# VOICEBAND MULTIPORT SPLIT BRIDGE WITH GAIN, EQUALIZATION AND TEST ACCESS IDENTIFICATION

#### 1. GENERAL

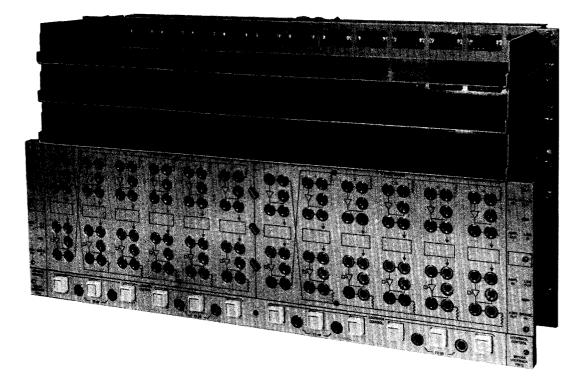
1.01 This section covers the identification and operation of the ED-2C029-30 Voiceband Multiport Split Bridge with gain, equalization and test access.

1.02 The bridge assembly, shown in Fig. 1, consists of separate distribution and collection bridges (that is, a split bridge). The primary use of the bridge assembly is in polling applications for 4-wire data services that require electrical independence between the distribution and collection functions. The bridge network is arranged to provide either one 12-port circuit or two 6-port circuits. The loss of the resistive networks used for each bridge is 23 dB, and the impedance is 600 ohms.

#### 2. PHYSICAL DESCRIPTION

2.01 The complete bridge assembly consists of four separate units assembled on mounting bars. The complete bridge assembly can be mounted in 23-inch bulb angle or unequal flange duct-type bays on 1-3/4 inch or 2-inch mounting centers.

2.02 The complete bridge assembly consists of three standard V-4 repeater plug-in component shelves and a test access panel (ED-2C108-30) with circuit graphics. The upper two plug-in shelves are 227-type amplifier shelves, each housing 12 amplifiers or 849-type networks. The lower plug-in shelf is a 359-type equalizer shelf for housing 12 equalizers.



### Fig. 1—Voiceband Multiport Split Bridge

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- 2.03 The test access panel ED-2C108-30 is comprised of the following hardware items:
  - 2-ED-2C086-30 G1 printed wiring board assemblies
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  - 48-572A jacks
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  - 24-246AM jacks (Amp Out MON)
  - 8-238AM jacks (23-dB pads)
  - 1—597A key (bridge conversion switch)
  - 2-592A keys (bridge load switch)
  - 12-630B4 keys (DC loop-back control)
  - 2-251B terminal blocks
  - 2-27A fanning strips.
- 2.04 The test access panel ED-2C108-30 consists of an upper and lower section. The upper section contains the distribution and collection bridge circuit graphics that are printed on a reversible

faceplate. The faceplate is a 1/16-inch anodized aluminum panel containing the graphics for the 6-port bridges on one side and the 12-port bridge on the opposite side of the panel.

2.05 The bridge assembly measures 12-1/2 inches high, 23 inches wide, and 10 inches deep.The assembly weighs approximately 35 pounds.

### 3. **REFERENCES**

3.01 The schematic drawing and circuit description covering the ED-2C029-30 bridge assembly are SD- and CD-99565-01.

**3.02** More descriptive and test information on the data assembly is covered in the following Bell System Practices.

SECTION	TITLE
314-815-100	Voiceband Multiport Split Bridge With Gain, Equalization and Test Access—Description
314-815-500	Voiceband Multiport Split Bridge With Gain, Equalization and Test Access—Test Procedures