

Chapter 11

Ladder Lister

The Ladder Lister tape or disk lets you:

List ladder logic.

List reference numbers.

List ASCII messages.

Examine and program memory locations.

The Ladder Lister Menu Tree at the end of this chapter diagrams the different menu choices and their interconnecting paths.

Ladder Lister Floppy Disk and Utility Tape

Features

The Ladder Lister uses the softkeys available on the P190, and the function keys on the personal computer keyboard, to execute menu options.

List Ladder Logic Lists all, or a specified range of, networks including cross references.

List Reference Numbers Lists all, or a specified range of, references.

List ASCII Messages Lists all, or a specified range of, messages.

Examine or Program Memory Locations Programs or examines the 984 memory using absolute addresses.

Ladder Lister Examples

List Ladder Logic Procedure

- Step 1** (P190) Load a working copy of the utility tape into the the P190 and press the red keys, <INIT> and <INIT LOCK>. (IBM) Select the Ladder Lister function from the Modicon Main Executive menu or select the reset level menu by pressing <ALT-F9>.
- Step 2** After the program loads and the menu is displayed, enter the ID number of the unit to which you want to attach.
- Step 3** Press the softkey labeled <ATTACH UNIT #>.
- Step 4** Press the Command key <EXIT>.
- Step 5** Press the softkey <LADDER LISTER>. Figure 11-1 illustrates how your screen should appear.

Figure 11-1 Ladder Lister Main Menu

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TITLE:
CONTROLLER:
LIST: NONE          FROM: 0000          TO: 0000
ASCII              FROM: 0000          TO: 0000
XMEM               FILE REGISTER      FILE REGISTER
                  FROM: 00          00000 TO: 00          00000
    
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COMMENCE	LIST REF/ NETWORKS	NO REF/ NETWORKS	LIST ASCII	NO ASCII	LIST XMEM	ENTER TITLE	ENTER CONTROL ID
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- Step 6** Press the softkey <ENTER TITLE> and enter a title (maximum 60 characters). Press the softkey <END TITLE> when you are done.
- Step 7** Press the softkey <ENTER CONTROL ID> and enter an ID (maximum 6 characters) for the 984. Press the softkey <END CONTROL ID> when you are finished.
- Step 8** Press the softkey <LIST REF/NETWORKS>.
- Step 9** Press the softkey <LIST NETWORK>.
- Step 10** Press the softkey <SET PARAMETERS>. The softkeys change to:
- Step 11** Press the softkey <ALL>, or for a partial listing, enter the number of the first network to be listed and press <FROM>, then enter the number of the last network to be listed and press <TO>.
- Step 12** Press the softkey <PREVIOUS MENU> twice.
- Step 13** Press the softkey <COMMENCE> to output networks to a printer.

ALL	FROM	TO					PREVIOUS MENU
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- Step 14** Press the Command key <EXIT> to return to the exit level menu.

Figure 11-2 Ladder Lister Output Report Examples

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CONTROLLER: 1 EXEC #: 02353

NETWORKS: 00001 TO 00027
 COILS: 00001 TO 00152
 DISCRETE INPUTS: 512
 INPUT REGS: NONE
 HOLDING REGS: 50
 EX REGISTERS: NONE
 NUMBER OF MESSAGES: NONE

984 CONFIGURATION (24 BIT LOGIC)

TOTAL LOGIC WORDS: 31325 TOTAL MESSAGE WORDS: 00000
 TOTAL MESSAGES: 0000 HIGHEST MESSAGEUSED: 0000

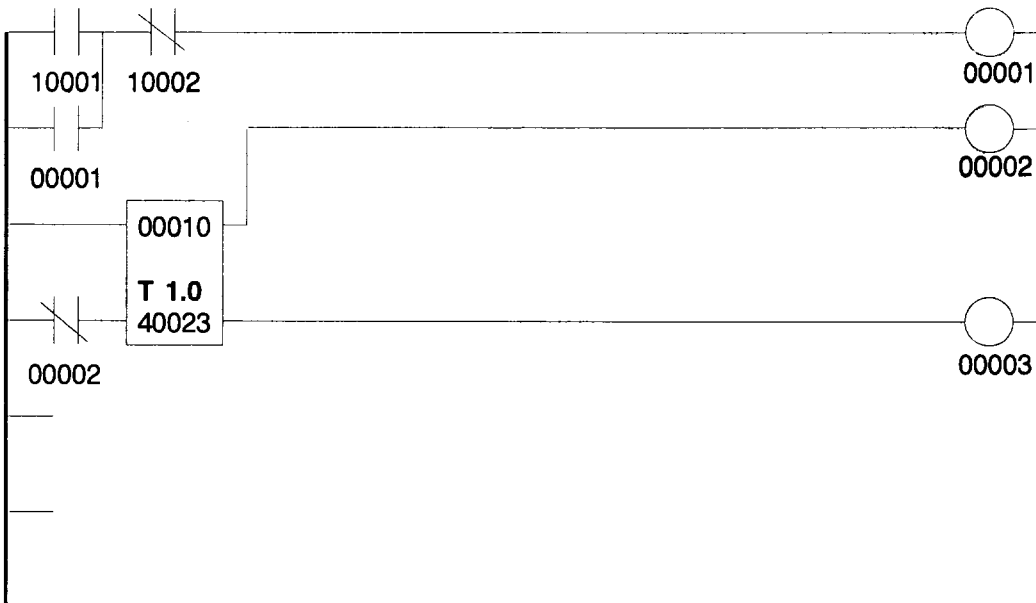
COILS: 1536 TOTAL XMEM WORDS: 98304 DISCRETE INPUTS: 512

INPUT REGS: 0000 HOLDING REGS: 50

SEG	USED	NETWORKS	SEG	USED	NETWORKS
0001	00113	0001-0034	0002	00001	NONE
0003	00001	NONE	0004	00001	NONE
0005	00001	NONE	0006	00001	NONE

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NETWORK: 00001 SEGMENT: 0001



List Reference Numbers Procedure

- Step 1** (P190) Load a working copy of the utility tape into the P190 and press the red keys, <INIT> and <INIT LOCK>. (IBM) Select the Ladder Lister function from the Modicon Main Executive menu or select the reset level menu by pressing <ALT-F9>.
- Step 2** After the program loads and the menu is displayed, enter the ID number of the unit to which you want to attach.
- Step 3** Press the softkey labeled <ATTACH UNIT #>.
- Step 4** Press the Command key <EXIT>.
- Step 5** Press the softkey <LADDER LISTER>. Figure 11-1 illustrates how your screen should appear.
- Step 6** Press the softkey <ENTER TITLE> and enter a title (maximum 60 characters). Press the softkey <END TITLE> when you are done.
- Step 7** Press the softkey <ENTER CONTROL ID> and enter an ID (maximum 6 characters) for the 984. Press the softkey <END CONTROL ID> when you are finished.
- Step 8** Press the softkey <LIST REF/NETWORKS>.
- Step 9** Press the softkey <LIST REFERENCE>.
- Step 10** Press the softkey <SET PARAMETERS>.
- Step 11** Press the softkey <ALL>, or for a partial listing, enter the number of the first reference to be listed and press <FROM>, then enter the number of the last reference to be listed and press <TO>.
- Step 12** Press the softkey <PREVIOUS MENU> twice.
- Step 13** Press the softkey <COMMENCE> to output references to a printer.
- Step 14** Press the Command key <EXIT> to return to the exit level menu.

List ASCII Message Procedures

- Step 1** (P190) Load a working copy of the utility tape into the P190 and press the red keys, <INIT> and <INIT LOCK>.
(IBM) Select the Ladder Lister function from the Modicon Main Executive menu or select the reset level menu by pressing <ALT-F9>.
- Step 2** After the program loads and the menu is displayed, enter the ID number of the unit to which you want to attach.
- Step 3** Press the softkey labeled <ATTACH UNIT #>.
- Step 4** Press the Command key <EXIT>.
- Step 5** Press the softkey <LADDER LISTER>. Figure 11-1 illustrates how your screen should appear.
- Step 6** Press the softkey <ENTER TITLE> and enter a title (maximum 60 characters). Press the softkey <END TITLE> when you are done.
- Step 7** Press the softkey <ENTER CONTROL ID> and enter an ID (maximum 6 characters) for the 984. Press the softkey <END CONTROL ID> when you are finished.
- Step 8** Press the softkey <LIST ASCII>.
- Step 9** Press the softkey <PREVIOUS MENU>.
- Step 10** Press the softkey <COMMENCE> to output ASCII messages to a printer.
- Step 11** Press the command key <EXIT> to return to the exit level menu.

Example of Program Memory Procedure

- Step 1** (P190) Load a working copy of the utility tape into the P190 and press the red keys, <INIT> and <INIT LOCK>.
(IBM) Select Ladder Lister function from the Modicon Main Executive menu or select the reset level menu by pressing <ALT-F9>.
- Step 2** After the program loads and the menu is displayed, enter the ID number of the unit to which you want to attach.
- Step 3** Press the softkey labeled <ATTACH UNIT #>.
- Step 4** Press the Command key <EXIT>.
- Step 5** Press the softkey <EXAMINE MEMORY> and enter the absolute memory reference required, in hexadecimal, into the AR and press the command key <GET>, (<ALT> with <F2> on the IBM). The softkeys offer a choice of display options. These are DECIMAL, HEXADECIMAL, BINARY, or ASCII. Press the softkey for the display format desired. The display shows the memory fields.
- Step 6** Memory contents may be changed two ways. The cursor can be positioned in the correct field by the <ARROW KEYS> or the <GET> Command key can display the location first typed on the alpha-numeric keys.
- Step 7** Position the cursor using the <ARROW KEYS> over the field to change. The ASCII and binary display formats use a secondary cursor controlled on the P190 by the <SHIFT> key combined with the <ARROW KEYS>. On the IBM, it's the <CONTROL> key and the <ARROW KEYS>.
- Step 8** Use the <ALPHA-NUMERIC> keys to type in a value and press the <ENTER> key to enter this value at the cursor position.
- Step 9** Press the Command key <EXIT> to return to the exit menu.

Ladder Lister Menu Tree

Figure 11-3 Ladder Lister Menu Tree

