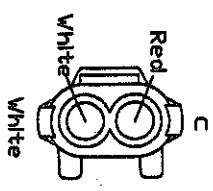
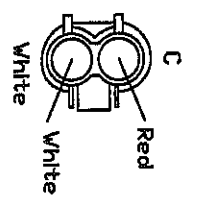
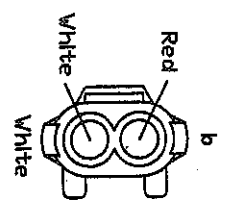
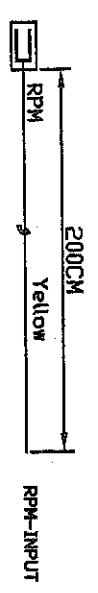
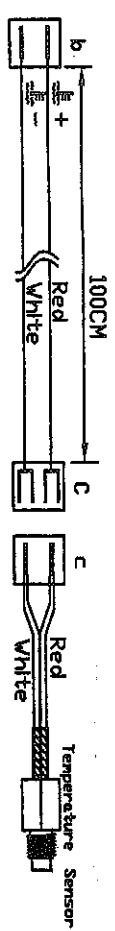
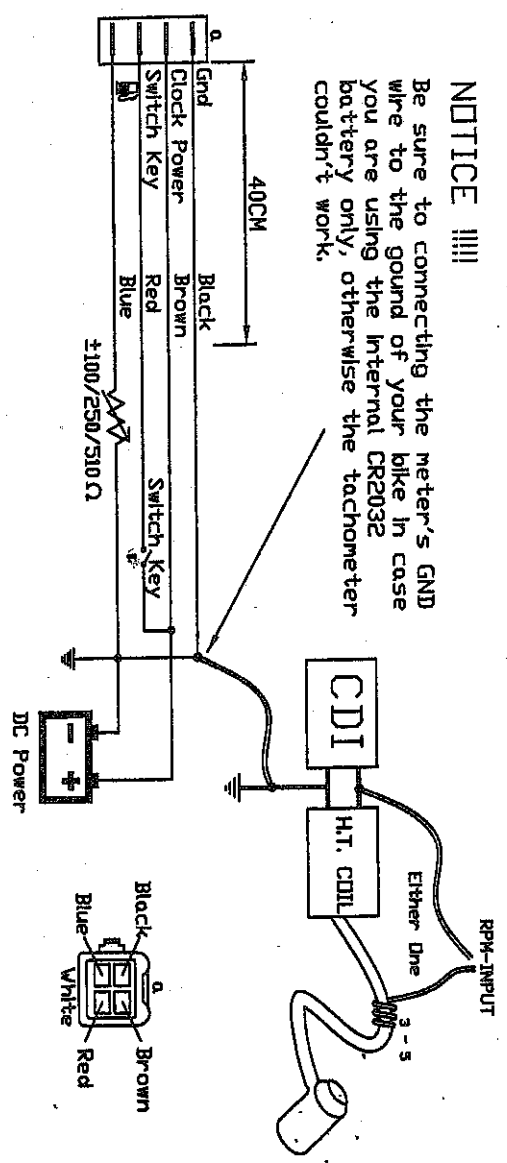
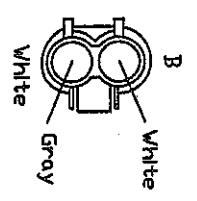
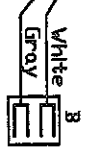
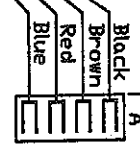
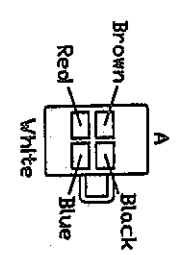
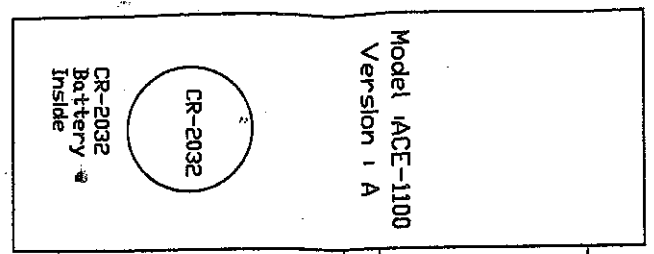


A B C D E F G H

ACEVELL

NOTICE !!!
 Be sure to connecting the meter's GND wire to the ground of your bike in case you are using the internal CR2032 battery only, otherwise the tachometer couldn't work.

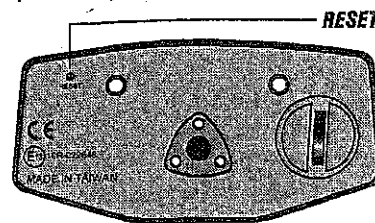
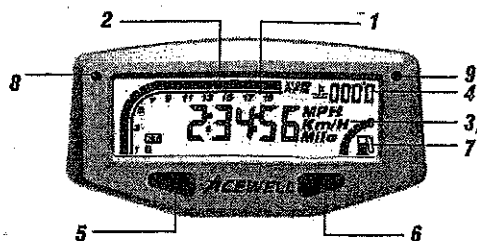


PART NO.	44121100N001A
MODEL NO.	ACE-1100
VERSION	A (2010/01/30)
FIR	AV STANDARD
億昇電子有限公司 ACEVELL INTERNATIONAL CO., LTD.	

ACEWELL ATV/Motorcycle Computer

ACE-1000/1100 User Manual

Thanks for bought the ATV/Motorcycle computer; this manual is designed for ACE-1000/1100 series.
ACE-1000 does not have functions of thermometer and volt meter; *all descriptions relative to these functions are for ACE-1100 only.



English

E 13 10R-029648

PANEL DESCRIPTIONS

1. Tachometer Scale
2. Bar Tachometer
3. Other functions
4. Thermometer*
5. RESET Button
6. MODE Button
7. Fuel Gauge
8. RPM Warning Indicator
9. Temperature*/Fuel gauge warning LED

FEATURES

- Displays bar-graphic tachometer, digital thermometer*, bar fuel gauge and one additional function at the same time.
- Bar-graph tachometers with selectable 10,000rpm or 20,000rpm redline.
- Two sets of maintenance reminders to remind you it is time to service your bike.
- Fuel gauge includes 100, 250 and 510 Ohm options for fuel meter input resistance, as well as "fuel gauge off" mode.
- Includes main unit, bracket, RPM sensing wire, thermo sensor*, fitting kits and wiring harness.

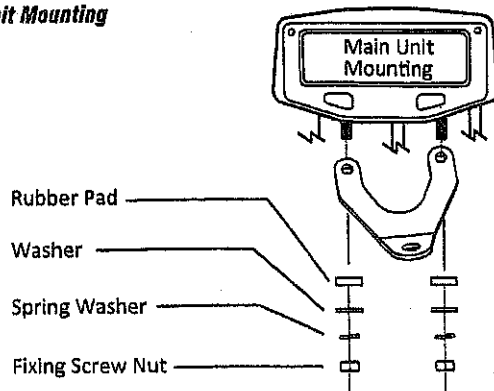
SPECIFICATIONS

Function	Simbolo	Specifications
Bar Tachometer		500-10,000 rpm 1,000-20,000rpm options
Digital Tachometer	rpm	100-19,900rpm
Digital Thermometer*		+50°C -180°C / 122°F -356°F
Maximum Thermometer*	MAX°C / °F	+50°C -180°C / 122°F -356°F
12/24 Hour Clock		0:00-11H59/23H59
Hour meter 1&2	RT 1&2	0-99H59'59"
Total Hour Meter	TT	0-999999H
Voltage Gauge*	V	8.0-12.0 Volt
Bar-Fuel Gauge		100Ω, 250Ω, 500Ω options or 1-7 Bar-graphic
Maintain Reminder	RT1 or RT2	1-9999 hours

Power Input	DC 12V
Tachometer Sensor	CDI or Ignition Coil Signal
Temperature Sensor*	Thermo Sensor
Power Consumption	50uA at clock mode 1mA at on status without backlight and all sensors off 2mA at all sensors on status without backlight 15mA at on status with 3 sec. backlight 25mA at on status with continue backlight
Dimensions	110.0mm x 55.0mm x 21.5 mm)

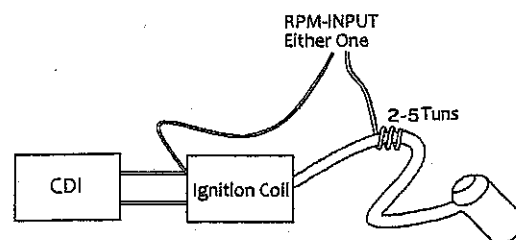
INSTALLATION

Main Unit Mounting



RPM sensing wire mounting:

1. Signal intensity from ignition coil is dependent on vehicle type.
2. Circles 2-5 turns around ignition coil, with more turns creating steadily stronger signal, fewer turns creating weaker signal.
3. The RPM circuit is designed for most bikes, however partial bikes' signal is too strong if the RPM looks like much more than actual RPM and unstable, please serial connect the attached 1M Ohm resistor to solve it.



Thermo Sensor and Sensor Tube* :

1. The unit includes a water temperature sensor; you have to purchase a suitable water pipe temperature sensor tube to install the sensor easily. It is not need to purchase sensor tube in case your bike matches PT1/8 temperature sensor and the attachment is PT1/8 sensor.
2. Cut the water pipe, insert the temperature tube into the pipe and secure it by attached pipe clamps.
3. Screw the sensor into the tube.

FUNCTIONS

BAR RPM: Bar Graphic Tachometer

The bar tachometer has 10,000rpm and 20,000rpm options.

RPM: Digital Tachometer

1. It displays digital tachometer up to 19,900RPM.
2. Tachometer signal can pick up from either CDI or Ignition Coil Signal.

Shift Warning RPM

1. The function enables you to set up a shift warning RPM.
2. Shift warning LED indicator flashes when RPM reaches setting value, and stop flash after you shift gear.

⌚ RT 1&2: Hour Meter 1&2

1. Calculates total engine operation time from last RESET.
2. Count automatically begins with engine starting.

TT: Total Hour Meter

1. Calculates total engine operation time from the beginning of the computer.
2. TT data is stored in memory, and couldn't be reset.

⌚ : 12/24 hour Clock

It displays 12 or 24 hour current time.

: Digital Thermometer*

1. The thermometer always displays on the right side of the screen.
2. It displays -L-°C or -L-°F when temperature is lower than 50°C or 122°F, and displays -H-°C or -H-°F when temperature is over 180°C or 356°F.
3. The thermometer digits and warning LED indicator flash when the thermo sensor detects temperature over the presetting warning temperature.

MAX °C or °F : Maximum Thermometer*

Displays highest temperature achieved after last Reset operation.

Volt: Digital Voltage Gauge*

It checks bike's battery and charging systems health.

Fuel Gauge

1. Has 7 bars to indicate how much fuel remains.
2. Built-in 100, 250, 510Ohm, oFF, -100, -250 and -510 Ohm fuel sender resistance, the fuel bars will disappear when you select "oFF" mode.
3. The full bars are low resistance and empty bar is high resistance for 100, 250 and 510ohm; -100, -250 and -510 ohm are the inverse.
4. Last bar flashes to indicate low fuel level automatically.

Bars	100Ω	250Ω	510Ω	-100Ω	-250Ω	-510Ω
7	0-10	0-25	0-50	100-90	250-230	510-460
6	11-20	26-50	51-100	89-75	229-200	459-380
5	21-35	51-85	101-180	74-60	199-150	379-300
4	36-45	86-110	181-230	59-45	149-110	299-230
3	46-60	111-150	231-300	44-35	109-85	229-180
2	61-75	151-200	301-380	34-20	84-50	179-100
1	76-90	201-230	381-460	19-10	49-25	99-50
0-Flash	91-100	231-250	461-510	9-0	24-0	49-0

RT1 or RT2: Maintenance Reminders

1. It has 2 maintenance reminders RT1 and RT2, which count down the preset  entered time RT1 & RT2 since last RESET.
2. It accumulates  RT1&RT2 when the count down reaches to "0", and symbols of  RT1 or RT2" flash to remind you to maintain oil or parts.
3. Push and hold RESET button to reset and restart the maintenance reminder after changing oil or parts.

AUTO Power Off :

1. The power will be turned off automatically after 3 minutes the unit does not receive any signal from speed, RPM or button operation in case it is using the internal battery CR2032.
2. The riding data will be kept in memory at each power off before the low battery icon appears.
3. The power is always turned on at LAP mode until go out the LAP mode.

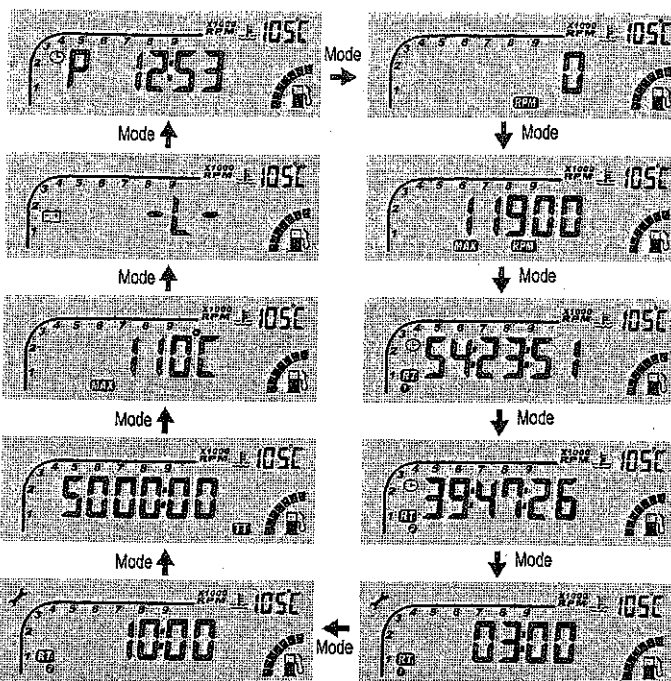
:Low Battery Indicator

1. The  icon flashes when the CR-2032 battery is at low power status to remind you change the battery.
2. All setting is kept in memory not matter the power is connected to bike's 12VDC battery or using internal CR2032 battery only; In case the power is only the internal CR2032 battery, the unit can display riding data but can't be kept in memory when the low battery icon appears in order to avoid setting data be reset at low voltage, that means riding data from last memory until the  con appears is lost.
3. Remove the old battery. Replace with a new CR2032 with the positive (+) pole towards the battery cap.
4. Be sure to press RESET button at the rear side after installed the battery to sure all functions work smoothly.

BUTTON OPERATIONS

MODE BUTTON

Press the MODE button to move all functions in loop sequence from one function screen to another.



RESET BUTTON

1. Press MODE button to get to the desired screen then press RESET button for 2 seconds to reset hour meter, MAX thermometer*, and MAX RPM data from stored values to zero individually.
2. TT data cannot be reset.

SHIFT WARNING RPM OPERATION

1. Press MODE button to the RPM screen; pull on the throttle until the desired shift warning RPM.
2. Press RESET button to confirm and set up the shift warning RPM.
3. Bar-graphic tachometer and warning LED will flash to warning you shift gear.
4. Press RESET button for 2 seconds at the RPM screen to re-adjust the shift warning RPM.

Backlight of Internal/Bike's Powers:

1. The computer built-in a CR2032 battery for off road bikes in case take away bike's batter to reduce weight.
2. You can use both internal battery and bike's battery at the same time.
3. The backlight is always turned on if you connect to bike's battery.
4. Each press of either button turns on backlight for 3 seconds then turn off automatically when uses CR2032 only.

Clock, RPM, Temperature and fuel meter SET UP

- Setup operations include 12/24 hour clock, bar rpm scale, shift warning RPM, numbers of engine rotation per signal, units of thermometer*, temperature warning*, fuel meter input resistance selection and maintain reminder setting. These must be set up step by step. The computer will be automatic reversion to normal mode if no button operation for 75 seconds at any setting screen.
- Press both MODE & RESET buttons to go into setting screen. In setting screens, each press RESET button to add the flashing digit by 1 or convert units, press MODE button to confirm the digit setting and jump to next digit or next setting screen to be set. Press MODE button for 2 seconds at any setting screen to finish the setting and go to normal mode.
- It displays "12 or 24H", "XX:XX" and "A" or "P" symbols in case you select 12H. Operates buttons as descriptions of item 2 to finish clock setting and jump to 10,000/20,000rpm scale setting.
- It displays 10,000rpm scale, press RESET button to convert 10,000 or 20,000rpm. Press MODE button to confirm the setting and jump to shift RPM warning setting.
- It displays the default "r 06500", the digit "0" flash. Follow the item 2 of button operation to finish the shift RPM warning setting and jump to engine specification setting.
- It displays "RPM SPC-X.X", the default value is 1.0; there are 4 options: 1.0, 2.0, 3.0 and 0.5. It means the numbers of engine rotation per signal. For example the value 2.0 means the engine rotate 2 turns to output a signal.
- Press RESET button to move in loop sequence from one to another value of the 4 values. Press MODE button to confirm the setting and go to temperature unit setting screen.
- It displays "°C, °F or OFF", each press of RESET button converts °C, °F or OFF, the temperature icon and digits will disappear when you select OFF mode; press MODE button to confirm temperature setting and jump to temperature warning setting.
- It displays "XXX" and the selected unit. Follow the item 2 of button operation to finish the temperature warning setting and go to fuel sensor resistance setting.
- It displays "100r" and fuel tank symbol, follow the item 2 to select 100r, 250r, 510ohm or OFF and jump to maintain reminder setting. The fuel meter bar will disappear if you select OFF mode.
- It displays "RT1 or RT2" symbols and "XXXX", the default of RT1 is 3 hours and RT2 has default of 10 hours, follow item 2 to setting a desired hours of maintain reminders and jump to normal mode.

