SERVICE AND EQUIPMENT MANUAL



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PART I—MAIN STATION AND EXTENSION SERVICES

Section I—Residence and Business Services

Section 2—Rural Service

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Section 4—Toll Terminal Service

Section 5-Toll Station Service

PUBLIC TELEPHONE		SEMI-PUBLIC TELEPHONE
NONE	INSTALLATION CHARGE	\$ 8,50
NONE	MO. REV. REQUIREMENT	35 ¢ PER DAY
15% LOCAL 10% L.D.	COMM. TO CUST	12.5% OF ALL ABOVE GUAR.
STRAIGHT BUS. LINE	OTHER SERV. REQUIRED	NONE

RESIDENCE AND BUSINESS SERVICES

GENERAL

A main station is a telephone connected directly to a local central office. It may be connected to any other telephone served by the central office, or to a line leading to another local central office or a toll (long distance) central office. Thus, through inter-connection of central offices, a main station can be connected to practically any other telephone in the general telephone system.

An extension telephone is an additional telephone connected to the main station line so that calls may be placed and answered at more than one location.

OPERATION—Main stations and extensions operate on either a magneto or a common battery (manual or dial) basis

With magneto operation, the electric current required for signaling and talking is provided at each telephone, the signaling current by means of a hand generator, and the talking current by means of dry cell batteries. The telephone user signals the operator by turning the hand crank which operates the generator.

With common battery operation, the electric current required for signaling and talking is supplied from batteries located at the local central office. In a common battery manual central office area, the telephone user signals the operator by lifting the receiver. In a common battery dial central office area, the user lifts the receiver and dials the number desired.

EQUIPMENT—Various types of telephone instruments are available for use with main station lines to meet particular customer requirements, including wall and desk telephones, handsets, headsets, telephones for people with impaired hearing, and other types for use under special conditions. These instruments are illustrated and described in Part III.

Telephone bells and special signals used to indicate incoming calls on telephone lines are described in Part III.

CUSTOMER AND PUBLIC SERVICES — Two general types of main station services are provided: (1) Customer and (2) Public services.

Customer services are furnished for the exclusive use of the customer, authorized joint users, and members of the household or employees of the firm. They are not provided for use of the general public or patrons who visit the premises of the customer. The residence and business customer services available are described below

Public telephone service is provided primarily for the use of the general public and patrons who visit the premises of the customer. Semi-public service is a combination of customer and public service used where the

volume of both customer and public usage is small enough to be handled over one central office line. Public and semi-public services are described in Part I, Section 3.

RESIDENCE MAIN STATIONS

A residence main station is a customer service furnished in private residences and apartments for the exclusive use of the customer and other members of the household. A listing in the alphabetical telephone directory is provided. Additional listings in the alphabetical directory may be purchased by the customer (See Part II). The telephone number should not be advertised.

Several kinds of residence service are provided:

- 1. Flat rate services
 - a Individual line (FR1)
 - b. Two-party line (FR2)
 - c. Four-party line (FR4)
- 2. Measured rate service
 - a. Two-party line (MR2)

Flat rate residence service permits an unlimited number of outgoing and incoming calls or messages at a fixed monthly charge. An individual line gives the customer exclusive use of the line at all times. With party-line service the customer shares the line with one or three other families, and use is therefore limited or restricted.

Measured rate residence service is provided in some exchanges on a two-party line basis. An unlimited number of local incoming calls or messages and a specified or limited number of outgoing local calls are provided at a fixed monthly charge. Additional local outgoing calls over the message allowance are charged for at a specified rate per call.

Residence services are provided within the local service area known as the exchange rate area. Where such service is provided beyond the initial rate area, additional mileage charges apply. Rural telephone service is also provided outside the initial rate area, as outlined in Part I, Section 2.

BUSINESS MAIN STATIONS

A business main station is a customer service furnished in business establishments for the exclusive use of the customer, authorized joint users, and employees. Use by the general public or by patrons of the firm is not contemplated. Public or semi-public telephone service is provided at premises where there is or will be public usage. (See Part I, Section 3).

A listing in the alphabetical directory and a listing in the classified directory are provided without charge for each business customer service (not for each line in a customer service). Additional listings may be purchased in the alphabetical and classified directories; and advertising may be purchased in the classified directory. (See Part II). The customer may also show his business telephone number on letterheads, signs, and in other advertising.

Two kinds of business service are provided:

- 1. Flat rate individual line service (FB1)
- 2. Measured rate individual line service (MB1)

Flat rate business service, furnished on an individual line basis, permits an unlimited number of outgoing and incoming calls or messages at a fixed monthly charge.

Measured rate business service, provided in some exchanges on an individual line basis, permits an unlimited number of local incoming calls or messages and a specified or limited number of outgoing local calls at a fixed monthly charge. Local outgoing calls exceeding the prescribed limit are charged for at a specified rate per call.

Flat and measured rate business services are provided within the exchange area. When such services are provided beyond the initial rate area (within an exchange area), additional mileage charges apply. Rural telephone service is also provided outside the initial rate area, as outlined in Part I, Section 2.

JOINT USER SERVICE

A residence or business customer may arrange with the telephone company to share his telephone service with another person or business not considered a member of the household or business establishment. Under such an arrangement, the other person or firm, called the joint user, is entitled to the same directory listing services as the customer. The minimum period of service is the directory period for joint users with directory listings, and one menth for joint users who have no listings.

Joint users service may be provided with individual flat and measured rate business lines, with residence individual and party lines, with semi-public service, and with commercial and hotel PBX service. Not more than two joint users are permitted with each central office line or commercial PBX trunk. On hotel and apartment PBX's any permanent guest may be a joint user. The joint user must be located in the same offices or in the same household as the customer, and the telephone number and address shown in the joint user's directory listings must be the same as the customer's.

Extensions and miscellaneous services may be provided with joint user arrangements. The charges for miscellaneous services as well as for the joint user service are billed to the customer and not the joint user.

When the combined usage of the customer and the joint users is expected to be substantial, the interests of all parties might be better served by providing separate main station service for each party. In establishing a joint user arrangement, additional central office lines and other facilities may be required to properly handle the combined usage of the customer and the joint users.

Joint user service is not furnished to customers who rent office space to clients and who wish to resell telephone service to the clients. Also, joint user service is not provided to meet the requirements of customers who wish to furnish secretarial service to a group of clients, that is, to answer clients' incoming calls during their absence. Secretarial service arrangements provided for this purpose are described in Part V.

COMBINING FB1's AND MB1's

Some classes of business services may and should often be combined to the mutual benefit of both the customer and the company.

However, there are certain combinations of primary services which are prohibited because they are either undesirable from the company's standpoint, the customer's interest, or both, usually the latter. There are still other combinations, though not always prohibited, are almost always undesirable and should be furnished only when the special circumstances indicate a clear need for them.

SEVERAL FB1's—The customer may require several flat rate individual business lines to handle his calls. This combination is highly desirable. The telephone numbers of such a group of lines should be consecutive, as 1234, 1235, 1236, with only the first number listed. A consecutive group of lines will handle considerably more incoming calls than a nonconsecutive group.

SEVERAL MB1's—This is also a highly desirable arrangement when telephone numbers are consecutive, as covered above with respect to several FB1's.

FB1's WITH MB1's—Flat rate and measured service combined on the same premises, called "mixed service", is not permitted, whether associated by means of key equipment or not, or whether for the same or different customers. The reason for this regulation is to help assure an equitable distribution of charges by preventing services from being used in ways and in amounts not contemplated in the rate schedule. For example, a customer with both a flat and a measured rate telephone on the same premises could place most of the outgoing calls over the flat, using the measured telephone for incoming calls.

RESIDENCE AND BUSINESS SERVICES

For information on combinations of business services with semi-public or public service and combinations of coin telephone services, see Part I, Section 3.

EXTENSION TELEPHONES

Extension telephones may be provided on a residence or business main station line for placing or answering calls at more than one location. When furnished with customer service, an extension must be installed in a location inaccessible to the public or patrons of the customer. A residence extension may not be installed on a business premises. However, a business extension may be installed on a residence premises.

A regular telephone bell may be provided with each extension. However, the number of bells which may be provided with each central office line is limited, as outlined in Part III.

Extensions may be either permanently connected to the line or may be portable for moving from one location to another, as outlined in Part III.

Special considerations apply where extensions are used with key telephone systems and key equipment.

RURAL SERVICE

GENERAL.

Families and business establishments in rural areas (i. e., areas outside the initial rate boundaries and within the respective exchange area boundaries) are served by three classes of service: (1) Main station service as described in Part I, Sections 1 and 3, on an excess mileage basis; (2) company-owned and maintained rural party lines; and (3) customer-owned and maintained lines (service lines). Rural telephone service, as the term is used here, includes only the latter two classes of service.

COMPANY-OWNED SERVICE

Company-owned rural telephone service is ordinarily provided by conventional pole and wire lines which, with the telephone instruments, are owned and maintained by the telephone company. Other methods for providing the service include: (1) Use of the power carrier telephone system which involves the use of electric power wires simultaneously for power service and for telephone service; and (2) joint use of poles to carry both power and telephone wires.

OPERATION—Rural telephone service may operate on either a magneto or a common battery (manual or dial) basis. Usually, the number of parties on the line is limited to eight. Residence and business customers may be served by the same line. Extension stations may be provided.

<u>SIGNALING</u>—The type of signaling (i.e., ringing) for incoming calls depends primarily on the type and size of central office to which the rural line is connected. The various types are:

- Full Code Ringing—All telephones on the line ring when there is an incoming call for a particular customer. Each customer is signaled by a code assigned to him, for example, one long and one short ring.
- Divided Code Ringing—A customer hears the code ringing of only half the customers on the line.
- Semi-Selective Ringing—A customer hears the ringing of his own telephone and that of one other customer.
- 4. Full Selective Ringing—A customer hears only the ringing of his own telephone.

EQUIPMENT - The telephone instruments may be

either wall, desk, or handsets. Headsets, telephones for people with impaired hearing, and plugs and jacks may also be provided. These equipments are illustrated and described in Part III.

<u>CONSTRUCTION</u> <u>CHARGES</u> — Where facilities are available, rural telephone service is provided without a construction charge to customers. Where facilities are not available, additional charges based upon cost apply as follows:

- 1. In the case of a new rural line, the telephone company will provide at its own expense new pole "leads" and circuits along public roads or on private property of from one-half to one mile per customer, depending on the monthly rate. In applying the allowance and determining the construction charges for facilities, service is treated on a "lead" or an area basis.
- 2. When poles on private property are necessary for entrance facilities to serve an individual customer, an allowance of two or more poles, depending on the monthly rate, is provided. When construction charges are involved, they are based on the number of poles in excess of the allowance.

CUSTOMER-OWNED LINES

In the past, it was common practice for groups of farmers to construct their own lines and provide their own telephone instruments. Many of these lines, called service lines, are still in existence. Such customer-owned lines are connected to a central office line at or near the initial rate area boundary. Switching service is provided by the telephone company at a monthly rate.

OPERATION—Most service lines are on a magneto basis. Service may be furnished on a common battery (manual or dial) basis in common battery exchanges, if the customer-owned facilities are suitable for this type of operation.

SIGNALING—Full code ringing is commonly used for customer-owned lines. Lines operated on a common battery basis have the same type ringing as is used for company-owned rural lines which may be divided code or semi-selective.

EQUIPMENT—The telephone company will lease station equipment and apparatus, including local batteries, to service station customers at a fixed monthly charge. Station equipment may, however, be owned by the customer.

GENERAL

Local telephone service provided primarily for use by the general public or by patrons of the business establishment is coin telephone service. As indicated in Part I, Section 1, public use of strictly customer services, such as individual flat and measured rate services, is not permitted, and customer services should not be installed in locations accessible to the general public or patrons of the customer.

Two kinds of coin service are provided in magneto and common battery (manual or dial) exchanges: public and semi-public, described in this section.

COIN TELEPHONES

The same type of coin telephone is used for both public and semi-public service (see exhibits). It is a wall telephone equipped with a three-slot coin collector for 5, 10 and 25-cent coins. Each type of coin when deposited gives a distinctive gong signal audible to the operator (when an operator is in attendance).

The older type coin telephone has the transmitter or mouthpiece mounted on the upper part of the housing and the receiver on a switchhook on the left side of the telephone. The newer type has an ordinary handset which hangs on a switchhook on the left side. The handset contains both transmitter and receiver. With both the older and newer types of coin telephones, the dial when required is also mounted on the upper part of the housing. The lower part of the housing contains the coin receptacle and the coin return chute.

Most public and semi-public telephones operate on a pre-pay basis, that is, the user places coin money in the appropriate slots to obtain the operator or the dial tone. If the call is a long distance call, the initial deposit is returned to the user by the operator.

In some manual exchanges the coin telephones operate on a post-pay basis, that is, on an outgoing local call the operator requests deposit of the money after someone answers the called telephone. It is not necessary to make an initial deposit to obtain the long distance operator.

PUBLIC TELEPHONE SERVICE

Public telephone service (PTN) is furnished for the use of the general public at locations selected by the telephone company. Use of public telephones by customers on whose premises such stations are located is only incidental to their main purpose of serving the needs of the general public.

Ordinarily public telephones are furnished on an individual line basis, but in some cases party line service outside the base rate area is provided.

Public telephones are not listed in the directory and incoming local service is not contemplated. Public telephone numbers should not be listed in customer advertising.

The customer on whose premises the public telephone is located is compensated for space, heat, electric current, janitor and other services he provides through the commissions he receives on local and long distance messages.

Since public telephone service is provided without the requirement of a guarantee, it should not be installed unless there is a well-defined need for the service and fully compensating revenue possibilities.

Extensions on public telephones are usually not permitted.

PUBLIC TELEPHONE LOCATIONS

In determining proper locations for public telephones, the following considerations apply:

- 1. Public telephones should be installed only at locations accessible and convenient for the general public. Such locations are usually on the street level, but may be at basement levels or on upper floors of buildings, such as rest rooms of theatres, mezzanine floors of hotels, and upper floors of department stores.
- A public telephone should not be installed on premises where it is the only class of service, except in the case of public buildings.
- 3. Customer service at public telephone locations should not be accessible to the general public.
- 4. Outdoor public telephones are suitable for locations where there is a substantial need for 24 hour service and where other coin telephones in the neighborhood are not available after the usual business hours.
- 5. To prevent robbery, a public telephone should be located where it is open to the public view and on a firm mounting surface. In the majority of coin telephone robberies the telephone is pried off the backboard or the telephone and backboard are pried off the wall or other mounting surface.

SEMI-PUBLIC SERVICE

Semi-public telephone service (SP1) is a combined customer and public telephone service provided where both customer and public usage can be handled satisfactorily over one line.

A directory listing is provided with each semi-public telephone service in both the alphabetical and classified directories, and an unlimited number of incoming calls may be received. Additional listings and classified directory advertising may be purchased by the customer.

Semi-public telephones are ordinarily furnished on an individual line basis.

Semi-public telephone service is provided where customer incoming and outgoing usage is comparatively small and where there is usage by the general public, as, for example, in a restaurant or service station. As indicated in Part I, Section 1, flat and measured rate business services are strictly customer services and usage by the general public is not contemplated.

Semi-public service should not be provided as a customer service where there is to be practically no public usage.

Where the customer usage, either incoming or outgoing, or both, is expected to be substantial, and there will be considerable public usage, the total volume of customer and public calls will probably be too large for satisfactory handling over one line, a semi-public telephone would not meet the requirements. The customer usage should be separated entirely from the public usage by installing flat or measured rate business telephones for the customer's use in locations inaccessible to the public, and by installing one or more public telephones in locations readily accessible to the public.

The semi-public telephone customer guarantees a minimum amount of daily revenue for local outgoing calls, and is charged for the difference if this minimum is not collected from users during the collection period. Collection periods vary from every three or four days to 112 days, depending upon how heavy the usage is at the telephone.

Amounts in excess of the guarantee in any collection period do not apply to any succeeding collection period. All semi-public telephones furnished to the same customer and installed on the same premises are considered collectively in determining the amount of the guarantee for any collection period. (An arrangement of several semi-public telephones on the same

premises is usually not desirable, as explained later in this section.)

As indicated for public telephones, semi-public telephones should be located where they are open to public view and where there is a firm mounting surface to provide maximum protection against robbery.

SEMI-PUBLIC EXTENSIONS

Extensions, either with or without coin boxes, may be provided. The coin box extension can be used for placing or receiving calls. The extension without a coin box is used only for answering calls when the customer cannot conveniently answer incoming calls at the main station, for example, a drugstore with main station in front of counter near entrance, and extension (without a coin box) behind prescription counter.

The main station and extension should be located so that users will be in sight of each other, so as to avoid interference to conversation and "loss" of coins.

SPI's WITH OTHER SERVICES

Several SPI's—Several semi-public telephones on one premises are usually not permitted. The volume of customer usage in such cases is usually large enough to warrant a flat or measured rate telephone which would prevent interference between the public and customer calls and could be installed in a more convenient location for prompt answering. The public usage could be handled over one or more public telephones. An exception might be made in some cases as, for example, a small hotel or club with a semi-public telephone on the ground floor and one or more semi-public main telephones on the upper floors for use by patrons or guests.

Consecutive or rotary service is not provided with two or more semi-public lines and the customer loses the advantage of increased capacity of grouped lines over non-grouped lines.

SP1 with FB1—Semi-public service on the same premises with flat rate service usually results in serious service disadvantages for the customer, and as a general rule is not recommended.

Ordinarily no directory listing is provided on the SP1 when it is combined with an FB1. The customer is entitled to only one alphabetical and one classified directory listing for his entire service. Grouping of SP1 and FB1 lines for consecutive or rotary service is not provided.

SPI's WITH OTHER SERVICES (Continued)

In a retail store, the SP1 and the FB1 would usually be in two different locations. No effective provision could be made for prompt answering or transferring of calls. Incoming customer calls might often be blocked by outgoing public calls, and vice versa.

However, there are a few isolated instances where SP1-FB1 combinations or SP1's with PBX service may be desirable, such as in schools, colleges, small hotels, clubs and hospitals.

SP1 with MB1—Message rate business telephones (provided in some exchanges) installed on the same premises with semi-public telephones for the same customer should ordinarily not be encouraged for the reasons outlined above for SP1-FB1 combinations.

SP1 with PTN—In some cases a semi-public telephone and a public telephone may be installed on the same premises, for example, where the premises are so "wide open" to the public or employees of the firm that the proprietor cannot protect the customer service from unauthorized or unwarranted use. Both the SP1 and the PTN should be in locations readily accessible to the public. Or, such combination may be desirable where the customer has some incoming usage but needs two coin telephones to care for peak periods of outgoing public usage. Under this arrangement, however, customer calls may receive interference from calls placed by the public, especially where the semi-public telephone is somewhat more accessible or convenient to the public than the public telephone.

BOOTHS, SHELVES, TABLES

Public and semi-public telephones may be installed in booths or on shelves and tables.

Indoor closed booths shut out room noises, afford privacy, and thereby encourage usage. The standard booths illustrated in the exhibits following meet most requirements and use of non-standard equipment should be limited.

Open shelves or booths with wide side partitions provide some degree of privacy. They are ordinarily used where the space provided for coin telephones is too small for use of closed booths.

In some cases where indoor wall space is not available, special tables with chairs are required on which the coin telephone is mounted. A special backboard is available when required for mounting the telephone on a table or other horizontal surfaces.

Standard outdoor closed booths are provided for privacy and protection against the weather. They should be mounted on a firm base such as a permanent pavement or platform. Where there is no permanent base, the telephone company will provide a concrete base without charge for a public telephone.

Standard booths and shelves are furnished with public telephones without charge; with semi-public service a monthly charge applies.

The customer furnishes and maintains the electric wiring, outlets, and power necessary for connecting booth lights, signs, and fans except in unusual cases where a large amount of wiring is required to reach outdoor public telephone locations. Booth equipment should be connected to a circuit which remains turned on throughout the business day, and not to circuits which are turned on only for certain periods of the day, such as show windows and basement light circuits.

DIRECTORY EQUIPMENT

Shelves, tables, binders, fasteners, hangers, and lights used to facilitate convenient use of the telephone directory are illustrated and described in the exhibits following. As a general rule directory facilities should be considered for every coin telephone installation to insure that the directory is readily at hand and convenient to use. Directory tables or shelves are often needed at multi-booth installations. At some selected locations, hotels, railroad and bus stations, and airports, provision should often be made for a number of out-of-town directories.

PUBLIC TELEPHONE SIGNS

The signs shown in the exhibits following make it easy for people to find coin telephones and help to stimulate usage.

Outdoor Signs—Flanged signs, mounted at right angles to the front of the premises and clear of awnings and other signs, are used to bring the attention of people about a half block away to the availability of indoor coin telephones. Flat signs on the windows or other surfaces at the front of the premises are designed to attract the attention of people directly in front of the premises. Buildings located at street corners should usually have signs on both exposed sides. If possible, outdoor signs (other than illuminated signs) should be mounted in positions illuminated by electric lights so they can be seen at night. All outdoor signs, particularly the projecting flanged signs, should be installed in conformance with local sign ordinances, usually eight or ten feet above the street, and should

PUBLIC TELEPHONE SIGNS (Continued)

not interfere with awnings or be obstructed by other signs.

Outdoor booths should be adequately signed on all exposed sides. Illuminated signs may be required where the immediate vicinity is poorly lighted at night. Newer types of outdoor booths usually are equipped with illuminated signs.

Indoor Signs—Directional signs are required indoors when the coin telephone location cannot be readily seen from all entrances to the premises, or from all entrances to the particular floor or room on the premises. In some cases illuminated directional signs may be required but usually the non-illuminated types suffice

Ordinarily each indoor booth or group of booths should have a sign on the front. If people approach the booth from the side, a sign on the side of the booth may be appropriate.

COIN TELEPHONE EQUIPMENT



Coin Telephone

1'7" high, 9" wide, $8\frac{1}{2}$ " deep Collects nickles, dimes, and quarters on pre-pay or part-pay basis. Bell box mounted separately. Manual or dial. Black finish.

Open Shelf



 $28\frac{1}{2}$ " wide, 19" high, $16\frac{1}{2}$ " deep No. 19A in walnut finish. No. 19T unfinished.

For single or group installations, the directory compartments serving as partitions in group installations. Back of shelf mounts flush on wall. The coin telephone is mounted at 30-degree angle. The directory compartment projects at 90-degree angle from back wall. Directory compartment can accommodate $2\frac{1}{2}$ " directory binder which is hung on a short chain. Bell box concealed in rear of compartment.

COIN TELEPHONE EQUIPMENT

Example of Special Shelf

Specially built shelves of this general type may be provided to meet special conditions where space and other considerations prevent use of standard equipment.

A shelf of the type illustrated may be built to have less width and depth than the No. 19 shelf. A floor extension support may be used when proper wall support cannot be obtained.





Example of Special Table

Table illustrated is about 16" wide, 30" high, and 33" deep. Chrome tubular frame. Seat and shelves in black. Seat 18" high, 16" wide, 10" deep. Table top 16" x 14". Directory shelf 12" x 14". Telephone attached to table top. Table anchored to floor. For use where space does not permit installation of shelf or booth.

Nos. 10 and 11 INDOOR CLOSED BOOTHS



No. 11 BOOTH WITH BLOWER 2'61/2" wide, 6'111/4" high, 2'61/2" deep

Openings provided over door for use with blower when provided for ventilating purposes. Directive lens on overhead light fixture concentrates light on telephone mounted diagonally in corner. Full length glass door panels. Wood panels on ends (sides) and back of booth are flush instead of recessed type used with Nos. 5 and 6 booths. The roof is plywood with no openings.

Interior walls are porcelain-coated steel in a smooth mottled beige color which does not mark or scratch easily (earlier models have beige enamel finish). Composition rubber floor in russet with cream mottling. Russet finished seat provided with No. 11. Outside dimensions same as Nos. 5 and 6 booths (Exhibit 4). Supersede Nos. 1, 2, 5 and 6 booths.

INDOOR CLOSED BOOTH EQUIPMENT

END PANELS —61 flush type wood panels may be used on sides of Nos. 5, 6, 10 and 11 booths. The 51 recessed type formerly standard with Nos. 5 and 6 booths is no longer manufactured.

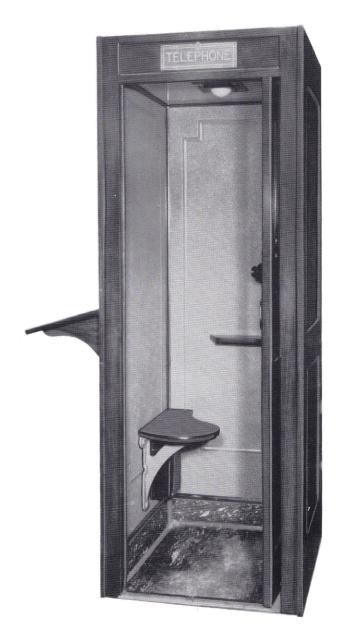
BACK PANELS — 62 flush type wood panels may be used on Nos. 5, 6, 10 and 11 booths. The 60 recessed type is no longer manufactured. A 53T unfinished back panel which has a small door with glass window (or plywood panel) in upper section may be provided with Nos. 5 and 10 booths where a window or door opening in back of booth is required. A 14W unfinished shelf is provided for use under the coin telephone. The 53T panel serves all purposes served by 52 and 54 panels no longer manufactured; can be used with seat equipped booths only by special arrangement.

4A LIGHT FIXTURE —Includes 40-watt lamp and directive lens sealed against dust and insects. Lens protudes slightly below ceiling and is surrounded by a grille of circular holes serving as exhaust paths for air circulated by blower. Light is concentrated on telephone instrument. The 4A mounts interchangeably with 3A fixture no longer manufactured.

KS-8164 VENTILATOR FAN—Rubber-bladed fan is located in ceiling corner over telephone. For use in Nos. 5 and 6 booths. Operated by door switch but also can be turned on and off by switch in fan mounting.

KS-14125 BLOWER (optional) — Changes air in booth about three times a minute. Mounts in corner above telephone at ceiling; projects $9\frac{1}{2}$ " into booth. Primarily used in Nos. 10 and 11 booths but may also be installed at shop in Nos. 1, 5 and 6 booths.

Blower draws air into booth through one-half of the openings over door. Air is expelled through openings in grille of light fixture and thence through other half of openings over door. Air movement is adequate without annoying drafts, because air velocity near user's head is only 30 to 50 feet a minute, compared to 180 feet a minute with KS-8164 ventilator fan. The air movement through openings creates more noise in booth than KS-8164 ventilator fan but has no measurable effects on transmission. An off and on switch is provided on the lower part of blower for independent control of blower when door is closed.



Nos. 5 and 6 BOOTHS

Booth illustrated is equipped with optional directory shelf and lamp. No. 5 same without seat. Some Nos. 5 and 6 booths have full length glass door panels. Superseded by Nos. 10 and 11 booths.

INDOOR CLOSED BOOTH DIMENSIONS

SINGLE INSTALLATION

Nos. 1, 2, 5, 6, 10 and 11 TYPE BOOTHS

OVERALL OUTSIDE DIMENSIONS

Type of	OVERAL	L WIDTH	DE	РТН	HE	IGHT
Booth	Feet	Inches	Feet	Inches	Feet	Inches
1-2	2	63⁄4	2	61/2	7	41/4
5-6	2	61/2	*2	61/2	6	1.11/4
10-11	2	61/2	*2	61/2	6	111/4

^{*}Add 9/16" if 60 or 62 type back panel is used.

GROUP INSTALLATIONS

NOS. 1, 5, 6, 10 AND 11 TYPE BOOTHS

OVERALL WIDTH

No. of	1 TYPE BOOTHS		5, 6,10 AND 11 TYPE BOOTH	
Booths	Feet	Inches	Feet	Inches
2	5	5⁄8	5	1/8
3	7	61/2	7	534
4	10	³ ⁄8	9	113/8
5	12	61/4	12	5
6	15	1/8	14	105 ₈
7	17	6	17	41/4
8	19	1178	19	978
9	22	53/4	22	31/2
10	24	115 ₈	24	91/8

- 1. No. 2 booth is not designed for group installations.
- 2. The overall widths include two 13/16'' end panels per group and the required number of 34'' separators. If a separator is used instead of an end panel on Nos. 5, 6, 10 and 11 booths, subtract 1/16'' from overall width.

INDOOR CLOSED BOOTH FINISHES

Nos. 10 AND 11 BOOTHS

Boo		Finish	Material of Front	End Panel	Separator	Back Panel
10 B	11B	Medium Mahogany	Birch	61B	1 A	62 B
10D	11D	Oak	Oak	61D	1C	62D
10F	11F	Dark Mahogany	Birch	61F	1E	62F
10H	11H	Walnut	Birch	61H	1G	62H
10P	11P	Unfinished	Oak	61P	1N	62P
10 T	11 T	Unfinished	Birch	61T	1 T	62T
10U	11U	Oak	Birch	61U	1U	62U

- 1. End and back panels are flush type instead of recessed type originally used on Nos. 5 and 6 booths.
- 2. End and back panels, and separators, are ordered separately. No back panel is required when back of booth is not exposed. Separators are used instead of end panels between booths in multiple installations and on ends of group if not exposed.
- 3. Oak wood panels are not readily available; oak finished birch meets most requirements.

Nos. 5 AND 6 BOOTHS

Boo		Finish	Material of Front	End Panel	Separator	Back Panel
5 B	6 B	Medium Mahogany	÷	51 A	1 A	60A
5 D	6 D	Oak	Oak	51C	1C	60C
5F	6F	Dark Mahogany	10	51E	1E	60E
5 H	6H	Walnut	Ø.	51G	1G	60G
5 K	6K	Walnut	Walnut	51J	1J	60J
5 M	6 M	Unfinished	0	51L	1L	60∟
5P	6P	Unfinished	Oak	51N	1N	60N
5 S	68	Unfinished	Walnut	51R	1R	60R
5T	6T	Unfinished	20	51 T	1T	60 T
5U	6U	Medium Oak	Birch	51U	1U	60 U

1. Manufacture of 51 and 60 panels discontinued. Available from recovery stock or 61 and 62 flush types for Nos. 10 and 11 booths may be used (See Exhibit 2).

* Birch, red gum or mahogany

- 2. End and back panels and separators, are ordered separately. No back panel is required if back of booth is not exposed. Separators are used instead of end panels between booths in multiple installations and on ends of group if not exposed.
- 3. Oak, walnut and mahogany woods are not readily available. Birch or other less expensive woods in desired finishes meet most requirements.

No. 9 OUTDOOR CLOSED BOOTH



9A—30" wide; 30" deep; $97\frac{1}{2}$ " high. 9B—30" wide; 30" deep; $85\frac{3}{4}$ " high. Height of booth step: $3\frac{1}{4}$ ".

No. 9A has peaked metal roof for outdoor use. No. 9B has a flat roof for semi-exposed locations. Folding door has wire glass panels. Sides may be wire glass panels or plywood. The finish required is applied locally or at Western Electric branch. Supersedes Nos. 1, 2, 3 and 4 booths. A ¾" wood separator is provided for use on multiple installations of 9B type. Seat is not provided. Equipped with overhead light. A fan may also be provided.

A concrete foundation is required unless booth is mounted on a permanent wood or concrete platform or sidewalk. The telephone company furnishes the concrete foundation where required for public telephones.

An automatic door closer may be provided to keep booth

door closed when booth is not occupied. Two different arrangements are possible:

- 1. Partial Closure—Door stands open about three inches. Sufficiently protects booth interior from most weather conditions and at same time affords reasonably good ventilation. Also indicates booth is unoccupied, prevents pinching of fingers due to automatic closing, and makes door easier to open from outside. A spacer device is required if booth light is to be turned off by partial closure of door.
- 2. Full Closure—Door closed completely for maximum protection against weather. Arrangement not as advantageous as partial closure from standpoint of ventilation, ease of opening from outside, etc.

ALUMINUM OUTDOOR BOOTH



DIMENSIONS -7'2" high, 2'91/2" wide and deep.

ROOF—Flat (aluminum) providing drainage at booth rear.

FRONT—Inward folding door with two safety glass panels and a kick plate. Automatic full or partial closure of door may be provided as with No. 9 booth (Exhibit 7).

SIDES AND REAR—Four panels of equal size either in safety glass or colored porcelain enamel (red, green or blue) are provided on sides and rear. Experience with glass breakage indicates glass panels are usually not desirable for lower part of booth. Solid paneling also used on entire back of booth when adjacent to a building. Ventilating louvers provided at bottom of sides and back of booth.

SIGN PANELS—Red, green, blue, black or blank. White translucent lettering $3^{\prime\prime}$ high on front and $3\,{}^1\!\!4$ $^{\prime\prime}$ high on sides and rear.

LIGHTING —Two 40-watt circular fluorescent lamps in the ceiling illuminate the booth interior, the translucent signs, and the immediate area surrounding the booth. Lamps and wiring are arranged for 110-volt, 60-cycle AC continuous operation, no door switch being provided.

DIRECTORY SHELF—Built-in shelf extends across right side of booth interior. Directory rack in middle of shelf has two compartments each accommodating one large directory in a binder (up to 3" thick) or several small directories in binders. An apparatus blank is used to extend the shelf surface over the left-hand compartment when not needed.

FLOOR AND BASE—Booth is usually anchored to a concrete slab base or permanent platform or a paved surface which serves as floor. The telephone company provides the concrete slab if required for a public telephone.

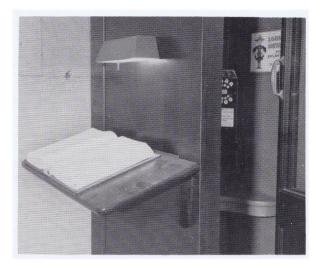
 $MULTIPLE\ INSTALLATIONS$ —Several booths may be placed adjacent to one another (about 6 inches apart to facilitate cleaning of glass).

DIRECTORY EQUIPMENT FOR COIN TELEPHONES

Directory Shelves

Code			
No. 11	Length 30"	Width 123/4"	Use On walls or end panels of
.,	30	12 74	Nos. 5 and 6 booths. For one large or two small directories.
12	50″	12¾″	On walls near booths. For two large or three small directories.
13	60″	12¾″	On walls near booths. For three large or four small directories.
17	36″	12¾″	On walls or end panels of No. 7 booth. For one large or two small directories.
Metal Shelf	23″	13 "	On side of metal open type booth. For one large or two small directories.

Nos. 11, 12, 13 are wood shelves.
The shelves are finished to match booth finishes.
The upper edges of all shelves are mounted $43\frac{1}{2}$ " from floor.



Shelf and Standard Light Fixture

Directory Tables



Code No.	Length	Width	Height	Use
51	32"	14"	427/8″	For one large or two small directories.
52	52"	14"	427/8″	For two large or three small directories.
53	21″	14"	427⁄8″	For one large or two s mall directories where space available is insufficient for 51 table.

All tables are finished to match booth finishes.

DIRECTORY EQUIPMENT FOR COIN TELEPHONES

Directory Binders

A stiff cover binder with rod for holding the directory and a steel eyebolt for attaching the binder to a 7302 type hanger. Binder is finished in red grain imitation leather with the word "Telephone", on front.

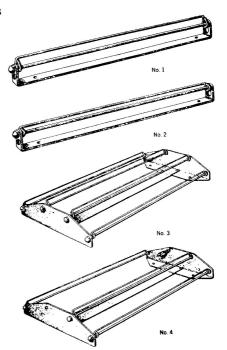
Page Sizes:	11 " × 9 "	Capacity:	1/2"
	11 " × 91/4"		3/4"
	11 " x 9¾"		11/8"
	11 " × 9 5/8"		1 5/8″
	$11\frac{5}{16}'' \times 9\frac{1}{4}''$		2 "
			21/4"

Any page size may be obtained in any of the six capacities.

Directory Fasteners

For fastening directories not enclosed in binders to shelves or tables. Fasteners are mounted in fixed positions on shelves or tables.

Code No.	Use
1	For directory 1" or more in thickness.
2	For directory $\frac{1}{2}$ " to 1" thick.
3	For three directories 1" or more in thickness, and one directory $\frac{1}{2}$ " to 1" thick.
4	Same as No. 3 except that a clevis and bolt is provided instead of a looped rod for a thin directory.
	Directories enclosed in binders may be fastened by bolting the binders to the shelves or tables.



Directory Hangers

For hanging directories on outside of booths or on nearby walls.



Directories Enclosed in Binders

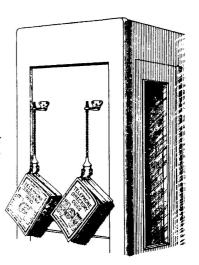
KS - 7302 - 4

Bronze finished metal hanger with sliding plate and four-link chain to which the directory binder eyebolt is attached.

Directories Not Enclosed in Binders

Bracket type hangers equipped with chains for hanging directories on booths or walls when no binders are provided.

No. Capacity	
1 One thick directory.	
2 One thin directory.	
3 Two thick directories.	
4 One thick and one thin director	ry.



PUBLIC TELEPHONE SIGNS









No. 9-A

No. 9-B

No. 50A

No. 50B

7" Diameter

Round transparent paper sign gummed on both sides for pasting on glass windows. Blue lettering, borders, and bell on white background.

7" Diameter

Round double-face decalcomania sign. Design is transferred from specially prepared paper to a glass window, usually to inside of window pane. Lettering and striping are in gold, bell and border in dark blue, and the translucent central field is cream.



Nos. 21 AND 22 7" Diameter

Round single-face porcelain metal sign. Blue lettering on white background. No. 21 is cemented to flat surface indoors or outdoors where back of sign will not be visible. No. 22 has eyelets for mounting with screws.



Nos. 21-C AND 22-C

7" Diameter

Nos. 21-C and 22-C are the same as Nos. 21 and 22 except for word, "connections", below bell, as illustrated. For use in connecting company areas.

Nos. 23 AND 23-C

11" Square with 11/2" Flange

Square flanged double-face porcelain metal sign. Blue and white. Projects at 90 or 45 degree angle from wall to provide two-direction display. Used indoors or outdoors. May be mounted on poles (except telephone and power line poles which are climbed). No. 23-C has word, "connections", below bell for use in connecting company areas. Such signs should be located in accordance with local ordinances, and should not interfere with awnings. Bottom should be 8 - 10 feet above ground or floor.



Nos. 24 AND 24-C

18" Square with 2" Flange

Same as Nos. 23 and 23-C except larger for use on streets and highways.



No. 25

121/4" x 55%"

Double-face blue and white enamel directional sign for mounting flat on wall or by means of brackets at 90 or 45 degree angles. Should be located in accordance with local ordinances and not interfere with awnings. Bottom should be about 8 to 10 feet above ground or floor.



No. 26

20" x 3¾"

Rectangular single-face blue and white enamel sign designed primarily for use on outdoor telephone booths.

TELEPHONE

No. 60-A

135/8" x 25/8"

Rectangular single-face sign of Masonite or similar material. Gold lettering and striping on black background. For use on front or end panel of booth instead of No. 10 bronze sign no longer available.

COIN TELEPHONE

No. 60-B

16¾" x 25%"

Same as No. 60-A except for size and wording. For use on booths in place of No. 14 bronze sign.



No. 8 CANTEEN SIGN

121/2" x 13" x 41/8"

Translucent glass globe for use with 50-watt lamp. Blue lettering, border, and seal on white background. Top opening type for ceiling installations. Bottom opening for standing on top of booth or other fixtures.

ILLUMINATED SIGNS



KS-14154 TYPE SIGN (End Mounted on Bayonet Bracket) 24" long; 4" wide; 5" high Black Crackle Finish

KS-14154 TYPE SIGN

(Formerly NU-2 and Colorvision)

For use indoors and in semi-exposed locations as a single or double-face sign with interchangeable panels. Four different panels available: Non-directional, arrow right, arrow left, and blank for single face use. Text is 151/2" long. Letters are 1¾" high on black background. A 15watt fluorescent tube is provided in daylight, green, gold, or blue. Designed for (1) mounting on a horizontal surface such as the top of a booth or store fixture, (2) mounting against a vertical surface such as a wall, (3) hanging from a ceiling, and (4) end mounting against a vertical surface (with bayonet type bracket). Where sign is mounted on top of booth and nearest electric outlet is beyond reach of the 48-inch cord, equipment is available to facilitate connection of sign to booth light circuit, with a switch mounted inconspicuously in ceiling for turning sign on and off.



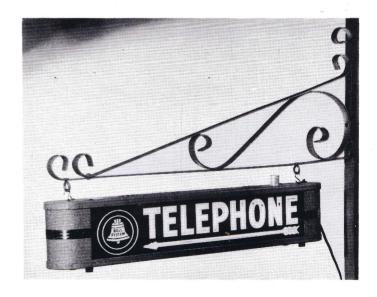
NULITE TELEPHONE SIGN 26" long; 6" high Black Crackle Finish

NULITE TELEPHONE SIGN

A single face indoor sign with transparent plastic letters 3'' high projecting 5'8'' from face of sign. A 20-watt blue fluorescent tube lights the sign. Small eyebolts provided at both ends of top of sign to permit hanging from ceiling or suitable wall bracket. Panels with directional arrows are not provided.

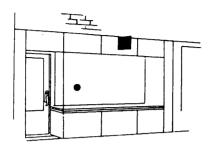
STREAMLINER SIGN (Manufacture Discontinued)

For use as a single or double face sign. Single face sign has Bell seal and the word "Telephone". Double face sign has directional arrows. Translucent letters, which are heavily outlined in white on a blue background, are highly legible when light is off. Over-all height of letters is $2\frac{1}{2}$ ". Sign may be mounted parallel to wall, on top of booth, or may project from wall on a bracket.



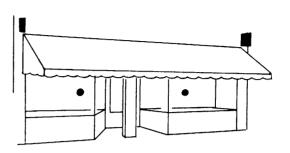
STREAMLINER SIGN 27" long; 4½" wide; 5½" high Dark Gray Crackle Finish

TYPICAL SIGN ARRANGEMENTS



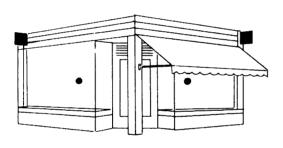
Single Store Front

Flange sign mounted at right angle to store front visible to people down the street. Flat sign on window at eye height visible to people directly in front of store.



Double Store Front

Flange sign at each end of store front and clear of awning. Flat sign on each window front.



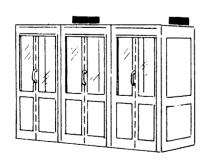
Corner Store

Flange and flat signs on sides of store exposed to street.



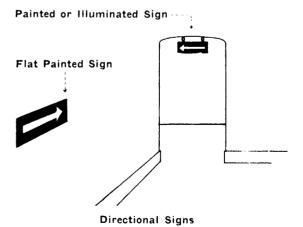
Premises Set Back From Street

Flange signs are particularly suitable for filling station and other drive-in establishments.



Booth Signs

Signs on front or on top of booths generally required. Also, on one or both sides if often approached from side.



Interior directional signs generally required when booth cannot be readily seen from all entrances to room or floor.

TOLL TERMINAL SERVICE

GENERAL

Tell terminals are stations or trunks connected directly to the telephone company's toll switchboard and are furnished only with local service. The toll terminal may terminate at the customer's premises in an instrument, a jack at the PBX switchboard or key equipments.

FIELD OF USE LIMITED

Originally toll terminals were provided to certain large toll users to speed up filing and handling of calls under manual operation and to give improved transmission. However, improvements in traffic operating methods have reduced the advantages of toll terminals. In dial offices toll terminals provide no service or operating improvement other than the few seconds saved by not having to dial the three-digit code to reach the toll operator.

With the introduction of inter-toll dialing, any advantages of toll terminals will be further limited, since connections to toll terminals, under inter-toll dialing, can be made only with the assistance of the terminating operator. Moreover, substantial reductions in the volume of toll terminal service will be essential to the economical use of inter-toll dialing. In the smaller exchanges which qualify for community dial service, the provision of toll terminals is impracticable because of the necessity for providing seperate facilities from the community dial of-fice to the control office to permit furnishing the service.

In view of the limited advantages of toll terminals and plans for inter-toll dialing, the following changes in practices have been made: (1) Toll terminal designations have been removed from the directories; (2) special toll terminal number lists which were formerly maintained at toll positions have been discontinued; and (3) completion of incoming toll calls to toll terminals has been discontinued except when the call is filed by a toll terminal number.

Generally, the company's policy is to avoid the installation of additional toll terminals and to substitute other service arrangements for existing toll terminals where-ever practicable. With most business customers, even though their toll usage is substantial, the greater flexibility and other advantages of local lines and PBX trunks are apt to more than offset any advantages of toll terminal service.

HOTEL TOLL TERMINALS

What is said above applies to business customers other than hotels. In the case of hotels toll terminals help materially to improve service. With the use of toll terminals, hotel guests are able to give the details of their calls directly to the operator and the call is usually completed on a non-hangup basis. The operator is also able to identify the call as coming from the hotel and is thus able to quote time and charges to the hotel without a specific request to do so. Where the volume of toll calls from hotels warrant toll terminals, they are provided without charge.

TOLL STATION SERVICE

GENERAL

Toll stations are company-owned stations connected directly to a toll circuit, and are generally provided only in communities not regularly provided with exchange service facilities and where there is a definite need for toll service. Typical locations of toll stations include general stores, grain elevators, cotton gins, filling stations, etc. There are two classes of toll stations, private toll stations and public toll stations.

PRIVATE TOLL STATIONS—A private toll station is furnished, upon request, primarily for the use of the customer, although the customer may allow the general public the use of such stations. The contract period is ordinarily one year, and a guarantee of usage applies.

PUBLIC TOLL STATIONS—A public toll station is provided primarily for the use of the general public. The person with whom the telephone company arranges for the installation acts as agent of the company. No guarantees as to messages or revenues are required of the agent.

SIGNS—Public telephone signs must be displayed at public toll stations, and they may be used at private toll stations also if the customer desires or permits. (See Part I, Section 3).

TYPES OF INSTRUMENTS—Regular hand, desk, or wall type telephone instruments are used in both public and private toll stations.

SERVICE STATION CONNECTIONS

Service stations may be connected with, and served through, both private and public toll stations.

ESTABLISHING TOLL STATIONS

Toll stations are furnished subject to the availability of facilities, and they are established only on the basis of a report and recommendation by the district manager. The recommendation, following review of the case with his Traffic and Plant coordinates, is forwarded through the lines of organization to the general manager. Upon approval by both the general manager and the traffic

superintendent, the latter arranges to have the necessary traffic order issued.

SERVICE PROBLEMS

There is always the possibility of some conflict between toll station service and regular long distance service:

- Toll station users, in ringing the operator, may inadvertently break in and ring while conversation is taking place over the circuit since they may ring without removing the receiver.
- Because toll station users can listen in at will on circuits to which their stations are connected, there is a possibility that transmission on such circuits will be reduced below satisfactory transmission levels.

Where there are two or more toll stations in the same community, the in and through operator at the toll center will ordinarily not know which toll station to ring on calls from distant points. This may require ringing all toll stations until the desired one is reached, a condition which wastes circuit time and which is apt to annoy customers called in error.

Toll stations ordinarily should not be connected to circuits between (1) two toll centers, or (2) a CLR tributary and a toll center. The reason for this limitation is that most of the traffic handled over "toll center to toll center" or "CLR tributary to toll center" circuits is not ticketed at the terminating end; therefore, the operating people must remember that a special condition applies on any "toll center to toll center" or "CLR tributary to toll center" circuits to which a toll station is connected.

If the operating people forget this special condition, the traffic from toll stations will not be ticketed and the revenue will be lost. It is well, therefore, to limit the connection of toll stations largely to "full tributary-toll center" circuits. Other conditions which should be avoided, to the extent practicable, include: (1) Connecting toll stations to circuits on which the load exceeds the engineering capacity, and (2) connecting toll stations to circuits already serving five or more toll stations. Generally toll station service should not be provided where it is practicable to obtain connection in some other way, such as a rural or service station line, or a connecting company exchange.