

Battery indicator instruction

Function Description:

This instrument is an indicator of static battery charge and discharge. Through multi-color LED show the battery's energy storage.

1. Has the power memory .
2. LED brights downlink or uplink delay function, which can filter voltage moment fluctuations caused by battery charge and discharge
3. Open clear function. Once disconnect with battery and connect again, indicator will detect and indicator battery status.
4. Under-voltage protection. When the battery voltage is low, The indicator will turn off some of the internal electrical appliances (such as forklift upgrade function) by power rely inside

Installation

1. Battery: lead-acid batteries, DC12V/24V/36V/48V/72V/80V (choose one) if need for LiFePO4 battery have to be made by order.
2. Voltage settings: Voltage per cell: [2.05@full](#), 1.73@ empty. Reset voltage is 2.27V.

Case specifications:

Instrument: Round, step type bezel, glass lens, maximum 4 pins, 3/16" terminals

Hardware kits: stainless steel U-shape mounting bracket, with washers(2 pcs), springs(2 pcs) and nuts(2 pcs), slip-on connectors(4 pcs), isolated sleeves(4 pcs).

Panel Cutout—52mm, 2-1/16"

Mechanical Shock—SAE J 1378, 55g

Mechanical Vibration---- SAE J 1378, 20g

Battery Status

Display---Battery state-of- charge:10-bar,tri-color LED. LED colors: 1# is RED; 2#—3# is YELLOW; 4#----10# is GREEN.

- The battery meter has 10 LEDS that will light to show the battery condition. When fully charged, only the 10th LED will light shown a **green LED**.
- As the battery discharges, successively lower LEDs will light; the 9th, 8th, 7th and so on lighting only 1 LED.
- At approximately 30% battery life, the #3 LED will light and the color is **Yellow** as a caution indicator.
- At approximately 20% battery life remaining, the #2 LED will light as a **Flashing Yellow**.
- When the battery discharges to approximately ~10% remaining life, the **#1 LED** will start **FLASHING RED** with the **#2 LED FLASHING Yellow** alternately.
- It is recommended to have the battery or batteries recharged when the #3 LED lights **Yellow** as a safety margin to prevent dead batteries.

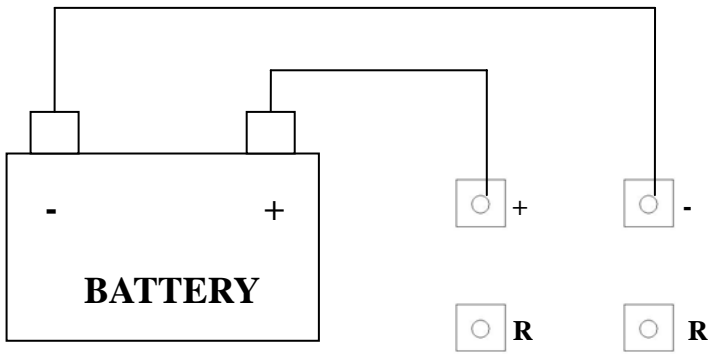
Environmental

Temperature----Operating: -40°C to 85°C

Humidity—maximum 95% RH(Non condensing) @ 38°C

Wiring:

+ : BATTERY POSITIVE ; - :BATTERY NEGATIVE; R/R: RELAY CONTACT (30V/3A *90W, Two R pins are the connections to make use of the relay function. Connect a positive voltage supply to pin 3. Connect pin 4 to equipment that you wish to operate limited to 3 amps max. This connection provides an open switch. When the meter senses full voltage, it activates the relay allowing current to flow to operate accessories. When the battery becomes discharged, the relay will open and shut off the power supply to an accessory that is wired through the meter to conserve battery life.)



Pin R & R are relay pins, acting as switch, which can shut off the device connecting via them, when battery voltage is too low, so as to prevent battery from over discharge.

Model	Voltage	1#-2#	2#	3#	4#	5#	6#	7#	8#	9#	10#
12V	voltage	≤10.3 8	10.38~ 10.59	10.59~ 10.82	10.82~ 11.03	11.03~ 11.25	11.25~ 11.46	11.46~ 11.68	11.68~ 11.90	11.90~ 12.33	≥12.33
24V		≤20.7 6	20.76~ 21.19	21.19~ 21.63	21.63~ 22.06	22.06~ 22.49	22.49~ 22.92	22.92~ 23.36	23.36~ 23.79	23.79~ 24.65	≥24.65
36v		≤31.1 4	31.14~ 31.79	31.79~ 32.44	32.44~ 33.09	33.09~ 33.74	33.74~ 34.38	34.38~ 35.04	35.04~ 35.69	35.69~ 36.98	≥36.98
48V		≤41.5 2	41.52~ 42.39	42.39~ 43.25	43.25~ 44.12	44.12~ 44.98	44.98~ 45.85	45.85~ 46.71	46.71~ 47.58	47.58~ 49.31	≥49.31
60		≤51.9	51.8~ 52.9	52.9~ 54.0	54.0~ 55.1	55.1~ 56.2	56.2~ 57.3	57.3~ 58.4	58.4~ 59.5	59.5~ 61.7	≥61.7
72V		≤62.2 8	62.28~ 63.57	63.57~ 64.89	64.89~ 66.18	66.18~ 67.47	67.47~ 68.76	68.76~ 70.08	70.08~ 71.37	71.37~ 73.95	≥73.95
80V		≤69.1 9	69.19~ 70.63	70.63~ 72.08	72.08~ 73.45	73.45~ 74.89	74.89~ 76.33	76.33~ 77.77	77.77~ 79.21	79.21~ 82.17	≥82.17
		Relay	open	on	on	on	on	on	on	on	on
	Working status	Alternately flash	Flash	LED on	LED on	LED on	LED on	LED on	LED on	LED on	LED on
	LED change delay	155 s	155 s	155 s	155s	155 s	155s	155 s	155 s	155 s	155 s

Battery indicator memorized the battery state is full when leaving factory. When use with a new battery, it should be powered on for at least 2 minutes to indicate the real battery state.