

COPY FOR GENERAL PLANT MANAGER

DSS FROM STATIONS

PBX System - 756A PBX - Direct Station Selection (DSS) from Stations

AMERICAN TELEPHONE AND TELEGRAPH COMPANY

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AREA CODE 212 393-3195

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Another new service feature - Direct Station Selection (DSS) from a PBX station - will soon be available on the 756A PBX. P.E.L. 6916 described DSS from attendants' consoles and now this time and effort saving convenience is being made available to the PBX station user on an optional basis.

DSS from a station permits a station user to reach any one of a maximum of ten other stations within the same PBX by simply lifting the handset, listening for dial tone and pushing a button corresponding to the station desired. The button can be any non-locking key with a single make contact - pick-up buttons on a station set or Call Director or a 549 type key can be used.

The Western Electric Company advises that the equipment required to provide this service is now available from factory stock. Pricing and ordering information and a more detailed description is attached.

At the request of Messrs. Collins, Stecker and Damkroger copies of this letter are included for your General Traffic and Plant Managers and Marketing people. Mr. Kertz will write the General Commercial Managers covering the rate aspects.

Sincerely,

Attachment
Pricing and Ordering
Information

C. M. Mapes

To all Chief Engineers
(Copies included for General
Traffic and Plant Managers
and Marketing People)

Pricing and Ordering InformationDirect Station Selection from Stations Engineering Estimate

<u>Ordering Information</u>	<u>Approximate Price Each</u>
<u>J58830A List 16</u>	\$5393.00
Switching Equipment for one 40 line 756A PBX arranged for - - - and D.S.S. with batteryless power supply	
<u>J58830A List 17</u>	5663.00
Switching Equipment for one 60 line 756A PBX arranged for - - - and D.S.S. with batteryless power supply	
<u>J58830A List 18</u>	5582.00
Switching Equipment for one 40 line 756A PBX arranged for - - - and D.S.S. with battery reserve power plant	
<u>J58830A List 19</u>	5852.00
Switching Equipment for one 60 line 756A PBX arranged for - - - and D.S.S. with battery reserve power plant	
<u>J58829A List 21</u>	12.70
50 pair supplementary house and feeder cable for D.S.S. from stations	
<u>J58829AA List 1</u>	38.90
Direct Station Selection Auxiliary Register Relay Unit	
<u>J58829AB List 1</u>	82.00
Direct Station Selection Auxiliary Station Relay Unit	
<u>J58829AB List 2</u>	13.40
Direct Station Selections Diode Assembly	

Direct Station Selection from StationsGeneral Method of Operation

When the handset is lifted at a station arranged for D.S.S., the PBX switching equipment will connect a dial pulse register to the line in the usual manner and dial tone will be returned. Pressing a D.S.S. key signals the register that a D.S.S. call is being originated. The register then operates relays in the Auxiliary Relay Circuit which connect, through units and tens digits leads, to ground the units and tens digit register relays corresponding to the station to be selected, thereby producing the same effect as would be achieved by dialing the two digit number. The auxiliary relay circuit allows only one D.S.S. call to be processed at a time but the processing time is sufficiently short so that the delay to a second "simultaneous" call is not significant.

Equipment and Circuit Arrangements

D.S.S. from stations will require an externally mounted Auxiliary Relay circuit. The equipment for this circuit consists of two units - an Auxiliary Station Relay Unit per J58829AB and an Auxiliary Register Relay Unit per J58829AA. These units are mounted in any suitable apparatus cabinet (6-plate minimum).

The Auxiliary Register Relay Unit per J58829AA List 1 is required once per 756A PBX. It consists of one 280 type relay and two wire spring relays for each of two registers mounted on a 2-inch by 23-inch mounting plate.

The Auxiliary Station Relay Unit per J58829AB List 1 will provide the necessary circuitry to equip four stations for D.S.S. service mounted on a 4-inch by 23-inch mounting plate. This unit is equipped with a cross-connect field which permits two diodes per D.S.S. key to be cross connected to terminals corresponding to the tens and units of the directory number of the station to be selected by the key. One diode assembly arranged for ten D.S.S. line pick up keys per J58829AB List 2 is required for each station line arranged for D.S.S.

A 50 pair supplementary house and feeder cable, 30-feet long per J58829A List 21 is required to connect the Auxiliary relay circuits in the apparatus cabinet to the 756A Module 2.

Power

A batteryless power plant per J86464L is provided as an integral part of the PBX. This is a new and smaller power plant than the J86464A power plant formerly furnished with the 756A PBX and includes a rectifier, capacitor panel, and AC-DC ringing panel. In addition to its smaller size, the new power plant has been designed to supply +48 volts D.C. and 10 volts A.C., the voltages required by the D.S.S. feature. For existing 756A PBX's

equipped with the J86464A power plant, the +48 volt D.C. and 10 volt A.C. required for D.S.S. may be provided by ordering a J86464K applique unit. Through the use of large capacitors, the power plant is capable of holding operated PBX circuits during momentary failures of commercial power.

For locations where PBX service must be maintained during commercial power failures lasting more than a few seconds, a third module per J58829U with batteries may be provided. However, since the J86464L power plant is not arranged for use with batteries the 756A PBX must be ordered equipped with the J86464A power plant when battery reserve operation is required. In PBX's having battery reserve and arranged for the D.S.S. feature, that J86464K applique unit must be provided. It should be noted that, in the event of a power failure, the D.S.S. feature will become inoperative.

Circuit and Equipment Drawings

<u>Number</u>	<u>Issue</u>	<u>Title</u>
SD-65942-01	1	Auxiliary Relay Circuit for Direct Station Selection from stations.
SD-65742-01	10B	756A PBX Dial Pulse Register Circuit
SD-65746-01	16B	756A PBX Cabling Diagram.
SD-81599-01	1	+48-volt D.C. and 10-volt A.C. applique for 756A Batteryless PBX.
SD-81600-01	1	A.C., D.C. and Ringing Supply for 756A Batteryless PBX.

Bell System Practices

<u>Number</u>	<u>Issue</u>	<u>Title</u>
AA355.020 (J58829)	5 App. 2	756A PBX - Manufacturing Codes
AA355.023 (J58830)	5 App. 1	756A PBX - Summarizing Specification

PLANT SERIES

<u>Number</u>	<u>Issue</u>	<u>Title</u>
551-104-210	1	Direct Station Selection by Station
981-660-100	1	756A PBX - General Descriptive Information