

Carrier Bending Jig E. FL-LP/CAB-MD

Instruction Manual



Caution

Read through this manual before the first use of this product for safety. Preserve it so that you can read it again at any time.

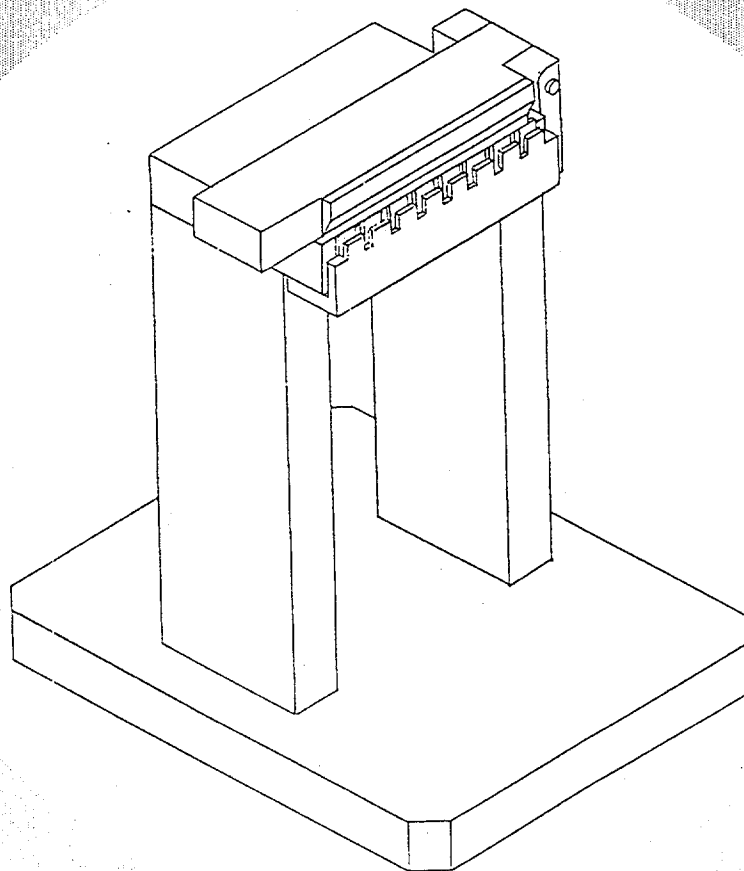


Table of contents

1. Model	1
2. Specifications	1
3. Names of jig parts	1
4. Harness fabrication processes	2
5. Working procedures	3
6. Confirmation of quality	4
7. Replacement of expendable supplies	6
8. List of expendable supplies	6
9. Daily care	6

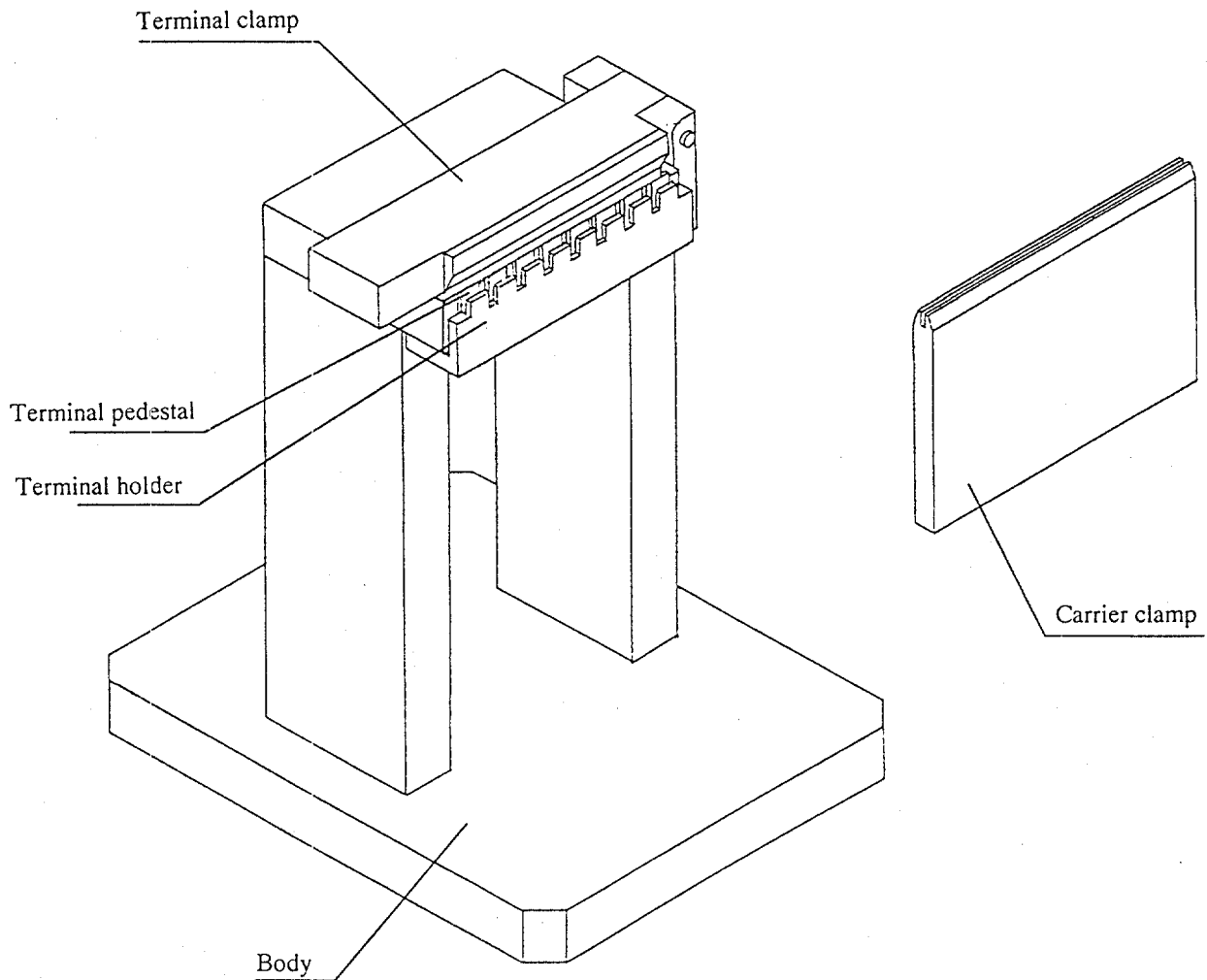
1. Model

Product number	HRS No.
E.FL-LP/CAB-MD	CL 902 - 3012 - 2

2. Specifications

Item	Specification
Applicable connector	E. FL-LP Female Terminal
Function	Cutting of terminals and carriers after soldering
Outside dimension	100 (W) × 90 (D) × 120 (H)
Weight	Approximately 1 kg

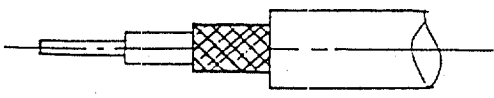
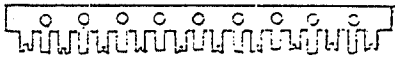
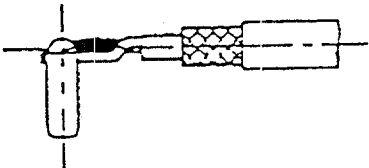
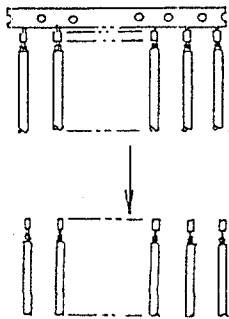
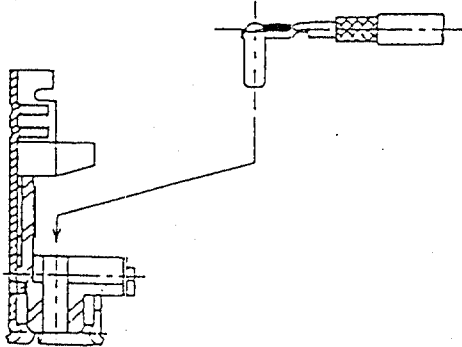
3. Names of jig parts



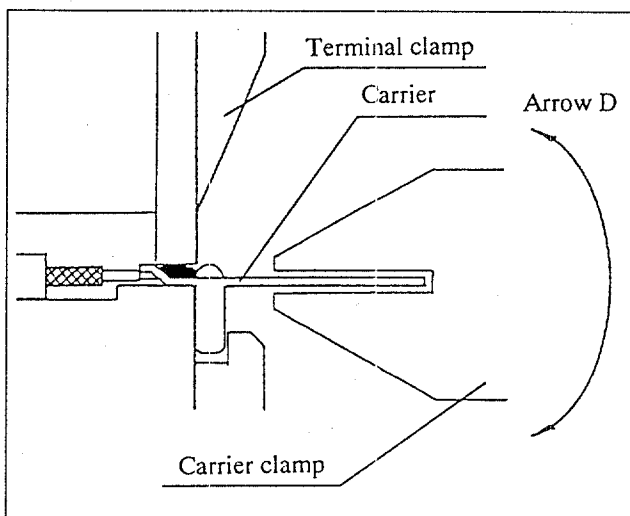
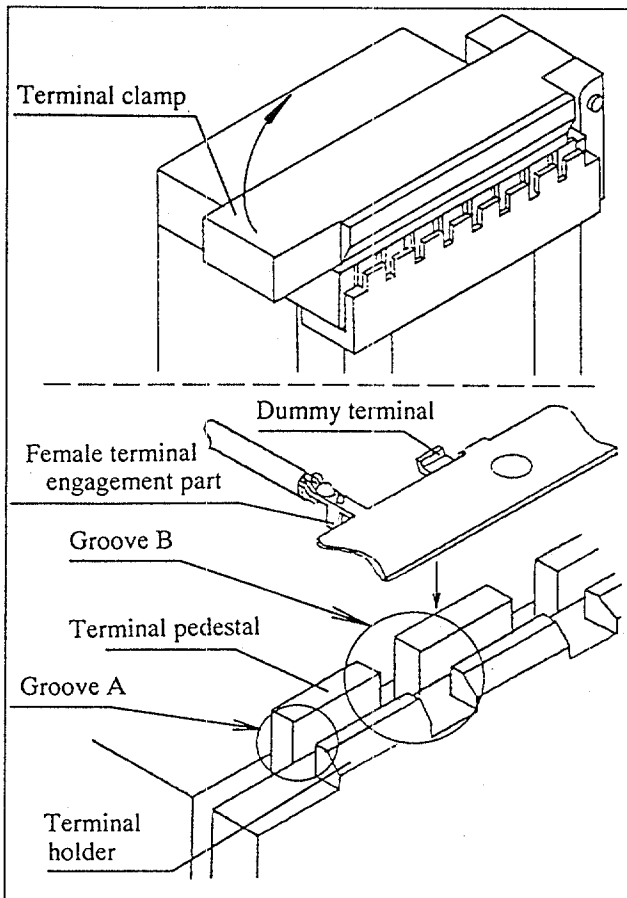
4. Harness fabrication processes

This jig is intended to cut off carriers from female terminals soldered in Process No.4.

For details on individual processes, refer to relevant instruction manuals.

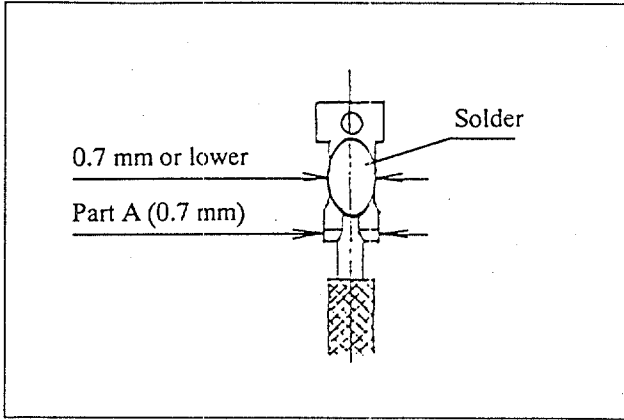
No.	Outline of Process	Description of Process	Required Tool
1		Make terminal treatment	Cable termination M/C (Commercially available)
2		Cut female terminals to specified dimensions	Nipper, scissors, etc. (Commercially available)
3		Solder cables to female terminals	E. FL-LP/SO-MD (CL902-3043-6) E. FL-LP/SO-MD-B (CL902-3027-0) Soldering iron (Commercially available) ★ Recommended soldering iron Takachiho Electric Iron pen 40 Iron tip SS-2B ★ Recommended solder Nihon Almit KR-19RMA Wire diameter: ϕ 0.3
4		Cut off carriers from soldered female terminals.	E. FL-LP/CAB-MD (CL902-3012-2)
5		Caulk the external conductors	E. FL-040/CR-AD (CL902-3006-0) E. FL-066/CR-AD (CL902-3042-3)
6		Make continuity and withstand voltage tests	Continuity and withstand voltage checker (Commercially available)

5. Working procedures




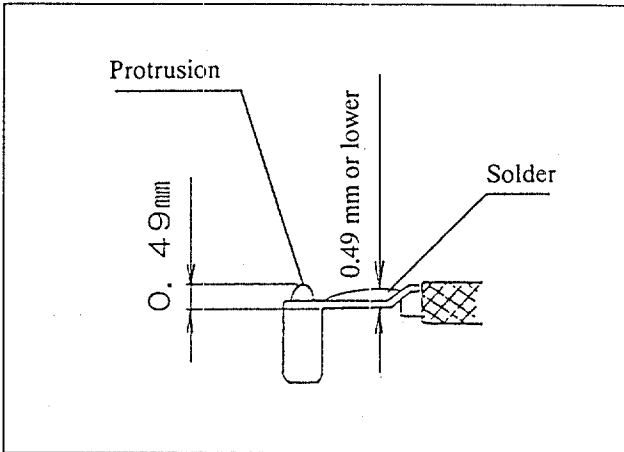
1. Complete the processes up to No.3 'Soldering between Cable and Female Terminal' before starting this process.
2. Swing the terminal clamp up as indicated by an arrow in the left diagram and then fit the engagement part on soldered female terminal into the groove A between the terminal pedestal and the terminal holder and the dummy terminal into the groove B on the terminal holder.
3. Tilting and lightly supporting the terminal clamp with a hand, fit the carrier clamp provided to the female terminal carrier. After attaching the carrier clamp, bend it three or four times in the up and down direction (indicated by arrow D). The carrier should be torn off.
4. Lifting up the terminal clamp, remove the soldered female terminal.
5. After removing the carrier from female terminal, check that the female terminal and cables are free from any damage and deformation. Then, follow the soldering quality check. (For soldering quality check, refer to "Section 6. Confirmation of quality".)
6. Using E. FL-040/CR-AD (CL902-3006-0) and E. FL-066/CR-AD (CL902-3042-3), install the female terminals having cables connected to the LP shell then caulk the external conductors. (For use of the tools, refer to relevant instruction manuals.)
7. Using a continuity and withstand voltage checker, make continuity and withstand voltage tests.

6. Confirmation of quality




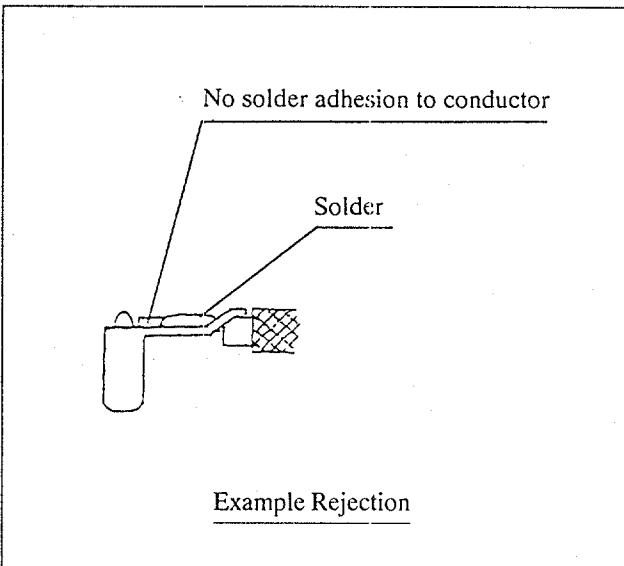
1. Allowable sideways extension of soldered conductor
Check the part A in each terminal for an extension of 0.7 mm or less (within the width of part A).

 Caution	Reject any terminal having a soldered conductor extending past the width of part A.
--	---




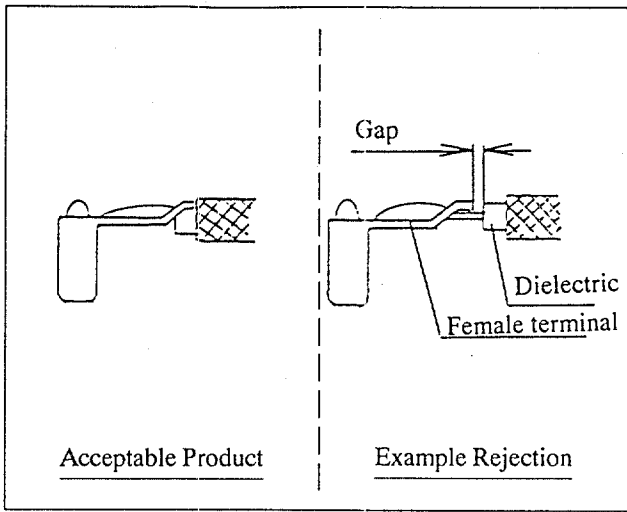
2. Allowable soldered part height and conductor floating
Check that the highest portion of soldered part is 0.49 mm or less in height.
Also check that any floating part of conductor is 0.49 mm or less in height. (As a guideline for evaluation of solder height, compare the height with protrusion.)
For those parts found equivalent in height to the protrusion, measure the height with a blade micrometer to check if it falls within 0.49 mm.

 Caution	Reject any terminal having a solder height exceeding 0.49 mm.
--	---




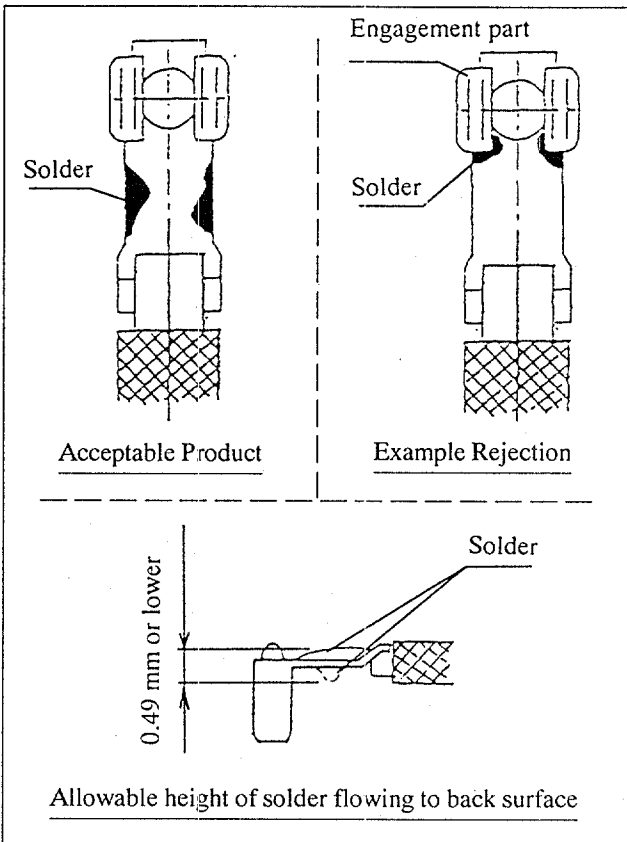
3. Check for any poor soldering.
Check that the entire conductor is soldered.

 Caution	Reject any terminal having any part missing soldering.
--	--




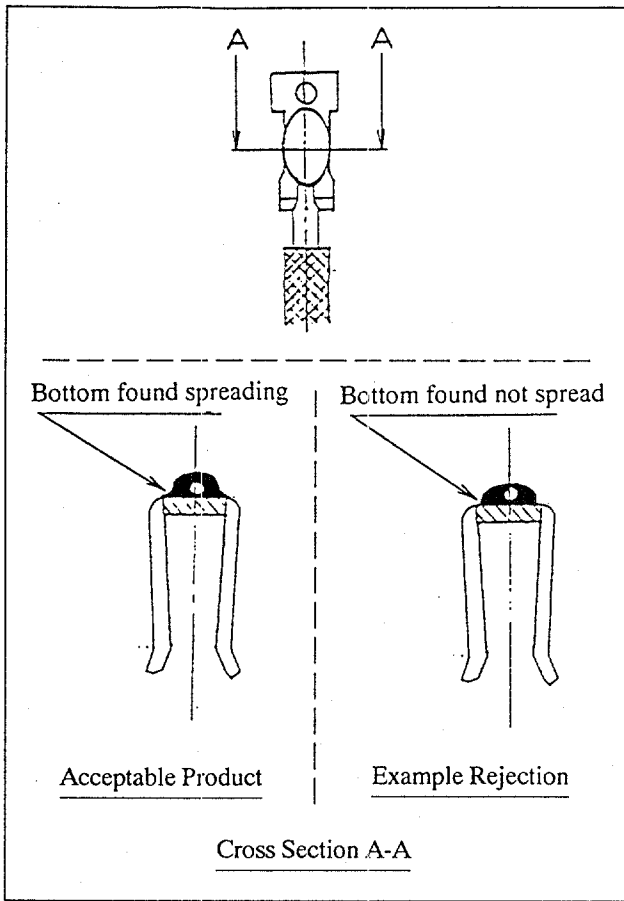
4. Check female terminal and dielectric for any gap.
Check that there is no gap between female terminal and dielectric.

 Caution	Reject any terminal having a gap between female terminal and dielectric.
--	--



5. Check the back surface for any flow of solder.
Check that the engagement part is free from any adhesion of solder flowing to the back surface.
When solder is found flowing to the back surface, check that the solder height shown in the left diagram is 0.49 mm or less.

 Caution	Reject any terminal having any solder flowing to the back surface and adhering to the engagement part or the dimension shown in the left diagram exceeding 0.49 mm.
--	---

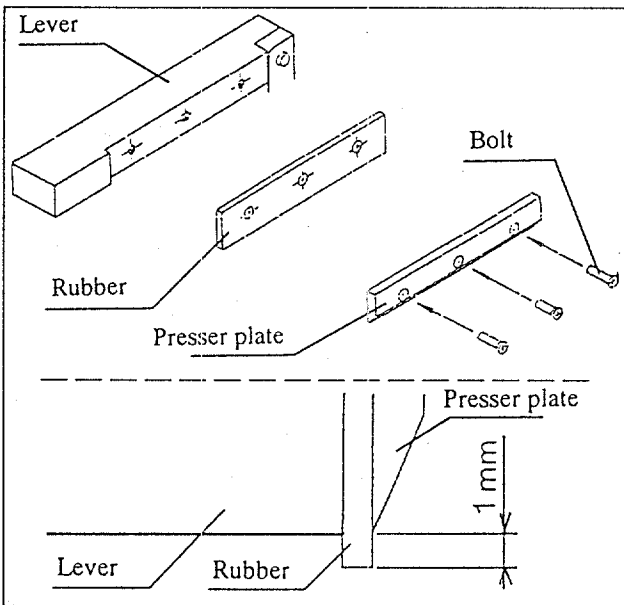


6. Check for any square soldering.

Check that terminals are free from any square soldering as shown in the left diagram.

	Caution	Reject any square soldered terminal.
--	----------------	--------------------------------------

7. Replacement of expendable supplies



■ Replacement Procedure

Remove the three bolts to remove the presser plate from the lever. Replace the rubber with a new one, place the new rubber between lever and presser plate, then tighten the bolts.

During installation of the rubber between lever and presser plate, be sure to extend the bottom of rubber 1 mm down as shown in the left diagram.

8. List of expendable supplies

When you order an expendable, tell us the HRS No..

No.	Product Name	HRS No.	Minimum Q'ty for Order
1	Rubber	CL902-3012-2 (61)	10 pcs./set

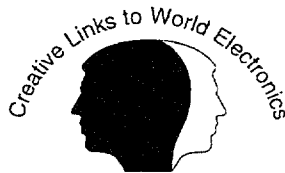
9. Daily care

With use of this jig, dust and fine particles may be built up near the terminal holder and the cable stage grooves. The build-up of dust and fine particles can cause adhesion to terminals and/or cables, leading to malfunction. Remember to clear any build-up of dust and fine particles with a soft cloth before and after every work shift.

Instruction manual number	
TAD-P4521	
Issued	February 1997
Revised	
Version	1st

Notices:

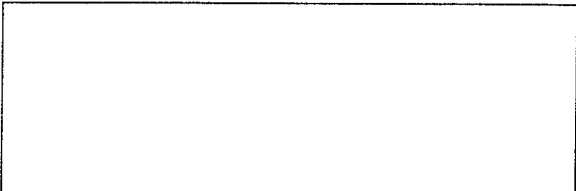
- (1) Reproduction or publication of this document in any form or format is prohibited without prior written permission of the publisher.
- (2) The information contained in this document is subject to change without notice.
- (3) The information contained in this document is based on the data identified correct at the time of publication of this document, though any questions, errors, omissions, or other such queries should be directed to the publisher.
- (4) HIROSE ELECTRIC CO., LTD. shall not be liable for any error discovered herein or for incidental or consequential damages resulting from the furnishing, performance, or use of this product in despite of the foregoing provision in the item (3).
- (5) HIROSE ELECTRIC CO., LTD. shall not be liable for any direct, incidental or consequential damages of any nature resulting from abuse, misuse, misapplication or improper operation of the product, failure to observe the instructions contained in this document, or any unauthorized repairs or modifications by third parties other than HIROSE ELECTRIC CO., LTD.
- (6) No repair or maintenance is supported for this product in foreign countries.



HRS®

HIROSE ELECTRIC CO.,LTD.

5-23, OSAKI 5-CHOME, SHINAGAWA-KU, TOKYO 141-8587, JAPAN
 TELEX: J2468237 HRSELE TELE FAX: 03-3493-2933
 CABLE: BESELECONHIROSE TOKYO, PHONE: 03-3491-9741



Hirose Electric (U.S.A.), Inc.	2688 Westhills Court, Simi Valley, Calif. 93065-6235	Phone : (805) 5227958 Tele-Fax : (805) 5223217
Hirose Electric GmbH	Zeppelinstraze 42 73760 Ostfildern-Kemnat	Phone : 0711-4560021 Tele-Fax : 0711-4560729
Hirose Electric UK Ltd.	Crownhill Business Centre, 22, Vincent Avenue, Crownhill, Milton Keynes, MK8 0AB	Phone : (0908) 260616 Tele-Fax : (0908) 563309
HIROSE KOREA Co., Ltd.	472-5, Mok Nae-Dong, Ansen-City Seoul	Phone : (02) 864-5075 Tele-Fax : (0345) 491-9886
Hirose Electric Co., Ltd., Hong Kong Branch	2102 Emperor Group Center, 288 Hennessy Road, Wanchai	Phone : 2803-5338 Tele-Fax : 2591-6560