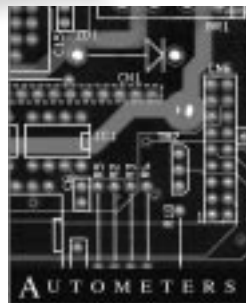


INFORMATION  
CENTRE  
IC890  
WITH  
HARMONIC ANALYSER



INSTALLATION  
AND OPERATING  
MANUAL

HARMONIC DATA (%)  
RU = 1 VU = 2 BU = 3  
RA = 4 VA = 5 BA = 6  
NA = 7 SELECT CH =

IC 890

## DESCRIPTION

The IC890 Multi-Function Meter is designed to display various types of power measurement information, including the option to select the Harmonic content of the Current and Voltage waveform.

When installing and operating the IC890 meter please refer to the IC870 Installation and Operating Manual (Publication Number IC870.12.99).

Installation and wiring information is exactly as shown in the IC870 series meters (Section 2 and 3).

To programme the IC890 meter follow the procedure as shown in the IC870 manual (Section 4)

To check the standard functions of the IC890 meter carry out the same procedure as shown in the IC870 manual (Section 7).

Operation of the IC890 meter and sequence of information readouts is as shown in the IC870 manual (Section 6)

### FIRST CHECK THE CONTENTS OF YOUR PACKAGE

It should contain:

1. Meter
2. Fixing brackets with screws inserted (Quantity 2)
3. Communications cassette (if specified with order)
4. Installation and operation manual

IC890 meters fully comply to European Electromagnetic Compatibility.



Conforms to IEC 61010-1.  
Accuracy Class 1.0



# FUNCTION DISPLAYS

## SEQUENCE

The IC890 is primarily a single key operation device. Information is displayed in exactly the same manner as described in Section 7 of the IC870 manual, but with the additional feature showing Harmonic Content.

To display the harmonic content of the current and voltage waveform requires 2 key operation.

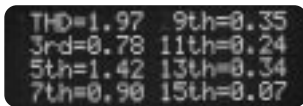
Press the harmonics key (H) to select the harmonic content option.

This will be displayed as follows.



HARMONIC DATA (%)  
RV = 1 VU = 2 BU= 3  
RA = 4 VA = 5 BA= 6  
NA = 7 SELECT CH =

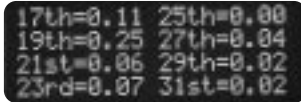
To select the harmonic requirement, e.g. RV (Red Volts), press the appropriate key, the harmonic content would be shown as



THD=1.97 9th=0.35  
3rd=0.78 11th=0.24  
5th=1.42 13th=0.34  
7th=0.90 15th=0.07



The display will then oscillate to show the following



17th=0.11 25th=0.00  
19th=0.25 27th=0.04  
21st=0.06 29th=0.02  
23rd=0.07 31st=0.02

Transformer Selection is as specified in the IC870 manual (Section 9)

Communications protocol is as shown in the IC870 manual (Section 10)

Performance and Data is as specified in the IC870 manual (Section 11)

Maintenance and Service considerations and performance characteristics are as shown in the IC870 manual (Section 12)

## Important

The attention of the specifier, purchaser, installer or user is drawn to special measures and limitations to use which must be observed when these products are taken into service to maintain compliance with the CE Directives. Details of these special measures and limitations of use are available from HMSO.

Ref: IEC 1000-5-1 (BS195/210788DC), IEC1000-5-2 (BS195/214642DC), IEC1000-5-6 (BS195/10789DC)

## **DEDICATED CUSTOMER SERVICE**

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Customer care is the cornerstone of the company's success. A positive service policy is observed throughout every specialist area of operation.

The personal involvement of the directors at every level, a highly trained and motivated staff, fully computerised systems and in-depth stockholding combine to provide a level of service which has earned the appreciation of customers across the spectrum of the UK and overseas markets.

Computerised distribution systems are geared to a consistent 24 hour despatch of products, with 20 minute despatch being possible in response to urgent demand for small orders.

## **PRODUCT RANGE**

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Metering and monitoring equipment ranges from single and polyphase kWh electromechanical meters to a sophisticated range of fully programmable information centres. Also available are Electronic Meters, Panel Mounted Meters, Maximum Demand Meters, DIN Rail Meters and Current Transformers.

*Product development is continuous and Autometers Ltd reserves the right to make alterations in specifications and manufacture without notice. Products as delivered may therefore differ from the description and illustration in this publication.*

**AUTOMETERS**

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