

LINEAR DC RESISTANCE WELDING CONTROL

DC25

OPERATION MANUAL



990-660 REV G

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REVISION RECORD

Revision	EO	Date	Basis of Revision
A	18122	12/01	Original Release
B	19166	12/01	Energy Capacity % Limit change.
C	21594	10/07	Updated Technical Specifications.
D	42840	10/13	Updated to Miyachi America name and logo.
E	43480	11/14	Updated to Amada Miyachi America name and logo.
F	43838	08/15	Updated to Amada Miyachi America format.
G	44640	05/17	Removed Reference to Weldstat Software

FOREWORD

Thank you for purchasing a Miyachi Unitek™ DC25 Linear DC Welding Control.

Upon receipt of your equipment, please thoroughly inspect it for shipping damage prior to its installation. Should there be any damage, please immediately contact the shipping company to file a claim, and notify us at:

Amada Miyachi America
1820 South Myrtle Avenue
P. O. Box 5033
Monrovia, California 91016
Phone: (626) 303-5676
FAX: (626) 358-8048
E-mail: info@amadamiyachi.com

The purpose of this manual is to supply operating, maintenance and service personnel with the information needed to properly and safely operate, maintain and service the DC25 Linear DC Welding Control.

We have made every effort to ensure that the information in this manual is accurate and adequate. Should questions arise, or if you have suggestions for improvement of this manual, please contact us at the above location/numbers.

Amada Miyachi America is not responsible for any loss due to improper use of this product.

SAFETY NOTES

This instruction manual describes how to operate and maintain the DC25 Linear DC Welding Control and provides instructions relating to its SAFE use. Procedures described herein **MUST** be performed, as detailed, by **QUALIFIED** and **TRAINED** personnel.

For **SAFETY**, and to effectively take advantage of the full capabilities of the workstation, please read this instruction manual before attempting to use the DC25 Linear DC Welding Control.

Procedures other than those described in this manual, or not performed as prescribed in it, may expose personnel to electrical hazards.

After reading this manual, retain it for future reference when any questions arise regarding the proper and **SAFE** operation of the unit.

Please note the following conventions used in this manual:

WARNING: Comments marked this way warn the reader of actions which, if not followed, might result in immediate death or serious injury.

CAUTION: Comments marked this way warn the reader of actions which, if not followed, might result in either damage to the equipment, or injury to the individual if subject to long-term exposure to the indicated hazard.

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Declaration of Conformity

Application of Council Directive: 89/336/EEC

Standards To Which
Conformity Is Declared:

EN55011 Class A Group 2
EN61000-3-2
EN61000-3-3
EN50082-2:1995
EN61000-4-2
EN61000-4-3
EN61000-4-4
EN61000-4-5
EN61000-4-6
EN61000-4-8
EN61000-4-11

Manufacturer's Name: Unitek Miyachi
Manufacturer's Address: 1820 S Myrtle Ave
Monrovia, CA 91017
(626) 303-5676
Equipment Description: Linear DC Resistance Welder
Equipment Class: ISM - Class A Group 1
Model Numbers: DC 25 (115V~ and 230V~)

I the undersigned, hereby declare that the equipment specified above, conforms to the above Directive(s) and Standard(s).

Monrovia, California
Place: _____
Signature: *Kevin Gunning*
Full Name: Kevin Gunning
Position: Director, R&D.



EN61010-1:1993

DECLARATION OF CONFORMITY

Application of Council Directive: 72/23/EEC

Standards to which conformity is declared: EN 61010-1:1993

Manufacturer's Name: Unitek Miyachi
Manufacturer's Address: 1820 S Myrtle Av
Monrovia CA 91016

Equipment Description: Linear DC Resistance Welder
Equipment Class: ISM - Class A, Group 2
Model Number: DC25 (115V and 230V)

I the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s) and Standard(s).



Place: Monrovia, California
Signature: Kevin Ganning
Full Name: Kevin Ganning
Position: Director, R+D

LIMITED WARRANTY

1. **(a)** Subject to the exceptions and upon the conditions set forth herein, Seller warrants to Buyer that for a period of one (1) year from the date of shipment (“**Warranty Period**”), that such Goods will be free from material defects in material and workmanship.

(b) Notwithstanding the foregoing and anything herein to the contrary, the warranty set forth in this Section 1 shall be superseded and replaced in its entirety with the warranty set forth on **Exhibit A** hereto if the Goods being purchased are specialty products, which include, without limitation, laser products, fiber markers, custom systems, workstations, Seller-installed products, non-catalogue products and other custom-made items (each a “**Specialty Products.**”

(c) EXCEPT FOR THE WARRANTY SET FORTH IN SECTION 1(A), SELLER MAKES NO WARRANTY WHATSOEVER WITH RESPECT TO THE GOODS (INCLUDING ANY SOFTWARE) OR SERVICES, INCLUDING ANY (a) WARRANTY OF MERCHANTABILITY; (b) WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE; (c) WARRANTY OF TITLE; OR (d) WARRANTY AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY; WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE.

(d) Products manufactured by a third party and third party software (“**Third Party Product**”) may constitute, contain, be contained in, incorporated into, attached to or packaged together with, the Goods. Third Party Products are not covered by the warranty in Section 1(a). For the avoidance of doubt, **SELLER MAKES NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO ANY THIRD PARTY PRODUCT, INCLUDING ANY (a) WARRANTY OF MERCHANTABILITY; (b) WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE; (c) WARRANTY OF TITLE; OR (d) WARRANTY AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY; WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE.** Notwithstanding the foregoing, in the event of the failure of any Third Party Product, Seller will assist (within reason) Buyer (at Buyer’s sole expense) in obtaining, from the respective third party, any (if any) adjustment that is available under such third party’s warranty.

(e) Seller shall not be liable for a breach of the warranty set forth in Section 1(a) unless: (i) Buyer gives written notice of the defect, reasonably described, to Seller within five (5) days of the time when Buyer discovers or ought to have discovered the defect and such notice is received by Seller during the Warranty Period; (ii) Seller is given a reasonable opportunity after receiving the notice to examine such Goods; (iii) Buyer (if requested to do so by Seller) returns such Goods (prepaid and insured to Seller at 1820 South Myrtle Avenue, Monrovia, CA 91016 or to such other location as designated in writing by Seller) to Seller pursuant to Seller’s RMA procedures and Buyer obtains a RMA number from Seller prior to returning such Goods for the examination to take place; and (iii) Seller reasonably verifies Buyer’s claim that the Goods are defective and that the defect developed under normal and proper use.

(f) Seller shall not be liable for a breach of the warranty set forth in Section 1(a) if: (i) Buyer makes any further use of such Goods after giving such notice; (ii) the defect arises because Buyer failed to follow Seller’s oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Goods; (iii) Buyer alters or repairs such Goods without the prior written consent of Seller; or (iv) repairs or modifications are made by persons other than Seller’s own service personnel, or an authorized representative’s personnel, unless such repairs are made with the written consent of Seller in accordance with procedures outlined by Seller.

(g) All expendables such as electrodes are warranted only for defect in material and workmanship which are apparent upon receipt by Buyer. The foregoing warranty is negated after the initial use.

(h) Subject to Section 1(e) and Section 1(f) above, with respect to any such Goods during the Warranty Period, Seller shall, in its sole discretion, either: (i) repair or replace such Goods (or the defective part) or (ii) credit or refund the price of such Goods at the pro rata contract rate, provided that, if Seller so requests, Buyer shall, at Buyer's expense, return such Goods to Seller.

(i) **THE REMEDIES SET FORTH IN SECTION 1(H) SHALL BE BUYER'S SOLE AND EXCLUSIVE REMEDY AND SELLER'S ENTIRE LIABILITY FOR ANY BREACH OF THE LIMITED WARRANTY SET FORTH IN SECTION 1(A).** Representations and warranties made by any person, including representatives of Seller, which are inconsistent or in conflict with the terms of this warranty, as set forth above, shall not be binding upon Seller.

Exhibit A
Warranty for “Specialty Products”

Limited Warranty

EXCEPT FOR THE WARRANTY SET FORTH BELOW IN THIS EXHIBIT A, SELLER MAKES NO WARRANTY WHATSOEVER WITH RESPECT TO THE GOODS (INCLUDING ANY SOFTWARE) OR SERVICES, INCLUDING ANY (a) WARRANTY OF MERCHANTABILITY; (b) WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE; (c) WARRANTY OF TITLE; OR (d) WARRANTY AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY; WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE.

Warranty Period: The Warranty Period for Specialty Products is for one (1) year, and the Warranty Period for laser welders and laser markers is two (2) years (unlimited hours), and the Warranty Period for the laser pump diodes or modules is two (2) years or 10,000 clock hours, whichever occurs first (as applicable, the “**Warranty Period**”). The Warranty Period begins as follows: (i) on orders for Goods purchased directly by Buyer, upon installation at Buyer’s site or thirty (30) days after the date of shipment, whichever occurs first; or (ii) on equipment purchased by a Buyer that is an OEM or systems integrators, upon installation at the end user’s site or six (6) months after the date of shipment, whichever occurs first.

Acceptance Tests: Acceptance Tests (when required) shall be conducted at Amada Miyachi America, Inc., Monrovia, CA, USA (the “**Testing Site**”) unless otherwise mutually agreed in writing prior to issuance or acceptance of the Acknowledgement. Acceptance Tests shall consist of a final visual inspection and a functional test of all laser, workstation, enclosure, motion and accessory hardware. Acceptance Tests shall include electrical, mechanical, optical, beam delivery, and software items deliverable under the terms of the Acknowledgement. Terms and conditions for Additional Acceptance Tests either at Seller’s or Buyer’s facility shall be mutually agreed in writing prior to issuance or acceptance of the Acknowledgement.

Performance Warranty: The system is warranted to pass the identical performance criteria at Buyer’s site as demonstrated during final Acceptance Testing at the Testing Site during the Warranty Period, as provided in the Acknowledgement. Seller explicitly disclaims any responsibility for the process results of the laser processing (welding, marking, drilling, cutting, etc.) operations.

Exclusions: Seller makes no warranty, express or implied, with respect to the design or operation of any system in which any Seller’s product sold hereunder is a component.

Limitations: The limited warranty set forth on this Exhibit A does not cover loss, damage, or defects resulting from transportation to Buyer’s facility, improper or inadequate maintenance by Buyer, Buyer-supplied software or interfacing, unauthorized modification or misuse, operation outside of the environmental specifications for the equipment, or improper site preparation and maintenance. This warranty also does not cover damage from misuse, accident, fire or other casualties of failures caused by modifications to any part of the equipment or unauthorized entry to those portions of the laser which are stated. Furthermore, Seller shall not be liable for a breach of the warranty set forth in this Exhibit A if: (i) Buyer makes any further use of such Goods after giving such notice; (ii) the defect arises because Buyer failed to follow Seller’s oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Goods; (iii) Buyer alters or repairs such Goods without the prior written consent of Seller; or (iv) repairs or modifications are made by persons other than Seller’s own service personnel, or an authorized representative’s personnel, unless such repairs are made with the written consent of Seller in accordance with procedures outlined by Seller.

Seller further warrants that all Services performed by Seller's employees will be performed in a good and workmanlike manner. Seller's sole liability under the foregoing warranty is limited to the obligation to re-perform, at Seller's cost, any such Services not so performed, within a reasonable amount of time following receipt of written notice from Buyer of such breach, provided that Buyer must inform Seller of any such breach within ten (10) days of the date of performance of such Services.

Seller shall not be liable for a breach of the warranty set forth in this Exhibit A unless: (i) Buyer gives written notice of the defect or non-compliance covered by the warranty, reasonably described, to Seller within five (5) days of the time when Buyer discovers or ought to have discovered the defect or non-compliance and such notice is received by Seller during the Warranty Period; (ii) Seller is given a reasonable opportunity after receiving the notice to examine such Goods and (a) Buyer returns such Goods to Seller's place of business at Buyer's cost (prepaid and insured); or (b) in the case of custom systems, Seller dispatches a field service provider to Buyer's location at Buyer's expense, for the examination to take place there; and (iii) Seller reasonably verifies Buyer's claim that the Goods are defective or non-compliant and the defect or non-compliance developed under normal and proper use.

All consumable, optical fibers, and expendables such as electrodes are warranted only for defect in material and workmanship which are apparent upon receipt by Buyer. The foregoing warranty is negated after the initial use.

No warranty made hereunder shall extend to any product whose serial number is altered, defaced, or removed.

Remedies: With respect to any such Goods during the Warranty Period, Seller shall, in its sole discretion, either: repair such Goods (or the defective part). **THE REMEDIES SET FORTH IN THE FOREGOING SENTENCE SHALL BE BUYER'S SOLE AND EXCLUSIVE REMEDY AND SELLER'S ENTIRE LIABILITY FOR ANY BREACH OF THE LIMITED WARRANTY SET FORTH IN THIS EXHIBIT A.** Representations and warranties made by any person, including representatives of Seller, which are inconsistent or in conflict with the terms of this warranty, as set forth above, shall not be binding upon Seller.

Products manufactured by a third party and third party software ("**Third Party Product**") may constitute, contain, be contained in, incorporated into, attached to or packaged together with, the Goods. Third Party Products are not covered by the warranty in this Exhibit A. For the avoidance of doubt, **SELLER MAKES NO REPRESENTATIONS OR WARRANTIES WITH RESPECT TO ANY THIRD PARTY PRODUCT, INCLUDING ANY (a) WARRANTY OF MERCHANTABILITY; (b) WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE; (c) WARRANTY OF TITLE; OR (d) WARRANTY AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY; WHETHER EXPRESS OR IMPLIED BY LAW, COURSE OF DEALING, COURSE OF PERFORMANCE, USAGE OF TRADE OR OTHERWISE.** Notwithstanding the foregoing, in the event of the failure of any Third Party Product, Seller will assist (within reason) Buyer (at Buyer's sole expense) in obtaining, from the respective third party, any (if any) adjustment that is available under such third party's warranty.

