

LINE NUMBER METHOD

PREPAY COIN

GENERAL DESCRIPTIVE INFORMATION

350A, 355A, 360A, AND 35E97

COMMUNITY DIAL OFFICES

1. GENERAL

1.01 The line number method of controlling coins by operators (Fig. 1) provides a system of dial prepay coin service in small dial offices without a separate toll train and with fewer than 100 coin lines. There are two arrangements of this system, but in both cases the operator dials the line number of the coin box. In one arrangement the operator dials the line number then operates a key to control the coin; in the other, the operator dials a special code followed by the line number.

1.02 The line number method is designed particularly for 350A, 355A, 360A, and 35E97 community dial offices. It permits the use of prepay coin service in small communities where it is not economical to provide separate coin trunks or where toll trains are not required for other reasons. A maximum of 100 coin lines can be served by this arrangement.

1.03 The line number method of prepay coin service (see Fig. 1) requires a coin control connector for each coin control channel available from the operator to the coin line. This connector is located in the community dial office (CDO) and is reached over a coin control channel or an operator office trunk. An auxiliary line circuit is used with each coin line and has an appearance on the banks of each coin control connector. An auxiliary trunk must be furnished with each operator office trunk. The usual coin box trunk used in other prepay coin control systems is also used in the line number method. It is placed between the line finder and first selector.

2. EQUIPMENT ELEMENTS

A. Coin Control Connector

2.01 The coin control connector is required to give the operator access to the coin lines for controlling coin deposits. It reaches a maximum of 100 coin lines through their auxiliary line circuits. This connector is available to the operator over a coin control trunk or an operator office trunk. The coin control trunk terminates directly in the coin control connector; the operator office trunk terminates in an incoming selector through which the coin

control connector is reached. The use of an operator office trunk and incoming selector to reach the coin control connector is not recommended where the operator office trunk is used to complete customer dialed calls.

2.02 The coin control connectors reach the proper line in response to the tens and units digits of the coin box line number. When terminal-per-station service is provided, the last two digits are the tens and units digits. When terminal-per-line service is provided, the last digit is a ringing digit, and the two preceding digits are the tens and units digits.

Use With Coin Control Cord

2.03 Two types of coin control connectors are available. One is for use with No. 1 or No. 3 toll switchboards equipped with a coin control cord and associated collect and refund keys. The connector is reached directly from the trunk circuit at the switchboard. The operator applies collect or refund current by operating a key. While the deposit is being collected or refunded, a high or low tone is applied to inform the operator that the circuit is functioning properly.

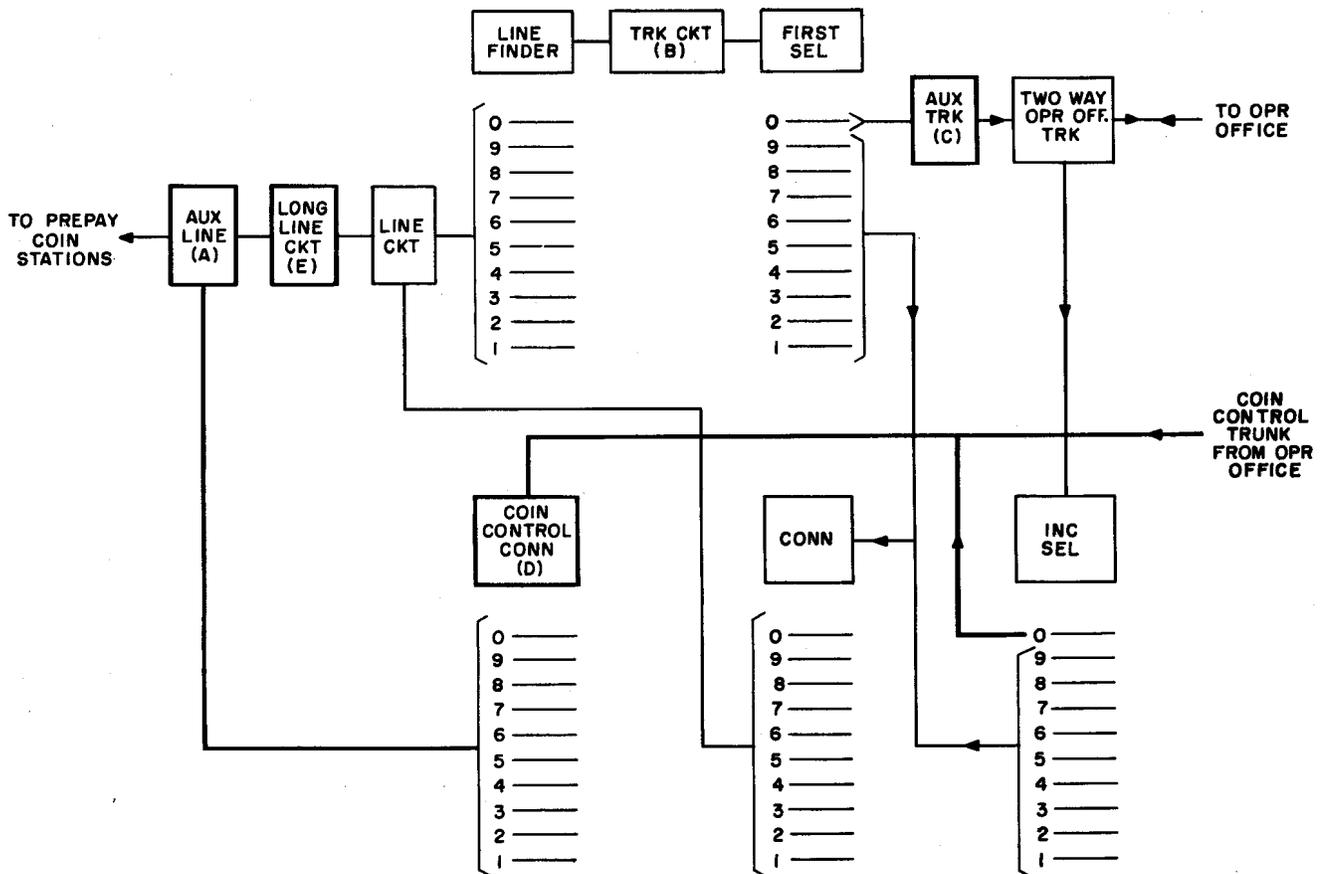
Use Without Coin Control Cord

2.04 A coin control connector is available for use with any toll or DSA board equipped to output the correct number of digits. The connector is conditioned for coin control by the operator's dialing 2 (collect) or 7 (return). This connector can be reached directly from the trunk circuit at the switchboard or through an incoming selector. It can be arranged to absorb unnecessary digits and to ignore a ringing digit.

2.05 In cases in which the operator controls prepay coin lines in several communities, some with terminal-per-line and some with terminal-per-station service, the coin control connectors may be arranged so that the dialing practice is the same in all offices. Unnecessary digits will be absorbed or ignored.

Assignment of Terminals

2.06 Ordinarily all coin lines will be served by the same connector group. However,



NOTES:

- (A) AUXILIARY LINE CIRCUIT TO GIVE CLEAR CONDUCTORS TO COIN STATION FOR COIN CONTROL.
- (B) STANDARD COIN TRUNK.
- (C) AUXILIARY TRUNK TO RETURN THE DEPOSIT WHEN THE OPERATOR ANSWERS.
- (D) COIN CONTROL CONNECTOR FOR OPERATOR'S USE IN CONTROLLING COINS.
- (E) LONG LINE COIN CIRCUIT PROVIDED ONLY WHERE REQUIRED.

Fig. 1 - Line Number Method Prepay Coin

if coin lines are assigned to more than one connector group, they should be assigned so that there is no conflict in the tens and units digits.

B. Auxiliary Line Circuit

2.07 The auxiliary line circuit provides an operating path to the coin box and enables it to collect or refund coin deposits in response to signals from the coin control connector. It isolates the line from the central office equipment and provides a holding bridge to maintain the connection during the coin disposal interval.

C. Auxiliary Trunk Circuit

2.08 Operator office trunks are not normally arranged to return the initial coin deposit on calls to the operator.

In the line number method, an auxiliary trunk circuit is provided to perform this function. It is under control of the operator office trunk. When the operator answers, it cuts through the coin trunk circuit and applies a pulse of coin return current through the coin trunk and the line finder circuits in a manner similar to coin CLR trunks. The auxiliary trunk circuit also transmits a class-of-service indication to the operator.

D. Coin Box Trunk

2.09 The standard prepay coin box trunk between the coin line finder group and first selector is used with this system to collect or return coins on local calls. The trunk is arranged for coin first operation.

E. Coin Collector

2.10 The standard prepay coin collector is used with the line number method of prepay coin.

F. Long-line Circuit

2.11 A long-line circuit may be used to extend the range of the coin lines.

3. METHOD OF OPERATION

3.01 Calls are handled in essentially the same way in both arrangements of the system. The customer places the call in the same manner as in any prepay service area. The operator practice, however, is different.

3.02 On toll or AB toll calls, the customer reaches the operator by dialing a code, such as 0 or 110. When the operator answers, the initial coin deposit is returned to the customer, and the operator is given a class-of-service tone to indicate that the call was originated at a coin box. The operator then sets up the call for the customer, and at the proper time asks the customer to deposit the amount required for the initial talking period.

3.03 Where the operator office switchboard is equipped with a coin control cord and associated collect and return keys, the operator can control the coin deposit by operating a key. In this arrangement the operator plugs the coin control cord into the coin trunk and dials the tens and units digits in order to reach the coin box. The operator then operates either the collect key or the return key associated with the coin cord to apply the proper polarity of coin control current. While the key is operated and until the coin deposit is disposed of, a high or low tone indicates to the operator whether return or collect current is

being applied. The auxiliary line circuit transfers the tip and ring of the coin line from the regular line circuit to the banks of the coin control connector during the time required for the disposal of the coin deposit.

3.04 Where the operator office switchboard is not equipped with a coin control cord and associated collect and return keys, the operator collects or returns coins by dialing a code 2 (collect) or 7 (return). The operator uses a regular cord to plug into a trunk to the CDO, then dials a code that includes 2 or 7. If the trunk terminates in the coin connector, 2 or 7 is the only code necessary; if the trunk is one of a common trunk group, a digit must precede the 2 or 7 to route the operator through an incoming selector to the coin control connector. Additional digits may be used to keep a uniform dialing practice especially in those areas where the operator office switchboard serves both terminal-per-line and terminal-per-station CJOs. The code sets the coin control connector to apply collect or return current when the line is reached. A tone indicates to the operator which action is being taken. The auxiliary line circuit isolates the subscriber line during disposal of the coin deposit.

4. TEST CIRCUITS

4.01 Circuits are provided in 350A and 355A offices for testing the coin box trunks, the auxiliary line circuits, the auxiliary trunk circuits, and the coin control connectors used with the line number method of coin control. Call-through tests may be used in 360A and 35E97 offices. If desired, 355A test equipment may be used in 360A or 35E97 offices to provide the same testing arrangements used in 355A offices.