REFERENCE GUIDE

SYSTEMS

Instruction Processor
(IP3260/IP3030)
Run-Time
Error Messages

Version 2.2

TEKTRONIX

INTRODUCTION

This *Reference Guide* lists the Instruction Processor (IP3260/IP3030) run-time error messages for Version 2.2. It includes the error messages for Terminal Control Mode (TCM), VERDICT Subprograms, Data Logging and Data Reduction, standard hardware malfunctions, system malfunctions, stimulus and measurement testing, pin electronics and dynamic testing, standard functions, waveform routines, and optional device drivers.

Error codes beginning with 4 are reserved for user-written subprograms. For your convenience, the guide includes a page for error code 4 — record your error codes on this page. In addition, blank pages at the back of the guide provide a place for your notes.

0 Errors — Terminal Control Mode (TCM)

00 — A GOTO, CALL, IF, or WHEN statement
attempted to branch to a nonexistent
line number.

01 — The statement listed contains a syntax
error and cannot be executed.

02 — A LOOP range contains no executable
statements. All the statements between
the LOOP statement and the end of the
LOOP are comments.

03 — A LOOP range was not entered through a
LOOP statement. Thus, the LOOP opera-
tion malfunctioned.

04 — The hardware for an operation is not
available (on-line).

05 — The selected station cannot be enabled
under program control. (TCM cannot
press the START button.)

06 — An attempt has been made to execute a
statement, but no station is enabled.
Possible causes are:
1) The station power is turned off.
2) The STOP button has been pressed.

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07 — An attempt has been made to execute
an undefined function or subroutine.

08 — A function or subroutine call cannot
be executed because one or more of its
arguments is undefined.

1 Errors — VERDICT Subprograms

10 — A voltage greater than 100 V was specified for the DCSCAL subroutine.

11 — The size of the IARRAY for the STATUS subroutine is too small to hold the status data.

12 — The configuration file CONFIG.BIN:SYS was not on the disk-pack when a request for status data was made.

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4 Errors — User-Written Subprograms

Error codes beginning with 4 are reserved for user-written subprograms.

8 Errors — Data Logging and Data Reduction

80 — Row number subscripts on a LOG REGISTER statement are out of range or do not make sense.

81 — An attempt was made to log a file marker outside of the range 1 to 127.

82 — An attempt was made to input data from a lun which is nonexistent or contained the wrong type of data for the intended use.*

83 — Data logging filled the allotted file space and no further logging is possible on that file.*

84 — A syntax error occurred during an ACCEPT statement and the device used for input is not the terminal.

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*This error code suspends testing. Press the STOP button to resume testing and to turn off the IN TEST indicator.

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85 — An illegal mode code has been specified in a call to a shift-register read function.

86 — Illegal shift-register subscripting in a call to a shift-register read function.

87 — Pinlist error in a call to a shift-register read function. Possible causes are:
A) Illegal pinlist subscripting.
B) Illegal pinlist format while using a pinlist stored in an IARRAY.

88 — An attempt was made to access the PRINT program, which is not in core.

9 Errors — Standard Hardware Malfunctions

90 — The system encountered an illegal controller instruction.

91 — A CP110 disk error occurred.* Possible causes are:
   1) A disk parity error (checksum error).
   2) Accessing a drive that is not ready.
   3) Accessing a nonexistent drive.
   4) Hardware malfunctions of the disk drive or controller.

92 — A controller bus error occurred. This is usually caused by accessing an odd memory address or a nonexistent memory address.

93 — The D/A Converter in the 1803 Test Table did not become ready to address in a reasonable length of time. Hardware is defective.*

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*This error code suspends testing. Press the STOP button to resume testing and to turn off the IN TEST indicator.

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94 — The Index/Refresh card in the 1803 Test Table did not become ready to address in a reasonable length of time. Hardware is defective. *

95 — An attempt has been made to use a test station that was not on-line when the system was booted. This station cannot be used until the system is rebooted.

96 — After a MOVE statement, the *Abort* line was asserted, indicating that the WHEN ERROR exit should be taken. However, the error interrupt is not enabled and the *Abort* line should not be asserted. Hardware is defective. *

97 — The 1340 Data Coupler has undergone a bus timeout. Hardware is defective. *

98 — A magnetic tape error occurred. *

99 — A card reader error occurred. *

9A — A line printer error occurred. *

9B — A paper-tape reader error occurred. *

9C — A paper-tape punch error occurred. *

*This error code suspends testing. Press the STOP button to resume testing and to turn off the IN TEST indicator.

A Errors — System Malfunctions

A0 — The requested test program cannot be loaded into memory. Possible causes are:
   1) The test file cannot be found.
   2) The test file is busy.
   3) The test program is too large to fit into the available memory space.

A1 — Manual abort: The STOP button has been pressed.

A2 — An illegal instruction processor (IP3260/ IP3030) command has been encountered.

A3 — A number greater than 1E+38 has been encountered.

A4 — A number less than 1E-38 has been encountered.

A5 — An attempt has been made to divide by zero.

A6 — An attempt has been made to run an old test program under new software. Retranslate the test.

A7 — Power is off on the 1803 Test Table.

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A8 — Power is off on the 1140 Power Supply.

A9 — Power is off on the 2941 Clock.

AA — An attempt has been made to LOOP more than 65,535 times or less than one time.

AB — An attempt has been made to nest more than 16 subroutine calls (or ERROR/PASS calls).

AC — Subscript out of range on an array.

AD — An attempt has been made to input data from a terminal without allocating a terminal to this test station.

AE — An attempt has been made to fix a number larger than 16 bits (65,535). Or, an integer argument is not in the expected range.

AF — A foreground-only function or subroutine has been used in a background test program.

B Errors — Stimulus and Measurement Testing

B0 — A SETUP statement cannot be performed because a previous conflicting SETUP statement has not been UNSET.

B1 — The maximum expected current on a SETUP TO MEASURE CURRENT statement is greater than 100 mA.

B2 — The maximum expected voltage on a SETUP TO MEASURE VOLTAGE statement is greater than 100 V.

B3 — The maximum expected time on a SETUP TO MEASURE TIME statement is greater than 1 ms.

B4 — An attempt has been made to read VOLTAGE/CURRENT without preceding it with a SETUP TO MEASURE VOLTAGE/CURRENT statement.

B5 — An attempt has been made to read TIME without preceding it with a SETUP TO MEASURE TIME statement.

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B6 — An attempt has been made to change the function of the 2941 Clock while it was in burst mode. Possible statements causing this are:

BURST ON
MOVE

B7 — The start time, width, or cycle for the 2941 Clock is greater than 1.048 ms or the cycle is less than 48 ns. Possible statements causing this are:

CYCLE
PHASE
DATAPHASE
HICOMPARE
LOCOMPARE

B8 — Mode correction on the 2941 parameters has caused them to go out of range. The maximum/minimum values for various modes are:

Mode	Max. Trigger	Min. Cycle
F,I,C,M	4095.	48 ns
FC	2047.	96 ns
FI,CM	2047.	96 ns
FICM	1023.	192 ns

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B9 — An attempt has been made to program one of the voltage/current supplies in the 1140 Power Supply beyond its limits. The limits are:

VS1, VS2 (voltage)	30.00 V
VS1, VS2 (current)	450 mA
VS3 (voltage)	39.99 V
VS3 (current)	450 mA
VS4 (voltage)	99.99 V
VS4 (current)	120 mA
IS1 (voltage)	100 V
IS1 (current)	199.9 mA

Possible statements causing this are:

VS1, VS2, VS3, VS4, or IS1 =
SETUP
HIDRIVE = or LODRIVE =
HICOMPARE = or LOCOMPARE =

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C Errors — Pin Electronics and Dynamic Testing

C0 — Subscripted pinlist operation resulted in no sector cards being programmed because of null elements in the PINLIST statement.

C1 — Subscript out of range for a subscripted pinlist.

C2 — Row number subscripts on a MOVE/ LOAD statement are out of the pattern bounds or do not make sense.

C3 — The APPEND number in a LOAD statement is greater than 1031.

C4 — The number of cycles the 2941 Clock must produce to execute a MOVE statement is greater than 4095.

C5 — Illegal pinlist for remote electronics (1843). The pinlists must consist of WA, XA, YA, and ZA sectors only.

D Errors — Standard Functions
Waveform Routines

D0 — An attempt has been made to SORT/ DISPLAY a number larger than 99.

D1 — The element of a TRIGGER statement is larger than 4095.

D2 — The element of an INDEXP statement is larger than 1031.

D3 — An element of a LOG statement is less than or equal to zero.

D4 — An undefined power function has been attempted.

D5 — The argument of the square root function is negative.

D6 — An attempt has been made to use the waveform digitizing routines without the 3S6 and 3T6 plug-ins in external program mode.

D7 — The waveform digitizing routines cannot adjust offset enough to bring the trace on screen.

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D8 — The number of scans requested of the waveform scanning routine is greater than 63.

D9 — Subscript out of range on waveform IARRAY.

DA — An attempt has been made to use an AUTOCAL routine without first calling LINKW.

DB — An attempt has been made to use AUTOCAL without the presence of a horizontal reference signal.

DC — An attempt has been made to use AUTOCAL without the presence of a vertical reference signal.

DD — An attempt has been made to use AUTOCAL, but the noise level of the vertical reference signal makes it impossible.

DE — The declare-disk array (DCLARY) function has encountered one of the following errors:
1) Insufficient disk space exists for the array.

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2) The directory is full and cannot hold another file name.
3) The file name specified is already in use and that file is protected from deletion.

DF — An attempt has been made to access a nonexistent disk array.

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E & F Errors — Optional Device Drivers

E0 — Datapulse 154-3 Pulse Generator Driver: An attempt has been made to program this device, but it is not in external program mode.

E1 — SM-2 Signal Switcher Driver: An illegal name has been specified, or an unavailable signal path has been requested.

E2 — Fluke 8400A Digital Voltmeter Driver: An illegal value has been used for the range or external reference.

E3 — Fluke 8400A Digital Voltmeter Driver: An attempt has been made to program this device, but it is not in external program mode.

E4 — Dana 4800 Digital Voltmeter Driver: The device is not in external program mode (remote) or the applied voltage has caused the device to overrange.

E5 — Hewlett-Packard 6130B Power Supply Driver: An attempt has been made to program a nonexistent supply.

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E6 — Wavetek Waveform Synthesizer: An illegal name has been specified or an attempt has been made to program this device out of range.

E7 — Sampling Head Multiplexer Driver: An attempt has been made to program a nonexistent channel.

E8 — Electroglas 1034B Automatic Prober Driver: An illegal value has been programmed.

E9 — Electroglas 1034B Automatic Prober Driver: An attempt has been made to use hardware that is not available.

EA — 1843 Remote Electronics Driver: An illegal name has been specified.

EB — 1843 Remote Electronics Driver: An attempt has been made to program the sample-and-holds to more than 30 V.

EC — Automatic Device Handler Driver: An illegal sort bin number was selected.

ED — MC-1 Current Measurement Driver: An illegal name has been specified, or an

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attempt has been made to program the
device out of range.

EE — Hewlett-Packard 8660 Signal Synthesizer:
An illegal value has been specified.

EF — 2942 Pattern Generator: The 2942 is
not present on the system.

F0 — Dana 8010B Counter Driver: An attempt
has been made to program this device,
but it is not in external program mode
(remote).

F1 — EH Research 1501 Pulse Generator: An
illegal name has been specified, or an
attempt has been made to program the
device out of range.

F2 — An attempt has been made to program
nonexistent hardware.

F3 — Temptronic Temperature Controller: An
attempt has been made to program the
device outside of its allowed temperature
range.

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F4 — Temptronic Temperature Controller: The device has one of these hardware problems:
   1) The device did not become ready to address in a reasonable length of time.
   2) The device is overheating and exceeding its temperature range.

F5 — An illegal combination of CL4 subroutines has been programmed.

F6 — An argument other than 4 or 10 has been programmed on one of the CL14 subroutines ENPULS(V), DSPULS(V), or CNPULS(V).

F7 — R7912 Transient Digitizer Driver: An illegal or nonexistent device number has been used.

F8 — R7912 Transient Digitizer Driver: The array specified to contain R7912 digitized data is too small to contain all the data produced.

F9 — R7912 Transient Digitizer Driver: The amount of digital information retrieved from the R7912 is insufficient to reconstruct the waveform.