

APPROVED BY: Ami Donado DATE: 6-4-2001

AMI DONADO

WRITTEN BY: Ami Donado

RESTRICTIONS:
SENSING HEAD AMBIENT TEMPERATURE RESTRICTED TO 0 TO 150 DEG. F (-17 TO 65 DEG. C) AND
EMISSIVITY SETTING RESTRICTED TO 0.3 FOR THE FIRST 25 DEGREES OF THE TEMPERATURE SPAN.
UNRESTRICTED, SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

GENERALITY OF APPLICATION AND RESTRICTIONS:

NOTE: THIS SPECIAL IS A COMBINATION OF SPECIALS R713 AND R200.

MODEL: DNE99-99C
RANGE: 375 - 800 DEG. C
OPTICAL RESOLUTION: D/50 WITH FIXED FOCUS AT 30"
WAVELENGTH: 1.49 - 1.6 um

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

PURPOSE AND DESCRIPTION:

INFRARAIL SPECIAL NUMBER R714

DATE: 06-04-2001
REVISION: C
W.O. No.: 108552
CUSTOMER: IRCON GMBH
LOCATION: TAUNUSSTEIN
LOCATION: GERMANY

INFRARAIL SPECIAL NUMBER R714 CONTINUED,

PRODUCTION INSTRUCTIONS:

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

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

DETECTOR ASSEMBLY CHANGES: (REF. ASSY. # C11209).

1. INSTALL InGaAs DETECTOR P.N. 59094-2 IN LIEU OF THE STANDARD SILICON DETECTOR.

2. WIRE THE DETECTOR PER DETAIL A OF DRAWING NO. C-11207.

3. INSTALL FILTER PART NUMBER 64055-2 (1.49 - 1.60 um).

FOR THE SENSING HEAD FINAL ASSEMBLY (C11201), USE DETECTOR FIELD STOP P.N. 45132-3 (.044" I.D.)
IN PLACE OF ITEM 1 PART NUMBER 45132-2 (.022" ID).

CALIBRATION INSTRUCTIONS:

PRE-CAL: PERFORM THE COMPUTERIZED LINEARIZER TEST PER STANDARD PROCEDURE.

ISCZS = 0.0103 UA
ISCFSS = 3.0000 UA

FINAL-CAL:

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

CALIBRATE PER STANDARD PROCEDURE.

FOLLOW OUTPUT TABLE ON PAGE 4 ATTACHED.

ISC @ Tpb 800 DEGREES C = 3.00 UA.

TEST FAULT INDICATION FEATURE BY DISCONNECTING THE INTERCONNECTING CABLE FROM THE MODULE
WHILE FOCUSED ON BLACK BODY. WHEN THIS IS DONE, THE ELECTRONIC MODULE OUTPUT SHOULD BE
20.000 Ma OR HIGHER. THIS HIGH OUTPUT WITH THE SENSOR DISCONNECTED PROVIDES THE CUSTOMER
WITH A FAULT INDICATION SIGNAL TO WARN OF A DISCONNECTED SENSOR CABLE.

MANUAL INSTRUCTIONS:

GENERIC INFRARAIL SERIES MANUAL.

INCLUDE THE RESTRICTIONS LISTED ON PAGE 1 OF THESE DETAIL SHEETS.

INFRARAIL SPECIAL NUMBER R714 CONTINUED,

BILL OF MATERIAL

MODEL: DNE99-99C

MODULE M1 REFERENCE: DWG. NO. C11194

SYMBOL

PART NO.

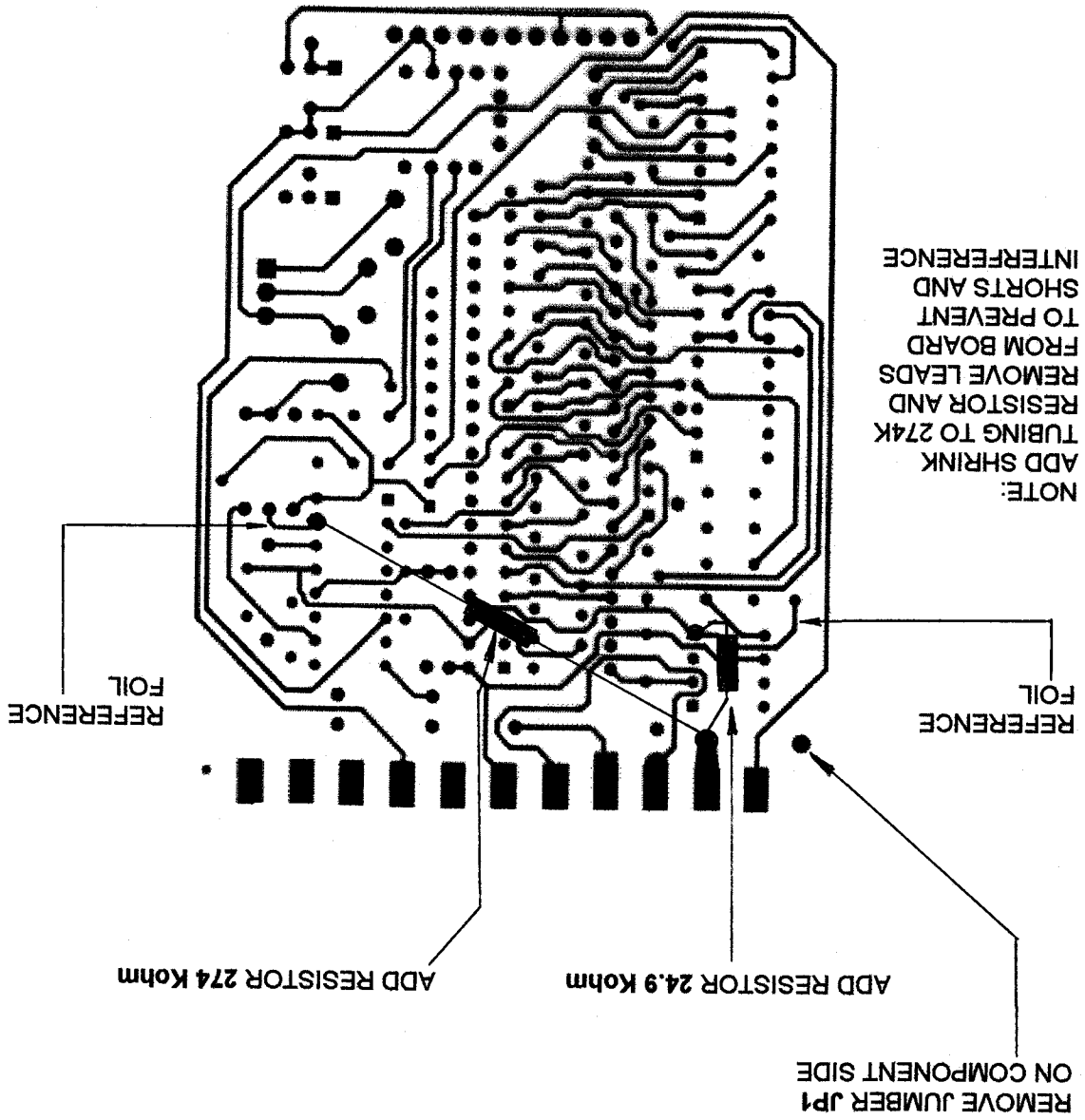
DESCRIPTION

SYMBOL	PART NO.	DESCRIPTION
R1	101074011	RESISTOR 1.07 Mohm METAL FILM 1/4W 1%
R44	101872011	RESISTOR 18.7 Kohm METAL FILM 1/4W 1%
R54	101183011	RESISTOR 118 Kohm METAL FILM 1/4W 1%
R45	101472011	RESISTOR 14.7 Kohm METAL FILM 1/4W 1%
R55	105902011	RESISTOR 59.0 Kohm METAL FILM 1/4W 1%
R46	101002011	RESISTOR 10.0 Kohm METAL FILM 1/4W 1%
R56	109762011	RESISTOR 97.6 Kohm METAL FILM 1/4W 1%
R47	106341011	RESISTOR 6.34 Kohm METAL FILM 1/4W 1%
R57	101623011	RESISTOR 162 Kohm METAL FILM 1/4W 1%
R48	103831011	RESISTOR 3.83 Kohm METAL FILM 1/4W 1%
R58	102803011	RESISTOR 280 Kohm METAL FILM 1/4W 1%
R49	102211011	RESISTOR 2.21 Kohm METAL FILM 1/4W 1%
R59	104993011	RESISTOR 499 Kohm METAL FILM 1/4W 1%
R50	101211011	RESISTOR 1.21 Kohm METAL FILM 1/4W 1%
R60	109313011	RESISTOR 931 Kohm METAL FILM 1/4W 1%
R51	106650011	RESISTOR 665 ohm METAL FILM 1/4W 1%
R61	101744011	RESISTOR 1.74 Mohm METAL FILM 1/4W 1%
R52	103400011	RESISTOR 340 ohm METAL FILM 1/4W 1%
R53	103570011	RESISTOR 357 Ohm METAL FILM 1/4W 1%
R62	103404011	RESISTOR 3.40 Mohm METAL FILM 1/4W 1%

INFRARAIL SPECIAL NUMBER R714
 TEMPERATURE RANGE: 375 TO 800 DEGREES C
 SPECTRUM: 1.49 TO 1.60 MICRONS
 (Planck Output)

TEMPERATURE DEGREES C	SENSOR OUTPUT IN uAMPS	INDICATOR OUTPUT mAMPS
375.0	0.0103	4.000
400.0	0.0175	4.941
425.0	0.0286	5.882
450.0	0.0454	6.824
475.0	0.0697	7.765
500.0	0.1041	8.706
525.0	0.1516	9.647
550.0	0.2160	10.588
575.0	0.3012	11.529
600.0	0.4122	12.471
625.0	0.5544	13.412
650.0	0.7338	14.353
675.0	0.9570	15.294
700.0	1.2312	16.235
725.0	1.5641	17.176
750.0	1.9640	18.118
775.0	2.4396	19.059
800.0	3.0000	20.000

FAULT INDICATION MODIFICATIONS SPECIAL R714



FOIL SIDE, PCB P.N. 50249-3

SEE REV B
A.D. 2-16-2001

PAGE 1 OF 4

DATE: 12-03-1997
REVISION: A
W.O. No. 108552
CUSTOMER: IRCON GmbH
LOCATION: TAUNUSSTEIN
LOCATION: GERMANY

INFRARAIL SPECIAL NUMBER R714

PURPOSE AND DESCRIPTION:

CUSTOMER REQUIRES A SPECIAL TEMPERATURE RANGE INFRARAIL SYSTEM WITH A SPECIAL 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 - 800 DEG. C
OPTICAL RESOLUTION: D/50 WITH FIXED FOCUS AT 30"
WAVELENGTH: 1.49 - 1.6 um

NOTE: THIS SPECIAL IS A COMBINATION OF SPECIALS R713 AND R200.

GENERALITY OF APPLICATION AND RESTRICTRIONS:

RESTRICTIONS:

SENSING HEAD AMBIENT TEMPERATURE RESTRICTED TO 0 TO 150 DEG. F (-17 TO 65 DEG. C) AND EMISSIVITY SETTING RESTRICTED TO 0.3 FOR THE FIRST 25 DEGREES OF THE TEMPERATURE SPAN.

UNRESTRICTED, SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

WRITTEN BY: Ami DONADO
AMI DONADO

APPROVED BY: Ami DONADO DATE: 12-03-97

INFRARAIL SPECIAL NUMBER R714 CONTINUED,

PRODUCTION INSTRUCTIONS:

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

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

DETECTOR ASSEMBLY CHANGES: (REF. ASSY. # C11209).

1. INSTALL InGaAs DETECTOR P.N. **59079-2** IN LIEU OF THE STANDARD SILICON DETECTOR.
2. WIRE THE DETECTOR PER **DETAIL A** OF DRAWING No. **C-11207**.
3. INSTALL FILTER PART NUMBER **64055-2** (1.49 - 1.60 μm).

FOR THE SENSING HEAD FINAL ASSEMBLY (C11201), USE DETECTOR FIELD STOP P.N. **45132-3** (.044" I.D.) IN PLACE OF ITEM 1 PART NUMBER 45132-2 (.022" ID).

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

CALIBRATION INSTRUCTIONS:

CALIBRATE PER STANDARD PROCEDURE.

Isc @ Tbb 800 DEGREES C = 3.00 μA .

TEST FAULT INDICATION FEATURE BY DISCONNECTING THE INTERCONNECTING CABLE FROM THE MODULE WHILE FOCUSED ON BLACK BODY. WHEN THIS IS DONE, THE ELECTRONIC MODULE OUTPUT SHOULD BE 20.000 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 AMENDED DRAWING NUMBER C-20211.

MANUAL INSTRUCTIONS:

GENERIC INFRARAIL SERIES MANUAL.

INFRARAIL SPECIAL NUMBER R714 CONTINUED,

BILL OF MATERIAL

MODEL: DNE99-99C

MODULE M1 REFERENCE: DWG.NO.C11194

SYMBOL	PART NO.	DESCRIPTION		
R1	101074011	RESISTOR	1.07 Mohm	METAL FILM 1/4W 1%
R44	101872011	RESISTOR	18.7 Kohm	METAL FILM 1/4W 1%
R54	101183011	RESISTOR	118 Kohm	METAL FILM 1/4W 1%
R45	101472011	RESISTOR	14.7 Kohm	METAL FILM 1/4W 1%
R55	105902011	RESISTOR	59.0 Kohm	METAL FILM 1/4W 1%
R46	101002011	RESISTOR	10.0 Kohm	METAL FILM 1/4W 1%
R56	109762011	RESISTOR	97.6 Kohm	METAL FILM 1/4W 1%
R47	106341011	RESISTOR	6.34 Kohm	METAL FILM 1/4W 1%
R57	101623011	RESISTOR	162 Kohm	METAL FILM 1/4W 1%
R48	103831011	RESISTOR	3.83 Kohm	METAL FILM 1/4W 1%
R58	102803011	RESISTOR	280 Kohm	METAL FILM 1/4W 1%
R49	102211011	RESISTOR	2.21 Kohm	METAL FILM 1/4W 1%
R59	104993011	RESISTOR	499 Kohm	METAL FILM 1/4W 1%
R50	101211011	RESISTOR	1.21 Kohm	METAL FILM 1/4W 1%
R60	109313011	RESISTOR	931 Kohm	METAL FILM 1/4W 1%
R51	106650011	RESISTOR	665 ohm	METAL FILM 1/4W 1%
R61	101744011	RESISTOR	1.74 Mohm	METAL FILM 1/4W 1%
R52	103400011	RESISTOR	340 ohm	METAL FILM 1/4W 1%
R53	103570011	RESISTOR	357 Ohm	METAL FILM 1/4W 1%
R62	103404011	RESISTOR	3.40 Mohm	METAL FILM 1/4W 1%

INFRARAIL SPECIAL NUMBER R714
TEMPERATURE RANGE: 375 TO 800 DEGREES C
SPECTRUM: 1.49 TO 1.60 MICRONS

TEMPERATURE DEGREES C	SENSOR OUTPUT IN nAMPS	INDICATOR OUTPUT mAMPS
375.0	10.2708	4.000
400.0	17.4807	4.941
425.0	28.6430	5.882
450.0	45.3618	6.824
475.0	69.6710	7.765
500.0	104.0861	8.706
525.0	151.6488	9.647
550.0	215.9639	10.588
575.0	301.2265	11.529
600.0	412.2392	12.471
625.0	554.4182	13.412
650.0	733.7897	14.353
675.0	956.9757	15.294
700.0	1231.1700	16.235
725.0	1564.1096	17.176
750.0	1964.0284	18.118
775.0	2439.6250	19.059
800.0	3000.0000	20.000

Engineering Special or System Request

Page 1 of 2

From: Brian Burke
To: Joe Lakner

Date: 11-7-97
Customer: Chase Brass & Copper

Description of Request:

Base standard model or series:

Customer has InfraRail, wants some kind of fault condition to signify when the sensor cable is disconnected.

The following wiring modifications from Wender (untested) will cause the output to go to 20mA if the sensor is disconnected. The customer has accepted this & is sending 33 units in. Set price of \$80 per unit. Need special created ASAP!

Details of specific approval:

Note! It is OK to test the modifications on the customer units

OK AS ABOVE (PER WEN-DER)

Specific Exceptions: _____

Price: \$80⁰⁰ PER UNIT
(adder to standard)

Delivery: 2 WEEKS
(adder to standard)

Approved by: AMI DONADO

Date: 11-12-97

Modification Steps For R200

All modifications are done to the Preamp/Linearizer board.

1. Unsolder jumper JP1, make sure the hole going to the edge finger is open.
2. Add the 24.9K resistor to the solder-side per the picture. One end of the resistor goes into the solder hole at the edge finger. The other end goes to U1 pin 4.
3. Add the 274K resistor to the solder side per the picture. Use insulating sleeves on the resistor leads. Solder one end of the resistor to the 24.9K resistor at the edge finger. The other end goes to U7 pin 15.

NOTE: U7 is a 14-pin chip, but the socket on the board is 16-pin. The 274K resistor goes to pin 15 of the SOCKET, which is actually pin 13 of the CHIP.

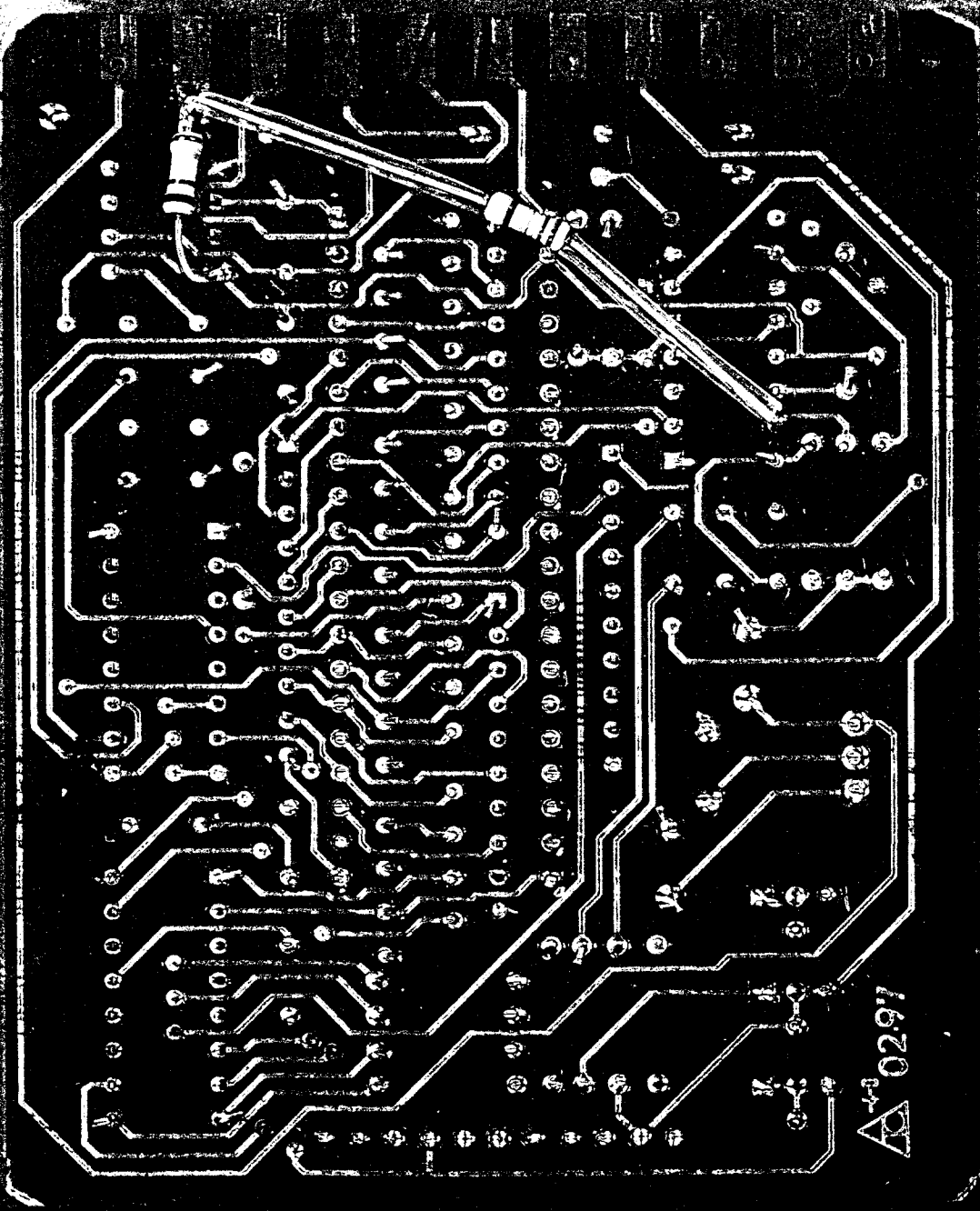
THERE IS VERY LITTLE CLEARANCE, SO MAKE SURE
THE RESISTORS LAY FLAT AGAINST THE BOARD

4. Special R200 adds a small offset to the temperature signal, and some models will require a new value for R53 to compensate. Check the inside cover of the special file to see if a value is listed for the model you have. If it is not listed, then complete these modifications and try to calibrate the box. If you cannot get the calibration within the accuracy specification, then R53 should be changed. The new value for R53 is dependant on how bad the calibration is at zero, mid, and full-scale.
5. Calibrate the InfraRail box as standard. If you are injecting signals into the box, it will be necessary to add a jumper between terminals 2-3. This will simulate a head connected to the box.
6. Verify that the output exceeds 20mA with the sensor cable disconnected.

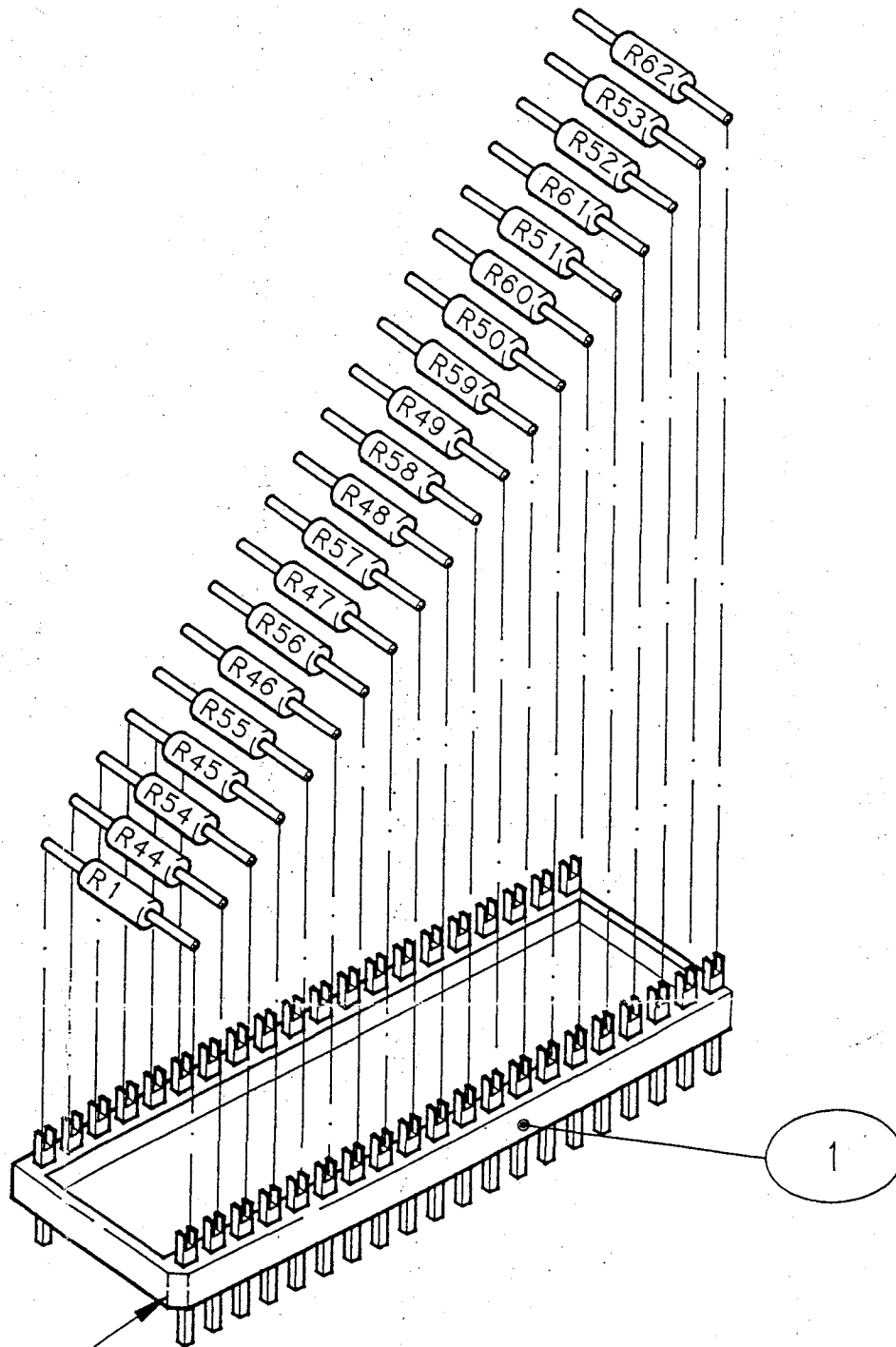
JPI

← 249K

← 274K



△ 0297



NOTE: CHAMFER EDGE

... INTO 40 PIN DIP HEADER (ITEM 1).
LEADS

Acknowledgment



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

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

SCHEDULED SHIPPING WEEK MONTH/DAY/YEAR
ENDING 11/28/98

OUR ORDER NO. ORDER DATE MONTH/DAY/YEAR
SA 066590/00 10/22/98

YOUR ORDER NO.
D-6491

TERMS NET 30
X OTHER NET 60

F.O.B. X NILES, ILLINOIS

CODE 726 .00

VIA MSAS PPD. X COLL.

SPECIAL SHIPPING INSTRUCTIONS

SOLD TO CUSTOMER NO. 008241

IRCON GMBH
POSTFACH 1361, D-65221
TAUNUSSTEIN, GRILLPARZERSTR 40
GERMANY

SHIPPING ADDRESS TAX CODE
NO TAX

INTROPA
SPEDITIONSGESELLSCHAFT GMBH
FRANKFURT AIRPORT
ZUR VERFUEGUNG IRCONGMBH

LINE NO.	PART NO.	QTY.	DESCRIPTION	UNIT MEAS	DISCOUNT %	PRICE EACH U.S. DOLLAR XXXXXXXXXX	AMOUNT U.S. DOLLAR XXXXXXXXXX
01		2	INFRARAIL TEMPERATURE SYSTEM MODEL DNE99-99C SERIAL NBR 002731 THRU 002732	EA		1316.80	2633.60
			CABLE(S) 4 MET. EA (4 MET. EA INCLUDED IN ABOVE)				
			PRODUCT MODIFICATION CHARGES ***** * SPECIAL Z999 *****			164.60	329.20
			!!!!!!!!!!!!WARNING!!!!!!!!!!!! ** SPL # TO BE DETERMINED ** ** SEE ENGINEERING DEPT. **				
			SUB TOTALS				2962.80
			GRAND TOTAL				2962.80

BILLINGS IN D.M.

REDO R714
AD. 10-26-98
Combare Special R713 Temp
range 375-800C, R/50
resolution and
R200-Special built
indicator

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

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

Ship To: IRCON, INC.
7300 N. NATCHEZ AVE.
NILES, IL 60714 USA

ORIGINAL

Part No. 020172 Rev C 12/95

R714

Section 1 — GENERAL INFORMATION

1.5 SPECIAL MODIFICATIONS

IRCON InfraRail Model DNE31-99C, Serial No's. 002731 through 002732 are modified for a special temperature range of 375 to 800°C and a special optical resolution of D/50.

The 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. R714.

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

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

**TO VIEW THE ORIGINAL
DESIGN,**

**A REQUEST TO VIEW
PHYSICAL FILE
IS YOUR NEXT OPTION.**

SEE REV C

A.D. 6-4-2001

DATE: 02-16-2001

REVISION: B

W.O. No. 108552

CUSTOMER: IRCON GmbH

LOCATION: TAUNUSSTEIN

LOCATION: GERMANY

INFRARAIL SPECIAL NUMBER R714

PURPOSE AND DESCRIPTION:

CUSTOMER REQUIRES A SPECIAL TEMPERATURE RANGE INFRARAIL SYSTEM WITH A SPECIAL 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 - 800 DEG. C
OPTICAL RESOLUTION: D/50 WITH FIXED FOCUS AT 30"
WAVELENGTH: 1.49 - 1.6 um

NOTE: THIS SPECIAL IS A COMBINATION OF SPECIALS R713 AND R200.

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UNRESTRICTED, SUITABLE FOR USE WITH ALL STANDARD OPTIONS.

WRITTEN BY: Ami DONADO
AMI DONADO

APPROVED BY: Ami DONADO DATE: 2-16-2001

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SPECTRUM: 1.49 TO 1.60 MICRONS

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375.0	10.2708	4.000
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525.0	151.6488	9.647
550.0	215.9639	10.588
575.0	301.2265	11.529
600.0	412.2392	12.471
625.0	554.4182	13.412
650.0	733.7897	14.353
675.0	956.9757	15.294
700.0	1231.1700	16.235
725.0	1564.1096	17.176
750.0	1964.0284	18.118
775.0	2439.6250	19.059
800.0	3000.0000	20.000

INFRARAIL SPECIAL NUMBER R714 CONTINUED,

PRODUCTION INSTRUCTIONS:

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

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

DETECTOR ASSEMBLY CHANGES: (REF. ASSY. # C11209).

1. INSTALL InGaAs DETECTOR P.N. **59079-2** IN LIEU OF THE STANDARD SILICON DETECTOR.
2. WIRE THE DETECTOR PER **DETAIL A** OF DRAWING No. **C-11207**.
3. INSTALL FILTER PART NUMBER **64055-2** (1.49 - 1.60 μm).

FOR THE SENSING HEAD FINAL ASSEMBLY (C11201), USE DETECTOR FIELD STOP P.N. **45132-3** (.044" I.D.) IN PLACE OF ITEM 1 PART NUMBER 45132-2 (.022" ID).

CALIBRATION INSTRUCTIONS:

PRE-CAL: PERFORM THE COMPUTERIZED LINEARIZER TEST PER STANDARD PROCEDURE.

FINAL-CAL:

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

CALIBRATE PER STANDARD PROCEDURE.

FOLLOW OUTPUT TABLE ON PAGE 4 ATTACHED.

Isc @ Tbb 800 DEGREES C = 3.00 μA .

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MANUAL INSTRUCTIONS:

GENERIC INFRARAIL SERIES MANUAL.

INCLUDE THE RESTRICTIONS LISTED ON PAGE 1 OF THESE DETAIL SHEETS.

FAULT INDICATION MODIFICATIONS SPECIAL R714

REMOVE JUMBER JP1
ON COMPONENT SIDE

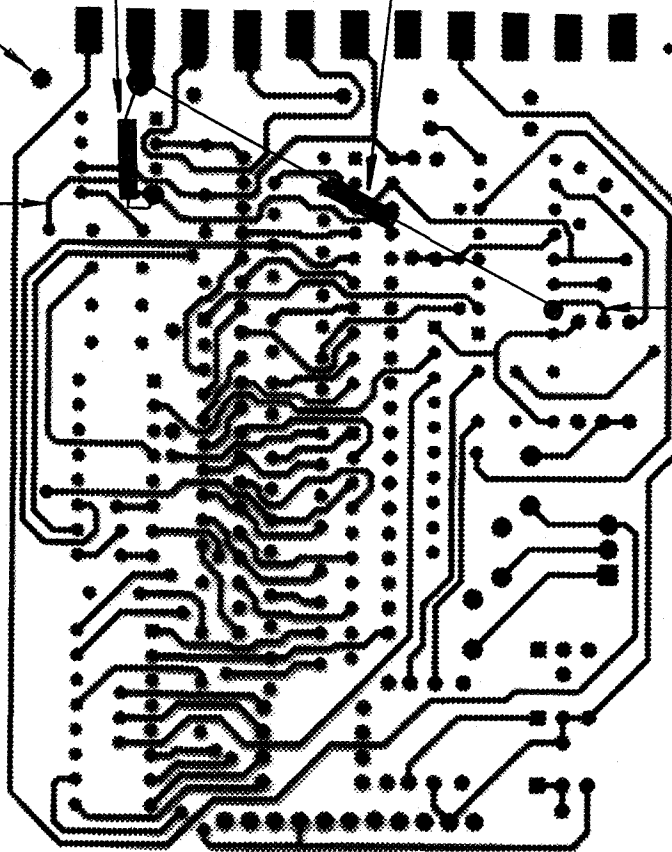
ADD RESISTOR 24.9 Kohm

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) 11-16-01 PROMISE DATE (MM-DD-YY) 11-16-01

OUR ORDER NO. 78813 ORDER DATE (MM-DD-YY) 10-25-01

YOUR ORDER NO. 200140699

TERMS _____
0.00/0/180

F.O.B. _____
ORIGIN

CODE _____
1001 (100.00)

VIA _____
MSAS

SPECIAL SHIPPING INSTRUCTIONS _____
REF: 208760/WK18658

DNE99-99C

LI	PART NO.	DESCRIPTION	QTY	DSCNT%	UNIT PRICE	AMOUNT
1	DN#11294 <i>w.o. #10567</i>	DN_DNE31-13C IRCON INFRARAIL IRT SYSTEM-COMLETE <i>Redo Special No R714 - Temp range 375 to 800C D/50 resolution + cable break alarm.</i> 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	2	0.00	878.40	1756.80
2	MOD-CHARGES	DN_DNE31-13C MODIFICATION OF PRODUCT	2	0.00	109.80	219.60
					GRAND TOTAL	

PAB 10/25

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.

W.O.# 10567

Number :DN#11294 - IRCON INFRARAIL IRT SO-LI: 78813*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	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-R713	MODULE ASSEMBLY - M1 - (I	1.0000	EA		M P				
2	101074011	RES. 1.07M OHM MF 1/4W 1%	1.0000	EA		B				
2	101872011	RES. 18.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	101183011	RES. 118K OHM MF 1/4W 1%	1.0000	EA		B				
2	101472011	RES. 14.7K OHM MF 1/4W 1%	1.0000	EA		B				
2	105902011	RES. 59.0K OHM MF 1/4W 1%	1.0000	EA		B				
2	101002011	RES. 10.0K OHM MF 1/4W 1%	1.0000	EA		B				

OK
FOR
R714
AD

OK

R714 (WITH CABLE)
BREAK ALARM

Number :DN#11294 - IRCON INFRARAIL IRT SO-LI: 78813*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
2	109762011	RES. 97.6K OHM MF 1/4W 1%	1.0000	EA		B				
2	106341011	RES. 6.34K OHM MF 1/4W 1%	1.0000	EA		B				
2	101623011	RES. 162K OHM MF 1/4W 1%	1.0000	EA		B				
2	103831011	RES. 3.83K OHM MF 1/4W 1%	1.0000	EA		B				
2	102803011	RES. 280K OHM MF 1/4W 1%	1.0000	EA		B				
2	102211011	RES. 2.21K OHM MF 1/4W 1%	1.0000	EA		B				
2	104993011	RES. 499K OHM MF 1/4W 1%	1.0000	EA		B				
2	101211011	RES. 1.21K OHM MF 1/4W 1%	1.0000	EA		B				
2	109313011	RES. 931K OHM MF 1/4W 1%	1.0000	EA		B				
2	106650011	RES. 665 OHM MF 1/4W 1%	1.0000	EA		B				
2	101744011	RES. 1.74M OHM MF 1/4W 1%	1.0000	EA		B				
2	103400011	RES. 340 OHM MF 1/4W 1%	1.0000	EA		B				
2	103240011	RES. 324 OHM MF 1/4W 1%	1.0000	EA		B				
2	103404011	RES. 3.40M 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	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	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#11294 - IRCON INFRARAIL IRT SO-LI: 78813*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#11294 - IRCON INFRARAIL IRT SO-LI: 78813*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: 04-12-05

Customer No. 003148
SOLD TO

CHASE BRASS & COPPER
 14212 COUNTY ROAD M-50
 MONTEPELIER, OH 43543

SHIP TO

CHASE BRASS & COPPER
 14212 COUNTY RD. M-50
 ATTN: EFREY
 MONTEPELIER, OH 43543

SPECIAL SHIPPING INSTRUCTIONS

OUR ORDER No.		YOUR PO No.		F.O.B.			TAX
88010		STK-13449-05		ORIGIN			Resale
SHIP VIA		TERMS		DATE REQUESTED	SALES REPRESENTATIVE		
UPS		0.00/0/30		04-26-05	1172 (100.00)		
LI	PART NO.	PRODUCT/DESCRIPTION	QTY	UNIT PRICE	DISC	NET PRICE	EXTENSION
1	DN-HO#25035 <i>w.o.#</i> <i>18567</i>	IRCON INFRARAIL IRT SENSING HEAD ONLY <i>DNE31-13C</i> Consists of the following: 1.0000 - INFRARAIL HEAD ONLY 1.0000 - DN - E SERIES 1.0000 - E-100 RESOLUTION (E) 1.0000 - 800-1300C	1	1150.00	0.0	1150.00	1150.00
<i>99-99C</i> <i>Redo Special No R714</i> <i>Temp range = -37.5 to 800C</i> <i>D/50 resolution</i> <i>Cable break alarm</i> <i>Rob 4/12</i>							
THIS ORDER IS ACCEPTED SUBJECT TO TERMS AND CONDITIONS SHOWN ON THIS AND THE REVERSE SIDE						GRAND TOTAL	USD1,150.00

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
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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: DNE 2113C
- Standard Product List Price: \$950.
- The product change requested would be: Redo R714
37568004, 0/504 Lab Alarm *Sales will attach specifics to this form.*
- The market is willing to pay: 1150. 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 4/13/05
W.O.# 18567.
- 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

W.O.# 18567

Number :DN-HO#25035 - IRCON INFRARAIL IRT SO-LI: 88010*1

Level	Part Number	Description	Quantity	UM	Alt	MB X	ECO No.	ECO Date	Start Use	End Use
	DN1DNE	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		

OK
A.D.

R714 (Sensor Only)