

CHECKWEIGHER

# CHECKWEIGHER AD-4961



*Checkweighing  
Simplified!*

# Why The Unique Modular Design Maximizes Production Efficiency



## Unique modular design

AD-4961 consists of four units, an infeed conveyor unit, a weighing conveyor unit, a control unit and a base unit, allowing fast and simple assembly. In the case of system shutdown, you do not need to wait for a service engineer to respond to the issue. Just simply replace the unresponsive module by yourself, so that you can shorten system downtime and maximize production efficiency.



Infeed conveyor unit



Control unit



Weighing conveyor unit



Base unit

## Easy maintenance

The Direct Gear Drive Mechanism allows you to replace a conveyor simply and easily. The entire system is washable with a stainless steel construction and hygienic design.



Replacing a belt

Replacing a gear

Replacing a conveyor

Replacing a gear motor

# A&D have redefined checkweighing with unparalleled simplicity and best-in-class precision.



## Best-in-class precision

With a newly developed digital load cell and an ultra-high speed processing module, high level precision of 0.08g (3 $\sigma$ ) has been realized. With this high accuracy checkweigher, you can minimize the giveaway of materials above the specified weight and contribute to reductions in production costs.



## IP65 compliant

Protected from dust and water to IP65 standards. Hygienic design with the entire system washable.

## 7 inch color touch panel

The display utilises a high visibility touch panel color LCD with user friendly Graphic User Interface (audio guidance support function included).

## Stores up to 1000 products

Products can be divided into 10 different groups, with up to 100 products able to be recorded within each group.

## Image import from USB

Product images can be quickly uploaded to the checkweigher from USB memory, making product identification and upload fast and simple.

## Optimization of weighing configuration

By inputting throughput(products per minute) or belt speed(m/min), optimal weighing conditions can be automatically set. You can weigh products precisely without inputting various setting.

## Lightweight and compact design

With it's modular structure, the AD-4961 allows for rapid and simple installation or relocation.



USB memory



Equipped with Modbus RTU/Modbus TCP as standard.  
With Modbus communication, seamless connection can be easily achieved.  
Operations such as stopping and starting weighing, collecting data and changing product can all be set from an external device.



Rejector output , alarm output, metal detector input, RS-232C, TCP/IP and USB interface are equipped as standards.  
Storing data in USB memory or outputting to a printer are also possible.



Various summary data such as histograms (frequency including defects), X charts, R charts, total summaries, etc., are available.  
You can visually confirm fluctuation of weighing results and adjust your manufacturing machine accordingly.

\*For further information please refer to "histogram" and "X chart" on the next page.

The AD-4961 also has an internal memory of up to 100 sets of weighing data.  
(By using USB memory the number of data records can be increased.)



Various reports or charts can be outputted to a PostScript printer via Ethernet.  
You can also save them in a pdf format to a USB memory.

## Reject modules and options



**AD-4981-2057**  
Screening capability 120pcs/min.



**AD-4982-2035**  
Screening capability 150pcs/min.



\*Please prepare an air compressor with a φ6mm air tube to be connected to the filter regulator of the rejector.  
Air supply: 0.5MPa, 0.1NL/time

# checkweigher which can be used for easy system design with connection and communication with external devices.

## History function

The history of configuration changes can be recorded and displayed. Suitable for use in HACCP programs along with the weighing history function.

Users can be registered and their scope of permitted operations controlled according to 4 management levels.

[ Operator ]

[ Supervisor ]

[ Quality Manager ]

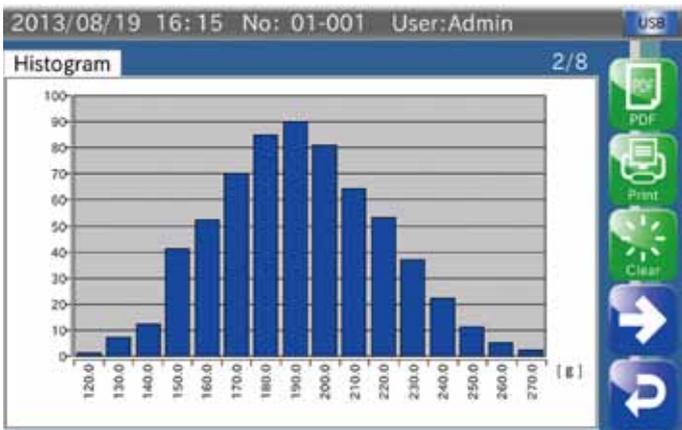
[ Administrator ]

By assigning each user to the appropriate level of access, inadvertent operations can be avoided.\*2

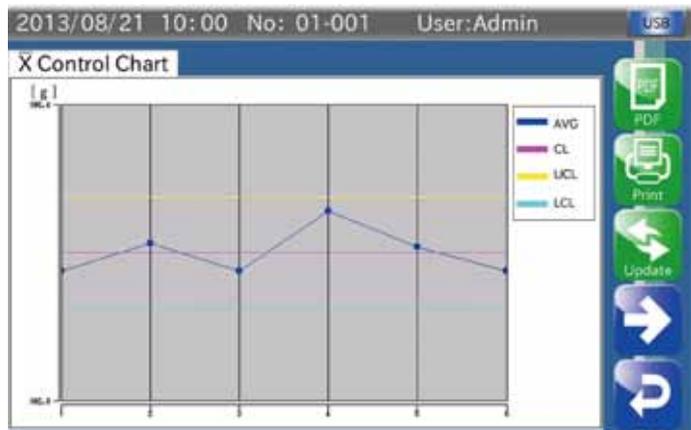
\*2 "Operator" is set as the factory default setting.

| Time            | User Name | No.   | Item           | Detail         |
|-----------------|-----------|-------|----------------|----------------|
| 2013/8/19 13:50 | Admin     | 1-001 | Stability Time | 1.000 + 2.000  |
| 2013/8/19 15:50 | Admin     | 1-001 | Login          |                |
| 2013/8/19 15:51 | Admin     | 1-001 | Language       | 0 + 1          |
| 2013/8/19 15:58 | Operator  | 1-001 | Login          |                |
| 2013/8/19 15:59 | Murata    | 1-001 | Login          |                |
| 2013/8/19 15:59 | Murata    | 1-001 | Target         | 57.00 + 100.00 |
| 2013/8/19 16:00 | Operator  | 1-001 | Login          |                |
| 2013/8/19 16:00 | Nishimura | 1-001 | Login          |                |
| 2013/8/19 16:00 | Nishimura | 1-001 | Stability Wei  | 10.00 + 5.00   |
| 2013/8/19 16:00 | Operator  | 1-001 | Login          |                |
| 2013/8/19 16:01 | Admin     | 1-001 | Login          |                |

## Histogram display screen



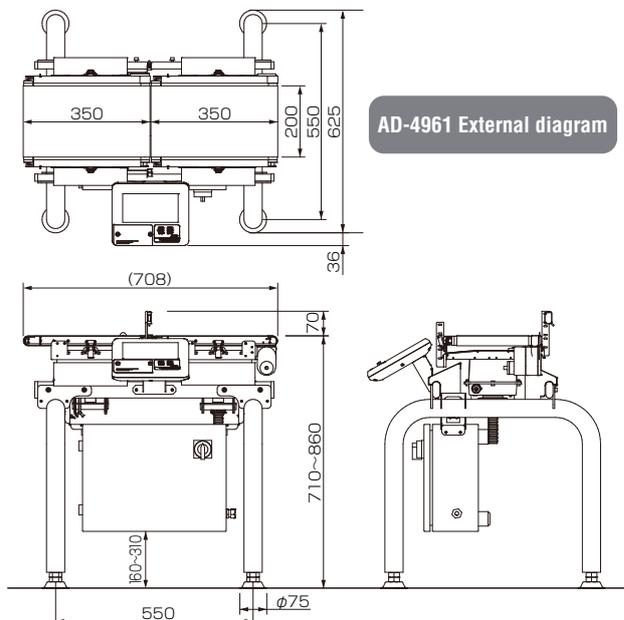
## X̄ chart screen



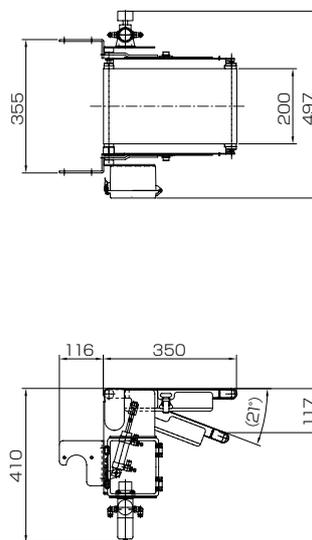
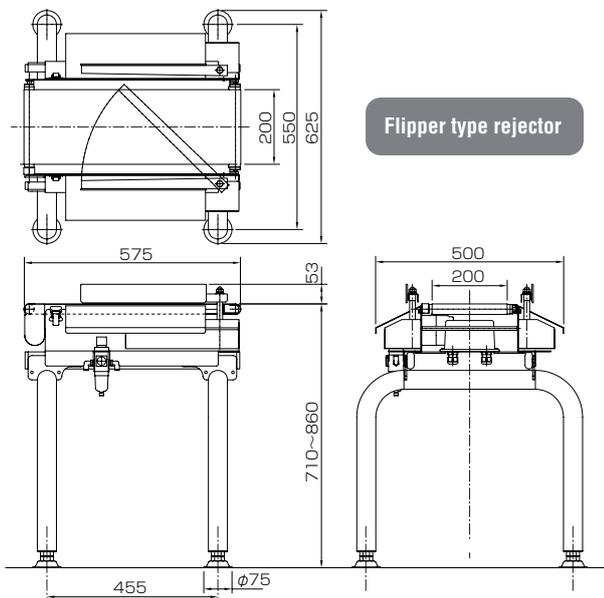
## Specifications

|                                      |   |
|--------------------------------------|---|
| Model                                | AD-4961-2KD-2035  |
| Capacity                             | 500g / 2,000g   |
| Resolution                           | 0.01g / 0.1g  |
| Accuracy(3 $\sigma$ )*1              | 0.08g/0.18g   |
| Throughput                           | 320pcs/min  |
| Conveyor belt width                  | 200mm   |
| Conveyor length                      | 350mm   |
| Transport medium                     | Urethane belt   |
| Conveyor belt speed                  | 15~120m/min   |
| Max. product dimensions              | Length : 30~300mm<br>Width : 200mm  |
| Weighing sensor                      | Strain gauge load cell  |
| Display                              | 7inch touch panel color display   |
| Operation method                     | Touch panel (WVGA), Key switch  |
| Number of recorded items             | 1,000 items (10 groups x 100 items)   |
| Communication functions              | Modbus TCP / Modbus RTU / RS-232C(metal detector) /<br>TCP/IP (PostScript printer) /<br>USB (for USB memory, data storage, image import use) *3 |
| External input                       | Non-voltage contact input 4points   |
| External output                      | Relay output 8points  |
| Dust/water resistance specifications | IP65 compliant  |
| Operation temperature/humidity range | -5 ~ 40°C / humidity below 85%(with no condensation)  |
| Power supply                         | Single phase AC100V-240V(+10% / -15%), 50/60Hz 180VA  |
| External dimensions *2               | Width : 700mm / Depth: 600mm / Height: 710~860mm  |
| Weight *2                            | Approx. 35kg  |
| Material                             | Display : ABS resin<br>Conveyor unit : Aluminum(alumite coating) and ABS resin<br>Control box : Stainless steel<br>Base unit : Stainless steel  |

\*1 Depends on the shape and the condition of the product and installation environment.  
\*2 Values for external dimensions and weight are for the standard condition without rejector.  
\*3 USB memory must be formatted to FAT32.



When the display stand is used, the display is attached on the opposite side from the standard display position.  
The display will be at a height approximately 310mm above the conveyor belt.



Conveyor drop type rejector

Unit : mm

# AND

...Clearly a Better Value

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