines, modems, credit card readers, cordless telephones, and single line telephones, to a PARTNER or PARTNER Plus system without installing additional dedicated lines or using expensive adapters.

Therefore, PARTNER and PARTNER Plus customers have the flexibility to “customize” their phone systems by affordably connecting equipment they may already own, such as answering machines and touch-tone or rotary phones, as well as new equipment that can improve the way they do business.

AT&T holds a patent on enhanced tip/ring (ETR) combo operation, which refers to the simultaneous operation of a system phone and an industry-standard tip/ring device on a single extension.

PARTNER and PARTNER Plus systems are just the right size for busy small companies.

The PARTNER system maximum capacity is four CO (central office) lines and 12 extensions.

The PARTNER Plus system maximum capacity is eight CO lines and 24 extensions.

PARTNER and PARTNER Plus are reliable modular systems that are easy to install, program, maintain, and upgrade.

PARTNER and PARTNER Plus communications systems have been designed and tested by AT&T Bell Laboratories. Under test conditions, both systems have demonstrated outstanding reliability.

PARTNER and PARTNER Plus are user-installable, although AT&T recommends that PARTNER Plus be installed by AT&T service personnel. The modular design of PARTNER and PARTNER Plus systems makes installation quick and easy. Customers experience little disruption and user training is simple. No maintenance is required except keeping the equipment clean and dust-free and avoiding damage to wires.

PARTNER and PARTNER Plus system features are user programmable. Upgrading or expanding PARTNER or PARTNER Plus most often involves simply swapping modular components.

PARTNER and PARTNER Plus are backed by customer support.

A 24-hour help line is available for PARTNER and PARTNER Plus customers. Documentation is concise and well illustrated. A user doesn't need an engineering degree to make and receive calls!

PARTNER and PARTNER Plus are protected during power outages.

Battery backup stores the system's memory in the event of a power failure. Therefore, the system doesn't need to be reprogrammed when the power comes back on. An optional uninterruptible power supply (UPS) keeps the system functioning during a power outage.

Built-in surge protection and lightning protection prevent damage to the system during electrical storms. The protection is so good we *guarantee* it, which is uncommon in the industry.

Easy to use PARTNER and PARTNER Plus feature make small business telecommunications simple and more cost-effective.

Most potential customers for a PARTNER communications system are primarily interested in:

- A simple, basic, reliable system
- Easy, one-touch access to features such as Last Number Redial and Privacy
- Auto Dialing and System Speed Dialing
- Basic dialing restrictions
- Conferencing
- IROB (in range - out of building) capability

PARTNER Plus prospects are the larger companies in the small business target market. Often these customers find the following added features attractive:

- Powerful dialing restriction options such as Allowed/Disallowed-Lists and Toll Restrictions
- Intercom (Group) Paging
- Do Not Disturb
- Fax Management
- Night Service
- Expanded extension programming

- Support for doorphones, paging systems, hot line, and/or music-on-hold systems

These are just a few of the major features of PARTNER and PARTNER Plus communications systems. Section 3.2 provides detailed descriptions of the PARTNER and PARTNER Plus features that are shown in *Features at a Glance*.

Features at a Glance PARTNER and PARTNER Plus Release 2

Feature	PARTNER	PARTNER Plus
Allowed/Disallowed Lists	-	yes
Automatic Line Selection	yes	yes
Automatic Privacy	-	yes
Bridging	yes	yes
Built-In Speakerphone	yes	yes
CENTREX Support	-	yes
Call Pickup	-	yes
Call Restriction	3 levels	3 levels
Central Telephone Programming from the Attendant	yes	yes
CO Forward Disconnect	yes	yes
Conference - CO-CO	yes	yes
Conference - Outside Conf Denial	-	yes
Conference - CO Call Drop	yes	yes
Conference - CO-ICOM	yes	yes
Copy Port Data	-	yes
Cordless Phone	yes	yes
Differentiated Ringing	-	yes
CO/ICOM	yes	yes
Direct Facility Termination	-	yes
Display - Call Timer	-	yes
Display - Calling Party ID	-	yes
Display - Clock/Date	-	yes
Display - Number Dialed	-	yes
Display - Identify	-	yes
Display - My Extension	-	yes
Display - Transfer Return Identification	-	yes
Do Not Disturb	-	yes
Doorphones	-	yes

Features at a Glance (cont.)
 PARTNER and PARTNER Plus Release 2

Feature	PARTNER	PARTNER Plus
“911” Emergency Dialing	yes	-
Emergency Number List	-	yes
Enhanced T/R (ETR)	yes	yes
End-to-End Signaling (manual)	-	yes
English/Spanish/French Display per Extension	-	yes
Extension Programming	yes	yes
Extension Test	yes	yes
Facility Postselect	yes	yes
Facility Preselect	yes	yes
Facility Status Information	yes	yes
(Facility Tracking) Line Reserve	-	yes
Fax Management Button	-	yes
Feature Button	yes	yes
Group Call Pickup	-	1 group
Hands-Free Answer On Intercom (HFAI)	yes	yes
Hold - Common	yes	yes
Hold - Exclusive	-	yes
Hold Release On Abandon	yes	yes
Hold Reminder Tone	-	yes
Hot Line	-	yes
Idle Intercom Timeout	yes	yes
Intercom Autodial (Ext. No.)	-	yes
Intercom Autodial (* plus Ext. No.)	-	yes
Intercom Call - Ring	yes	yes
Intercom Call - Voice Signal	yes	yes
IROB	yes	yes
Last Number Redial	yes	yes

Features at a Glance (cont.)
 PARTNER and PARTNER Plus Release 2

Feature	PARTNER	PARTNER Plus
Line Assignment	-	yes
Line Restrictions	-	yes
Line Ringing Options	yes	yes
Loudspeaker Paging	opt.	yes
Message Light On/Off	-	yes
Music-On-Hold - External	-	yes
Night Service	-	yes
Onhook Dialing	yes	yes
One Touch Transfer	-	yes
Outside Autodial	yes	yes
PBX Dial Out Code (1 digit)	-	yes
Password Restriction Override	-	yes
Personal Line Termination	-	yes
Personal Speed Dialing	0	20
Privacy	yes	yes
Real-Time Clock	-	yes
Recall - CO/Intercom	yes	yes
Ringing Line Preference	yes	yes
Ringing at Busy Telephone (abbr. or continuous)	yes	yes
Rotary/Touch-Tone Dialing	yes	yes
Save Number Redial	-	yes
Square Operation	yes	yes
System ID	yes	yes
System Speed Dialing	60	60
Touch-Tone Enable	yes	yes
Transfer	yes	yes
Transfer Return	-	yes
Transfer Return to Programmable Extension	-	yes

Features at a Glance (cont.)

PARTNER and PARTNER Plus Release 2

Feature	PARTNER	PARTNER Plus
Transfer Return Identification	-	yes
Volume Backup/Restore	yes	yes
Volume Control - Handset	yes	yes
Volume Control - Ringer	yes	yes
Volume Control - Speaker	yes	yes

3.2 PARTNER and PARTNER Plus Features

PARTNER and PARTNER Plus features can be grouped according to how they are used by customers:

- To make and receive calls
- To provide a variety of telephone-based communications functions
- To manage the system
- To control telecommunications costs

It is important to note that the ability to program and use features is hardware driven; that is, it depends to a great degree on the specific type of telephone at each extension. While PARTNER and PARTNER Plus systems do allow customers to use several types of telephones, full PARTNER/PARTNER Plus functionality requires proprietary system phones. There is also a PARTNER/PARTNER Plus-compatible cordless telephone, the MLC-6.

3.2.1 Making and Receiving Calls

Automatic Line Selection (P/P+)

Users simply pick up a handset and the system automatically provides a line. There is no need to push a button to access a line. Lines are made available according to either the system default pattern or a customer-programmed pattern.

Automatic Line Selection is one of many PARTNER and PARTNER Plus features that make the system extraordinarily easy to use.

Ringling Line Preference (P/P+)

When an extension that is programmed to answer incoming calls (an alerting extension) goes offhook, it is automatically connected to the call that has been ringing for the longest amount of time. This feature improves customer service because it permits calls to be answered efficiently and in the order received.

Line Ringing Options (P/P+)

Both PARTNER and PARTNER Plus feature **immediate ring** and **no ring** line ringing options.

Immediate Ring lets predesignated extension(s) ring as soon as the line rings. This is ideal for employees whose duties include taking messages.

No Ring provides an alerting visual signal (a flashing light) but no audible signal. Individuals who are not responsible for answering incoming calls are not disturbed.

PARTNER Plus has an additional line ringing option, **delayed ring**, which rings a specified extension after 15 seconds (or three rings) have elapsed. This feature helps ensure that an incoming call is not inadvertently lost.

Joining (Bridging) (P/P+)

Bridging allows users to join and leave conversations without disrupting the call. LEDs indicate that a particular line is in use. If a user wishes to join the call in progress, all he/she has to do is select that line by pressing its button, and then pick up the handset. When the user wishes to leave the conversation, he/she just hangs up.

Bridging is especially helpful in making it easier to communicate and reducing callbacks. The person who originated the call can tell if someone has joined that call, because the corresponding LED on the telephone set will be blinking.

Call Pickup (P+)

Users can answer an incoming call at any properly programmed extension. Employees are able to move around the premises without worrying about missing calls or being unable to answer the phone promptly.

Dialing Features

Last Number Redial (P/P+)

The last number dialed at an extension may be redialed at the touch of a button, making it convenient to keep trying to reach a number that is busy.

Onhook Dialing (P/P+)

Calls may be placed on all proprietary PARTNER and PARTNER Plus MLS and MLC telephones (see section 3.3, Components) without lifting the handset. Call progress tones are heard through the speaker. This hands-free operation allows employees to continue to work while placing calls.

System Speed Dialing (P/P+)

Sixty numbers of up to 20 digits each can be programmed for shared use on a systemwide basis. These numbers are quickly and simply dialed using the feature button and a two-digit code instead of the complete number.

When entering System Speed Dial numbers into PARTNER Plus, the system programmer may designate specific numbers that can be dialed via System Speed Dialing even though a feature such as Toll Restriction is in effect. Therefore, employees with restricted phones can still make certain long-distance calls.

Personal Speed Dialing (P+)

Like System Speed Dialing, Personal Speed Dialing offers the convenience of having to press the feature button and then dial only two numbers to place a call. However, Personal Speed Dialing allows an individual user to program speed dialing numbers at his/her own telephone. These numbers are not systemwide. Twenty numbers of up to 20 digits each are programmable by extension.

Save Number Redial (P+)

Save Number Redial puts an unfamiliar yet important telephone number at the user's fingertips. A user may save a telephone number by pressing a preprogrammed button. The number can be redialed by pressing the button after going onhook. One number per preprogrammed button may be saved in the system at a time. (A user can have as many SNR buttons as needed.)

Save Number Redial is useful, for example, when an employee is trying to resolve a problem with a particular vendor. Although the employee may not call the supplier frequently under normal conditions, solving the current problem will entail multiple calls over the course of several days. The first time the user telephones the vendor, the user can temporarily store the number by using Save Number Redial.

Outside Autodial (P/P+)

A button can be programmed to automatically dial an outside number up to 20 digits long without the user having to dial any digits. That special number is reached without even having to dial a two-digit code. To use, just touch the button and the system does the rest.

3.2.2 Managing Telephone-Based Communications

Privacy Features (P/P+)

PARTNER and PARTNER Plus privacy features prevent colleagues who share lines from accidentally joining each other's calls.

Although privacy is not an extension-programmable PARTNER feature, there is a privacy feature button on the PARTNER MLS-12 telephone.

PARTNER Plus has two privacy features: **automatic privacy** and **privacy**.

Automatic Privacy, which is programmed on an extension-by-extension basis via system programming, is intended to provide the privacy feature to a tip/ring device. Automatic Privacy ensures the confidentiality of voice calls and keeps data transmission calls from being interrupted. This feature facilitates the use of facsimile machines, modems, and credit card readers by preventing employees from bridging in or otherwise compromising the data transmission call. When Automatic Privacy is "assigned" to an extension, Privacy is normally on. When Automatic Privacy is "not assigned" to an extension, Privacy is normally off.

Privacy is programmed on a feature button with an LED, allowing the user to turn Privacy on and off with one touch.

The Automatic Privacy and Privacy features can be used very effectively together to manage an extension that has a tip/ring device (modem, fax machine, credit card scanner) attached to it. If the user “assigns” Automatic Privacy to that extension, the tip/ring device is normally protected from attempts to bridge onto the extension. When an MLS telephone is in use at that extension, the Privacy button can be used to temporarily turn off Automatic Privacy during voice calls.

Do Not Disturb (P+)

The Do Not Disturb feature is available to PARTNER Plus users. It is programmed on a button with an LED. When Do Not Disturb is activated, the green LED is on. There is no audible alert on incoming CO-based calls, and intercom callers trying to reach the extension get a busy signal. This allows the user to work free of telephone call interruptions.

Personal Line Termination (P+)

Personal line termination can be used to guarantee the availability of a CO line at a given extension. Other extensions cannot access the line. A line assigned in this manner will always be available for the convenience of the user. In other words, this feature allows the user to customize line assignment. For example, the boss can have his/her own line, and that line will not appear on anyone else's phone.

Conferencing Features

Conference Call Capacity (P/P+)

PARTNER and PARTNER Plus provide the convenience of flexible conference calling with excellent voice quality. Users find that PARTNER and PARTNER Plus conferencing features reduce the need for callbacks and expedite the flow of verbal information.

Conference calls can be made up of CO calls, an intercom/CO mixture, or all internal (intercom) calls. In all cases, the extension at which the call is originated adds other parties and terminates the call.

A PARTNER system permits conference calls consisting of the originator of the call and two other inside/outside parties.

PARTNER Plus accommodates conference calls made up of the originator plus four other inside/outside parties.

CO-CO Conference Call Denial (P+)

The system can be programmed to prevent conferencing of one or more outside lines. This feature helps reduce network costs.

Conference Drop (P/P+)

The last person to join a conference call can be conveniently dropped without disrupting other parties on the call.

Differentiated Ringing (P/P+)

Users can immediately determine whether a call is an intercom call, outside call, or transfer call. CO calls “ring”; Intercom calls “ring...beep”; Transfer calls “ring...beep...beep.”

Hold Features

Many small businesses do not have phone systems that feature hold capability. Employees are forced to put the handset down on a counter or desk. Aside from giving the caller the opportunity to hear what’s being said in the background, this way of dealing with callers gives a business a very unprofessional image.

Hold (P/P+)

With PARTNER and PARTNER Plus, callers can be placed on hold while users locate information the caller needs.

Exclusive Hold (P+)

The Exclusive Hold feature prevents anyone but the user who put the call on hold from retrieving the call.

Hold Reminder Tone (P+)

There’s no need to worry about remembering to retrieve a call that is on hold. When a call that has been placed on hold remains on hold for one minute, the extension that placed the call on hold will beep.

Music on Hold (P+)

An external sound source, such as AT&T Magic on Hold^R or models from other manufacturers, can be connected to the PARTNER Plus processor module to provide music for callers who are on hold. All that's required in an audio source with a cord that has an RCA plug.

Note: Users of equipment that rebroadcasts copyrighted music or other material may be required to obtain a license from a third party such as ASCAP or BMI. This is not necessary for users of AT&T Magic on Hold.

Transfer Features

PARTNER and PARTNER Plus transfer features make transferring calls extremely simple. In fact, on PARTNER Plus, transfer can often be accomplished at the touch of a button.

Basic Transfer (P/P+)

A user can easily transfer calls by touching the transfer button and dialing the extension number to which the call is being transferred. This eliminates the need for a caller to hang up and redial should he/she need to speak to another party at the same site. PARTNER only transfers outside calls.

One Touch Transfer (P+)

A PARTNER Plus user can follow an even simpler process to transfer a CO call. He/she just presses the appropriate intercom autodial button and hangs up, and the call is transferred. The user can also stay on and announce the call and then hang up.

Transfer Return (P+)

If a user transfers a call and that call is not picked up within a predetermined number of rings, the call will automatically return to the extension from which it was transferred. In addition, the system can be programmed so that the call returns to a different extension. The call status is shown on the extension's display. Transfer Return reduces "lost" calls and increases the firm's responsiveness to its customers.

Intercom Features

Calling Party ID (P+)

The number of an internal calling extension is shown on the display of the extension receiving the call. Before the user picks up the phone, he/she already knows which colleague is calling.

Hands-Free Answer on Intercom (P/P+)

HFAI allows extensions to answer intercom calls automatically via speakerphone. The intercom call recipient does not have to stop what he/she is doing to respond to the caller. HFAI is not available on the MLS-6 telephone.

Intercom-Ring/Voice Signal (P/P+)

The user can ring an extension's intercom, or attempt to signal the extension by voice. If the called extension is busy or unable to receive the voice signal, the system will ring the extension on the intercom button.

Group Calling Features

Group Call Pickup (P+)

From one to 24 PARTNER Plus extensions can be programmed into a **call pickup group**. The Group Call Pickup feature allows users to pick up a ringing call at any extension in this “group.”

Group Calling/Paging (P+)

Extensions that are part of the same calling/paging group can be called/paged simultaneously. If several employees are working together on a project, for example, their supervisor can give them a message or page them at the same time.

Built-In Speakerphone (P/P+)

PARTNER and PARTNER Plus MLS telephones with a speaker and a microphone support full speakerphone operation.

3.2.3 Managing the System

Programming (P/P+)

Programming PARTNER and PARTNER Plus communications systems is easy. The central answering position (ext. 10), which is used to program the system, can also be used to program extensions. A **copy** feature permits the programming for one extension to be applied to other extensions as well. Again, the system is programmed using a system phone at extension 10. PARTNER programming is dialcode based. PARTNER Plus programming, which is display based, requires an MLS-12D or

34D telephone equipped with a display.

System programming establishes the operational characteristics of a PARTNER or PARTNER Plus, including line assignments, Calling Groups and Pickup Groups, System Speed Dialing Numbers, and Restrictions.

Some programming can be done on an extension-by-extension basis by the user or at the attendant extension. **Extension programming** allows individuals to program personal speed dialing numbers and other features they prefer.

As buttons are programmed, the currently defined feature is displayed when the button is pressed, thus facilitating connect feature button programming.

In Range - Out of Building (P/P+)

IROB capability allows users to have PARTNER or PARTNER Plus extensions located in different buildings that occupy the same site. These extensions will work at distances of up to 1,000 feet from the PARTNER or PARTNER Plus processor module. (Tip/ring devices work at distances of up to 3,000 feet. Two IROBs are required for MLS and one for tip/ring devices.)

Fax Management (P+)

Users with a facsimile machine can program Fax Management on a programmable button. Fax Management shows whether the fax extension is busy, idle, or in trouble. It allows one-touch call transfer to the fax, and indicates when the fax extension is not answering a call. Fax Notify, which is a fax machine feature, lets the user know a fax has arrived.

Multilingual Display (P+)

The PARTNER Plus programming procedure is display driven. Information can be displayed in English, Spanish, or French on an extension-by-extension basis.

Extension Test (P/P+)

Each MLS telephone can be tested by the user to ensure that the LEDs and ringer are working properly and that the extension is connected to the system correctly.

Facility Status and Selection Features

Status (P/P+)

Convenient “I/They” green and red LED indicators make users aware of the status of all extensions at a given time. It’s just like a traffic light . . . red for stop, green for go.

Facility Postselect (P/P+)

Facility Postselect allows a user to choose a line other than the line with which he/she is automatically connected when going offhook. Users can choose lines to use for adjuncts as well as a fax machine.

Line Reserve (Facility Tracking) (P+)

If a user preselects a busy line, an audible signal will automatically be given when that line becomes free. The user is free to continue working while waiting.

Hot Line (P+)

The Hot Line feature helps many PARTNER Plus users improve customer service. Also known as a lobby phone, a hot line is a preprogrammed extension that is connected directly to a specific extension. When the hot line phone goes offhook, it automatically rings the extension, announcing that someone has entered an unattended lobby or waiting area and allowing the visitor to speak with the person at that extension. The lobby phone can reduce initial costs by permitting the use of an inexpensive standard set.

Message Light (P+)

PARTNER Plus MLS proprietary telephones have a message LED that lets the user know he/she has messages that have been left with the receptionist or attendant.

Night Service (P+)

The Night Service feature allows off-hours management of incoming calls on PARTNER Plus. Incoming calls are routed and answered, but unauthorized off-hours use of business phones can be prevented. When Night Service is turned on, any line set to “no ring” or “delayed ring” on an extension in the Night Service Group changes to immediate ring. If System Password has been programmed, only those knowing the password can make toll calls other than emergency numbers and marked System Speed Dialing numbers.

Volume Backup and Restore (P/P+)

The PARTNER and PARTNER Plus processor module retains ringer, handset, and speaker volume settings for

enhanced tip/ring telephones such as the PARTNER and PARTNER Plus MLS series. Therefore, even if the telephone is unplugged, volume levels will remain the same when the phone is plugged back in again.

Power Failure Support (P/P+)

PARTNER and PARTNER Plus communications systems that contain at least one standard touch-tone or standard rotary telephone are designed to continue to provide service during power outages.

PARTNER and PARTNER Plus will retain system-programmed settings for approximately four days (100 hours) after the system stops receiving power.

3.2.4 Controlling Telecommunications Costs

Restriction and Override Features

Restriction features are extremely useful in holding down telecommunications costs by controlling usage and alleviating unauthorized calls. Override features lift restrictions under certain circumstances.

Call Restriction (P/P+)

PARTNER and PARTNER Plus extensions can be “Inside Only,” “Local Only,” or “Unrestricted.” Additional PARTNER Plus restriction options include **Allowed/Disallowed Lists** and **Line Restrictions**.

Allowed/Disallowed Lists (P+)

Allowed Lists are tables of leading digits of phone numbers that can be dialed by users regardless of call restriction parameters. Disallowed Lists denote the leading digits of numbers the system will block.

Line Restriction (P+)

Restrictions can be established on each line to which a given extension has access. These restrictions include “Out Only,” which does not allow the extension to receive calls; “In Only,” which prohibits the extension from placing calls; and “No Access,” which allows the extension to monitor phone system activity, but prevents incoming and outgoing calls.

Toll Restriction (P+)

PARTNER Plus can be programmed to allow money-saving calls, such as those to 800 numbers, and prohibit costly calls, including 900 and 976 calls.

911 Emergency Dialing (P)

PARTNER phones that can access an outside line will allow users to dial 911 even if they are In Only extensions.

Emergency Number List (P+)

Numbers on the Emergency Number List can be called on any extension that has access to an outside line. This safety feature ensures that, regardless of calling restrictions, emergency personnel can be notified immediately if their assistance is required.

Password Restriction Override (P+)

Dialing restrictions can be overridden by entering a password. For example, if a supervisor wishes to use an employee's "Local Only" extension to make a toll call, he/she is able to do so after the password is entered.

After the call is made, the extension returns to its restricted status.

Call Timer (P+)

Users of display telephones can take note of call duration time. This feature helps control call length and expedites manual bill-back procedures.

CO Forward Disconnect (P/P+)

CO Forward Disconnect is a "behind the scenes" feature that improves the effectiveness of tip/ring devices and increases the efficiency of devices like answering machines.

3.3 PARTNER and PARTNER Plus Release 2 System Components and Performance

3.3.1 System Components

PARTNER and PARTNER Plus are modular systems. This makes them particularly easy to install, expand, upgrade, and repair. Most competing communications systems cannot offer customers this type of flexibility and room to grow.

206 Module

A PARTNER/PARTNER Plus 206 module contains feature memory and call processing capability. The 206 is also the “connection” to touch-tone communications. Each 206 module connects one or two telephone lines and up to six telephones or other devices such as facsimile machines, answering machines, and/or modems. Both PARTNER and PARTNER Plus require at least one 206 module in order to operate.

Tip/ring lets your customers save CO line charges by sharing CO line resources. For stand-alone systems, the tip/ring adjunct is plugged directly into the station port. In combo mode, the tip/ring adjunct and the PARTNER set work from the same port using an inexpensive adapter. Two of these adapters are included with the 206 Module.

A PARTNER system is “maxed out” when two 206 modules are being used fully; that is, for four lines and 12 extensions. PARTNER Plus reaches full capacity at eight lines and 24 extensions.

Each 200 module and 206 module has one (1) Touch-Tone Receiver built in, which enables tip/ring devices to dial. Add together the number of modules the user requires and that’s how many tip/ring devices can be dialing simultaneously. Twenty seconds after dialing, the Touch-Tone Receiver is free for the next tip/ring device.

Processor Module (P+)

The processor module is required to expand the system’s capacity beyond four lines and 12 extensions, or when a customer needs enhanced features or call processing beyond that provided by the 206 module. Processor modules

also have a jack for a loudspeaker paging system and a jack for music on hold.

200 Module

The 200 module has jacks for two outside lines, but does not have extension jacks. Therefore, the 200 module is used to add lines inexpensively when additional extensions are unnecessary.

Telephones

PARTNER and PARTNER Plus support the following telephones:

- System (proprietary) sets: MLS (multiline sets) and MLC (multiline cordless)
- Standard rotary
- Standard touch-tone
- Feature phones with built-in function keys and lights

AT&T manufactures five telephones specifically designed to optimize PARTNER and PARTNER Plus communications systems. (All five are not supported by PARTNER.) These are called *system telephones*, and they offer full PARTNER and PARTNER Plus functionality. PARTNER and PARTNER Plus Release 2 telephones equipped with a speaker and microphone can support speakerphone operation. Built-in speakerphone (BIS) functionality lets users place and receive calls without lifting the handset, and permits voice paging.

At least one MLS telephone is required per PARTNER or PARTNER Plus system for programming.

The **MLS-6™** is intended for those who require a minimum level of access to outside lines and/or features. It has six buttons with lights, including four buttons for outside lines or programmable features (on PARTNER Plus only), and two intercom buttons. The MLS-6 also has a built-in speaker.

The **MLC-6™** is basically a cordless version of the MLS-6.

The **MLS-12D™** has 12 buttons with lights: eight outside line/feature buttons, two intercom buttons, and two lighted programmable buttons. There are six additional programmable buttons without lights, a built-in speaker and microphone, and a 2 x 16 character display.

The **MLS-12™** is identical to the MLS-12D, but without the display.

The **MLS-34D™** has 34 buttons with lights and is intended for use as an attendant position. Eight buttons are for outside lines or programmable features, two for intercom, and 24 are programmable. The MLS-34D has a built-in speaker and microphone, and a display that shows status information such as:

- Information (e.g., telephone numbers) programmed on the buttons
- Current date and time
- Number the user dialed or extension calling the user
- Prompts and messages when the user is changing system settings
- Elapsed time during a call
- Transfer Return extension

PARTNER Products Telephone Compatibility

	P(R1)	P(R2)	P+(R1)	P+(R2)
MLS-6	x	x	x	x
MLC-6	x	x	x	x
MLS-12	x	x	x	x
MLS-12D	-	-	x	x
MLS-34D	-	-	-	x

3.3.2 Performance

AT&T Bell Laboratories has tested the performance of PARTNER, PARTNER Plus, and MLS proprietary telephones. Mean time between failure (MTBF) rates under laboratory conditions are greater than those for Merlin and Spirit.

3.4 PARTNER and PARTNER Plus Release 2 Adjuncts and System Interfaces

3.4.1 Adjuncts and Other Support Devices

Enhanced tip/ring technology allows small business customers to connect single-line, industry-standard telecommunications equipment to their telephone systems to provide functionality that until now has been unavailable to them for reasons of compatibility or cost. In addition, there are other types of devices that can enhance the effectiveness of PARTNER and PARTNER Plus.

Many PARTNER and PARTNER Plus system adjuncts are manufactured and sold by AT&T. PARTNER and PARTNER Plus systems also support most devices manufactured by other vendors.

PARTNER and PARTNER Plus adjuncts include:

Alerters - Various alerting devices such as strobes, lights, chimes, horns, or bells can be connected to the PARTNER and PARTNER Plus systems.

Amplified handsets - PARTNER and PARTNER Plus support the AT&T K8S handsets, which have been designed especially for use in noisy environments.

Answering machines - Answering machines can be connected easily with any telephone that is part of a PARTNER or PARTNER Plus system. Callers can leave messages quickly, without requiring the intervention of a receptionist. Accuracy is improved when messages are left in the caller's own words.

Credit card scanners - Many businesses use credit card scanners to allow customers to make purchases with major credit cards.

Doorphones - Doorphones are small units with a speaker, a pushbutton, and a microphone. They are generally mounted near the outer door(s) of a business, so that visitors can announce themselves in order to gain entry to a secured building. Doorphones are also used to control internal entry to areas such as darkrooms, laboratories, or clean rooms. PARTNER Plus allows the doorphone to alert as many as five system extensions

simultaneously. Up to two doorphones can be accommodated (a total of 10 extensions alerted). The PARTNER Plus doorphone is designed to work exclusively with PARTNER Plus.

Facsimile machines - PARTNER and PARTNER Plus extensions can be used for fax machines. PARTNER Plus has special fax management capabilities that notify a user when a fax has been received or when the fax machine is not operating. Fax management* can be programmed on any unused feature button of an MLS proprietary telephone. This feature button can be used to transfer a call to a fax machine, and the feature button LED indicates fax status.

*Notify is a fax machine feature, supported but not initiated by PARTNER Plus.

Headsets - Headsets, which are units that combine an earphone and microphone into a unit that is worn on the head, are especially useful to receptionists, salespeople, or others who need to have their hands free while talking, but don't wish to use a speaker. A tip/ring headset is the preferred model.

IROB protectors - IROB protectors are designed to provide a weather-resistant link to phones installed in a parking lot or other outside area.

Loudspeaker paging system - PARTNER and PARTNER Plus support paging. Loudspeaker paging systems allow users to broadcast a message throughout a facility. Please note that because PARTNER doesn't have a paging port, additional equipment is required to connect a paging system *or* the use of a like port is sacrificed.

Modems - PARTNER and PARTNER Plus users can incorporate Hayes-compatible modems.

Repertory dialers - For users who require capacity beyond the 60 speed dialing numbers accommodated by PARTNER and PARTNER Plus, repertory dialers can be added. A repertory dialer may be connected to a station port on a 206 module or may share an extension.

Speakerphones - PARTNER and PARTNER Plus MLS-34D, MLS-12D, and MLS-12 proprietary telephones feature built-in speakers and microphones. The AT&T S203 speakerphone is supported for extensions that are not equipped with one of the phones listed above.

Telephone recording device interfaces - Telephone recording device interfaces allow the user to record both sides of telephone conversations.

Tip/ring cordless phones - The AT&T MLC-6 cordless phone and other tip/ring cordless sets (such as AT&T's 4000 and 5000 series) can be used with PARTNER and PARTNER Plus systems.

PARTNER™ Products Device (Adjunct) Listing

PEC	Description	Remarks
Answering Machines		
3103-MED	Model 1321	Midrange
3103-HIX	Model 1323	Has Voice Help Menu
Cordless Phones		
3103 CLS	Model 5320	Single-line two-way page
3153 03(X)	PARTNER Cordless	Four lines with display
Credit Card Dialers		
	American Express ICOT 9100	
	Transaction 7	
	GTE MicroPhone	
	DMC Creditline 1&2	
	Taltek Electronic Model 727	
<i>AT&T does not manufacture a scanner. All competitive equipment that has been tested works.</i>		
Doorphones		
5324-003	PARTNER Plus	Alerts up to five
	Doorphone	extensions
5324-001	AT&T Doorphone	Compatible with all
		AT&T products
53240	Speaker	
Extra Alerts		
5580-004	TelBell	Vol. Cov. 85-95 db
5580-020	TelHorn	Vol. Cov. 75-105 db
5580-034	Telchime	Vol. Cov. 80-90 db
5580-042	TelStrobe	Vol. Cov. 600 sq. ft.
5580-043	AC TelStrobe	Vol. Cov. 5000 sq. ft.
61211	Network I/F Alert	Vol. Cov. 65 db
31016	Loud External Ringer	Vol. Cov. 85 db
31019	External Ringer	Loud Gong Vol. Cov. 65 db

PEC	Description	Remarks
Fax Machines		
3506-530	5300	One # Notify w/answering machine interface
3502-HFE	9025+	Four # Notify
3503-SFE	9035+	Four # Notify & Exp. Memory
3505-902	9020FX	No Notify, medium machine
3508-903	9022 w/1 Meg.	No Notify, Memory
<i>All other AT&T fax machines work</i>		
Headsets		
3122-314	SPIRIT Headset	Over ear w/o switch hook control
3122-304	STAR Set II	In ear w/o switch hook control
3122-315	T/R Headset	
Modems		
2224 C00	AT&T 4024	
2260 424	DL424 V. 32	
2260 M42	DM424 V. 32	
2122 208P	AT&T 208BR	Refurbished only, to be MD'd
<i>Recommended: Hayes-compatible modems</i>		
Paging System–PARTNER		
53519/5323-006	Port Saver w/PagePac 6	Basic, ties up line port
5323-008	PagePac 6	Multizone w/Talk-Back, ties up line port
58500/5323-006	UPAM w/PP6	Basic, ties up line port
58500	UPAM	For Comp. Paging Systems, ties up line port

PEC	Description	Remarks
Paging System–PARTNER Plus		
5323-006	PagePac 6	Basic, Page Port
5323-008	PagePac 6+	Multizone w/Talk-Back Page Port
5322-700	PagePac VS	
5323-005	PagePac 20	Page Port
5322-051	PagePac 50	
5322-101	PagePac 100	
5322-201	PagePac 200	
52150	Amplifiers 50	
52100	Amplifiers 100	
52120	Amplifiers 200	
UPS		
2403-050	500VA	10 min. reserve battery support at a full load
24035	500VA Extended Reserve Cabinet (ERC)	ERC connects to UPS & provides one-hour holdover
2403-036	360VA	Capacity/overload indicator supports adjuncts & add'l equipment 6 minutes
Amplified Handset		
31052		Supports Encore also
Music On Hold		
3128-010	AT&T Magic on Hold	Connects to MOH Port
Call Processors		
50109H	VersaLink	

3.4.2 Interfaces With Other Systems

Occasionally, a customer will have a system in place that is already providing some of the features and benefits of a PARTNER or PARTNER Plus system. This system is frequently Centrex or a PBX. (See Appendix 1 for definitions of Centrex and PBX.)

The presence of Centrex should not discourage you from discussing PARTNER Plus with the customer, since PARTNER Plus can fill Centrex feature gaps by:

- Providing paging
- Providing music on hold
- Providing flexible intercom capability that permits two talk paths without tying up an outside line
- Using PARTNER Plus MLS telephone set feature to make it easier to access Centrex features by programming them on buttons

In some specific cases, Centrex can actually enhance the capabilities of PARTNER Plus, since Centrex can:

- Efficiently connect multiple buildings that are more than 1,000 feet apart
- Provide call detail reporting
- Provide least cost routing in situations where discount long-distance services are available
- Provide Call Waiting and Call Forwarding

3.5 PARTNER and PARTNER Plus Release 1 vs. Release 2

New features in PARTNER and PARTNER Plus Release 2 include:

- 911 Emergency Dialing (P)
- Additional Call Restriction capability (P) and 911 Emergency Dialing (P) - see section 3.2.4
- Group Paging (P) - see section 3.2.2
- IROB (in range - out of building) capability (P/P+) - see section 3.2.3
- Additional System Speed Dialing capacity (P) - see section 3.2.1
- Volume Backup/Restore (P/P+) - see section 3.2.3
- Improved Built-in Speakerphone operation (P/P+) - see section 3.2.2
- MLS-34D 34-button enhanced tip/ring telephone set (P+) - see section 3.3
- CO Forward Disconnect (P+) - see section 3.2.4
- Improved Centrex support (P+) - see section 3.4.2
- Intercom Autodial (P+) - see section 3.2.1
- Transfer Return to programmable extension (P+) - see section 3.2.2

In general, R2 feature changes provide:

- Reduced documentation (one manual)
- Cheaper line capacity via the 200 module (P/P+)
- Better functionality at the attendant position (PARTNER Plus and the MLS-34D telephone)
- Better support of answering machines and other tip/ring devices via CO forward disconnect (P/P+) and transfer return to programmable extension (P+)
- Additional PARTNER features, including more speed dialing numbers and enhanced toll restrictions

General Business Systems Product Line Feature Matrix

	CLASSIC 206	CLASSIC 410	CLASSIC 820	PARTNER R2	PARTNER PLUS R2	SPIRIT 308 SPIRIT 616	SPIRIT 2448	MERLIN PLUS
SYSTEM CONFIGURATION								
Expansion								
Maximum CO Lines	2	4	8	4	8	6	24	8
Maximum Stations	6	10	20	12	24	16	48	20
Max. CO Talk Paths	2	4	8	4	8	6	24	8
Max. Intercom Conv	1	2	2	NON/BLK'G	NON/BLK'G	2	6	3
Architecture	ANALOG	ANALOG	ANALOG	DIGITAL	DIGITAL	ANALOG	ANALOG	ANALOG
Switching	SPACE	SPACE	SPACE	TIME	TIME	SPACE	SPACE	SPACE
Blocking	YES	YES	YES	NO	NO	YES	YES	YES
User Programmable	YES	YES	YES	YES	YES	YES	YES	YES
Data Support	OPT	OPT	OPT	W MODEMS	W MODEMS	W MODEMS	W MODEMS	W MODEMS
Hardware:								
# Diff. Circuit Bds	NA	NA	3	2	3	2	3	2
Card Slot Usage	NA	NA	FLEX	NA	NA	FIXED	FIXED	FIXED
Station Wiring	4-PAIR	4-PAIR	4-PAIR	2-PAIR	2-PAIR	2-PAIR	2-PAIR	4-PAIR
Max. distance from KSU	1000'	1000'	1000'	1000'	1000'	1000'	1000'	2000'
2500 Type Set Support	YES	YES	YES	STD	STD	OPT	OPT	YES
500 Type Set Support	YES	YES	YES	STD	STD	OPT	OPT	YES
Electronic Sets	5	5	5	3	5	2	2	5
DSS/BLF Console	NA	NA	NA	NA	YES	NA	OPT	NA
HARDWARE COMPATIBILITY								
Circuit Card Migration	NA	NA	NA	YES*	YES*	NA	NA	NA
Set Migration	STD	STD	STD	YES*	YES*	YES	NA	YES
Wiring Migration	STD	STD	STD	YES*	YES*	YES	STD	YES

LEGEND:

STD = STANDARD * = WITHIN FAMILY

OPT = OPTIONAL NA = NOT AVAILABLE IU = INFO UNAVAILABLE

General Business Systems Product Line Feature Matrix

	CLASSIC 206	CLASSIC 410	CLASSIC 820	PARTNER R2	PARTNER PLUS R2	SPIRIT 308 SPIRIT 616	SPIRIT 2448	MERLIN PLUS
SYSTEM FEATURES								
Account Code Entry	NA	NA	NA	NA	NA	NA	STD	STD
Battery Backup (system)	OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Behind Centrex Capability								
Call Transfer	STD	STD	STD	STD	STD	STD	STD	STD
Call Transfer Return	STD	STD	STD	NA	STD	STD	STD	STD
Programmable Return	STD	STD	STD	NA	STD	NA	NA	STD
Call Hold Reminder	STD	STD	STD	NA	STD	STD	STD	STD
Calling Pty ID/Name Disp.	NA	NA	NA	STD	STD	NA	NA	NA
Diagnostics (Self test)	STD	STD	STD	STD	STD	STD	STD	STD
Distinctive Ringing	STD	STD	STD	STD	STD	STD	STD	STD
Enhanced Tip/Ring	NA	NA	NA	STD	STD	NA	NA	NA
Fax Management	NA	NA	NA	NA	STD	NA	NA	NA
Message Waiting	STD	STD	STD	NA	STD	STD	STD	STD
Multi Lingual Disp.	NA	NA	NA	NA	STD 3	NA	NA	NA
Music On Hold	OPT	OPT	OPT	NA	OPT	OPT	OPT	OPT
Night Service:								
Fixed	STD	STD	STD	NA	STD	STD	STD	STD
Flexible	NA	NA	NA	NA	STD	STD	STD	NA

LEGEND

STD = STANDARD * = WITHIN FAMILY

OPT = OPTIONAL NA = NOT AVAILABLE IU = INFO UNAVAILABLE

General Business Systems Product Line Feature Matrix

	CLASSIC 206	CLASSIC 410	CLASSIC 820	PARTNER R2	PARTNER PLUS R2	SPIRIT 308 SPIRIT 616	SPIRIT 2448	MERLIN PLUS
SYSTEM FEATURES								
Off Premise Extensions	OPT	OPT	OPT	NA	OPT	NA	NA	OPT
On Hook Dialing	STD	STD	STD	STD	STD	STD	STD	STD
Outgoing Call Restrict.	STD	STD	STD	STD	STD	STD	STD	STD
Private Lines	STD	STD	STD	NA	STD	STD	STD	STD
SMDR	NA	NA	NA	NA	NA	NA	OPT	OPT
Syst. Speed/Pers. Dialing	40 x 16	40 x 16	40 x 16	60 x 0	60 x 20	10 x 16	70 x 16	130 x 16
Toll Restriction 0,1	STD	STD	STD	STD	STD	STD	STD	STD
Allow/Deny Lists	NA	NA	NA	NA	STD	NA	NA	STD
Toll Restrict Override Code	NA	NA	NA	NA	STD	NA	STD	NA
Sys. Speed/ Pers. Dial	NA	NA	NA	STD	STD	STD	STD	STD
ATTENDANT FEATURES								
Multiple Consoles	NA	NA	NA	NA	OPT	NA	NA	NA
System Prog. / Admin	STD	STD	STD	STA10	STA10	STA10	NA	STD
SYSTEM ADMINISTRATION								
Command Code Driven	STD	STD	STD	STD	STD	NA	NA	STD
Printout Avail.	NA	NA	NA	NA	NA	NA	NA	NA
User Programmable (via station or DSS)	STD	STD	STD	STD	STD	STD	STD	STD
(via Attn. Console)	STD	STD	STD	STD	STD	NA	NA	STD
SPECIAL PACKAGES								
Call Accounting System	NA	NA	NA	NA	NA	NA	OPT	NA

LEGEND:

STD = STANDARD * = WITHIN FAMILY

OPT = OPTIONAL NA = NOT AVAILABLE IU = INFO UNAVAILABLE

General Business Systems Product Line Feature Matrix

	CLASSIC 206	CLASSIC 410	CLASSIC 820	PARTNER R2	PARTNER PLUS R2	SPIRIT 308 SPIRIT 616	SPIRIT 2448	MERLIN PLUS
STATION FEATURES								
Auto Busy Redial	NA	NA	NA	NA	NA	NA	NA	STD
Auto Hold Recall	STD	STD	STD	NA	NA	STD	STD	STD
Auto Intercom Buttons	STD	STD	STD	NA	STD	STD	STD	STD
With Busy Lamps	STD	STD	STD	NA	STD	STD	STD	STD
Bridging	NA	NA	NA	STD	STD	STD	STD	STD
Built-In Speakerphone	STD	STD	STD	STD	STD	STD	NA	STD
Call Forward:								
External	NA	NA	NA	NA	NA	NA	NA	STD
Call Pickup (directed)	STD	STD	STD	NA	NA	STD	STD	STD
Call Pickup (group)	NA	NA	NA	NA	STD	NA	STD	NA
Conference # Parties	5-PARTY	5-PARTY	5-PARTY	3-PARTY	5-PARTY	4-PARTY	4-PARTY	5-PARTY
Direct Group Calling	NA	NA	NA	NA	STD	NA	NA	NA
Display	STD	STD	STD	NA	OPT	NA	NA	OPT
Do Not Disturb	STD	STD	STD	NA	STD	STD	STD	STD
Dual LED Indicators	STD	STD	STD	STD	STD	NA	NA	STD
External Page Interface	OPT	OPT	OPT	OPT	STD	OPT	OPT	STD
Flex. Circ/Feat Buttons	STD	STD	STD	STD	STD	NA	STD	STD
Flex. Station Numbering	NA	NA	NA	NA	NA	NA	NA	NA
HFAI	STD	STD	STD	STD	STD	STD	STD	STD
Internal Paging	STD	STD	STD	STD	STD	STD	STD	STD
Last Number Redial	STD	STD	STD	STD	STD	STD	STD	STD
Manual Signaling	STD	STD	STD	NA	STD	STD	STD	STD
Msg. Waiting Indication	STD	STD	STD	NA	STD	STD	STD	STD
Personalized Ringing	STD	STD	STD	NA	NA	NA	NA	STD
Power Fail Trans. Phones	OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT
Privacy	STD	STD	STD	OPT	STD	STD	STD	STD
Saved Number Redial	STD	STD	STD	NA	STD	NA	NA	STD
Station Speed Dialing	STD	STD	STD	NA	20 x 20	16 x 16	16 x 16	24 X 16
Trk. Queue. w/ Call Back	STD	STD	STD	NA	NA	NA	STD	STD
Voice Signal on Busy	STD	STD	STD	NA	NA	NA	NA	STD
Volume Ctrl. (spkr/ring)	STD	STD	STD	STD	STD	STD	STD	STD

LEGEND:

STD = STANDARD * = WITHIN FAMILY

OPT = OPTIONAL NA = NOT AVAILABLE IU = INFO UNAVAILABLE

3.7 Compatibility Between Release 1 and Release 2

3.7.1 PARTNER

PARTNER Release 2 has been designed to be fully “backward-compatible” with R1. That is, R2 206 Modules work with R1 206 Modules, and the 200 Expansion Module works with either R1 or R2 206 Modules. However, the positions in which the 206 Modules are installed will affect system features.

PARTNER offers flexibility for growth and feature functionality. The new equipment introduced with Release 2, such as the MLC-6 cordless telephone, alert/signaling devices, and headsets, provides alternatives to suit the customer’s special needs. All of this equipment can function fully on a Release 1 version of PARTNER.

3.7.2 PARTNER Plus

As with PARTNER, the combination of Release 1 and Release 2 equipment affects system functionality. The R2 Processor Module is required to support the MLS-34D attendant phone. Other new equipment, such as the PARTNER Doorphone, does not require R2 capability. However, R2 changes make them work more efficiently.

3.8 Growth and Upgrade

The compatibility of Release 2 with Release 1 has several implications for growth and/or upgrade strategies for existing PARTNER/PARTNER Plus Release 2 customers.

“Growth” pertains to adding lines or extensions within the system’s current component configuration.

“Upgrade” refers to enhancing feature set or overall system capacity.

Customers currently using PARTNER or PARTNER Plus Release 1 (R1) may want to expand or upgrade their systems because:

- Their businesses have grown, and they now require an enhanced communications system, or
- There are Release 2 (R2) features that could make their PARTNER or PARTNER Plus even more profitable and effective.

Growth, upgrade, and growth plus upgrade scenarios for PARTNER and PARTNER Plus have been developed so that sales representatives can help customers make a transition from R1 to R2.

3.8.1 PARTNER Growth and Upgrade

Below is a chart explaining how installation affects the feature content of a PARTNER system.

PARTNER

“Slot” 206 Module	“Slot 2” 206 Module	Functionality
R1	R1	R1
R1	R2	R1
R2	R1	R2 <i>except no Forward Disconnect on 2nd 206 Module</i>
R2	R2	R2

PARTNER R1 customers can upgrade to PARTNER Plus Release 2 by purchasing PARTNER Plus R2 Carrier and MLS-12D or MLS-34D telephone sets

Resulting functionality: PARTNER Plus R2 without Forward Disconnect.

PARTNER R1 2x6 customers can expand their systems by purchasing an R2 206 Module and a Modular Connector and “reversing” the positions of the 206 Modules.

Resulting functionality: PARTNER R2 functionality without Forward Disconnect on the R1 Module. If the customer does not require the additional R2 functionality, the R2 206 Module can be mounted in the second position.

3.8.2 PARTNER Plus Growth and Upgrade

PARTNER

Processor Module	206 Module	Functionality
R1	R1 or R2	R1
R1	R1 or R2	R2 <i>except no Forward Disconnect on the R1 206</i>
R2	R2	R2

R1 PARTNER Plus customers can purchase R2 206 Modules for expansion purposes and retain R1 functionality.

R1 Customers can also replace the R1 Processor Module with an R2 Processor Module and get R2 functionality (required for MLS-34D support) but no Forward Disconnect on R1 206 Modules. If a customer also purchases R2

206 Modules, he or she will get Forward Disconnect on those extensions.

4.0 PARTNER and PARTNER Plus Positioning

PARTNER products are an extension of AT&T's two-tier product strategy. The two-tier strategy was designed to provide small, medium, and large customers with a choice between a premium offering and a less expensive alternative. Small business customers, for whom the premium offering (MERLIN Plus) is beyond consideration, now have a new fallback alternative to SPIRIT in PARTNER Plus.

PARTNER Plus should always be considered the flagship offering for customers whose needs are more basic. The PARTNER line itself is two-tier, providing a small, basic system and a larger system with additional and enhanced features.

The basic PARTNER product was originally designed and priced for retail outlets such as Phone Center Stores, Sears, etc., and should only be positioned as a Direct Channel fallback product offering *after* MERLIN Plus, then *after* PARTNER Plus.

4.1 What PARTNER and PARTNER Plus Bring to AT&T GBS

PARTNER/PARTNER Plus communications systems have made a successful entry into the low-end business market, a market which traditionally perceived AT&T as high-quality, but too big, too expensive, and disinterested in small customers.

As AT&T GBS continues to use products like PARTNER and PARTNER Plus to build a significant customer base

among small businesses, opportunities to increase market penetration and expand product scope will continue to increase as well.

4.2 What PARTNER and PARTNER Plus Bring to Small Business Customers

AT&T PARTNER and PARTNER Plus are the only small business communications systems that provide the enhanced tip/ring extension interface.

What does that *really* mean to a small business customer? The features, capabilities, and ease of use he/she's been looking for, all in a flexible system that provides sophisticated, yet simple, call handling.

PARTNER and PARTNER Plus customers solve old problems and find new opportunities in the areas of:

- Equipment connections
- Management control
- Messaging
- Mobility
- Reliability
- Network connections

4.2.1 Equipment Connections

Businesses with a PARTNER or PARTNER Plus system do not need adapters or dedicated lines to add other equipment. Answering machines, headsets, modems, facsimile machines, paging systems, alerts, doorphones, credit card scanners, a variety of telephones, and uninterruptible power supplies increase the utility and dependability of small business telecommunications.

4.2.2 Management Control

When PARTNER or PARTNER Plus is part of a business management team, managers and owners can control costs more effectively and provide opportunities for employees to perform job functions more productively. Call restriction options keep network costs down, and dialing, intercom, paging, and conferencing features encourage employees to work efficiently and professionally.

4.2.3 Messaging

Small business operations can improve substantially by implementing PARTNER or PARTNER Plus-based messaging solutions to improve the timeliness and accuracy of message exchange. PARTNER and PARTNER Plus features expedite the flow of information in voice, data, and fax formats, both internally and between the business and its customers and suppliers.

4.2.4 Mobility

PARTNER and PARTNER Plus communications systems give employees the freedom to move around the work place without missing an important incoming or intercom call. Cordless phone compatibility and loudspeaker, group page, intercom, doorphone, and call transfer capabilities allow this type of mobility.

There's another type of mobility, too, and that's an employee's mobility right at his/her own desk. Onhook (hands-free) dialing, built-in speakerphone capability, and headset compatibility permit a user to place calls and talk on the telephone without picking up the handset.

4.2.5 Reliability

No business runs smoothly when its phone system is down. PARTNER and PARTNER Plus systems are designed to be virtually trouble-free. Should a problem occur, however, troubleshooting techniques described in customer documentation generally allow users to uncover and solve the problem quickly. In addition, a customer help line is available 24 hours day.

Battery backup stores the system's memory for up to four days in the event of a power failure. PARTNER and PARTNER Plus can be configured so that the user can connect an extension equipped with a standard telephone to a CO line to provide service during an outage.

4.2.6 Network Connections: PARTNER Plus Behind Centrex

PARTNER Plus "behind Centrex" is targeted to Centrex users with 2 - 8 telephones. A typical customer might be a new business that prefers the Central Office-based features of Centrex, but also wants to provide its customers with direct access to specific employees. This requires a system such as PARTNER Plus that can work in conjunction with Centrex. Users of PARTNER Plus behind Centrex can take advantage of PARTNER Plus enhanced tip/ring capabilities, as well as provide callers a single transparent interface even if the business has more than one location. See Appendix 1 for a definition of Centrex.

5.0 Selling PARTNER and PARTNER Plus

5.1 Bundling - "Growing" Your Customer

When you have an opportunity to sell a PARTNER or PARTNER Plus communications system, you have a chance to provide a fax machine and the adjuncts described in section 3.4 as well. Use your visits with a prospect to evaluate the broad needs of his or her business, as well as those requirements that basic PARTNER and PARTNER Plus systems can fulfill. The *Data Gathering* sections of *Solutions for Success* describe how you and your customer can examine business needs together ... you by asking the right questions, and your customer by thinking about your questions and answering them honestly.

How could a facsimile machine expedite placing and receiving orders or obtaining and giving approvals? Would loudspeaker paging on the factory floor reduce insurance costs? Can a modem get sales figures to the accountant more quickly? What about a doorphone for that loading dock?

By uncovering opportunities to make a PARTNER or PARTNER Plus system even more effective, you demonstrate AT&T's commitment to providing not just any solution, but the total solution.

You are also solidifying an existing customer relationship, or creating a new AT&T customer who in time may wish to upgrade or expand his/her system, purchase or lease other types of AT&T products, and provide referrals.

Remember that the small business market is only now discovering that AT&T has affordable products that are easy to use and designed with small businesses in mind.

See section 5.3, Sample Selling Scenarios, for information about how PARTNER and PARTNER Plus and associated products can be bundled to provide comprehensive strategies and solutions for small business customers.

5.2 Cost Justification

Enhanced tip/ring functionality is the basis for much of the cost-savings associated with PARTNER and PARTNER Plus Communications Systems. And remember, PARTNER products are currently the only products in the marketplace to have this capability.

5.2.1 Cost of Interface Devices

No expensive adapters are needed to connect tip/ring devices to PARTNER and PARTNER Plus. For instance, a BTMI costs \$250 plus \$39 for installation, and a GPA costs \$200 plus \$21 for installation.

5.2.2 Cost of Dedicated Lines

Companies that do not use PARTNER or PARTNER Plus may have to pay for a dedicated line every month to use a facsimile machine, modem, or answering machine without compromising voice lines. The national average cost of a dedicated business line is \$37 - \$40 per month, although the monthly cost can range from \$10/month to \$100/month plus installation, depending on the territory.

5.2.3 Network Costs

PARTNER and PARTNER Plus call restriction features enable the business owner or general manager to reduce unauthorized local and long-distance calling.

5.2.4 Opportunity Costs

Many small business owners have difficulty quantifying improvements in productivity. It can be hard for them to associate facilitating work flow with actually saving money, since they may be focused primarily on getting business done more smoothly. Nonetheless, some prospective customers for PARTNER and PARTNER Plus may understand that a communications system that is flexible and easy to use is in reality a source of cost-savings, as well as a way to improve how the business runs.

5.3 Sample Selling Scenarios

When assessing your customers' requirements, remember that while potential PARTNER and PARTNER Plus users often wish to integrate existing equipment into a PARTNER/PARTNER Plus configuration, AT&T has developed enhanced tip/ring (ETR) equipment specifically for use with PARTNER or PARTNER Plus.

Therefore, it is important to understand customer needs well enough to know whether the customer's selection criterion is primarily:

- the desire to create a system that provides optimum functionality (total AT&T solution), or
- the ability to use existing equipment to obtain adequate

functionality (integrate existing compatible equipment that may not be AT&T).

AT&T GBS *Solutions for Success* is a comprehensive guide to selling PARTNER, PARTNER Plus, and other GBS products to the six customer types described in section 2. Sales representatives can access this information electronically. A sample selling scenario is presented below for each customer type.

5.3.1 Company A: Care Providers

Overview: Company A is a group of four doctors with a very busy practice in a converted residence. They employ a receptionist, two nurses, and a laboratory technician. There are four examining rooms, four offices, a reception area and file room, a lab, a stockroom with an outside door, and a waiting room. The participating physicians want calls to be handled in a way that puts patients at ease and builds confidence in the practice.

Incoming calls are received from colleagues, patients, family members, hospitals, rescue squads, outside labs, and pharmaceutical houses. Outgoing calls are made to the same groups.

Deliveries of medical supplies are made frequently, and delivery people must now park their vans in back of the building, walk around to the front, and tell the receptionist a delivery has arrived.

When conferring with a patient, the doctor may not want to be interrupted by phone calls. He/she may wish to use an intercom to summon a colleague or support staff.

There must be prompt communication between the front desk, the lab, and the examining rooms. The office has to be able to receive and send EKGs and other vital patient information. Since many patients now pay with credit cards, the receptionist must frequently use the telephone to call for credit verification.

Recommendation: A PARTNER Plus system that supports four lines and 11 extensions, plus:

- 11 MLS display telephones
- Two 206 modules (three if the system is expected to grow)
- Credit card scanner at receptionist's desk extension in combo with his/her phone
- Autodial for frequently dialed numbers
- Fax management feature to assure the receipt of emergency transmissions and monitor operational status of fax machine
- Chime alert for incoming call notification
- Conference calling to allow telephone consultations
- Fax machine on lab extension (receptionist has Fax Management)
- Transfer Return feature so call handler knows whether a transferred call has been picked up
- Do-Not-Disturb option controlled by individual extensions
- Modem for lab technician

- Music on Hold to lessen patient apprehension
- Doorphone (and admission buzzer) at the back door, so medical supply delivery people do not have to go to the waiting room to gain admission, leaving their vehicles and deliveries such as drugs unattended
- Headset for receptionist so he or she can answer calls hands-free

5.3.2 Company B: Information Managers

Overview: Company B is an executive-level employment agency with a twist. Instead of simply attempting to place clients locally, the firm is part of a network of similar companies that trade information on job openings and prospective employees. This allows Company B to remain small, yet serve as a nationally oriented placement firm. The owner, who manages the business, employs five job placement specialists, a receptionist, a clerical worker, and a bookkeeper.

The firm subscribes to the latest human resources data services so it can maintain an up-to-minute picture of the employment market.

Aside from initial in-person interviews with men and women seeking employment, Company B's mode of doing business is almost entirely telecommunications based. Members of the staff are on the phone all the time.

The company transmits and receives a great deal of information via facsimile machine and modem.

Company B's receptionist also fields a great number of calls from employers as a result of the company's extensive use of direct mail and other marketing tools. Occasionally an employer anticipating downsizing will contact Company B to arrange a formal program for its soon-to-be ex-employees, and the firm has a good reputation for handling unusual requirements. Callers to Company B expect confidentiality and responsiveness.

Recommendation: A PARTNER Plus communications system that supports six lines and nine extensions, plus:

- Two 206 modules and one 200 module
- MLS display telephones with built-in speakerphone operation, to allow the placement staff to access the database while they're speaking with clients and to provide displays of call duration for manual billback
- Modem
- Facsimile machine to expedite information flow
- Fax Management, so the receptionist can monitor fax machine
- Conferencing among applicants, prospective employers, and Company B specialists
- Do-Not-Disturb, so interviews aren't disrupted
- Privacy features to ensure confidentiality and prevent inadvertent interruptions of data transmission
- Answering machine for any after-hours calls

5.3.3 Company C: Producer/Distributor

Overview: Company C, a sign manufacturer, is an older business that operates in two buildings at the same site. Signs are designed and manufactured in the factory and shipped from that building as well. The owners, an administrative assistant/bookkeeper, and an order processor have offices in a separate building. Each building has its own phone system.

Company C's owners want to have the telephones in both buildings on the same communications system. Currently, callers who accidentally call one location but wish to speak with someone in the other building are told to hang up and dial the other number. Needless to say, this is aggravating to many customers and suppliers. In addition, when someone from the office is on the telephone with a customer or supplier, it is impossible for the factory foreman to join the call without someone going out to get him.

Company C's communications woes don't end there. Recent telephone bills indicate that some unauthorized toll calls are being made from both buildings, and the company's insurance carrier feels both buildings could not be evacuated quickly enough in the event of an emergency. Since Company C has customers and suppliers in different time zones, business can sometimes be delayed or even lost because callers cannot leave orders after-hours.

The owners are beginning to realize that poor communications capability is costing them money, and that they're missing out on modem technology that could expedite business. For example, while the owners would like to have fax capability to speed up the incoming and outgoing order process, they're under the impression that a dedicated line

is required. The owners also report that employees are constantly walking paperwork back and forth between the two buildings. This takes a great deal of time that could be spent more productively.

Recommendation: A PARTNER Plus communications system that supports four lines and 12 extensions, plus:

- MLS-12D telephone for the boss
- MLS-34D for administration
- MLS-12 for order processor
- Two 206 modules
- Two tip/ring for factory (hotline to administration/paging group)
- In-range - out-of-building (IROB) protection for extension in main office, extra alerter (loud alert), and noisy environment handset or MLS-6 with jacked-up volume for factory building
- Loudspeaker paging for factory building to satisfy safety and insurance requirements
- System Speed Dialing to improve productivity on outgoing calls
- Call Restriction to stop all toll calls
- Disallowed Lists to stop 900 and 976 phone calls

- Fax machine and answering machine in the office to speed up information transfer and allow information to be received during after-hours. Company C can take advantage of PARTNER Plus Night Service by having a line ring at an answering machine extension during after-hours
- Second fax machine in the factory for interbuilding paperwork
- Conferencing capability to allow conference calls between an outside caller and individuals in the company's two buildings

5.3.4 Company D: Project Professionals

Overview: Company D is an up-and-coming architectural firm with two employees, a junior architect, and an administrative assistant/bookkeeper. Although the company seems well on its way to success, the owner, who is the chief architect, wants to keep overhead down.

The company receives a great number of calls from field people during the construction phase of its projects, and the firm's client base is growing. It is important that calls are answered efficiently, even if only one person is in the office or if the office is closed. The owner also wants to be able to use a fax and a modem without bringing in dedicated lines.

Recommendation: A PARTNER communications system that supports two lines and five extensions, plus:

- At least one MLS phone for programming at the bookkeeper/administrative assistant's extension

- Answering machine to receive calls after-hours or when the assistant is not available
- One 206 module
- Facsimile machine to speed receipt/transmission of information
- Cordless phone for the architects, so they can move around to review plans away from their desks
- Modem
- Conferencing capability that allows mixture of inside/outside lines on one call

5.3.5 Company E: Service Deliverer

Overview: Company E is a small catering firm. The company's two owners, one assistant, and a driver work full-time. Part-time help is used as needed. Often the part-time work is off-site at the client's location. The company's clients are businesses and individuals within a 50-mile radius of Company E's food preparation facility, which is located at the residence of one of the owners.

Company E's main requirement is that a communications system be easy to use. Hands-free operation, speed dialing of frequently called numbers, conferencing, and built-in speakerphone capability are all important to the firm's productivity. Most of Company E's business customers have facsimile machines, so Company E must be able to fax menus, seating charts, and table designs for client approval.

The owners are pleased with how well their business is doing, and they sense further growth is not too far in the future. Therefore, upgradability is an important consideration.

Recommendation: A PARTNER system with two lines and five extensions, plus:

- Two MLS-12 phones for programming and BIS
- One 206 module
- Cordless phone for mobility
- Facsimile machine to streamline operations and improve customer service
- Answering machine for answer assurance
- Speed Dialing to contact suppliers quickly

5.3.6 Company F: Walk-In Merchant

Overview: Company F, a children's clothing retailer, has three areas of activity: the cash register, the office, and the inventory room.

Clerks are responsible for handling incoming calls for information, as well as for verifying the authenticity of credit cards and checks. The store owner spends a considerable amount of time in the office. She does most of the buying over the phone. Aside from specializing in several lines of children's clothes, the store is also the outlet for official clothing used by area school systems. This clothing in-

cludes uniforms, gym clothes, and school jackets. Therefore, the store takes quite a few orders over the phone, and the beginning of the school year is quite hectic. Communication within the store is an issue, too. When the clerks are all busy, the owner pitches in on the selling floor or at the register, but one of the clerks has to go to the office or supply room to get her. Clerks also need to be able to check the supply room for additional inventory.

Company F needs to be able to answer calls promptly, provide and receive information when the store is closed, decrease the amount of time it takes to make calls, make conference calls, use a fax machine and credit card scanner, and communicate within the premises.

Recommendation: A PARTNER Plus communications system that supports four lines and six extensions, plus:

- One MLS-12D phone for owner to allow Speed Dialing or MLS-34D for Autodialing
- Three other MLS phones
- Voice-only extension or MLC-6 cordless phone in the inventory room to improve mobility and productivity
- AT&T Magic on Hold
- One 206 module and one 200 module
- Speed Dialing for quick access to frequently called suppliers
- Credit card scanner at the cash register extension to speed credit approval process and enhance accuracy

- Paging to expedite clerk's requests for prices or assistance
- Fax machine and answering machine at the office extension to streamline operations and increase customer satisfaction

5.4 Selling With Confidence

PARTNER and PARTNER Plus are systems you can sell with confidence. The *PARTNER Plus Communications System Installation and Programming Guide* received the 1990 Award of Excellence from the Society of Technical Communications, and 99% of the customers whose businesses were beta test sites for PARTNER/PARTNER Plus Release 2 chose to keep the system.

In its brief time on the market, the PARTNER/PARTNER Plus product line has generated a great deal of positive feedback from our customers and the telecommunications industry:

"This phone system, along with its related literature, is by far the simplest system I have ever worked with. I commend you on providing your customers with such a great system. User friendly is an understatement."

Catering company
Little Ferry, NJ

"Wonderful. Due to our time schedule we were using our system without training for almost a month. I read the documentation, did the programming myself, [and] only had a couple questions for the trainer."

Retail art supply store
Mason, MI

"[I] love the look and feel of the phone, [and] would recommend it highly to anyone. Our [AT&T] technicians were particularly helpful and presented the training in an easy-to-understand manner. [They] were very fast in installing and cleaned up everything after themselves."

Doctor's office
San Antonio, TX

"I think you have a very strong offering here, and we have purchased two PARTNER Plus systems thus far for two of our plants. We are currently evaluating it for use in our other plants and showroom."

Clothing retailer
Chattanooga, TN

"One hour installation, one hour programming by myself. Piece of cake. No problems, very easy."

Warehouse
Torrington, CT

"Technically, I can't find anything negative about the PARTNER Plus. It has made my job easier, as well as presenting a more professional image of our company than our old system did. We are all well satisfied. Dealing with the patient, kind professional [AT&T technician] was a pleasure, [I] wish all the people I dealt with in a day were like your personnel."

Coffee shop
New Prague, MN

"1990 Products of the Year - We saw them. We liked them. We wrote about them. We salute them. Innovative little sucker, cheap too."

Teleconnect, 1/91

"PARTNER provides an uncomplicated user interface for those small business customers who 'refuse' to look at a manual. PARTNER is designed to take care of itself. . . AT&T [GBS] made PARTNER affordable and easy to use."

Datapro, 1/91

5.5 Competition

5.5.1 PARTNER/PARTNER Plus Competitive Position

There are many players in the small business telephone marketplace, but AT&T GBS PARTNER/PARTNER Plus communications systems are truly the premier offerings.

Although some competing systems support industry-standard stations in addition to their proprietary stations, only PARTNER and PARTNER Plus offer enhanced tip/ring functionality. This allows users to connect adjuncts such as answering machines, doorphones, lobby phones (hot lines), and modems directly to the telephone system.

Documentation (P/P+): Users have praised the clear, concise, user-friendly documentation provided with every PARTNER and PARTNER Plus communications system.

Fax Management (P+): Fax Management capability is unique to PARTNER Plus. Generally, any systems that support industry-standard touch-tone stations are capable of supporting a fax machine in a "behind-switch" mode. However, at this point no manufacturer is offering the capabilities provided by PARTNER Plus Fax Management.

Multilingual Display (P+): PARTNER Plus allows telephones to display system messages in English, French, and Spanish. Only Northern Telecom now offers a similar capability, but only two of the three languages can be displayed per system, either English/Spanish or English/French. PARTNER Plus features all three.

Enhanced Tip/Ring (P/P+): Although many competing systems will support industry-standard stations in addition to their proprietary stations, there is not another manufacturer that provides the capabilities offered by the PARTNER/PARTNER Plus Enhanced Tip/Ring feature. Panasonic has come the closest with its new SDBS 308 and SDBS 616. However, the Panasonic system is essentially an internal software-driven A/B switch. Industry-standard stations can share the same station number, but require a different pair of wires. The proprietary station and industry-standard station cannot be active simultaneously.

Modular Design and Upgradability (P/P+): PARTNER products have fewer parts than their competitors. This feature reduces complexity, expedites trouble detection, and builds your customers' confidence in the system. PARTNER products are made up of individual 206 modules. The modules and processor have LEDs, so users can quickly recognize problems. If one 206 module fails, it does not affect the others in a given PARTNER/PARTNER Plus system. Competing products, such as the system available from Norstar, contain one large circuit board. If it fails, an entire unit must be replaced. Another example is the Panasonic KX-T-308, which starts as a 308 and stops as a 308 . . . it cannot grow. PARTNER customers can initially purchase a 206 system and grow at a later date.

Simple stated, customers with PARTNER products are free

to add hardware, rather than having to replace hardware as their telecommunications system needs grow.

And, of course, no competitor has AT&T standing behind each and every system. It's up to the AT&T sales representative to use the *Six-Step Selling Process* and *Solutions for Success* to explore the needs of small business customers and develop PARTNER or PARTNER Plus system configurations that will meet those requirements.

5.5.2 Sources of Information on Competing Products

Sales representatives can obtain the most current competitive information from the following sources:

- GBS competitive analysis information is available via the SCAN database to authorized users of ELIB. If you are a GBS employee and do not have an ELIB login ID, contact your sales manager, sales support manager, or area sales offices system administrator.
- SCAN (Sales Competitive Analysis Newsletter) will highlight PARTNER products' competitors in the July and September issues. If you currently are not receiving this valuable newsletter, complete AT&T form ATT-011 (07/88) "Update for Mailing Address Program (MAP) and Directory Services."
- If you have exhausted the sources described above and still cannot find the specific competitive information you need, contact the SCAN NTM Competitive Support Hot Line at 1 (800) 222-1313.

5.5.3 Key Competitors

AT&T PARTNER/PARTNER Plus's primary competitors in the small business key telecommunications systems marketplace are:

- Comdial Corporation
- Executone Information Systems, Inc.
- Northern Telecom, Inc.
- Panasonic
- Tie Communications
- Toshiba

Comdial Corporation

target market: Small to medium-sized businesses, residential customers.

products: Up to 60-station size key telephone systems that operate behind Centrex.

distribution: No direct sales force. Comdial distributes its products through suppliers such as Graybar Electric, North Supply, and Alltel Supply, which sell the equipment to local interconnects.

market strategy: In 1990, Comdial merged with Eagle Telephonics, another behind-Centrex key telephone systems manufacturer. This move is expected to enhance the firm's behind-Centrex capability. Comdial emphasizes its "made in America" heritage. The company recently became a long-distance reseller.

Executone Information System (EIS)

target market: Businesses with up to 300 desktops.

products: Voice and data equipment, including small business key telephones systems of up to 16 stations; MCI long-distance services.

distribution: Direct sales and service, independent distributors.

market strategy: National direct mail and outbound tele-marketing programs that position the company as a provider of network services and customer premises equipment.

miscellaneous information: Since 1988, EIS has consolidated sales and service operations and suffered some dealer defection.

Northern Telecom, Inc.

target market: Large, medium, and small businesses.

products: Full range of telecommunications products from small key systems of up to 16 stations, to large Central Office switches.

distribution: Via RBOCs, major independent telephone companies, and interconnects.

market strategy: An “evergreen” policy that guarantees backward-compatibility of Northern Telecom products. Future products supposedly will not displace existing products,

although this has not always proven to be true.

miscellaneous information: Northern Telecom, Inc. is the second largest manufacturer of telecommunications equipment in North America. Fifty-five percent of the company is owned by Bell of Canada.

**Panasonic Communications & Systems Co.
Panasonic Company**

target market: Small businesses, residential customers.

products: Key and hybrid/PBX systems.

distribution: Through dealers and retailers via supply houses.

market strategy: Provide full-featured systems for small business customers.

miscellaneous information: Panasonic Communications & Systems Co. and Panasonic Company are wholly owned by Matsushita Communications Industrial Co. Ltd. of Japan. Matsushita has begun U.S. production of small business telephone systems.

Tie Communications

target market: Small- and medium-sized businesses.

products: Key and PBX systems.

distribution: Dealers and direct sales force. The resulting channel conflict has caused dissension among Tie dealers.

market strategy: Tie, one of the leading manufacturers and importers of telecommunications products in the U. S., has been losing market share since 1984. Its primary strategy at this point is to increase profitability and regain share.

Toshiba

target market: Small- and medium-sized businesses; special emphasis on multilocation businesses.

products: Key and PBX systems.

distribution: 200+ interconnect dealers nationwide; no direct sales force.

market strategy: Private label agreements with USX, Lanier, Pactel, Alltel, and Radio Shack; national account teams cover multilocation accounts; rental and lease/purchase programs.

miscellaneous information: While Toshiba does have multilocation accounts, the company really does not have formal national sales and service organizations.

5.6 Price Element Codes

PARTNER/PARTNER PLUS ORDERING INFORMATION

PEC	PEC DESCRIPTION	COMCODE	APCODE	SKU	SCEBOOK
6060-824	PARTNER PLUS R2 CARRIER	106440233	103B2	09076	6060-824A
6060-206	PARTNER R2 CU	106440217	103E1	09075	6060-206
60606	PARTNER/PARTNER PLUS R2 206 MODULE	106440225	103E2	09078	60606A
3151-04B	MLS-6 (BLK)	106446040	7311H04A-003	00912	3151-04BA
3151-04W	MLS-6 (WHT)	106446057	7311H04A-264	00911	3151-04WA
3151-05B	MLS-12 (BLK)	106446065	7311H05A-003	00914	3151-05BA
3151-05W	MLS-12 (WHT)	106446073	7311H05A-264	00913	3151-05WA
3151-06B	MLS-12D (BLK)	106446081	7311H06A-003	00916	3151-06BA
3151-06W	MLS-12D (WHT)	106446099	7311H06A-264	00915	3151-06WA
3151-08B	MLS-34D (BLK)	106381643	7315H01A-003	09042	3151-08BA
3151-08W	MLS-34D (WHT)	106381668	7315H01A-264	09041	3151-08WA
60607	PARTNER/PARTNER PLUS 200 MODULE	106413180	103D	09028	60607A
60603	PARTNER MOD CONNECTOR	105744148	103C	00908	60603A
60608A	PARTNER PLUS R2 PROC MOD	106413172	5392A2	09079	60608A
60608A	PARTNER PLUS DOCUMENTATION	106488349	5392A2	09079	
60612	PARTNER IROB	106392558	503A	00967	N/A
3153-03B	MLC-6 (BLK)	106202492		01067	3153-03BA
3153-03W	MLC-6 (WHT)	106202518		01069	3153-03WA
MLS-6	PROTECTIVE COVERS (pkg. 3)	406483206		N/A	10704X
MLS-12	PROTECTIVE COVERS (pkg. 3)	406483230		N/A	10705X
MLS-12D	PROTECTIVE COVERS (pkg. 3)	406483214		N/A	10706X
5234-003	PARTNER PLUS DOORPHONE	406269845		01064	5234-003A
N/A	PROCESSOR MODULE	106413172		N/A	N/A
N/A	FACE PLATE, GRAPHIC LABELS - MLS-6	106265051		N/A	10710X

PARTNER/PARTNER PLUS ORDERING INFORMATION

PEC	PEC DESCRIPTION	COMCODE	APCODE	SKU	SCEBOOK
N/A	FACE PLATE, GRAPHIC LABELS - MLS-12/12D	106265069		N/A	10711X
N/A	FACE PLATE, GRAPHIC LABELS - MLS-34D	106557499		N/A	10713X
N/A	TEL STD-WHITE	106437163		N/A	N/A
N/A	TEL STD-BLK	106437155		N/A	N/A
N/A	AC POWER CORD	846512341		N/A	N/A
N/A	FILTER TO PREVENT RADIO INTERFERENCE	106416340		N/A	N/A
N/A	BACK PLANE SCREWS	842058471		N/A	N/A
N/A	BACK PLANE ASSEMBLY	846296197		N/A	N/A
N/A	PARTNER PLUS COVER	846374007		N/A	N/A
N/A	SWITCHBOOK CLIP-BLK	845780675		N/A	N/A
N/A	SWITCHBOOK CLIP-WHT	845545003		N/A	N/A
N/A	267F2 ADAPTER	106276876		N/A	10662X
N/A	9 FT HDST CD-WHT	105766737		N/A	10713X
N/A	12 FT HDST CD-WHT	106521768		00556	10700X
N/A	25 FT HDST CD-WHT	106521776		00557	10701X
N/A	9 FT HDST CD-BLK	105635429		N/A	10609X
N/A	12 FT HDST CD-BLK	102401445		15983	10089X
N/A	25 FT HDST CD-BLK	105503866		15965	10132X
N/A	HANDSET-WHT	106053408		N/A	10672X
N/A	HANDSET-BLK	106050065		N/A	10671X
N/A	D2R CORD, 14 FT	103732566		N/A	10663X
N/A	D2R CORD, 7 FT	103732582		N/A	N/A
N/A	D2R CORD, 7 FT	103732541		N/A	N/A
N/A	D4BU CORD, 14 FT	102479896		N/A	N/A
N/A	D4BU CORD, 2 FT	102867579		N/A	N/A
N/A	D4BU CORD, 25 FT	102803269		N/A	10088X
N/A	D4BU CORD, 7 FT	102479904		N/A	10086X

5.7 Availability

PARTNER Release 2 products are available for ordering nationally effective 6/24/91. Colors include two-to-one customer preference for black. Time to delivery is one week.

5.8 Warranty

There is a one-year warranty on all PARTNER products (available from 8AM to 5PM on business days). Contact your local manager for enhanced service protection plans.

6.0 For Additional Information

PARTNER Installation and Use Guide 518-455-110

PARTNER User's Reference Cards 518-455-150 (package of six)

PARTNER Plus System Planner Form GBS 117
(call 1-800-367-6487)

System Planner (dealers and customers) 518-600-109

PARTNER Plus Installation and Use Guide 518-455-210

PARTNER Plus User's Reference Cards 518-455-250
(package of six)

MLS-34D Programming Overlay 518-455-221

MLS-12D Programming Overlay 518-455-220

PARTNER Plus Doorphone Product Fact Sheet GB-4605

Signaling Products Quick Reference 999-350-655

T/R Signaling Installation Instructions (included with product)

PARTNER Cordless Slim Jim GB-4578

PARTNER Plus Slim Jim GM-4598

PARTNER Slim Jim GB-4597

PARTNER Product Fact Sheet GB-4601

PARTNER Plus Product Fact Sheet GB-4602

Spanish documentation

PARTNER Plus Programming Quick Reference
518-600-107-SPD

PARTNER Programming Quick Reference
518-600-108-SPD

PARTNER Plus User's Quick Reference Cards
518-455-250-SPD

PARTNER User's Quick Reference Cards
518-455-150-SPD

Appendix 1: Basic Telecommunications Terms

Telecommunications terminology can be confusing to even the most experienced sales representative. In addition, customers often use technical or descriptive terms incorrectly. This basic telephony refresher should help you to clarify terms in your own mind and explain relevant telecommunications concepts to your customers.

Alpha Trial

A product's alpha trial follows thorough testing by the manufacturer (Shreveport) and independent laboratory testing (AT&T Bell Laboratories). During an alpha trial, engineers and product team members use the products being tested on a daily basis. Usually this testing phase also includes several customer locations. PARTNER products entered this phase of the testing cycle in early spring, 1989.

Beta Trial

When alpha testing is completed satisfactorily, the product's beta trial begins. PARTNER products began beta testing in November, 1989. More than 42 customers participated. Ninety-nine percent (99%) of these customers elected to keep their PARTNER products.

Central Office Lines

A Central Office (CO) line is a circuit (telephone number) from the Central Office to a service location. Your home phone number is an example of a CO line. A key telephone system is another example. Because all lines terminate in at least one telephone in a key system simultaneously, there is no need to switch calls.

Central Office Trunks

A CO trunk is a circuit from the Central Office to a PBX switching facility at another site. When a call comes in to the CO, it is switched to the PBX, which then switches it to a particular extension.

Centrex

Key systems and PBXs are customer premises-based. Centrex is an offering that essentially provides PBX service to customers from the local CO. Centrex customers receive a block of telephone numbers from the Centrex vendor. These numbers are programmed together to constitute a “system” that provides features such as intercom, call forwarding, call transfer, toll restriction, least cost routing, and call hold. Users pay a mileage-sensitive monthly charge. The farther away a customer is from his or her Centrex CO, the more the monthly charge will be. Users can link multiple locations in a single Centrex environment.

Occasionally a customer may use more than one of these systems. It is important to understand that if a customer's Centrex service terminates in a key system such as PARTNER or PARTNER Plus, he or she may be able to use the features of both systems (see section 3.4.2, Interfaces With

Other Systems). In this case, the key system is said to operate “behind Centrex.”

Dual Tone Multiple Frequency (DTMF)

Touch-tone, station-set, end-to-end signaling method that encodes digits as audible multifrequency tones.

Enhanced Tip/Ring

Enhanced tip/ring (ETR) refers to the simultaneous operation of a proprietary (system) and tip/ring telephone set. ETR allows the key telephone system user to connect tip/ring adjuncts in parallel with a proprietary phone, without any special adapters or dedicated lines.

Foreign Exchange Service and Remote Call Forwarding

These are also part of the public network. Foreign exchange service is essentially a CO line that has been “stretched” from one exchange area into the territory of another exchange. If, for example, a business moves from New York to New Jersey, but wants to retain its New York telephone number, the circuit is brought over to the local exchange in New Jersey and then brought into the business’s new location. Two COs are involved and the line between them is a private circuit leased on the basis of its length in miles.

Remote call forwarding is a service also used by businesses that move from one location to another. Such a firm may want its old customers to continue to be able to use a local number to reach the company in its new, out-of-area location. When a customer calls the old number, the CO makes another call to the new number, connecting the two calls. The business owner pays for the second call.

Key Systems

AT&T PARTNER and PARTNER Plus communications systems are key telephone systems. In a key system, a CO line terminates on more than one instrument at the same time. Therefore, it is possible for every CO line coming into a given key system to appear as a button on every phone in that system. For example, the once common six-button telephone set accommodated five CO lines and had a hold button. Calls could be directed simply by putting the caller on hold and notifying the desired party that a call had come in for him or her. That party would then pick up the same incoming line on his or her phone.

Private Branch Exchange (PBX) Systems

Key systems share the business communications marketplace with private branch exchange (PBX) systems. A PBX differs from a key system in that the PBX switches a call from a central answering point to the individual telephone set requested by the caller. In other words, incoming calls ring at an operator or attendant telephone, and then are sent to the designated party. There are no incoming lines assigned to individual phone sets. A user wishing to make an outgoing call has to “request” a trunk from a pool, generally by dialing 9. Internal extensions can be dialed directly.

PBXs can be analog or digital. These terms refer to the ability of the system to switch voice and data signals.

Generally, older PBXs are analog, capable of switching voice calls only.

Today's digital PBXs are able to link appropriately equipped voice terminals (telephones) to computers and other devices.

Private Network (Private Line) Circuits

A private line circuit provides point-to-point and multi-point dedicated voice links between two or more non-switching pieces of equipment. Although the CO can switch calls to private network circuits, these circuits are not attached to the public network. Police and taxi call boxes and brokers' lines to the stock exchange floor are examples of private networks. Users lease private network circuits on a full-time, mileage-sensitive basis.

Private network (private line) circuits are not the same thing as what many customers call a "private line." Generally, he or she is really referring to a personal line. A personal line is a telephone number that is accessible only at a specific extension.

Switched (Public) Network

The switched network is comprised of the facilities used to make and receive calls on an as-needed basis. These facilities include:

- Central Office (CO) lines
- CO trunks
- Special service lines and trunks such as WATS and 800
- Centrex
- Foreign Exchange Service (a half-public/half-private circuit) and
- Remote Call Forwarding

Tie

Remote call forwarding is a service also used by businesses that move from one location to another. Such a firm may want its old customers to continue to be able to use a local number to reach the company in its new, out-of-area location. When a customer calls the old number, the CO makes another call to the new number, connecting the two calls. The business owner pays for the second call.

A tie line is a leased or private dedicated telephone circuit provided by common carriers that links two points without using the switched telephone network.

WATS and 800 Services

WATS and 800 services are components of the public network. They are CO lines or trunks that feature limited access or scope in exchange for special calling rates.

Appendix 2: Product Shots

MLS-12D Design Features

Dedicated circuit provides high quality Speakerphone and Handset operation.

COMPUTER controlled to ensure successful handling of calls and prevention of false or lost calls.

MICROPROCESSOR switch-hook detector for reliable trouble-free operations.

Internal protection circuits to prevent damage due to miswiring or Static Discharge.

Radio Frequency Filter to block unwanted radio station signals from interfering with operation.

Special background noise canceller to filter unwanted room noise from each call.

Red and Green Indicators on each button to make it easy to identify call and feature status.

DISPLAY with wide viewing angle to provide clock, calendar, timer, alarm, system administration and system status information.

Release tab provides for easy removal faceplate.

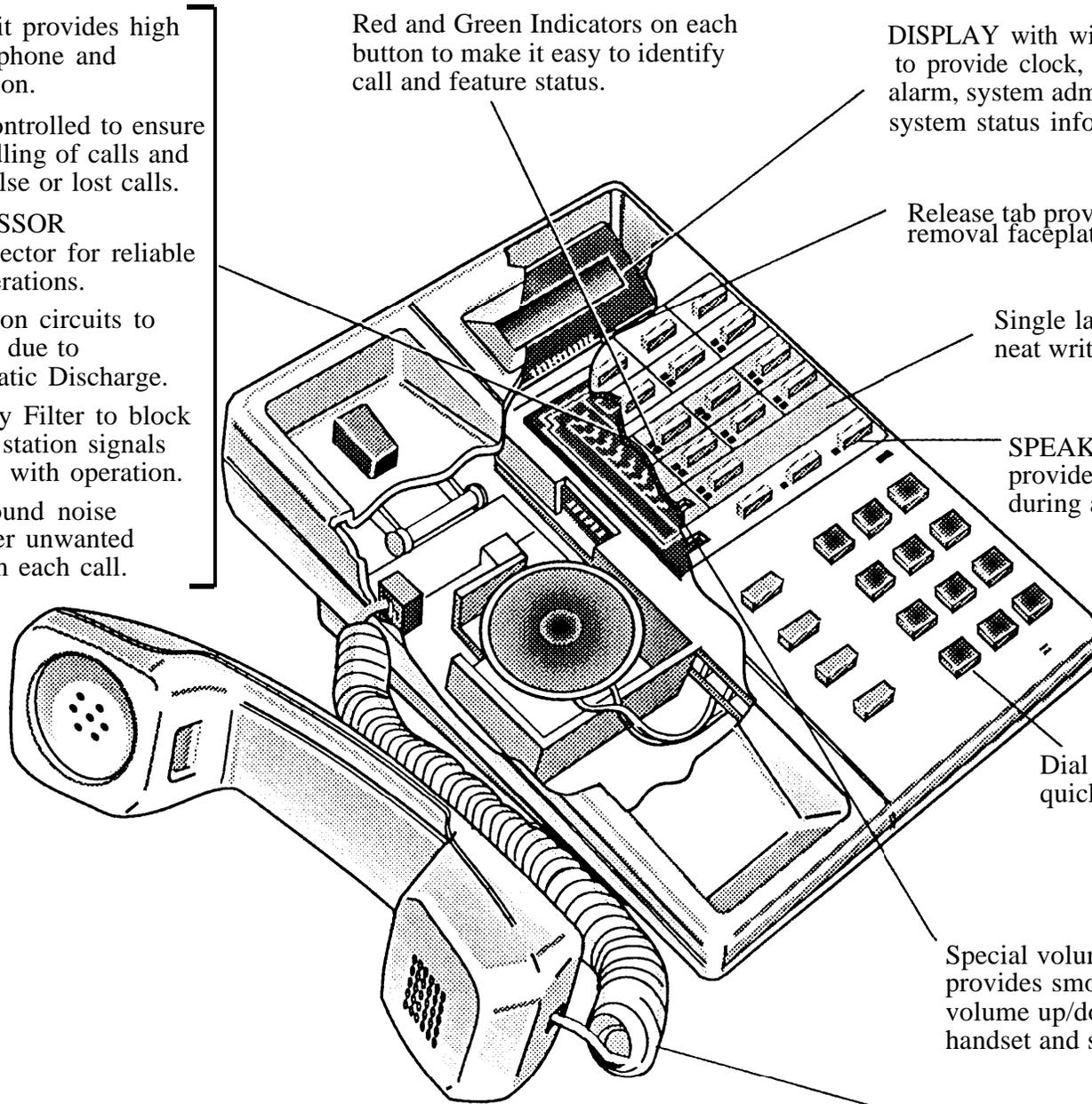
Single label sheet provides neat written or typed labeling.

SPEAKERPHONE controls to provide for Hands-Free operation during a call.

Dial buttons designed for quick, error-free operation.

Special volume control circuit provides smooth continuous volume up/down on ringer, handset and speakerphone.

9 ft. handset cord for added mobility.



MLS-34D Design Features

Dedicated circuit provides high quality Speakerphone and Handset operation.

MICROPROCESSOR controlled to ensure successful handling of calls and prevention of false or lost calls.

OPTICAL switch-hook detector for reliable, trouble-free operations.

Internal protection circuits to prevent damage due to miswiring or Static Discharge.

Radio Frequency Filter to block unwanted radio station signals from interfering with operation.

Special background noise canceller to filter unwanted room noise from each call.

DISPLAY with wide viewing angle to provide clock, calendar, timer, alarm, system administration and system status information.

Release tab provides for easy removal faceplate.

Red and Green Indicators on each button to make it easy to identify call and feature status.

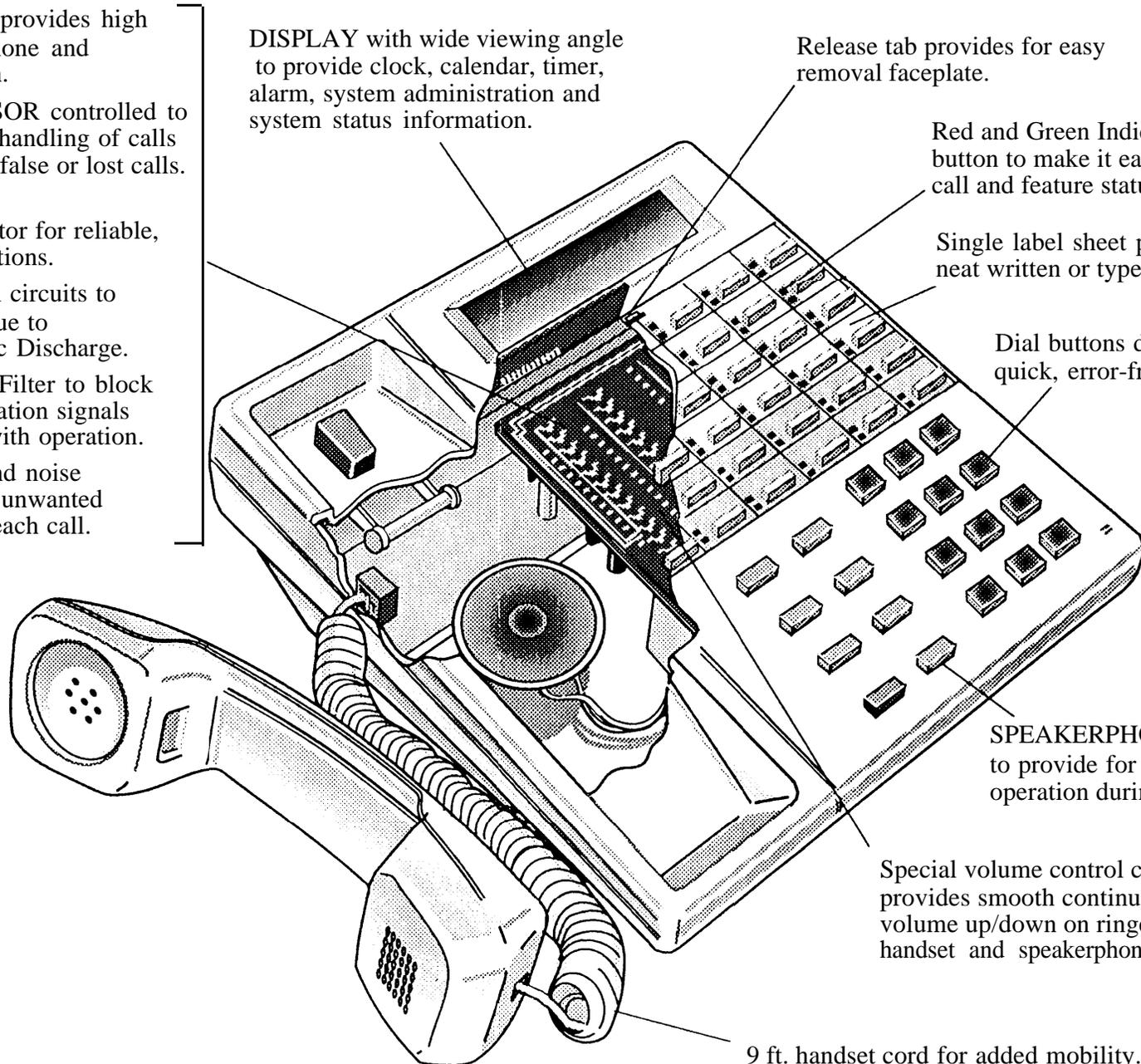
Single label sheet provides neat written or typed labeling.

Dial buttons designed for quick, error-free operation.

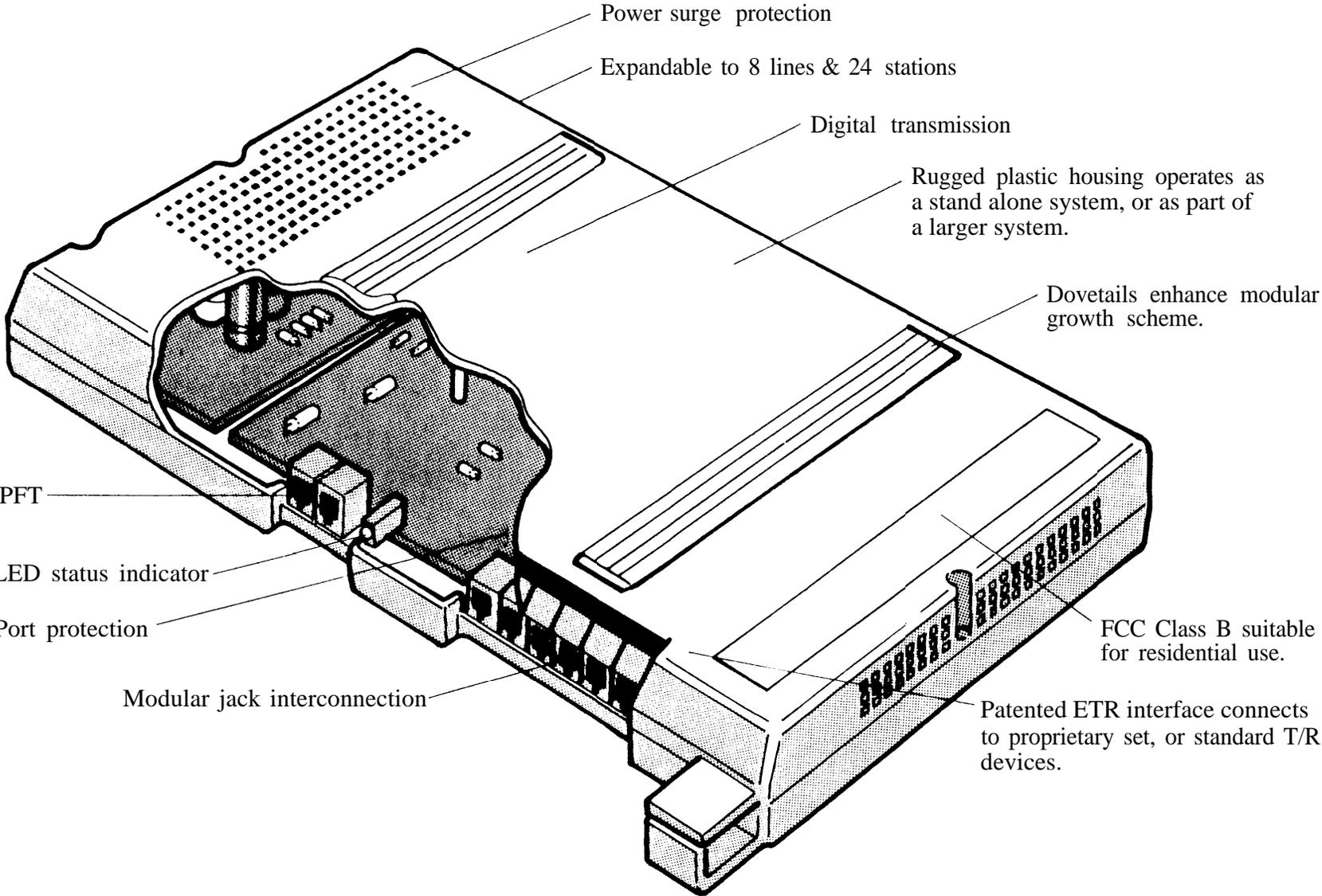
SPEAKERPHONE controls to provide for Hands-Free operation during a call.

Special volume control circuit provides smooth continuous volume up/down on ringer, handset and speakerphone.

9 ft. handset cord for added mobility.



PARTNER Control Module Design Features



(CPU) Processor design features

