

AD-4404

Check Weighing Indicator

*Fast Sampling Speed for Check Weighing Application
User Programmable Check-Weighing Mode for Many
Specific Requirements - Manual Check-Weighing System
and Fully Automatic Check-Weighing System*



AND
A&D Company, Limited
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More Choices from New Advanced Weighing Indicator for Numerous Weighing System Applications

Features

- Easy to get judgment by Hi/OK/Lo or HiHi/Hi/OK/Lo/LoLo Comparator lights with buzzer
- Foreign Material Detection input function is newly added
- Bar graph shows where the weight of an object falls within the OK range
- Built-in timer controls weighing process by signal from an external photoelectric switch or by programmable weight recognition function that is beneficial for transparent objects
- Weight, Accepted Piece, Accumulated Piece count, name of the object weighed, and standard deviation can be displayed at the touch of button
- Up to 100 sets of target (OK weight), Hi, Lo and tare can be stored by individual code number
- 5 digits of Target and 4 digits of Upper and Lower Limit can be set by the front key operation and number of digit and its location can be customized
- Bright and large 13mm (0.52 inch) fluorescent display
- 1/16000 display resolution capability, precise enough for any application
- Sealed keys keep out dust in industrial environments
- 100 times/second fast sampling
- Standard Current Loop output and Standard RS-485
- Full Digital Calibration makes Zero and Span calibration a breeze
- Complete RFI/EMI protection

Many Features Simplify Operation

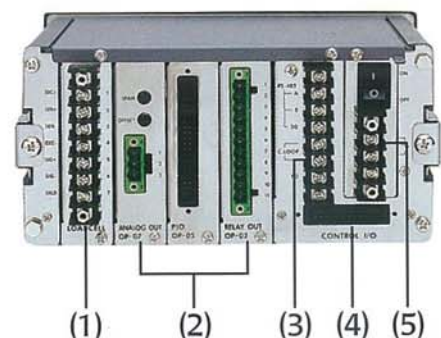
- Display (Default) — Stores and recalls up to 100 sets of pre-set items by individual code number
 - Total number of pieces checked
 - Total number of pieces accepted
 - Target Weight
 - Bar graph indicates deviation from target weight
- Heavy-duty construction
- Easy installation
- Simple calibration
- 11 inputs and 11 open collector output standard
 - Optional Dry contact relay
- Auto Zero Maintenance with adjustable parameters
- Comparator Buzzer
- Front panel key lock out prevents operator tampering
- Fully selectable decimal point positioning
- Programmable Gravity Compensation
- Selectable units of measuring: None, g, kg, t, lbs (USA)



Rear Panel Descriptions

There are many features, like selectable I/O control terminals, standard RS-485 I/F.

- (1) Load cell input 350Ω L/C up to 8 units Replacement A/D board available
Accuracy guaranteed to 1/500
- (2) 3 Options slots – Up to 3 options installed
- (3) External control RS-485 standard, up to 32 units controlled simultaneously
- (4) Programmable Control I/O – Input 11/Output 11
- (5) AC Power 85~250V



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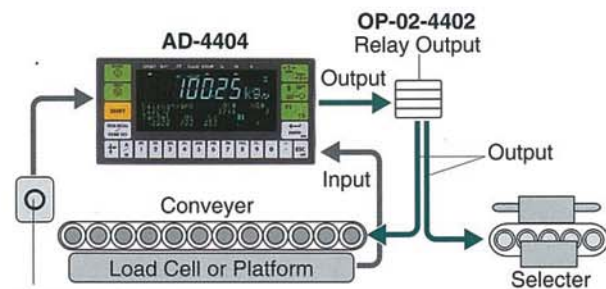
Check Weighing Indicator

Set-up Example



User Programmable Check-Weighing Modes

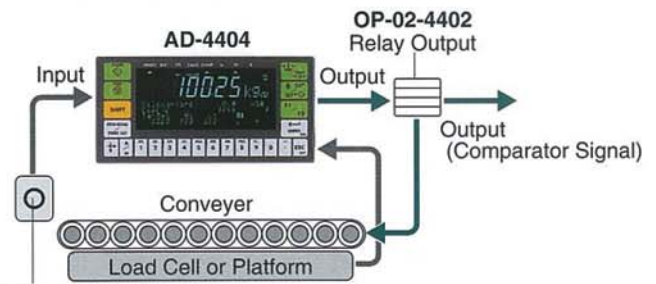
Because check-weighing requirements are not the same for everyone, we designed the AD-4404 to be programmable to your specific requirements.



Photoelectric Switch

● **Fully Automatic (1):**
Always in motion.
Automatic reject.

● **Simple Check Weigher**
In-motion only.
Records total packages and total acceptable packages.

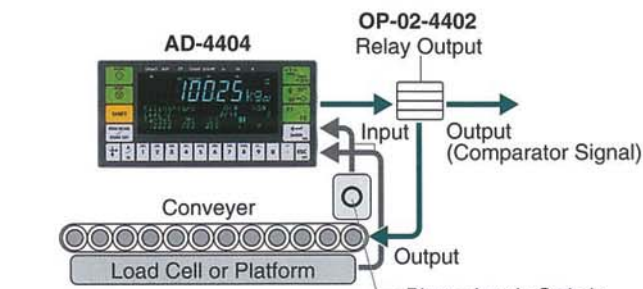


Photoelectric Switch

● **Semi-Automatic (1):**
Stops conveyor when item is out of acceptable range.

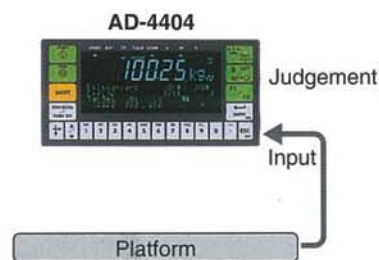
● **Fully Automatic (2):**
Conveyor stops during weighing for high accuracy.
Automatic restart.
Automatic reject.

● **Semi-Automatic (2):**
Conveyor stops during weighing for higher accuracy.
Conveyor stops and buzzer sounds for items out of acceptable range.



● **Packing Mode**

Fill container on in-motion scale while stationary.
Press start button when complete.
If container is within acceptable range, conveyors starts.



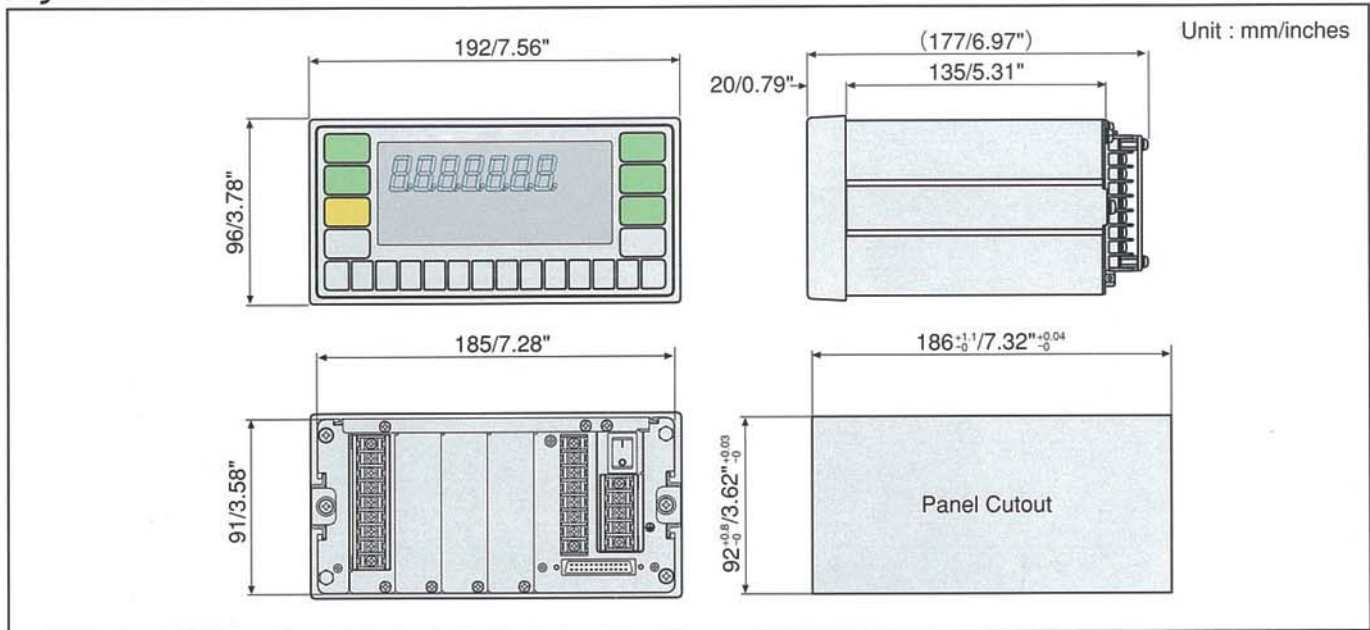
● **HI/OK/Lo**

Set the acceptable weight range and set the buzzer function to your HI/OK/Lo requirements.

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Check Weighing Indicator

Physical Dimensions



Specifications

Analog Input and A/D Conversion

Input Sensitivity	0.3 μ V/d
Zero Adjustment Range	0mV ~ 20mV (0mV/V ~ 2mV/V)
Input Signal Range	0mV ~ 32mV (0mV/V ~ 3.2mV/V)
Load Cell Excitation	DC 10V \pm 5% 230mA, Remote Sensing (Up to 8 load cells at 350 Ω /load cell)
Zero Temperature Coefficient	\pm (0.2 μ V+8ppm of dead load)/ $^{\circ}$ C (typically)
Span Temperature Coefficient	\pm 8ppm/ $^{\circ}$ C of reading (typically)
Non-Linearity	0.01% of full scale
Input Noise	Less than 0.6 μ Vp-p
Input Impedance	10M Ω or more
A/D Conversion Method	Delta Sigma
A/D Resolution	1,000,000 counts
Maximum Display Resolution	16,000 counts (This limitation can be bypassed)
A/D Conversion Rate	100 times/sec.

Digital Section

Main Display	Blue Fluorescent, 7-segment, 7-digit Character Height: 18mm
Subdisplay	Blue Fluorescent, 7-segment (54 digits) /5 \times 7 dots (54 digits) Character Height: 5mm
Status Displays/Symbols	8 displays/10 symbols (5 \times 7 dots)

External Input/Output Section

Control I/O	Inputs 11/Outputs 11
Standard Serial I/F (Ch.1)	RS-485 (Terminal)
Standard Serial I/F (Ch.2)	Current loop (Terminal)

General

Power	AC 85V ~ 250V (50/60Hz)
Consumption	Approximately 30VA
Operating Temperature	-5 ~ +40 $^{\circ}$ C (23 $^{\circ}$ F ~ 104 $^{\circ}$ F)
Operating Humidity	Less than 85% RH (non-condensing)
Physical Dimensions	192(W) \times 135(D) \times 96(H) mm 7.56(W) \times 5.31(D) \times 3.78(H) inches With terminal posts: 192(W) \times 177(D) \times 96(H) mm 7.56(W) \times 6.97(D) \times 3.78(H) inches
Panel Cutout Dimensions	186(W) \times 92(H) mm 7.32(W) \times 3.62(H) inches
Net Weight	Approximately 1.8 kg / 4.0 lb

Options

OP-01-4402	BCD Output
OP-02-4402	Relay Output
OP-03-4402	RS-422/RS-485 I/O
OP-04-4402	RS-232C I/O
OP-05-4402	Parallel I/O
OP-07-4402	Analog Output

Accessories

AD8118A	Journal Printer
AD8118B	Universal Printer
AD8121A	Dot matrix Printer
AD8917	External Display
AD8512	Digital Comparator
AD8951	Comparator Light

Specifications subject to change for improvement without notice.

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