



**United Kingdom of Great Britain
and Northern Ireland**

**OIML Certificate No
R76/2006-GB1-10.01**

OIML CERTIFICATE OF CONFORMITY

Issuing authority

Name: **National Weights and Measures Laboratory
(Part of the National Measurement Office)**
Address: **Stanton Avenue
Teddington
Middlesex
TW11 0JZ
United Kingdom**

Person responsible: **Paul Dixon – Product Certification Manager**

Applicant

Name: **Avery Weigh-Tronix Ltd**
Address: **Foundry Lane
Smethwick
West Midlands B66 2LP
United Kingdom**

Identification of the certified pattern:

**Weighing indicator, as part of a non-automatic weighing
instrument, designated the E11xx / E12xx**

Further characteristics see page 2

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML:	R76
Edition:	2006 (E)
Accuracy class:	III, IIII

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

**OIML Certificate No
R76/2006-GB1-10.01**

This certificate does not bestow any form of legal international approval.

The conformity was established by tests described in the associated:


NWML Test report:	TR 573	having 29 pages
	SN 1137	having 16 pages
	SN 1138	having 13 pages
	SN 1140	having 11 pages
Pattern Evaluation report:	P00357	having 14 pages

The issuing authority



Mr P R Dixon

The CIML member



Mr P Mason

Date: 25 May 2010

Ref: T1127/0040

Characteristics: This family of indicating device is designated the E11xx / E12xx and comprises the E1105, E1110, E1205 and E1210 models. It is designed to be used as part of a Class III or III non-automatic weighing instruments. The indicators are self-indicating, dc-powered and operate as single or multi-interval instruments.

Main features:

- Processor and converter unit comprising CPU and A/D converter
- 8-digit, 7-segment back-lit LED display and dot matrix display (E1105 and E1110) with annunciators
- Back-lit LCD graphics display (E1205 and E1210) with annunciators
- Operator keypad with dedicated keys and soft keys
- Plastic (E1105 and E1205) or metallic (E1110 and E1210) enclosure
- Construction marked as **5** on the rating plate

Devices:

- Semi-automatic zero setting ($\leq 20\%$ Max)
- Zero tracking ($\leq 4\%$ Max)
- Semi-automatic subtractive tare weighing or balancing
- Preset tare
- Determination of stability of equilibrium
- PLUs
- Multi-scale (with a maximum of two)
- Totalisation
- Truck weighing
- Counting
- Target weighing
- Checkweighing
- Gross, Net, Tare, Preset tare, Print, Zero, Motion, Accumulation, Over/Under weight indicators

Technical data:

Power supply	110-240 Vac – 50/60 Hz
Maximum number of scale intervals	10,000 (Class III, single interval) 3,000 (Class III, multi-interval) 1,000 (Class III, single interval)
Maximum subtractive tare	Max
Load cell excitation voltage	10 VDC
Minimum load cell impedance	22 Ω
Maximum load cell impedance	1200 Ω
Minimum input voltage per verification scale interval	0.6 μ V
Measuring range minimum voltage	0 mV
Measuring range maximum voltage	20 mV
Fraction of maximum permissible error	$P_{ind} = 0.5$
Operating temperature range	-10 °C to + 40 °C
Load cell cable (junction box to indicator) - Maximum length	138 m/mm ² (6-wire connection)

Interfaces / optional boards:

The instrument may be fitted with the following protected interfaces:

- Load cell 4 or 6-wire shielded connection
- 1 or 2 RS232/RS485/20mA
- 1 x serial O/P (to external O-I/P module)
- 10/100 Base T Ethernet
- Trip O/P (3)
- Control I/P (3)
- External PC style keyboard (IBM PS/2)

The instrument may be fitted with any or all of the following optional boards:

- (i) load cell interface board (to allow the connection of a second platform, maximum of 16 load cells) and 2 analogue O/Ps (voltage or current),
- (ii) digital expansion board with two serial ports, which can be configured as either RS232 or RS485 or RS422, “pulse input” and BCD interface,
- (iii) “SRAM” expansion board,
- (iv) “Anybus” expansion board – allowing any one of the following additional fieldbus interfaces:-
 - a. Profibus DP
 - b. DeviceNet
 - c. ControlNet
 - d. EthernetmodbusTCP
 - e. EthernetIP

The indicator may additionally be configured to allow up to 16 remote I/O interfaces to be connected for driving relays, motors etc. and receive inputs from switches, photocells, etc.

**OIML Certificate No
R76/2006-GB1-10.01**

Internal DSD (electronic tallyroll):

The “SRAM” expansion board may be used to store data for each transaction and shall include the date, time, transaction ID and the net weight. There is storage capacity to hold a minimum of 4 months data (72,000-transaction records @ 600 records/day for 120 days).

For each trade weight that is taken. The following is recorded:

- conseq. no, plus scale id (scales 1 – 8)
- weight, plus units of weight, plus g/t/n identification
- time and date

The conseq no is normally a 6 digit numeric code starting at 000001 and rolling around to start again after 999999. This is allocated to each trade weight by the indicator.

The load receptor ID is stored in the tally memory and is included in the information printed on tickets or sent to PCs.

The user is able to print the transaction log either in full or in part starting from a particular transaction ID.

Certificate History

ISSUE NO.	DATE	DESCRIPTION
R76/2006-GB1-10.01	24 May 2010	Certificate first issued.
-	-	No revisions have been issued.

Important note: Apart from the mention of the certificate’s reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.