



CONDITIONS OF CONTRACT

1. Any goods (at your request) not collected/dispatched, shall be stored at your expense and risk. Such goods may be sold or disposed of 30 days after the invoice date to cover the price and cost incurred thereby.
2. Delivery / completion shall be effected by agreement or any reasonable extension thereof, and no claim(s) shall lie against NicomUSA, Inc. for any reason save for negligence by NicomUSA, Inc.
3. Each and every installment delivery shall be considered as a separate contract and shall be subject to full payment prior to any further delivery(ies).
4. Delivery shall be F.O.B. National City, California. Shipment to consignee's chosen address and all carriage insurance shall be at consignee's expense.
5. Any price increases affecting the quoted price prior to delivery shall be increased accordingly.
6. All quoted prices at NicomUSA, Inc.'s sole discretion are subject to change/variation by virtue of any condition beyond their control. The price shall not include packing costs for shipping purposes or any taxes, duties, or transportation costs.
7. **Any damage to the goods must be reported to the carrier in writing on the shipping receipt. Any discrepancy/damage discovered subsequent to delivery shall be reported to NicomUSA, Inc. within 5 days of its receipt.**
8. NicomUSA, Inc. extends to the original end user purchaser all original manufacturers' warranties which are not transferable and all claims are to be made through your dealer or distributor as per indicated procedures.
9. All manufacturers' warranties will be supported by NicomUSA, Inc. to ensure precise and speedy service when possible.
10. NicomUSA, Inc. shall not be liable for damages of whatsoever nature arising out in connection with the product or its use thereof.
11. **NicomUSA's warranty shall not include:**
 - a) Cost of reshipment of the unit to NicomUSA, Inc. for repair purposes.
 - b) Any unauthorized repairs/modifications.
 - c) Repair of unit whose seal has been broken without Nicom's authorization.
 - d) Incidental/consequential damages as a result of any defect.
 - e) Nominal non-incident defects.
 - f) Free replacement of parts like vacuum tubes, amplifier tubes and cooling fans.
 - g) Free replacement of semiconductors (transistors, mosfets and IC's) which are not covered under any warranty.
 - h) Shipment costs or insurance of the unit or replacement units/parts from customer to NicomUsa and back from NicomUsa back to customer.
12. Warranty shall commence as of the invoice/shipment date and for the period of the manufacturer's warranty.
13. To claim your rights under this warranty:
 - A. Contact the dealer or distributor from whom this product was purchased. Describe the problem and ask if they have an easy solution. Dealers and distributors are supplied with information on problems which may occur and usually can repair the unit more quickly than by going directly to the factory. It is also often true that errors in installation or use will be discovered by your dealer.
 - B. If your dealer cannot help, they will contact Nicom and explain the problem. If it is determined that the unit needs to be returned to the factory, they will obtain from Nicom a return authorization and shipping instructions for you.
 - C. When you receive the return authorization, you can return the unit. Pack the unit(s) carefully for shipment. If possible, use the original packing materials and assume the shipping carton will be dropped several times during the transportation process. We recommend the use of UPS or similar freight services and would discourage the use of the postal system. If equipment is received inadequately packed, there will be a charge for re-packing the equipment for re-shipment. The risk of loss is assumed by you (NicomUSA, Inc. is not responsible for damage or loss) until the package is received at NicomUSA, Inc.. We advise you to take out insurance for the full replacement value of the unit. Ship the unit **PREPAID** to the address specified by NicomUSA, Inc. service manager on the return authorization. **DO NOT RETURN UNITS WITHOUT A RETURN AUTHORIZATION. AS THEY WILL NOT BE ACCEPTED.** Be sure to enclose a written descriptive statement of the problem experienced and a copy of your original invoice establishing the starting date of the warranty.
14. Terms shown on the front of invoice are from date of invoice and not contingent upon delivery. In the event buyer fails to fulfill the terms of payment hereunder, buyer promises to pay all costs and expenses of collection and reasonable attorney's fees incurred by NicomUSA, Inc. on account of collection, whether or not suit is filed thereon. NicomUSA, Inc. reserves the right to charge interest on all bills not paid at maturity.
15. As a condition of purchaser conducting business with NicomUSA, Inc., the parties agree that should any dispute arise under such transaction for any reason, that venue and jurisdiction, therefore, shall be San Diego Superior Court, Central Court District or Municipal Court of the County of San Diego, San Diego Judicial District.
16. Interest shall accrue at the rate of 2% per month on all balances incurred for whatever reason remaining unpaid thirty (30) days from the date of invoice.
17. If buyer has consigned goods to NicomUSA, Inc. for repair within or outside of warranty period, buyer may lease/rent replacement goods AS IS from NicomUSA, Inc., if available. Buyer agrees that any and all of its goods in possession of NicomUSA, Inc. for whatever purpose, shall constitute retained security for the timely return of said rental goods as well as timely payment for repair services performed by NicomUSA, Inc. who at its option, may require a deposit paid for any rental goods leased to buyer. Said deposit may be used by NicomUSA, Inc. as satisfaction of any amounts owed to it by buyer in the event of buyer's failure to make any payment required in a timely fashion.

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WARNING

The device described in this manual has been designed and manufactured with to safeguard the users. In any case it is recommended that during any operation of installation, maintenance, miscellaneous interventions and calibrations requiring the apparatus to be switched on,

THE USER TAKES ALL THE PRECAUTIONS TO AVOID INCIDENTS

It is required to use the proper clothes and protection gloves in order to prevent damages from incidental contacts with high-voltage parts.

The manufacturer declines every responsibility in case the recommendations above are not followed.

IMPORTANT

The component lists attached to the relevant electrical diagrams indicate for each item the reference, the description and the type normally used.

NicomUsa, Inc though reserves the right to use or supply as spare parts components with equivalent characteristics but of a different type, assuring anyway the optimal work of the device in accordance with the specifications.

The use of whatever information enclosed in this technical manual without explicit authorization given by *NicomUsa, Inc* will be prosecuted by the law.

The data and technical characteristics of the apparatus described in this manual are not compelling for the manufacturer.

The *NicomUsa, Inc* reserves the right to make, without previous notice, modifications or updates in order to improve the quality of the product.

The general conditions of sale are described in the contract.

Summary of warranty

We, NicomUsa, Inc, SS096 Km 113 Z.I. PALO DEL COLLE (BA) ITALY, warrant to the ORIGINAL PURCHASER of a NEW product, for a period of one (1) year from the date of purchase by the original purchaser (the "warranty period") that the new ELETTRONIKA product is free of defects in materials and workmanship and will meet or exceed all advertised specifications for such a product. This warranty does not extend to any subsequent purchaser or user, and automatically terminates upon sale or other disposition of our product.

Items excluded from this ELETTRONIKA warranty

We are not responsible for product failure caused by misuse, accident, or neglect. This warranty does not extend to any product on which the serial number has been defaced, altered, or removed. It does not cover damage to loads or any other products or accessories resulting from ELETTRONIKA product failure. It does not cover defects or damage caused by use of unauthorized modifications, accessories, parts, or service.

What we will do

We will remedy any defect, in material or workmanship (except as excluded), in our sole discretion, by repair, replacement, or refund. If a refund is elected, then you must make the defective or malfunctioning component available to us free and clear of all liens or other encumbrances. The refund will be equal to the actual purchase price, not including interest, insurance, closing costs, and other finance charges less a reasonable depreciation on the product from the date of original purchase. Warranty work can only be performed at our authorized service centers or at our factory. Expenses in remedying the defect will be borne by ELETTRONIKA, including one-way surface freight shipping costs within the United States. (Purchaser must bear the expense of shipping the product between any foreign country and the port of entry in the United States and all taxes, duties, and other custom's fee(s) for such foreign shipments).

How to obtain warranty service

You must notify us of your need for warranty service not later than ninety (90) days after the expiration of the warranty period. We will give you an authorization to return the product for service. All components must be shipped in a factory pack or equivalent which, if needed, may

Disclaimer of consequential and incidental damages

You are not entitled to recover from us any consequential or incidental damages resulting from any defect in our product. This includes any damage to another product or products resulting from such a defect.

Warranty alterations

No person has the authority to enlarge, or modify this warranty. The warranty is not extended by the length of time for which you are deprived of the use of the product. Repairs and replacement parts are provided under the terms of this warranty shall carry only the unexpired portion of this warranty.

Design changes

We reserve the right to change the design of any product from time to time without notice and with no obligation to make corresponding changes in products previously manufactured.

Legal remedies of purchaser

There is no warranty which extends beyond the terms hereof. This written warranty is given in lieu of any oral or implied warranties not contained herein. We disclaim all implied warranties, including without limitation any warranties of merchantability or fitness for a particular purpose. No action to enforce this warranty shall be commenced later than ninety (90) days after expiration of the warranty period.

Warranty for electronic tubes

The warranty applied for electronic tubes is the one given by the manufacturer of the tube. In the event that the product shows anomalies within the deadline of the validity of the warranty given by the manufacturer of the product itself, the buyer will have to return it to the seller with the needed documents and the written description of the defect. The seller will ship the broken tube to the manufacturer in order to effect the necessary technical tests to find out the cause of the anomaly. Meanwhile the buyer of the tube who needs to use, and as such to replace immediately the product, will have to buy a new one and provide to the relevant payment, further to the issuing by the seller of a regular commercial invoice. After the adequate tests made by the manufacturer, should the result be positive, that is confirm the defect in manufacturing, the seller will issue a regular credit note in the name of the buyer and return the amount paid. Should the result be negative, that is detect a negligence in the installation or use by the buyer, he will have no right against the seller.

INTRODUCTION

The unit described in this manual is the latest of this series, offering high performances, remarkable reliability and a wide range of features at a low cost.

Its is easy to install and use. You only need to follow the installation procedure as shown in the manual: after removing the unit from the package, you only have to follow step by step the instructions in the various sections.

Before starting to use the apparatus, remember to:

- ☐ read carefully the general safety information contained in this section;
- ☐ follow the instructions for the installation and set up of the unit;
- ☐ read all the remaining sections of this manual in order to know well the device and learn how to obtain the best of its performances.

CONTENTS OF THE MANUAL

The chapters of this manual contain all the information concerning the use of the unit. For more information refer to NicomUsa, Inc.

WARNING!

The currents and voltages in this equipment are dangerous!
Personnel must at all times observe safety regulation!

This manual is intended as a general guide for trained and qualified personnel who are aware of the dangers inherent in handling potentially hazardous electrical and electronic circuits. It is not intended to contain a complete statement of all safety precautions which should be observed by personnel in using this or other electronic equipment.

The installation, operation, maintenance and service of this equipment involves risks both to personnel and equipment, and must be performed only by qualified personnel exercising due care. NicomUsa, Inc shall not be responsible for injury or damage resulting from improper procedures or from the use of improperly trained or inexperienced personnel performing such tasks.

During installation and operation of this equipment, local building codes and fire protection standards must be observed.

WARNING!

Always disconnect power before opening covers, doors, enclosures, gates, panels or shields.
Always use grounding nsticks and short out high voltage points before servicing. Never make internal adjustments, perform maintenance or service when alone or when fatigued.

Do not remove, short-circuit or tamper with interlock switches on access covers, doors, enclosures, gates, panels or shields.
Keep away from live circuits, know your equipment and don't take chances.

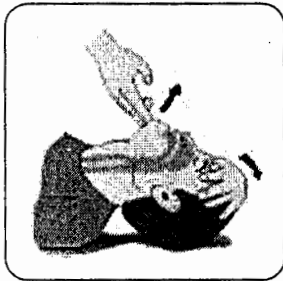
WARNING!

In case of emergency ensure that power has been disconnected.

1) If victim is not responsive follow the A, B, C's of basic life support.

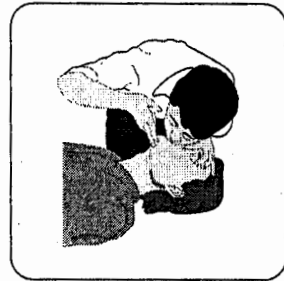
PLACE VICTIM FLAT ON HIS BACK ON A HARD SURFACE

A - AIRWAY



If unconscious, open airway lift up neck, push forehead back, clear out mouth if necessary, observe for breathing.

B - BREATHING

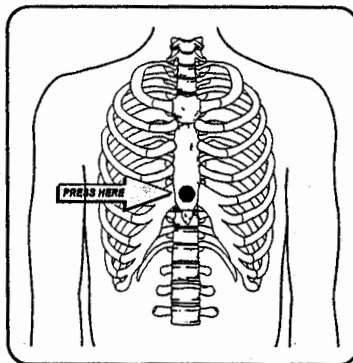


If not breathing, begin artificial breathing. Tilt head, pinch nostrils, make airtight seal, 4 quick full breaths. Remember mouth to mouth resuscitation must be commenced as soon as possible.

C - CIRCULATION



Check carotid pulse. If pulse absent, begin artificial circulation.



Approx. 80sec.: 1 rescuer, 15 compressions, 2 quick breaths.

Approx. 60sec.: 2 rescuers, 5 compressions, 1 breath.

NOTE: DO NOT INTERRUPT RHYTHM OF COMPRESSIONS WHEN SECOND PERSON IS GIVING BREATH.

Call for medical assistance as soon as possible.

1.2 TECHNICAL CHARACTERISTICS

RF

Frequency range	470 - 806 MHz 174 - 216 MHz
Output power	0 to 5W (Adj.)
Output power control	Automatic or Manual (switch-Selected)
Local oscillator	2,5ppm (option 0,05ppm)
I.M.D	< -60dB (with IF Pre-corrector)
Spurious and Harmonics level	< -60dB
RF Output connector	N Female
RF Output impedance	50Ω

VIDEO SECTION

Input	75Ω
Nominal level	1Vpp ±6dB
Return loss	>= 30dB up to 5MHz
DC Recovery	Clamped to back porch
White limitation	90%... 115% not affecting crominance
Group delay pre-corrector	8 Cells
Group delay	<= 50ns (with professional vestigial filter)
Frequency response	<= ±0.5dB
Differential gain	<= ±5%
Differential phase	<= ±5°
Luminance non-linearity	<= 5%
S/HUM Ratio	>= 45dB weighted
S/N Ratio	>= 65dB weighted, >= 55dB unweighted
Black level variation	<= 2%
2T K Factor	<= 1%
ICPM	<= 2°
IF	32.7MHz... 45.75MHz
IF Level (on external link)	-15dBm... -10dBm

AUDIO SECTION

Input	600Ω/10kΩ balanced
Nominal level	2.2Vpp -10dB++6dB
Pre-emphasis	FLAT, 50μs, 75μs
Low-pass filter	15kHz, 100kHz
Limitation circuit	Dnom +1dB
Frequency response	<= 0.5dB
THD	<= 0.5%
Intermodulation	d2<=-60dB, d3<=-60dB
S/N FM CCIR Ratio	>= 60dB weighted >= 60dB unweighted (ref. 50kHz)
S/N AM Ratio	>= 70dB asynchronous >= 50dB synchronous (ref. 100%)

LOCAL OSCILLATOR

IF
IF Level (on external link)

30.5MHz... 41.25MHz
Adjustable

Frequency
bands I, III, IV/V
Offset
Frequency stability
External reference
Output level (on mixer)
S/N FM CCIR Ratio

50MHz..900MHz splitted between
 $\pm 32\text{kHz}$ max
 $\pm 2.5\text{ppm}$ ($0^\circ\text{C} \dots +50^\circ\text{C}$)
5MHz
7dBm $\pm 1\text{dB}$
 $\geq 60\text{dB}$ weighted
 $\geq 60\text{dB}$ unweighted (ref. 50kHz)

GENERAL

Power supply
Cabinet
Dimensions
Weight
Ambient temperature
Humidity

110/230VAC, $\pm 10\%$, 50/60Hz
Rack 19"-2U
482,6x88x400mm
8kg
 -5° to $+45^\circ\text{C}$
20% - 90%

PROTECTION THR.

FWD Power
REF Power
Temperature

6W ($P_{\text{NOM}} + 20\%$)
1W ($20\% P_{\text{NOM}}$)
 70°C (on heatsink)