

**BELL SYSTEM PRACTICES**  
**Station Installation and Maintenance**

**SECTION C55.745**  
**Issue 2, June, 1953**  
**AT&T Co Standard**

## **RECORDER CONNECTORS**

### **50-TYPE**

### **DESCRIPTION, USE AND INSTALLATION**

#### **1. GENERAL**

1.01 This section is reissued to include information concerning the description, use and installation of the 50B recorder connector. The marginal arrows usually used to indicate changes are omitted because of extensive changes in the scope and arrangement of this section.

1.02 The purpose of the recorder connector is to provide a suitable method of associating customer-owned recording equipment with Telephone Company facilities, including protection against excessive voltages. The recorder connector provides a warning tone to the distant party indicating to the party that a voice recorder is being used.

1.03 The Federal Communications Commission has imposed certain restrictions concerning the use of voice recorders on telephone lines which the Telephone Company must observe. These restrictions are listed below:

(a) The use of a voice recorder on a telephone line must be accompanied by adequate notice to all parties to the telephone conversation that the conversation is being recorded. This notice is given by the use of an automatically produced distinctive tone that is repeated at approximately 15-second intervals during the course of the telephone conversation whenever the voice recorder is in use.

(b) The recorder connector, and associated wiring and equipment required to connect it to the telephone line shall be provided, installed and maintained by the Telephone Company. This does not include the customer-owned cord and associated Cannon Type SK-M7-21C-1/2 Plug used to connect the recorder connector to the customer-owned recorder.

(c) No recording equipment is to be used unless, at the will of the user, it can be physically connected to and disconnected from the telephone line, or switched on and off.

(d) Recording devices which are connected to the telephone facilities either acoustically or inductively do not meet F.C.C. requirements since they employ no tone-warning features and any such unauthorized recording equipment shall not be employed for recording conversations from telephone lines.

**Note:** Recorder connectors incorporating a tone signal are not required in conjunction with recorders used on private lines which are not connected to exchange line service. Such cases should be referred through lines of organization for advice as other connecting equipment as specified locally is required.

1.04 Recorder connectors are installed only upon issuance of a service order or other proper authorization.

## 2. USE

2.01 The recorder connectors have the following uses:

(a) Installation on a particular subscriber line on which a voice recorder is to be used.

(b) Connection to a key telephone set of a key telephone system in such a manner as to permit the use of a recorder with any one of the lines to which the set has access.

(c) Installation at P.B.X.'s, turrets or other switching equipment where an attendant may cut in a recorder.

(d) Special installations to permit any one of several stations on the same premises to have access to a single recorder merely by the operation of a key at the station.

(e) Portable assemblies each consisting of a recorder connector on a mounting board and terminated in a cord and plug.

(f) Installations of recorder connectors on Telephone Company premises for the purpose of demonstrating the tone to customers and Telephone Company employees.

## 3. DESCRIPTION

3.01 The 50-type recorder connector consists of an assembly of electronic apparatus mounted on a base approximately 9-5/8" x 7-1/8" with a removable metal cover approximately 4" deep (see Figs. 1 and 2). The base is arranged for wall or desk mounting. Entrance holes for the telephone line

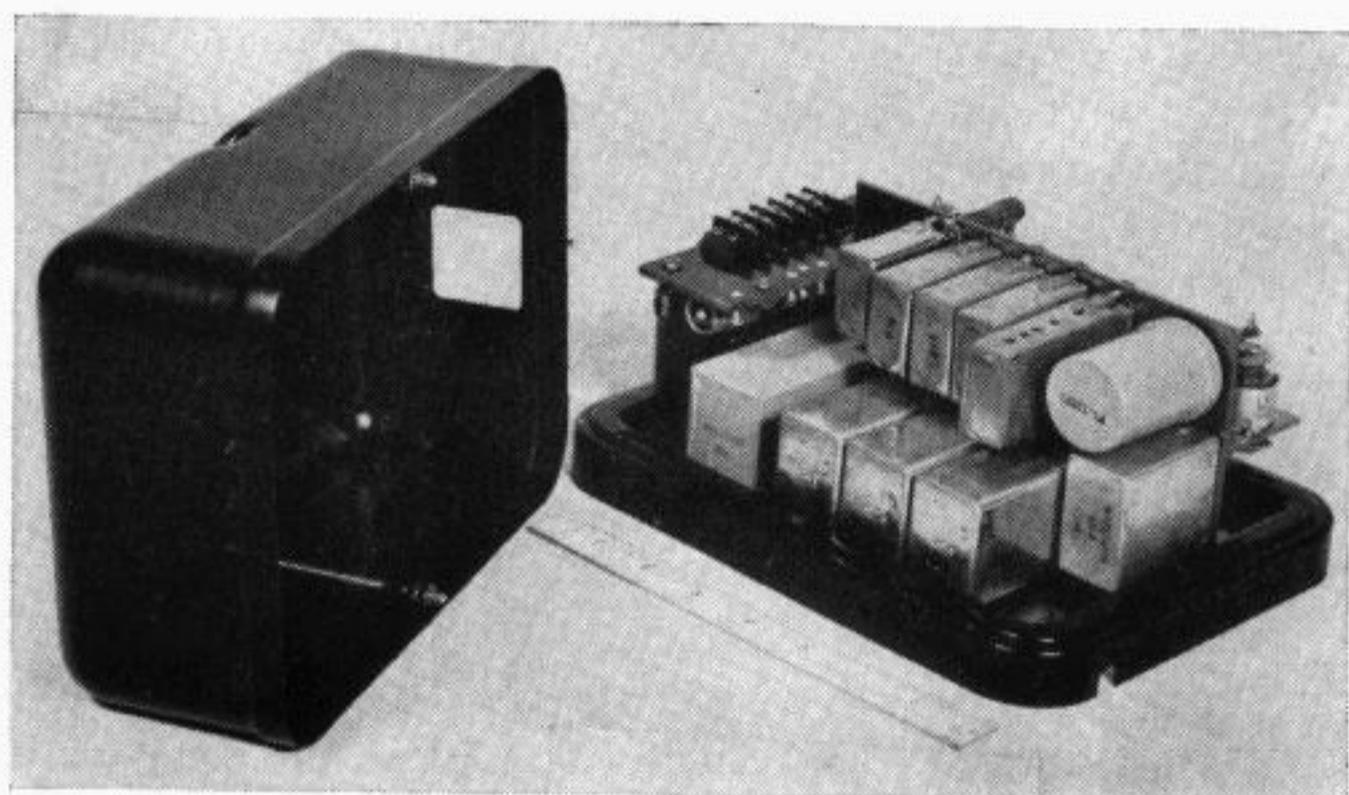
wires and cord or wires to the telephone station are located at both the top and the bottom of the set and a terminal strip with screw terminals is provided inside for connecting the telephone wires. A terminal which is connected to the chassis base is also provided on this terminal strip for connection to a local telephone ground. Connection to the associated recorder is made by means of a cord equipped with a seven contact Cannon Type SK-M7-21C-1/2 Plug or equivalent type plug to a receptacle at the bottom of the set. The cord and plug are supplied by the customer.

3.02 The 50A or 50AA recorder connector is designed to operate on commercial 105-125-volt, either d-c or 25-60-cycle a-c power supply furnished from the recorder by means of a cord and plug.

3.03 The 50B recorder connector is designed to operate on 105-125-volt 50-60-cycle a-c power only.



**Fig. 1—50-Type Recorder Connector**



**Fig. 2—50A Recorder Connector**

## **4. INSTALLATION**

### **Locating and Mounting**

- 4.01 In locating the set be guided by the customer's wishes and the considerations outlined below:
- (a) Avoid locations where cord to recorder may be stretched across aisle or passageway or near windows that are opened or where the set may otherwise be exposed to the elements.
  - (b) Locate set near the proposed location for the recorder.
  - (c) Where workmen will not be exposed to injury when working on the set.
  - (d) Where the set is to be attached to desks and wall surfaces be guided by considerations included in the section in C30 Division covering the locating and mounting of subscriber sets.
- 4.02 In general the set should be attached to the various mounting surfaces in the same manner described in Section C31.145 for mounting subscriber sets and using the same fasteners. Place two fasteners in the two keyhole-shaped mounting holes at the top of the set and one fastener in the round mounting hole at the bottom to attach the set except in areas where local regulations require that the set may be dismantled without the use of tools, in which case the third

fastener should be placed in the keyhole-shaped hole at the bottom instead of in the round mounting hole.

4.03 Where a backboard is required the 147A, 165A or other suitable backboard may be used and attached in the same manner as subscriber set backboards. When attaching the set to the 165A backboard, center the set on the backboard.

4.04 The cover of the 50A or 50AA recorder connector should be in place at all times when commercial power is connected to the recorder connector. When all connections are completed, if the power supply plug associated with the recorder is inserted in the power outlet so that the polarity is reversed, the inner chassis of the recorder connector, on which are mounted the vacuum tubes, condensers, etc., becomes alive under this condition; if the cover of the recorder connector is not in place, a shock may be experienced by a person who is in contact with the inner chassis and a ground at the same time. This condition does not exist in the 50B recorder connector.

### **Connections**

4.05 Make connections to the line and station in accordance with instructions included in section in the C60 Division covering connections for recorder connectors.

4.06 Determine the type of power supply since the 50B recorder connector can only be used as described in Paragraph 3.03.

### **Final Test**

4.07 **Station Testing:** Upon completion of the installation make tests in accordance with the sections in the C60 Division covering tests with the test desk.

4.08 Where the recorder is available, obtain customer's permission to connect the recorder to the recorder connector and make the tests with the recorder in operation for recording. It is essential that the recorder is equipped for connection to the recorder connector. Note that the warning tone can be satisfactorily heard when the recorder is so operating.