

**NEC**

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**Electra-616**

ELECTRONIC KEY TELEPHONE SYSTEM

**INSTALLATION  
SERVICE  
MANUAL**

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# INSTALLATION SERVICE MANUAL

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SECTION A

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## SECTION A REGULATORY INFORMATION

### Regulatory Requirements

1. The Federal Communications Commission (FCC) has established Rules which permit the Electra-616 Electronic Key Telephone System to be directly connected to the telephone network. A jack is provided by the telephone company. Jacks for this type of customer-provided equipment will not be provided on party lines or coin lines.
2. If the Electra-616 System is malfunctioning, it may also be causing harm to the telephone network. The Key Telephone System should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service.
3. The telephone company may make changes in its technical operations and procedures. If such changes affect the compatibility or use of the Electra-616 System, the telephone company is required to give adequate notice of the changes.
4. In compliance with FCC Part 15 rules, the following statement is provided:

**Warning:** This equipment generates and uses radio frequency energy, and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna.
- Relocate the computer with respect to the receiver.

- Move the computer away from the receiver.
- Plug the computer into a different outlet so that the computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the FCC helpful: 'How to Identify and Resolve Radio-Television Interference Problems.' This booklet is available from the United States Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

5. Important Information to be Supplied to Purchaser of Electra-616 System.

The Key Telephone sets provided for the Electra-616 Key Telephone System are not hearing and compatible. FCC rules prohibit the use of non-hearing aid-compatible telephones in the following locations:

- 1) Any public or semipublic location where coin-operated or credit card telephones may be found.
- 2) Elevators, highways and tunnels (automobile, subway, railroad or pedestrian) where a person with impaired hearing might be isolated in an emergency.
- 3) Places where telephones are specifically installed to alert emergency authorities such as fire, police or medical assistance personnel.
- 4) Hospital rooms, residential health care facilities, convalescent homes, and prisons, specifically where telephones are used for signaling life-threatening or emergency situations if alternative signaling methods are not available.
- 5) Workstations for hearing impaired personnel.
- 6) Hotel, motel, apartment lobbies; in stores where telephones are used by patrons to order merchandise; in public transportation terminals where telephones are used to call taxis, or to reserve lodging or rental automobiles.

- 7) Hotel and motel rooms. (At least ten percent of the rooms must contain hearing aid-compatible telephones; or contain jacks for plug-in hearing aid compatible telephones which will be provided to hearing impaired customers upon request).

Single line telephone sets used in conjunction with the Electra-616 Key Telephone System may or may not be hearing aid compatible. The manufacturer of the single line telephone sets must provide notice of hearing aid compatibility to comply with FCC rules. The Key Telephone sets provided for the Electra-616 Electronic Key Telephone System can be made hearing aid compatible. Contact NEC Telephones Key System Engineering for further information.

#### Company Notification

Before installing the Electra-616 Electronic Key Telephone System to the telephone network, the telephone company must be provided with the following:

- a. Your telephone number
- b. The FCC registration number: AY589N-70504-KF-E
- c. The ringer equivalence number: 1.2B
- d. The USOC jack required:
  - 1) RJ21X for 50 position miniature ribbon amphenol type connectors (MDA-S KTU installed). One per Electra-616 Electronic Key Telephone System.
  - 2) RJ11C for miniature 6 position modular-type connectors (MDM-S KTU installed). One per each CO line installed.

Items b. and c. are also indicated on the System equipment label.

#### Service Requirements

In the event of equipment malfunction, all repairs will be performed by NEC or an authorized agent of NEC. It is the responsibility of users requiring service to report the need for service to NEC or to one of their authorized agents.



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INTRODUCTION

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## SECTION 1 INTRODUCTION

### 1. Manual and Supporting Documents

1.01 This manual provides the information required to install and maintain the Electra-616 Electronic Key Telephone System. It covers the areas of: site selection, configuring a system, hardware installation, and programming. Technical Bulletins pertinent to this system should be attached to it to provide a complete and current field book.

1.02 The Electra-616 Electronic Key Telephone System is also the subject of the following documents:

ND-17313	NEC Electra-616 General Description
ND-17315	NEC Electra-616 Circuit Description
ND-17316	NEC Electra-616 Schematic Drawings

1.03 It is recommended that the installer make himself familiar with this document before beginning installation.

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