

Station Systems - 249A and 250A Key Telephone Units

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

195 BROADWAY, NEW YORK 7, N.Y.

AREA CODE 212 393-3452

R. F. DAVIS

CUSTOMER TELEPHONE PRODUCTS PLANNING ENGINEER

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Supplements P.E.L. 6976

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Harold Smith

The Switching System No. 400 (20-40 DIAL PAK) described in P.E.L. 6976 introduced a dial communication system capable of handling the telephone needs of customers having less than 40 stations. One of the features of this system is the ability to provide add-on conferencing on incoming and outgoing calls.

This memorandum announces the development of a 24 VDC add-on line circuit that operates functionally the same as the Add-On Line Unit (J-53035 CF) mounted in the basic SS400 cabinet. The 249A and 250A Key Telephone Units may be used in those installations of the SS400 where the add-on requirements exceed the available space within the cabinet. These units may be mounted in any standard apparatus cabinet designed to mount 200-type Key Telephone Units. A separate power plant and common circuit unit (232-type KTU) is required.

Detailed information on the 249A and 250A Key Telephone Units is contained in the attached Notes and in B.S.P. C71.861.00, C71.861.01 and C71.861.02.

The Western Electric Company advises that the 249A and 250A Key Telephone Units will be available from factory stock in February 1963 at an approximate price of \$16.40 and \$21.80 each, respectively. Orders should be worded as follows:

(Quantity) Unit, Telephone, Key, 249A

(Quantity) Unit, Telephone, Key, 250A

Yours very truly,

R. F. Davis

Attachment
Notes

To all Chief Engineers
(Copies included for
General Plant Managers)

Customer Telephone Products Planning Engineer

KEY TELEPHONE LINE AND ADD-ON CIRCUIT

General Method of Operation

This add-on circuit with two line circuits provides a means of connecting a central office line to a switching system with the assistance of a person at the telephone set where the central office line appears. For each add-on circuit provided, one 249A KTU is required for each line, and one 250A KTU is used for bridging these lines. A complete system contains two 249A KTU's and one 250A KTU.

An incoming call is answered by a person at whose key telephone set a central office line and an associated switching system line appear. The central office line is answered and placed on hold after determining which switching system station is desired by the calling party. The principal dials the desired switching system station over the station line which may be associated with the held central office line and operates the non-locking transfer key momentarily. This releases the hold on the central office line and connects it to the station thru the add-on circuit. The principal can hang up or stay on the established connection, as desired.

An outgoing call from a switching system station to a central office line may be handled by the answering point using the reverse of the procedure described above.

The disconnect of the add-on circuit is under control of the switching system station.

If there is no answer on an incoming call to the primary telephone set, the time out feature will disconnect the locked in flashing signal in about 30 to 45 seconds.

An incoming call produces a 60 IPM flashing line lamp and a held call produces either a 120 IPM winking or steady line lamp depending upon the option wired. A ringing switching system station is indicated by a 30 IPM flashing lamp.

Drawings and Practices

The circuit drawing for the 249A and the 250A Key Telephone Units is SD-69474-01. The circuit description is CD-69474-01.

The following Plant Series practices have been issued including information on these new key telephone units.

- C71.861.00 - Switching System No. 400 - Identification
- C71.861.01 - Switching System No. 400 - Installation
- C71.861.02 - Switching System No. 400 - Connections