WAVECREST Corporation

7626 Golden Triangle Drive
Eden Prairie, MN 55344
(952) 831-0030   FAX: (952) 831-4474
(800) 733-7128

Date: March 22, 2000

Subject: Errata sheet for the GPIB Programming Guide for the DTS-2079/2077/2075™, code
version 2.00, 1.99 and 1.97.

1. :HARDcopy:SERialINCRement

Currently, the front panel does not display any changes that were made to the SERialINCRement
value via the GPIB interface.

2. :SYSTem:MAC

Currently, if the :SYSTem:HEADer return option is enabled (ON), all commands must be sent in
the format specified by the :SYSTem:LONGform command.

3. :SYSTem:TEST|<Hex value> - New Command

The :SYSTem:TEST command specifies which diagnostic tests are performed when executing the
*TST? query (See Section 3-13 of the GPIB Programming Guide). There are 24 individual tests that
can be selected by setting the appropriate bit position in the status register to one. Upon completion,
if any bits are set in the status register, the corresponding test failed. Writing 0xFFFFFF to the register
performs all tests. A result of zero indicates a successful completion of all tests. Below is a list of
available tests:

CPU_Test - Tests CPU Board
0 - CPU 50ms Timer interrupt: Tests count down timer
1 - CPU Ramp Memory - All zeros: Write 0 and verify ramp memory.
2 - CPU Ramp Memory - All ones: Write 0xFFFF and verify ramp memory.
3 - CPU Ramp Memory - Increment word: Write data (word) and verify ramp memory.
4 - CPU Ramp Memory - Increment byte: Write data (byte) and verify ramp memory.
5 - CPU Memory - Lower bound: Write and verify 0000, FFFF. 5555, AAAA.
6 - CPU Floating Point - Multiply:
7 - CPU Floating Point - Divide:
8 - CPU Unexpected Interrupt: Check if any invalid or error interrupts have occurred.

DCB_Test - Tests Digital Control Board and Interface Backplane
9 - DCB Test ID: Read the IQM ID
10 - DCB Test Data: Test the DCB test register
11 - DCB Test 8254 PIT (Programmable interval timer)
12 - DCB Test NVRam: Save page into local ram, test as byte and word

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MSU_Test - Tests Measurement Setup Board
13 - MSU Calibration Signal: Sets Cal signal to 200MHz, 1MHz, 8kHz, Off
14 - MSU ID: Reads the MSU ID
15 - MSU NV Ram: Save gains, write and read data, restore gains.
16 - MSU AD1170 Calibration: Checks functionality of gain and offset
17 - MSU AD1170 MUX Data: Set the AD mux to all 16 positions, check voltage and tolerance.
18 - MSU Test DACs: Sets the DAC mux for Vref Start, Stop, Arm1 and Arm2 for max.(0x3FFF), ½ and min.
19 - MSU Test Vref: Sets the DAC mux for Vref Start, Stop, Arm1 and Arm2 in .321v increments and displays output.
20 - Unused
21 - MSU Test Event Data: Test the DCB and MSU event registers

IQM_Test - Tests Interval Quantizer Board (Ramps)
22 - IQM Setup: Sets up a test for Cal_200MHz, Stop count = 1, Start count =1, TPDPP.
23 - IQM Interrupts: Set time for one second, Issue a clear to the IQM, Issue a reset trigger to the MSU, wait for timer
to expire, print the IQM_count.

4. :CAL:INT (See Sections 7-4 and 7-5 of the GPIB Programming Guide)

When front panel control exists, internal calibration time defaults to 11 minutes. When GPIB
control exits, internal calibration time defaults to 5.5 minutes and extended calibration
multiplier factors apply.

5. CAL:STAT? - New Query

Returns status of calibration tests (0 = pass, 1 = fail):

Bit Pos.	Hex Value	Description
0	1	Internal Calibration
1	2	External Calibration
3	4	DC Calibration
4	8	Strobe Calibration