OPERATION GUIDE FOR DIGILOG 200, 400, AND 600

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PN 98-7060-00 Rev. A

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1. Connect unit to line (see drawing below).
2. Press Auto Set-up key. The message “Auto Set-up in Progress” is displayed.
3. After a short period of time, either the message “Auto Set-up Complete” or “Unable to Auto Set-up” is displayed.
4. If the “... Complete” message is displayed, press Run Mon key to start monitoring.
5. If the “Unable ...” message is displayed, press “A” (Monitor Menus) from the Function menu.
7. Press Halt key to stop.

GENERAL INSTRUCTIONS FOR MONITORING

CABLE CONNECTIONS FOR MONITORING
1. Connect unit to line (see drawing below).
2. Press "B" key (Trap Menus) from Function Menu.
3. Select proper Data Format Menu options (refer to pages 15 and 16).
4. Press Page Fwd key once.
5. Select desired Data Display Menu options (refer to page 17).
6. Press Page Fwd key once.
7. Select desired Trap Menu options (refer to pages 19 and 20).
8. Press Page Fwd key three times.

GENERAL INSTRUCTIONS FOR PASSIVE TRAPPING

CABLE CONNECTIONS FOR PASSIVE TRAPPING
1. Connect unit to line (see drawing below).
2. Press "B" key (Trap Menus) from Function Menu for 200/400. Press soft function key for 600.
3. Select proper Data Format Menu options (refer to pages 15 and 16).
4. Press Page Fwd key once.
5. Select desired Data Format Menu options (refer to pages 15 and 16).
6. Press Page Fwd key once.
7. Select desired Trap Menu options (refer to pages 19 and 20).
8. Press Page Fwd key three times.
9. Select proper Output Control Menu options (Mode On). (Refer to page 18.)
11. Enter message to be output (refer to pages 21 and 22).
12. Press Run Trap key.
13. Press Halt key to stop.

GENERAL INSTRUCTIONS FOR INTERACTIVE TRAPPING
(Output Message on Trap)

CABLE CONNECTIONS FOR INTERACTIVE TRAPPING
1. Connect unit to line (see drawing below).
2. Press "B" key (Trap Menus) from Function Menu.
3. Select proper Format Menu options (refer to pages 15 and 16).
4. Press Page Fwd key once.
5. Select desired Data Display Menu options (refer to page 17).
6. Press Page Fwd key three times.
7. Select proper Output Control Menu options (refer to pages 19 and 20).
8. Press Page Fwd key once.
9. Enter message in Message Buffer Menu using proper protocol format (refer to pages 21 and 22).
10. Press Run Trap key.
11. Press Halt key to stop.

GENERAL INSTRUCTIONS FOR MESSAGE OUTPUT

CABLE CONNECTIONS FOR MESSAGE OUTPUT
LOADING A SAVED FILE

1. Insert media (PROM Pack for 200; PROM Pack or floppy for 400/600).
2. Press “G” key (Storage Management Menus) from Function Menu for 200/400; soft function key for 600.
3. Press “F” key (Load) for 200/400; soft function key for 600.
4. Select Source in which program is stored.
5. Select type of file to be loaded (All option will load all types with the same file name.)
6. Enter the name of the file to be loaded.
7. Press Exec Menu Cmd key. The message “Successful Operation” is displayed.
8. Press Run Prog key to start program.
9. Press Halt key to stop.

REMOTE CONTROL

1. Press “E” key (All Menus) from Function Menu for 200/400; soft function key for 600.
2. Press “N” key (Remote Control Menu) from Main Menu (page 2 in 200/400—press Page Fwd key).
3. Press and hold Ctrl key and press “Z” key. Remote Control Setup Menu is displayed.
4. Enter the Password for your unit.
5. Enter the ID for the slave unit.
6. Select desired Framing and Speed.
7. Press and hold Ctrl key and press “Z” key to return to Remote Control Menu.
8. Establish connection to remote unit.
9. Select and execute desired command. (“Greetings” or “Force Remote” must be the first command given.)
10. Terminate Remote Control by selecting and executing the “Bye” command.
1. Press "D" key (BERT Menu) from Function Menu for 200/400; soft function key for 600.
2. Select desired BERT format.
3. Select desired RTS type.
4. Select desired Speed.
5. Select desired Run Duration.
6. Press Exec Menu Cmd to initiate test. (Results are displayed.)
7. Press Don't Care key to insert errors.
8. Press Exec Menu Cmd key to resync when needed.
9. Press Halt key to stop.

**BERT (Bit Error Rate Test)**

**PRINTING**

1. Press "E" key (All Menus) from Function Menu.
2. Press "M" key (Printer Menu) from Main Menu (page 2 in 200/400—press Page Fwd key).
3. Select Output type to print.
4. Select Type of printed data desired.
5. Select number of columns.
6. Select printer Speed.
7. Select printer CR/LF Delay.
8. Select printer Parity.
9. Press Exec Menu Cmd key to initiate printing. (Printing stops automatically.)
10. Press Halt key to abort, if necessary.
A. Data Format Menu (Menu C from Main Menu)
1. Select framing to Async 1, 1.5, or 2.
2. Select desired speed.
3. Select desired code.

B. Output Control Menu (Menu F from Main Menu)
1. Select Mode: On
2. Select output to Term or Modem.
3. Select desired output repetition.

C. Press Run Trap key.
D. Press Halt key to stop.

ASYNC FOX MESSAGE OUTPUT INSTRUCTIONS

SYNC MESSAGE OUTPUT INSTRUCTIONS

A. Data Format Menu (Menu C from Main Menu)
1. Select framing to sync.
2. Select desired speed.
3. Select desired code.

B. Output Control Menu (Menu F from Main Menu)
1. Select output to Term or Modem.
3. Output MSG #01.
4. Select desired output repetition.

C. Message Buffer Menu (Page Fwd from Output Control Menu)
1. Enter message number 01.
2. Enter synchronous message.
D. Press Run Trap key.
E. Press Halt key to stop.
**Side Of Line** — Selects send, receive, or send & receive line data.

**Framing** — Selects either character or message framing.

**Speed** — Selects baud rate.

<table>
<thead>
<tr>
<th>Code Bits</th>
<th>CRC/LRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>— Selects character set.</td>
<td>— Selects frame error checking method.</td>
</tr>
<tr>
<td>— Selects number of bits per character.</td>
<td>— Selects complement of character (inverts bit pattern).</td>
</tr>
<tr>
<td>— Selects frame error checking method.</td>
<td>— Selects least- or most-significant bit first.</td>
</tr>
</tbody>
</table>

**DATA FORMAT MENU FIELD EXPLANATIONS**

**DATA FORMAT MENU FIELD EXPLANATIONS (Cont'd)**

<table>
<thead>
<tr>
<th>Supress</th>
<th>Sync Char</th>
<th>Use Pin 24</th>
<th>Drop Sync</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifies character to be suppressed (user enterable)</td>
<td>Specifies user's sync character (user enterable)</td>
<td>Selects the enabling of interface pin 24 to supply a clock to a DCE.</td>
<td>Specifies user's drop sync character (user enterable).</td>
</tr>
</tbody>
</table>
### Display Format
- Selects mode of screen display.

### Display Data From
- Selects side of line to be displayed.

### Capture Buffer Control
- Selects conditions upon which monitoring or trapping stops.

### EIA Indicators Receive
- Selects the highlighting of EIA lead status on the receive side of the line.

### Highlight Parity / BCC Errors
- Selects highlighting of detected data errors.

### EIA Indicators Send
- Selects the highlighting of EIA lead status on the send side of the line.

### Level 2 Modulo
- Selects Level 2 message sequence range.

### DATA DISPLAY MENU FIELD EXPLANATIONS

#### OUTPUT CONTROL MENU FIELD EXPLANATIONS

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode</td>
<td>Selects whether or not to output messages.</td>
</tr>
<tr>
<td>CTS DLY</td>
<td>Selects clear-to-send delay when acting as a DCE.</td>
</tr>
<tr>
<td>Output To</td>
<td>Selects output to a terminal (when acting as a DCE) or to a modem (when acting as a DTE).</td>
</tr>
<tr>
<td>RTS</td>
<td>Selects when request to send signal is desired.</td>
</tr>
<tr>
<td>Idle</td>
<td>Selects character to be transmitted between messages.</td>
</tr>
<tr>
<td>DCD</td>
<td>Selects when data carrier detect signal is desired.</td>
</tr>
<tr>
<td>Output Msg #</td>
<td>Specifies number of the message to be sent from message buffer (user enterable).</td>
</tr>
<tr>
<td>Output Msg (Second Fld)</td>
<td>Selects conditions upon which the output message will be transmitted.</td>
</tr>
</tbody>
</table>
TRAP 1 (Also applies to trap 2)

Search — Selects side of line to be examined for data.

Data — Specifies the unique characters to be compared against data from the selected side of the line (user enterable).

NOTE: To exclude an alphanumeric, hex, or control character from a trap search, press the Not key before entering the character. The character entered will be displayed in reverse video.

Data can be entered in one of five forms:
1. Alphanumeric (A, D, g, m, 1, 5, ":" , /)
2. Hex (Two-character data entered with Hex key pressed—indicator lit)
3. Don’t Care (Don’t Care key pressed to disregard a character or bit position)
4. Control Character (CTRL & V keys display Sync; CTRL & D keys display ET – EOT)
5. Bit Mask (Mask/CRC key pressed to designate character position in trap for separate bit mask field)

TRAP MENU FIELD EXPLANATIONS

Bit Mask — Used for one character position in a trap data field. Specifies a unique bit configuration to compare with a character from the selected side of the line. (User entered—ones or zeros only.)

Stop on Trap 1 — Selects whether or not to halt unit when trap 1 data is found.

Display — Selects how trap data is to be displayed (Normal or reverse).

Capture on — Selects whether to start or stop capturing data.

— Selects conditions for action.
Message Number—Specifies message number (User enterable—01-99).
Message Field—Specifies messages to be transmitted.
Examples:
ASYNC—LOGON CR (CR = Return key)
BISYNC—SYSETFFFFFFFSYSYAA"EQ (General Poll)

NOTES:
Sy = SYNC (Press and hold CTRL key and press "V" key.)
ET = EOT (Press and hold CTRL key and press "D" key.)
Fr = Pad Character (Press Hex key, "F" key twice, and Hex key again.)
AA = Control unit address (Press "A" key twice.)
"" = Device address (Press and hold Shift key and press " key twice.)
EQ = ENQ (Press and hold CTRL key, press "E" key.)

MESSAGE BUFFER MENU FIELD EXPLANATIONS

Examples (Cont'd):
Bit Oriented Protocol (BOP) - 01 93 - (SNRM)

NOTES:
01 = Address in Hex.
93 = Unnumbered frame with poll/final bit set on in control field. Type is SNRM
(Set Normal Response Mode). Shown in hex.
— = Blank spaces for CRC insertion. (Press space bar twice.)

MESSAGE BUFFER MENU FIELD EXPLANATIONS (Cont'd)

[] = Highlighted marking for first and last characters to be included in CRC calculations. (Using cursor control keys, position cursor over the first character to be included and press Mask/CRC key. Do the same for the last character to be included.)
<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALARM</td>
<td>Controls the audible alarm.</td>
</tr>
<tr>
<td>CAPTURE</td>
<td>Starts/stops data capture.</td>
</tr>
<tr>
<td>COUNTER</td>
<td>Increments, decrements, or resets specified counters or all counters.</td>
</tr>
<tr>
<td>DEFINE</td>
<td>Establishes a string variable.</td>
</tr>
<tr>
<td>FRAME</td>
<td>Builds or decodes Level 2 messages.</td>
</tr>
<tr>
<td>GOTO</td>
<td>Jumps to the specified line number.</td>
</tr>
<tr>
<td>IF</td>
<td>Jumps to a specified line number if a conditional test is met.</td>
</tr>
<tr>
<td>LET</td>
<td>Assigns a value to an integer variable.</td>
</tr>
<tr>
<td>LOOP</td>
<td>Executes a designated set of instructions a specified number of times.</td>
</tr>
<tr>
<td>INPUT</td>
<td>Displays a specified prompt and waits for keyboard data, which is assigned to an integer or string variable (press Tab key after entering the data).</td>
</tr>
<tr>
<td>PRINT</td>
<td>Prints out data to CRT or printer.</td>
</tr>
<tr>
<td>RECEIVE</td>
<td>Fetches data (either a message or a character) for Program analysis. (Use only Receive character in Async.)</td>
</tr>
<tr>
<td>REPLACE</td>
<td>Allows modification of user message.</td>
</tr>
<tr>
<td>SEND</td>
<td>Transmits a specified message.</td>
</tr>
<tr>
<td>STOP</td>
<td>Stops program execution.</td>
</tr>
<tr>
<td>TIMER</td>
<td>Starts, stops, or resets specified timers or all timers.</td>
</tr>
<tr>
<td>WAITFOR</td>
<td>Suspends program execution until a trap or timeout occurs.</td>
</tr>
</tbody>
</table>
1. CALL — Invokes a subroutine.
2. RECORD — Starts/ Stops recording on floppy disk.
3. RETURN — Terminates a subroutine.
4. SET — Causes one of three signals (C1, C2, C3) to go high or low.

DIGILOG COMMAND LANGUAGE EXPLANATIONS
FOR DIGILOG 400 & 600 PROGRAMMING

1. EXECUTE — Calls another program to run with optional setup, message, and/or Misc Menu.
2. LEVEL 3 — Builds or decodes Level 3 messages.
3. IF (Enhancement) — Logical AND/OR Function allows testing for multiple conditions in an IF instruction.
4. PRESERVE — Retains values of one or more variables to be used by a program called by an Execute instruction.
1. Select Data Format menu.
2. Set Capture Buffer control to Continuous.
3. Insert floppy disk with write protect off.
4. Select Storage Management Menu.
5. Select: Record for Digilog 400; Disk Store for Digilog 600.
6. Select Mode: On
7. Select Type: Bit Image (raw data) or Selective (decoded).
8. Enter Name of file.
11. Recording starts when Run Mon or Run Trap key is pressed or when a Record Start instruction in a program is executed.
12. Select Initialize Device, select Floppy, press Exec Menu Cmd key to format if a new diskette is used or, if errors are reported.

GENERAL INSTRUCTIONS FOR DATA RECORD FOR DIGILOG 400 & 600

1. Insert floppy disk with recorded data.
2. Select Storage Management Menu.
4. Select Source: Floppy.
5. Press Exec Menu Cmd key.
6. Look for file type: B (Bit Image recording); D (Selective recording).
7. Select: Replay (I), Model 400; Disk Play, Model 600.
8. Select Mode: On.
9. Select Type as recorded: Bit Image (B); Selective (D).
10. Enter Name: Filename.
11. Enter: Starting Block.
12. Select Speed.
13. Press Exec Menu Cmd key.
14. Press Run key (Mon / Trap / Prog).
1. Insert floppy disk with write protect off.
2. Replay data file from floppy; note block # of data to be copied (start and stop).
4. Select Data Copy.
5. Select Type: Bit Image (B) or Selective (D), as recorded.
6. Tab Fwd. to New Name.
7. Enter Name of new file.
8. Enter Starting Block of source file.

GENERAL INSTRUCTIONS FOR DATA COPY FOR DIGILOG 400 & 600