MODIFICATION RECOMMENDED –
CORRECTS MANUFACTURING OR DESIGN DEFECTS

E5071A-03

S E R V I C E N O T E

Supersedes:
NONE

E5071A ENA Series Network Analyzer, 300 kHz to 8.5 GHz

Serial Numbers: JP1KJ00000 / JP1KJ00396

Handler I/O Port Malfunction Due to TTL-Low Level Threshold Voltage Anomaly

To Be Performed By: Agilent-Qualified Personnel

Parts Required:

P/N	Description	Qty.
E5070-61006	HANDLER I/O BOARD	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION: **MODIFICATION RECOMMENDED**			
ACTION CATEGORY:	[ ] IMMEDIATELY X ON SPECIFIED FAILURE [ ] AGREEABLE TIME	STANDARDS: LABOR: 0.5 Hours	
LOCATION CATEGORY:	[ ] CUSTOMER INSTALLABLE [ ] ON-SITE X SERVICE CENTER	SERVICE INVENTORY: [ ] RETURN [ ] SCRAP [ ] SEE TEXT	USED PARTS: [ ] RETURN X SCRAP [ ] SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: January 2005	
AUTHOR: TO	PRODUCT LINE: WN		
ADDITIONAL INFORMATION:			

Agilent Technologies

January 30, 2003

Situation:
The 24-bit handler I/O of the E5071A units with the specified serial numbers may not function normally. Due to the possible threshold-voltage anomaly of TTL input circuit at either of the I/O pins 2, 18 and 22 through 29, the handler I/O port may ignore the “Low” state of control input signals. When the threshold voltage for TTL-Low level is too low (lower than 0.5 V), it is possible that control input signal does not cross the threshold voltage (VLTH) though the “Low” level of the signal is within the recommended voltage range (0 V to 0.5 V). As a result, a handler interface error occurs. See Figure 1.

Note: Old version of the E5070A/E5071A Programmer’s Guide has an error concerning the recommended voltage range for the “Low” level of input signal. The correct voltage range is 0 V to 0.5 V.

Solution/Action:
When the threshold voltage of the handler I/O (either of the I/O pins) is too low, replace the A23 Handler I/O board with new one (P/N E5070-61006).

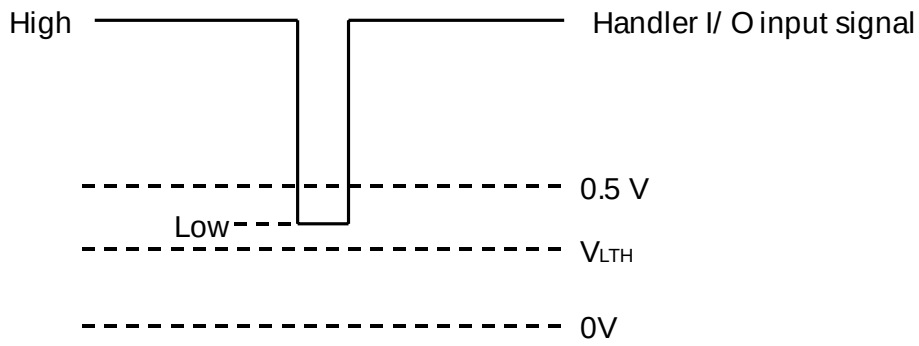

Figure 1. Threshold voltage anomaly