CE

CLY-AS LOAD INDICATOR

User's Guide

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Overview

CLY series load indicator combines advanced electrical hardware with good software. Using 89 series micro-processor and high precision A/D conversion technology, the CLY series load indicator has a specially designed jittering compensation circuitry so they can reach steady state quickly with strong anti-interference capability. With portable structure and combined functions of measure the force and weight, this series of load indicator can be used for weighing application in force measuring, commercial trade, mines, storage and transportations.

| Product Execute Standard | GB/T11883-2002 | | |
|--------------------------|---|--|--|
| Accuracy Grade | ≤0.1% F • S | | |
| Zeroing Range | 100% Full Scale | | |
| Maximum Safe Load | 150% Full Scale | | |
| Display Specifications | 6-digit 18 mm FSTN LCD display with back lighting | | |
| Operating Temperature | -20°C ~+45°C | | |
| Operating Humidity | ≤90% RH | | |
| Low Voltage Indicator | Low voltage indicator turns on when the scale power supply voltage is | | |
| | low. | | |
| Power Supply | Four (4) AA/1.5V Alkaline batteries – Standard | | |
| | Option: Four (4) 1.2V Nickel-H rechargeable batteries | | |
| | | | |
| Auto Power Off | 30 minutes after the scale is inactive or at extreme low power supply | | |
| Casing | Alloy steel housing with high strength, fatigue resistance | | |
| Keypad | Light touch keypad to prolong the life of keypad performance | | |

Specifications

Keypad Functions

The keypad includes those keys such as ON, OFF, DIVISION CONVERSION, ZERO. (Note: the above keys can be used to set up kg-lb or kg-kN conversion, Beeper On/Off, Peak hold, Auto backlighting, etc.)

| Madal | Max. Capacity | Standard | Division | Resolution | |
|-----------|---------------|----------|---------------|------------|--|
| Model | (kg) | Division | Hi Resolution | Standard | |
| CLY-AS-3 | CLY-AS-3 3000 | | 0.5 | 1/3000 | |
| CLY-AS-5 | 5000 | 2 | 1 | 1/2500 | |
| CLY-AS-10 | 10000 | 5 | 2 | 1/2000 | |
| CLY-AS-20 | 20000 | 10 | 5 | 1/2000 | |
| CLY-AS-30 | 30000 | 10 | 5 | 1/3000 | |



- 1. [Zero/Light/] : At the mode of force measuring /weighing, press this key to set the current display to zero. When it's under manual backlighting with displaying 'OFF', it will be the switch of backlight. Under setting mode of operation, it will function as input or confirm.
- 2. [Set/Peak/<] : Press this key at the mode of force measuring/weighing to function the peak hold; Press this key again, the function will be closed. Press this key under setting mode, it will move digit left.
- 3. [ON/OFF/ ^]: Keep pressing this key to turn on or off the load indicator. Press this key under force measuring/weighing mode, it will display 'OFF'. Press this key again to shut off the load indicator. Press [Set/Peak/<] when displaying 'OFF', the load indicator will return to the current mode. Under setting mode, press this key to add.

General Operation

- 1. Turn On the load indicator
 - a) Press the key [ON/OFF/] on the keypad overlay to turn on the scale. The load indicator's maximum weighing capacity is first shown, and then the load indicator goes through a self-check sequence.
 - b) After 0 is displayed, the load indicator is ready for force measuring/weighing operation. (Note: it is recommended to allow load indicator 3~5 minutes of warm-up time before starting force measuring/weighing operation).
- 2. Zeroing

In general, the load indicator shows "0"kg or "0"N/kN after it is turned on. In case the

display is showing numerical value other than "0", press [Zero/Light/ -] to set the

display to "0".

- 3. Weighing / Force Measurement
 - a) Once the load is suspended completely, the display shows the weight value of the load. When the "Stable" indicator is lit, weight value can be recorded.
 - b) In case there is tare such as cable, load the tare and press [Zero/Light/ -] to zero the

display to "0"kg. The weight value after this will be the net weight. This will not change until the tare change or the load indicator being turned off.

- 4. Turn Off the Scale
 - a) After force measuring/weighing operation, the load indicator should be turned off. Keep pressing the [ON/OFF/] key to shut off the power completely to prevent the leakage of the battery.

Battery Charging Method

The product uses four (4) AA/1.5V Alkaline batteries or Nickel-H rechargeable batteries. When the power is low, it will display the following signals:

- a) The LOB indicator light comes ON. The four (4) AA/1.5V Alkaline batteries need be replaced or the Nickel-H rechargeable batteries need to be charged now. The load indicator, however, can continue to operate for about 1 hour without replacing or charging.
- b) After the LOB indicator is ON for several hours without replacing or charging or there is no more power in the battery, the load indicator will be powered off automatically. To avoid the leakage of the batteries damaging the indicator, please take out the batteries immediately.
- c) If the product uses 2000mAH rechargeable batteries, it can be used continuously over 60 hours after fully charging (Without backlighting). The four (4) AA/1.5V Alkaline batteries can be used for about 30 hours (without backlighting)

Precautions

- 1. The product uses four (4) AA/1.5V Alkaline batteries or Nickel-H rechargeable batteries.
- 2. Do NOT attempt lifting loads in excess of the normal rated capacity of the load indicator.
- 3. Perform routine inspection and maintenance to ensure operation safety for these basic items:
 - a) Check for loose bolts.
 - b) Check all links for deformation, wearing and tearing.
 - c) Check other components for signs of metal fatigue.
 - d) Check for missing hook latch.
 - e) Avoid hitting, bumping the display window.
 - f) Do not use the load indicator in the rain or heavily polluted environment.

For problem "a" through "d", please stop using the load indicator and send it back to authorized Blue Arrow dealer or Blue Arrow for repair or replacement of problem parts.

Parameter Set-up

| Step | Operation | Display | Remarks | | |
|------|-------------------------------|---------|--|--|--|
| 1 | Press & Hold [Set/Peak/<]Key | bEE 1 | Sound setting | | |
| | to during self check sequence | | 0 to close the sound, 1 to use sound; | | |
| | | | Press [Set/Peak/<] to select | | |
| 2 | Press [Zero/Light/]] | CHt 0 | To select kg-N or kg-lb | | |
| | | | 0- kg, 1-N or lb; | | |
| | | | Press [Set/Peak/<] to select | | |
| 3 | Press [Zero/Light/ | Aut 0 | Setting backlight | | |
| | | | 0- manual backlight, 1-Auto backlight; | | |
| | | | press [Set/Peak/<] to select | | |
| 4 | Press [Zero/Light/]] | d 0 | Setting divisions | | |
| | Press [Zero/Light/ -] | | 0- standard division,1-hi divion; | | |
| | | | press [Set/Peak/<] to select | | |
| 5 | | YES 0 | Save the record or not | | |
| | Press [Zero/Light/]] | | 0-not record, 1-record; press [Set/Peak/<] | | |
| | | | to select | | |
| 6 | Press [Zero/Light/ | | Restart the system | | |

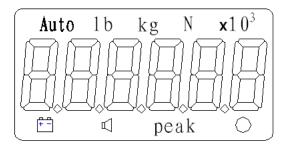
Calibration Method

Please do not attempt to calibrate the load indicator without standard weight

| Step | Operation | Display | Remarks |
|------|--------------------------|---------|--|
| 1 | Press & Hold | SPEn | Enter the calibration procedure. The load |
| | [Zero/Light/]] Key to | | indicator should be with no load |
| | power on | | |
| 2 | Press | SEt | Confirm zero point, when stable, display |
| | [Zero/Light/]]Key | 00000 | "00000" |
| 3 | Press [ON/OFF/ ^] | 3000.0 | Load the scale. The closer to full capacity, the |
| | Key to add | | better. For example, 3000kg |
| | Press[Set/Peak/<] Key to | | |
| | move the digit left | | |
| 4 | Press[[Zero/Light/]] | HOLd | To store the result once the weighing becomes stable |
| | Кеу | | |
| 5 | | 3000.0 | System goes back to weighing mode after |
| | | | several seconds. |

Display Screen and Prompt Symbol

LCD display window

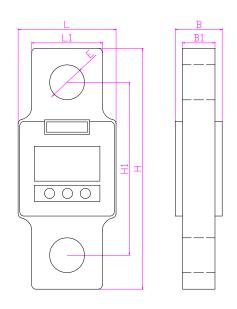


 $\begin{bmatrix} -& -\\ -& + \end{bmatrix}$ Low voltage indicator. When this symbol is lit, the system is at low power status. Please replace the batteries now.

$\mathbf{I}_{\mathbf{x}}^{\mathbf{y}}$ The beeper is turned on when the light is on.

When this symbol is lit, the weighing process is stable and customer can take record of the weight.

Schematics



| Capacity Size | 3t | 5t | 10t | 20t | 30t |
|------------------|---------|-----|-----|-----------------|---------|
| Н | 220 | 235 | 283 | 349 | 410 |
| H1 | 170 | 177 | 203 | 237 | 270 |
| L | 115 | 115 | 115 | 115 | 120 |
| L1 | 50 | 56 | 83 | 115 | 120 |
| В | 55 | 55 | 55 | 73 | 84 |
| B1 | 38 | 38 | 38 | 56 | 67 |
| E | otin 26 | Ø31 | Ø41 | Ø 56 . 5 | Ø 70. 5 |