

# SINGLE-LINE, ELECTRONIC PUSHBUTTON TELEPHONES WITH AUTO DIAL (FASTFONE) GENERAL DESCRIPTION

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## 1. GENERAL DESCRIPTION

**1.01** This document covers the single-line, electronic pushbutton telephones with auto dial. (See Figure 1.) A general description plus information peculiar to the single-line, electronic pushbutton telephones with auto dial is included.



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**Figure 1: Single-Line, Electronic Pushbutton Telephone With Auto Dial**

**1.02** Whenever this section is reissued, reason for reissue will be listed in this paragraph.

**1.03** For additional information on replacement parts and for an exploded-view drawing for the telephones, refer to Section 50-400-101. The circuit labels appear in Section 50-400-102. Related documents of the ITT Telephone Apparatus Practices Manual provide information on components.

**1.04** The Model 2400 desk telephones are single-line, electronic pushbutton telephones with auto dial. With this feature, the station user can record 10 frequently-used numbers, up to 16 digits each. Upon request, the Model 2400 telephone will dial the recorded number automatically. The station user also can automatically redial the last-number-dialed and can predial a number before going off-hook. These telephones are anti-sidetone type units that operate efficiently over a wide range of loop resistances and line impedances.

**1.05** The Model 2400 telephones are available as conventional, quarter-modular, or full-modular versions. These versions are designated by a code letter that is placed in front of the ringer code letters in the order number of the telephone. (Refer to Table A.)

**1.06** Conventional version desk telephones include a hard-wired handset cord and a hard-wired line cord. This version is designated by the code letter O.

**1.07** Quarter-modular version desk telephones include a hard-wired handset cord and a plug-in line cord. The line cord is hard-wired on one end to the telephone base. The line cord is terminated on the other end with a modular plug that can be inserted into a modular wall jack. This version is designated by the code letter Q.

**1.08** Full-modular version desk telephones are available with or without a modular handset cord and a modular line cord. However, all full-modular desk telephones are equipped with jacks to accept the plugs of a modular handset cord and a modular line cord. The full-modular version of the telephone with both a modular handset cord and a modular line cord, terminated on each end with modular plugs, is designated by the code letter M. The full-modular version without a modular handset cord and a modular line cord is designated by the code letter F.

TABLE A  
ORDERING INFORMATION – TELEPHONES

CODE NUMBERS										
TELEPHONE CODE NUMBERS ARE FORMED IN SIX STEPS AS FOLLOWS:										
(1) Type of Instrument (See Part 1)										
(2) Color (See Part 2)										
(3) Version (See Part 3)										
(4) Ringer (See Part 4)										
(5) Special Feature (See Part 5)										
(6) Dial (See Part 6)										
PART 1 TYPE OF INSTRUMENT										
CODE	DESCRIPTION	COLOR OFFERED	VERSION OFFERED	RINGER OFFERED	FEATURE OFFERED	DIAL OFFERED				
2400	Single-Line, Electronic Pushbutton Telephone With Auto Dial	00, 05, 09, 12, 13, 15, 43, 44, 45, 46, and 47 (Available On All Models)	O, F, M, Q	BA, LR	20	S				
REFER TO INDIVIDUAL UNIT DESCRIPTION FOR COMPLETE DESCRIPTION OF FEATURE COMBINATIONS										
PART 2 COLORS		PART 3 VERSIONS		PART 4 RINGERS		PART 5 SPECIAL FEATURES		PART 6 DIALS		
CODE	COLORS	CODE	VERSIONS	CODE	RINGERS	CODE	SPECIAL FEATURES	CODE	DIAL	
00	Black	O	Conventional	LR	Less Ringer	20	No Special Feature	S	Auto Dial	
05	Moss Green									
09	Ivory	F	Full-Modular	BA	Straight-Line					
12	Aqua Blue									
13	Beige	M	Full-Modular (with cords)							
15	White									
43	Orange	Q	Quarter-Modular							
44	Light Ash									
45	Cocoa Brown									
46	Harvest Gold									
47	Cherry Red									

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1.09 The Model 2400 desk telephones are described in the following paragraphs. The circuit label drawing for these telephones is described in Section 50-400-102.

**MODEL 2400\*\* ( ) 20**

1.10 The Model 2400\*\* ( ) 20 is a single-line, electronic pushbutton dial, desk telephone with auto dial feature. The auto dial feature consists of the 186087-101 electronic auto dialer assembly, the 186250-101 AUTO DIAL pushbutton switch, and associated components. It allows the station user to record 10 frequently-used numbers, up to 16

digits each, and dial any one of the recorded numbers on request. The Model 2400 telephone uses the 67-type electronic handset and associated components; this allows reliable operation using less current than other telephones require. The electronic handset will operate only on electronic telephones such as the Model 2400 telephone.

**2. INSTALLATION**

2.01 Since the modular versions of these telephones are equipped with modular plugs, installation consists of inserting this plug into an available wall jack. Refer to the appropriate circuit label for installation wiring of nonmodular units.

### 3. MAINTENANCE

**3.01** For replacement parts information and for an exploded-view drawing of major assembly groups, refer to Section 50-400-101.

### 4. OPERATION

**4.01** A number can be recorded into auto dial directly or as the last-number-dialed. Either method can be used with the handset on-hook or off-hook. If a misdial occurs while recording a number, start again at the first step.

**4.02** To record a number directly into auto dial, perform the following steps:

- (a) Press the AUTO DIAL feature button.
- (b) Press the pushbutton dial \* button.
- (c) Press the pushbutton dial number (0-9) button that corresponds to the desired recording location.
- (d) Dial the complete number to be recorded.

*Note:* Any recorded number can be cleared by going on-hook and performing steps a, b, and c. This action will clear only one recorded number at a time.

**4.03** An adhesive-backed directory card is included with the telephone. It can be glued to the telephone handset or housing and used to list each recorded number in the corresponding dial pushbutton (0-9) number location.

**4.04** To record the last-number-dialed, perform the following steps:

- (a) Press the AUTO DIAL feature button.
- (b) Press the pushbutton dial \* button.
- (c) Press the pushbutton dial number (0-9) that corresponds to the desired recording location.
- (d) Press the AUTO DIAL feature button.
- (e) Press the pushbutton dial # button.

*Note:* The last-number-dialed memory can be cleared with the handset on-hook by pressing the pushbutton dial \* button twice. This action has no effect on recorded numbers.

**4.05** Numbers can be recorded in a manner that allows for "stops", with dialing continuing upon request. To record a "stop", press the pushbutton dial # button. As the auto dial feature automatically dials the recorded number and the "stop" is reached, press the pushbutton dial # button, and dialing will continue automatically. When automatic dialing of the recorded number is completed, manual dialing can be continued as desired.

**4.06** Three methods of automatic dialing with the auto dial feature are as follows: (a) dial a recorded number, (b) pre-dial a number, or (c) redial the last-number-dialed.

- (a) To dial a recorded number automatically:
  - (1) Go off-hook and check for the presence of dial tone.
  - (2) Press the AUTO DIAL feature button.
  - (3) Press the pushbutton dial number (0-9) button that corresponds to the desired recorded number.
- (b) To pre-dial a number:
  - (1) Dial the desired number.
  - (2) Go off-hook and check for the presence of dial tone.
  - (3) Press the AUTO DIAL feature button two times.
- (c) To redial automatically the last-number-dialed:
  - (1) Go off-hook and check for the presence of dial tone.
  - (2) Press the AUTO DIAL feature button.
  - (3) Press the pushbutton dial # button.

*Note:* Manual dialing may be used in addition to automatic dialing. For example, a station user can dial a CO (Central Office) access

number manually; then, after receiving CO dial tone, the station user can perform steps 2 and 3 of the automatic dialing operation.

## 5. BATTERY REQUIREMENTS

**5.01** The Model 2400 telephone with the electronic auto dialer assembly must have a battery installed. The battery is not included with the telephone. Any nine-volt alkaline battery is acceptable, and it should be replaced once each year. The battery can be changed without any loss of recorded numbers by going off-hook at the Model 2400 telephone.

**5.02** The nine-volt alkaline battery can be installed in the telephone without removing the telephone housing. To install the battery into the telephone perform the following steps:

(a) Remove the dial faceplate from the telephone.

*Note:* Use a straightened paper clip to push up the retainer clip at the top of the faceplate.

(b) Locate the plastic battery tab near the upper left-hand corner of the electronic auto dialer assembly. This plastic battery tab is attached to the battery bracket and is used to remove the old battery from the telephone.

(c) Locate the battery clip and match the terminals of the battery clip to the terminals of the battery. Push the battery clip onto the battery terminals.

(d) Insert the battery down into the bracket and fold the end of the plastic battery tab over the battery. Push the battery clip wires toward the left side of the telephone housing so they will not interfere with the dial.

(e) Replace the dial faceplate.