

TrueTime

Model 560-5141-1D BNC Passive Output Interface Manual

SECTION ONE

1. FUNCTIONAL DESCRIPTION
 - 1.1. PURPOSE OF EQUIPMENT
 - 1.1.1. PHYSICAL SPECIFICATIONS
 - 1.1.2. ENVIRONMENTAL SPECIFICATIONS
 - 1.1.3. POWER REQUIREMENTS
 - 1.1.4. FUNCTIONAL SPECIFICATIONS

SECTION TWO

2. INSTALLATION AND OPERATION
 - 2.1. HOT-SWAPPING
 - 2.2. REMOVAL AND INSTALLATION
 - 2.3. SETUP
 - 2.4. FAULT INDICATION
 - 2.5. MAINTENANCE

SECTION THREE

3. THEORY OF OPERATION
 - 3.1. GENERAL INFORMATION
 - 3.2. HARDWARE DESCRIPTION
 - 3.3. DETAILED DESCRIPTION

SECTION FOUR

4. DETAILED DRAWINGS
 - 4.1. 560-5141-1 DETAILED DRAWINGS / BILL OF MATERIALS

SECTION ONE

1. FUNCTIONAL DESCRIPTION

1.1. PURPOSE OF EQUIPMENT

The TrueTime Model 560-5141-1D BNC Passive Output Interface provides the output interface for a compatible front function card. The 6+ Outputs are fed directly through the backplane connector from the front function card. The output signals are distributed via 50 ohm traces to 6 BNC connectors at the rear panel, optimized for use in single-ended mode with 50 ohm-to-ground termination.

1.1.1. PHYSICAL SPECIFICATIONS

Dimensions: 0.8" w X 4.4" h X 5.0" d (2 cm X 11 cm X 13 cm)
Weight: Approximately ½ pound (¼ kg)

1.1.2. ENVIRONMENTAL SPECIFICATIONS

Operating Temp: 0° to +50°C
Storage Temp: -40° to +85°C
Humidity: Up to 95% relative, non-condensing
Cooling Mode: Convection

1.1.3. POWER REQUIREMENTS

Power: NONE

1.1.4. FUNCTIONAL SPECIFICATIONS

1.1.4.1. OUTPUT CONNECTOR

Type: BNC
Quantity: 6

1.1.4.2. CARD COMPATIBILITY

Location: Slots 1-17 with compatible function card in front slot

SECTION TWO

2. INSTALLATION AND OPERATION

2.1. HOT-SWAPPING

All cards, input cables and output cables are hot swappable. It is not necessary to remove chassis power during insertion or removal. The system is designed to protect against permanent effects and minimize any temporary effects of hot swapping.

2.2. REMOVAL AND INSTALLATION

CAUTION: Individual components on this card are sensitive to static discharge. Use proper static discharge procedures during removal and installation.

CAUTION: This assembly is designed to provide BNC outputs for front modules that are configured for digital TTL outputs only.

To remove card, loosen the captive retaining hardware at the top and bottom of the assembly, then firmly pull on the handle (or on any connector on rear panel adapter cards) at the bottom of the card. Slide the card free of the frame. Refer to the SETUP section for any required switch settings or set them identically to the card being replaced. Reinstall the card in the frame by fitting it into the card guides at the top and bottom of the frame and sliding it in slowly, avoiding contact between bottom side of card and adjacent card front panel, until it mates with the connector. Seat card firmly to avoid contact bounce. Secure the retaining screws at the top and bottom of the card assembly.

2.3. SETUP

This card has no setup requirements.

2.4. FAULT INDICATION

This card has no fault indication.

2.5. MAINTENANCE

This card has no maintenance requirements.

SECTION THREE

3. THEORY OF OPERATION

3.1. GENERAL INFORMATION

This section contains a detailed description of the circuits in the Passive Output card. These descriptions should be used in conjunction with the drawings in SECTION FOUR.

3.2. HARDWARE DESCRIPTION

The Passive Output card incorporates 6 BNC output connectors with local control of over-shoot and under-shoot.

3.3. DETAILED DESCRIPTION

Reference drawing 560-5141-1. Each BNC connector is sourced via the backplane connector from individual drivers on the front function card via 50 ohm controlled-impedance traces on the Passive Output card.

SECTION FOUR

4. DETAILED DRAWINGS

4.1. 560-5141-1 DETAILED DRAWINGS / BILL OF MATERIALS

MAX * BILL OF MATERIALS * SINGLE-LEVEL EXPLOSION BY PART IDENTIFIER W/REFERENCE

PART IDENTIFIER	DESCRIPTION 1	DESCRIPTION 2	EFF DATE	ECH #	QTY/ASSY	REV UOM LVL	REFERENCE DESCRIPTION
560-5141-1D	PASSIVE OUTPUT INTFC BNC	W/DIODES INSTALLED				EA	
0000-APPROVAL	PARTS LIST APPROVAL		0000		1.0000	EA	<i>GT/ae 7/98</i>
0000-PL	PARTS LIST REV LEVEL		0000		1.0000	EA	REV N/C (07-02-98)
0000-PRINT	REFERENCE PRINT		0000		1.0000	EA	SEE 560-5141-1
057-5817	DIODE 1N5817	1N5817	0000		6.0000	EA	D1-6
560-5141-1	PASSIVE OUTPUT INTFC BNC	MADE FROM 560-2141-1	0000		1.0000	EA	01
LA	LABOR ASSEMBLY COST HRS		0000		0	EA	
LT	LABOR TEST COST HOURS		0000		0	EA	
OSV560-5141-1D	OUTSIDE LABOR 560-5141-1D	PCA	0000		1.0000	EA	

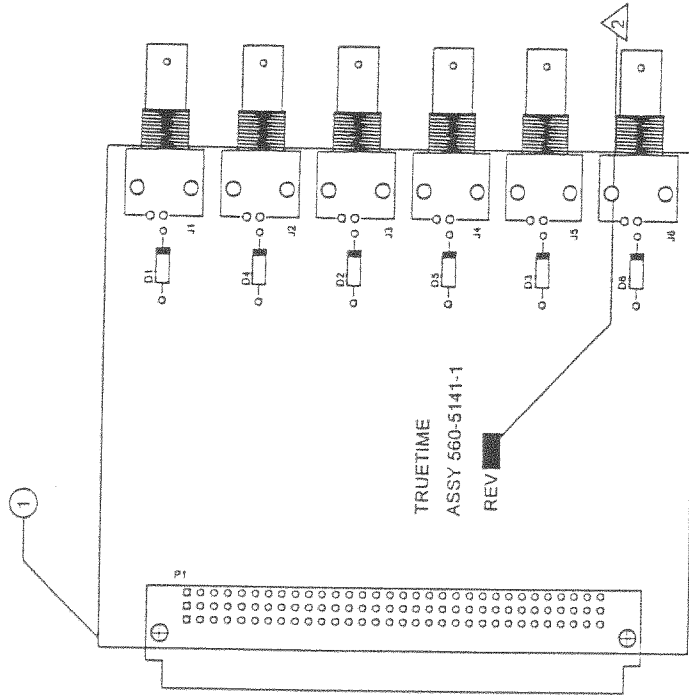
NOTES: UNLESS OTHERWISE SPECIFIED

1. RESISTORS ARE IN OHMS, CAPACITORS ARE IN MICRO FARADS

2. STAMP REVISION LEVEL.

3. ASSEMBLE PER ASSEMBLY REQUIREMENTS DOCUMENT 421-11.

4. DO NOT INSTALL D1-6.



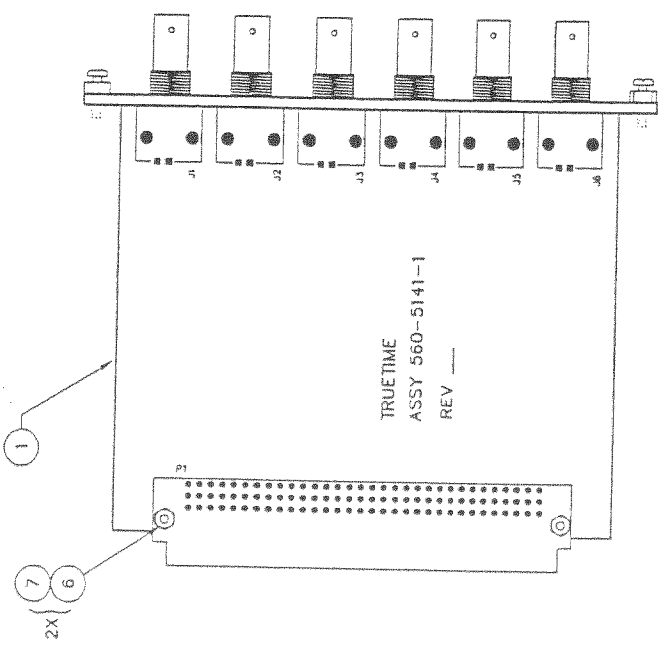
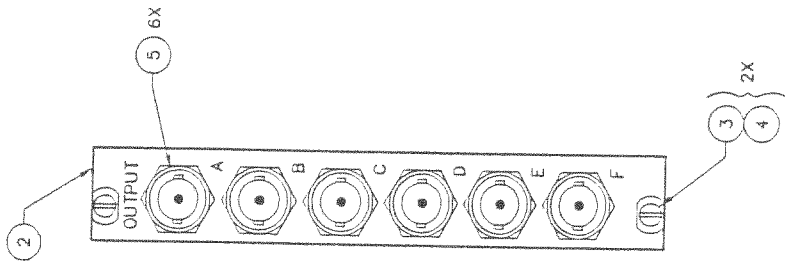
REVISIONS

LTR	DESCRIPTION	DATE	APPROVED
A	MOVE BNC'S BACK .030"	7-19-96	
B	ADD DIODES, GND PINS AT P1	10-31-96	
C	INCREASED GROUND PLANE	5-21-97	

TrueTime, Inc.
Santa Rosa, California

Item	ASSY DRAWING	Rev.	C
Part	PASSIVE OUTPUT INTERFACE BNC	Quantity	560-5141-1
Date	5-21-97	Drawn	S B K
Checked		Approved	
Next Assy		File Name	2141-1C.PCB
Sheet	1	of	3

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REV	C
DRAWING NO.	560-5141-1
SIZE	B
CODE IDENT NO.	
SCALE	NONE
FILENAME:	\\560\5141-1B
DATE:	06-16-97
NEXT ASSY	
SHEET 2 OF	3