

3A CODE CALL UNIT

EQUIPMENT DESIGN REQUIREMENTS

COMMON SYSTEMS

1. GENERAL

Scope

1.01 This specification, together with the supplementary information listed herein, covers the equipment design requirements for the framework, equipment, and circuit to be used in the manufacture and installation of the 3A code call unit.

1.02 This specification is reissued:

- (a) To add reference to the 800A PBX.
- (b) To add reference to the No. 1 ESS Centrex.
- (c) To change the BSP number from Section 809-115-150 (PBX Systems) to Section 801-607-150 (Common Systems).
- (d) To make minor revisions.

Description

1.03 The 3A code call unit is a device whereby a station or an attendant at a PBX equipped with this unit may by dialing, cause bells, horns, or other signals located about the subscriber premises to operate intermittently and sound a code corresponding to the pulses dialed. This unit is used when it is desired to reach by telephone a person who is on the premises but not near his telephone.

1.04 The code call equipment consists of two parts, the code sending equipment (which occupies the space of five 2-inch mounting plates on a 23-inch relay rack and consists of a 206 selector, two or three 19-inch and two 23-inch mounting plates mounted on a common framework) and the code call terminal and jack circuit equipment (which is mounted on one or two 23-inch mounting plates). One or two code call terminal units of either of two types may be connected to the code sending unit by installer wiring between the terminal strips.

1.05 Auxiliary equipment not on the unit consists of the TOUCH-TONE® receiver and

converter units when supplied, the power relays and signals, additional A resistance lamps, and, when a manual switchboard is to work into the unit, the jacks and lamps, and if necessary, the multiple.

1.06 In order to reach by telephone a person who is on the premises but not near his telephone, the calling party dials the code number of the code call equipment, followed by a code number assigned to the desired party; the calling mechanism gives audible signals corresponding to the dialed pulses. The called party on hearing his signal goes to the nearest phone and by dialing the code assigned for answering code calls, completes the connection between the two parties.

1.07 The 3A code call terminal circuit is accessed by a selector level or connecting circuit after the required access code is dialed. The 740B PBX, to connect with a code call unit, is equipped with those standard selector-connectors which serve both trunks and tie trunks on the fifth level. It is necessary to dial only one digit before the desired code, with all except the 740B PBX which requires two digits, since the code call unit appears on the same level as the trunks and tie trunks.

1.08 Any unassigned directory number may be associated with the code call unit to enable any party whose code is being sounded to dial this number from any telephone in the PBX and talk to the party originating the call.

1.09 The code sending unit, one of which is required per PBX, contains the common equipment and, in addition, is arranged for the following optional features:

- (a) Slower signals may be provided by the addition of two relays in the code sending unit. With this arrangement, the interval between successive signals is increased by the operating time of these relays.
- (b) An option is available for providing tone when the unit is to be used with PBXs which do not have a power ringing circuit.

- (c) An option to provide dial tone on seizure when power ringing circuit is in the PBX.
- (d) TOUCH-TONE pulsing option is available.

1.10 Two code call terminal units are available:

- (a) Code call terminal equipment and associated jack equipment required when the PBX is equipped with a manual switchboard.
- (b) Code call terminal equipment required when the PBX is not equipped with a manual switchboard.

1.11 A second code call terminal may be provided for cases where one terminal is unable to serve all of the code call traffic, providing the PBX system is equipped for consecutive number group operation. When one code call terminal is in use, the code signaling equipment is available for use with the second code call terminal.

1.12 Central office or tie trunks may be used for code calls in the 3A code call system. That is, a call incoming over a central office or tie trunk may be completed by the PBX manual switchboard attendant who dials up the code call equipment. Incoming repeating tie trunks may also be used to dial directly into the code call equipment.

1.13 In order to simplify the code signals, the 3A code call system is arranged for the use only of the numbers up to and including five on any of the digits in the code. The unit can be arranged to have either a 2-digit code with 25 available codes or a 3-digit code with 125 available codes.

1.14 A time-out feature has been provided which transfers the call to the manual switchboard attendant who talks to the calling party. The code call system can be arranged to time out after the code has been sounded three or five times. Also, this feature is arranged so that if the calling party dials any of the numbers 6, 7, 8, 9, or 0 on any of the digits of the code, the call will be immediately transferred to the operator. When there is no switchboard, the call will not be sounded. In this case, failure to receive the tones corresponding to the code signal will be an indication to the calling party that the call did not go through and that he should hang up and then dial again.

2. SUPPLEMENTARY INFORMATION

- 809-000-000 — PBX Systems Index
- 819-000-000 — No. 5 Crossbar
- 800-600-000 — List of General Equipment Requirement Sections
- 820-001-150 — No. 1 ESS
- 823-005-150 — No. 101 ESS
- J53035 — 812-215-150 — Switching System No. 400
- J58801 — 809-803-150 — 701A and 711A PBXs
- J58816 — 809-815-155 — 740AX PBX
- J58823 — 809-815-151 — 740E PBX
- J58829 — 809-820-150 — 756A PBX
- J58831 — 809-803-151 — 701B-711B PBX
- J58838 — 809-821-150 — 757A PBX
- J58844 — 809-140-152 — TOUCH-TONE Calling Receiver — PBX Systems
- J58847 — 809-140-150 — TOUCH-TONE Calling Equipment for Step-by-Step PBX Systems
- J58849 — 809-850-150 — 800A PBX
- J99289 — 801-621-151 — TOUCH-TONE Calling Receiver Signaling—Common Systems

3. DRAWINGS

- ED-92494-01 — Typical Local Cable
- J58822B — Equipment
- SD-66610-01 — Code Call Circuit

4. EQUIPMENT

J58822B — AT&T Co Std — 3A Code Call Unit

Equipment — J58822B-()

Local Cable — ED-92494-01

List 1 — Framework, assembly, wiring, and equipment for one 3A code call arranged for 5 cycles of code call 3-digit dialing, signals on one second cycle less all other options.

SEE
WIRE EQUIP NOTES

Code Call Ckt, SD-66610-01,

Fig. 3, 7, A, and E with

U, ZM and ZO wiring and App 1 1 B,G
&I

List 2 — Wiring and equipment per SD-66610-01, Fig. B, required in addition to list 1, 8, 9, or 10 when signals on 2-second cycle are required.

List 3 — Wiring and equipment per SD-66610-01, Fig. F, required in addition to list 1, 8, 9, or 10 to supply tone when PBXs do not have a power ringing circuit.

List 4 — Framework, assembly, wiring, and equipment required in addition to list 1, 8, 9, or 10 for one code call terminal and one jack circuit. (See Note C and 5.05 and 5.06.)

	WIRE	EQUIP	SEE NOTES
Code Call Term. Ckt, SD-66610-01, universally wired for Fig. 1, 2, with ZF wiring and App	1	1	I,J&N
Jk Rel Ckt, SD-66610-01, Fig. D, with N wiring and App	1	1	A

List 5 — Framework, assembly, wiring, and equipment required in addition to list 1, 8, 9, or 10 for one code call terminal without jack circuit. (See Note C and 5.05 and 5.06.)

	WIRE	EQUIP	SEE NOTES
Code Call Term. Ckt, SD-66610-01, universally wired for Fig. 1, 2, and C with T app and less T wiring and ZF wiring and App	1	1	D,F,G, H,I,J, N&O

List 6 — Equipment per SD-66610-01, Fig. D, Q apparatus only, required in addition to list 4 when unit is to be used in a 700C PBX. (See Notes A and E.)

List 7 — Equipment per SD-66610-01, P apparatus only, (omit U apparatus) required in addition to list 1, 8, 9, or 10, when signals on half-second cycle are required.

List 8 — Framework, assembly, wiring, and equipment for one 3A code call arranged for 5 cycles of code call 2-digit dialing signals on one-second cycle less all other options.

	WIRE	EQUIP	SEE NOTES
Code Call Ckt, SD-66610-01, Fig. 3, 7, A, and E with U, ZM, and ZP wiring and App	1	1	B,G,I &M

List 9 — Framework, assembly, wiring, and equipment for one 3A code call arranged for 3 cycles of code call, 3-digit dialing, signals on one-second cycle less all other options.

	WIRE	EQUIP	SEE NOTES
Code Call Ckt, SD-66610-01, Fig. 3, 7, A, and E with U, ZN, and ZO wiring and App	1	1	B,G,I &M

List 10 — Framework, assembly, wiring, and equipment for one 3A code call arranged for 3 cycles of code call, 2-digit dialing, signals on one-second cycle less all other options.

	WIRE	EQUIP	SEE NOTES
Code Call Ckt, SD-66610-01, Fig. 3, 7, A, and E with U, ZN, and ZP wiring and App	1	1	B,G,I &M

List 11 — Wiring and equipment per SD-66610-01, Fig. J, and ZS apparatus, required in addition to list 1, 8, 9, or 10 when rotary dial with dial tone is used.

List 12 — Wiring and equipment per SD-66610-01, Fig. H, ZV and ZZ wiring and apparatus, required in addition to list 4 for use with step-by-step PBX, and No. 5 crossbar centrex. (See Note K.)

List 13 — Wiring and equipment per SD-66610-01, Fig. H, ZV and ZZ wiring and apparatus, required in addition to list 5 for use with step-by-step PBX and No. 5 crossbar centrex. (See Note K.)

List 14 — Framework, assembly, wiring, and equipment required in addition to list 1 or 9 when TOUCH-TONE receiver type C1 is to be used. (See Note 5.07.)

	WIRE	EQUIP	SEE NOTES
TOUCH-TONE Relay Ckt, SD-66610-01, Fig. 9 with ZO wiring and App	1	1	L

List 15 — Framework, assembly, wiring, and equipment required in addition to list 8 or 10 when TOUCH-TONE receiver type C1 is to be used. (See Note 5.07.)

	WIRE	EQUIP	SEE NOTES
TOUCH-TONE Relay Ckt, SD-66610-01, Fig. 9	1	1	L&M

List 16 — Wiring and equipment per SD-66610-01, Fig. K, required in addition to list 14 or 15 when TOUCH-TONE receiver type A3 is to be used.

List 17 — Cable required in addition to list 4 or 5 for connecting to an 800A PBX per ED-1E073-10, Gr 5 (see Note N) (1 per PBX).

List 18 — Cable required in addition to list 14 or 15 for connecting to an 800A PBX with TOUCH-TONE per ED-1E073-10, Gr 4.

Notes

- A. Strapping of the (E) and (F) resistances per V, W, X, and Y wiring shall be provided by the installer as required.
- B. R or S wiring shall be provided by the installer as required.

C. One or two code call terminals shall be mounted directly above the code call equipment per list 1 and cross-connected with loose wiring by the installer.

D. When code call unit is to work in a 2-digit PBX, the installer shall connect T wiring per SD-66610-01, Fig. C.

E. When list 6 is ordered, the installer shall remove N apparatus and mount and wire Q apparatus in its place.

F. Units wired prior to Issue 20 AC of SD-66610-01 with ZI option should be provided with ZJ option when used with Switching System No. 400.

G. Units wired prior to Issue 21D of SD-66610-01 with Fig. G and ZK option should be provided with Fig. L and ZL option when used with No. 101 ESS.

H. Units wired prior to Issue 23D of SD-66610-01 should be provided with Fig. L, ZV and ZZ option when used with Switching System No. 400.

I. Units wired prior to Issue 23D of SD-66610-01 with ZQ option should be provided with ZR and ZS options when used with TOUCH-TONE pulsing.

J. When list 4 or 5 is to be used with a 756A or 757A PBX, Fig. L and ZV wiring and apparatus are required.

K. When list 12 or 13 is to be used with No. 5 crossbar centrex, ZY option is used.

L. Wiring between TOUCH-TONE receiver, TOUCH-TONE relay unit, and 3A code call may be cross-connected with loose wiring by the installer.

M. When ZM or ZO options are not specified, ZN or ZP wiring should be provided.

N. When list 4 or 5 is to be used with an 800A PBX, Fig. L and options YB and YC are required.

O. When list 5 is to be used with a No. 1 ESS Centrex, Fig. L and M and options YD and YE are required.

5. GENERAL NOTES

Miscellaneous Equipment

5.01 The power relays and signals (per SD-66610-01, Figs. 5 and 6) shall be furnished by the telephone company and located by the customer. The customer may also choose to provide his own signals. The wire to be used for leads from the power relays to the signals shall be furnished and installed by the customer.

5.02 Where the dial PBX has an associated manual switchboard, the jack and lamp equipment shall be furnished per SD-66610-01, Fig. 4, and located as covered on the typical front equipment drawings for these switchboards.

5.03 The A resistance lamps per SD-66610-01, Fig. 7, required in addition to the one furnished in J58822B, L1 shall be mounted on a 189A mounting plate and located with the code call unit.

5.04 When the PBX is located in a manual area, the manual switchboard positions of the PBX shall be equipped with dials for dialing into the code call equipment.

5.05 When the 3A code call unit is used with a 740A, 740B, 740C, or 740AX PBX, only one code call terminal can be used since the selector-connectors are not arranged for connector hunting. In these PBXs, a line circuit must be assigned for use with the code call and the cut-off relay given the special adjustment covered on the code call circuit.

5.06 When two code call terminal units are provided, they shall appear on the connector or selector-connector as a 2-terminal hunting group.

5.07 When the code sending unit is wired for TOUCH-TONE pulsing, a D4A terminal strip mounted on a 224A mounting plate is added to the code sending unit and wired per SD-66610-01-9, Fig. 64.

List of A&M Only and Mfr Disc. Equipment

5.08 The following equipment has been replaced as indicated:

EQUIPMENT	RATING	LAST COVERED IN ISSUE	REPLACING EQUIPMENT
J58822A	Mfr Disc.	3	J58822B

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