

User Manual



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I/O TEST module

070-A818-50

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Operating Instructions

This manual provides the following information:

- I/O TEST module overview
- TG700 check procedure
- Error codes

I/O TEST Module Overview

The I/O TEST module can be used to check that the TG700 TV Signal Generator Platform mainframe is functioning correctly and performs the following tasks:

- ID ROM access test
- Memory access test
- Clock/Frame test
- Power test (Four I/O TEST modules are needed for full load test.)

Rear-Panel Connectors

Figure 1 shows the I/O TEST module rear-panel connectors.

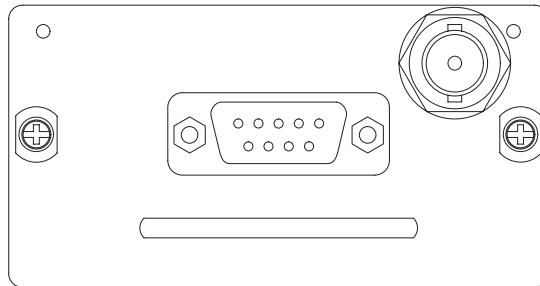


Figure 1: I/O TEST module rear-panel connectors

- **BNC connector:** 54 MHz clock signal output.
- **RS-232C Connector:** For future use. Not operate with the current TG700 mainframe.

TG700 Check Procedure

Perform the following procedure to check that the TG700 mainframe is functioning correctly using the I/O TEST modules:

1. Insert the four I/O TEST modules into all the module slots of the TG700 mainframe.
2. Connect the power cable to the TG700 mainframe.
3. Use the 75 Ω BNC cable and 75 Ω termination to connect any of the 54 MHz outputs of the I/O TEST modules to the INPUT A connector of the frequency counter (MF1603A).
4. Set the frequency counter to trigger on the input, and then confirm that the displayed frequency is within the range of 53.9999946 MHz to 54.0000054 MHz.
5. Execute the diagnostic routines using the UTILITY : DIAGNOSTICS submenu of the TG700 mainframe.
6. Confirm that no error messages appear on the display. If a diagnostics error is displayed, press the front-panel **MODULE** button to check the Result Code corresponding to each of the modules. See *Error Codes*.
7. Disconnect the power cable, and then remove all the modules from the TG700 mainframe.

Error Codes

Table 1 shows the error codes detected while the diagnostic routines are executed.

NOTE. *If two or more errors are detected successively during the diagnostic routines, the error codes are ORed. For example, when an address bus error and a data bus error are detected, the error code becomes 0x0003.*

Table 1: Error codes

Error code	Descriptions
0x0000	no error
0x0001	address bus error
0X0002	data bus error
0x0004	FRAME1 error
0x0008	FRAME2 error

Table 1: Error codes (Cont.)

Error code	Descriptions
0x0010	FRAME3 error
0x0020	FRAME OUT error
0x0040	74 MHz clock error
0x0080	14 MHz clock error
0x0100	12 MHz clock error
0x0200	VCC error
0x0400	3.3 V error
0x0800	8 V error
0x1000	-5 V error
0x2000	WAIT error
0x4000	CKIO error
0x8000	memory error

