

DMS-1 DIGITAL MULTIPLEX SYSTEM

ORDER-WIRE AND FAULT-LOCATE SHELF

1. GENERAL

1.01 The DMS-1 order-wire and fault-locate shelf,

- terminates the order-wire and fault-location pairs of the LD-1 digital line;
- enables communication between the Control Concentrator Terminal (CCT), the Remote Concentrator Terminal (RCT) locations, and the line repeater sites;
- provides facilities for locating faulty repeaters on the LD-1 digital line
- provides connections to the central office switching equipment.

2. MECHANICAL DESCRIPTION

2.01 The shelf (Fig. 1) is 19 inches (483 mm) wide, 5.3 inches (135 mm) high, and 13.7 inches (350 mm) deep. It can therefore be mounted on standard 19-inch racks. The shelf consists of sheet steel sideplates, with extruded aluminum members on the top and bottom. The extruded members support nylon sliders which guide the plug-in circuit packs into the connectors mounted at the rear of the shelf.

2.02 Up to eight circuit packs can be contained in the shelf, depending on the location of the CCT or RCT (see Section 363-2011-151).

2.03 Each circuit pack consists of:

- the circuit components mounted on a fiberglass epoxy circuit board,
- jacks, controls, and circuit pack designations on the circuit pack faceplate.

3. FUNCTIONAL DESCRIPTION

3.01 The block diagram of the order-wire and fault-locate shelf (Fig. 2) shows the connections to the circuit packs and the functions of the circuit packs.

ORDER-WIRE

3.02 The order-wire section of the shelf:

- (a) terminates the order-wire pair (or pairs, if the location is an intermediate RCT on a system with digital-line diversity),
- (b) supplies talk battery for handset current and signaling,
- (c) provides a jack for connecting a headset,
- (d) operates the office minor alarm to signal an incoming order-wire call.

FAULT-LOCATING

3.03 The fault-locating section of the shelf,

- (a) terminates the fault-locating pair(s),
- (b) provides a jack for connecting to a repeater fault-locate test set,
- (c) provides connections for up to four fault-locate filters to accommodate a maximum of:
 - two separate digital lines (diversity),
 - two directions of fault location, and
 - up to six QPP436 or QPP437 repeaters. This configuration may be required at an intermediate RCT location.

4. CIRCUIT PACKS

4.01 The following LD-1 circuit packs are used in the order-wire and fault-locate shelf.

- QPP300 – Fault-Locate Filter
- QPP301C – Fault-Locate Access
- QPP302A – Span Order-Wire Termination
- QPP303A – Telephone Set
- QPP304A – Bridging Circuit.

The quantity and configurations are described in the LD-1 Sections 368-2101-103 and 368-2101-107.

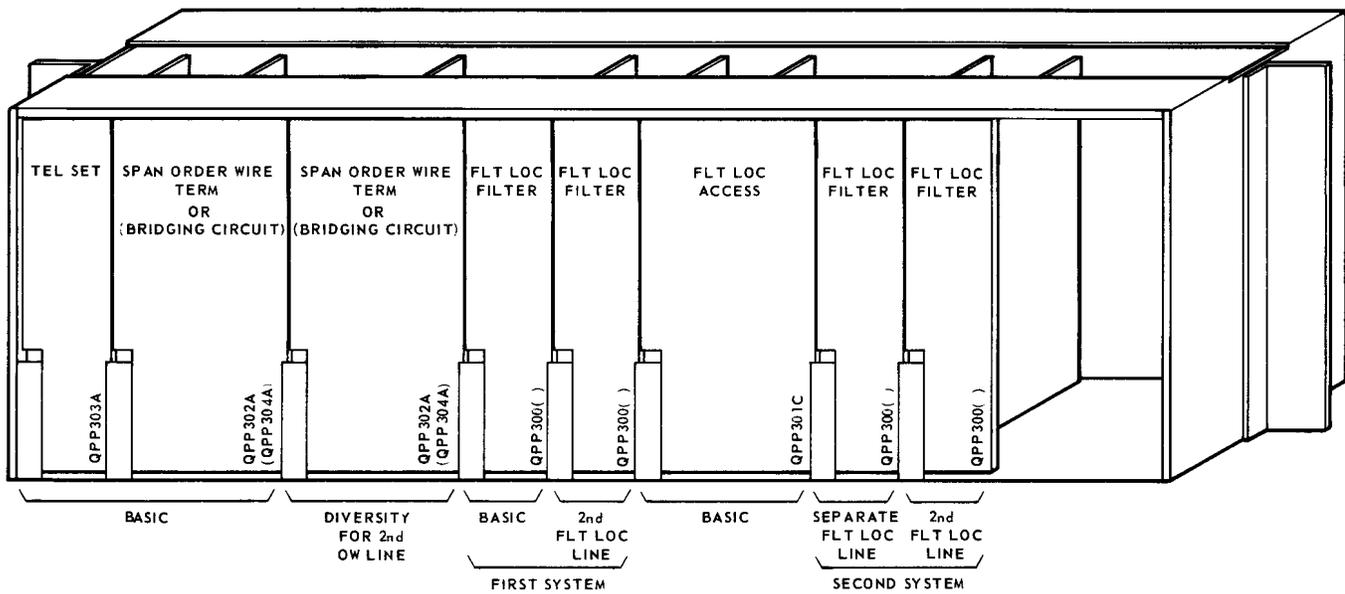


Fig. 1 – Order-Wire and Fault-Locate Shelf Layout

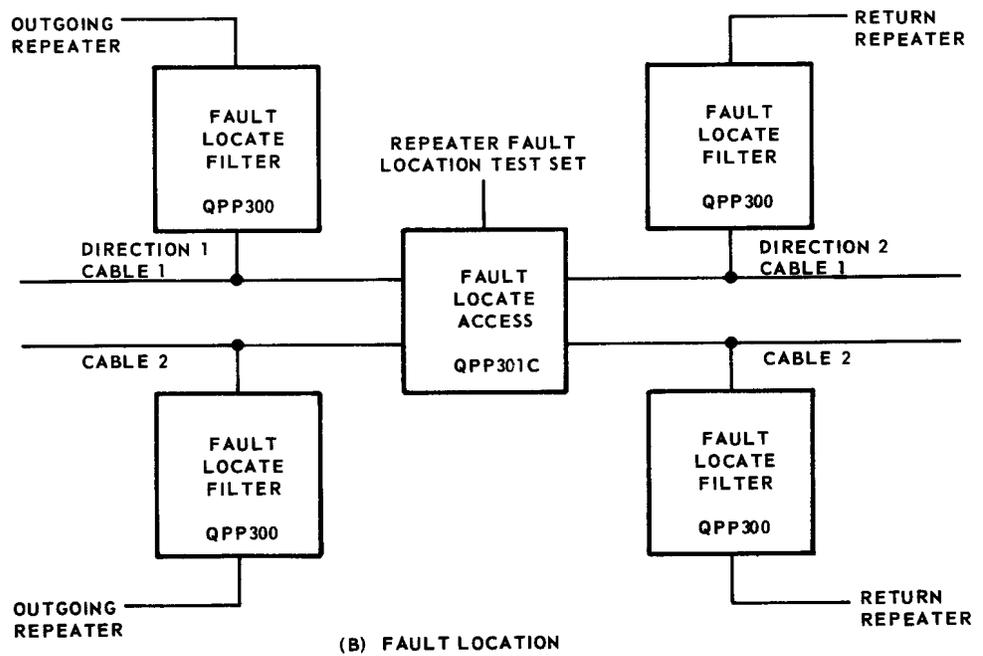
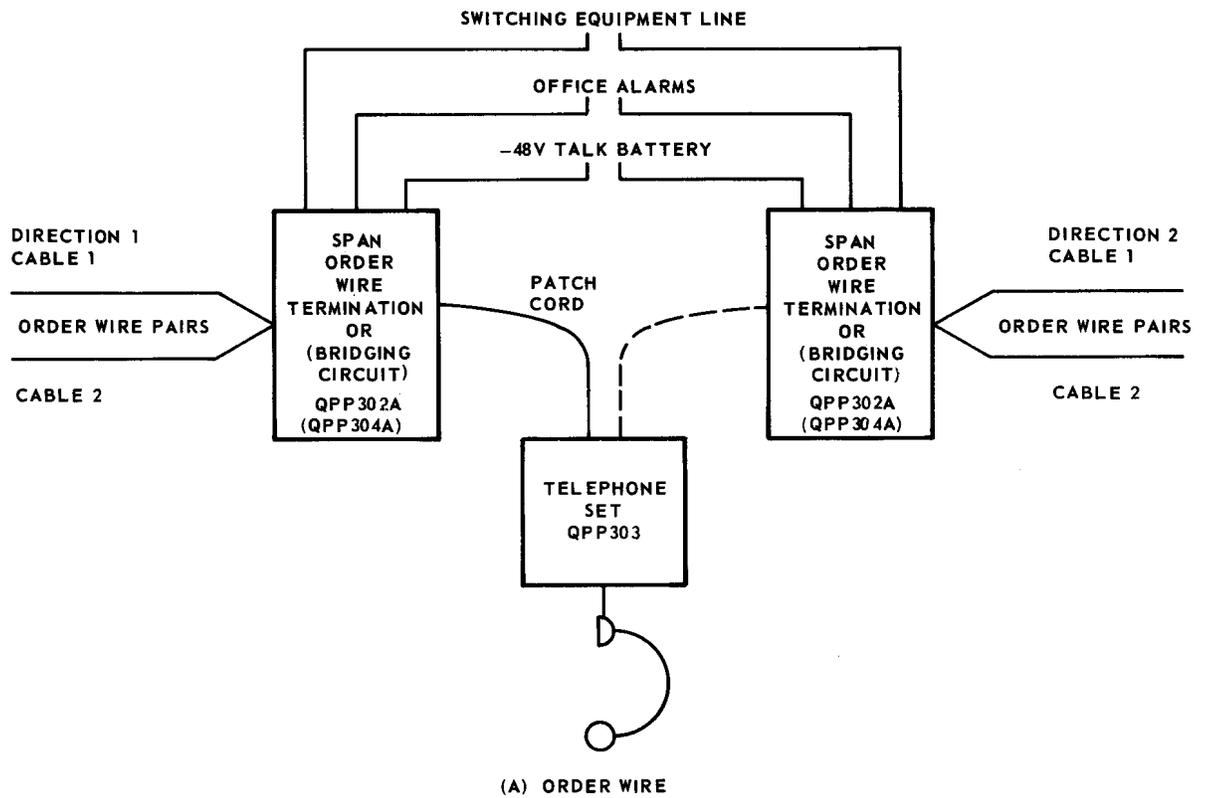


Fig. 2 — Functional Block Diagram