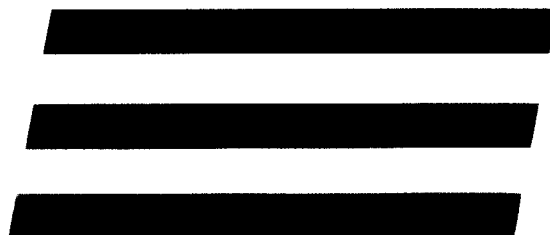




DSI 700

Technical
Reference Manual

HUNTRON[®]



HUNTRON INSTRUMENTS, INC.

DSI 700

TECHNICAL REFERENCE MANUAL

September, 1994
P/N 21-1244

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For technical support or to obtain information about service, accessories, and other products contact:

**Huntron Instruments, Inc.
15720 Mill Creek Blvd., Suite 100
Mill Creek, WA 98012
USA**

In North America, Call (800) 426-9265 or (425) 743-3171.

Huntron is also accessible by:

- **FAX:** (425) 743-1360
- **Internet E-mail:** huntron@huntron.com
- **Internet Home Page:** <http://www.huntron.com>

Outside North America, call your local distributor for assistance or service.

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CHAPTER 1 INTRODUCTION AND SPECIFICATIONS

1-1. INTRODUCTION

The Huntron DSI 700 has been designed as a compatible accessory for the Huntron Tracker 2000. Together, they create an effective component troubleshooting system. Working with the Tracker 2000, the DSI 700 allows faster troubleshooting of components with the use of automatic signature comparison which points out differences in analog signatures. When the DSI 700 is connected to an IBM compatible PC, it becomes a digital storage interface for the Tracker 2000. Analog signatures can be digitized and stored in the PC as a reference database for troubleshooting.

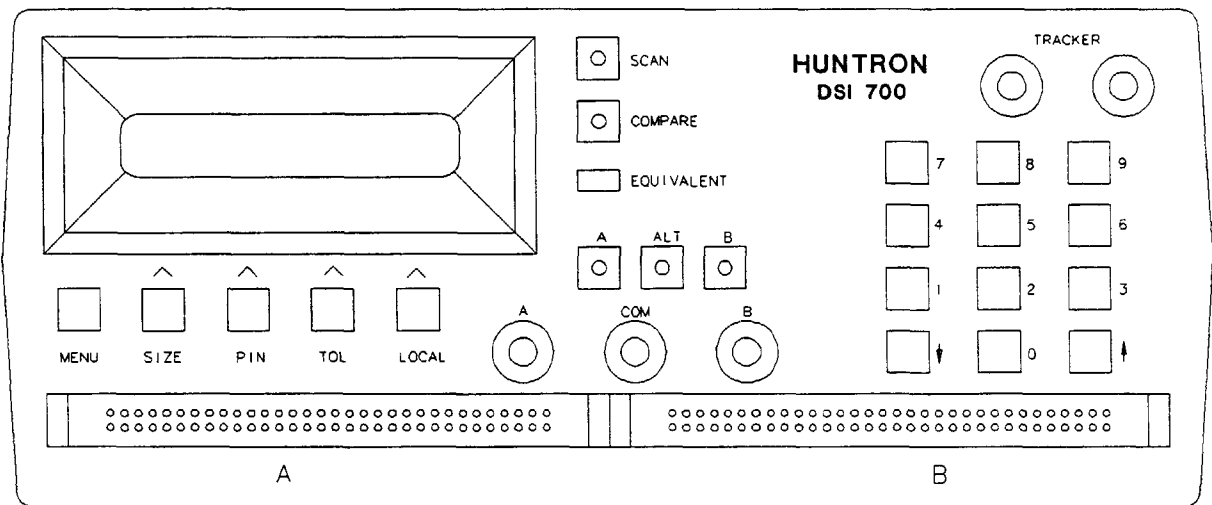


Figure 1-1. Huntron DSI 700

1-2. SPECIFICATIONS

**Table 1-1
DSI 700 Specifications**

ELECTRICAL

Interconnections:

Discrete Components

Channel A, B, and COM front panel jacks are provided for use with probes.

Number of Test Pins 64(maximum)

Number of Channels 2

Connectors:

(2) 64 pin IDC (for devices of 64 pins or less)

Display:

16 character x 2 lines LCD with LED Backlight

Input Voltage:

± 12 VDC (supplied by the Tracker 2000)

Interface:

IBM-PC parallel port

ENVIRONMENTAL

Operating Temperature: 15° C to 30° C (+59° F to +86° F)

Storage Temperature: -20° C to 60° C (-4° F to 140° F)

Humidity: 0 to 50% R.H.

MECHANICAL

Size: 9"W x 4"H x 11"D
(23cm W x 10cm H x 28cm D)

Weight: 4.0 lbs (1.8kg)

Shock and Vibration will withstand shock and vibration
encountered in commercial shipping
and handling.

1-3. SAFETY CONSIDERATIONS

This manual contains information, cautions, and warnings the user must follow to ensure safe operation, and to keep the instrument in safe condition.

WARNING

A warning denotes a hazard. It calls attention to a procedure or practice which, if not correctly performed or adhered to, could result in personal injury.

CAUTION

A caution also denotes a hazard. It calls attention to a procedure or practice which, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the instrument.

Notes:

SECTION 2 MAINTENANCE

WARNING

These service instructions are for use by qualified service personnel only. To avoid electric shock, do not perform any procedures in this section unless you are technically qualified to do so.

2-1. INTRODUCTION

This section presents disassembly and assembly instructions for the DSI 700.

2-2. SERVICE INFORMATION

The conditions of the DSI 700 warranty are given at the front of this manual. Malfunctions that occur within the limits of the warranty will be corrected at no cost to the purchaser exclusive of one-way shipping costs to Huntron Instruments, Inc. Huntron service is also available for calibration and/or repair of instruments that are beyond the warranty period. In either case, please describe clearly the problems encountered with the instruments.

For in-warranty or out of warranty factory service in the United States, call (toll-free) 800-426-9265 and receive an RMA number and shipping instructions prior to shipment. This number must be clearly displayed on the exterior of the shipping carton. Only parcels displaying an RMA number will be accepted. For in-warranty or out of warranty service outside the United States, contact the distributor you purchased the unit from.

When packaging the unit for shipment, use the original shipping container to provide protection during transit. If the original container isn't available, package the unit in a box with a minimum of two inches (5cm) of cushioning material on all sides.

2-3. CMOS HANDLING PRECAUTIONS

CAUTION

This instrument contains CMOS components which can be damaged by static discharge.

To prevent damage, take the following precautions when troubleshooting and/or repairing the instrument:

- Perform all work at a static-free work station.
- Do not handle components or PCB assemblies by their connectors.
- Wear static ground straps.
- Remove all plastic, vinyl and styrofoam from the work area.
- Use a grounded, temperature-regulated soldering iron.

2-4. DISASSEMBLY PROCEDURES

WARNING

To avoid electric shock, remove the Power/Clock cable and any test leads before disassembling the instrument.

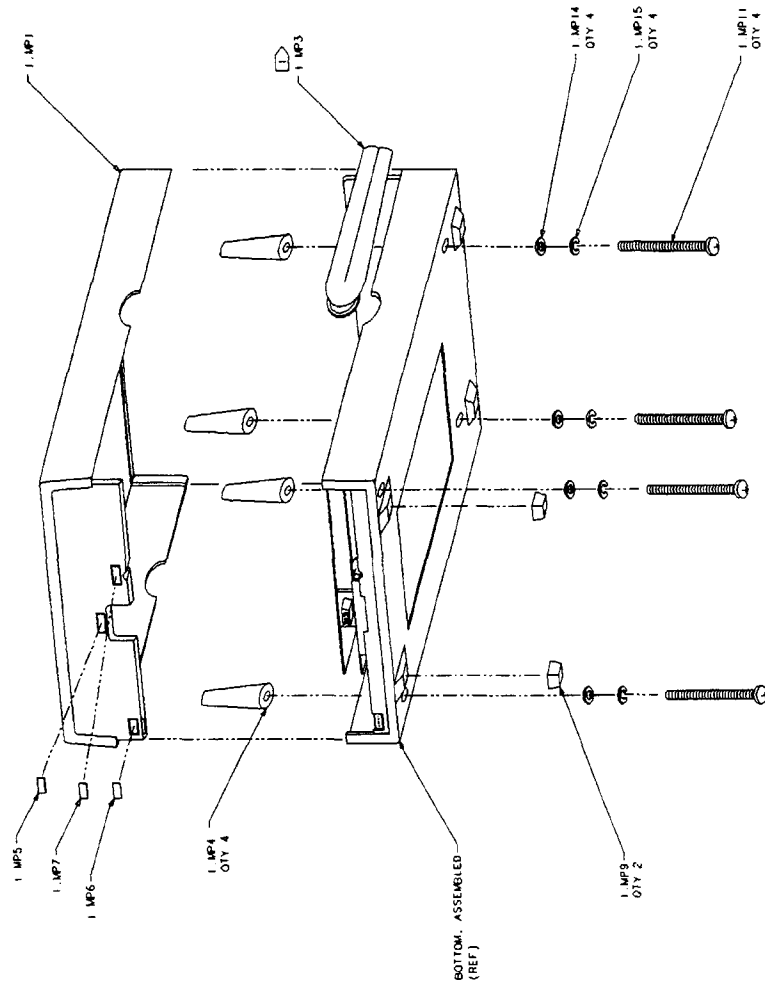
The following paragraphs present disassembly procedures for the DSI 700. The procedures should be performed in the order presented.

Remove the case top first, then the Interface PCA, Main PCA and then the Front Control and the Scanner PCA at the same time.

Case Top Removal:

Refer to Figure 2-1.

1. Turn the unit over and place on a flat surface. Remove the four screws (1.MP11) from the case bottom.
2. While holding both the case top and the bottom, turn the unit right side up. Remove the case top (1.MP1) by sliding it straight up from the case bottom.
3. Remove the case handle (1.MP3) from the case bottom.
4. Remove the four case spacers (1.MP4).



NOTES : UNLESS OTHERWISE SPECIFIED

☐ (1 PLACE)
 SHOWN SIDE OF HANDLE FACING UP WHEN
 HANDLE IS IN FRONT OF UNIT.

Figure 2-1. Case Top Removal.

Interface PCA Removal:

Refer to Figure 2-2.

1. Disconnect the Front Control Ribbon Cable from J1 on the Interface PCA (1.A3).
2. Disconnect the LCD interface ribbon cable from J2 on the Interface PCA (1.A3).
3. Remove the five screws (1.MP12) from the Interface PCA (1.A3).
4. Lift the Interface PCA (1.A3) straight up.

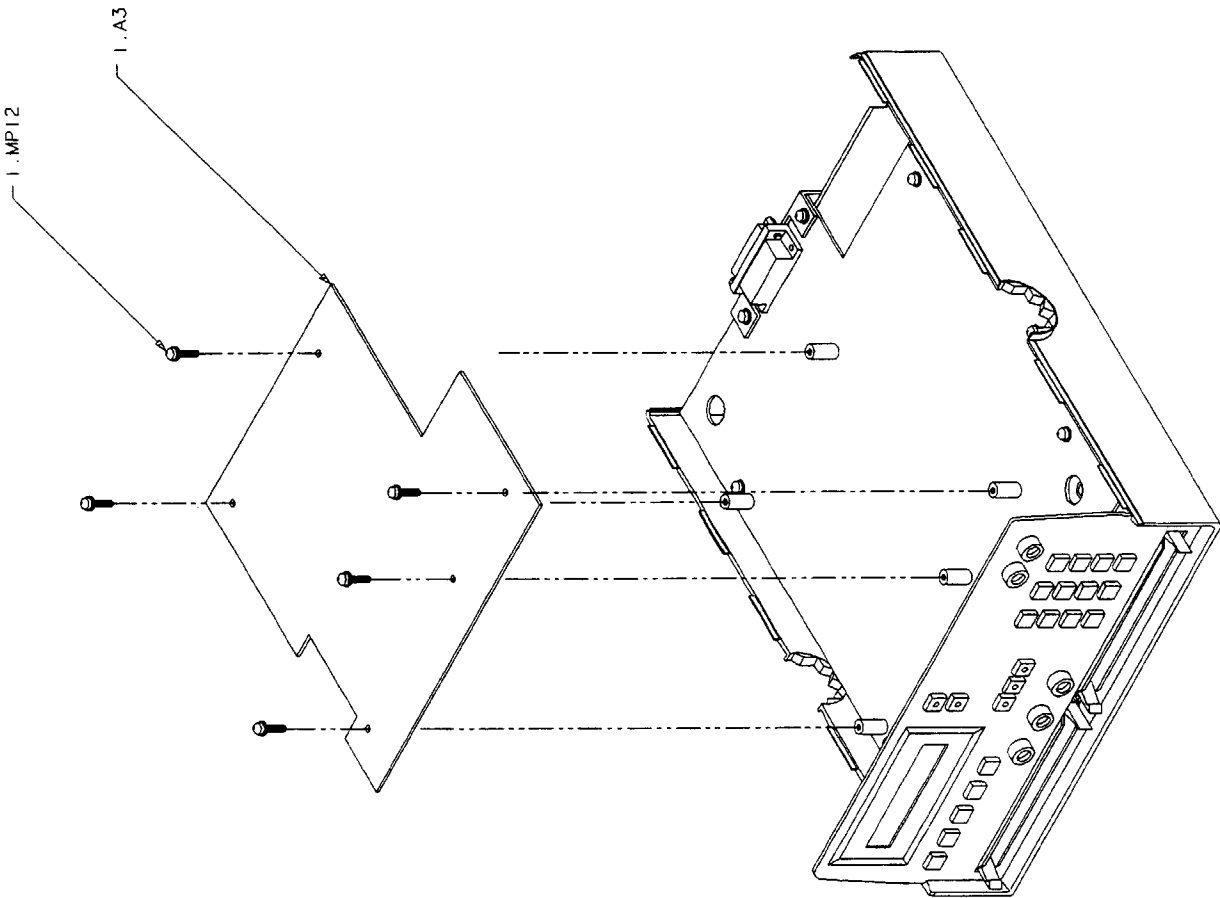
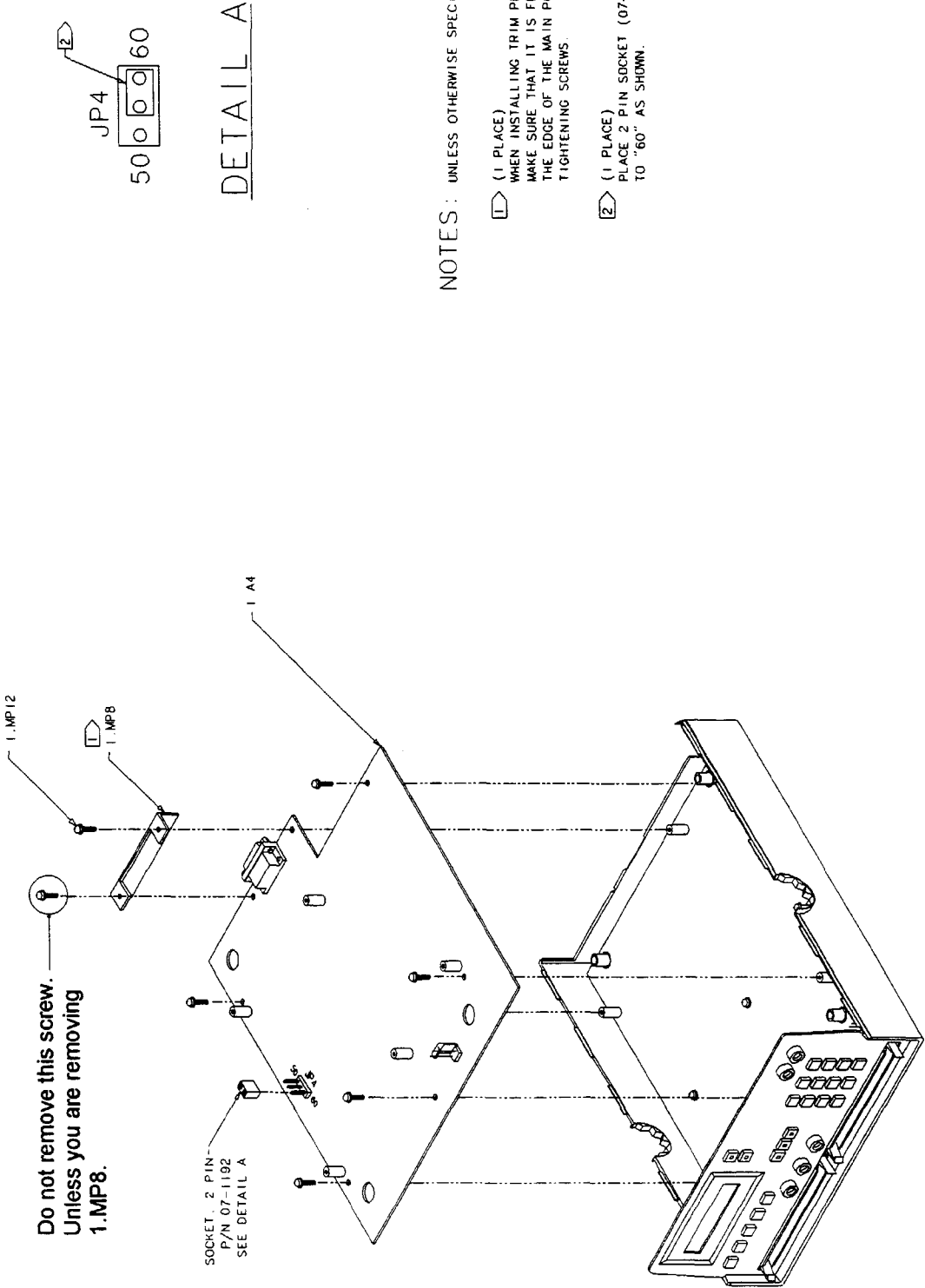


Figure 2-2. Interface PCA Removal.

Main PCA Removal:

Refer to Figure 2-3.

1. Disconnect the 2 pin connector from J7 on the Main PCA.
2. Remove the 6 screws (1.MP12) from the Main PCA. Do not remove the screw that is labeled "Do Not Remove" next to J4. This screw holds the trim plate in place.
3. Lift the Main PCA straight up.



NOTES : UNLESS OTHERWISE SPECIFIED

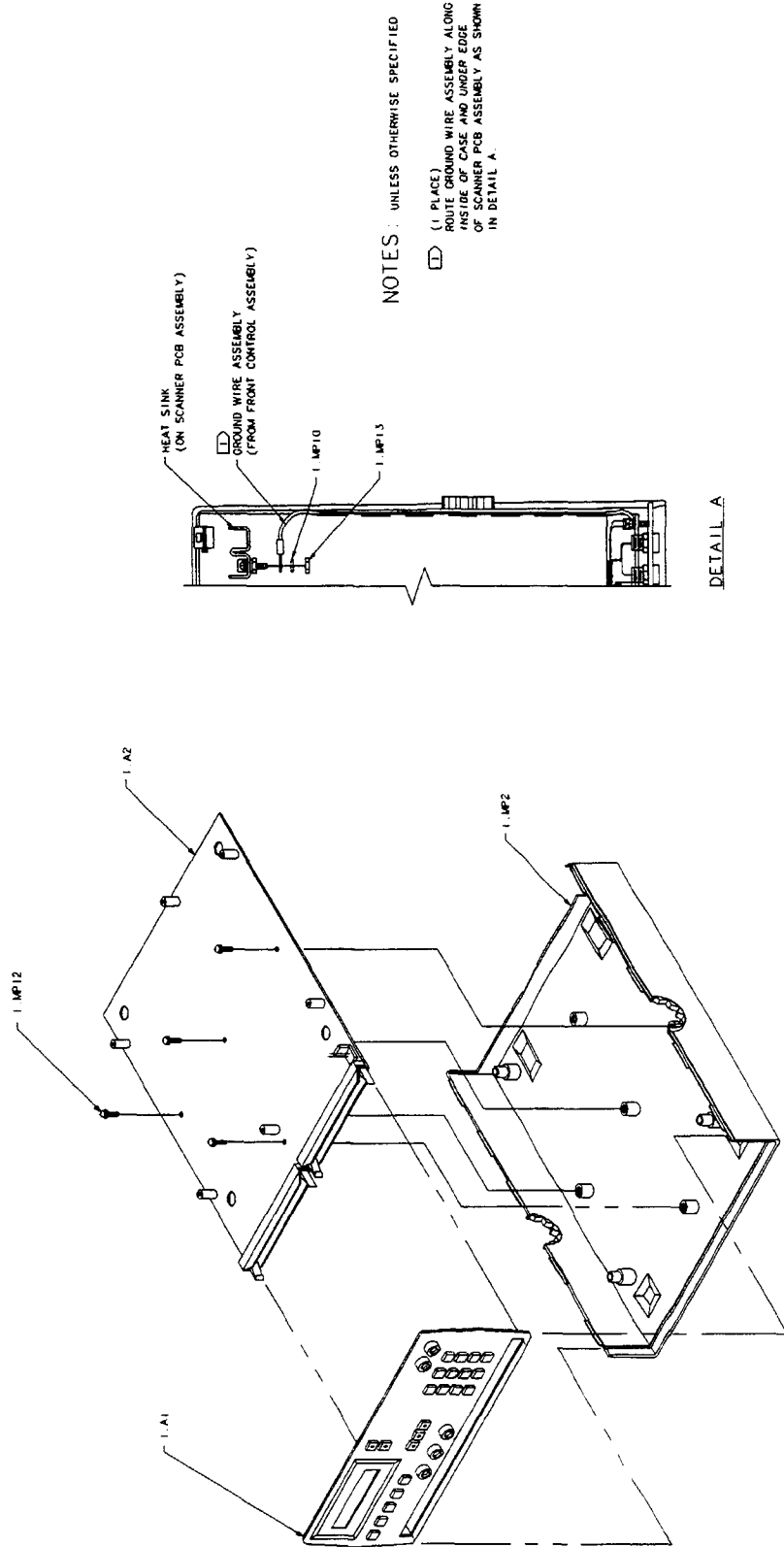
- (1 PLACE) WHEN INSTALLING TRIM PLATE MAKE SURE THAT IT IS FLUSH AGAINST THE EDGE OF THE MAIN PCB BEFORE TIGHTENING SCREWS.
- (1 PLACE) PLACE 2 PIN SOCKET (07-1192) TO "60" AS SHOWN.

Figure 2-3. Main PCA Removal.

Scanner PCA and Front Control Assembly Removal:

Refer to Figure 2-4

1. Remove the Ground Wire Assembly from the Heat Sink (see Figure 2-4, detail A).
2. Disconnect the two pin connector from J5 on the Scanner PCA (1.A2).
3. Remove the four screws (1.MP12) from the Scanner PCA (1.A2).
4. Lift the Scanner PCA (1.A2) and the Front Control Assembly (1.A1) up at the same time. When both assemblies have cleared the case bottom, slide the Front Control Assembly (1.A1) away from the Scanner PCA (1.A2).



NOTES : UNLESS OTHERWISE SPECIFIED

(1 PLACE)
 ROUTE GROUND WIRE ASSEMBLY ALONG
 INSIDE OF CASE AND UNDER EDGE
 OF SCANNER PCB ASSEMBLY AS SHOWN
 IN DETAIL A.

Figure 2-4. Scanner PCA & Front Control Assembly Removal.

Front Control PCA Removal:

Refer to Figure 2-5.

1. Cut the two wire ties (1.A1.MP10) holding the wires to the Front Control PCA (1.A1.A1).
2. Remove the seven screws (1.A1.MP9) holding the Front Control PCA (1.A1.A1) to the Front Control Assembly.
3. Lift the Front Control PCA (1.A1.A1) away from the Front Control Assembly.

Front Control LCD Removal:

Refer to Figure 2-5.

1. Remove the four screws (Part of 1.A1.MP2) that hold the LCD (1.A1.MP11) and Bezel (1.A1.MP1) to the Front Control Assembly.

2-5. REASSEMBLY PROCEDURE

To reassemble the DSI 700, reverse the order in which you disassembled it.

2-6. JUMPER SETTINGS

The following describes the function of the jumpers on the Main PCA.

JP1 Selects between a 256Kbyte or a 512Kbyte EPROM.

JP2 Selects RAM memory type.

JP3 Selects RAM memory type.

JP4 Selects DSI 700 50 Hz or 60 Hz operation.

SECTION 3

LIST OF REPLACEABLE PARTS

3-1. INTRODUCTION

This section contains the parts list for the DSI 700. The components of each assembly are listed alphanumerically by reference designation. Both electrical and mechanical components are listed by reference designation, and can be referenced to illustrations and schematics.

Part lists include the following information:

1. Reference Designation (Ref. Des.)
2. Description of each part (Description)
3. Huntron Part Number (Huntron P/N)

Numbers in parenthesis following the description refer to the total quantity of the part for that assembly.

3-2. HOW TO OBTAIN PARTS

Components may be ordered directly from a manufacturer by using the part description, or from Huntron Instruments, Inc. or its authorized distributors by using the HUNTRON PART NUMBER. In the event the part you order has been replaced by a new part, the replacement will be accompanied by an explanatory note and installation instructions if necessary.

To ensure prompt and efficient handling of your order, please include the following information:

1. Quantity
2. Huntron Part Number
3. Part Description
4. Reference Designation
5. Printed Circuit Board Part Number and Revision Level
6. Instrument Model and Serial Number

CAUTION

Devices indicated by an asterisk (*) in the list of replaceable parts are subject to damage by static discharge.

Final Assembly

Ref. Des.	Description	Huntron P/N
1	* Final Assembly (All Models)	
2	* Final Assembly 60Hz (Only)	
3	* Final Assembly 50Hz (Only)	
4	* Final Assembly 50-60Hz Combination (Only)	
1.A1	* Front Control Assembly	06-1092
1.A2	* Scanner PCB Assembly	06-3063
1.A3	* Interface PCB Assembly	06-3072
1.A4	*Main PCB Assembly	(Reference Only See 4.A4)
2.A4	*Main PCB Assembly 60Hz	Superseded to 06-3074 (4.A4)
3.A4	*Main PCB Assembly 50Hz	Superseded to 06-3074 (4.A4)
4.A4	*Main PCB Assembly 50-60Hz Comb.	06-3074
1.MP1	Top	01-1155
1.MP2	Bottom	01-1156
1.MP3	Handle	01-1157
1.MP4	Spacer (4)	01-1158
1.MP5	Label, "COMPUTER"	01-2054
1.MP6	Label, "POWER"	01-2341
1.MP7	Label, "FOOT SWITCH"	01-2343
1.MP8	Trim Plate	01-3045
1.MP9	Rubber Foot, .5"x.5"x.23"(2)	07-2073
1.MP10	Washer, #4 Lock Star	07-3020
1.MP11	Screw 6-32 x 3" Ph Phil (4)	07-3049
1.MP12	Screw 4-40 x 3/8" Ph Phil W/Washer (16)	07-3051
1.MP13	Nut, 4-40 Hex	07-3052
1.MP14	Washer, #6 Flat (4)	07-3055
1.MP15	Washer, #6 Lock Split (4)	07-3066

Front Control Assembly

Ref. Des.	Description	Huntron P/N
1.A1	*Front Control Assembly	06-1092
1.A1.A1	*Control PCB Assembly	06-3062
1.A1.A2	Cable, Flexible 16 Pin	06-4028
1.A1.A3	Harness, Control PCB	06-4037
1.A1.A4	Harness, Front Control	06-4063
1.A1.A5	Ground Wire Assembly	06-4066

Front Control Assembly Cont.

Ref. Des.	Description	Huntron P/N
1.A1.MP1	Bezel Black Kit	01-1130
1.A1.MP2	Spacer, Bezel, LCD (2)	01-1178
1.A1.MP3	Overlay	01-2034
1.A1.MP4	Face Plate	01-3044
1.A1.MP5	Jack, Banana, Red W/Hex Nut (2)	07-1147
1.A1.MP6	Jack, Banana, Black W/Hex Nut (2)	07-1148
1.A1.MP7	Jack, Banana, Yellow W/Hex Nut	07-1149
1.A1.MP8	Washer, #4 Lock Star	07-3020
1.A1.MP9	Screw, 4-40 x 1/4" Ph Phil W/Washer (7)	07-3050
1.A1.MP10	Cable Tie, 4" (2)	07-3089
1.A1.MP11	Display, LCD	07-4050

Control PCB Assembly

Ref. Des.	Description	Huntron P/N
1.A1.A1	*Control PCB Assembly	06-3062
1.A1.A1.C1	Cap, .01uF 50V Mono Ceramic	03-3051
1.A1.A1.C2	Cap, .1uF 50V Mono Ceramic	03-3028
1.A1.A1.D1	Diode, Switch 100V 75ma	04-4007
1.A1.A1.D2	Diode, Switch 100V 75ma	04-4007
1.A1.A1.DS1	Not Used	
1.A1.A1.DS2	Not Used	
1.A1.A1.DS3	LED Green Rectangular	04-4028
1.A1.A1.J1	Header, Dual 20 Pin	07-1135
1.A1.A1.MP1	Button , Light Gray W/Window (5)	07-2083
1.A1.A1.MP2	Button, Light Gray (16)	07-2103
1.A1.A1.MP3	Button, Dark Gray	07-2104
1.A1.A1.R1	Res, 100K, 1/4W 5%	02-2139
1.A1.A1.R2	Res, 100K, 1/4W 5%	02-2139
1.A1.A1.RN1	Res, Network	02-3007

Control PCB Assembly Cont.

Ref. Des.	Description	Huntron P/N
1.A1.A1.S1-12	Switch (12)	07-4038
1.A1.A1.S13	Switch, Green LED	07-4024
1.A1.A1.S14	Switch, Red LED	07-4023
1.A1.A1.S15	Switch, Green LED	07-4024
1.A1.A1.S16	Switch, Green LED	07-4024
1.A1.A1.S17	Switch, Yellow LED	07-4025
1.A1.A1.S18	Switch	07-4038
1.A1.A1.S19	Switch	07-4038
1.A1.A1.S20	Switch	07-4038
1.A1.A1.S21	Switch	07-4038
1.A1.A1.S22	Switch	07-4038
1.A1.A1.U1	IC, 16 Key Encoder	05-5125
1.A1.A1.U2	IC, Quad Input NAND	05-5063

Scanner PCB Assembly

Ref. Des.	Description	Huntron P/N
1.A2	*Scanner PCB Assembly	06-3063
1.A2.C1	Cap, .1uF 50V Mono Ceramic	03-3028
1.A2.C2	Cap, .1uF 50V Mono Ceramic	03-3028
1.A2.C3	Cap, 47uF 25v Tant. Radial	03-3096
1.A2.C4	Cap, .33uF Mono	03-3094
1.A2.C5	Cap, 10uF 25V Tant. Radial	03-3011
1.A2.C6	Not Used	
1.A2.C7	Cap, .1uF 50V Mono Ceramic	03-3028
1.A2.C8	Cap, 10uF 25V Tant. Radial	03-3011
1.A2.J1	Header, 64 Pin	07-1265
1.A2.J2	Header, 64 Pin	07-1265
1.A2.J3	Socket, 20 Pin	07-1268
1.A2.J4	Header, 2 Pin	07-1153
1.A2.J5	Header, 4 Pin	07-1178
1.A2.K1-64	Relay, 2 Form A W/Diode	07-4041
1.A2.K65	Relay, 1 Form C W/Diode	07-4040

Scanner PCB Assembly Cont.

Ref. Des.	Description	Huntron P/N
1.A2.MP1	Washer, #4 Lock Star	07-3020
1.A2.MP2	Standoff, 1/2x1/4" 4/40 (6)	07-3046
1.A2.MP3	Screw, 4-40 x 3/8" Ph Phil W/Washer	07-3051
1.A2.MP4	Nut, 4-40 Hex	07-3052
1.A2.MP5	Screw, 2-56 x 1/2" Ph Phil (4)	07-3069
1.A2.MP6	Cable Tie, 4"	07-3089
1.A2.MP7	Standoff, 2-56 x 1/8" (4)	07-3091
1.A2.MP8	Latch (4)	07-1197
1.A2.MP9	Heat Sink	07-2080
1.A2.R1	Res, 100K 1/4W 5%	02-2139
1.A2.U1	IC, 32 Bit Shift Register	05-5045
1.A2.U2	IC, 32 Bit Shift Register	05-5045
1.A2.U3	IC, 5V Regulator	05-5017
1.A2.U4	Cap, 10,000pF	03-3093
1.A2.U5	Cap, 10,000pF	03-3093

Interface PCB Assembly

Ref. Des.	Description	Huntron P/N
1.A3	*Interface PCB Assembly	06-3072
1.A3.B1	Beeper	05-7003
1.A3.C1	Cap, 10uF 25V Tant. Radial	03-3011
1.A3.C2-12	Cap, .1uF 50V Mono Ceramic	03-3028
1.A3.C13	Cap, .33uF Mono Ceramic	03-3094
1.A3.J1	Header, Dual 20 Pin	07-1135
1.A3.J2	Header, 16 Pin	07-1272
1.A3.J3	Header, 3 Pin	07-1226
1.A3.P1	Header, Dual 20 Pin	07-1135
1.A3.P2	Header, Dual 20 Pin	07-1135
1.A3.P3	Header, 6 Pin	07-1273
1.A3.Q1	Transistor, FET	05-5100

Interface PCB Assembly Cont.

Ref. Des.	Description	Huntron P/N
1.A3.R1	Res, 5.6K 1/4W 5%	02-2343
1.A3.R2	Trim Pot 10K 1/5W 20% Mini	02-1044
1.A3.R3	Res, 1K 1/4W 5%	02-2125
1.A3.RN1	Resistor Network 10K x 7	02-3009
1.A3.RN2	Resistor Network 100K x 9	02-3003
1.A3.U1	IC, Octal Inverter	05-5068
1.A3.U2	IC, Octal Flip-Flop	05-5070
1.A3.U3	IC, Tran. Array	05-5072
1.A3.U4	IC, Octal Flip-Flop	05-5070
1.A3.U5	IC, Tran. Array	05-5072
1.A3.U6	IC, Dual J/K Flip-Flop	05-5049
1.A3.U7	IC, Tran. Array	05-5072
1.A3.U8	IC, Octal Inverter	05-5068
1.A3.U9	IC, Octal Tranceiver	05-5092
1.A3.U10	IC, Quad 2-Input OR	05-5117
1.A3.U11	IC, Quad 2-Input OR	05-5117
1.A3.U12	IC, Quad Input Nand	05-5063
1.A3.U13	IC, Hex Inverter	05-5046
1.A3.U14	IC, Hex Inverter	05-5046

Main PCB Assembly

Ref. Des.	Description	Huntron P/N
1.A4	*Main PCB Assembly	All Models
2.A4	*Main PCB Assembly 60Hz	Supceded by 06-3074 (4.A4)
3.A4	*Main PCB Assembly 50Hz	Supceded by 06-3074 (4.A4)
4.A4	*Main PCB Assembly 50-60Hz Comb.	06-3074
1.A4.C1	Cap, 22pF Mono	03-3095
1.A4.C2	Cap, 22pF Mono	03-3095
1.A4.C3-4	Not Used	
1.A4.C5	Cap, 47pF 50V Mono Ceramic	03-3083
1.A4.C6	Cap, 47pF 50V Mono Ceramic	03-3083
1.A4.C7	Cap, 10uF 25V Tant Radial	03-3011
1.A4.C8	Cap, 10uF 25V Tant Radial	03-3011
1.A4.C9-11	Not Used	
1.A4.C12	Cap, .1uF 50V Mono Ceramic	03-3028

Main PCB Assembly Cont.

Ref. Des.	Description	Huntron P/N
1.A4.C14-19	Cap, .1uF 50V Mono Ceramic	03-3028
1.A4.C20-29	Not Used	
1.A4.C30	Cap, .1uF 50V Mono Ceramic	03-3028
1.A4.C31	Cap, .1uF 50V Mono Ceramic	03-3028
1.A4.C32-35	Not Used	
1.A4.C36	Cap, .1uF 50V Mono Ceramic	03-3028
1.A4.C37	Cap, .1uF 50V Mono Ceramic	03-3028
1.A4.C38	Cap, 10uF 25V Tant Radial	03-3011
1.A4.C39	Cap, .1uF 50V Mono Ceramic	03-3028
1.A4.C40	Cap, .1uF 50V Mono Ceramic	03-3028
1.A4.C41	Cap, 10uF 25V Tant Radial	03-3011
1.A4.C42	Cap, .33uF Mono	03-3094
1.A4.C43	Cap, 10uF 25V Tant Radial	03-3011
1.A4.C44	Cap, .1uF 50V Mono Ceramic	03-3028
1.A4.C45	Cap, 10uF 25V Tant Radial	03-3011
1.A4.C46	Cap, .1uF 50V Mono Ceramic	03-3028
1.A4.C47	Not Used	
1.A4.C48	Cap, .001uF 100V 5% Met.Poly	03-3059
1.A4.D1-4	Diode, Switch	04-4007
1.A4.J1	Socket, 20 Pin Dual Row	07-1268
1.A4.J2	Not Used	
1.A4.J3	Socket, 20 Pin Dual Row	07-1268
1.A4.J4	Socket, 15 Pin 3 Row	07-1269
1.A4.J5	Jack, Audio	07-1267
1.A4.J6	Socket, 6 Pin	07-1179
1.A4.J7	Header, 2 Pin	07-1153
1.A4.JP1	Header, 3 Pin	07-1226
1.A4.JP2	Header, 3 Pin	07-1226
1.A4.JP3	Header, 3 Pin	07-1226
1.A4.K1	Relay, Sip Reed 1 Form A 5V W/Diode	07-4033
1.A4.K2	Relay, 1 Form C W/Diode	07-4040
1.A4.MP1	Rubber Gasket, 3/8 x 3/8 x 1/8 (2)	01-1218
1.A4.MP2	Standoff, 1/2 x 1/4" 4-40 (6)	07-3046
1.A4.MP3	Standoff, 1/8" 4-40	07-3077
1.A4.MP4	Socket, 2 Pin (3)	07-1192
1.A4.MP5	Socket, IC, 28 Pin (2)	07-1224
1.A4.MP6	Socket, IC, 40 Pin	07-1225
1.A4.MP7	Heat Sink	07-2091

Main PCB Assembly Cont.

Ref. Des.	Description	Huntron P/N
1.A4.P1	Header, Dual 20 Pin	07-1135
1.A4.Q1	Transistor, PNP	05-5039
1.A4.Q2	Transistor, FET	05-5130
1.A4.Q3	Transistor, FET	05-5130
1.A4.R1	Res, 20M 1/4W 5%	02-2340
1.A4.R2	Res, 1K 1/4W 5%	02-2125
1.A4.R3	Not Used	
1.A4.R4	Res, 10M 1/4W 1%	02-2328
1.A4.R5	Res, 402K 1/4W .1%	02-2354
1.A4.R6	Res, 10M 1/4W 1%	02-2328
1.A4.R7	Res, 402K 1/4W .1%	02-2354
1.A4.R8-13	Not Used	
1.A4.R14	Res, 15.0K 1/4W .1%	02-2265
1.A4.R15	Res, 10.0K 1/4W .1%	02-2251
1.A4.R16	Res, 7.50K 1/4W .1%	02-2263
1.A4.R17	Res, 2.49K 1/4W .1%	02-2261
1.A4.R18	Res, 10.0 Ohm 1/4W .1%	02-2262
1.A4.R19	Res, 6.04K 1/4W .1%	02-2264
1.A4.R20-21	Not Used	
1.A4.R22	Res, 1.6K 1/4W 5%	02-2135
1.A4.R23-37	Not Used	
1.A4.R38	Res, 10K 1/4W 5%	02-2137
1.A4.R39	Res, 10K 1/4W 5%	02-2137
1.A4.R40-43	Res, 100K 1/4W 5%	02-2139
1.A4.R44	Res, 1K 1/4W 5%	02-2125
1.A4.R45	Res, 100K 1/4W 5%	02-2139
1.A4.R46	Not Used	
1.A4.R47	Res, 16 Ohm 1/4W 5%	02-2352
1.A4.RN1	Resistor Network 100K x 9	02-2003
1.A4.RN2	Resistor Network 100K x 9	02-2003
1.A4.RN3	Resistor Network 10K x 7	02-2009
1.A4.S1	Switch	07-4038
1.A4.U1	IC, 17 Stage Oscillator/Divider	05-5123
1.A4.U2	IC, Power Supply Monitor W/Reset	05-5121
1.A4.U3	IC, Octal Inverter	05-5068
1.A4.U4	Not Used	
1.A4.U5	IC, 8 Bit Micro	05-5059

Main PCB Assembly Cont.

Ref. Des.	Description	Huntron P/N
1.A4.U6	IC, Octal Latch	05-5057
1.A4.U7	Eprom (Programmed)	06-5033
1.A4.U8	IC, SRAM	05-6011
1.A4.U9	IC, 1 of 8 Decoder	05-5093
1.A4.U10	IC, Octal Inverter	05-5068
1.A4.U11-14	Not Used	
1.A4.U15	IC, Op Amp	05-5021
1.A4.U16-18	Not Used	
1.A4.U19	IC, Dual Op Amp	05-5047
1.A4.U20	IC, Dual Analog Switch	05-5051
1.A4.U21	IC, 8 Bit A/D Converter	05-5053
1.A4.U22	Not Used	
1.A4.U23	IC, -5V Linear Volt Reg.	05-5120
1.A4.U24	IC, Neg. Variable Reg.	05-5073
2.A4.X1	Crystal, 2.98295 MHz (50 Hz)	05-7004
3.A4.X1	Crystal, 3.579545 MHz (60 Hz)	05-7002
1.A4.X2	Crystal, 11 MHz	05-7000

Notes:

SECTION 4

SCHEMATIC DIAGRAMS

4-1. SCHEMATICS

The following list shows the component location diagrams and schematic diagrams for the DSI 700.

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4-1	Interface PCB Component Locations	4-2
4-2	Interface PCB Schematic	4-3
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4-6	Scanner PCB Component Locations	4-7
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4-8	Front Control PCB Component Locations	4-9
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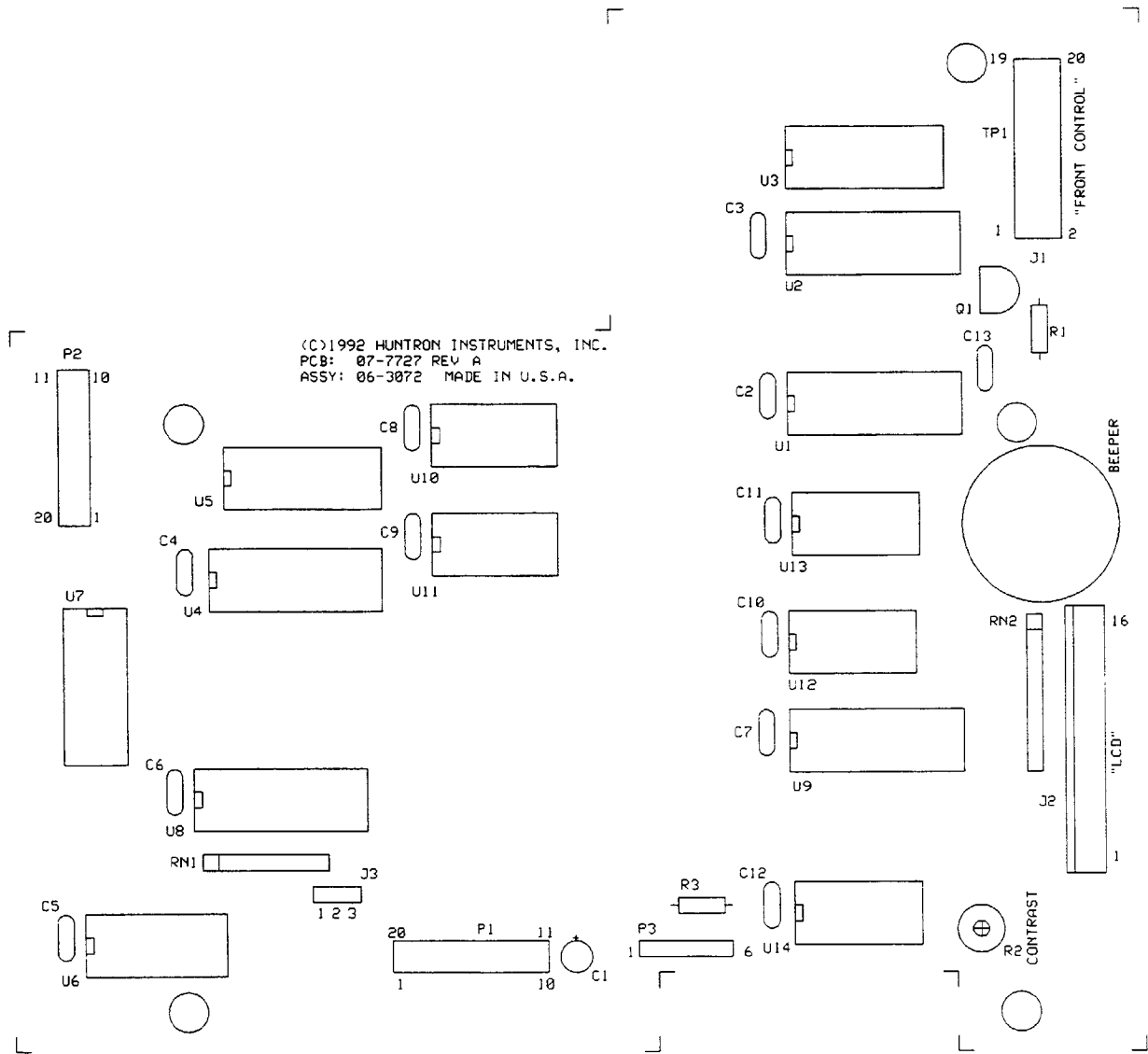
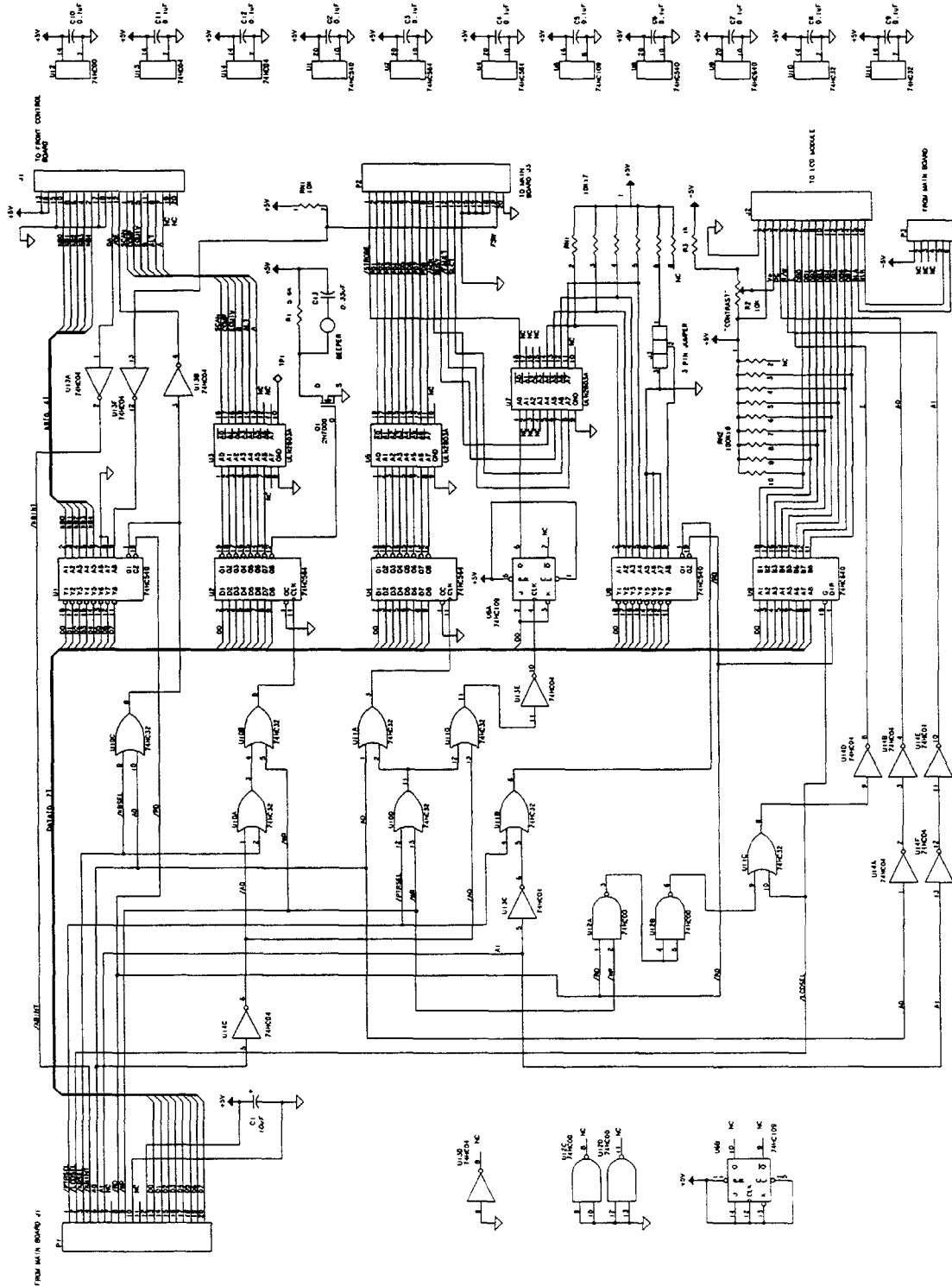


Figure 4-1. Interface PCB Component Locations.



NOTES: UNLESS OTHERWISE SPECIFIED
 1. J3 - SHORT PINS 1 & 2 (DEFAULT).

Figure 4-2. Interface PCB Schematic.

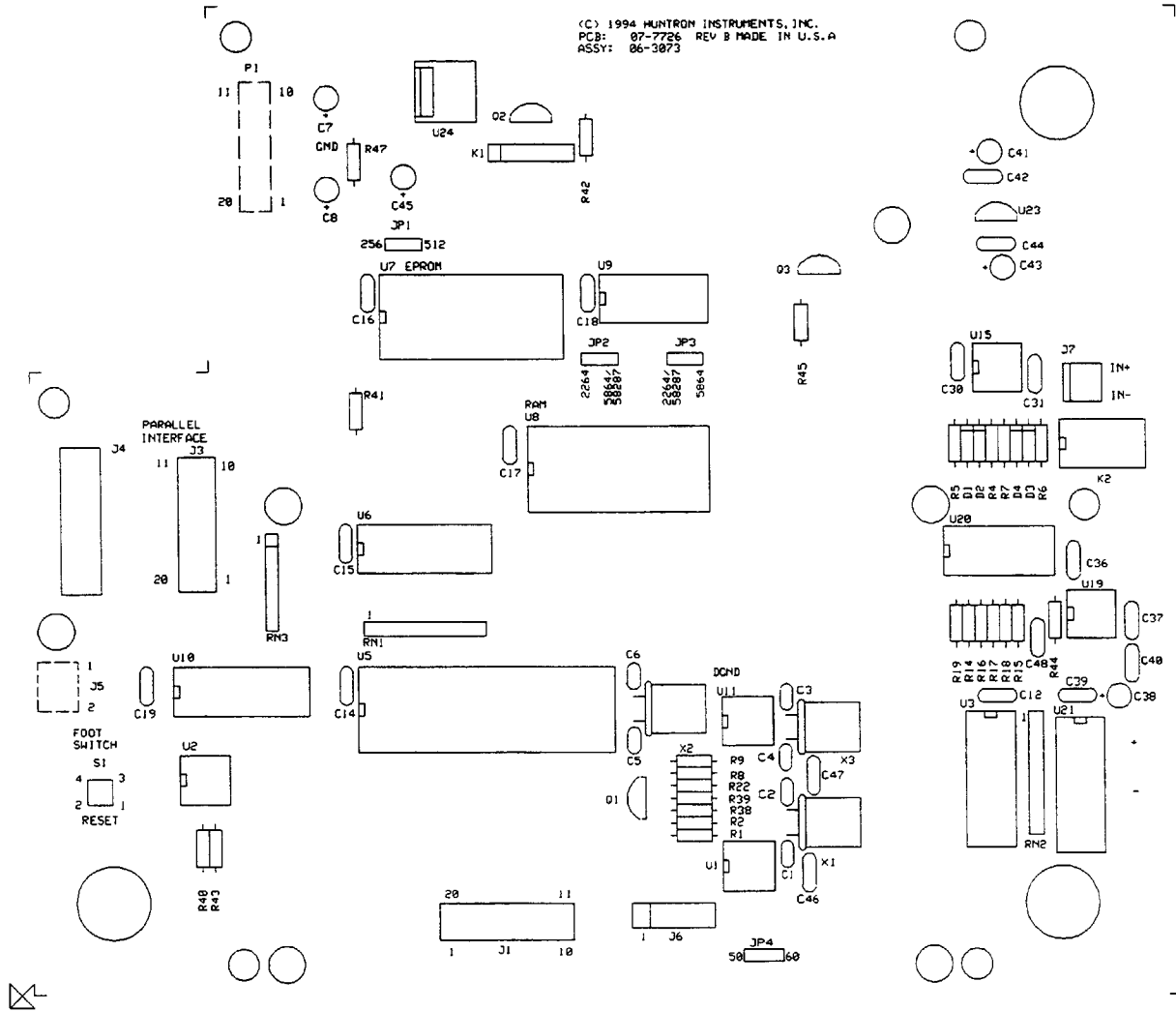
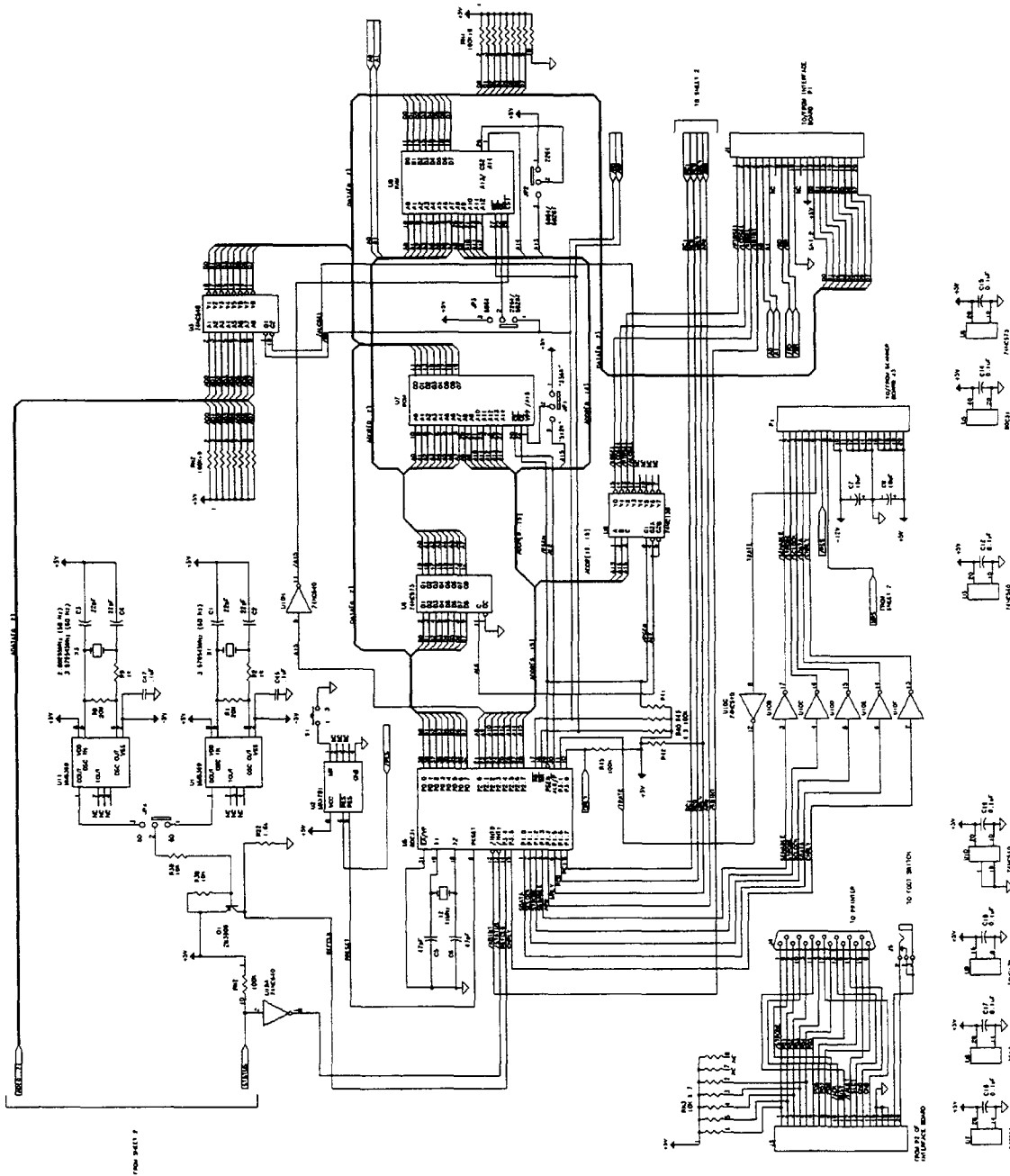


Figure 4-3. Main PCB Component Locations.



NOTES: UNLESS OTHERWISE SPECIFIED
 1. ALL RESISTORS ARE 1/4W. 5%.

Figure 4-4. Main PCB Schematic (Sheet 1 of 2).

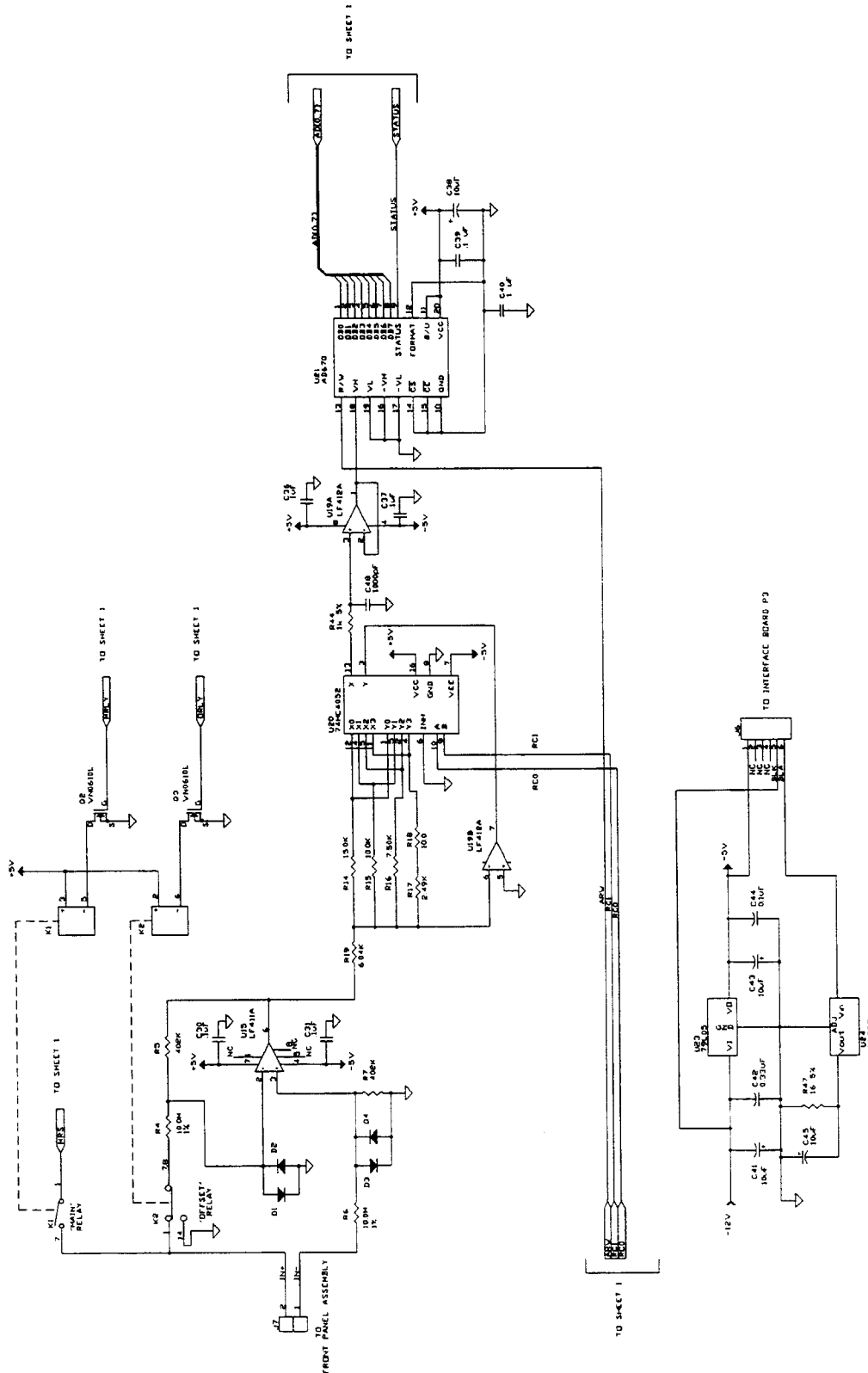


Figure 4-5. Main PCB Schematic (Sheet 2 of 2).

NOTES: UNLESS OTHERWISE SPECIFIED
 1. ALL RESISTORS ARE 1/4W, 0.1%.

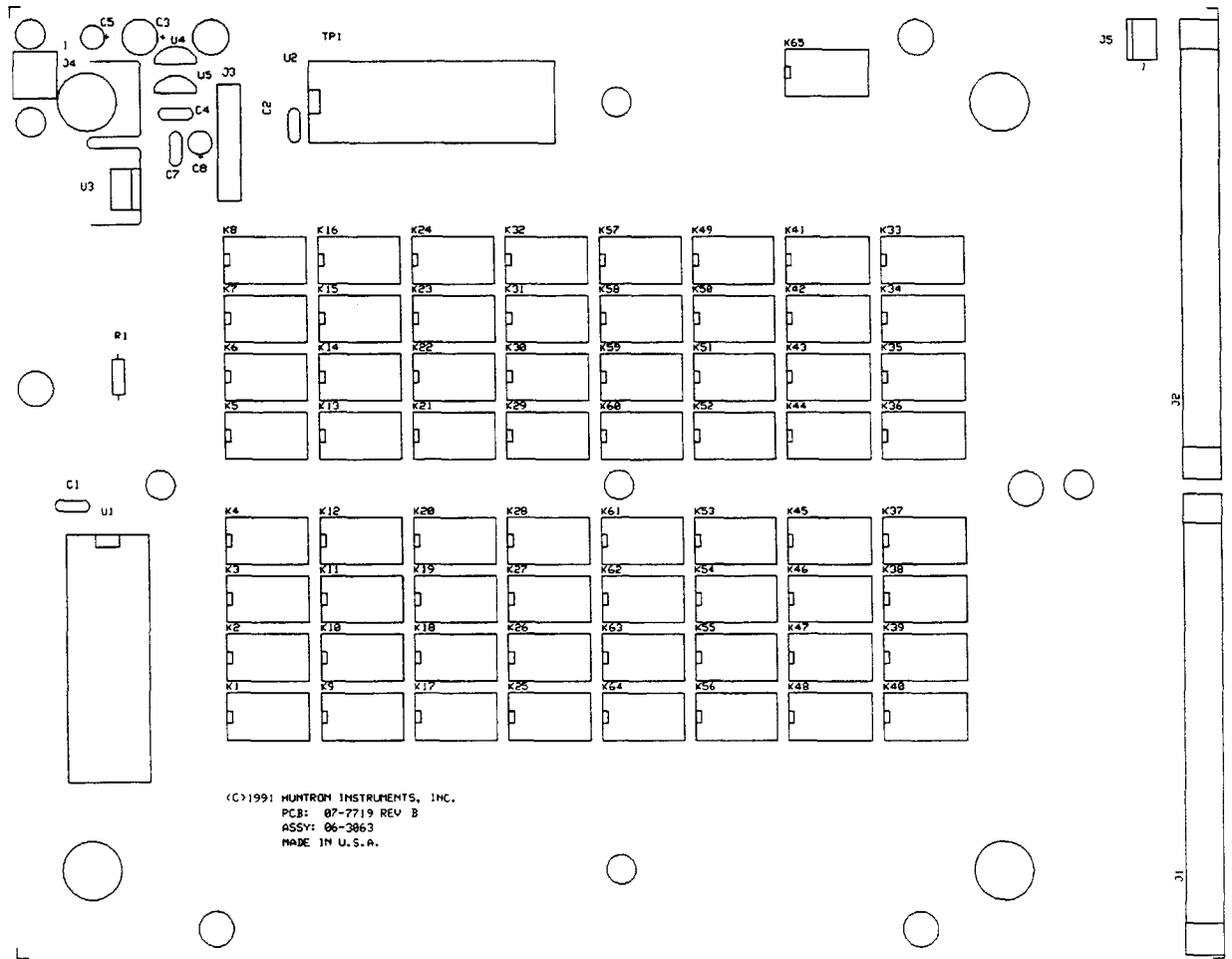


Figure 4-6. Scanner PCB Component Locations.

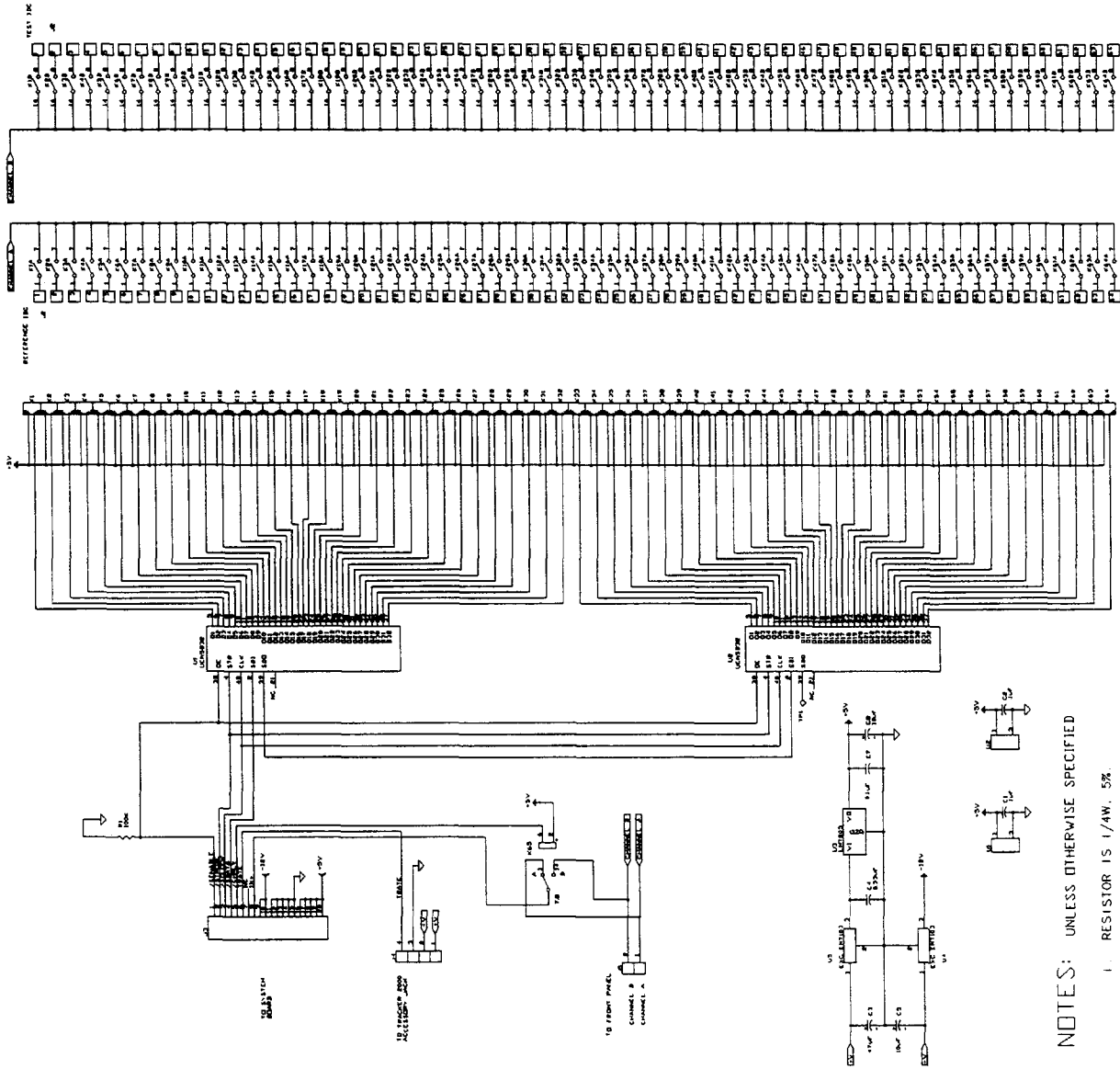


Figure 4-7. Scanner PCB Schematic.

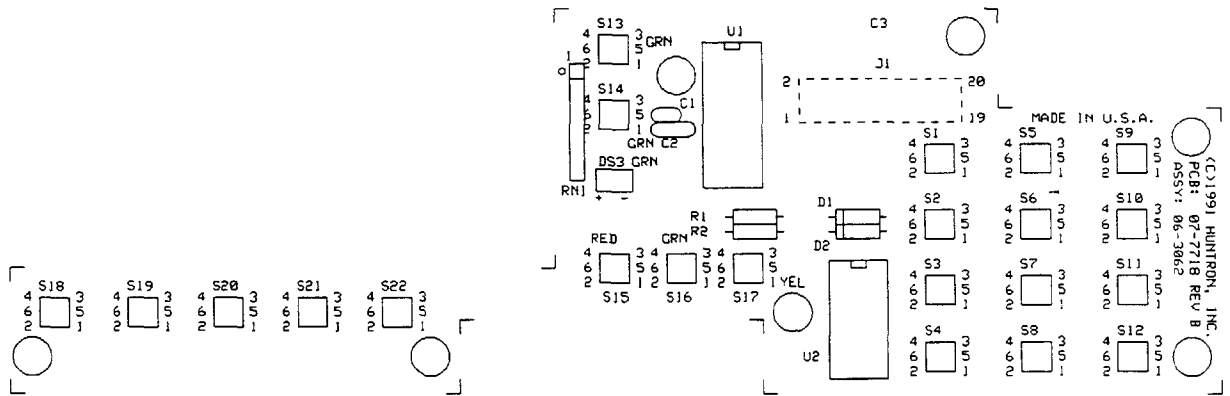


Figure 4-8. Front Control PCB Component Locations.

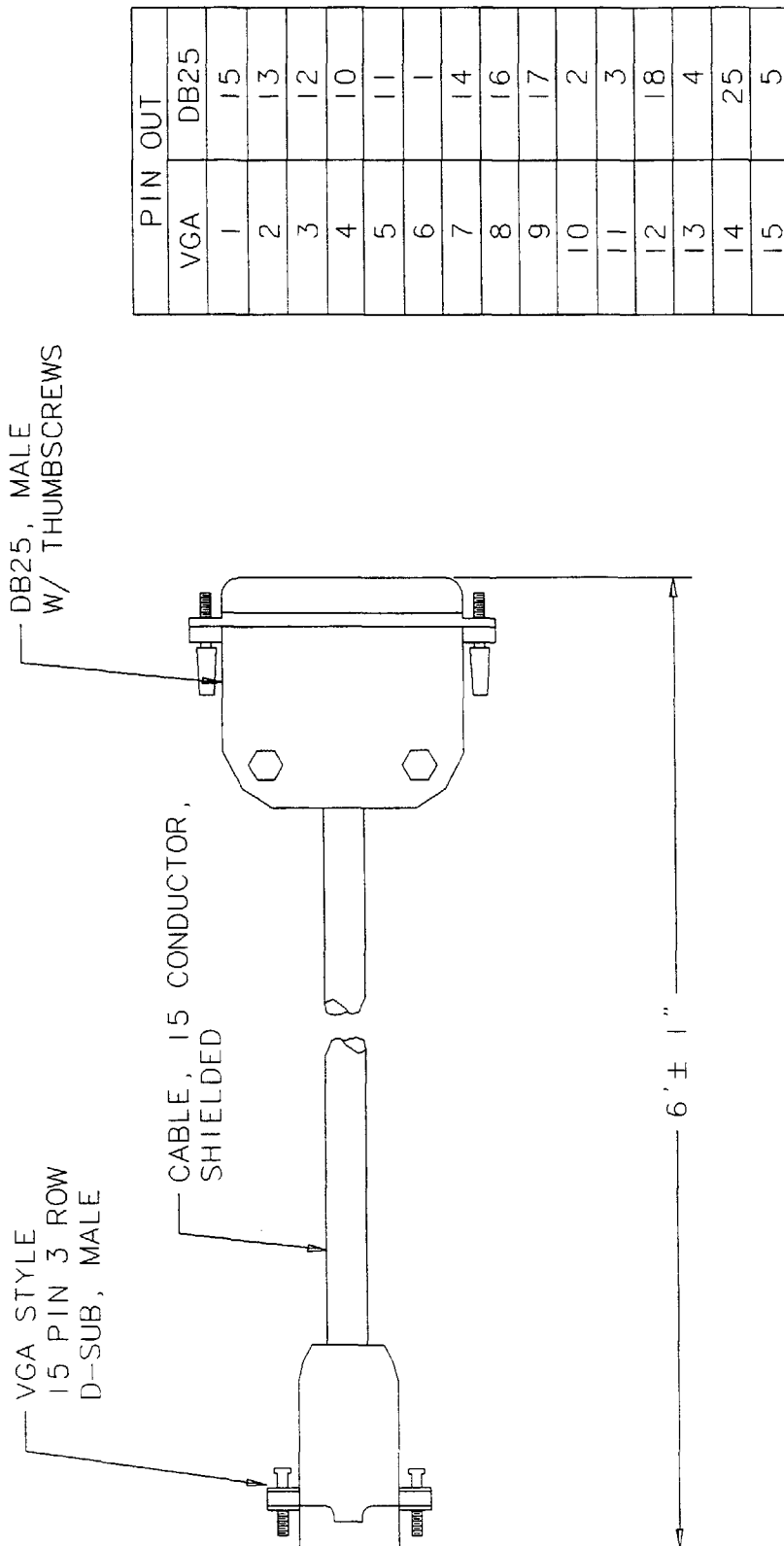


Figure 4-10. DSI 700 to PC Interface Cable Diagram.

PIN OUT	
VGA	DB25
1	15
2	13
3	12
4	10
5	11
6	1
7	14
8	16
9	17
10	2
11	3
12	18
13	4
14	25
15	5

Notes: