# ACE-27xx/28xx series User's Manual



Thank for purchasing an Acewell ATV/Motorcycle/Scooter computer. This manual is specially designed for the ACE-27xx/28xx series. Each model has 4-6 LED indicators. Different models have different LED indicators; a fuel meter is optional, but all other functions are the same. You may find that the photo above has a set of LED indicators different from your computer; the photo is for reference only.

# PANEL DESCRIPTIONS

Bar Speed Scale
 RESET Button
 Bar Speed
 MODE Button

3. 1st row display: Speedometer, Maximum Speed 7. Fuel Meter Bar: (optional) 8. LED indicator symbols

4. 2nd row display: Other functions .

$\triangle$	Left-Direction Indicator/Green	4 <u>F</u> /	Engine Oil/Red
≣D	Main-Beam Headlamp/Blue	N	Neutral Gear/Green
$\Rightarrow$	Right-Direction Indicator/Gree	n <b>R</b>	Reverse Gear/Red
$\triangle$	Hazard Warning/ Red	D	Drive Gear/Green
P	Parking/Green	<b>₹</b>	Engine Coolant Temperature/Red
令中	Direction Indicator/Green	<b>0</b> ŧ	Rear Fog Lamp/Amber
<b>⇔1</b> ⇔	Trailer Flashers/Green	Ø	Engine "Not In Use"/ Red

# **FEATURES**

- Includes analog and digital tachometer, speedometer (300km/h), trip meter, odometer, clock, average speedometer, maximum speedometer, riding timer and cumulative riding timer.
- Computer unit has 4-6 built-in LEDs for different purpose indicators.
- LCD has two rows of digital and one analog bar-graphic tachometer displays, with blue LED backlight.
- Odometer and cumulative riding timer measurements are stored in memory, even when power is off.
- The computer's clock is always on, even when other functions are power-off.
- Universal wheel circumference setting range of 1-3999mm.
- Metric/ British system options.
- Waterproof design

# **SPECIFICATIONS**

FUNCTIONS	Symbol	SPECIFICATIONS	INCREMENTS	ACCURACY
Bar Tachometer		500-12,000 rpm	500 rpm	
Digital Tachometer	RPM	100-19,900rpm	100 rpm	
Shift Warning	RPM	100-19,900rpm	100 rpm	
Maximum Tachometer	MAX RPM	100-19,900rpm	100 rpm	
Speed Meter		2.3-300KM/h (187.5M/h)	0.1 KM/H or M/H	+/-1% or +/- 0.1(KPH/MPH)
Maximum Speed Meter	MAX	MAX 2.3-300KM/h (187.5M/h)	0.1 KM/H or M/H	+/-1% or +/- 0.1(KPH/MPH
Average Speed Meter	AVG	AVG 2.3-300KM/h (187.5M/h)	0.1 KM/H or M/H	
Trip Meter	TRIP 1&2	0.0-999.9 Km (624.9 Miles)	0.1 Km or Miles	+/- 0.1%
Odometer	ODO	0 - 999999 Km (0.0- 624999 Miles)	1 Km or Miles	+/- 0.1%
Riding Time	RT	0.00'00"- 99:59'59"	1 Second	+/- 50PPM
Total Time	TT	9999H59'	1 Minute	+/- 50PPM
Clock		0.00'00"- 24:59'59"	1 Second/1 Minute	+/- 50PPM

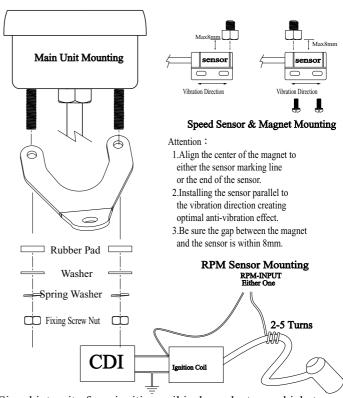
Power Input: 12VDC.

Speed Sensor: No Contact Magnetic Sensor. Tachometer Input: CDI or Ignition-coil signal.

Wheel Circumference Setting: 1mm - 3999 mm (1 mm increment)
Operation Temperature: -10° C - +80° C (inner housing)
Storage Temperature: -25° C - +85° C (inner housing)

Fuel Sensor Resistance:  $100\,\Omega$  (For models with fuel meter only)

# **INSTALLATIONS & PARTS**



- 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.

# **FUNCTIONS**

# BAR RPM: Bar Graphic Tachometer

- 1. The bar graphic tachometer reading is always displayed at the bar graph.
- 2. Tachometer bar graphic displays up to 12,000 RPM.

# RPM: Digital Tachometer

- 1. RPM is displayed in 2nd row.
- 2. Digital tachometer displays up to 19,900 RPM.
- 3. Tachometer signal picked up from either CDI or Ignition coil.

#### Shift Warning RPM

- 1. Function enables you to set up an RPM shift warning.
- Bar-graphic tachometer flashes when RPM reaches pre-set value, and stops flashing after you shift gear.

# MAX RPM: Maximum Tachometer

- 1. MAX RPM is displayed on 2nd row.
- 2. Displays highest tachometer reading achieved after last RESET operation.

# SPD: Speed Meter

- 1. Speed meter display is on 1st row of the screen.
- 2. Displays speedometer reading up to 300.0 Km/H or 187.5 mph.

#### MAX: Maximum Speed Meter

- 1. MAX is displayed on 1st row.
- 2. Displays highest speed achieved after last RESET operation.

# AVG: Average Speed Meter

- 1. AVG is displayed on 2nd row.
- $2. \ Calculates \ average \ speed \ from \ last \ RESET.$

#### TRIP 1 & 2: Trip Meter 1& 2

- TRIP function registers cumulative trip distance from last RESET while bike is being ridden.
- 2. Display is on 2nd row of screen.

#### ODO: Odometer

- 1. ODO registers cumulative distance traveled during motorbike operation.
- 2. ODO data is stored in memory, even when power is off.

## RT: Riding Timer

- 1. Calculates total operation time from last RESET.
- 2. Count automatically begins with vehicle movement.

### TT: Total Riding Timer

- 1. Calculates total operation time from the beginning of bike use.
- 2. Count automatically begins with vehicle movement.
- 3. TT data is stored in memory, even when power is off.

# 12/24 hour Clock

It displays 12- or 24-hour current time.

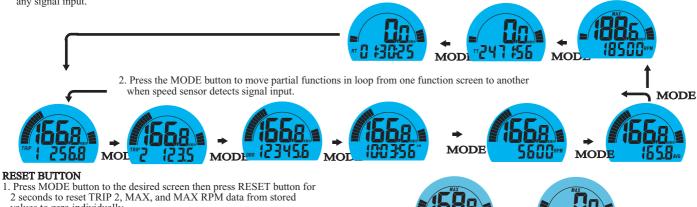
Fuel Meter (Only for models with the function)

- 1. Has 7 bargraphic indicator of fuel status.
- 2. Last bar flashes to indicate low fuel level.

# BUTTON OPERATION

#### MODE BUTTON

1. Press the MODE button to move all functions in loop sequence from one function screen to another when the speed sensor does not detect any signal input.



RESE

2 sec

- values to zero individually
- 2. The data of TRIP 1, AVG & RT can be reset at the same time when one of the three data functions is being reset.
- 3. ODO, Clock and TT data cannot be reset.

#### SHIFT RPM WARNING OPERATION

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

# WHEEL CIRCUMFERENCE TABLE

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

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

# UNIT & WHEEL CIRCUMFERENCE SETTING

- 1. Setup operations include 12/24hour clock, shift RPM warning, numbers of engine rotations per signal, wheel circumference and units. These must be set up step by step. The computer will automatic reversion to main screen if no button operation for 75 seconds at any
- 2. Press both MODE & RESET buttons to go into setting screen. In setting screens, press RESET button to add the flashing digit by 1, press MODE button to confirm the digital 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 main screen.
- 3. It displays "12 or 24H and XX:XX-XX" symbols and AM/PM in case you select 12H.
- 4. Press RESET button converts 12/24H, press MODE button to complete the setting and jump to clock digit setting.
- 5. Press RESET button to increase flashing digit by one; press MODE button to confirm digit setting and jump to next digit.
- **6.** Press MODE button to go to shift warning RPM setting screen after set clock.
- 7. It displays "rXXX00 RPM". Press RESET button to increase flashing digit by one; press MODE key to confirm digit setting and jump to next digit.
- 8. Press MODE button to go to numbers of engine rotations per signal setting screen after completed shift warning RPM setting.
- 9. It displays "SPC-X.X RPM", 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.
- 10. 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 wheel circumference setting screen.
- 11. In "cXXXX" display, "c" means "Circumference", following 4 default digits; flashing digit is digit to be set.
- 12. Press RESET button to increase flashing digit by one; press MODE button to confirm digit setting and jump to next digit.
- 13. Press MODE button to jump to unit setting screen.
- 14. It displays KM/h or M/h, each press of RESET button converts unit; press MODE button for 2 seconds to confirm unit setting and jump to main screen.

