



DATE: 05-21-2001  
REV. : C  
CONFIG. NO: 6236  
CUSTOMER: IRCON BV  
LOCATION: AMERSFOORT  
LOCATION: NETHERLANDS

**INFRARAIL SPECIAL NUMBER R730**

**PURPOSE AND DESCRIPTION:**

CUSTOMER REQUIRES A SPECIAL TEMPERATURE RANGE INFRARAIL SYSTEM WITH A SPECIAL OPTICAL RESOLUTION AND A SPECIAL FAULT CONDITION INDICATION TO WARN THE USER WHEN THE CABLE IS DISCONNECTED.

MODEL: DNE99-99C  
RANGE: 375 - 850 DEG. C  
OPTICAL RESOLUTION: D/50 W/FIXED FOCUS @ 30"  
WAVELENGTH: 1.49 TO 1.60 microns

**GENERALITY OF APPLICATION AND RESTRICTIONS:**

1. THE SENSOR AMBIENT TEMPERATURE IS RESTRICTED TO A MAXIMUM OF 150 DEG. F (66 DEG. C).
2. EMISSIVITY IS RESTRICTED TO 0.3 FOR THE FIRST 25 DEG. C OF THE TEMPERATURE SPAN.
3. ACCURACY FOR THIS SYSTEM IS 1.0% OF FULL SCALE TEMPERATURE.

UNRESTRICTED, SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

WRITTEN BY: Ami DONADO DATE: 5-21-2001  
AMI DONADO

APPROVED BY: Ami DONADO DATE: 5-21-2001

**INFRARAIL SPECIAL NUMBER R730 CONTINUED,**

**PRODUCTION INSTRUCTIONS:**

START WITH A STANDARD SENSOR MODEL DNE31-13C AND MAKE THE FOLLOWING CHANGES:

REFERENCE DETECTOR ASSEMBLY NO. C11209

1. USE DETECTOR P.N. 590942 (InGaAs) IN PLACE OF THE STANDARD SILICON DETECTOR.
2. WIRE THE DETECTOR PER DETAIL A OF DRAWING # C-11207.
3. USE FILTER P.N. 640552 (1.49 – 1.60 microns).

REFERENCE SENSING HEAD FINAL ASSEMBLY NO. C11201:

1. USE DETECTOR FIELD STOP P.N. 451323 (0.044" DIA ) IN PLACE OF ITEM 1 P.N. 451322 ( 0.022" DIA).

START WITH A MODEL DNE31-13C ELECTRONIC MODULE AND BUILD THE M1 LINEARIZER MODULE PER BILL OF MATERIAL ON PAGE 3.

**CALIBRATION INSTRUCTIONS:**

PRE-CAL: DO THE COMPUTERIZED LINEARIZER TEST PER STANDARD PROCEDURE

SET Iout Head Zero Scale ( 375 deg. C ) = 0.0103 uA

SET Iout Head Full Scale ( 850deg. C ) = 4.4079 Ua

**!!! NOTE !!!: CALIBRATION MUST MAKE THE MODIFICATIONS TO THE ELECTRONIC MODULE FOR THE SPECIAL FAULT CONDITION INDICATION OPTION INCLUDED WITH THIS INSTRUMENT. THE MODIFICATIONS MUST BE COMPLETED BEFORE FINAL CALIBRATION IS DONE. FOLLOW THE INSTRUCTIONS ON PAGE 5 ATTACHED.**

USE TABLE ON PAGE 4 FOR FINAL CALIBRATION.

TEST THE FAULT INDICATION FEATURE BY DISCONNECTING THE CABLE FROM THE SENSING HEAD WHILE STILL FOCUSED ON A BLACK BODY. CHECK THAT THE ELECTRONICS MODULE OUTPUT READS 20.000 Ma OR HIGHER.

**MANUAL INSTRUCTIONS:**

GENERIC INFRARAIL SERIES MANUAL PAGE.

INCLUDE RESTRICTIONS ON PAGE ONE OF THESE PAGES AND CONSULT R200 FOR THE FAULT INDICATION FEATURE.

INFRARAIL SPECIAL NUMBER R730 CONTINUED,

BILL OF MATERIAL

MODULE M1 REFERENCE: DWG.NO.C11194

SYMBOL	PART NO.	DESCRIPTION		
R1	107323011	RESISTOR	732 Kohm	METAL FILM 1/4W 1%
R44	101872011	RESISTOR	18.7 Kohm	METAL FILM 1/4W 1%
R54	101153011	RESISTOR	115 Kohm	METAL FILM 1/4W 1%
R45	101542011	RESISTOR	15.4 Kohm	METAL FILM 1/4W 1%
R55	106192011	RESISTOR	61.9 Kohm	METAL FILM 1/4W 1%
R46	101002011	RESISTOR	10.0 Kohm	METAL FILM 1/4W 1%
R56	101053011	RESISTOR	105 Kohm	METAL FILM 1/4W 1%
R47	106191011	RESISTOR	6.19 Kohm	METAL FILM 1/4W 1%
R57	101783011	RESISTOR	178 Kohm	METAL FILM 1/4W 1%
R48	103571011	RESISTOR	3.57 Kohm	METAL FILM 1/4W 1%
R58	103163011	RESISTOR	316 Kohm	METAL FILM 1/4W 1%
R49	101961011	RESISTOR	1.96 Kohm	METAL FILM 1/4W 1%
R59	105763011	RESISTOR	576 Kohm	METAL FILM 1/4W 1%
R50	101101011	RESISTOR	1.10 Kohm	METAL FILM 1/4W 1%
R60	101134011	RESISTOR	1.13 Mohm	METAL FILM 1/4W 1%
R51	105490011	RESISTOR	549 ohm	METAL FILM 1/4W 1%
R61	102214011	RESISTOR	2.21 Mohm	METAL FILM 1/4W 1%
R52	102740011	RESISTOR	274 ohm	METAL FILM 1/4W 1%
R53	102260011	RESISTOR	226 ohm	METAL FILM 1/4W 1%
R62	104644011	RESISTOR	4.64 Mohm	METAL FILM 1/4W 1%

INFRARAIL SPECIAL NUMBER R730  
TEMPERATURE RANGE: 375 TO 850 DEGREES C  
SPECTRUM: 1.49 TO 1.60 MICRONS

TEMPERATURE DEGREES C	SENSOR OUTPUT IN uAMPS	INDICATOR OUTPUT mAMPS
375.0	0.0103	4.000
400.0	0.0175	4.842
425.0	0.0286	5.684
450.0	0.0453	6.526
475.0	0.0696	7.368
500.0	0.1040	8.211
525.0	0.1515	9.053
550.0	0.2157	9.895
575.0	0.3009	10.737
600.0	0.4117	11.579
625.0	0.5538	12.421
650.0	0.7329	13.263
675.0	0.9558	14.105
700.0	1.2297	14.947
725.0	1.5622	15.789
750.0	1.9617	16.632
775.0	2.4367	17.474
800.0	2.9964	18.316
825.0	3.6502	19.158
850.0	4.4079	20.000

## FAULT INDICATION MODIFICATIONS SPECIAL R730

REMOVE JUMBER JP1  
ON COMPONENT SIDE

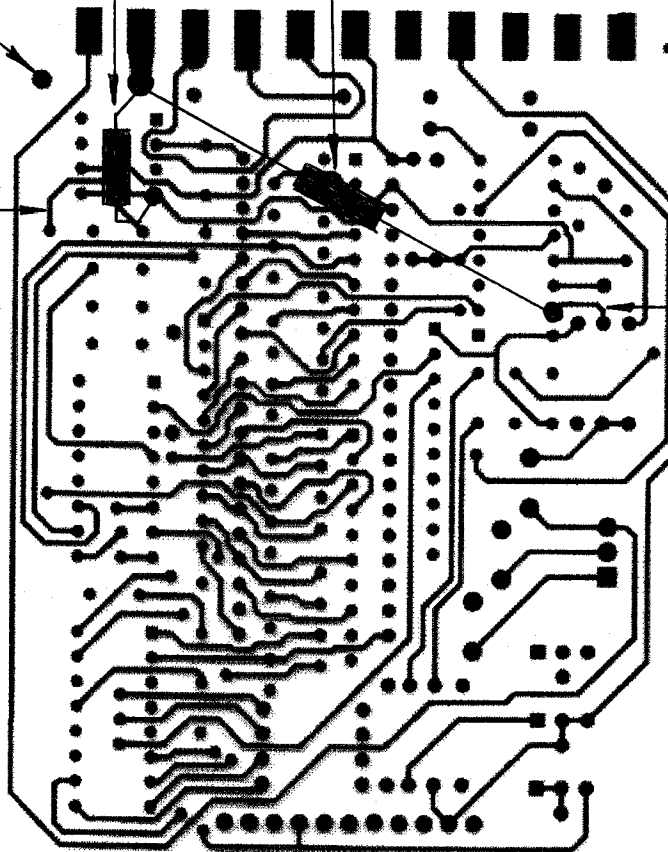
ADD RESISTOR 24.9 Kohm

ADD RESISTOR 274 Kohm

REFERENCE  
FOIL

REFERENCE  
FOIL

NOTE:  
ADD SHRINK  
TUBING TO 274K  
RESISTOR AND  
REMOVE LEADS  
FROM BOARD  
TO PREVENT  
SHORTS AND  
INTERFERENCE



FOIL SIDE, PCB P.N. 50249-3

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
THE NETHERLANDS

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE \_\_\_\_\_

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
THE NETHERLANDS

REQUEST DATE (MM-DD-YY) 08-25-00 PROMISE DATE (MM-DD-YY) 08-25-00

OUR ORDER NO. 74742 ORDER DATE (MM-DD-YY) 07-25-00

YOUR ORDER NO. 200040486

TERMS 0.00/0/180

F.O.B. \_\_\_\_\_

CODE 1001 (100.00)

VIA MSAS

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

*99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN#6236 <i>W.O.#7215</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMPLETE  Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 4 meters. 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	6	0.00	840.00	5040.00
2	MOD-CHARGES	MODIFICATION OF PRODUCT	6	0.00	105.00	630.00
<b>GRAND TOTAL</b>						

*New Special Temp range of 375-850C  
D/50 Res and cable fault indicator*

*Prof 7/29*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 008239

IRCON INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714

REQUEST DATE (MM-DD-YY) 02-13-01 PROMISE DATE (MM-DD-YY) 02-13-01

OUR ORDER NO. 76575 ORDER DATE (MM-DD-YY) 02-06-01

YOUR ORDER NO. WARRANTY-REPLACEMENT

TERMS 0.00/0/30

F.O.B. ORIGIN

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE \_\_\_\_\_

MUELLER BRASS CO.  
2199 LAPEER AVE.  
PORT HURON, MI 48060

CODE 1001 (100.00)

VIA UPS RED

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

*DNE99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN-EM#8534 <i>w.o.# 8774</i>	DN_DNE31-13C IRCON INFRARAIL IRT PROCESSOR MODULE ONLY  Consists of the following: 1.0000 - DN ELECTRONIC MODULE 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	6	0.00	0.00	0.00
<i>Redo Special No R730 375-850C with D/50 Resolution Cable Break alarm</i>						
						<i>PAB 2/6</i>
GRAND TOTAL						USD0.00

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

See REV B  
2-13-2001

PAGE 1 OF 4

DATE: 07-27-2000  
REV.: A  
CONFIG. NO: 6236  
CUSTOMER: IRCON BV  
LOCATION: AMERSFOORT  
LOCATION: NETHERLANDS

**INFRARAIL SPECIAL NUMBER R730**

**PURPOSE AND DESCRIPTION:**

CUSTOMER REQUIRES A SPECIAL TEMPERATURE RANGE INFRARAIL SYSTEM WITH A SPECIAL OPTICAL RESOLUTION AND A SPECIAL FAULT CONDITION INDICATION TO WARN THE USER WHEN THE CABLE IS DISCONNECTED.

MODEL: DNE99-99C  
RANGE: 375 - 850 DEG. C  
OPTICAL RESOLUTION: D/50 W/FIXED FOCUS @ 30"  
WAVELENGTH: 1.49 TO 1.60 microns

**GENERALITY OF APPLICATION AND RESTRICTIONS:**

1. THE SENSOR AMBIENT TEMPERATURE IS RESTRICTED TO A MAXIMUM OF 150 DEG. F (66 DEG. C).
2. EMISSIVITY IS RESTRICTED TO 0.3 FOR THE FIRST 25 DEG. C OF THE TEMPERATURE SPAN.
3. ACCURACY FOR THIS SYSTEM IS 1.0% OF FULL SCALE TEMPERATURE.

UNRESTRICTED, SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

WRITTEN BY: AMI DONADO DATE: 7-28-2000  
AMI DONADO

APPROVED BY: AMI DONADO DATE: 7-28-2000

**INFRARAIL SPECIAL NUMBER R730 CONTINUED,**

**PRODUCTION INSTRUCTIONS:**

START WITH A STANDARD SENSOR MODEL DNE31-13C AND MAKE THE FOLLOWING CHANGES:

REFERENCE DETECTOR ASSEMBLY NO. C11209

1. USE DETECTOR P.N. 590792 (InGaAs) IN PLACE OF THE STANDARD SILICON DETECTOR.
2. WIRE THE DETECTOR PER DETAIL A OF DRAWING # C-11207.
3. USE FILTER P.N. 640552 (1.49 – 1.60 microns ).

REFERENCE SENSING HEAD FINAL ASSEMBLY NO. C11201:

1. USE DETECTOR FIELD STOP P.N. 451323 (0.044" DIA ) IN PLACE OF ITEM 1 P.N. 451322 ( 0.022" DIA).

START WITH A MODEL DNE31-13C ELECTRONIC MODULE AND BUILD THE M1 LINEARIZER MODULE PER BILL OF MATERIAL ON PAGE 3.

**CALIBRATION INSTRUCTIONS:**

CALIBRATE PER STANDARD PROCEDURE.

SET Iout Head Zero Scale ( 375 deg. C ) = 0.0103 uA

SET Iout Head Full Scale ( 850deg. C ) = 4.4079 uA

USE TABLE ON PAGE 4 FOR FINAL CALIBRATION.

TEST THE FAULT INDICATION FEATURE BY DISCONNECTING THE CABLE FROM THE SENSING HEAD WHILE STILL FOCUSED ON A BLACK BODY. CHECK THAT THE ELECTRONICS MODULE OUTPUT READS 20.000 Ma OR HIGHER.

**ENGINEERING INSTRUCTIONS:**

MODIFY THE ELECTRONICS MODULE PER AMENDED DRAWING NO. C-20211 OR SEE SPECIAL R200.

**MANUAL INSTRUCTIONS:**

GENERIC INFRARAIL SERIES MANUAL PAGE.

INCLUDE RESTRICTIONS ON PAGE ONE OF THESE PAGES AND CONSULT R200 FOR THE FAULT INDICATIO FEATERE.

INFRARAIL SPECIAL NUMBER R730  
TEMPERATURE RANGE: 375 TO 850 DEGREES C  
SPECTRUM: 1.49 TO 1.60 MICRONS

TEMPERATURE DEGREES C	SENSOR OUTPUT IN uAMPS	INDICATOR OUTPUT mAMPS
375.0	0.0103	4.000
400.0	0.0175	4.842
425.0	0.0286	5.684
450.0	0.0453	6.526
475.0	0.0696	7.368
500.0	0.1040	8.211
525.0	0.1515	9.053
550.0	0.2157	9.895
575.0	0.3009	10.737
600.0	0.4117	11.579
625.0	0.5538	12.421
650.0	0.7329	13.263
675.0	0.9558	14.105
700.0	1.2297	14.947
725.0	1.5622	15.789
750.0	1.9617	16.632
775.0	2.4367	17.474
800.0	2.9964	18.316
825.0	3.6502	19.158
850.0	4.4079	20.000

OK  
SAVE FOR REFERENCE  
ONLY.

PAGE 2 OF 4

**INFRARAIL SPECIAL NUMBER R730**

REVISION: A  
DATE: 07-27-2000

**PRODUCTION INSTRUCTIONS:**

FOR THE ELECTRONICS MODULE, INSTALL M1 MODULE AS PER BILL OF MATERIAL ON PAGE 3.

WHEN ASSEMBLY IS COMPLETED, DELIVER THE ELECTRONICS MODULE TO ENGINEERING FOR ADDITIONAL MODIFICATIONS.

FOR THE SENSING HEAD, START WITH A MODEL DNE31-13C SENSOR AND MAKE THE FOLLOWING CHANGES:

DETECTOR ASSEMBLY (C11209) CHANGES:

1. FOR THE DETECTOR , USE DETECTOR P.N. 590792 (InGaAs) IN PLACE OF SILICON DETECTOR.
2. WIRE THE DETECTOR PER **DETAIL A** OF DRAWING C-11207.
3. FOR THE FILTER USE P.N. 64055-2 (1.49 - 1.6 um).

FOR THE SENSING HEAD FINAL ASSEMBLY (C11201) , USE DETECTOR FIELD STOP P.N. 45132-3 (0.044 " I.D.) IN PLACE OF ITEM 1 P.N.451322 (.022 DIA.).

**CALIBRATION INSTRUCTIONS:**

CALIBRATE AS PER STANDARD.

$I_{sc} @ T_{bb} 800^{\circ}C = 2.99 \mu A.$

TEST THE FAULT INDICATION FEATURE BY DISCONNECTING THE INTERCONNECTING CABLE FROM THE SENSOR WHILE FOCUSED ON A BLACKBODY. WHEN THIS IS DONE, THE ELECTRONICS MODULE OUTPUT SHOULD BE 20.00 mA. THIS HIGH OUTPUT WITH THE SENSOR DISCONNECTED, PROVIDES THE CUSTOMER WITH A FAULT INDICATION SIGNAL TO WARN OF A DISCONNECTED SENSOR CABLE.

**ENGINEERING INSTRUCTIONS:**

MODIFY THE ELECTRONICS MODULE PER AMMENDED DRAWING C-20211

**MANUAL INSTRUCTIONS:**

GENERIC INFRARAIL SERIES MANUAL.

PAGE 1 OF 4  
DATE: 07-27-2000  
REVISION:A  
CFG. NO: 6236  
CUSTOMER: IRCON BV  
LOCATION: NETHERLAND

**INFRARAIL SPECIAL NUMBER R730**

**PURPOSE AND DESCRIPTION:**

CUSTOMER REQUIRES A INFRARAIL TEMPERATURE SYSTEM WITH A SPECIAL TEMPERATURE RANGE AND OPTICAL RESOLUTION. IN ADDITION, THE CUSTOMER ALSO REQUIRES A FAULT CONDITION INDICATOR THAT WILL WARN THE USER WHEN THE SENSOR CABLE IS DISCONNECTED.

MODEL: DNE99-99C  
RANGE: 375 - 850 DEG. C  
OPTICAL RESOLUTION: D/50 WITH FIXED FOCUS AT 30"  
WAVELENGTH: 1.49 - 1.6  $\mu$ m

**GENERALITY OF APPLICATION AND RESTRICTIONS:**

RESTRICTIONS: SENSING HEAD RESTRICTED TO AMBIENT TEMPERATURES OF 0° TO 150°F (-17° TO 65°C) AND AN EMISSIVITY SETTING OF 0.3 FOR THE FIRST 25°C OF THE TEMPERATURE SPAN. ACCURACY FOR THIS SYSTEM IS 1.0%.

UNRESTRICTED: SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

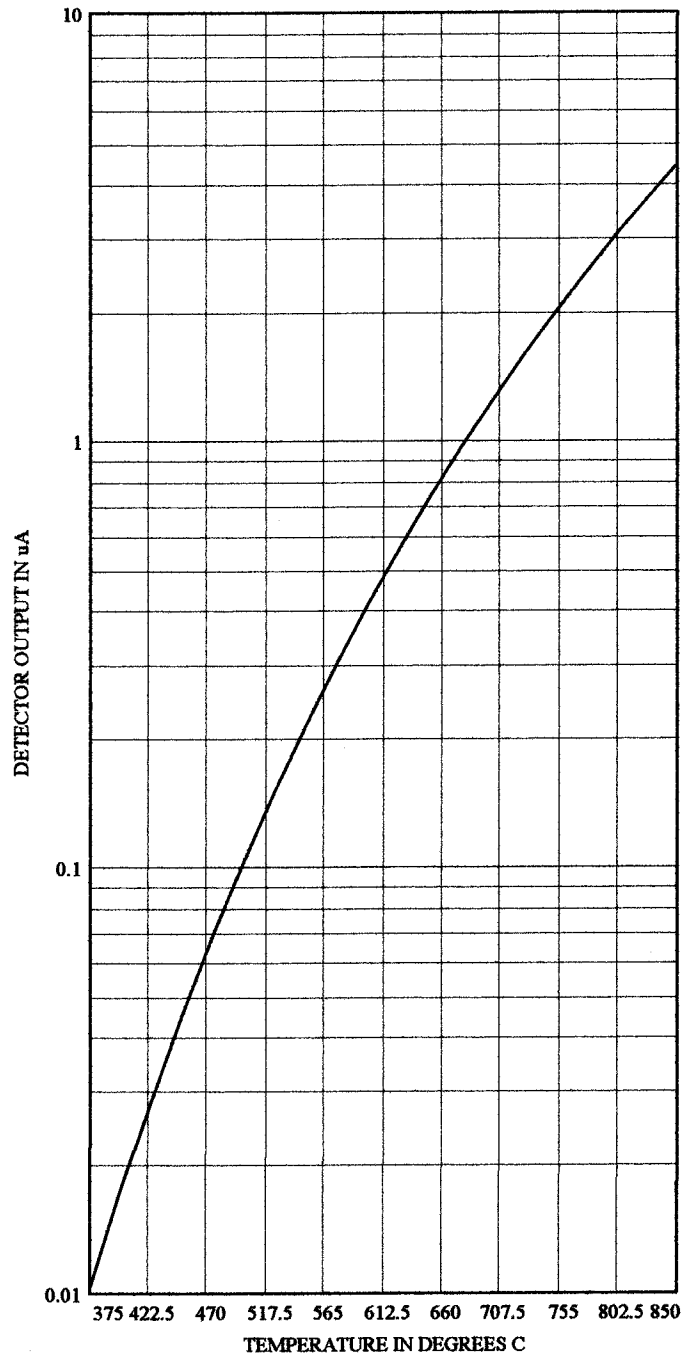
WRITTEN BY: Ami DONADO

APPROVED BY: Ami DONADO DATE: 7-27-2000

INFRARAIL MODEL NUMBER DNFFB-13C  
 TEMPERATURE RANGE: 375 - 800 C  
 RESOLUTION: D/50  
 SPECTRUM: 1.49 - 1.60

PAGE 4 OF 4  
 REV. A

Temp DEG. C	SENSOR CURRENT IN uA	Indicator current 4 - 20 mADC
TC	Isc(TC)	Iout(TC)
850	4.408	20.000
825	3.651	19.158
800	2.997	18.316
775	2.438	17.474
750	1.963	16.632
725	1.563	15.789
700	1.231	14.947
675	0.957	14.105
650	0.734	13.263
625	0.554	12.421
600	0.412	11.579
575	0.301	10.737
550	0.216	9.895
525	0.152	9.053
500	0.104	8.211
475	0.070	7.368
450	0.045	6.526
425	0.029	5.684
400	0.018	4.842
375	0.010	4.000



For Reference only  
 V. L 1/27/2000

SEE REV C

A.D. 5-22-01

PAGE 1 OF 5

DATE: 02-13-01

REV.: B

CONFIG. NO: 6236

CUSTOMER: IRCON BV

LOCATION: AMERSFOORT

LOCATION: NETHERLANDS

### INFRARAIL SPECIAL NUMBER R730

#### PURPOSE AND DESCRIPTION:

CUSTOMER REQUIRES A SPECIAL TEMPERATURE RANGE INFRARAIL SYSTEM WITH A SPECIAL OPTICAL RESOLUTION AND A SPECIAL FAULT CONDITION INDICATION TO WARN THE USER WHEN THE CABLE IS DISCONNECTED.

MODEL: DNE99-99C

RANGE: 375 - 850 DEG. C

OPTICAL RESOLUTION: D/50 W/FIXED FOCUS @ 30"

WAVELENGTH: 1.49 TO 1.60 microns

#### GENERALITY OF APPLICATION AND RESTRICTIONS:

1. THE SENSOR AMBIENT TEMPERATURE IS RESTRICTED TO A MAXIMUM OF 150 DEG. F (66 DEG. C).
2. EMISSIVITY IS RESTRICTED TO 0.3 FOR THE FIRST 25 DEG. C OF THE TEMPERATURE SPAN.
3. ACCURACY FOR THIS SYSTEM IS 1.0% OF FULL SCALE TEMPERATURE.

UNRESTRICTED, SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

WRITTEN BY:

*Ami DONADO*

AMI DONADO

DATE:

*02-13-01*

APPROVED BY:

*Ami DONADO*

DATE:

*02-13-01*

## INFRARAIL SPECIAL NUMBER R730 CONTINUED,

### PRODUCTION INSTRUCTIONS:

START WITH A STANDARD SENSOR MODEL DNE31-13C AND MAKE THE FOLLOWING CHANGES:

REFERENCE DETECTOR ASSEMBLY NO. C11209

1. USE DETECTOR P.N. 590792 (InGaAs) IN PLACE OF THE STANDARD SILICON DETECTOR.
2. WIRE THE DETECTOR PER DETAIL A OF DRAWING # C-11207.
3. USE FILTER P.N. 640552 (1.49 – 1.60 microns ).

REFERENCE SENSING HEAD FINAL ASSEMBLY NO. C11201:

1. USE DETECTOR FIELD STOP P.N. 451323 (0.044" DIA ) IN PLACE OF ITEM 1 P.N. 451322 ( 0.022" DIA).

START WITH A MODEL DNE31-13C ELECTRONIC MODULE AND BUILD THE M1 LINEARIZER MODULE PER BILL OF MATERIAL ON PAGE 3.

### CALIBRATION INSTRUCTIONS:

PRE-CAL: DO THE COMPUTERIZED LINEARIZER TEST PER STANDARD PROCEDURE

SET Iout Head Zero Scale ( 375 deg. C ) = 0.0103 uA

SET Iout Head Full Scale ( 850deg. C ) = 4.4079 Ua

**!!! NOTE !!!: CALIBRATION MUST MAKE THE MODIFICATIONS TO THE ELECTRONIC MODULE FOR THE SPECIAL FAULT CONDITION INDICATION OPTION INCLUDED WITH THIS INSTRUMENT. THE MODIFICATIONS MUST BE COMPLETED BEFORE FINAL CALIBRATION IS DONE. FOLLOW THE INSTRUCTIONS ON PAGE 5 ATTACHED.**

USE TABLE ON PAGE 4 FOR FINAL CALIBRATION.

TEST THE FAULT INDICATION FEATURE BY DISCONNECTING THE CABLE FROM THE SENSING HEAD WHILE STILL FOCUSED ON A BLACK BODY. CHECK THAT THE ELECTRONICS MODULE OUTPUT READS 20.000 Ma OR HIGHER.

### MANUAL INSTRUCTIONS:

GENERIC INFRARAIL SERIES MANUAL PAGE.

INCLUDE RESTRICTIONS ON PAGE ONE OF THESE PAGES AND CONSULT R200 FOR THE FAULT INDICATION FEATURE.

INFRARAIL SPECIAL NUMBER R730  
TEMPERATURE RANGE: 375 TO 850 DEGREES C  
SPECTRUM: 1.49 TO 1.60 MICRONS

TEMPERATURE DEGREES C	SENSOR OUTPUT IN uAMPS	INDICATOR OUTPUT mAMPS
375.0	0.0103	4.000
400.0	0.0175	4.842
425.0	0.0286	5.684
450.0	0.0453	6.526
475.0	0.0696	7.368
500.0	0.1040	8.211
525.0	0.1515	9.053
550.0	0.2157	9.895
575.0	0.3009	10.737
600.0	0.4117	11.579
625.0	0.5538	12.421
650.0	0.7329	13.263
675.0	0.9558	14.105
700.0	1.2297	14.947
725.0	1.5622	15.789
750.0	1.9617	16.632
775.0	2.4367	17.474
800.0	2.9964	18.316
825.0	3.6502	19.158
850.0	4.4079	20.000

## FAULT INDICATION MODIFICATIONS SPECIAL R730

REMOVE JUMBER JP1  
ON COMPONENT SIDE

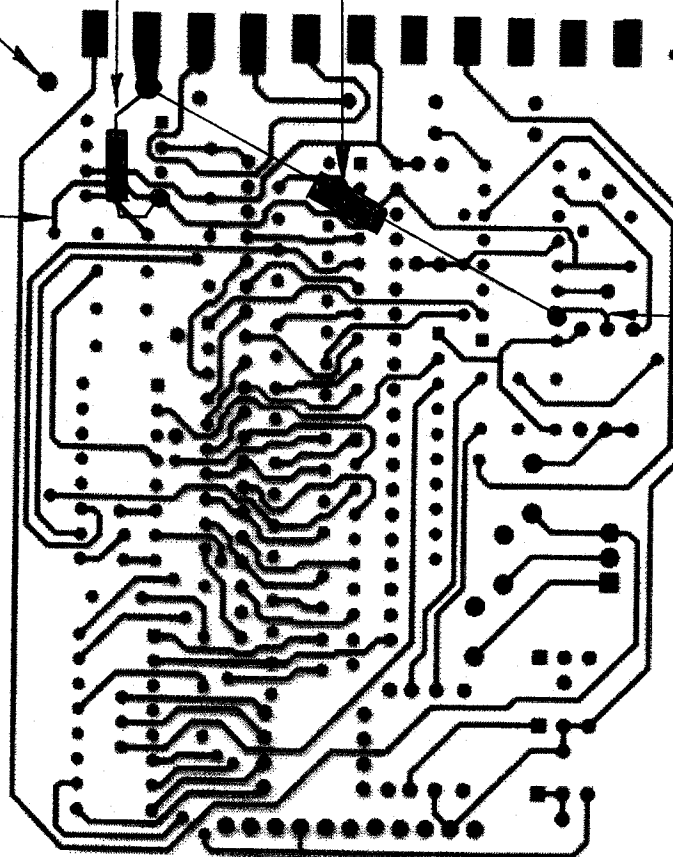
ADD RESISTOR 24.9 Kohm

ADD RESISTOR 274 Kohm

REFERENCE  
FOIL

REFERENCE  
FOIL

NOTE:  
ADD SHRINK  
TUBING TO 274K  
RESISTOR AND  
REMOVE LEADS  
FROM BOARD  
TO PREVENT  
SHORTS AND  
INTERFERENCE



FOIL SIDE, PCB P.N. 50249-3

R730

S/077502

## Section 1 — GENERAL INFORMATION

### 1.5 PRODUCT MODIFICATION

IRCON InfraRail Model DNE99-99C is modified for a special temperature range of 375° to 850°C, an optical resolution of D/50 with 30" fixed focus and a wavelength of 1.49 - 1.60 microns per customer specifications.

In addition, customer requires a special fault condition indicator that warns when the sensor cable is disconnected. The special fault indication provides for a current output from the signal processor which exceeds 20 mA<sub>dc</sub> any time the sensor is disconnected from the signal processor.

**Restrictions:**

- 1) Sensor ambient temperature is restricted to a maximum of 150°F (66 °C).
- 2) Emissivity is restricted to 0.3 for the first 25 degree C of the temperature span.
- 3) Accuracy for this system is 1.0% of full scale temperature.

This modified instrument may be used with all standard InfraRail options and accessories.

Details of this modification are retained in IRCON Engineering Files as InfraRail Special No. R730.

**NOTE:** Ircon, Inc. is the sole owner in all respects of any product or software modification or design herein specified.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

REQUEST DATE (MM-DD-YY)

08-20-01

PROMISE DATE (MM-DD-YY)

08-20-01

OUR ORDER NO.

78132

ORDER DATE (MM-DD-YY)

07-30-01

YOUR ORDER NO.

R8574

TERMS

0.00/0/30

F.O.B.

ORIGIN

CODE

1004 (100.00)

VIA

UPS

SPECIAL SHIPPING INSTRUCTIONS

SOLD TO

CUSTOMER NO.

011400

MUELLER BRASS COMPANY  
ATTN: ACCOUNTS PAYABLE  
2199 LAPEER AVE.  
PORT HURON, MI 48060

SHIPPING ADDRESS

TAX CODE

MUELLER BRASS COMPANY  
2199 LAPEER AVE.  
PORT HURON, MI 48060

*ONE99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN#10478 <i>w.o. # 10014</i>	<p><i>ONE99-99C</i></p> <p>DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMPLETE</p> <p><i>Relo Special No R730</i> <i>Temp range 275-850 C</i></p> <p>Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C</p> <p><i>any Qty \$400</i></p>	1	0.00	2280.00	2280.00
2	DN-EM#10479 <i>w.o. # 10015</i>	<p><i>ONE99-99C</i></p> <p>DN_DNE31-13C IRCON INFRARAIL IRT PROCESSOR MODULE ONLY</p> <p><i>same as item 1</i></p> <p>Consists of the following: 1.0000 - DN ELECTRONIC MODULE 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E)</p> <p><i>any Qty \$200</i></p>	1	0.00	1195.00	1195.00
					<b>GRAND TOTAL</b>	

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



**IRCON, INC.**  
 7300 N. Natchez Ave.  
 Niles, IL 60714 USA

Phone 847-967-5151  
 Toll Free 800-323-7660  
 Fax 847-647-0948

REQUEST DATE (MM-DD-YY)  
**08-20-01**

PROMISE DATE (MM-DD-YY)  
**08-20-01**

OUR ORDER NO.  
**78132**

ORDER DATE (MM-DD-YY)  
**07-30-01**

YOUR ORDER NO.  
**R8574**

TERMS  
**0.00/0/30**

F.O.B.  
**ORIGIN**

CODE  
**1004 (100.00)**

VIA  
**UPS**

SPECIAL SHIPPING INSTRUCTIONS

SOLD TO CUSTOMER NO. **011400**

**MUELLER BRASS COMPANY  
 ATTN: ACCOUNTS PAYABLE  
 2199 LAPEER AVE.  
 PORT HURON, MI 48060**

SHIPPING ADDRESS TAX CODE  
**MUELLER BRASS COMPANY  
 2199 LAPEER AVE.  
 PORT HURON, MI 48060**

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
2	DN-EM#10479 (CONTINUED)	1.0000 - 800-1300C  DN_DNE31-13C				
<b>GRAND TOTAL</b>						<b>USD3,475.00</b>

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

**SHIP TO:** IRCON, INC.  
 7300 N. NATCHEZ AVE.  
 NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

08/21/01 10:10 AM



# INFRARAIL CALIBRATION TEST REPORT

TECHNICIAN# 639

SERIAL# 59743

MODEL# DNE99-99C

SPECIAL# R730

FULL SCALE 850C

FS CURRENT= 4.400 uA

$\lambda_{max}$ = 1.60

ZERO SCALE 375C

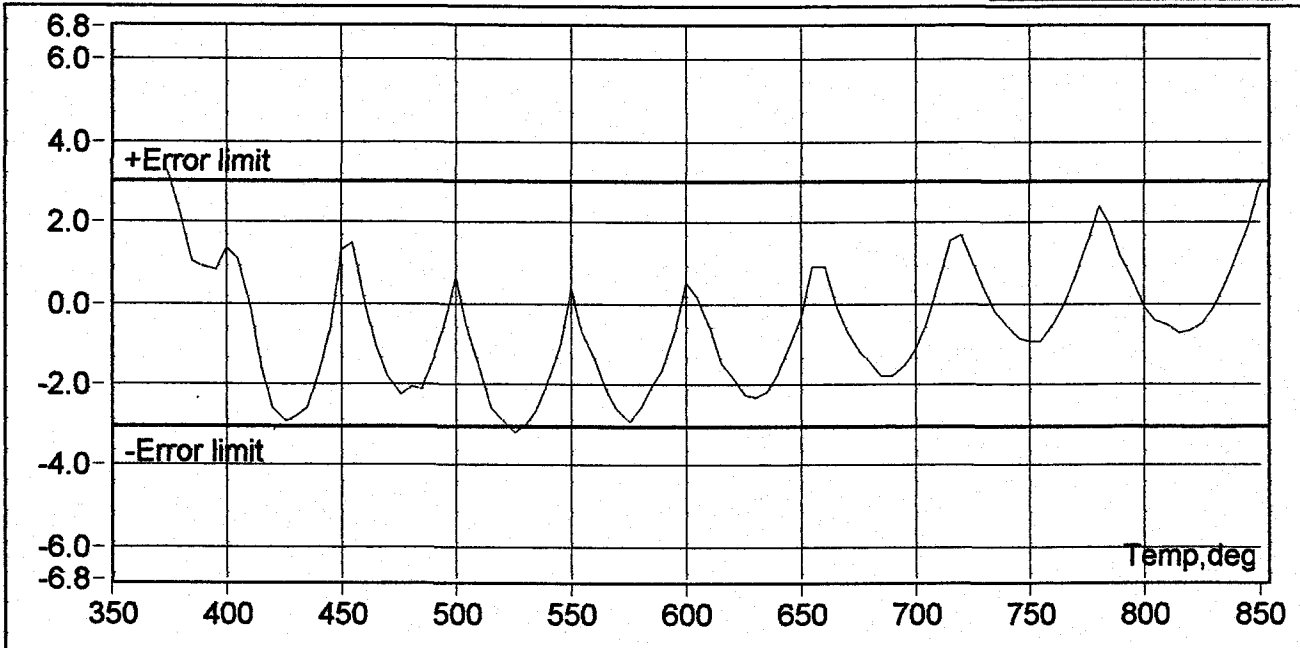
ZS CURRENT= 0.010 uA

$\lambda_{min}$ = 1.49

TEST NAME	SPEC.	TEST RESULT	EVAL
1. REFERENCE 3.2 V	3.2 $\pm$ 0.005 V	3.200	P
2. CURRENT OUTPUT	4 $\pm$ 0.05 mA	4.04	P
	20 $\pm$ 0.05 mA	20.00	
3. LINEARIZER TEST			P
4. EMISSIVITY CONTROL			P
5. RESPONSE TIME	10 $\pm$ 2 S	10.6	P
	10 $\pm$ 2 ms	11.0	
6. P-P DECAY RATE	< 0.05%	0.038	P
	5 - 6.5 %	5.9	

SEE SPECIAL PAGES  
 R 61 - 2.80M

Temp. Error, deg



Tech# \_\_\_\_\_

DATE \_\_\_\_\_

QA# \_\_\_\_\_

08/21/01 10:36 AM



# INFRARAIL CALIBRATION TEST REPORT

TECHNICIAN# 639

SERIAL# 29743

MODEL# DNE99-99C

SPECIAL# R730

FULL SCALE 850C

FS CURRENT= 4.400  $\mu$ A

$\lambda_{max}$ = 1.60

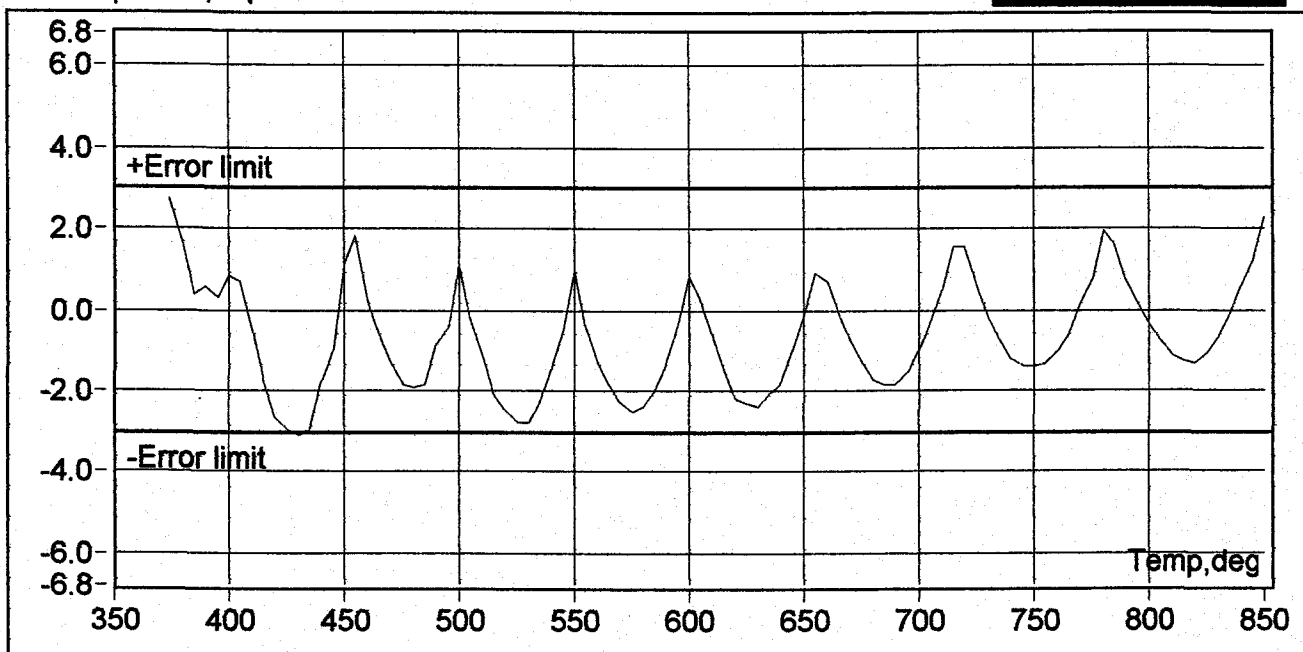
ZERO SCALE 375C

ZS CURRENT= 0.010  $\mu$ A

$\lambda_{min}$ = 1.49

TEST NAME	SPEC.	TEST RESULT	EVAL
1. REFERENCE 3.2 V	3.2 $\pm$ 0.005 V	3.200	P
2. CURRENT OUTPUT	4 $\pm$ 0.05 mA	4.00	P
	20 $\pm$ 0.05 mA	20.00	
3. LINEARIZER TEST			P
4. EMISSIVITY CONTROL			P
5. RESPONSE TIME	10 $\pm$ 2 S	11.1	P
	10 $\pm$ 2 mS	10.0	
6. P-P DECAF RATE	< 0.05%	0.032	P
	5 - 6.5 %	6.0	

Temp. Error, deg



Tech# \_\_\_\_\_

DATE \_\_\_\_\_

QA# \_\_\_\_\_

08/21/01 10:53 AM



# INFRARAIL CALIBRATION TEST REPORT

TECHNICIAN# 639

SERIAL# 19743

MODEL# DNE99-99C

SPECIAL# R730

FULL SCALE 850C

FS CURRENT= 4.400  $\mu$ A

$\lambda_{max}$ = 1.60

ZERO SCALE 375C

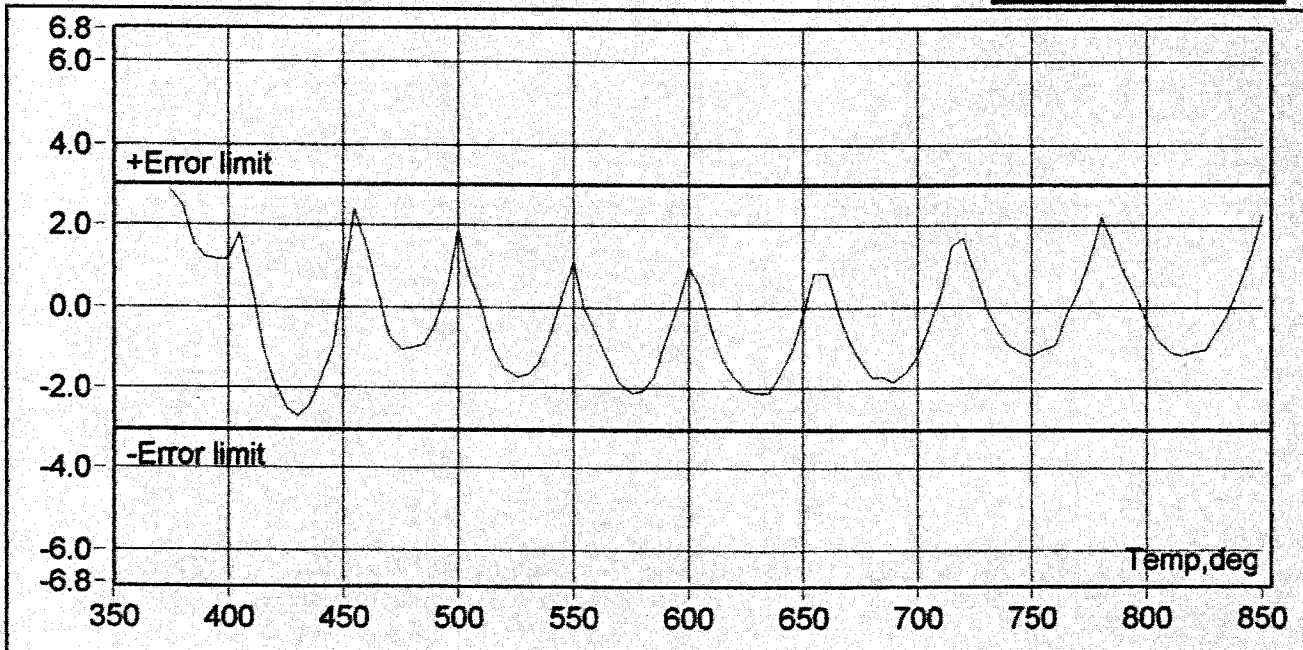
ZS CURRENT= 0.010  $\mu$ A

$\lambda_{min}$ = 1.49

TEST NAME	SPEC.	TEST RESULT	EVAL
1. REFERENCE 3.2 V	3.2 $\pm$ 0.005 V	3.200	P
2. CURRENT OUTPUT	4 $\pm$ 0.05 mA	3.99	P
	20 $\pm$ 0.05 mA	20.01	
3. LINEARIZER TEST			P
4. EMISSIVITY CONTROL			P
5. RESPONSE TIME	10 $\pm$ 2 S	10.3	P
	10 $\pm$ 2 mS	11.0	
6. P-P DECAY RATE	< 0.05%	0.051	P
	5 - 6.5 %	6.6	

*RG1 = 2.61 M*

Temp. Error, deg



Tech# \_\_\_\_\_

DATE \_\_\_\_\_

QA# \_\_\_\_\_

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO CUSTOMER NO. 100897  
  
GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

SHIPPING ADDRESS TAX CODE  
  
GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

REQUEST DATE (MM-DD-YY) 10-23-01 PROMISE DATE (MM-DD-YY) 10-23-01  
OUR ORDER NO. 78557 ORDER DATE (MM-DD-YY) 09-24-01  
YOUR ORDER NO. 78845

TERMS 0.00/0/30

F.O.B. ORIGIN  
CODE 1004 (100.00)

VIA UPS CONSGN

SPECIAL SHIPPING INSTRUCTIONS JOB # 13228.13

*DNE99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN-NC#10990 <i>w.o. # 10358</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMPLETE W/O CABLE  Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	1	0.00	1592.00	1592.00
2	L11201	KIT CABLE E/F INT/EXT - S PVC - INFRARAIL	1	0.00	0.00	0.00
3	AA-4	AIR PURGE ACCESSORY INFRARAIL TYPE E	1	0.00	106.25	106.25
4	AP-1	FLANGED ACCESSORY ADAPTER PLATE	1	0.00	127.50	127.50
					<b>GRAND TOTAL</b>	

*Ready Special NOR 730  
Temp range 375-850C  
PAH 9/25*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



**IRCON, INC.**  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

REQUEST DATE (MM-DD-YY)

01-18-02

PROMISE DATE (MM-DD-YY)

01-18-02

OUR ORDER NO.

79294

ORDER DATE (MM-DD-YY)

01-07-02

YOUR ORDER NO.

82443

TERMS

0.00/0/30

F.O.B.

ORIGIN

CODE

1004 (100.00)

VIA

UPS

SPECIAL SHIPPING INSTRUCTIONS

SOLD TO

CUSTOMER NO.

100897

GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

SHIPPING ADDRESS

TAX CODE

GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

*DNE*  
*99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN-NC#11891 <i>w.o. #10964</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMPLETE W/O CABLE  Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	1	0.00	1592.00	1592.00
2	L11201	KIT CABLE E/F INT/EXT - S PVC - INFRARAIL	1	0.00	0.00	0.00
<b>GRAND TOTAL</b>						

*Redo Special No R 730*  
*Temp range 375-850C*  
*Eng Clg - \$200*  
*RH 1/7*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

Changed R60 FR: 1.13 M $\Omega$  to 130 M $\Omega$

09/28/01 12:39 PM



### INFRARAIL CALIBRATION TEST REPORT

TECHNICIAN# 639

SERIAL# 110990

MODEL# DNE99-99C

SPECIAL# R730

FULL SCALE 850C

FS CURRENT= 4.400  $\mu$ A

$\lambda_{max}$ = 1.60

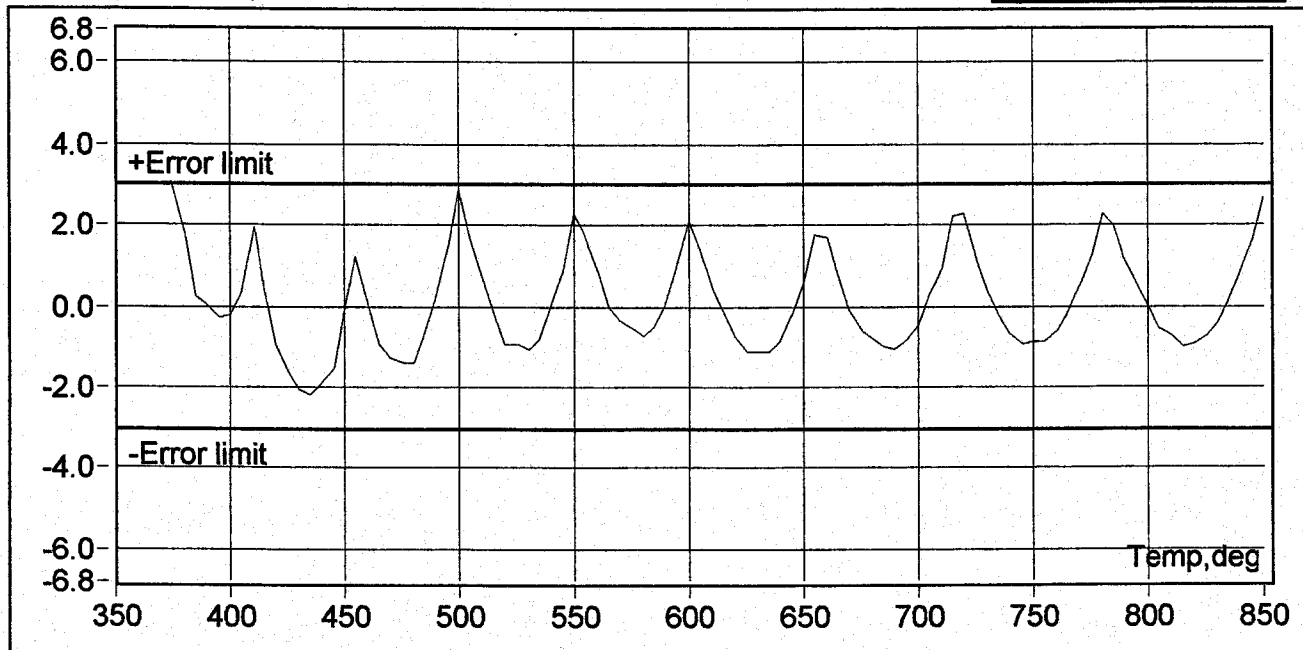
ZERO SCALE 375C

ZS CURRENT= 0.010  $\mu$ A

$\lambda_{min}$ = 1.49

TEST NAME	SPEC.	TEST RESULT	EVAL
1. REFERENCE 3.2 V	3.2 $\pm$ 0.005 V	3.200	P
2. CURRENT OUTPUT	4 $\pm$ 0.05 mA	4.00	P
	20 $\pm$ 0.05 mA	20.01	
3. LINEARIZER TEST			P
4. EMISSIVITY CONTROL			P
5. RESPONSE TIME	10 $\pm$ 2 S	10.5	P
	10 $\pm$ 2 mS	10.0	
6. P-P DECAY RATE	< 0.05%	0.045	P
	5 - 6.5 %	6.3	

Temp. Error, deg



Tech# \_\_\_\_\_

DATE \_\_\_\_\_

QA# \_\_\_\_\_

R730

S/085376

## Section 1 — GENERAL INFORMATION

### 1.5 PRODUCT MODIFICATION

IRCON InfraRail Model DNE99-99C is modified for a special temperature range of 375° to 850°C, an optical resolution of D/50 with 30" fixed focus and a wavelength of 1.49 - 1.60 microns per customer specifications.

In addition, customer requires a special fault condition indicator that warns when the sensor cable is disconnected. The special fault indication provides for a current output from the signal processor which exceeds 20 mA<sub>dc</sub> any time the sensor is disconnected from the signal processor.

**Restrictions:**

- 1) Sensor ambient temperature is restricted to a maximum of 150°F (66 °C).
- 2) Emissivity is restricted to 0.3 for the first 25 degree C of the temperature span.
- 3) Accuracy for this system is 1.0% of full scale temperature.

This modified instrument may be used with all standard InfraRail options and accessories.

Details of this modification are retained in IRCON Engineering Files as InfraRail Special No. R730.

**NOTE:** Ircon, Inc. is the sole owner in all respects of any product or software modification or design herein specified.

W.O. # 10964

Number :DN-NC#11891 - IRCON INFRARAIL IRT SO-LI: 79294\*1

Level	Part Number	Description	Quantity	UM	Alt	MB	X	ECO No.	ECO Date	Start Use	End Use
1	DN0DNE	DN PRICES	1.0000	EA		M	P				
1	C11201-R713	SENSING HEAD FINAL ASSY	1.0000	EA		M	P				
2	451323	FIELD STOP .044DIA	1.0000	EA		B		3709	05-17-1996		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	990300005	RETAINING RING 7/16 OD, .2	1.0000	EA		B		3709	05-17-1996		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B		3709	05-17-1996		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M	P	3709	05-17-1996		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M	P	3770	08-21-1996		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B					
4	640552	FILTER, BANDPASS	1.0000	EA		B					
4	590942	DETECTOR InGaAs 1.6u	1.0000	EA		B					
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B					
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B					
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B					
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B					
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B					
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B					
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B					
4	200204130	SCREW #2-56 X 1/8 PH SLOT	1.0000	EA		B					
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B					
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B					
2	447352	SENSOR, E-HEAD	1.0000	EA		B		3709	05-17-1996		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B		3709	05-17-1996		
2	990100002	EPOXY HARDMAN #4005 GEN P	1.0000	EA		B		3709	05-17-1996		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B		3709	05-17-1996		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B		3709	05-17-1996		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B		3709	05-17-1996		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B		3709	05-17-1996		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B		3709	05-17-1996		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B		3709	05-17-1996		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B		3709	05-17-1996		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B		3709	05-17-1996		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B		3709	05-17-1996		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B		3709	05-17-1996		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B		3709	05-17-1996		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	443502	RETAINING NUT	1.0000	EA		B		3709	05-17-1996		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B		3709	05-17-1996		
2	474772	LABEL GROUND WARNING	1.0000	EA		B		3709	05-17-1996		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B		3709	05-17-1996		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B		3709	05-17-1996		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B		3709	05-17-1996		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B		3709	05-17-1996		
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M	P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B		3671	04-08-1996		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M	P	3671	04-08-1996		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M	P	4202	01-14-1999		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M	P	4202	01-14-1999		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B		3769	08-05-1996		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B		3769	08-05-1996		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B		3769	08-05-1996		
4	532952	OP-AMP OP80GP ULTRA LOW B	2.0000	EA		B		3769	08-05-1996		
4	532322	IC. 4053B ANALOG MUX/DEMUX	1.0000	EA		B		3769	08-05-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B		3769	08-05-1996		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	104993011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B		3769	08-05-1996		

Proprietary and Confidential to IRCON INC

R730

(SOLD WITHOUT CABLE)

Number :DN-NC#11891 - IRCON INFRARAIL IRT SO-LI: 79294\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	Start Use	End Use
				UM						
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA	B		3769	08-05-1996		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA	B		3769	08-05-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA	B		3769	08-05-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA	B		3769	08-05-1996		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA	B		3769	08-05-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA	B		3769	08-05-1996		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA	B		3769	08-05-1996		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA	B					
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA	B		3769	08-05-1996		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA	B		3769	08-05-1996		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA	B		3769	08-05-1996		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA	B		3769	08-05-1996		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA	B		3769	08-05-1996		
4	551122	CHOKE 9250-122 1.2 UH, .1	2.0000	EA	B		3769	08-05-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA	B		3769	08-05-1996		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA	B		3769	08-05-1996		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA	B		3769	08-05-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA	B		3769	08-05-1996		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA	B		3769	08-05-1996		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA	B		3769	08-05-1996		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA	B		3769	08-05-1996		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA	B		3769	08-05-1996		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA	B		3769	08-05-1996		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA	B		3769	08-05-1996		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA	B		3769	08-05-1996		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA	M P					
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA	B		3769	08-05-1996		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA	M P					
2	C11186	PREAMP/LINEARIZER PCB AS	1.0000	EA	M P		3671	04-08-1996		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA	M P		3659	04-12-1996		
3	LDN100	PREAMP/LIN PCB ASSY INFR	1.0000	EA	M P		3659	04-12-1996		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA	B		3767	08-07-1996		
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA	M P					
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA	M P					
4	532982	OP-AMP AD548CQ LOW PWR	1.0000	EA	B		3767	08-07-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	2.0000	EA	B		3767	08-07-1996		
4	532992	OP-AMP OP490EY LOW VOLT Q	1.0000	EA	B		3767	08-07-1996		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA	B		3767	08-07-1996		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA	B		3767	08-07-1996		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA	B		3767	08-07-1996		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	4.0000	EA	B		3767	08-07-1996		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA	B		3767	08-07-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA	B		3767	08-07-1996		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA	B		3767	08-07-1996		
4	551122	CHOKE 9250-122 1.2 UH, .1	1.0000	EA	B		3767	08-07-1996		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA	B		3767	08-07-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA	B		3767	08-07-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA	B		3767	08-07-1996		
4	521932	CAP. 100PF COG 200V	1.0000	EA	B		3767	08-07-1996		
4	521962	CAP. 10PF NPO 200V .2LS	2.0000	EA	B		3767	08-07-1996		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA	B		3767	08-07-1996		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA	B		3767	08-07-1996		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA	B		3767	08-07-1996		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA	B		3767	08-07-1996		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA	M P					
4	574432	SOCKET 40 POS DIP 5HT EL	1.0000	EA	B		3767	08-07-1996		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA	M P					
4	526002	CAP. SMC 330Pf NPO 50V 5%	1.0000	EA	B		3767	08-07-1996		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA	B		3767	08-07-1996		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA	M P					
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA	M P		3671	04-08-1996		
3	LDN300	PCB INTERCONN ASSY. (INFRA	1.0000	EA	M P		3767	08-07-1996		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA	B		3767	08-07-1996		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA	B		3767	08-07-1996		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	4.0000	EA	B		3767	08-07-1996		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA	B		3767	08-07-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA	B		3767	08-07-1996		

Proprietary and Confidential to IRCON INC

Number :DN-NC#11891 - IRCON INFRARAIL IRT SO-LI: 79294\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB	X	ECO No.	ECO Date.	Start Use	End Use..
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B		3721	08-01-1996		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B		3721	08-01-1996		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B		3671	04-08-1996		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M	P	3671	04-08-1996		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M	P	4030	10-08-1997		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B					
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B					
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B					
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B					
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B					
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B					
2	C11189	RESPONSE TIME POT/ CONN	1.0000	EA		M	P	3671	04-08-1996		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M	P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B					
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B					
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B					
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B					
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B					
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B					
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M	P	3671	04-08-1996		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M	P				
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B		3767	08-07-1996		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B		3767	08-07-1996		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B		3767	08-07-1996		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B		3767	08-07-1996		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B		3767	08-07-1996		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B		3767	08-07-1996		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B		3767	08-07-1996		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B		3671	04-08-1996		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B		3671	04-08-1996		
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B		3671	04-08-1996		
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M	P	3671	04-08-1996		
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B					
3	T-C11194-1	SELECTOR M1 MODULE VALUES	0.0000	EA		B					
3	T-C11194-3	GT M15 MODULE VALUES	0.0000	EA		B					
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B		3671	04-08-1996		
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B		3671	04-08-1996		
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B		3671	04-08-1996		
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B		3671	04-08-1996		
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M	P	3671	04-08-1996		
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B		3694	04-17-1996		
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B		3671	04-08-1996		
1	U-M1-R730	MODULE ASSEMBLY M1	1.0000	EA		M	P				
2	107323011	RES. 732K OHM MF 1/4W 1%	1.0000	EA		B					
2	101872011	RES. 1847K OHM MF 1/4W 1%	1.0000	EA		B					
2	101153011	RES. 115K OHM MF 1/4W 1%	1.0000	EA		B					
2	101542011	RES. 15.4K OHM MF 1/4W 1%	1.0000	EA		B					
2	106192011	RES. 61.9K OHM MF 1/4W 1%	1.0000	EA		B					
2	101002011	RES. 1010K OHM MF 1/4W 1%	1.0000	EA		B					
2	101053011	RES. 105K OHM MF 1/4W 1%	1.0000	EA		B					
2	106191011	RES. 61.9K OHM MF 1/4W 1%	1.0000	EA		B					
2	101783011	RES. 178K OHM MF 1/4W 1%	1.0000	EA		B					
2	103571011	RES. 3.57K OHM MF 1/4W 1%	1.0000	EA		B					
2	103163011	RES. 316K OHM MF 1/4W 1%	1.0000	EA		B					
2	101961011	RES. 1096K OHM MF 1/4W 1%	1.0000	EA		B					
2	105763011	RES. 576K OHM MF 1/4W 1%	1.0000	EA		B					
2	101101011	RES. 1.10K OHM MF 1/4W 1%	1.0000	EA		B					
2	101134011	RES. 1.13M OHM MF 1/4W 1%	1.0000	EA		B		3671	04-08-1996		
2	105490011	RES. 549 OHM MF 1/4W 1%	1.0000	EA		B		3671	04-08-1996		
2	102214011	RES. 2.21M OHM MF 1/4W 1%	1.0000	EA		B		3671	04-08-1996		
2	102740011	RES. 274 OHM MF 1/4W 1%	1.0000	EA		B		3671	04-08-1996		
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B					
2	104644011	RES. 4.64M OHM MF 1/4W 1%	1.0000	EA		B					
		TERM. BLOCK JUMPER QUICK									
		CONN. KEYING ELEMENT (DN-									
		LABEL, SERIAL NUMBER, DIN						3671	04-08-1996		
		LABEL, DIN BOX, INFRARAIL						3671	04-08-1996		
		TERM. BLOCK JUMPER QUICK						3671	04-08-1996		
		MTG CLIP KIT FOR INFRARAI						3671	04-08-1996		
		CLIP MTG FOR DIN BOX						3694	04-17-1996		
		SEE EXTENDED DESCRIPTION									
		LABEL-CE MARK (PRODUCTS)						3671	04-08-1996		
		MODULE ASSEMBLY M1									
		RES. 732K OHM MF 1/4W 1%									

Proprietary and Confidential to IRCON INC

W.O. #9539 ————— REPLACES W.O. #9507

Number :DN-NC#9743 - IRCON INFRARAIL IRT SO-LI: 77502\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	Start Use	End Use
1	DN0DNE	DN PRICES	1.0000	EA		M P				
1	OK C11201-R713	SENSING HEAD FINAL ASSY	1.0000	EA		M P				
2	451323	FIELD STOP .044DIA	1.0000	EA		B	3709	05-17-1996		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	990300005	RETAINING RING 7/16 OD,.2	1.0000	EA		B	3709	05-17-1996		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B	3709	05-17-1996		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M P	3709	05-17-1996		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M P	3770	08-21-1996		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B				
4	640552	FILTER, BANDPASS	1.0000	EA		B				
4	590942	DETECTOR InGaAs 1.6u	1.0000	EA		B				
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B				
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B				
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B				
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B				
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B				
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B				
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B				
4	200204130	SCREW #2-56 X 1/8 PH SLOT	1.0000	EA		B				
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B				
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B				
2	447352	SENSOR, E-HEAD	1.0000	EA		B	3709	05-17-1996		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B	3709	05-17-1996		
2	990100004	EPOXY HB FULLER FE 7004	1.0000	EA		B	3709	05-17-1996		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B	3709	05-17-1996		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B	3709	05-17-1996		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B	3709	05-17-1996		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B	3709	05-17-1996		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B	3709	05-17-1996		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B	3709	05-17-1996		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B	3709	05-17-1996		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B	3709	05-17-1996		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B	3709	05-17-1996		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B	3709	05-17-1996		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B	3709	05-17-1996		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	443502	RETAINING NUT	1.0000	EA		B	3709	05-17-1996		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B	3709	05-17-1996		
2	474772	LABEL GROUND WARNING	1.0000	EA		B	3709	05-17-1996		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B	3709	05-17-1996		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B	3709	05-17-1996		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B	3709	05-17-1996		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B	3709	05-17-1996		
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-1996		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-1996		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-1999		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-1999		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-1996		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-1996		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-1996		
4	532952	OP-AMP OP80GP ULTRA LOW B	2.0000	EA		B	3769	08-05-1996		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	3769	08-05-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-1996		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		

R730 W/ CABLE BREAK ALARM (SOLD W/O CABLE)

Number :DN-NC#9743 - IRCON INFRARAIL IRT SO-LI: 77502\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	Start Use	End Use
				UM						
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA		B	3769	08-05-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA		B				
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	3769	08-05-1996		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-1996		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-1996		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-1996		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-1996		
4	551122	CHOKE 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-1996		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-1996		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-1996		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-1996		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-1996		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-1996		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-1996		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-1996		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-1996		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-1996		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-1996		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-1996		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	3659	04-12-1996		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-1996		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-1996		
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	532982	OP-AMP AD548CQ LOW PWR	1.0000	EA		B	3767	08-07-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	2.0000	EA		B	3767	08-07-1996		
4	532992	OP-AMP OP490EY LOW VOLT Q	1.0000	EA		B	3767	08-07-1996		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-1996		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	4.0000	EA		B	3767	08-07-1996		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-1996		
4	551122	CHOKE 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-1996		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-1996		
4	521962	CAP. 10Pf NPO 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-1996		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-1996		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	526002	CAP. SMC 330Pf NPO 50V 5%	1.0000	EA		B	3767	08-07-1996		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-1996		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-1996		
3	LDN300	PCB INTERCONN ASSY (INFR	1.0000	EA		M P				

Number :DN-NC#9743 - IRCON INFRARAIL IRT SO-LI: 77502\*1

.....Level.....	..Part Number..	.....Description.....	.Quantity.	.UM.	Alt.	MB X	.ECO No.	.ECO Date.	.Start Use	.End Use..
				UM						
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-1996		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-1996		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	3671	04-08-1996		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-1997		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONN	1.0000	EA		M P	3671	04-08-1996		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-1996		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-1996		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-1996		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-1996		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-1996		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-1996		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B	3671	04-08-1996		
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B	3671	04-08-1996		
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P	3671	04-08-1996		
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B				
3	T-C11194-1	SELECT "M1" MODULE VALUES	0.0000	EA		B				
3	T-C11194-3	GT M1 MODULE VALUES	0.0000	EA		B				
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B	3671	04-08-1996		
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B	3671	04-08-1996		
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B	3671	04-08-1996		
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B	3671	04-08-1996		
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M P	3671	04-08-1996		
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B	3694	04-17-1996		
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B	3671	04-08-1996		
1	U-M1-R730	MODULE ASSEMBLY M1	1.0000	EA		M P				
2	107323011	RES. 732K OHM MF 1/4W 1%	1.0000	EA		B				
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101153011	RES. 115K OHM MF 1/4W 1%	1.0000	EA		B				
2	101542011	RES. 15.4K OHM MF 1/4W 1%	1.0000	EA		B				
2	106192011	RES. 61.9K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	101053011	RES. 105K OHM MF 1/4W 1%	1.0000	EA		B				
2	106191011	RES. 6.19K OHM MF 1/4W 1%	1.0000	EA		B				
2	101783011	RES. 178K OHM MF 1/4W 1%	1.0000	EA		B				
2	103571011	RES. 3.57K OHM MF 1/4W 1%	1.0000	EA		B				
2	103163011	RES. 316K OHM MF 1/4W 1%	1.0000	EA		B				
2	101961011	RES. 1.96K OHM MF 1/4W 1%	1.0000	EA		B				
2	105763011	RES. 576K OHM MF 1/4W 1%	1.0000	EA		B				
2	101101011	RES. 1.10K OHM MF 1/4W 1%	1.0000	EA		B				
2	101134011	RES. 1.13M OHM MF 1/4W 1%	1.0000	EA		B				
2	105490011	RES. 549 OHM MF 1/4W 1%	1.0000	EA		B				
2	102214011	RES. 2.21M OHM MF 1/4W 1%	1.0000	EA		B				
2	102740011	RES. 274 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104644011	RES. 4.64M OHM MF 1/4W 1%	1.0000	EA		B				



# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

REQUEST DATE (MM-DD-YY)

05-15-02

PROMISE DATE (MM-DD-YY)

05-15-02

OUR ORDER NO.

80215

ORDER DATE (MM-DD-YY)

05-02-02

YOUR ORDER NO.

86230

TERMS

0.00/0/30

QUOTE #

F.O.B.

ORIGIN

CODE

1004 (100.00)

VIA

UPS

SPECIAL SHIPPING INSTRUCTIONS

SOLD TO

CUSTOMER NO.

100897

GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

SHIPPING ADDRESS

TAX CODE

NO TAX

GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

*DNE99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT
1	DN-NC#13158 <i>w.o.# 11732</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMplete W/O CABLE Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	1	0.00	1592.00	1592.00
2	AA-4	AIR PURGE ACCESSORY INFRARAIL TYPE E	1	0.00	106.25	106.25
3	L11201	KIT CABLE E/F INT/EXT - S PVC - INFRARAIL	1	0.00	0.00	0.00
					<i>any chg</i>	<i>\$350</i>
						<i>ATB 5/3</i>
THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE					GRAND TOTAL	USD 1,698.25

*Redo Special No R730  
Temp range 375 to 850C*

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 101142

EXTRUDED METALS  
302 SOUTH ASHFIELD  
BELDING, MI 48809

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE NO TAX

EXTRUDED METALS  
302 SOUTH ASHFIELD  
BELDING, MI 48809

REQUEST DATE (MM-DD-YY) 05-23-02 PROMISE DATE (MM-DD-YY) 05-23-02

OUR ORDER NO. 80255 ORDER DATE (MM-DD-YY) 05-08-02

YOUR ORDER NO. 47570MC

TERMS 0.00/0/30

QUOTE # \_\_\_\_\_

F.O.B. ORIGIN

CODE 1004 (100.00)

VIA UPS

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

*DNE99-91C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT	
1	DN-HO#13201 <i>w.o.# 11759</i>	<del>DN_DNE31-13C</del> IRCON INFRARAIL IRT SENSING HEAD ONLY Consists of the following: 1.0000 - INFRARAIL HEAD ONLY 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	2	0.00	1270.00	2540.00	
		<i>Reb Special No R 130</i> <i>Temp range 325-850C</i> <i>D/50 resolution.</i>  <i>any Qty — \$300</i>				<i>RAJ</i> <i>5/8</i>	
THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE						GRAND TOTAL	USD2,540.00

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

R730

S/O 80215

## Section 1 — GENERAL INFORMATION

### 1.5 PRODUCT MODIFICATION

IRCON InfraRail Model DNE99-99C is modified for a special temperature range of 375° to 850°C, an optical resolution of D/50 with 30" fixed focus and a wavelength of 1.49 - 1.60 microns per customer specifications.

In addition, customer requires a special fault condition indicator that warns when the sensor cable is disconnected. The special fault indication provides for a current output from the signal processor which exceeds 20 mA<sub>dc</sub> any time the sensor is disconnected from the signal processor.

#### Restrictions:

- 1) Sensor ambient temperature is restricted to a maximum of 150°F (66 °C).
- 2) Emissivity is restricted to 0.3 for the first 25 degree C of the temperature span.
- 3) Accuracy for this system is 1.0% of full scale temperature.

This modified instrument may be used with all standard InfraRail options and accessories.

Details of this modification are retained in IRCON Engineering Files as InfraRail Special No. R730.

**NOTE:** Ircon, Inc. is the sole owner in all respects of any product or software modification or design herein specified.

W.O.# 11759

Number :DN-HO#13201 - IRCON INFRARAIL IRT SO-LI: 80255\*1

Level	Part Number	Description	Quantity	UM	Alt	MB	X	ECO No.	ECO Date	Start Use	End Use
1	DN1DNE	DN PRICES	1.0000	EA		M	P				
1	OK C11201-R713	SENSING HEAD FINAL ASSY	1.0000	EA		M	P				
2	451323	FIELD STOP .044DIA	1.0000	EA		B		3709	05-17-1996		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	990300005	RETAINING RING 7/16 OD,.2	1.0000	EA		B		3709	05-17-1996		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B		3709	05-17-1996		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M	P	3709	05-17-1996		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M	P	3770	08-21-1996		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B					
4	640552	FILTER, BANDPASS	1.0000	EA		B					
4	590942	DETECTOR InGaAs 1.6u	1.0000	EA		B					
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B					
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B					
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B					
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B					
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B					
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B					
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B					
4	200204130	SCREW #2-56 X 1/8 PH SLOT	1.0000	EA		B					
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B					
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B					
2	447352	SENSOR, E-HEAD	1.0000	EA		B		3709	05-17-1996		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B		3709	05-17-1996		
2	990100002	EPOXY HARDMAN #4005 GEN P	1.0000	EA		B		3709	05-17-1996		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B		3709	05-17-1996		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B		3709	05-17-1996		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B		3709	05-17-1996		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B		3709	05-17-1996		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B		3709	05-17-1996		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B		3709	05-17-1996		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B		3709	05-17-1996		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B		3709	05-17-1996		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B		3709	05-17-1996		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B		3709	05-17-1996		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B		3709	05-17-1996		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	443502	RETAINING NUT	1.0000	EA		B		3709	05-17-1996		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B		3709	05-17-1996		
2	474772	LABEL GROUND WARNING	1.0000	EA		B		3709	05-17-1996		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B		3709	05-17-1996		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B		3709	05-17-1996		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B		3709	05-17-1996		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B		3709	05-17-1996		

R730  
(SENSOR ONLY)

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

REQUEST DATE (MM-DD-YY)

11-01-02

PROMISE DATE (MM-DD-YY)

11-01-02

OUR ORDER NO.

81201

ORDER DATE (MM-DD-YY)

10-02-02

YOUR ORDER NO.

200240546

TERMS

0.00/0/180

QUOTE #

F.O.B.

ORIGIN

CODE

1001 (100.00)

VIA

MSAS

SPECIAL SHIPPING INSTRUCTIONS

REF: 220402/WA62341

SOLD TO

CUSTOMER NO.

100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

SHIPPING ADDRESS

TAX CODE

NO TAX

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

*DNE99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT
1	DN-HO#14585 <i>W.O. #12582</i>	DN_DNE31-13C IRCON INFRARAIL IRT SENSING HEAD ONLY Consists of the following: 1.0000 - INFRARAIL HEAD ONLY 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	1	0.00	451.04	451.04
2	MOD-CHARGES	MODIFICATION OF PRODUCT	1	0.00	102.51	102.51
					<b>GRAND TOTAL</b>	<b>ECU553.55</b>

*Redo Special No R730  
Temp 375-850C  
P/50 \*  
Cable break alarm  
PAB  
10/2*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NACHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

**DRAWING (S) TOO LARGE  
TO SCAN.**

**TO VIEW THE ORIGINAL  
DESIGN,  
A REQUEST TO VIEW  
PHYSICAL FILE  
IS YOUR NEXT OPTION.**

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 100897

GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

REQUEST DATE (MM-DD-YY) 09-14-01 PROMISE DATE (MM-DD-YY) 09-14-01

OUR ORDER NO. 77502 ORDER DATE (MM-DD-YY) 05-15-01

YOUR ORDER NO. 73852

TERMS 0.00/0/30

F.O.B. ORIGIN

CODE 1004 (100.00)

VIA UPS CONSGN

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE \_\_\_\_\_

GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

*DNE99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN-NC#9743 <i>W.O. 9539</i> <i>REPLACES</i> <i>W.O. 9507</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMPLETE W/O CABLE  Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	16	0.00	1592.00	25472.00
2	AA-4	AIR PURGE ACCESSORY INFRARAIL TYPE E	16	0.00	105.00	1680.00
3	AP-1	FLANGED ACCESSORY ADAPTER PLATE	16	0.00	126.00	2016.00
4	L11201	KIT CABLE E/F INT/EXT - S PVC - INFRARAIL	16	0.00	0.00	0.00
<b>GRAND TOTAL</b>						

*Redo Special No R730*  
*Temp range 375-850C*  
*MAHSTEY*  
*avg chg \$100 ea*  
*w/ cable BREAK alarm*  
*A.P.*  
*5-21-01*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO CUSTOMER NO. 100897  
GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

SHIPPING ADDRESS TAX CODE  
GRANCO-CLARK INC.  
7298 NORTH STOREY ROAD  
BELDING, MI 48809

REQUEST DATE (MM-DD-YY) 09-14-01 PROMISE DATE (MM-DD-YY) 09-14-01  
OUR ORDER NO. 77502 ORDER DATE (MM-DD-YY) 05-15-01  
YOUR ORDER NO. 73852  
TERMS 0.00/0/30  
F.O.B. ORIGIN  
CODE 1004 (100.00)  
VIA UPS CONSGN  
SPECIAL SHIPPING INSTRUCTIONS

*ONE 99-99c*

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN-NC#9690 <i>W.O. # 9507</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMplete W/O CABLE  Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C  DN_DNE31-13C	16	0.00	1592.00	25472.00
2	AA-4	AIR PURGE ACCESSORY INFRARAIL TYPE E	16	0.00	105.00	1680.00
3	AP-1	FLANGED ACCESSORY ADAPTER PLATE	16	0.00	126.00	2016.00
4	L11201	KIT CABLE E/F INT/EXT - S PVC - INFRARAIL	16	0.00	0.00	0.00
<b>GRAND TOTAL</b>						

*Redox Special No R730  
Temp range 375 TO 850 C  
Cable break RAB 5/16  
A-D. 5-16-01  
empty \$100 ea*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



**IRCON, INC.**  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO CUSTOMER NO. 100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

SHIPPING ADDRESS TAX CODE  
NO TAX

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

REQUEST DATE (MM-DD-YY) 11-01-02 PROMISE DATE (MM-DD-YY) 11-01-02

OUR ORDER NO. 81342 ORDER DATE (MM-DD-YY) 10-22-02

YOUR ORDER NO. 200240579

TERMS 0.00/0/180

QUOTE #

F.O.B. ORIGIN

CODE 1001 (100.00)

VIA MSAS

SPECIAL SHIPPING INSTRUCTIONS  
REF: 217846/WA62341

*DNE99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT
1	DN#14795 <i>w.o.# 12694</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMPLETE Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 4 meters. 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	12	0.00	820.07	9840.83
2	MOD-CHARGES	MODIFICATION OF PRODUCT	12	0.00	102.51	1230.10
					<b>GRAND TOTAL</b>	<b>ECU11,070.93</b>

*Redo Spec No. R730  
Temperature 375 to 850C  
D/50 resolution  
cable break alarm*

*MB 10/22*

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.



IRCON, INC.  
7300 North Natchez Avenue  
Niles, Illinois 60714 USA

Telephone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

ISO 9001/QS 9000 TE  
Quality Systems Certified

**Modified Standard Product**  
**Data Form**

*A modified standard product is a product that is based on a standard product found in the most recent price list. The modifications maybe items such as; temperature ranges, output types, resolution, response time and optical issues. A modified standard product form is to be completed and submitted to Steve Schumm and Gene Kalley for review and approval based on the modification (which we have done before). If the modification has not been done before, the approval will require the entire senior management team's approval BEFORE QUOTING. A modified standard product if approved; this product will become a price listed standard product. We can then pay commission as outlined in our most recent contract.*

- Standard Product is a Model Number: DNE31-31C MODULE ONLY
- Standard Product List Price: \$484.00
- The product change requested would be: Redo Special No R730

Sales will attach specifics to this form.

- The market is willing to pay \$ 584 for this product (total including standard price).
- What is engineering's expected time investment and cost: 1 HOUR Man Days  
\$ 100.00
- What is production's expected purchasing and production time requirement: \_\_\_\_\_ Days
- This new product has potential in the following application and estimated potential per year would be \_\_\_\_\_ per year:

➤ This product will be \_\_\_\_\_ not be \_\_\_\_\_ quoted and produced as previously outlined.

➤ Agreed on this date of \_\_\_\_\_ By production/purchasing \_\_\_\_\_

By engineering A. DONADO 2/6/03

➤ Sales can now quote this project for \$ \_\_\_\_\_ per unit.

\_\_\_\_\_ lead time.

\_\_\_\_\_ Add to standard product list in literature (Maxine)

\_\_\_\_\_ Add to price list (Vern)

cc/ Greg P, Paul V, Regional Sales Staff Globally

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
THE NETHERLANDS

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE NO TAX

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
THE NETHERLANDS

REQUEST DATE (MM-DD-YY) 02-14-03 PROMISE DATE (MM-DD-YY) 02-14-03

OUR ORDER NO. 82009 ORDER DATE (MM-DD-YY) 02-05-03

YOUR ORDER NO. 200340063

TERMS 0.00/0/180

QUOTE # \_\_\_\_\_

F.O.B. ORIGIN

CODE 1001 (100.00)

VIA MSAS

SPECIAL SHIPPING INSTRUCTIONS  
REF: 225349/WA62341

*DNE99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT
1	DN-EM#15687 <i>W.O.#13278</i>	DN_DNE31-13C IRCON INFRARAIL IRT PROCESSOR MODULE ONLY Consists of the following: 1.0000 - DN ELECTRONIC MODULE 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	1	0.00	447.57	447.57
2	MOD-CHARGES	MODIFICATION OF PRODUCT <i>Redo Spec - No R730 Temp range 375-850 D/50 resolution + Cable C break alarm RAB 2/5</i>	1	0.00	92.47	92.47
					<b>GRAND TOTAL</b>	<b>ECU540.04</b>

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

GRAND TOTAL ECU540.04

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

REQUEST DATE (MM-DD-YY) 06-06-03 PROMISE DATE (MM-DD-YY) 06-06-03

OUR ORDER NO. 82840 ORDER DATE (MM-DD-YY) 06-02-03

YOUR ORDER NO. 200340254

TERMS 0.00/0/180

QUOTE # \_\_\_\_\_

F.O.B. ORIGIN

CODE 1001 (100.00)

VIA UPS INTL

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE NO TAX

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

SPECIAL SHIPPING INSTRUCTIONS  
REF: 229838/WA62341 *new 6/2*

*49-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT
1	DN-EM#16900 <i>w.o. #13964</i>	DN_DNE31-13C IRCON INFRARAIL IRT PROCESSOR MODULE ONLY Consists of the following: 1.0000 - DN ELECTRONIC MODULE 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	3	0.00	410.66	1231.99
2	MOD-CHARGES	MODIFICATION OF PRODUCT	3	0.00	84.85	254.54
3	DN-EM#16901 <i>w.o. #13965</i>	DN_DNE31-13C <i>49-99C</i> IRCON INFRARAIL IRT PROCESSOR MODULE ONLY Consists of the following: 1.0000 - DN ELECTRONIC MODULE 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	5	0.00	410.66	2053.32
4	MOD-CHARGES	MODIFICATION OF PRODUCT	5	0.00	84.85	424.24
5	DN-EM#16902 <i>w.o. #13966</i>	DN_DNFFA-11C IRCON INFRARAIL IRT <i>Red Spec R-200 cable special</i>	1	0.00	410.66	410.66
					GRAND TOTAL	<i>Calam</i>

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



**IRCON, INC.**  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE NO TAX

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

REQUEST DATE (MM-DD-YY) 06-06-03 PROMISE DATE (MM-DD-YY) 06-06-03

OUR ORDER NO. 82840 ORDER DATE (MM-DD-YY) 06-02-03

YOUR ORDER NO. 200340254

TERMS 0.00/0/180

QUOTE # \_\_\_\_\_

F.O.B. ORIGIN

CODE 1001 (100.00)

VIA UPS INTL

SPECIAL SHIPPING INSTRUCTIONS  
REF: 229838/WA62341

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT
6	MOD-CHARGES	<p>PROCESSOR MODULE ONLY Consists of the following: 1.0000 - DN ELECTRONIC MODULE 1.0000 - DN- F SERIES 1.0000 - D/30 10FT FIB. OPT. 1.0000 - 700 TO 1100C DN_DNFFA-11C</p> <p>MODIFICATION OF PRODUCT</p>	1	0.00	84.85	84.85
					<b>GRAND TOTAL</b>	<b>ECU4,459.60</b>

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.



IRCON, INC.  
7300 North Natchez Avenue  
Niles, Illinois 60714 USA

Telephone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

ISO 9001/QS 9000 TE  
Quality Systems Certified

82840

**Modified Standard Product**  
**Data Form**

*A modified standard product is a product that is based on a standard product found in the most recent price list. The modifications maybe items such as; temperature ranges, output types, resolution, response time and optical issues. A modified standard product form is to be completed and submitted to Steve Schumm and Gene Kalley for review and approval based on the modification (which we have done before). If the modification has not been done before, the approval will require the entire senior management team's approval BEFORE QUOTING. A modified standard product if approved; this product will become a price listed standard product. We can then pay commission as outlined in our most recent contract.*

- Standard Product is a Model Number: DNE 31-13C Module only
- Standard Product List Price: \$ 484
- The product change requested would be: Rel. R720 + R729 + R202  
Temp Range + Cable Breakdown *Sales will attach specifics to this form.*
- The market is willing to pay: 504 for this product (total including standard price).
- What is engineering's expected time investment and cost: 3 hours Man Days  
\$ 300<sup>00</sup>
- What is production's expected purchasing and production time requirement: \_\_\_\_\_ Days
- This new product has potential in the following application and estimated potential per year would be \_\_\_\_\_ per year:

➤ This product will be  not be \_\_\_\_\_ quoted and produced as previously outlined.

➤ Agreed on this date of \_\_\_\_\_ By production/purchasing \_\_\_\_\_

By engineering A. DONADO 6/3/02

➤ Sales can now quote this project for \$ \_\_\_\_\_ per unit.

\_\_\_\_\_ lead time.

W.O. # 13964  
13965  
13966

\_\_\_\_ Add to standard product list in literature (Maxine)

\_\_\_\_ Add to price list (Vern)

cc/ Greg P, Paul V, Regional Sales Staff Globally

W.O. # 13964

Number :DN-EM#16900 - IRCON INFRARAIL IRT SO-LI: 82840\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
1	DN2DN	DN PRICES	1.0000	EA		M P				
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-1996		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-1996		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-1999		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-1999		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-1996		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-1996		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-1996		
4	532952	OP-AMP ULTRA LOW BIAS	2.0000	EA		B	3769	08-05-1996		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	4842	07-31-2002		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-1996		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA		B	3769	08-05-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA		B				
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	4906	05-19-2003		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-1996		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-1996		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-1996		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-1996		
4	551122	CHOKO 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-1996		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-1996		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-1996		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-1996		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-1996		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-1996		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-1996		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-1996		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-1996		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-1996		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-1996		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-1996		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	4785	03-05-2002		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-1996		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-1996		
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	532982	OP-AMP AD548CQ LOW PWR	1.0000	EA		B	3767	08-07-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	3.0000	EA		B	3767	08-07-1996		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-1996		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	6.0000	EA		B	3767	08-07-1996		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		

Proprietary and Confidential to IRCON INC

R730 (MODULE ONLY)

Number :DN-EM#16900 - IRCON INFRARAIL IRT SO-LI: 82840\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-1996		
4	551122	CHOKO 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-1996		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-1996		
4	521962	CAP. 10Pf NPO 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-1996		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-1996		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	526002	CAP. SMC 330Pf NPO 50V 5%	1.0000	EA		B	3767	08-07-1996		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-1996		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-1996		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-1996		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-1996		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	3671	04-08-1996		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-1997		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONNEC	1.0000	EA		M P	3671	04-08-1996		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-1996		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-1996		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-1996		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-1996		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-1996		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-1996		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B	3671	04-08-1996		
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B	3671	04-08-1996		
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P	3671	04-08-1996		
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B				
3	T-C11194-1	SELECT "M1" MODULE VALUES	0.0000	EA		B				
3	T-C11194-3	GT M1 MODULE VALUES	0.0000	EA		B				
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B	3671	04-08-1996		
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B	3671	04-08-1996		
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B	3671	04-08-1996		
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B	3671	04-08-1996		
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M P	3671	04-08-1996		
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B	3694	04-17-1996		
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B	3671	04-08-1996		
1	U-M1-R730	MODULE ASSEMBLY M1	1.0000	EA		M P				
2	107323011	RES. 732K OHM MF 1/4W 1%	1.0000	EA		B				

Number :DN-EM#16900 - IRCON INFRARAIL IRT SO-LI: 82840\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101153011	RES. 115K OHM MF 1/4W 1%	1.0000	EA		B				
2	101542011	RES. 15.4K OHM MF 1/4W 1%	1.0000	EA		B				
2	106192011	RES. 61.9K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	101053011	RES. 105K OHM MF 1/4W 1%	1.0000	EA		B				
2	106191011	RES. 6.19K OHM MF 1/4W 1%	1.0000	EA		B				
2	101783011	RES. 178K OHM MF 1/4W 1%	1.0000	EA		B				
2	103571011	RES. 3.57K OHM MF 1/4W 1%	1.0000	EA		B				
2	103163011	RES. 316K OHM MF 1/4W 1%	1.0000	EA		B				
2	101961011	RES. 1.96K OHM MF 1/4W 1%	1.0000	EA		B				
2	105763011	RES. 576K OHM MF 1/4W 1%	1.0000	EA		B				
2	101101011	RES. 1.10K OHM MF 1/4W 1%	1.0000	EA		B				
2	101134011	RES. 1.13M OHM MF 1/4W 1%	1.0000	EA		B				
2	105490011	RES. 549 OHM MF 1/4W 1%	1.0000	EA		B				
2	102214011	RES. 2.21M OHM MF 1/4W 1%	1.0000	EA		B				
2	102740011	RES. 274 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104644011	RES. 4.64M OHM MF 1/4W 1%	1.0000	EA		B				

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE NO TAX

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

REQUEST DATE (MM-DD-YY) 06-13-03 PROMISE DATE (MM-DD-YY) 06-13-03

OUR ORDER NO. 82852 ORDER DATE (MM-DD-YY) 06-04-03

YOUR ORDER NO. 200340261

TERMS 0.00/0/180

QUOTE # \_\_\_\_\_

F.O.B. ORIGIN

CODE 1001 (100.00)

VIA UPS INTL

SPECIAL SHIPPING INSTRUCTIONS  
REF: 22987/WA62342

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT
1	DN-HO#16926 <i>W.O.#13987</i>	DN_DNE31-13C IRCON INFRARAIL IRT SENSING HEAD ONLY Consists of the following: 1.0000 - INFRARAIL HEAD ONLY 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	5	0.00	373.33	1866.65
		<i>Redo Special No R-729 Temp range 450-1050C D/50 Res + Cable Bracket Eng Chg - \$50</i>				
2	DN-HO#16927	DN_DNFFA-11C IRCON INFRARAIL IRT SENSING HEAD ONLY Consists of the following: 1.0000 - INFRARAIL HEAD ONLY 1.0000 - DN- F SERIES 1.0000 - D/30 10FT FIB. OPT. 1.0000 - 700 TO 1100C 1.0000 - STD FOCUS LENS DN_DNFFA-11C	1	0.00	373.33	373.33
		<i>Eng Chg - \$50</i>				
3	DN-HO#16928 <i>W.O.#13988</i>	DN_DNE31-13C IRCON INFRARAIL IRT SENSING HEAD ONLY Consists of the following: 1.0000 - INFRARAIL HEAD ONLY 1.0000 - DN - E SERIES 1.0000 - D/100 RESOLUTION (E)	3	0.00	373.33	1119.99
		<i>Redo Spec. R-730 Temp range 375-850C D/50 Res + Cable Bracket Alam</i>				
					<b>GRAND TOTAL</b>	

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



**IRCON, INC.**  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 100426

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE NO TAX

IRCON B.V.  
DATABANKWEG 6 C  
3821 AL AMERSFOORT  
  
THE NETHERLANDS

REQUEST DATE (MM-DD-YY) \_\_\_\_\_ PROMISE DATE (MM-DD-YY)  
06-13-03 06-13-03

OUR ORDER NO. \_\_\_\_\_ ORDER DATE (MM-DD-YY)  
82852 06-04-03

YOUR ORDER NO. \_\_\_\_\_  
200340261

TERMS \_\_\_\_\_  
0.00/0/180

QUOTE # \_\_\_\_\_

F.O.B. \_\_\_\_\_  
ORIGIN

CODE \_\_\_\_\_  
1001 (100.00)

VIA \_\_\_\_\_  
UPS INTL

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_  
REF: 22987/WA62342

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT	
3	DN-HO#16928 (CONTINUED)	1.0000 - 800-1300C DN_DNE31-13C					
THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE						<b>GRAND TOTAL</b>	<b>ECU3,359.97</b>

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.



IRCON, INC.  
7300 North Natchez Avenue  
Niles, Illinois 60714 USA

Telephone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

ISO 9001/QS 9000 TE  
Quality Systems Certified

82852

**Modified Standard Product**  
**Data Form**

*A modified standard product is a product that is based on a standard product found in the most recent price list. The modifications maybe items such as; temperature ranges, output types, resolution, response time and optical issues. A modified standard product form is to be completed and submitted to Steve Schumm and Gene Kalley for review and approval based on the modification (which we have done before). If the modification has not been done before, the approval will require the entire senior management team's approval BEFORE QUOTING. A modified standard product if approved; this product will become a price listed standard product. We can then pay commission as outlined in our most recent contract.*

- Standard Product is a Model Number: DNE99-99C
- Standard Product List Price: \$ 400
- The product change requested would be: Redy Spec R729 + R730  
450-109C / 375 + 650C **Sales will attach specifics to this form.**
- The market is willing to pay: 450 for this product (total including standard price).
- What is engineering's expected time investment and cost: 2 hours Man Days  
\$ 200<sup>00</sup>
- What is production's expected purchasing and production time requirement: \_\_\_\_\_ Days
- This new product has potential in the following application and estimated potential per year would be \_\_\_\_\_ per year:

➤ This product will be  not be \_\_\_\_\_ quoted and produced as previously outlined.

➤ Agreed on this date of \_\_\_\_\_ By production/purchasing \_\_\_\_\_

By engineering A. DONADO 6/5/03

➤ Sales can now quote this project for \$ \_\_\_\_\_ per unit.

W.O. # 13987  
13988

\_\_\_\_\_ lead time.

\_\_\_\_\_ Add to standard product list in literature (Maxine)

\_\_\_\_\_ Add to price list (Vern)

cc/ Greg P, Paul V, Regional Sales Staff Globally

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 006365

DAWON ENGINEERING  
B-602, TWIN TOWER 275-4  
YANGJAE-DONG, SUHCHO-KU  
SEOUL,  
KOREA

REQUEST DATE (MM-DD-YY) 06-14-04 PROMISE DATE (MM-DD-YY) 06-14-04

OUR ORDER NO. 85376 ORDER DATE (MM-DD-YY) 05-12-04

YOUR ORDER NO. D.E.-0405005

TERMS Cash in Advance

QUOTE # \_\_\_\_\_

F.O.B. ORIGIN

CODE 1083 (100.00)

VIA DHL COLLECT

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE NO TAX

DAWON ENGINEERING  
B-602, TWIN TOWER 275-4  
YANGJAE-DONG, SUHCHO-KU  
SEOUL,  
KOREA

*DNE99-99C*

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT
1	DN#21015 <i>W.O.# 16201</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMLETE Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 4 meters. 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	1	0.00	1784.00	1784.00
		<i>Redo special No R729 Temp 450 to 1050C P/50 + Break alarm</i>				
2	DN#21016 <i>W.O.# 16202</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMLETE Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 4 meters. 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C	1	0.00	1784.00	1784.00
		<i>DNE99-99C Redo special No R730 Temp 375-850C P/50 + Break alarm</i>				
3	DN#21017 <i>W.O.# 16205</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMLETE Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES	1	0.00	1784.00	1784.00
		<i>DNE99-99C Redo spec No - R725 Temp 700-1100C. single per unit 5402 PWB 5/12</i>				
GRAND TOTAL						

THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.

# Acknowledgment



IRCON, INC.  
7300 N. Natchez Ave.  
Niles, IL 60714 USA

Phone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

SOLD TO \_\_\_\_\_ CUSTOMER NO. 006365

DAWON ENGINEERING  
B-602, TWIN TOWER 275-4  
YANGJAE-DONG, SUHCHO-KU  
SEOUL,  
KOREA

SHIPPING ADDRESS \_\_\_\_\_ TAX CODE NO TAX

DAWON ENGINEERING  
B-602, TWIN TOWER 275-4  
YANGJAE-DONG, SUHCHO-KU  
SEOUL,  
KOREA

REQUEST DATE (MM-DD-YY) 06-14-04 PROMISE DATE (MM-DD-YY) 06-14-04

OUR ORDER NO. 85376 ORDER DATE (MM-DD-YY) 05-12-04

YOUR ORDER NO. D.E.-0405005

TERMS Cash in Advance

QUOTE # \_\_\_\_\_

F.O.B. ORIGIN

CODE 1083 (100.00)

VIA DHL COLLECT

SPECIAL SHIPPING INSTRUCTIONS \_\_\_\_\_

LI	PART NO.	DESCRIPTION	QTY	DSCNT %	UNIT PRICE	AMOUNT
3	DN#21017 (CONTINUED)	1.0000 - Std Cbl Lgth 4 meters. 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 800-1300C DN_DNE31-13C				
THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE					<b>GRAND TOTAL</b>	<b>USD5,352.00</b>

SHIP TO: IRCON, INC.  
7300 N. NATCHEZ AVE.  
NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE.



IRCON, INC.  
7300 North Natchez Avenue  
Niles, Illinois 60714 USA

Telephone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

ISO 9001/QS 9000 TE  
Quality Systems Certified

**Modified Standard Product**  
**Data Form**

*A modified standard product is a product that is based on a standard product found in the most recent price list. The modifications maybe items such as; temperature ranges, output types, resolution, response time and optical issues. A modified standard product form is to be completed and submitted to Steve Schumm and Gene Kalley for review and approval based on the modification (which we have done before). If the modification has not been done before, the approval will require the entire senior management team's approval BEFORE QUOTING. A modified standard product if approved; this product will become a price listed standard product. We can then pay commission as outlined in our most recent contract.*

- Standard Product is a Model Number: DNE31-13C
- Standard Product List Price: \$ 1384 ea
- The product change requested would be: Med. Spec. R729, R730, R725  
Temp. ranges per Special Sales will attach specifics to this form.
- The market is willing to pay: 1784. for this product (total including standard price).
- What is engineering's expected time investment and cost: 1 HOUR Man Days  
\$ 100.00
- What is production's expected purchasing and production time requirement:      Days
- This new product has potential in the following application and estimated potential per year would be      per year:

\_\_\_\_\_ This product will be  not be  quoted and produced as previously outlined.

➤ Agreed on this date of \_\_\_\_\_ By production/purchasing \_\_\_\_\_

By engineering A.D. 5/13/04

➤ Sales can now quote this project for \$ \_\_\_\_\_ per unit. W.O.# 16201  
W.O.# 16202  
\_\_\_\_\_ lead time. W.O.# 16205

\_\_\_\_\_ Add to standard product list in literature (Maxine)  
\_\_\_\_\_ Add to price list (Vern)

cc/ Greg P, Paul V, Regional Sales Staff Globally

W.O.# 13988

Number :DN-HO#16928 - IRCON INFRARAIL IRT SO-LI: 82852\*3

Level	Part Number	Description	Quantity	UM	Alt	MB	X	ECO No.	ECO Date	Start Use	End Use
1	DN1DNE	DN PRICES	1.0000	EA							
1	C11201-R713	SENSING HEAD FINAL ASSY	1.0000	EA							
2	451323	FIELD STOP .044DIA	1.0000	EA		B		3709	05-17-1996		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	990300005	RETAINING RING 7/16 OD, .2	1.0000	EA		B		3709	05-17-1996		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B		3709	05-17-1996		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M	P	3709	05-17-1996		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M	P	3770	08-21-1996		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B					
4	640552	FILTER, BANDPASS	1.0000	EA		B					
4	590942	DETECTOR InGaAs 1.6u	1.0000	EA		B					
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B					
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B					
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B					
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B					
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B					
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B					
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B					
4	200204130	SCREW #2-56 X 1/8 PH SLOT	1.0000	EA		B					
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B					
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B					
2	447352	SENSOR, E-HEAD	1.0000	EA		B		3709	05-17-1996		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B		3709	05-17-1996		
2	990100002	EPOXY HARDMAN #4005 GEN P	1.0000	EA		B		3709	05-17-1996		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B		3709	05-17-1996		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B		3709	05-17-1996		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B		3709	05-17-1996		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B		3709	05-17-1996		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B		3709	05-17-1996		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B		3709	05-17-1996		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B		3709	05-17-1996		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B		3709	05-17-1996		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B		3709	05-17-1996		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B		3709	05-17-1996		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B		3709	05-17-1996		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	443502	RETAINING NUT	1.0000	EA		B		3709	05-17-1996		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B		3709	05-17-1996		
2	474772	LABEL GROUND WARNING	1.0000	EA		B		3709	05-17-1996		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B		3709	05-17-1996		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B		3709	05-17-1996		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B		3709	05-17-1996		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B		3709	05-17-1996		

OK

R730 (Sensor Only)

W.O. # 16202

Number :DN#21016 - IRCON INFRARAIL IRT SO-LI: 85376\*2

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
	DNODNE	DN PRICES	1.0000	EA		M P				
1	C11201-R713	SENSING HEAD FINAL ASSY	1.0000	EA		M P				
2	451323	FIELD STOP .044DIA	1.0000	EA		B	3709	05-17-1996		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	990300005	RETAINING RING 7/16 OD, .2	1.0000	EA		B	3709	05-17-1996		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B	3709	05-17-1996		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M P	3709	05-17-1996		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M P	3770	08-21-1996		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B				
4	640552	FILTER, BANDPASS	1.0000	EA		B				
4	590942	DETECTOR InGaAs 1.6u	1.0000	EA		B				
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B				
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B				
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B				
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B				
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B				
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B				
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B				
4	200204130	SCREW #2-56 X 1/8 PH SLOT	1.0000	EA		B				
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B				
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B				
2	447352	SENSOR, E-HEAD	1.0000	EA		B	3709	05-17-1996		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B	3709	05-17-1996		
2	990100002	EPOXY HARDMAN #4005 GEN P	1.0000	EA		B	3709	05-17-1996		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B	3709	05-17-1996		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B	3709	05-17-1996		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B	3709	05-17-1996		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B	3709	05-17-1996		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B	3709	05-17-1996		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B	3709	05-17-1996		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B	3709	05-17-1996		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B	3709	05-17-1996		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B	3709	05-17-1996		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B	3709	05-17-1996		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B	3709	05-17-1996		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	443502	RETAINING NUT	1.0000	EA		B	3709	05-17-1996		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B	3709	05-17-1996		
2	474772	LABEL GROUND WARNING	1.0000	EA		B	3709	05-17-1996		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B	3709	05-17-1996		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B	3709	05-17-1996		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B	3709	05-17-1996		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B	3709	05-17-1996		
1	D11198	PVC-(INT/EXT-E/F SERIES) (	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	1.0000	FT		B	3913	04-02-1997		
2	D11198/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	D11198/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	D11198/03	SEE EXTENDED DESCRIPTION	8.0000	EA		M				
2	575882	CONN. CIRC 10SL-3 BACKSHE	1.0000	EA		B	3913	04-02-1997		
2	3210G00X0	TUBING #10 PVC CLEAR	3.0000	IN		B	3913	04-02-1997		
2	3212G00X0	TUBING #12 PVC CLEAR	1.0000	IN		B	3913	04-02-1997		
2	575902	CONN. CIRC 10SL-3 STR PLU	1.0000	EA		B	3913	04-02-1997		
2	3216I1400	TUBING 1/4" SHRINKABLE BL	1.0000	IN		B	3913	04-02-1997		
2	990100027	ADHESIVE LOCTITE 272	1.0000	EA		B	3913	04-02-1997		
2	C-CABLE	DETERMINE CABLE LENGTH FR	1.0000	EA		M P	3913	04-02-1997		
2	477202	LABEL INFRARAIL (2.0" X 0	1.0000	EA		B	3913	04-02-1997		
1	U-D11198-C	12 FEET OF CABLE	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	12.0000	FT		B				
1	U-M1-R730	MODULE ASSEMBLY M1	1.0000	EA		M P				
2	107323011	RES. 732K OHM MF 1/4W 1%	1.0000	EA		B				
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101153011	RES. 115K OHM MF 1/4W 1%	1.0000	EA		B				
2	101542011	RES. 15.4K OHM MF 1/4W 1%	1.0000	EA		B				
2	106192011	RES. 61.9K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				

Proprietary and Confidential to IRCON INC

R730 (w/ CABLE BREAK ARM)

Number :DN#21016 - IRCON INFRARAIL IRT SO-LI: 85376\*2

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
2	101053011	RES. 105K OHM MF 1/4W 1%	1.0000	EA		B				
2	106191011	RES. 6.19K OHM MF 1/4W 1%	1.0000	EA		B				
2	101783011	RES. 178K OHM MF 1/4W 1%	1.0000	EA		B				
2	103571011	RES. 3.57K OHM MF 1/4W 1%	1.0000	EA		B				
2	103163011	RES. 316K OHM MF 1/4W 1%	1.0000	EA		B				
2	101961011	RES. 1.96K OHM MF 1/4W 1%	1.0000	EA		B				
2	105763011	RES. 576K OHM MF 1/4W 1%	1.0000	EA		B				
2	101101011	RES. 1.10K OHM MF 1/4W 1%	1.0000	EA		B				
2	101134011	RES. 1.13M OHM MF 1/4W 1%	1.0000	EA		B				
2	105490011	RES. 549 OHM MF 1/4W 1%	1.0000	EA		B				
2	102214011	RES. 2.21M OHM MF 1/4W 1%	1.0000	EA		B				
2	102740011	RES. 274 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104644011	RES. 4.64M OHM MF 1/4W 1%	1.0000	EA		B				
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-1996		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-1996		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-1999		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-1999		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-1996		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-1996		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-1996		
4	532952	OP-AMP ULTRA LOW BIAS	2.0000	EA		B	3769	08-05-1996		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	4842	07-31-2002		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-1996		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA		B	3769	08-05-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA		B				
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	4906	05-19-2003		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-1996		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-1996		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-1996		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-1996		
4	551122	CHOKE 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-1996		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-1996		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-1996		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-1996		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-1996		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-1996		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-1996		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-1996		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-1996		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-1996		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-1996		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-1996		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	4785	03-05-2002		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-1996		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-1996		

Number :DN#21016 - IRCON INFRARAIL IRT SO-LI: 85376\*2

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	532982	OP-AMP AD548CQ LOW PWR	1.0000	EA		B	3767	08-07-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	3.0000	EA		B	3767	08-07-1996		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-1996		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	6.0000	EA		B	3767	08-07-1996		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-1996		
4	551122	CHOKER 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-1996		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-1996		
4	521962	CAP. 10Pf NPO 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-1996		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-1996		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	526002	CAP. SMC 330Pf NPO 50V 5%	1.0000	EA		B	3767	08-07-1996		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-1996		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-1996		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-1996		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-1996		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	4909	06-11-2003		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-1997		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONNEC	1.0000	EA		M P	3671	04-08-1996		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-1996		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-1996		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-1996		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-1996		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-1996		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-1996		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B	3671	04-08-1996		
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B	3671	04-08-1996		
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P	3671	04-08-1996		

Number :DN#21016 - IRCON INFRARAIL IRT SO-LI: 85376\*2

.....Level.....	..Part Number..	.....Description.....	.Quantity.	.UM.	Alt.	MB X	.ECO No.	.ECO Date.	.Start Use	.End Use..
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B				
3	T-C11194-1	SELECT "M1" MODULE VALUES	0.0000	EA		B				
3	T-C11194-3	GT M1 MODULE VALUES	0.0000	EA		B				
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B	3671	04-08-1996		
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B	3671	04-08-1996		
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B	3671	04-08-1996		
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B	3671	04-08-1996		
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M P	3671	04-08-1996		
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B	3694	04-17-1996		
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B	3671	04-08-1996		



IRCON, INC T 847-967-5151  
 7300 North Natchez Ave T 800-323-7660  
 Niles, Illinois 60714 USA F 847-647-0948

# Acknowledgment

ORDER DATE: 16 AUG 2005

REV: DATE:

Customer No. 100897

SOLD TO

SHIP TO

GRANCO-CLARK INC.  
 7298 NORTH STOREY ROAD  
 BELDING, MI 48809

GRANCO-CLARK INC.  
 7298 NORTH STOREY ROAD  
 BELDING, MI 48809

### SPECIAL SHIPPING INSTRUCTIONS

OUR ORDER No.		YOUR PO No.		F.O.B.			TAX
88924		65227		ORIGIN			Resale
SHIP VIA		TERMS		DATE REQUESTED	SALES REPRESENTATIVE		
UPS COLLECT		0.00/0/30		09-15-05	1004 (100.00)		
LI	PART NO.	PRODUCT/DESCRIPTION	QTY	UNIT PRICE	DISC	NET PRICE	EXTENSION
1	DN-NC#26482 <i>w.o.# 19420</i>	<del>DN_DNE31-13C</del> <i>ONE99-99C</i> IRCON INFRARAIL IRT SYSTEM-COMplete W/O CABLE Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - <del>D/100 RESOLUTION (E)</del> <i>TEMP Range 375 to 850C</i> 1.0000 - <del>800-1300C</del> <i>D/150 resolution</i> P/N 53032.84	7	1750.00	0.0	1750.00	12250.00
2	AA-4	AIR PURGE ACCESSORY INFRARAIL TYPE E Cust Part: 53032.85	7	126.00	0.0	126.00	882.00
3	AP-1	FLANGED ACCESSORY ADAPTER PLATE Cust Part: 53032.86	7	135.00	0.0	135.00	945.00
4	L11201	KIT CABLE E/F INT/EXT - S PVC - INFRARAIL Cust Part: 53032.84	7	0.00	0.0	0.00	0.00
THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE						<b>GRAND TOTAL</b>	USD14,077.00

SHIP TO: IRCON, INC.  
 7300 N. NATCHEZ AVE.  
 NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF  
 EXEMPTION OR DIRECT PAYMENT CERTIFICATE



IRCON, INC.  
 7300 North Natchez Avenue  
 Niles, Illinois 60714 USA

Telephone 847-967-5151  
 Toll Free 800-323-7660  
 Fax 847-647-0948

ISO 9001/QS 9000 TE  
 Quality Systems Certified

**Modified Standard Product  
 Data Form**

*A modified standard product is a product that is based on a standard product found in the most recent price list. The modifications maybe items such as; temperature ranges, output types, resolution, response time and optical issues. A modified standard product form is to be completed and submitted to Steve Schumm and Gene Kalley for review and approval based on the modification (which we have done before). If the modification has not been done before, the approval will require the entire senior management team's approval BEFORE QUOTING. A modified standard product if approved; this product will become a price listed standard product. We can then pay commission as outlined in our most recent contract.*

- Standard Product is a Model Number: ONE 31-13C
- Standard Product List Price: \$ 1550
- The product change requested would be: Re-do R 730: 375 to 850C  
0/50 Resolution ***Sales will attach specifics to this form.***
- The market is willing to pay \$1750 for this product (total including standard price).
- What is engineering's expected time investment and cost: 1 hour Man Days  
\$ 100.00
- What is production's expected purchasing and production time requirement: \_\_\_\_\_ Days
- This new product has potential in the following application and estimated potential per year would be \_\_\_\_\_ per year:

---

- This product will be  not be \_\_\_\_\_ quoted and produced as previously outlined.
- Agreed on this date of \_\_\_\_\_ By production/purchasing \_\_\_\_\_  
 By engineering A-DONATO 8/16/05
- Sales can now quote this project for \$ \_\_\_\_\_ per unit. W.O.# 19420  
 \_\_\_\_\_ lead time.

\_\_\_\_\_ Add to standard product list in literature (Maxine)  
 \_\_\_\_\_ Add to price list (Vern)  
 cc/ Greg P, Paul V, Regional Sales Staff Globally

W.O.# 19420

Number :DN-NC#26482 - IRCON INFRARAIL IRT SO-LI: 88924\*1

Level	Part Number	Description	Quantity	UM	Alt	MB	X	ECO No.	ECO Date	Start Use	End Use
1	DN0DNE	DN PRICES	1.0000	EA							
1	C11201-R713	SENSING HEAD FINAL ASSY	1.0000	EA							
2	451323	FIELD STOP .044DIA	1.0000	EA		B		3709	05-17-1996		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	990300005	RETAINING RING 7/16 OD, .2	1.0000	EA		B		3709	05-17-1996		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B		3709	05-17-1996		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M	P	3709	05-17-1996		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M	P	3770	08-21-1996		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B					
4	640552	FILTER, BANDPASS	1.0000	EA		B					
4	590942	DETECTOR InGaAs 1.6u	1.0000	EA		B					
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B					
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B					
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B					
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B					
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B					
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B					
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B					
4	200204130	SCREW #2-56 X 1/8 PH SLOT	1.0000	EA		B					
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B					
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B					
2	447352	SENSOR, E-HEAD	1.0000	EA		B		3709	05-17-1996		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B		3709	05-17-1996		
2	990100002	EPOXY HARDMAN #4005 GEN P	1.0000	EA		B		3709	05-17-1996		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B		3709	05-17-1996		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B		3709	05-17-1996		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B		3709	05-17-1996		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B		3709	05-17-1996		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B		3709	05-17-1996		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B		3709	05-17-1996		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B		3709	05-17-1996		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B		3709	05-17-1996		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B		3709	05-17-1996		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B		3709	05-17-1996		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B		3709	05-17-1996		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	443502	RETAINING NUT	1.0000	EA		B		3709	05-17-1996		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B		3709	05-17-1996		
2	474772	LABEL GROUND WARNING	1.0000	EA		B		3709	05-17-1996		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B		3709	05-17-1996		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B		3709	05-17-1996		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B		3709	05-17-1996		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B		3709	05-17-1996		
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M	P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B		3671	04-08-1996		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M	P	3671	04-08-1996		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M	P	4202	01-14-1999		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M	P	4202	01-14-1999		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B		3769	08-05-1996		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B		3769	08-05-1996		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B		3769	08-05-1996		
4	532952	OP-AMP ULTRA LOW BIAS	2.0000	EA		B		3769	08-05-1996		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B		4842	07-31-2002		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B		3769	08-05-1996		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B		3769	08-05-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B		3769	08-05-1996		

R730

Number :DN-NC#26482 - IRCON INFRARAIL IRT SO-LI: 88924\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA		B	3769	08-05-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA		B				
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	4906	05-19-2003		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-1996		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-1996		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-1996		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-1996		
4	551122	CHOKE 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-1996		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-1996		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-1996		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-1996		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-1996		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-1996		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-1996		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-1996		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-1996		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-1996		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-1996		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-1996		
3	C20211	SCHEMATIC/ PREAMP/ LINEAR	1.0000	EA		M P	4785	03-05-2002		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-1996		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-1996		
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	532982	OP-AMP AD548CQ LOW PWR	1.0000	EA		B	3767	08-07-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	3.0000	EA		B	3767	08-07-1996		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-1996		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	6.0000	EA		B	3767	08-07-1996		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-1996		
4	551122	CHOKE 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-1996		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-1996		
4	521962	CAP. 10Pf NPO 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-1996		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-1996		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	526002	CAP. SMC 330Pf NPO 50V 5%	1.0000	EA		B	3767	08-07-1996		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-1996		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-1996		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-1996		

Number :DN-NC#26482 - IRCON INFRARAIL IRT SO-LI: 88924\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB X	ECO No.	ECO Date	Start Use	End Use
				UM						
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-1996		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	4909	06-11-2003		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-1997		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONNEC	1.0000	EA		M P	3671	04-08-1996		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-1996		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-1996		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-1996		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-1996		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-1996		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-1996		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B	3671	04-08-1996		
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B	3671	04-08-1996		
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P	3671	04-08-1996		
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B				
3	T-C11194-1	SELECT "M1" MODULE VALUES	0.0000	EA		B				
3	T-C11194-3	GT M1 MODULE VALUES	0.0000	EA		B				
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B	3671	04-08-1996		
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B	3671	04-08-1996		
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B	3671	04-08-1996		
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B	3671	04-08-1996		
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M P	3671	04-08-1996		
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B	3694	04-17-1996		
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B	3671	04-08-1996		
1	U-M1-R730	MODULE ASSEMBLY M1	1.0000	EA		M P				
2	107323011	RES. 732K OHM MF 1/4W 1%	1.0000	EA		B				
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101153011	RES. 115K OHM MF 1/4W 1%	1.0000	EA		B				
2	101542011	RES. 15.4K OHM MF 1/4W 1%	1.0000	EA		B				
2	106192011	RES. 61.9K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	101053011	RES. 105K OHM MF 1/4W 1%	1.0000	EA		B				
2	106191011	RES. 6.19K OHM MF 1/4W 1%	1.0000	EA		B				
2	101783011	RES. 178K OHM MF 1/4W 1%	1.0000	EA		B				
2	103571011	RES. 3.57K OHM MF 1/4W 1%	1.0000	EA		B				
2	103163011	RES. 316K OHM MF 1/4W 1%	1.0000	EA		B				
2	101961011	RES. 1.96K OHM MF 1/4W 1%	1.0000	EA		B				
2	105763011	RES. 576K OHM MF 1/4W 1%	1.0000	EA		B				
2	101101011	RES. 1.10K OHM MF 1/4W 1%	1.0000	EA		B				
2	101134011	RES. 1.13M OHM MF 1/4W 1%	1.0000	EA		B				
2	105490011	RES. 549 OHM MF 1/4W 1%	1.0000	EA		B				
2	102214011	RES. 2.21M OHM MF 1/4W 1%	1.0000	EA		B				
2	102740011	RES. 274 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104644011	RES. 4.64M OHM MF 1/4W 1%	1.0000	EA		B				

W.O.# 13278

Number :DN-EM#15687 - IRCON INFRARAIL IRT SO-LI: 82009\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
1	DN2DN	DN PRICES	1.0000	EA		M P				
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-1996		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-1996		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-1999		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-1999		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-1996		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-1996		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-1996		
4	532952	OP-AMP ULTRA LOW BIAS	2.0000	EA		B	3769	08-05-1996		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	4842	07-31-2002		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-1996		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA		B	3769	08-05-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA		B				
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	3769	08-05-1996		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-1996		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-1996		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-1996		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-1996		
4	551122	CHOKO 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-1996		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-1996		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-1996		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-1996		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-1996		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-1996		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-1996		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-1996		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-1996		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-1996		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-1996		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-1996		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	4785	03-05-2002		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-1996		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-1996		
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	532982	OP-AMP AD548CQ LOW PWR	1.0000	EA		B	3767	08-07-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	3.0000	EA		B	3767	08-07-1996		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-1996		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	6.0000	EA		B	3767	08-07-1996		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		

Proprietary and Confidential to IRCON INC

R730 (ELECTRONIC MODULE ONLY)  
WITH CABLE BREAK ALARM

Number :DN-EM#15687 - IRCON INFRARAIL IRT SO-LI: 82009\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-1996		
4	551122	CHOKER 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-1996		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-1996		
4	521962	CAP. 10Pf NPO 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-1996		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-1996		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	526002	CAP. SMC 330Pf NPO 50V 5%	1.0000	EA		B	3767	08-07-1996		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-1996		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-1996		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-1996		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-1996		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	3671	04-08-1996		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-1997		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONNEC	1.0000	EA		M P	3671	04-08-1996		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-1996		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-1996		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-1996		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-1996		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-1996		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-1996		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B	3671	04-08-1996		
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B	3671	04-08-1996		
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P	3671	04-08-1996		
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B				
3	T-C11194-1	SELECT "M1" MODULE VALUES	0.0000	EA		B				
3	T-C11194-3	GT M1 MODULE VALUES	0.0000	EA		B				
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B	3671	04-08-1996		
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B	3671	04-08-1996		
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B	3671	04-08-1996		
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B	3671	04-08-1996		
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M P	3671	04-08-1996		
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B	3694	04-17-1996		
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B	3671	04-08-1996		
1	U-M1-R730	MODULE ASSEMBLY M1	1.0000	EA		M P				
2	107323011	RES. 732K OHM MF 1/4W 1%	1.0000	EA		B				

Number :DN-EM#15687 - IRCON INFRARAIL IRT SO-LI: 82009\*1

.....Level.....	..Part Number..	.....Description.....	.Quantity.	.UM.	Alt.	MB X	.ECO No.	.ECO Date.	.Start Use	.End Use..
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101153011	RES. 115K OHM MF 1/4W 1%	1.0000	EA		B				
2	101542011	RES. 15.4K OHM MF 1/4W 1%	1.0000	EA		B				
2	106192011	RES. 61.9K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	101053011	RES. 105K OHM MF 1/4W 1%	1.0000	EA		B				
2	106191011	RES. 6.19K OHM MF 1/4W 1%	1.0000	EA		B				
2	101783011	RES. 178K OHM MF 1/4W 1%	1.0000	EA		B				
2	103571011	RES. 3.57K OHM MF 1/4W 1%	1.0000	EA		B				
2	103163011	RES. 316K OHM MF 1/4W 1%	1.0000	EA		B				
2	101961011	RES. 1.96K OHM MF 1/4W 1%	1.0000	EA		B				
2	105763011	RES. 576K OHM MF 1/4W 1%	1.0000	EA		B				
2	101101011	RES. 1.10K OHM MF 1/4W 1%	1.0000	EA		B				
2	101134011	RES. 1.13M OHM MF 1/4W 1%	1.0000	EA		B				
2	105490011	RES. 549 OHM MF 1/4W 1%	1.0000	EA		B				
2	102214011	RES. 2.21M OHM MF 1/4W 1%	1.0000	EA		B				
2	102740011	RES. 274 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104644011	RES. 4.64M OHM MF 1/4W 1%	1.0000	EA		B				

*W.O. # 10014*

Number :DN#10478 - IRCON INFRARAIL IRT SO-LI: 78132\*1

Level	Part Number	Description	Quantity	UM	Alt	MB	X	ECO No.	ECO Date	Start Use	End Use
1	DN0DNE	DN PRICES	1.0000	EA		M	P				
1	<i>OK</i> C11201-R713	SENSING HEAD FINAL ASSY	1.0000	EA		M	P				
2	451323	FIELD STOP .044DIA	1.0000	EA		B		3709	05-17-1996		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	990300005	RETAINING RING 7/16 OD, .2	1.0000	EA		B		3709	05-17-1996		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B		3709	05-17-1996		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M	P	3709	05-17-1996		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M	P	3770	08-21-1996		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B					
4	640552	FILTER, BANDPASS	1.0000	EA		B					
4	590942	DETECTOR InGaAs 1.6u	1.0000	EA		B					
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B					
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B					
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B					
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B					
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B					
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B					
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B					
4	200204130	SCREW #2-56 X 1/8 PH SLOT	1.0000	EA		B					
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B					
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B					
2	447352	SENSOR, E-HEAD	1.0000	EA		B		3709	05-17-1996		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B		3709	05-17-1996		
2	990100002	EPOXY HARDMAN #4005 GEN P	1.0000	EA		B		3709	05-17-1996		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B		3709	05-17-1996		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B		3709	05-17-1996		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B		3709	05-17-1996		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B		3709	05-17-1996		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B		3709	05-17-1996		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B		3709	05-17-1996		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B		3709	05-17-1996		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B		3709	05-17-1996		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B		3709	05-17-1996		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B		3709	05-17-1996		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B		3709	05-17-1996		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	443502	RETAINING NUT	1.0000	EA		B		3709	05-17-1996		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B		3709	05-17-1996		
2	474772	LABEL GROUND WARNING	1.0000	EA		B		3709	05-17-1996		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B		3709	05-17-1996		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B		3709	05-17-1996		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B		3709	05-17-1996		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B		3709	05-17-1996		
1	D11198	PVC-(INT/EXT-E/F SERIES) (	1.0000	EA		M	P				
2	560052	CABLE PVC 2 COND 1100/200	1.0000	FT		B		3913	04-02-1997		
2	D11198/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	D11198/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M					
2	D11198/03	SEE EXTENDED DESCRIPTION	8.0000	EA		M					
2	575882	CONN. CIRC 10SL-3 BACKSHE	1.0000	EA		B		3913	04-02-1997		
2	3210G00X0	TUBING #10 PVC CLEAR	3.0000	IN		B		3913	04-02-1997		
2	3212G00X0	TUBING #12 PVC CLEAR	1.0000	IN		B		3913	04-02-1997		
2	575902	CONN. CIRC 10SL-3 STR PLU	1.0000	EA		B		3913	04-02-1997		
2	3216I1400	TUBING 1/4" SHRINKABLE BL	1.0000	IN		B		3913	04-02-1997		
2	990100027	ADHESIVE LOCTITE 272	1.0000	EA		B		3913	04-02-1997		
2	C-CABLE	DETERMINE CABLE LENGTH FR	1.0000	EA		M	P	3913	04-02-1997		
2	477202	LABEL INFRARAIL (2.0" X 0	1.0000	EA		B		3913	04-02-1997		
1	U-D11198-C	12 FEET OF CABLE	1.0000	EA		M	P				
2	560052	CABLE PVC 2 COND 1100/200	12.0000	FT		B					
1	U-M1-R730	MODULE ASSEMBLY M1	1.0000	EA		M	P				
2	107323011	RES. 732K OHM MF 1/4W 1%	1.0000	EA		B					
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B					
2	101153011	RES. 115K OHM MF 1/4W 1%	1.0000	EA		B					
2	101542011	RES. 15.4K OHM MF 1/4W 1%	1.0000	EA		B					
2	106192011	RES. 61.9K OHM MF 1/4W 1%	1.0000	EA		B					
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B					

*R730 (WITH CABLE BREAK ALARM)*

Number :DN#10478 - IRCON INFRARAIL IRT SO-LI: 78132\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
2	101053011	RES. 105K OHM MF 1/4W 1%	1.0000	EA		B				
2	106191011	RES. 6.19K OHM MF 1/4W 1%	1.0000	EA		B				
2	101783011	RES. 178K OHM MF 1/4W 1%	1.0000	EA		B				
2	103571011	RES. 3.57K OHM MF 1/4W 1%	1.0000	EA		B				
2	103163011	RES. 316K OHM MF 1/4W 1%	1.0000	EA		B				
2	101961011	RES. 1.96K OHM MF 1/4W 1%	1.0000	EA		B				
2	105763011	RES. 576K OHM MF 1/4W 1%	1.0000	EA		B				
2	101101011	RES. 1.10K OHM MF 1/4W 1%	1.0000	EA		B				
2	101134011	RES. 1.13M OHM MF 1/4W 1%	1.0000	EA		B				
2	105490011	RES. 549 OHM MF 1/4W 1%	1.0000	EA		B				
2	102214011	RES. 2.21M OHM MF 1/4W 1%	1.0000	EA		B				
2	102740011	RES. 274 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104644011	RES. 4.64M OHM MF 1/4W 1%	1.0000	EA		B				
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-1996		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-1996		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-1999		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-1999		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-1996		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-1996		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-1996		
4	532952	OP-AMP OP80GP ULTRA LOW B	2.0000	EA		B	3769	08-05-1996		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	3769	08-05-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-1996		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA		B	3769	08-05-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA		B				
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	3769	08-05-1996		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-1996		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-1996		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-1996		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-1996		
4	551122	CHOKER 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-1996		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-1996		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-1996		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-1996		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-1996		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-1996		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-1996		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-1996		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-1996		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-1996		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-1996		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-1996		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	3659	04-12-1996		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-1996		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-1996		

Number :DN#10478 - IRCON INFRARAIL IRT SO-LI: 78132\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	532982	OP-AMP AD548CQ LOW PWR	1.0000	EA		B	3767	08-07-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	2.0000	EA		B	3767	08-07-1996		
4	532992	OP-AMP OP490EY LOW VOLT Q	1.0000	EA		B	3767	08-07-1996		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-1996		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	4.0000	EA		B	3767	08-07-1996		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-1996		
4	551122	CHOKER 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-1996		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-1996		
4	521962	CAP. 10Pf NPO 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-1996		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-1996		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	526002	CAP. SMC 330PF NPO 50V 5%	1.0000	EA		B	3767	08-07-1996		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-1996		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-1996		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-1996		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-1996		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	3671	04-08-1996		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-1997		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONNEC	1.0000	EA		M P	3671	04-08-1996		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-1996		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-1996		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-1996		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-1996		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-1996		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-1996		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B	3671	04-08-1996		
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B	3671	04-08-1996		

Number :DN#10478 - IRCON INFRARAIL IRT SO-LI: 78132\*1

Level	Part Number	Description	Quantity	UM	Alt.	MB	X	ECO No.	ECO Date	Start Use	End Use
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M	P	3671	04-08-1996		
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B					
3	T-C11194-1	SELECT "M1" MODULE VALUES	0.0000	EA		B					
3	T-C11194-3	GT M1 MODULE VALUES	0.0000	EA		B					
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B		3671	04-08-1996		
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B		3671	04-08-1996		
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B		3671	04-08-1996		
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B		3671	04-08-1996		
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M	P	3671	04-08-1996		
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B		3694	04-17-1996		
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M	P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B		3671	04-08-1996		



IRCON, INC T 847-967-5151  
 7300 North Natchez Ave T 800-323-7660  
 Niles, Illinois 60714 USA F 847-647-0948

# Acknowledgment

ORDER DATE: 14 NOV 2006

REV: DATE:

Customer No. 101142  
 SOLD TO

**SHIP TO**

EXTRUDED METALS  
 302 SOUTH ASHFIELD  
 BELDING, MI 48809

EXTRUDED METALS  
 302 SOUTH ASHFIELD  
 BELDING, MI 48809

**SPECIAL SHIPPING INSTRUCTIONS**

OUR ORDER No.		YOUR PO No.		F.O.B.			TAX
92506		P067984-00		ORIGIN			Resale
SHIP VIA		TERMS		DATE REQUESTED	SALES REPRESENTATIVE		
UPS		0.00/0/30		12-06-06	1004 (100.00)		
LI	PART NO.	PRODUCT/DESCRIPTION	QTY	UNIT PRICE	DISC	NET PRICE	EXTENSION
1	DN#32104 <i>W.O.# 22807</i>	<del>DN_DNE31-13C</del> <i>PNE99-99C</i> IRCON INFRARAIL IRT SYSTEM-COMplete Consists of the following: 1.0000 - INFRARAIL 1.0000 - DN - E SERIES 1.0000 - Std Cbl Lgth 12ft 1.0000 - D/100 RESOLUTION (E) 1.0000 - 1400-2400F (E) DN_DNE31-13C	2	2395.00	0.0	2395.00	4790.00
		<i>Relo Spec No R1730</i> <i>Temp range 375 to 850C</i> <i>D/50 resolution</i> <i>with cable break alarm</i> <i>RVB</i> <i>11/14</i>					
THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE					<b>GRAND TOTAL</b>		USD4,790.00

SHIP TO: IRCON, INC.  
 7300 N. NATCHEZ AVE.  
 NILES, IL 60714 USA

IF TAX EXEMPT, PLEASE PROVIDE COPY OF EXEMPTION OR DIRECT PAYMENT CERTIFICATE



IRCON, INC.  
7300 North Natchez Avenue  
Niles, Illinois 60714 USA

Telephone 847-967-5151  
Toll Free 800-323-7660  
Fax 847-647-0948

ISO 9001/OS 9000 TE  
Quality Systems Certified

**Modified Standard Product**  
**Data Form**

*A modified standard product is a product that is based on a standard product found in the most recent price list. The modifications maybe items such as; temperature ranges, output types, resolution, response time and optical issues. A modified standard product form is to be completed and submitted to Steve Schumm and Gene Kalley for review and approval based on the modification (which we have done before). If the modification has not been done before, the approval will require the entire senior management team's approval BEFORE QUOTING. A modified standard product if approved; this product will become a price listed standard product. We can then pay commission as outlined in our most recent contract.*

- Standard Product is a Model Number: PNE31-13C
- Standard Product List Price: \$ 1945
- The product change requested would be: Reel R730 375 to 850C  
P/SO Reel + Cable for alarm *Sales will attach specifics to this form.*
- The market is willing to pay: 2395 for this product (total including standard price).
- What is engineering's expected time investment and cost: 1 hour Man Days  
\$ 100.00
- What is production's expected purchasing and production time requirement:      Days
- This new product has potential in the following application and estimated potential per year would be      per year.

- 
- This product will be  not be  quoted and produced as previously outlined.
  - Agreed on this date of      By production/purchasing       
By engineering A. DONADO 11/15/06
  - Sales can now quote this project for \$      per unit. W.O.#22807  
     lead time.

Add to standard product list in literature (Maxine)  
 Add to price list (Vern)  
cc/ Greg P, Paul V, Regional Sales Staff Globally

W.O. # 22807

Number :DN#32104 - IRCON INFRARAIL IRT SO-LI: 92506\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
1	DNODNE	DN PRICES	1.0000	EA		M P				
1	OK C11201-R713	SENSING HEAD FINAL ASSY	1.0000	EA		M P				
2	451323	FIELD STOP .044DIA	1.0000	EA		B	3709	05-17-1996		
2	C11201/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	990300005	RETAINING RING 7/16 OD, .2	1.0000	EA		B	3709	05-17-1996		
2	431442	DET. LOCATOR MOD2	1.0000	EA		B	3709	05-17-1996		
2	C11209-R707	SH DETECTOR ASSEMBLY E HD	1.0000	EA		M P	3709	05-17-1996		
3	LR721-D	DET ASSY FOR SPL# R721	1.0000	EA		M P	3770	08-21-1996		
4	LR721-D/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	431432	DET. HOLDER MR20 SERIES	1.0000	EA		B				
4	640552	FILTER, BANDPASS	1.0000	EA		B				
4	590942	DETECTOR InGaAs 1.6u	1.0000	EA		B				
4	LR721-D/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	560372	CABLE PVC 1 COND SHIELD 2	3.0000	IN		B				
4	312430100	WIRE 24AWG BARE SOLID	1.0000	IN		B				
4	430292	CONN. GASKET 2000 SERIES	1.0000	EA		B				
4	575892	CONN. CIRC 3 RECPT 10SL-3	1.0000	EA		B				
4	490042	SPRING DETECTOR RETAINER	1.0000	EA		B				
4	630092	FOLDING MIRROR SH MROA SE	1.0000	EA		B				
4	490032	SPRING FOLDING MIRROR MOD	1.0000	EA		B				
4	200204130	SCREW #2-56 X 1/8 PH SLOT	1.0000	EA		B				
4	990100016	EPOXY HARDMAN #4001 3-5 M	1.0000	EA		B				
4	3214G00X0	TUBING #14 PVC CLEAR	1.0000	IN		B				
2	447352	SENSOR, E-HEAD	1.0000	EA		B	3709	05-17-1996		
2	610432	EYE LENS FOR A HEAD	1.0000	EA		B	3709	05-17-1996		
2	990100002	EPOXY HARDMAN #4005 GEN P	1.0000	EA		B	3709	05-17-1996		
2	447372	FIELD STOP, .312 DIA	1.0000	EA		B	3709	05-17-1996		
2	447382	FIELD STOP, .437 DIA	1.0000	EA		B	3709	05-17-1996		
2	610402	LENS PLANO CONVEX 30" F/L	1.0000	EA		B	3709	05-17-1996		
2	431752	O RING 13/16 X 1/16 TH 70	1.0000	EA		B	3709	05-17-1996		
2	447362	LENS RING E-HEAD SENSOR	1.0000	EA		B	3709	05-17-1996		
2	200412440	SCREW #4-40 X 3/8 FIL SLO	4.0000	EA		B	3709	05-17-1996		
2	220403200	WASHER #4 LOCK SPLIT RING	4.0000	EA		B	3709	05-17-1996		
2	454152	SCREW, ADJUSTMENT,	1.0000	EA		B	3709	05-17-1996		
2	433372	O RING 3/32 X 7/32 X 1/16	1.0000	EA		B	3709	05-17-1996		
2	220602200	WASHER #6 LOCK EXT TOOTH	1.0000	EA		B	3709	05-17-1996		
2	200606040	SCREW #6-32 X 3/16 PH SLO	1.0000	EA		B	3709	05-17-1996		
2	C11201/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	443502	RETAINING NUT	1.0000	EA		B	3709	05-17-1996		
2	477142	LABEL, SERIAL NUMBER, SEN	1.0000	EA		B	3709	05-17-1996		
2	474772	LABEL GROUND WARNING	1.0000	EA		B	3709	05-17-1996		
2	T-C11201-1	DETERMINE IF CABLE IS REQ	0.0000	EA		B	3709	05-17-1996		
2	C11201/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	999900013	CAP PLUG #SC-1-1/4	1.0000	EA		B	3709	05-17-1996		
2	990100028	SEALANT RTV SILICONE BLAC	1.0000	EA		B	3709	05-17-1996		
2	999900014	STEM BUMPER 3/8OD .275T	1.0000	EA		B	3709	05-17-1996		
1	D11198	PVC-(INT/EXT-E/F SERIES) (	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	1.0000	FT		B	3913	04-02-1997		
2	D11198/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	D11198/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M				
2	D11198/03	SEE EXTENDED DESCRIPTION	8.0000	EA		M				
2	575882	CONN. CIRC 10SL-3 BACKSHE	1.0000	EA		B	3913	04-02-1997		
2	3210G00X0	TUBING #10 PVC CLEAR	3.0000	IN		B	3913	04-02-1997		
2	3212G00X0	TUBING #12 PVC CLEAR	1.0000	IN		B	3913	04-02-1997		
2	575902	CONN. CIRC 10SL-3 STR PLU	1.0000	EA		B	3913	04-02-1997		
2	3216I1400	TUBING 1/4" SHRINKABLE BL	1.0000	IN		B	3913	04-02-1997		
2	990100027	ADHESIVE LOCTITE 272	1.0000	EA		B	3913	04-02-1997		
2	C-CABLE	DETERMINE CABLE LENGTH FR	1.0000	EA		M P	3913	04-02-1997		
2	477202	LABEL INFRARAIL (2.0" X 0	1.0000	EA		B	3913	04-02-1997		
1	U-D11198-C	12 FEET OF CABLE	1.0000	EA		M P				
2	560052	CABLE PVC 2 COND 1100/200	12.0000	FT		B				
1	U-M1-R730	MODULE ASSEMBLY M1	1.0000	EA		M P				
2	107323011	RES. 732K OHM MF 1/4W 1%	1.0000	EA		B				
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101153011	RES. 115K OHM MF 1/4W 1%	1.0000	EA		B				
2	101542011	RES. 15.4K OHM MF 1/4W 1%	1.0000	EA		B				
2	106192011	RES. 61.9K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				

R730 (WITH CABLE BREAK ALARM)

Number :DN#32104 - IRCON INFRARAIL IRT SO-LI: 92506\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
2	101053011	RES. 105K OHM MF 1/4W 1%	1.0000	EA		B				
2	106191011	RES. 6.19K OHM MF 1/4W 1%	1.0000	EA		B				
2	101783011	RES. 178K OHM MF 1/4W 1%	1.0000	EA		B				
2	103571011	RES. 3.57K OHM MF 1/4W 1%	1.0000	EA		B				
2	103163011	RES. 316K OHM MF 1/4W 1%	1.0000	EA		B				
2	101961011	RES. 1.96K OHM MF 1/4W 1%	1.0000	EA		B				
2	105763011	RES. 576K OHM MF 1/4W 1%	1.0000	EA		B				
2	101101011	RES. 1.10K OHM MF 1/4W 1%	1.0000	EA		B				
2	101134011	RES. 1.13M OHM MF 1/4W 1%	1.0000	EA		B				
2	105490011	RES. 549 OHM MF 1/4W 1%	1.0000	EA		B				
2	102214011	RES. 2.21M OHM MF 1/4W 1%	1.0000	EA		B				
2	102740011	RES. 274 OHM MF 1/4W 1%	1.0000	EA		B				
2	102260011	RES. 226 OHM MF 1/4W 1%	1.0000	EA		B				
2	104644011	RES. 4.64M OHM MF 1/4W 1%	1.0000	EA		B				
1	D11191	INFRARAIL BOX ASSEMBLY	1.0000	EA		M P				
2	433332	ENCLOSURE, DIN BOX, MODIF	1.0000	EA		B	3671	04-08-1996		
2	C11187	POWER SUPPLY/ PEAK-PICKER	1.0000	EA		M P	3671	04-08-1996		
3	C20212	SCHEMATIC: POWER SUPPLY/	1.0000	EA		M P	4202	01-14-1999		
3	LDN200	PWR SUPPLY/ PP PCB ASSY	1.0000	EA		M P	4202	01-14-1999		
4	502505	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3769	08-05-1996		
4	LDN200/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	533082	TRAN. MJE800 NPN - DARLIN	1.0000	EA		B	3769	08-05-1996		
4	LDN200/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN200/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	530882	DIODE 1N4002 GP RECTIFIER	1.0000	EA		B	3769	08-05-1996		
4	532952	OP-AMP ULTRA LOW BIAS	2.0000	EA		B	3769	08-05-1996		
4	532322	IC 4053B ANALOG MUX/DEMUX	1.0000	EA		B	4842	07-31-2002		
4	531862	OP-AMP LM346N PROGRAM QUA	1.0000	EA		B	3769	08-05-1996		
4	102493011	RES. 249K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	103321011	RES. 3.32K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101820011	RES. 182 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104421011	RES. 4.42K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	106654011	RES. 6.65M OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	104021011	RES. 4.02K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	103480011	RES. 348 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	100000990	JUMPER DUMMY RESISTOR	5.0000	EA		B	3769	08-05-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101004011	RES. 1.00M OHM MF 1/4W 1%	4.0000	EA		B	3769	08-05-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3769	08-05-1996		
4	104991011	RES. 4.99K OHM MF 1/4W 1%	1.0000	EA		B	3769	08-05-1996		
4	101503011	RES. 150K OHM MF 1/4W 1%	1.0000	EA		B				
4	530572	DIODE 1N4446 SWITCHING	2.0000	EA		B	4906	05-19-2003		
4	530532	DIODE FD300 GENERAL PURPO	1.0000	EA		B	3769	08-05-1996		
4	521852	CAP. 0.68 MFD 50V CERAMIC	1.0000	EA		B	3769	08-05-1996		
4	521972	CAP. .047 MFD 50V CER X7	1.0000	EA		B	3769	08-05-1996		
4	521072	CAP. 22MFD 16V TANT 10%	2.0000	EA		B	3769	08-05-1996		
4	551122	CHOKO 9250-122 1.2 UH, .1	2.0000	EA		B	3769	08-05-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	1.0000	EA		B	3769	08-05-1996		
4	521862	CAP. 3.3 MFD 50V CERAMC X	1.0000	EA		B	3769	08-05-1996		
4	521872	CAP. 1.0 MFD 50V CERAMIC	5.0000	EA		B	3769	08-05-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	6.0000	EA		B	3769	08-05-1996		
4	531892	REG. LM317LZ +1.2/37V ADJ	1.0000	EA		B	3769	08-05-1996		
4	431902	BIVAR PERMO PAD 0.250 DIA	1.0000	EA		B	3769	08-05-1996		
4	530862	TRAN. 2N2222A NPN MED POW	1.0000	EA		B	3769	08-05-1996		
4	551152	INDUCTOR 100UH +/-10% IMS	2.0000	EA		B	3769	08-05-1996		
4	531882	DIODE LM385BZ-2.5 2.5V RE	6.0000	EA		B	3769	08-05-1996		
4	575602	CONN. HDR AMP STRAIGHT 5	1.0000	EA		B	3769	08-05-1996		
4	574592	CONN. HDR AMP STRAIGHT 4	1.0000	EA		B	3769	08-05-1996		
4	LDN200/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3769	08-05-1996		
4	LDN200/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11186	PREAMP/ LINEARIZER PCB AS	1.0000	EA		M P	3671	04-08-1996		
3	C20211	SCHEMATIC: PREAMP/ LINEAR	1.0000	EA		M P	4785	03-05-2002		
3	LDN100	PREAMP/ LIN PCB ASSY INFR	1.0000	EA		M P	3659	04-12-1996		
4	502493	PCB DIN RAIL LINEARIZER	1.0000	EA		B	3767	08-07-1996		

Number :DN#32104 - IRCON INFRARAIL IRT SO-LI: 92506\*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
4	LDN100/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	LDN100/02	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	532982	OP-AMP AD548CQ LOW PWR	1.0000	EA		B	3767	08-07-1996		
4	531862	OP-AMP LM346N PROGRAM QUA	3.0000	EA		B	3767	08-07-1996		
4	530532	DIODE FD300 GENERAL PURPO	16.0000	EA		B	3767	08-07-1996		
4	514632	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	514642	RES. 330K NETWORK 10 PIN	2.0000	EA		B	3767	08-07-1996		
4	104533011	RES. 453K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	1010R0011	RES. 10.0 OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102743011	RES. 274K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102103011	RES. 210K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	105364011	RES. 5.36M OHM MF 1/4W 1%	6.0000	EA		B	3767	08-07-1996		
4	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	101003011	RES. 100K OHM MF 1/4W 1%	1.0000	EA		B	3767	08-07-1996		
4	102003011	RES. 200K OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	101000011	RES. 100 OHM MF 1/4W 1%	2.0000	EA		B	3767	08-07-1996		
4	100000990	JUMPER DUMMY RESISTOR	1.0000	EA		B	3767	08-07-1996		
4	551122	CHOKO 9250-122 1.2 UH, .1	1.0000	EA		B	3767	08-07-1996		
4	540412	FERRITE BEAD ON LEAD AXIA	3.0000	EA		B	3767	08-07-1996		
4	522002	CAP. .01 MFD 200V CERAMIC	7.0000	EA		B	3767	08-07-1996		
4	521902	CAP. NPO 1000pf 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	521932	CAP. 100 PF COG 200V	1.0000	EA		B	3767	08-07-1996		
4	521962	CAP. 10Pf NPO 200V .2LS	2.0000	EA		B	3767	08-07-1996		
4	514612	POT. 50K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514242	POT. 25K OHM 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	514622	POT. 100K 25T 1/2W 10%	1.0000	EA		B	3767	08-07-1996		
4	574922	CONN. HDR AMP STRAIGHT 3	1.0000	EA		B	3767	08-07-1996		
4	LDN100/03	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	574432	SOCKET 40 POS DIP .5HT EL	1.0000	EA		B	3767	08-07-1996		
4	LDN100/04	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	526002	CAP. SMC 330Pf NPO 50V 5%	1.0000	EA		B	3767	08-07-1996		
4	572732	HEADER SNGL 36 PIN .1 CNT	11.0000	EA		B	3767	08-07-1996		
4	LDN100/05	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	C11193	PCB INTERCONNECT ASSEMBLY	1.0000	EA		M P	3671	04-08-1996		
3	LDN300	PCB INTERCONN ASSY (INFRA	1.0000	EA		M P				
4	502533	PCB DIN RAIL POWER PEAK-P	1.0000	EA		B	3721	08-01-1996		
4	575922	CONN. FEMALE 11 POSITION	2.0000	EA		B	3721	08-01-1996		
2	477112	LABEL, COVER, DIN BOX	1.0000	EA		B	4909	06-11-2003		
2	C11190	DECAY RATE POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN003	DECAY RATE POT/ CONN. ASS	1.0000	EA		M P	4030	10-08-1997		
4	514592	POT. 50K OHM 1T 1/2W 10%	1.0000	EA		B				
4	LDN003/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
4	302479000	WIRE 24AWG VIO/WHITE STRA	1.0000	IN		B				
4	302409000	WIRE 24AWG BLK/WHITE STRA	1.0000	IN		B				
4	302459000	WIRE 24AWG GRN/WHITE STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574692	CONN. HOUSING 5 POSITION-	1.0000	EA		B				
2	C11189	RESPONSE TIME POT/ CONNEC	1.0000	EA		M P	3671	04-08-1996		
3	LDN002	RESP. TIME POT/ CONN. ASS	1.0000	EA		M P				
4	514602	POT. 5M OHM 1T 1/2W 20% P	1.0000	EA		B				
4	302440000	WIRE 24AWG YEL/BLACK STRA	1.0000	IN		B				
4	302460000	WIRE 24AWG BLU/BLACK STRA	1.0000	IN		B				
4	302430000	WIRE 24AWG ORG/BLACK STRA	1.0000	IN		B				
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B				
4	574682	CONN. HOUSING 4 POSITION-	1.0000	EA		B				
2	C11188	EMISSIVITY POT/ CONNECTOR	1.0000	EA		M P	3671	04-08-1996		
3	LDN001	EMISSIVITY POT/ CONN. ASS	1.0000	EA		M P	3767	08-07-1996		
4	513722	POT. 100K 2 DIGIT 1% DIGI	1.0000	EA		B	3767	08-07-1996		
4	30245X000	WIRE 24AWG GREEN STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30249X000	WIRE 24AWG WHITE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	30246X000	WIRE 24AWG BLUE STRANDED	1.0000	IN		B	3767	08-07-1996		
4	574662	CONN. CONTACT 20-24 AWG C	3.0000	EA		B	3767	08-07-1996		
4	574672	CONN. HOUSING 3 POSITION-	1.0000	EA		B	3767	08-07-1996		
4	477212	LABEL - CLEAR WINDOW	1.0000	EA		B	3767	08-07-1996		
2	575852	KNOB, 9MM COLLET TYPE,	2.0000	EA		B	3671	04-08-1996		
2	575872	POINTER, 9MM COLLET TYPE	2.0000	EA		B	3671	04-08-1996		
2	575862	CAP. 9MM COLLET TYPE KNOB	2.0000	EA		B	3671	04-08-1996		
2	C11194	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P	3671	04-08-1996		

Number :DN#32104 - IRCON INFRARAIL IRT SO-LI: 92506\*1

.....Level.....	..Part Number..	.....Description.....	.Quantity.	.UM.	Alt.	MB X	.ECO No.	.ECO Date.	.Start Use	.End Use..
3	573912	HEADER 40 PIN DIP .6 CENT	1.0000	EA		B				
3	T-C11194-1	SELECT "M1" MODULE VALUES	0.0000	EA		B				
3	T-C11194-3	GT M1 MODULE VALUES	0.0000	EA		B				
2	575912	CONN. KEYING ELEMENT (DN-	2.0000	EA		B	3671	04-08-1996		
2	477132	LABEL, SERIAL NUMBER, DIN	1.0000	EA		B	3671	04-08-1996		
2	477122	LABEL, DIN BOX, INFRARAIL	1.0000	EA		B	3671	04-08-1996		
2	574082	TERM. BLOCK JUMPER QUICK	1.0000	EA		B	3671	04-08-1996		
2	LDNKIT	MTG CLIP KIT FOR INFRARAI	1.0000	EA		M P	3671	04-08-1996		
3	990300010	CLIP MTG FOR DIN BOX	2.0000	EA		B	3694	04-17-1996		
3	LDNKIT/01	SEE EXTENDED DESCRIPTION	0.0000	EA		M P				
2	477182	LABEL-CE MARK (PRODUCTS)	1.0000	EA		B	3671	04-08-1996		