

**Rinstrum**

**Assembly Manual**

**0085 RS232 Opto-Isolator**

**0085-802-100**

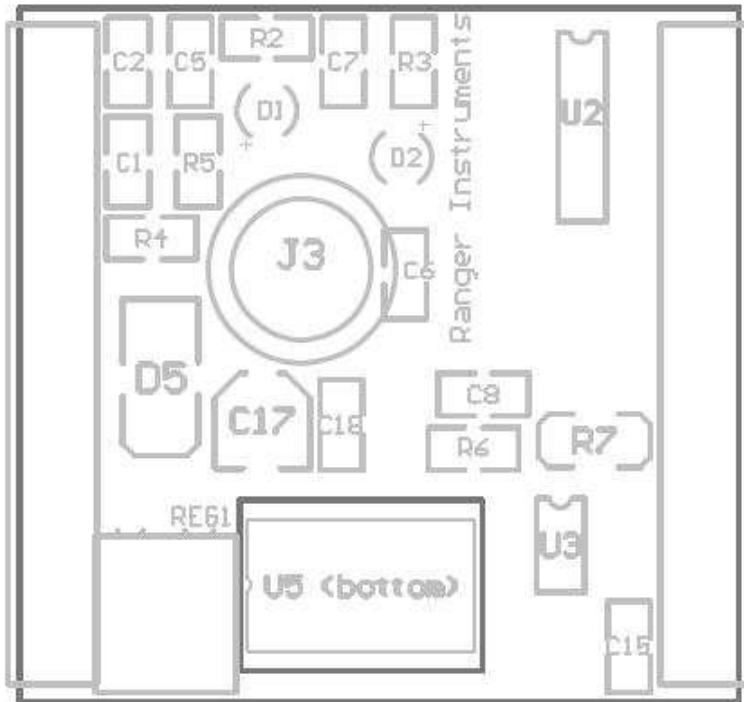
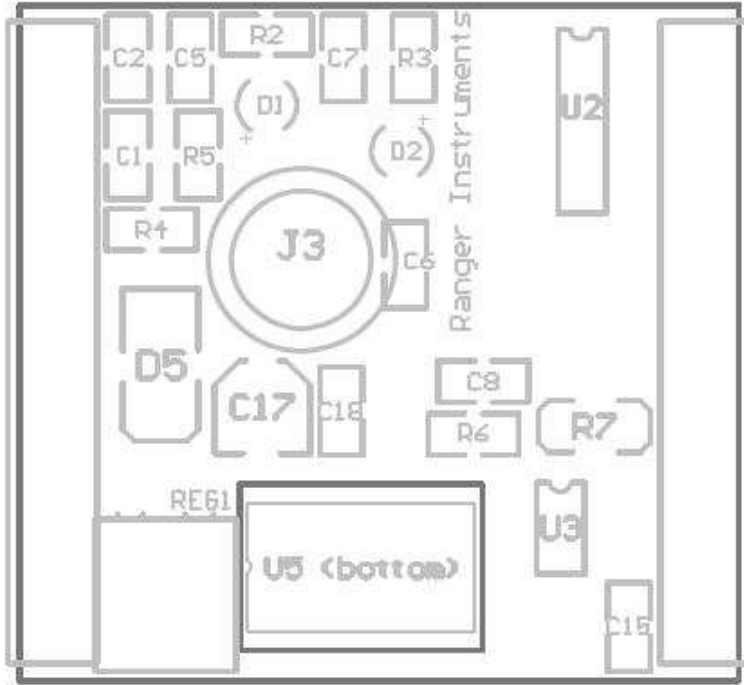
**Rinstrum ASSEMBY MANUAL**  
**0085 RS232 Opto-Isolator**  
**0085-802-100**

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# 1. PCB Components

The following diagram shows the layout of all the components on the PCB.



## **2. Assembly Instructions**

### ***Board Assembly***

- SMD Assembly shall be completed using an automated pick and place machine and re-flow soldering process.
- Leaded components are added by hand and after board has been lacquered.

### ***Post Assembly***

Check each circuit board for the following using the sample as a guide:

- Correct orientation of components
- Dry solder joints.
- Solder bridging.
- Overheating of solder joints.
- Pitting of solder joints.

### ***Drying & Lacquering***

- 1 . After washing boards place in drying cabinet for a minimum of 24hrs until dry.
- 2 . Take boards from drying cabinet and lacquer immediately under heat lamps using CHRFCPL01 lacquer.
- 3 . Leave lacquer to dry under heat lamps for a minimum of 1 hour.

## **3. Appendix One: Bill of Materials**

Stock code	Description	Drawing office no.	U/M	Cat.	Rev Rel	Ebq	Pan	Lead Time						
0085	Opto-Isolator, RS232 Comm's		EA	M		50.000	1.000	82						
Lv	Component	Seq Description	Quantity per	U/M	On-date	Off-date	Qty	Scrap %	Rev Rel	Op	Cat	Prt	Lt	
01	430022	CASE DB25-TO-DB25 PLASTIC	1.0000	EA						1	B	N	Y	30
01	210110	PACK CONN DB9F-DB25F ADAPTOR	1.0000	EA						7	B	N	Y	30
01	210111	PACK CONN DB9M-DB25M ADAPTOR	1.0000	EA						7	B	N	Y	30
01	250018	PACK CABLE DB9F-DB9M FEED-THRU	1.0000	EA						7	B	N	Y	30
01	510057	PACK MANUAL 0085 REFERENCE V1.1	1.0000	EA						7	B	N	Y	15
01	520134	PACK LABEL 0085 OPTO-ISO 232/485PKG	1.0000	EA						7	B	N	Y	15
01	830005	PACK F/S BAG PLSTC CLR SEAL 230x150	1.0000	EA						7	B	N	Y	15
01	620041	PTH PCB-ASSY 0085 MAIN BD	1.0000	EA						4	G	N	Y	79
02	180025	PTH LED RED ROUND 3MM LD	1.0000	EA						4	B	N	Y	75
02	180026	PTH LED GREEN ROUND 3MM LD	1.0000	EA						4	B	N	Y	75
02	210082	PTH CONN DC-PWR SKT 2.1MM ROUND	1.0000	EA						4	B	N	Y	60
02	210107	PTH CONN DB25 MALE SOLDER-LINE	1.0000	EA						4	B	N	Y	60
02	210108	PTH CONN DB25 FEMALE SOLDER-LINE	1.0000	EA						4	B	N	Y	60
02	420097	PTH O-RING 7/32" x 1/16" 0.070 ND	1.0000	EA						4	B	N	Y	15
01	610031	SMT SMT-ASSY 0085 MAIN BD	1.0000	EA				2.00		2	G	N	Y	78
02	310051	PCB PCB 0085 COMMS OPTO ISO V1.0	1.0000	EA						2	B	N	Y	30
02	110009	SMT CAP 100N 10% 50V X7R SMT 1206	1.0000	EA						2	B	N	Y	75
02	110016	SMT CAP 100N 10% 50V X7R SMT 0805	16.0000	EA						2	B	N	Y	75
02	110017	SMT CAP 10U 20% 35V ELEC SMT	1.0000	EA						2	B	N	Y	75
02	130009	SMT RES 270R 1% 50PPM SMT MINMELF	3.0000	EA						2	B	N	Y	75
02	130048	SMT RES 1K0 1% 50PPM 1/8W SMT0805	2.0000	EA						2	B	N	Y	75
02	130051	SMT RES 4K7 1% 50PPM 1/8W SMT0805	3.0000	EA						2	B	N	Y	75
02	150004	SMT FUSE 600MA SMT	1.0000	EA						2	B	N	Y	75
02	170006	SMT DIODE SIGNL BAS32 SMT SOD80C	2.0000	EA						2	B	N	Y	70
02	170008	SMT DIODE SCHOT MBR5130 SMT XXXXX	2.0000	EA						2	B	N	Y	75
02	170013	SMT IC OPTO-CPLR HCPL0501 SMT XXXX	3.0000	EA						2	B	N	Y	60
02	170016	SMT IC VOLT-REG 5V LF50 SMT XXXX	1.0000	EA						2	B	N	Y	60
02	170061	SMT IC DC-DC CONV 5-5V 12 SMT SO-8	1.0000	EA						2	B	N	Y	75
02	170071	SMT IC RS232 TCVR ESD15KV SMT XXXX	2.0000	EA						2	B	N	Y	75
02	170072	SMT IC RS485 TCVR ESD15KV SMT SO-8	2.0000	EA						2	B	N	Y	60
01	520073	UNIT LABEL 0085 OPTO-ISOLATOR (SET)	1.0000	EA						5	B	N	Y	15

End of report

#### 4. Appendix Two: Change History

Initial Release	8/2/2005

**END OF INSTRUCTION**