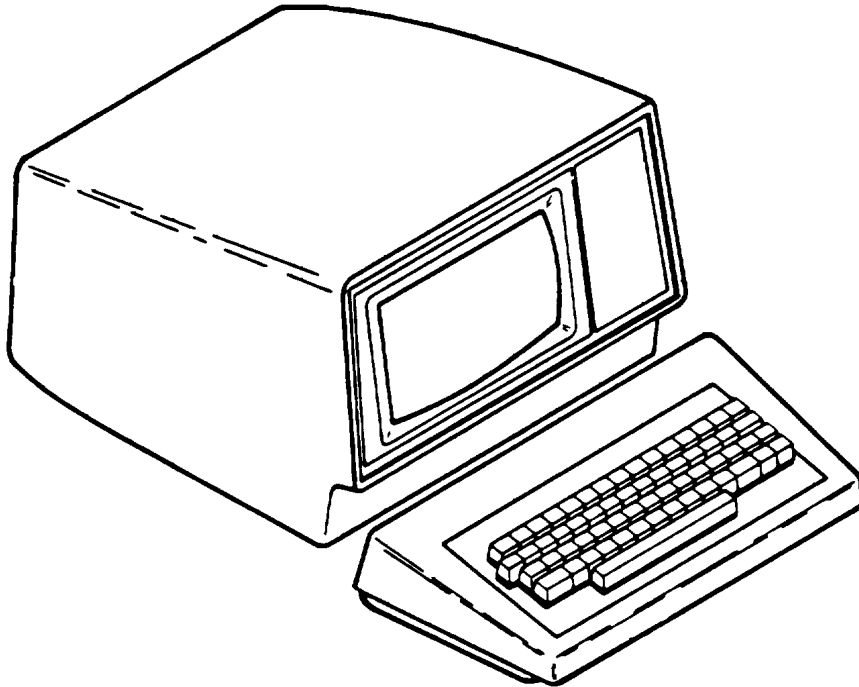


OPERATOR'S MANUAL



**EQUIPMENT
DESCRIPTION
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PROCEDURES
PAGE 3-1**

KEYBOARD DISPLAY

MX-10171/MYQ-4

(NSN 7025-01-094-0081)

HEADQUARTERS, DEPARTMENT OF THE ARMY

FEBRUARY 1984

WARNING

HIGH VOLTAGE

High voltage is used in the operation of this equipment.

ELECTROCUTION ON CONTACT

Electrocution may result if you fail to observe these safety precautions.

Never perform maintenance on this equipment when it is powered on. If you have operating problems or equipment failure, power off and report the problem to your supervisor.



5

SAFETY STEPS TO FOLLOW IF SOMEONE IS THE VICTIM OF ELECTRICAL SHOCK

1

DO NOT TRY TO PULL OR GRAB THE INDIVIDUAL

2

IF POSSIBLE, TURN OFF THE ELECTRICAL POWER

3

IF YOU CANNOT TURN OFF THE ELECTRICAL POWER, PULL, PUSH OR LIFT THE PERSON TO SAFETY USING A DRY WOODEN POLE OR A DRY ROPE OR SOME OTHER INSULATING MATERIAL

4

SEND FOR HELP AS SOON AS POSSIBLE

5

AFTER THE INJURED PERSON IS FREE OF CONTACT WITH THE SOURCE OF ELECTRICAL SHOCK, MOVE THE PERSON A SHORT DISTANCE AWAY AND IMMEDIATELY START ARTIFICIAL RESUSCITATION

OPERATOR'S MANUAL
KEYBOARD-DISPLAY MX-10171/MYQ-4

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in back of this manual, direct to: Commander, US Army Communications and Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MQ, Fort Monmouth, New Jersey 07703. A reply will be furnished to you.

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HOW TO USE THIS MANUAL

This manual tells you how to operate and service Keyboard-Display MX-10171/MYQ-4.

LOCATION OF SUBJECTS IN MANUAL

In this manual, paragraphs are numbered in order by chapter. For example, paragraph 2-3 is the third paragraph in chapter 2. Pages are also numbered this way. Using this numbering system, there are two easy ways to locate the information you need in this manual.

- Front cover locators
- Subject index

Use the front cover locators and marked pages to quickly find the parts of the manual shown on the cover. If the information you need is not listed on the front cover, use the subject index at the back of this manual. It lists all subjects covered in the manual and directs you to the subject by page number.

OPERATING AND MAINTENANCE PROCEDURES

Operating and maintenance procedures in this manual have two features which help you perform them more easily:

- Initial setup boxes
- First-time performance aids

An initial setup box is used at the start of any procedure which requires setup items before you perform it. This box lists items such as tools and supplies needed to perform the procedure. If the box does not appear at the start of a procedure, it means no setup items are needed.

If you are using this manual to perform a procedure for the first time, always read through the entire procedure before you start. This will help you understand the task you will perform. Always perform the task steps in the order given. This will help assure correct performance. Use the illustrations beside the steps to find the parts of the equipment called out in the steps. Some steps include a reference to another paragraph. Go to that paragraph if you are not sure how the steps are done.

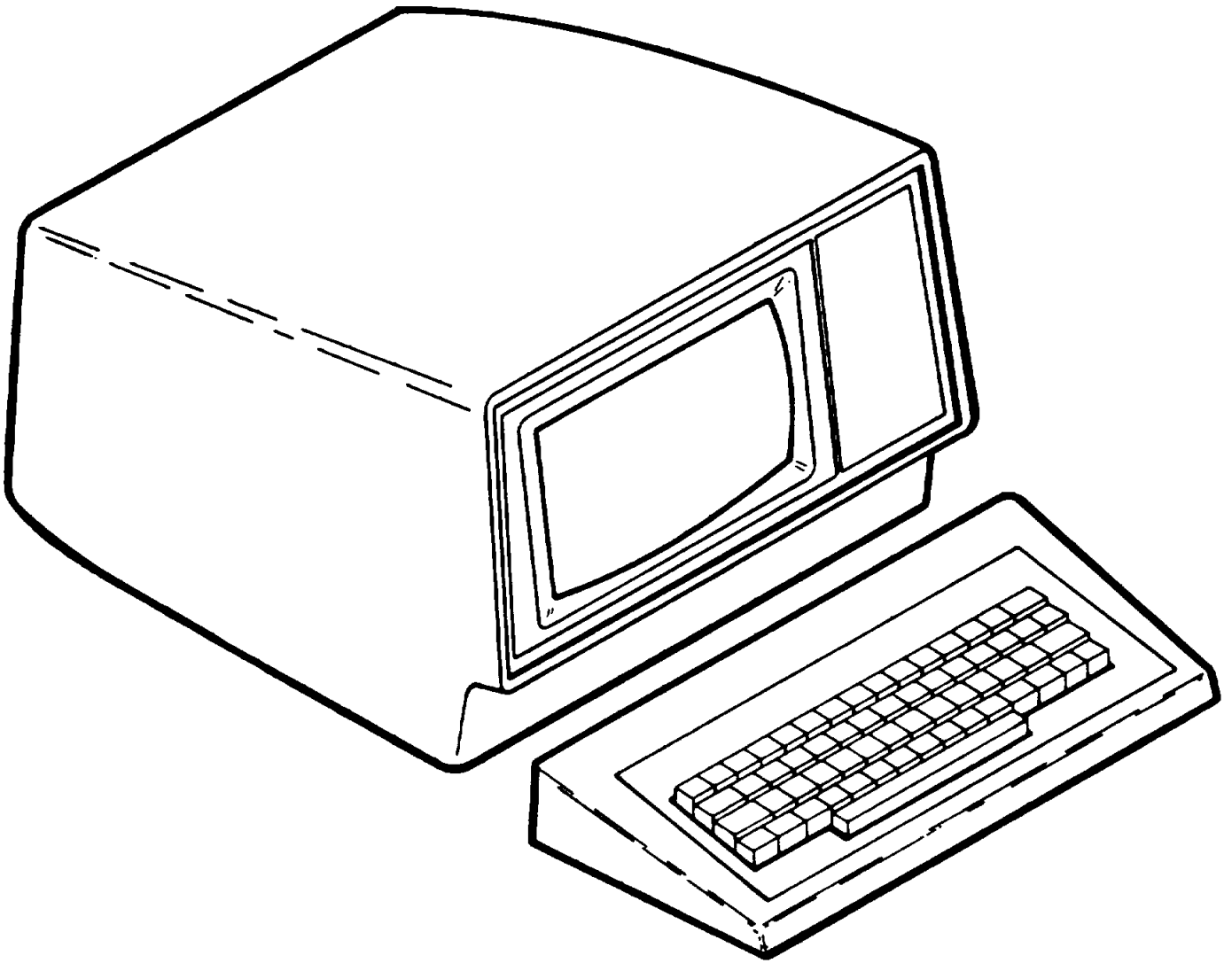


Figure 1-0. Keyboard-Display MX-10171/MYQ-4

CHAPTER 1 INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE

This manual is the operator's manual for Keyboard-Display MX-10171/MYQ-4 (fig. 1-0). In the rest of this manual it will be called the console terminal. This manual describes the console terminal and tells you how to operate and maintain it. The console terminal is a keyboard video display terminal used to input and output information to/from an automated data processing system.

1-2. MAINTENANCE FORMS AND RECORDS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System (TAMMS).

1-3. HAND RECEIPT (-HR) MANUALS

This manual has a companion document with a TM number followed by -HR (which stands for Hand Receipt). TM 11-7025-207-10-HR consists of preprinted hand receipts (DA Form 2062) that list end item related equipment (i.e., COEI, BII, and AAL) which you must account for. As an aid to property accountability, additional -HR manuals may be requisitioned from the following source in accordance with procedures in Chapter 3, AR310-2: The US Army Adjutant General Publications Center ATTN: AGLD-OD, 2800 Eastern Boulevard, Baltimore, MD 21220

1-4. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your console terminal needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment.

Let us know why you don't like the design or performance. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at: Commander, US Army Communications and Electronics Command and Fort Monmouth, ATTN: DRSEL-ME-MQ, Fort Monmouth, NJ 07703. We'll send you a reply.

1-5. REFERENCE INFORMATION

This listing includes the nomenclature cross reference list, list of abbreviations, and an explanation of terms (glossary) used in this manual.

1-6. NOMENCLATURE CROSS REFERENCE LIST

Common names are used throughout this manual, but you must use the official nomenclature when filling out report forms, sending an EIR, or finding referenced technical manuals.

<u>Common Name</u>	<u>Official Nomenclature</u>
Console Terminal	Keyboard-Display MX-10171/MYQ-4

1-7. LIST OF ABBREVIATIONS

ANSI	American National Standards Institute
ASCII	American Standard Code for Information Interchange
BPS	Bits per second
BRK	Break
CAP	Capital
CLR	Clear
CRT	Cathode ray tube
CTL	Control
DEL	Delete
EIA	Electronic Industries Association
ESC	Escape
LF	Line feed
RPT	Repeat

1-8. GLOSSARY

ASCII	American Standard Code for Information Interchange. The standard used for transmission of data between computer systems and remote terminals over telephone lines.
Asynchronous	Data communication which is not time related. Uses stop and start bits instead of time pulses to reorganize data for transmission.
Baud Rate	Rate at which data bits are transmitted (bits per second).
Cursor	A distinctive mark (such as a square or underline) that indicates where the next character will be displayed on a video terminal.
EIA	Electronic Industries Association. A trade organization of the electronics industry which sets technical standards used by government agencies and the electronics industry.

Full Duplex	Communications mode which allows transmission and reception at the same time.
Mark	Presence of a signal. Equivalent to a binary one condition.
Modem	Modulator Demodulator. A device which converts digital data To analog form for transmission. Also receives analog form and converts it to digital data for processing.
Parity	A common technique for error detection in data transmission. Parity check bits are added to the data so that each group of bits adds up to an even number for even parity and an odd number for odd parity.
RS-232-C	An EIA standard that dictates data interface characteristics.
Scroll	Upward or downward movement of data on a video terminal screen.
Software	Programs, routines and codes which instruct a computer to perform its functions in a data processing system.
Stop bit	The last bit of each character. This resets the receiving equipment to its rest condition in preparation for receipt of the next character.

Section II. EQUIPMENT DESCRIPTION

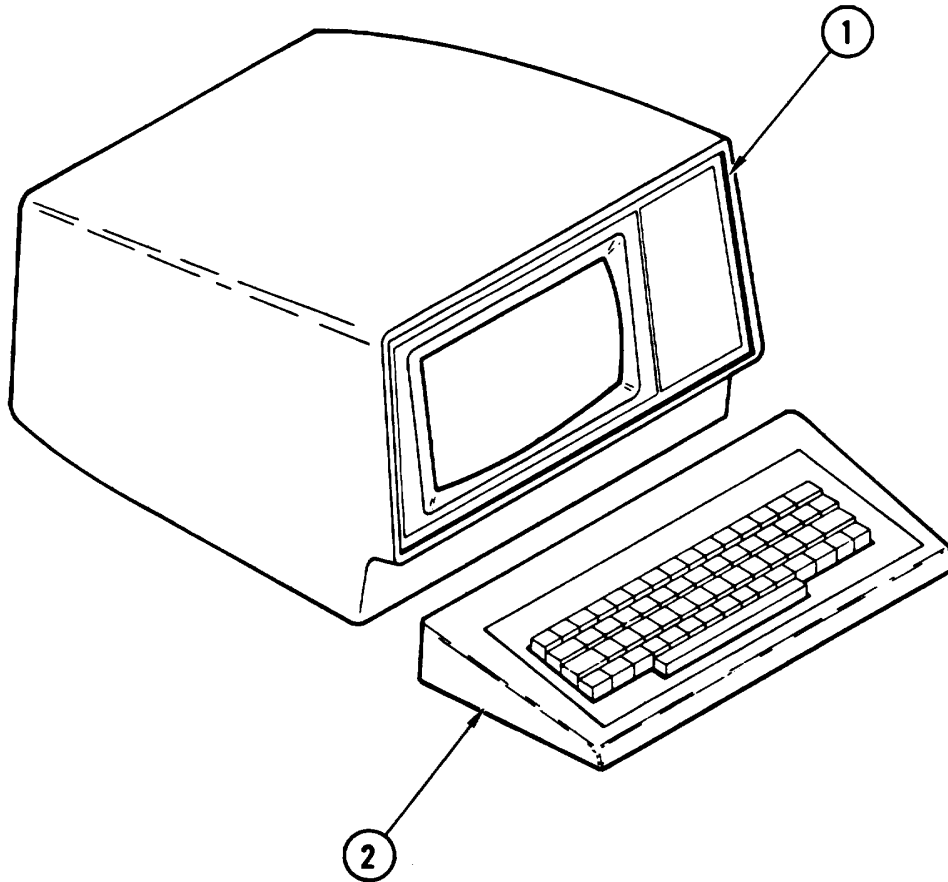
1-9. EQUIPMENT PURPOSE, CAPABILITIES, AND FEATURES

The console terminal is a keyboard video display terminal. It transmits a code associated with each character and control key on the keyboard. A code will be transmitted as soon as a key or key combination is struck. If a displayable character is associated with the transmitted code, it will be shown on the CRT display. The console terminal:

- Sounds a tone when powered on and when a character is entered into the 75th column
- Connects with a computer system directly or through a modem
- Displays operator input and system messages from the computer
- Connects with a teleprinter to provide a paper copy of console terminal operations

1-10. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

The console terminal (fig. 1-1) consists of a display unit and a keyboard. The keyboard is connected to the display unit with a ribbon cable. The cable allows the keyboard to be moved from the display unit for operator convenience or to meet space restrictions.



- (1) DISPLAY UNIT 12-inch nonglare screen is composed of a cathode ray tube (CRT) and supporting electronic components housed in a stand-alone case
- (2) KEYBOARD Consists of keys arranged in a stepped rise on base. Key placement meets requirements of American National Standards Institute for alphanumeric communications

Figure 1-1. Console Terminal Major Components

1-11. EQUIPMENT DATA

Weight and Dimensions:

Weight 40.0 lb (18.2 kg)
Height 13.1 in. (33.3 cm)
Width 18.1 in. (46.0 cm)
Depth 23.8 in. (60.5 cm)

Operating Environment:

Temperature 50OF to 1000F (10°C to 300C)
Relative humidity 10% to 80% (noncondensing)

Power Requirements:

Voltage 102 V ac to 132 V ac
Frequency 60 Hz

Display:

Line format 12 lines of 80 characters each (960 character capacity)
Character set 63 ASCII (uppercase alphabet, numerics and special symbols)

Keyboard:

Configuration 60 solid state keys (36 alphanumeric and 24 special function)
Capability Full 128 character, 7 bit ASCII code set

Communication Interface:

EIA interface Conforms to RS-232-C
Mode Full duplex, asynchronous
Data (baud) rate 75, 110, 150, 300, 600, 1200, 1800, 2400, 4800, or 9600 bps
Character structure 10-bits (start, 7 data bits, parity, stop)
11-bits (start, 7 data bits, parity, stop, stop)
Parity generation Odd, even or mark (1) parity for 10 or 11 bit characters

Section III. TECHNICAL PRINCIPLES OF OPERATION

1-12. FUNCTIONAL DESCRIPTION

The console terminal can operate off line (LOCAL) or on line (REMOTE). Off-line operation is used for startup and testing prior to connecting the console terminal to an operating data processing system. The keyboard is operated and the characters appear on the display unit. During on-line operation, when a character is keyed, an ASCII code is sent to the data processing system and the console terminal receives data from the system.

The display (fig. 1-2) is bottom line entry and is comprised of 12 lines of 80 characters each for a total of 960 characters.

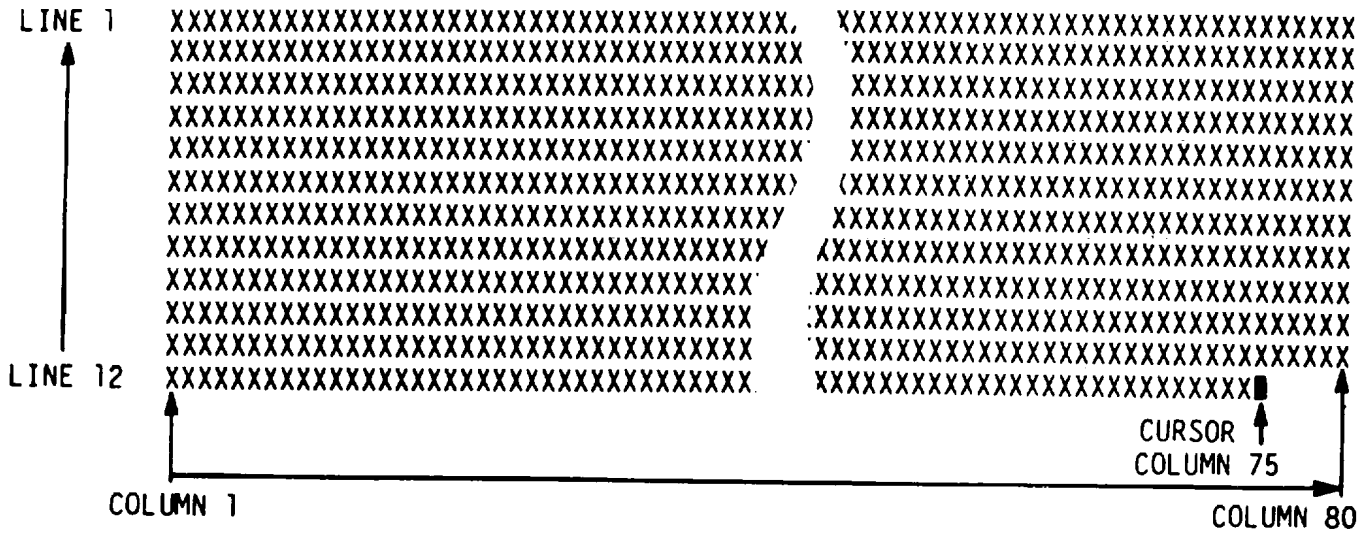


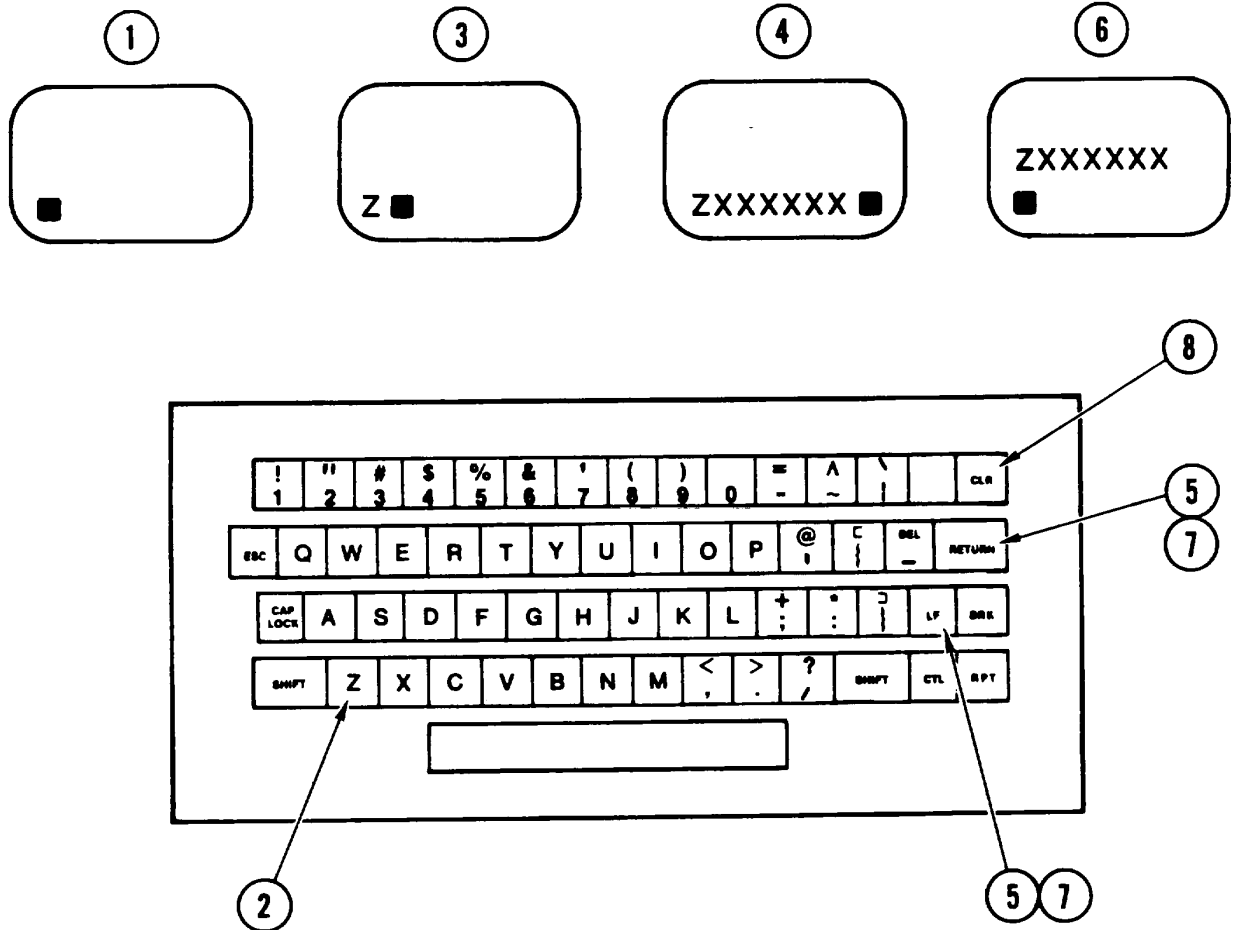
Figure 1-2. Display Format

The cursor is a solid block which remains on the bottom (12th) line. When the console terminal is powered on, the cursor appears at the far left (column one) of line 12. During operation, the cursor moves across the display appearing to the right of the last character entered. An audible alarm sounds when the cursor reaches column 75 to signal the operator that the line is going to end. The character appearing in column 80 with the cursor will be displayed in inverse video. There is no automatic carriage return or line feed. When a line is completed, the RETURN key must be pressed to reset the cursor to column one and the LF (line feed) key must be pressed to scroll the completed line up. Each LF action causes all lines on the display to move up one line. When all 12 lines are full, the top line will scroll off the page and be lost.

The keyboard contains 60 keys which generate the 128 character ASCII code for the data processing system. Only upper case letters appear on the display unit. A detailed description of the keys is given in chapter 2, section 1.

1-13. DATA ENTRY

Data entry operation is illustrated and described in figure 1-3.



- (1) Cursor appears in column one, line 12 (at bottom of screen) at startup
- (2) Character is entered at keyboard
- (3) Cursor moves to column two, and character is displayed in column one
- (4) Entry continues until end of line is reached
- (5) RETURN key is pressed and LF key is pressed
- (6) Cursor moves to column one of line 12 and displayed characters scroll up to line 11
- (7) Entry continues until line one is complete. RETURN key and LF key are pressed, data on line one is scrolled off and lost, and new data entered on line 12
- (8) When all data has been entered and transmission is complete, CLR key is pressed. Display is cleared and cursor returns to home (column one, line 12) position

Figure 1-3. Data Entry Operation

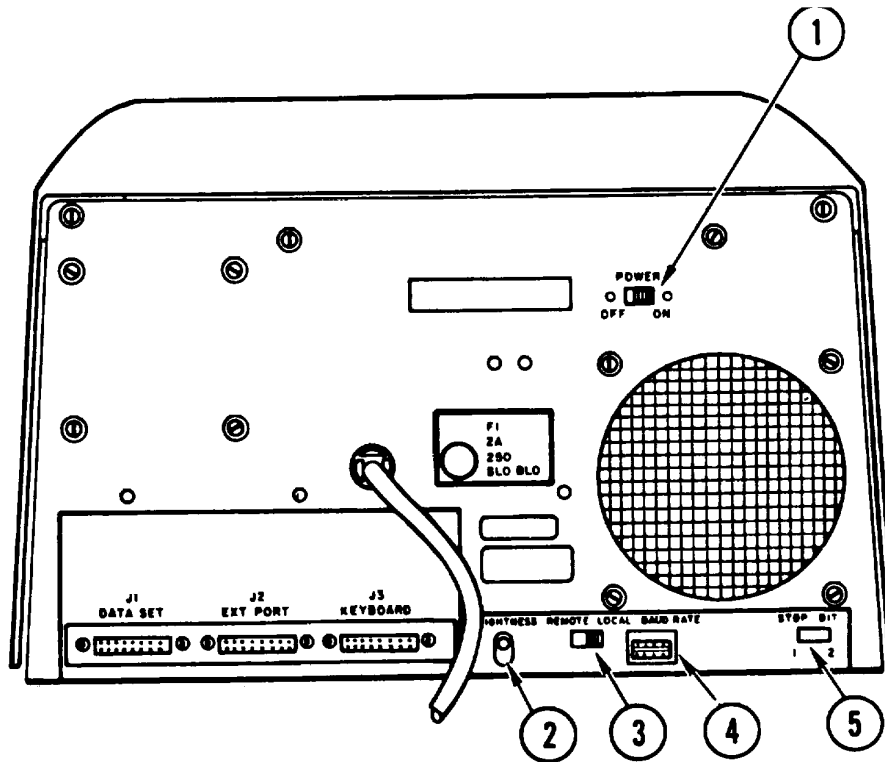
CHAPTER 2
OPERATING INSTRUCTIONS

Section I. DESCRIPTION AND USE OF OPERATOR'S
CONTROLS AND INDICATORS

2-1. CONTROLS AND INDICATORS

2-2. DISPLAY UNIT

Operator's controls for the display unit (fig. 2-1) are located on the back of the device. When powered on, cursor is visible on the CRT screen.



- | | | |
|-----|---------------------|---|
| (1) | POWER ON / OFF | Turns power on or off |
| (2) | BRIGHTNESS CONTROL | Varies intensity of image displayed on screen. Clock-wise rotation increases brightness |
| (3) | REMOTE-LOCAL SWITCH | Sets console terminal offline (LOCAL) or online (REMOTE) |
| (4) | BAUD RATE SWITCH | Selects the data transfer rates shown in table 2-1. Normally set at installation by maintenance personnel |
| (5) | STOP BIT SWITCH | Selects number of stop bits per character. Normally set at installation by maintenance personnel |

Figure 2-1. Display Unit Controls

Table 2-1. Baud Rate Switch Settings

Setting	Baud Rate
2	75
3	110
5	150
6	300
7	600
9	1200
10	1800
11	2400
13	4800
14	9600

2-3. KEYBOARD

The console terminal keyboard is arranged in groups of keys as follows: data entry keys, keyboard control keys, and command control keys. There are no indicators on the console terminal keyboard.

2-4. DATA ENTRY KEYS

This group (fig. 2-2) consists of 26 alphabetic, 10 numeric and 32 special character keys. The characters represented by these keys appear on the display unit as soon as each key is struck. The keyboard can send all 128 ASCII characters; however, the displayable character set is determined by the display unit. The console terminal will display a 63-character set in uppercase alphabet only. If lowercase characters are entered at the keyboard or received in transmission, they will be displayed in uppercase only.

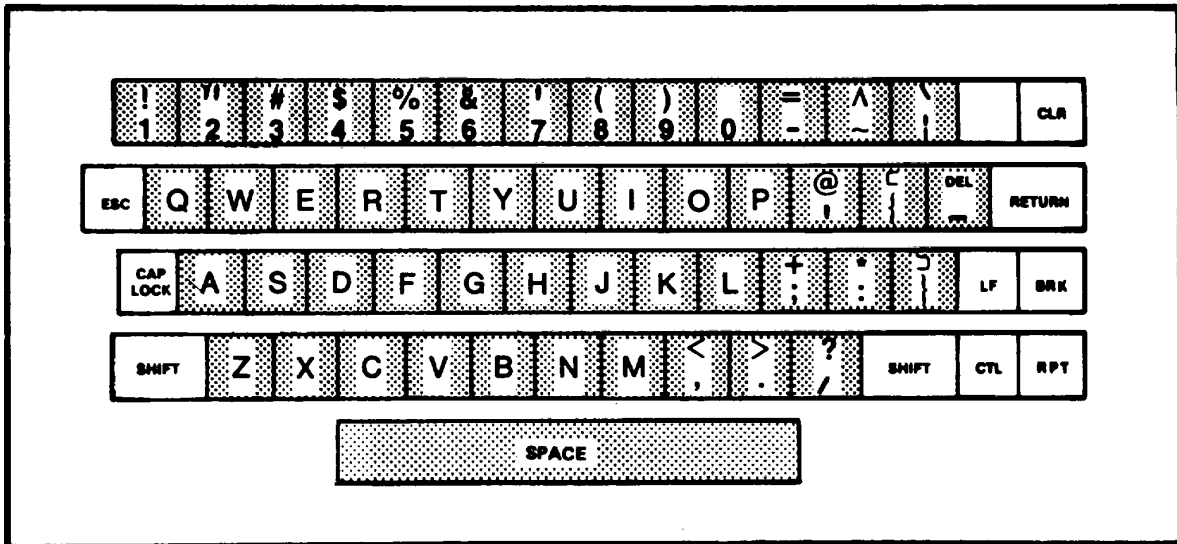
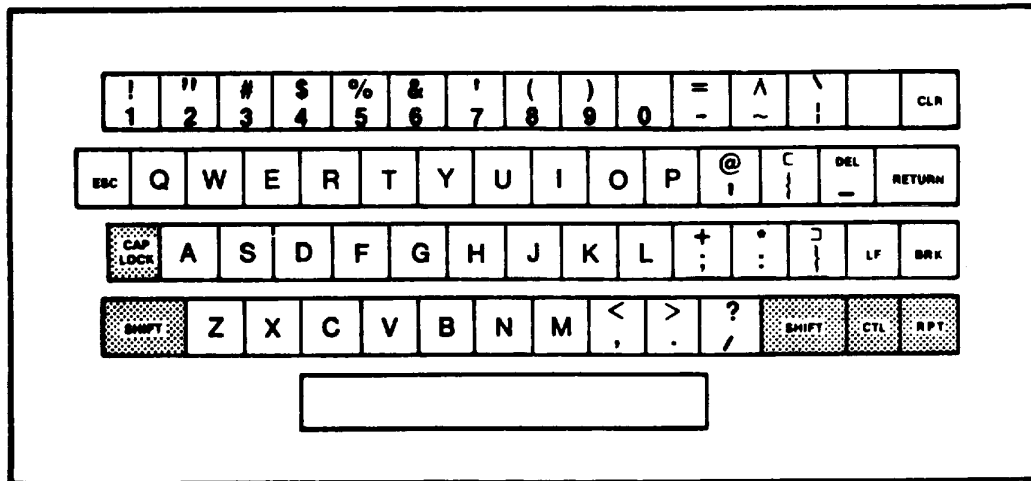


Figure 2-2. Data Entry Keys

2-5. KEYBOARD CONTROL KEYS

This group (fig. 2-3) consists of four nondisplayable keys that change keyboard codes. Each performs as follows:



SHIFT - When followed by an alphabetic character, associated uppercase character is displayed. When followed by a dual marked key (except DEL), the marking on upper part of key is displayed.

RPT (Repeat) - When followed by an alphanumeric or special character key, the character represented by the key is repeated on display unit until the key is released. When followed by LF (line feed), rapid scrolling occurs.

CAP LOCK - When pressed down in locked position, keyboard transmits uppercase alphabetic characters only. Lowercase characters are suppressed.

CTL (Control) - Used to transmit control functions of the ASCII code. When followed by the keys shown in table 2-2, ASCII control codes are transmitted by keyboard. Codes may or may not produce the result described in table. Depends on system with which console terminal is used.

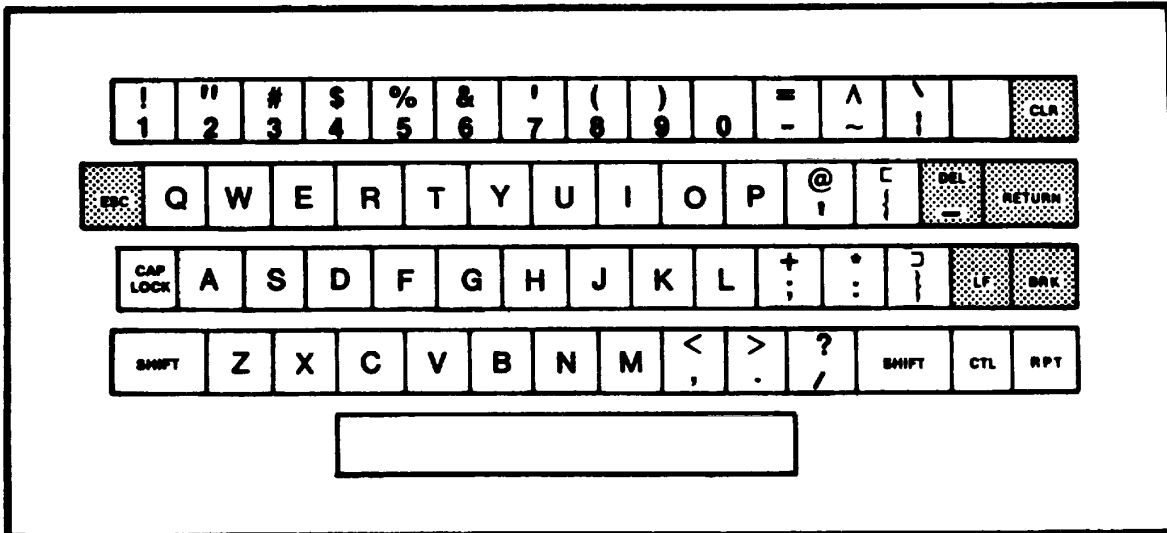
Figure 2-3. Keyboard Control Keys

Table 2-2. Control Codes

CTL followed by:	Result
G	Sounds an alarm.
H	Backspaces a displayed character one space each time H is pressed.
J	Scrolls display one line each time J is pressed.
L	Clears display and returns cursor to HOME position.
M	Carriage return,
R	Advances cursor one space each time R is pressed. Screen display is not destroyed.
X	Cancels current line typed. Returns cursor to HOME position.

2-6. COMMAND CONTROL KEYS

This group (fig. 2-4) consists of five nondisplayable keys. The effect of each key described below is determined by the display unit, the system with which the console terminal is used, and whether the terminal is on line or off line.



CLR* (Clear) - Transmits ASCII code FF. Clears display screen and returns cursor to home position (lower left corner of screen).

ESC* (Escape) - Transmits ASCII code ESC. Display unit does not recognize this code. Key has no effect on console terminal.

RETURN - Transmits ASCII code CR. Returns cursor to column one.

LF (Line Feed) - Transmits ASCII code LF. Scrolls the display one line each time LF is pressed.

DEL* (Delete) - Transmits ASCII code DEL when pressed while holding SHIFT down. Cancels the current line typed. Returns cursor to home position.

BRK (Break) - Activates the break (interrupt) function while pressed. Halts interaction between console terminal and data processing system.

Figure 2-4. Command Control Keys

* On some system configurations such as DAS3 these keys will have no effect.

Section II. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

2-7. GENERAL

Operator's Preventive Maintenance Checks and Services (PMCS) are the required daily and weekly inspection and care of the equipment necessary to keep it in good operating condition. PMCS shall be done before (B) operation, during (D) operation and after (A) operation. Other checks and services are done on a weekly (W) or monthly (M) cycle.

NOTE

Always observe all WARNINGS and CAUTIONS when you perform the PMCS procedures.

- a. Before operation. Do your before (B) PMCS to be sure that the equipment is ready for operation.
- b. During operation. Do your during (D) PMCS to be sure that the equipment is operating properly.
- c. After operation. Do your after (A) PMCS so that the equipment will be ready for future operation.
- d. If your equipment fails to operate. Refer to chapter 3 for troubleshooting procedures. Report any deficiency on DA Form 2404. See TM 38-750.

2-8. PMCS PROCEDURES

PMCS procedures are done at fixed intervals for the following purposes:

- Make sure that the equipment is operable
 - Prevent equipment problems in future operation
 - Identify and resolve minor problems in the equipment before they become major problems
 - Scheduled cleaning of the equipment
- a. PMCS Table. The PMCS procedures are contained in table 2-3. This information is given by item number, interval, item inspected, procedure and criteria for rejection. An explanation of the contents of each column is given below.
 - (1) Item Number Column. The checks and services are numbered in chronological order. The numbers in this column shall be used in the TM Item No. column of DA Form 2404, Equipment Inspection and Maintenance Worksheet, in recording results of PICS.

- (2) Interval Column. This column identifies the interval at which the check or service is performed. Only those columns are used which are pertinent to the equipment.
- (3) Item To Be Inspected Column. The equipment or portion of the equipment being checked or serviced is listed in this column.
- (4) Procedures Column. This column contains the check or service procedure.
- (5) Equipment Is Not Ready/Available If: Column. The reason why an equipment will be classified as unable to perform its mission will be given in this column. An entry in this column will:
 - (a) Identify conditions that make the equipment not ready/available for readiness reporting purposes.
 - (b) Deny use of the equipment until corrective maintenance has been performed.

b. Routine Checks. Checks like equipment inventory, cleaning, dusting, washing, checking for frayed cables, storing items not in use, covering unused receptacles and checking for loose nuts and bolts are not listed in your PMCS. They are things you should do anytime you see they must be done. If you find a routine check like one of these listed in your PMCS, it was listed because other operators reported problems with this item.

Table 2-3. Preventive Maintenance Checks and Services

NOTE

If the equipment must be kept in continuous operation, check and service only those items that can be checked and serviced without disturbing operation. Make the complete checks and services when the equipment can be shut down.

NOTE: Within designated interval, these checks are to be done in the order listed.

B = Before

W = Weekly

Perform weekly as well as before PMCS if:

- (1) You are the assigned operator and have not operated the equipment since the last weekly.
- (2) You are operating the equipment for the first time.

Table 2-3. Preventive Maintenance Checks and Services -- Continued

Item No.	Interval		Item to be inspected	Procedures Check for and have repaired or adjusted as necessary	Equipment is not Ready/Available If:
	B	W			
1	•	•	Console Terminal	Check for cleanliness. Clean if required as follows: 1. Vacuum display unit and keyboard exterior using soft-bristled nozzle. 2. Remove fingerprints and smudges from display screen using clean, soft, lint-free cloth dampened with non-spray window cleaning fluid. 3. Dry using a clean, soft, lint-free cloth.	Equipment damaged.
2	•			Check for undamaged condition of display unit, keyboard, cables and power cord.	

Section III. OPERATION UNDER USUAL CONDITIONS

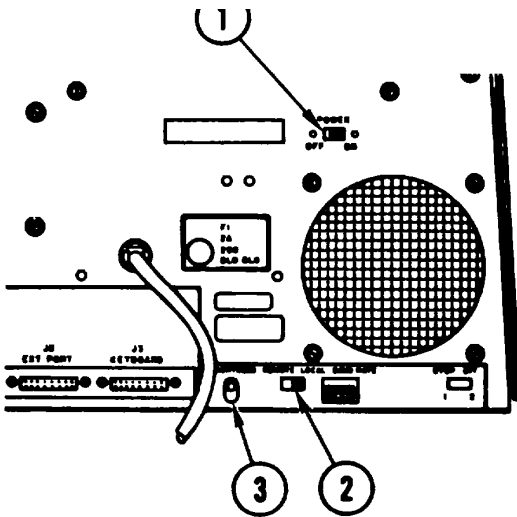
2-9. ASSEMBLY AND PREPARATION FOR USE

Interconnect the display unit and keyboard and connect the console terminal to a 115 V 60 Hz power source.

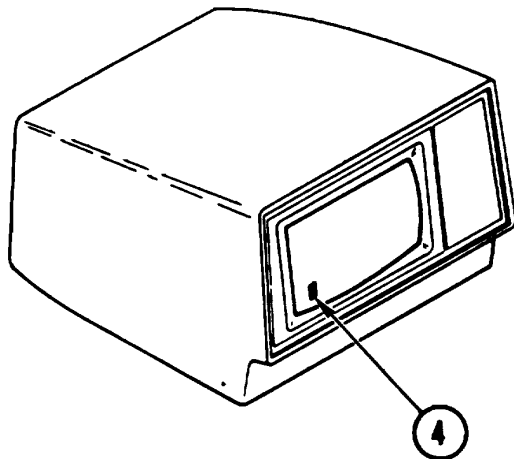
2-10. OPERATING PROCEDURES

This section contains the procedure you use to operate the console terminal.

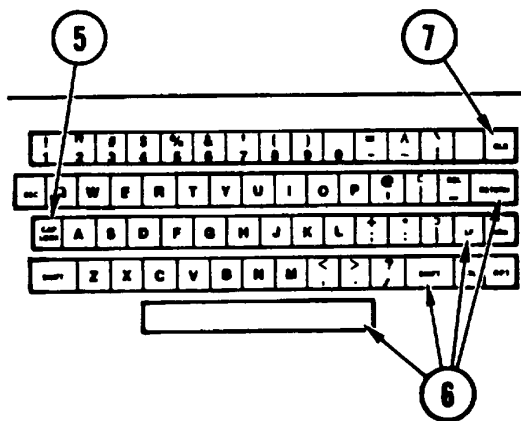
2-11. OPERATE CONSOLE TERMINAL



1. Set POWER switch to ON.
2. Set REMOTE-LOCAL switch to LOCAL.
3. Adjust BRIGHTNESS control to suit lighting conditions.



4. Check that cursor appears at lower left corner of display unit screen. If not, begin troubleshooting. (See table 3-1.)



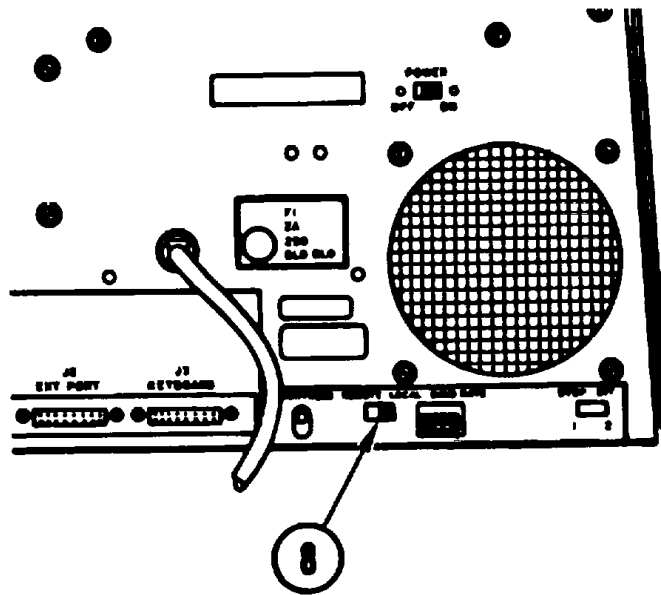
5. Press CAP LOCK key.
6. Type all characters on keyboard. Use LF, SPACE, SHIFT and RETURN keys. Type at least 15 lines to verify all display functions and line advance.
7. Press CLR key to clear display.

2-11. OPERATE CONSOLE TERMINAL (CONT)

NOTE

If REMOTE (on line) operation is required, go to step 8. Otherwise set POWER switch to OFF.

8. Set REMOTE-LOCAL switch to REMOTE.



2-12. PREPARATION FOR MOVEMENT

See your system manual for specific preparation for movement instructions.

Section IV. OPERATION UNDER UNUSUAL CONDITIONS

2-13. OPERATION IN UNUSUAL WEATHER

The console terminal is designed to operate normally in a climate controlled area protected from dust and extreme dryness. If the climate control equipment fails, you may continue to operate the console terminal if the room temperature is not lower than 50°F (10°C) or higher than 100°F (38°C).

WARNING

Do not allow wet cloths used for emergency humidification to drip on floor or near electronic equipment in operating area. A shock hazard will result.

When operating in extremely dry climate you must use a humidifier to raise the relative humidity above 10%. If the humidifier fails, soak cloths or towels with water and hang them in the work area away from equipment. The evaporation which results will raise the humidity and allow you to continue operation. Monitor the humidity while you operate to make sure it is at least 10%.

**CHAPTER 3
MAINTENANCE INSTRUCTIONS**

Section I. LUBRICATION INSTRUCTIONS

3-1. LUBRICATION I

The console terminal does not require lubrication.

Section II. TROUBLESHOOTING PROCEDURES

3-2. GENERAL I

Table 3-1 lists the common malfunctions which you may find during the operation or maintenance of the console terminal or its components. You should perform the tests/inspections and corrective actions in the order listed.

This manual cannot list all malfunctions that may occur, nor all tests or inspections and corrective actions. If a malfunction is not listed or is not corrected by listed corrective actions, notify your supervisor.

Table 3-1. Troubleshooting

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
1.	THERE IS NO CURSOR WHEN POWER IS TURNED ON. Step 1. Check to see if ac power plug is in outlet. If not, push in ac power plug. Step 2. Check BRIGHTNESS setting.	If necessary, set for higher intensity.

Section III. MAINTENANCE PROCEDURES

3-3. GENERAL

The console terminal does not require operator maintenance.

**APPENDIX A
REFERENCE**

A-1. SCOPE

This appendix lists all forms, technical manuals and miscellaneous publications referenced in this manual.

A-2. FORMS

Equipment Inspection and Maintenance Worksheet DA Form 2404
Quality Deficiency Report Form SF 368
Recommended Changes to Equipment Technical Manuals DA Form 2028-2
Recommended Changes to Publications and Blank Forms DA Form 2028

A-3. TECHNICAL MANUALS

Hand Receipt Manual: Keyboard-Display MX-10171/MYQ-4 TM 11-7025-207-10-HR
The Army Maintenance Management System (TAMMS) TM 38-750

A-4. MISCELLANEOUS PUBLICATIONS

Consolidated Index of Army Publications and Iank Forms DA Pam 310-1

A-1/(A-2 blank)

APPENDIX B
COMPONENTS OF END ITEM
AND BASIC ISSUE ITEMS LISTS

Section I. INTRODUCTION

B-1. SCOPE

This appendix lists components of end item and basic issue items for the console terminal to help you inventory items required for safe and efficient operation.

B-2. GENERAL

The Components of End Item and Basic Issue Items Lists are divided into the following sections:

a. Section II. Components of End Item. This listing is for informational purposes only, and is not authority to requisition replacements. These items are part of the end item, but are removed and separately packaged for transportation or shipment. As part of the end item, these items must be with the end item whenever it is issued or transferred between property accounts. Illustrations are furnished to assist you in identifying the items.

b. Section III. Basic Issue Items. These are the minimum essential items required to place the console terminal in operation, to operate it, and to perform emergency repairs. Although shipped separately packaged BII must be with the console terminal during operation and whenever it is transferred between property accounts. The illustrations will assist you with hard-to-identify items. This manual is your authority to request/requisition replacement BII, based on TOE/MTOE authorization of the end item.

B-3. EXPLANATION OF COLUMNS

The following provides an explanation of columns found in the tabular listings:

Column (1) - Illustration Number (Illus Number). This column indicates the number of the illustration in which the item is shown.

Column (2) - National Stock Number. Indicates the National stock number assigned to the item and will be used for requisitioning purposes.

Column (3) - Description. Indicates the National item name and, if required, a minimum description to identify and locate the item. The last line for each item indicates the Federal Source Code for Manufactures (FSCM) in parentheses followed by the part number. If item needed differs for different models of this equipment, the model is shown under the "Usable On" heading in this column.

These codes are identified as:

Code

Used On

Column (4) -- Unit of Measure (U/M). Indicates the measure used in performing the actual operational/maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr).

Column (5) -- Quantity required (Qty rqr). Indicates the quantity of the item authorized to be used with/on the equipment.

Section II. COMPONENTS OF END ITEM

(Not applicable)

Section III. BASIC ISSUE ITEMS

(Not applicable)

APPENDIX C
ADDITIONAL AUTHORIZATION LIST

Section I. INTRODUCTION

C-1. SCOPE

This appendix lists additional items you are authorized for the support of the console terminal.

C-2. GENERAL

This list identifies items that do not have to accompany the console terminal and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

C-3. EXPLANATION OF LISTING

National stock numbers, descriptions, and quantities are provided to help you identify and request the additional items you require to support this equipment. The items are listed in alphabetical sequence by item name under the type document (i.e., CTA, MTOE, TDA, or JTA) which authorizes the item(s) to you.

Code

Used On

Section II. ADDITIONAL AUTHORIZATION LIST
(Not applicable)

C-1/(C-2 blank)

**APPENDIX D
EXPENDABLE SUPPLIES AND MATERIALS LIST**

Section I. INTRODUCTION

D-1. SCOPE

This appendix lists expendable supplies and materials you will need to operate and maintain the console terminal. These items are authorized to you by CTA 50-970, Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

D-2. EXPLANATION OF COLUMNS

Column (1) - Item number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 5, App. D").

Column (2) -- Level. This column identifies the lowest level of maintenance that requires the listed item.

- C -- Operator/Crew
- O -- Organizational Maintenance
- F -- Direct Support Maintenance

Column (3) -- National Stock Number. This is the National stock number assigned to the item; use it to request or requisition the item.

Column (4) -- Description. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the Federal Supply Code for Manufacturer (FSCM) in parentheses followed by the part number.

Column (5) -- Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Section II. EXPENDABLE SUPPLIES AND MATERIALS LIST

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) DESCRIPTION PART NO. AND FSCM	(5) UNIT OF MEAS.
	C	8305-00-222-2423	Cloth, Lintfree	YD
	C	7930-00-664-6910	Glass Cleaner (Non-Spray) 58536 A-A-40	CO

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By Order of the Secretary of the Army:

JOHN A. WICKHAM JR.
General, United States Army
Chief of Staff

Official:

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

Distribution:

To be distributed in accordance with special list.

☆ U.S. GOVERNMENT PRINTING OFFICE : 1985 O - 461-421 (20250)

PIN : 054837-000