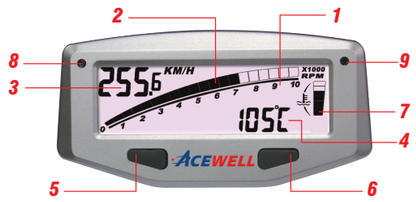
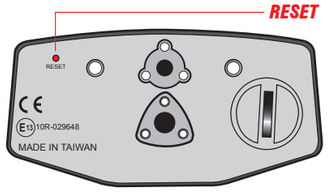
ACEWELL® ATV/Motorcycle Computer
ACE-1550T User Manual

Thanks for bought the ATV/Motorcycle computer, please read the manual before you install the computer.





English

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PANEL DESCRIPTIONS

1. Tachometer Scale
2. Bar Tachometer
3. 1st row: Current & Max. Speedometer
4. 2nd row: Other functions
5. RESET Button
6. MODE Button
7. Bar Thermometer
8. RPM Warning Indicator
9. Temperature Warning LED

FEATURES

- Displays bar-graphic tachometers, speedometer, bar temperature gauge, and one additional function at the same time. Powered with either the internal CR2032 battery or the bike's battery.
- Bar-graph tachometers with selectable 10,000rpm or 20,000rpm redline.
- Allows end user to adjust odometer when the odometer is less than 30km / 18.6 miles..
- Includes bracket, RPM sensing wire, speed sensor, thermo sensor, fitting kits and wiring harness.

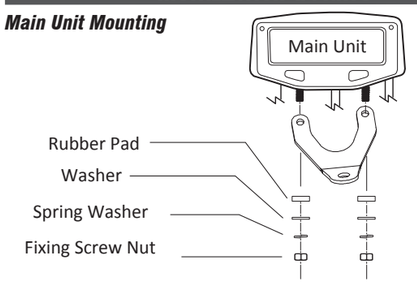
SPECIFICATIONS

Function	Simbolo	Specifications
Bar Tachomete		500-10,000 rpm 1,000-20,000rpm options
Digital Tachometer	rpm	100-19999 rpm, 100rpm increment
Speedometer	km/H/MPH	2.4-399.9 km/h (248.5 MPH)
Trip meter 1&2	Trip1&2	0.0-999.9 KM/Miles
Odometer	ODO	0.0 - 999999 KM, 0.0-624999 Miles
12/24 Hour Clock	⏲	0:00' – 11H59'/23H59'
Average speed	AVG	2.4-399.9 KM/h (248.5 MPH),
Riding timer	RT	0-99H59`59``
Hour Meter	⏲ RT	0-9999H59`
Digital Tachometer	rpm	100-19,900 rpm,
Maximum speed	MAX	2.4-399.9 KM/h (248.5 MPH),
Total Hour Meter	TT	0-999999H
Digital Thermometer	°C or °F	+50°C-180°C / 122°F-356°F
Maximum Thermometer	MAX°C / °F	+50°C-180°C / 122°F-356°F
Voltage Gauge	V	8.0-18.0 Volt
Bar Temperature Meter		1-7 Bar-graphic

Power Input	DC 9-18V or Internal 3VDC
Tachometer Sensor	CDI or Ignition Coil Signal
Speed Sensor	Reed Sensor (Internal or Bike's power) or Hall sensor (Bike's power application) only
Temperature Sensor	Thermo Sensor
Wheel circumference setting	1mm-3999mm
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)

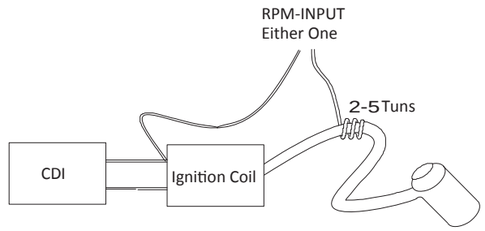
INSTALLATION & PARTS

Main Unit Mounting



RPM sensing wiring Mounting

1. Signal intensity from ignition coil is dependent on vehicle type.
2. Circles 2-5 turns around spark plug lead – more turns creates a steadily stronger signal, fewer turns creates a weaker signal.
3. The RPM circuit is designed for most bikes, however some bikes show a much higher and less stable RPM than they should. In this case the signal is too strong and the included 1M Ohm resistor should be installed inline in the yellow RPM sensor cable.

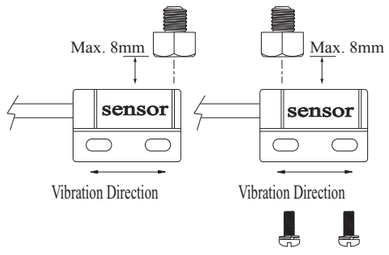


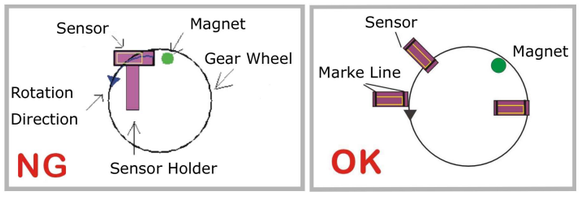
Speed Sensor Mounting:

Acewell has several speed sensors; the unit includes one of them or not speed sensor in case the model has to be connected to gear box to get speed signal.

Reed Speed Sensor and Magnet:

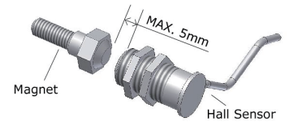
1. This sensor is universal sensor for motorcycle, find a rotating part to install magnet (for example disk, sprocket or driveshaft) and a location to install the sensor where it can be aligned to the magnet.
2. Align the center of the magnet to either of the sensor marking lines or the side of the sensor. The magnet must not travel down the body of the sensor
3. Installing the sensor parallel to the vibration direction creates optional anti-vibration effect.
4. Make sure the gap between the magnet and the sensor is within 8mm.





Hall Effective Speed Sensor and Magnet:

1. This is universal sensor for ATV front or rear wheel installation or motorcycle front wheel installation. For some fitments an accessory speed sensor holder may need to be purchased.
2. Find a rotating part to install magnet (for example disk, sprocket or driveshaft) and a location to install the sensor where it can be aligned to the magnet
3. Align the center of the magnet to center of side face of the sensor.
4. Make sure the gap between the magnet and the sensor is within 5mm.



Specific Hall sensors:

Cable drive adaptors for most bikes originally fitted with cable driven speedometers or milemeters are available. When using these cables it is necessary to divide the circumference setting by the number of rotations of the cable per rotation of the wheel.

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.
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.
4. If your vehicle is fitted with a thermostat that stops water flowing to the radiator when the engine is cold, you will not get a reading until the thermostat opens

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 and displays 19,999rpm when tachometer is over 20,000rpm. .
2. Tachometer signal can pick up from either CDI or Ignition Coil Signal.

RPM: Shift Warning RPM

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

MAX RPM: Maximum Tachometer

Displays highest tachometer reading achieved since last Reset operation.

Km/H or MPH: Speedometer

Displays speed meter up to 399.9 Km/H or 248.5 MPH.

MAX: Maximum Speed Meter

Displays highest speed achieved since last Reset operation.

AVG: Average Speed Meter

It calculates average speed since last RESET. The AVG is calculated from TRIP be divided by RT.

TRIP: Trip Meter

TRIP function accumulates trip distance since last RESET as long as bike/vehicle is in motion.

ODO: Odometer

1. ODO accumulates total accumulated distance traveled during bike moving.
2. ODO data is adjustable when it is less than 30km (18.6 Miles), after that it stored in memory and cannot be reset.

RT: Riding Timer

1. Calculates total running time since last RESET.
2. Count automatically begins with movement.

⏲ RT: Hour Meter

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

TT: Total Hour Meter

1. Calculates total engine operation time from when the speedometer was installed.
2. TT data is stored in memory, and cannot be reset.

⏲: 12/24 hour Clock

Displays 12 or 24 hour current time.

°C / °F: Digital Thermometer

1. 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 .
2. The LCD screen will automatically change to temperature screen and flash the digits of the temperature when the thermo sensor detects temperature over the preset warning temperature.

MAX °C/ °F: Maximum Thermometer

Displays highest temperature achieved since last Reset operation.

Volt: Digital Voltage Gauge

It checks bike's battery and charging systems health.

: Bar Thermometers

1. There are 7 bars to indicate engine temperature. Each bar represents a 15 change in temperature.
2. The over temperature LED lights and the display starts to flash at the preset warning temperature.
3. The scale is adjusted by the computer so that when the scale shows 1 to 5 bars, the engine is in permitted operating temperature and when the 6th bar lights the warning temperature has been reached.

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.

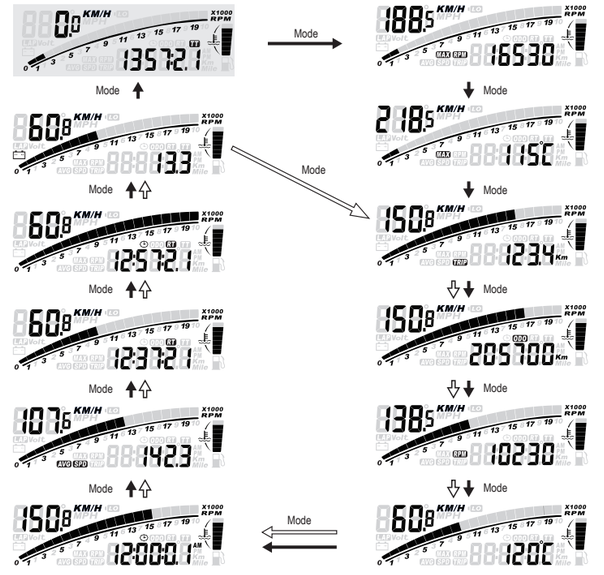
LO: Low Battery Indicator

1. The " LO " icon flashes when the CR-2032 battery is at low power status to reminder you change the battery.
2. All setting is kept in memory not mater 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, riding data can be kept in memory when the first time The " LO " icon appears then the unit display riding data but does not keep riding data in memory to avoid setting data be reset at low voltage.
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

1. Press the MODE button to move between all functions in loop sequence as " ➔ " path from one function screen to another when the speed sensor does not detect any signal input..
2. Press the MODE button to move partial functions in loop sequence as " ⇨ " path when speed sensor detects signal input.



RESET BUTTON

1. Press MODE button to get to the desired screen then press RESET button for 2 seconds to reset hour meter, MAX SPD, MAX thermometer and MAX RPM data from stored values to zero individually.
2. The data of Trip, AVG & RT can be reset at the same time when one of the 3 data functions is being reset.
3. ODO, clock and TT data cannot be reset.

Shift Warning RPM Operation

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

Thermometer Warning

1. The LCD screen will jump to temperature screen automatically when the sensor detects temperature higher than the presetting warning temperature.
2. The thermometer digits and warning LED flash, the LCD screen will auto change to the temperature screen after 4 seconds of button operations at over temperature status.
3. Stop engine until temperature cooling down to protect your engine.

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; backlight will be turned on 3 seconds then turn off automatically by each press of any button when using internal power status.
4. Once connect to bike's battery, button operations will be switch off when switch key power is off. User needs to turn on power switch key to operating buttons.

WHEEL CIRCUMFERENCE TABLE

1. The details below have been calculated using following formula: Tire Diameter (inches) x 25.4(mm/inches) x 3.1416 = wheel circumference (in mm).
2. Identify the tire size of your ATV/Motorcycle when you need to change different tire size and key in the corresponding number shown in the following chart.

Tire Size	Circumference number (mm)	Tire Size	Circumference number (mm)	Tire Size	Circumference number (mm)
15 inch	1197	19 inch	1516	23 inch	1835
16 inch	1277	20 inch	1596	24 inch	1915
17 inch	1357	21 inch	1676	25 inch	1995
18 inch	1436	22 inch	1756	26 inch	2075

3. The computer calculates the wheel rotating length between 2 passes of the magnet; use this table to find the settings when you are using a reed sensor or an universal hall sensor with magnet to measure your speed.
4. If you are using a cable drive speed sensor then divide the number in the above table by the number of turns of the cable drive for each revolution of the wheel. For example if 1 wheel revolution equals 5 turns of speed cable then the wheel circumference has to be divided 5.
5. You can use more magnets, but the wheel circumference setting must be divided by the number of magnet you installed.

Clock, RPM, Wheel, Temperature and ODO SET UP

1. Setup operations include 12/24hour clock, bar rpm scale, shift warning RPM, numbers of engine rotation per signal, wheel circumference, units, units of temperature, temperature warning and odometer adjustment. 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.
2. 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.
3. It displays " 12 or 24H and XX:XX-XX " symbols as well AM/PM 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.
4. 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.
5. It displays the default " RPM 6500 ", the digit " 6 " flash. Follow the item 2 of button operation to finish the shift RPM warning setting and jump to engine specification setting.
6. 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. Follow the item 2 of button operation to finish the engine specification setting and jump to wheel circumference setting.
7. In " cXXXX " display, " c " means " Circumference ", following 4 default digits; flashing digit is digit to be set. Follow the item 2 of button operation to finish the wheel circumference setting and jump to unit setting.
8. It displays KM/H or MPH, each press of RESET button converts unit; press MODE button to confirm unit setting and jump to thermometer unit setting. (fuel sensor resistance setting.)
9. It displays "°C ,°F or oFF", each press of RESET button converts °C, °F or Off, the temperature bars will disappear when you select oFF mode; press MODE button to confirm temperature setting and jump to temperature warning setting.
10. It displays " XXX " and the selected unit. Follow the item 2 of button operation to finish the temperature warning setting and go to Odometer setting.
11. It displays " ODO & 00000X km ", the " X " is tested odometer in factory, follow item 2 to setting a desired odometer and jump to clock setting or return to Normal Mode. This setting screen will disappear when the odometer is over 30km or your setting is over 30km.