

# ACEWELL® ATV/Motorcycle Computer ACE-5XXX User Manual

Thanks for purchasing the ATV/Motorcycle computer; this manual is specifically designed for ACE-5XXX series. The ACE-5XXX series includes ACE-51XX/52XX, 55XX/56XX and ACE-57XX/58XX, descriptions with "\*" are for ACE-55XX/56XX and ACE-57XX/58XX only, functions and descriptions with "\*\*" are for ACE-57XX/58XX only. Each series has different models, each model has different LED indicators. You may find that the photo has a set of LED indicators different from your computer, the photo is for reference only.



## PANEL DESCRIPTIONS

1. Tachometer Scale
2. Bar-tachometer
3. Bar temperature gauge
4. 1st row: Speedometer
5. 2nd row: Other functions
6. Gear Indicator
7. RESET Button
8. MODE Button
9. LED Indicators
10. Bar Fuel gauge

Different models have different LED indicators, each indicator symbol means as below:

## FEATURES

- Simultaneously displays tachometer, speedometer, gear indicator, fuel gauge and \*bar-graph temperature meter as well as one of the other functions.
- Built-in gear indicator which calculates gear comparing speed and RPM, and "gear indicator off" mode for Automatic vehicles.
- On some models the backlight can be controlled separately from the ignition power.
- Bar-graph tachometer has selectable scale of 10,000rpm or 20,000 rpm
- End user is able to adjust odometer when the odometer is less than 30km /18.6 miles.
- \*Acceleration and deceleration timers as well as distance timer for racing practice.
- \*\* Features a 99 lap timer and an optional cable connected remote control switch.
- \*\*Built-in air temperature sensor which installed outside the housings.
- Built-in 6-9 LED warning lamps with different symbols depending on model
- Fast processor so can connect to pulse type gearbox speed sensors.
- Universal wheel circumference setting range: 1-3999mm.
- Fuel gauge full and empty resistances are fully adjustable and it can connect to sender units with resistance range up to 990 ohms. In reserve mode, the fuel gauge is not displayed and fuel symbol lights when the input wire is connected to -ve. The gauge can be switched off entirely if not required.
- Flexible battery warning voltage setting from 11.0 to 14.9V.
- Speedometer can show nearest 0.1 mph or km/h speed if required by user. E.g. 100 or 100.5
- Includes bracket, RPM sensing wire, speed sensor, \*temperature sensor, fitting kits, wiring harness and \*\*wired remote control switch.
- Excellent water resistance, anti-vibration structure and noise immunity design.
- \*\*EM & IR receivers and IR transmitter for automated lap timing are available as accessories.

## SPECIFICATIONS

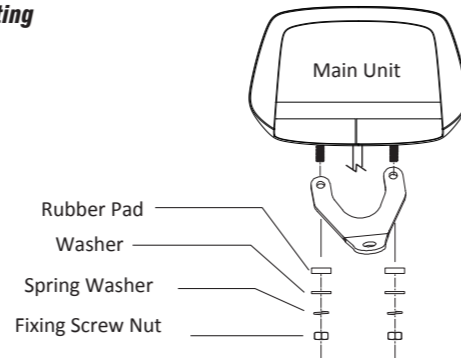
Functions	Symbol	Specifications
Bar Tachometer		500-10,000 rpm/ 1,000-20,000rpm options
Speedometer	Km/h or MPH	2.4-399.9 km/h (248.5 MPH)
Trip meter 1&2	TRIP 1&2	0.0-999.99 KM/Miles
Trip meter 3	TRIP 3	0.0-999.99 KM/Miles
Odometer	ODO	0.0 - 999,999 KM, 0.0-621,387 Miles
12/24 Hour Clock		0:00' - 11H59'59"/23H59'59"
Digital Tachometer	rpm	10-19,990 rpm, 10rpm increment
* Engine Temperature		+25°C-180°C / 77°F-356°F
** Air Temperature		-20°C-60°C / -4°F-+140°F

Average speed	AVG SPD	2.4-399.9 KM/h (248.5 MPH),
Riding Timer	RT	0-99H59'59"
Total Riding Timer	TT	0-9999H59'
Hour Meter		0-9999H59'
*Voltage Meter		8.0-18.0 Volt
Maintenance reminder		0-9999H / / 0-9999km(6213Miles)
Maximum speed	MAX SPD	2.4-399.9 Km/h (248.5 MPH),
Maximum RPM	MAX RPM	10-19,990 rpm, 10rpm increment
*Max. Temperature	MAX	+25°C-180°C / 77°F-356°F
Gear Indicator		N, R, 1, 2,...8 gears and off mode
*Distance timer	Trip RT	0-1/4 mile, 0-100M, 0-400M
*Acceleration timer	SPD RT	0-100km/h, 50-70mph
*Deceleration timer	d SPD RT	100kmh-0kmh
Bar-Fuel gauge		Adjustable 10Q-999Q, or off mode
*Bar Temperature		1-7 Bar-graphic or off mode
**Lap Timer		99 Laps.

Power Input	DC 12V
Tachometer Sensor	CDI or Ignition Coil Signal
Speed Sensor	Reed switch / 2 wire Hall-effect Sensor & Magnet / Cable drive adaptor
Wheel circumference setting	1mm-3999mm (1mm increment)
Speed input divider setup	1-199 Pulses
Maximum frequency of divider	7K Hz
Dimensions	130.1mm x82.8mmx27.0 mm
*Temperature Sensor	Thermo Resistor Sensor
**Lap Timer Sensor	Push button or optional accessory spare parts of IR receiver/Magnetic Field sensors.

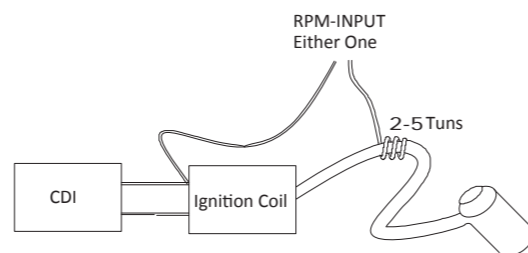
## INSTALLATION & PARTS

### Main Unit Mounting



### RPM sensor mounting:

- RPM Input, Either one
1. Signal intensity from ignition coil is dependent on vehicle type.
  2. Coil 2-5 turns around spark plug lead, with more turns creating steadily stronger signal, fewer turns creating weaker signal.
  3. The RPM circuit is designed for most bikes, however some bikes' signal is too strong if the RPM looks like much more than actual RPM and unstable, please connect the included 1M Ohm resistor in series to solve it.

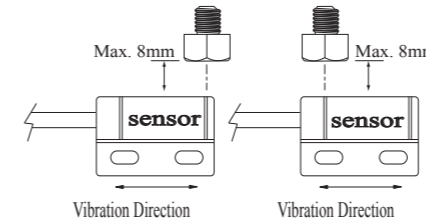


### Speed Sensor Mounting:

ACEWELL has several speed sensors; the unit may include one of them. If the model is intended to be connected to a gearbox electronic speed output to obtain the speed reading, no speed sensor will be included.

### 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.
5. Install sensor using supplied bolt or self tapping screws.



### 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 fits 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.

### \*\*Air Temperature sensor:

1. ACE-58XX series includes an air temperature for outdoor temperature measurement.
2. Plug the sensor's connector to the relative connector from main unit.
3. Keep the sensor away from sunshine after installed.

### \*\*Wire Remote Control Switch Installation:

1. Install the switch arm on handlebar.
2. Install the switch box to one of 3 fixing holes and adjust switch box to a suitable angle.
3. Plug the switch box connector into the main unit connector.

## FUNCTIONS

### BAR RPM: Bar Graphic Tachometer

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

### Km/H or MPH: Speedometer

1. Displays speed meter up to 399.9 Km/H or 248.5 MPH.
2. Speedometer can show nearest 0.1 mph or km/h speed if required by user. E.g. 100 or 100.5
3. The maximum frequency of software divider is 7K Hz.
4. The speed can be less than 399.9 KM/H in case the setup is using software divider for speedometer, for example the maximum speed is 250KM/H in case setup of software at 105P and the wheel circumference at 1277mm.

### RPM: Digital Tachometer

1. It displays digital tachometer up to 19,990RPM and displays 19,999rpm when tachometer is over 20,000rpm.
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 stops flashing after you shift gear.

### MAX RPM: Maximum Tachometer

Displays highest tachometer achieved since last Reset operation.

### MAX SPD: Maximum Speed Meter

Displays highest speed achieved since last Reset operation.

### AVG SPD: Average Speed Meter

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

### TRIP 1/2: Trip Meter 1 or 2

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

### TRIP 12: Trip Meter 12

1. TRIP-12 function appears and starts to accumulate trip distance automatically after low fuel warning LED is turned on.
2. TRIP-12 be reset to zero automatically when fuel is added to over the low fuel warning level.

### ODO: Odometer

1. ODO accumulates total distance traveled.
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 riding time since last RESET.
2. Counter automatically begins with movement.

### TT: Total Hour Meter

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

### HRT: Hour Meter

1. Calculates total engine operation time from last RESET.
2. Count automatically begins with engine starting.
3. HRT data is stored in memory, and couldn't be reset.

### 12/24 hour Clock

It displays 12 or 24 hour current time.

### Bar Thermometer\*

1. Have 7 bars to indicate engine temperature.
2. The 4th bar counts from bottom be turned on and over temperature LED flashes when thermometer reaches the preset warning temperature, each +/-15°C lights on/off a bar base on the 4th bar.
3. The bar-temperature flashes when the measured temperature is higher than the preset warning temperature.

### 1: Digital Engine Temperature Meter

1. It displays -L-°C or -L-°F when temperature is lower than 40°C or 104°F, and displays -H-°C or -H-°F when temperature is over 180°C or 356°F.
2. The LCD screen flashes the digits of temperature when the thermo sensor detects temperature higher than the maximum preset temperature.

### 2: Air Temperature


It displays air temperature from -20°C(-4°F) to +60°C(+140°F)

### Max : Maximum Temperature

Displays highest temperature achieved since last Reset operation.

### : Maintenance Reminders

1. It counts down the preset entered time or distance since last RESET.
2. It accumulates when the count down reaches to "0", and symbol of

“” flash to remind you to maintain oil or parts.

3. Push and hold RESET button to reset and restart the maintenance reminder after maintained.

** : Digital Voltage Gauge**

It checks bike’s battery and charging systems health.

**:Gear Indicator**

1. The gear indicator has each one wire for N and R, connect wires to N and R gears firstly.
2. The gear indicator calculates gear comparing speed and RPM then displays gear position.
3. User has to training the gear indicator before use it.

**TRIP RT: Trip Timer Test**

1. The Trip RT can be set 100meter or 400meter.
2. The unit calculates trip timer auto- start when receive speed signal and auto- stop when the bike/vehicle reaches the preset distance.

**SPD RT 1: Acceleration Timer Test**

1. The SPD RT 1 can be set 0-100Km/H acceleration test.
2. The unit calculates acceleration timer auto- start when receive speed signal and auto- stop when the bike/vehicle reaches the preset speed.

**SPD RT 2: Deceleration Timer Test**

1. The SPD RT 2 can be set 100 to 0Km/H deceleration test.
2. The unit calculates deceleration timer auto- start when speed decelerates to 100km/h and auto- stop after 2 seconds of the bike/ vehicle stop then returns the over counted 2 seconds automatically.

**SCAN: Scan function**

1. The 2nd row of LCD data will be changed automatically every 5 seconds if the SCAN is selected.
2. All functions will be manual operations when SCAN is switched off.

**: Fuel Gauge**

1. Has 7 bars to indicate how much fuel remains.
2. To use as a fuel gauge, the user enters the sender ‘empty’ resistance between 10 and 990 ohms and the sender ‘full’ resistance between 10 and 990 ohms. The computer produces a linear scale of bars between these two resistances. When less than 10% fuel remains the gauge will flash and the warning LED if fitted will light.
3. To use as a reserve indicator, connect the reserve switch to the input and put into “rEs” mode. When the switch pulls the input to –ve the LED warning will light. On vehicles with temperature based sensors a 68 ohm 5w resistor needs to be connected between the input wire and 12v (switched).
4. If the gauge and warning lamp are not required they can be switched off.

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

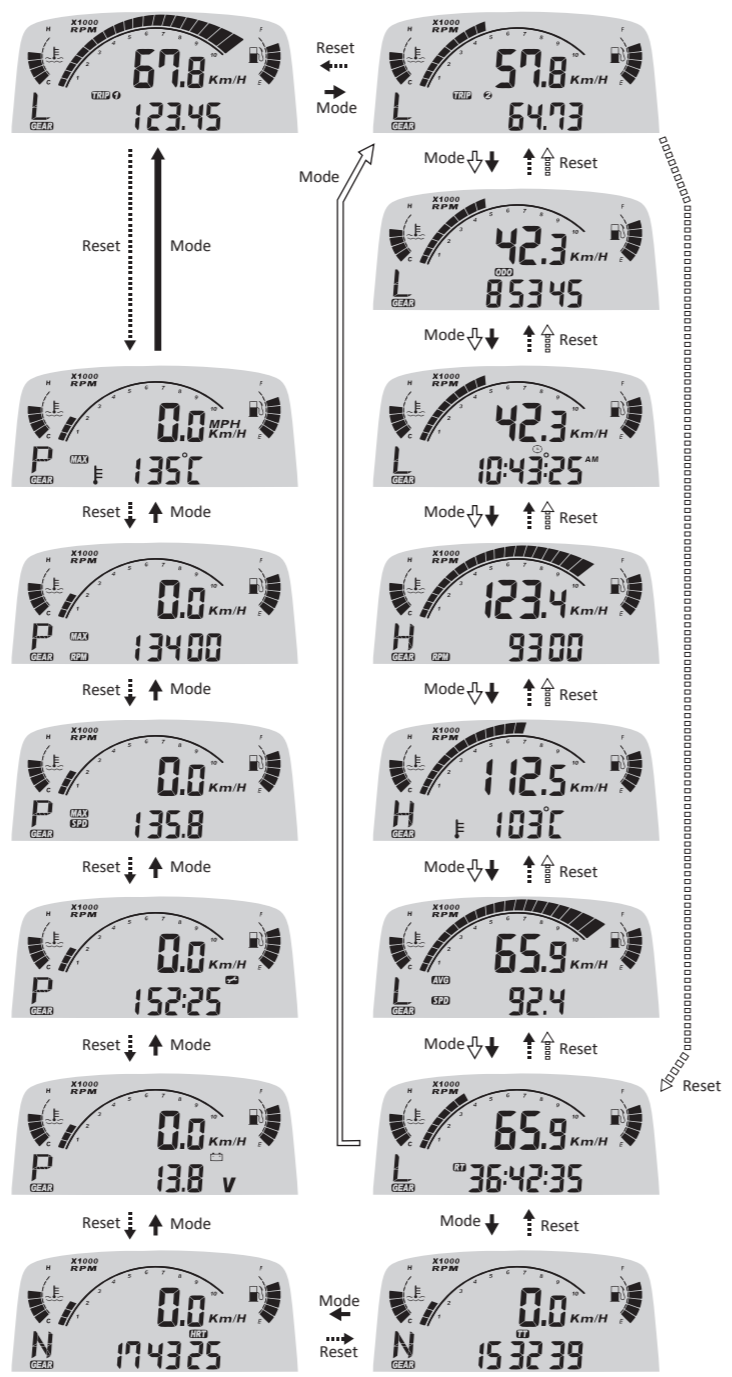
**LAP\*\*: Lap Timer**

1. It can keep up to 99 sets of lap timer.
2. The function must be operated by an additional wiring remote control switch or an accessory IR receiver/transmitter or a magnetic field sensor.

**BUTTON OPERATIONS**

**MODE BUTTON**

1. Press the MODE button to move between all functions in sequence as “→” from one function screen to another when the speed sensor does not detect any signal input.  
Trip 1-Trip 2-(Trip 12) - ODO - CLK - RPM - 1 - 2 - AVG SPD - RT - TT - HRT - MAX SPD - MAX RPM - MAX - Trip 1
2. Press the MODE button to move partial functions in loop sequence as “⇒” when speed sensor detects signal input.



**RESET BUTTON**

1. Press RESET button acts as a revised button operation of MODE button.
2. Press MODE or RESET button to the desired screen then press RESET button for 2 seconds to reset TRIP 2, MAX SPD, MAX RPM and MAX data from stored values to zero individually. The maintain reminder data will be reset to the preset value rather than zero.
3. The data of Trip 1, AVG & RT will all be reset at the same time when one of the 3 data functions is being reset.
4. ODO, clock, HRT and 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.

**Gear Indicator training operations:**

1. Connects grey wire to N and purple wire to R.
2. Put bike to a rolling stand, turns on engine and keep at N gear.
3. Gear indicator shows “N”
4. Change the LCD screen to digital RPM.
5. Press and hold MODE button for 2 seconds to go into the number of gears setting mode.
6. Gear indicator flashes the default 6 gears.
7. Press RESET button to select the number of gear, user can select 4-8 gears or “0” to disable the gear function.
8. Press MODE button to confirm the number of gears and go to the number gear ratio setting mode.

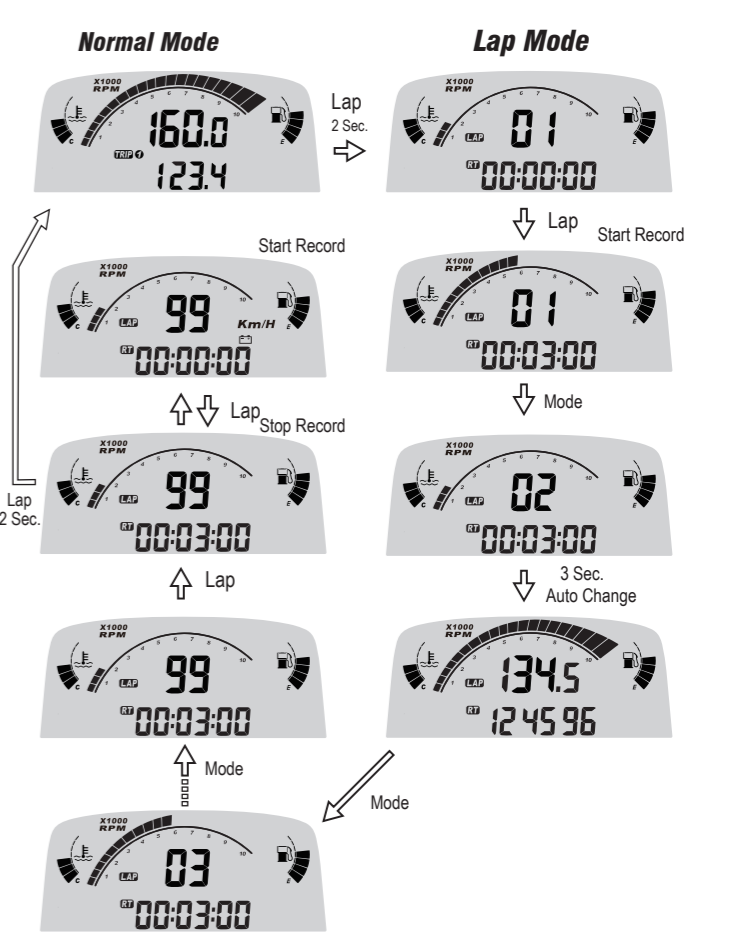
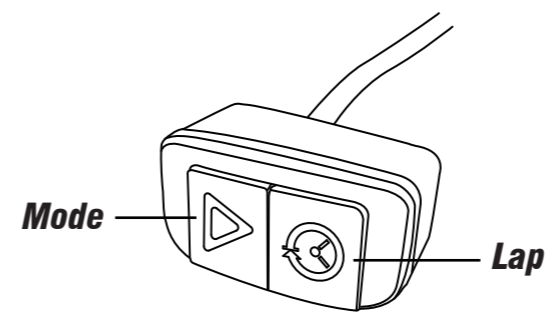
9. It displays and flashes “1”, shift bike’s gear to the 1st gear, run the engine to between 2000-4000RPM.
10. Hold the speed and the RPM for about 5 seconds until the “-” flashing. The flashing “-” after the gear “1” means the 1st gear be set.
11. Press MODE button to confirm the set and go to the 2nd gear setting.
12. It displays and flashes “2”, shift bike’s to the 2nd gear, run the engine to between 2000-4000RPM.
13. Hold the speed and the RPM for about 5 seconds until the “-” flashing. The flashing “-” after the gear “2” means the 2nd gear be set.
14. Press MODE button to confirm the setting and go to next gear setting.
15. Operates the same operations as items 11-14 to set other gears until the last gear be set. Press MODE button to return to normal mode.
16. At gear indicator setting mode, press and hold MODE button for 2 seconds to abort the setting if you need to re-set at any setting screen.

**\*TRIP RT, SPD RT1 and SPD RT2 setting mode**

1. Press MODE or RESET button to the TT screen, press and hold MODE button for 2 seconds to go into the 3 test timers set mode.
2. It displays SELECT and flashes TRIP RT, press MODE button to move SPD RT 1, SPD RT 2 and TRIP RT from one set mode to another set mode in loop sequence, press RESET button at the one of the 3 screens to go into the mode to be set.
3. At TRIP RT set mode, it displays TRIP RT and flashing “100”, each press of MODE button converts 100 or 400meter to be tested, press RESET button to confirm the setting and go into the trip timer testing screen and flashing 00:00:00, the timer counts automatically when it receive speed signal and auto-stop when trip meter reaches preset 100 or 400 meter. Press RESET button to reset the tested timer and preparing another new rund test, it displays TRIP RT and flashes 00:00:00 again. Press and hold MODE button for 2 seconds to go out the TRIP RT test screen and return to TT screen.
4. At SPD RT 1 set mode, it displays SPD RT 1 and flashing “0-100”, press RESET button to confirm the setting and go into the acceleration timer testing screen and flashing 00:00:00, the timer counts automatically when it receive speed signal and auto-stop when speed reaches preset 100Km/H. Press RESET button to reset the tested timer and restart a new test, it displays SPD RT 1 and flashes 00:00:00 again. Press and hold MODE button for 2 seconds to go out the SPD RT 1 test screen and return to TT screen.
5. At SPD RT 2 set mode, it displays SPD RT 2 and flashing “100-0”, press RESET button to confirm the setting and go into the acceleration timer testing screen and flashing 00:00:00, speed the bike/vehicle up to more than 100km/h the decreased the speed, the timer counts automatically when it speed is less than 100km/h and auto-stop after 2 seconds of the bike/vehicle stop then count back 2 seconds automatically. Press RESET button to reset the tested timer and restart a new test, it displays SPD RT 2 and flashes 00:00:00 again. Press and hold MODE button for 2 seconds to go out the SPD RT 2 test screen and return to TT screen.

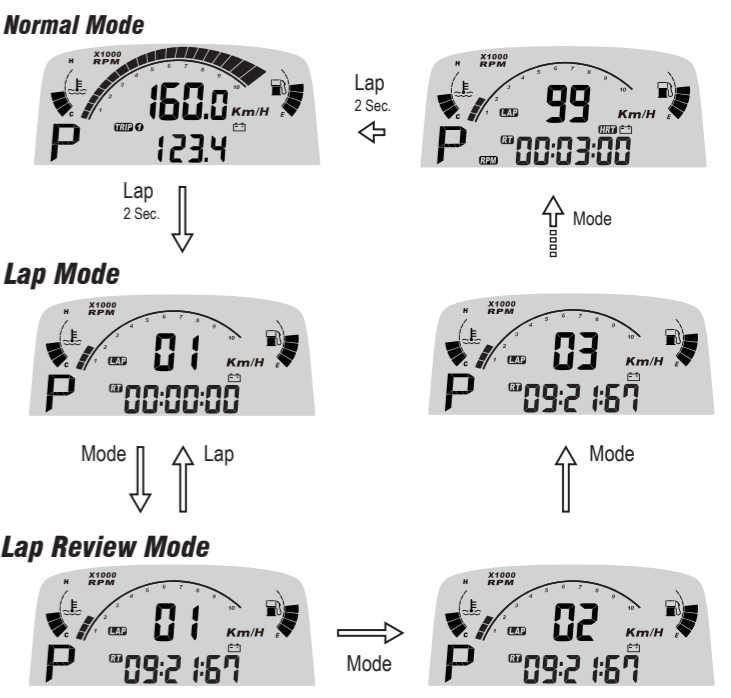
**\*\*Remote Control Switch for LAP timer:**

1. The remote control switch has 2 buttons: MODE and LAP. The MODE button has the same function as on the main unit.
2. Press and hold the LAP button for 2 seconds to go into the LAP mode.
3. LAP Record operations:
4. In LAP mode, press LAP button to start the LAP recording function, each press of MODE button records a set of data LAP & AVG and displays LAP timer for 3 seconds then changes display to speed mode automatically, press LAP button to convert stop or start LAP record function, press and hold the LAP button for 2 seconds to go out LAP mode and return to normal mode.



**\*\*LAP review operations:**

1. In the LAP mode, press MODE button to review the 1st storage data, it displays number of lap and lap timer.
2. Press the LAP button to switch between lap timer or average speed of the same LAP; each press of the MODE button displays data for the next lap.
3. Press and hold LAP buttons for 2 seconds to go out LAP mode and return to normal mode.



## WHEEL CIRCUMFERENCE TABLE

- The details below have been calculated using following formula: Tire Diameter (inches) x 25.4(mm/inches) x 3.1416 = wheel circumference (in mm).
- 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

- These values are approximate and will differ for different brands of tire, we would always recommend that you measure the distance travelled per revolution of the wheel in mm and enter this into the computer.
- 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.
- 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.
- You can use more magnets, but the wheel circumference setting must be divided by the number of magnet you installed.
- The computer has a built-in software divider setting from 1 to 199 for different speed signal application, refer to the divider setup, one means one wheel revolution creates one signal. You have to input the number of signal per wheel revolution to have a correct speed.

### Clock, RPM, Wheel, Divider, Unit, Maintain, Thermometer, fuel meter and ODO SET UP

- Setup operations include 12/24hour clock, bar rpm scale, shift warning RPM, numbers of engine rotation per signal, wheel circumference, signal divider, units, decimal, maintain reminder, warning voltage, \*units of temperature 1, \*temperature 1 warning, SCAN, fuel meter input resistance selection, sensor type of lap timer, and odometer adjustment. These must be set up step by step. The computer will be automatically revert to normal mode if no button is pressed for 75 seconds at any setting screen.
- Press both MODE & RESET buttons to go into setting mode. In setting mode, each press of the RESET button increments the flashing digit by 1 or converts 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, ☺ 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.
- 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 "RPM r06500", 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 SP 1r1P", the default value is 1r1P; there are 6 options: 1r1P, 2r1P, 3r1P, 1r2P, 1r3P, 1r4P. "r" means the numbers of engine rotation, "P" means number of signals from engine. For example the value 2r1P means the engine rotate 2 turns to output one signal.
- Press RESET button to move in loop sequence from one to another value of the 6 values. Press MODE button to confirm the setting and go to wheel circumference setting screen.
- In "SPD 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 signal divider setting.
- It displays "SPD P-001" for signals to be divided. Follow item 2 of button operation to finish the setting and jump to unit setting.
- It displays 100.0Km/H or MPH, each press of RESET button converts unit; press MODE button to confirm unit setting and jump to decimal point setting.
- It displays "100.0Km/H & on" or "100Km/H & off", the decimal point will be disappeared in case Off is selected. Follow the item 2 of button operation to finish the decimal setting and jump to maintain reminder setting.

- It displays 🏍️ and RT, TRIP or OFF, RT has default of 100 hours, TRIP has 1000km (621Miles) default. Follow the item 2 of button operation to finish the maintain reminder setting and jump to voltage warning setting. The maintain reminder function will be disappear when select "OFF".
- It displays "b-on and a flashing numbers of voltage" to be set, "b-on" means battery warning on voltage – when the voltage falls below this the LED will come on, setting range from 11.0 to 14.9V. It displays "b-off and a flashing numbers of voltage", "b-off" means battery warning off voltage, setting range from 11.0 to 14.9V to, but b-off voltage must larger than b-on voltage – when this voltage is exceeded the LED will go off. Follow the item 2 of button operation to finish the voltage warning setting and jump to thermometer 1 setting.
- Thermometer 1 setting: It displays "1.1°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 1 warning setting.
- It displays "1 XXX" and the selected unit. Follow the item 2 of button operation to finish the temperature warning setting and go to thermometer 2 setting.
- Thermometer 2 setting It displays "\*\*1.2°C, °F or OFF", each press of RESET button converts °C, °F or Off, press MODE button to confirm temperature setting and jump to scan setting.
- It displays SCAN and on or off, Follow the item 2 of button operation to finish the SCAN setting and go to fuel sensor resistance setting.
- It displays "on, off or rES" and 🏍️, the setting range of "on" from 10r to 990r, press and hold RESET button can change digits quickly, follow the item 2 to select a resistance same as your fuel sender and jump to sensor type of \*LAP timer setting. The fuel meter bar will disappear if you select off mode. In "rES" mode connecting the input wire to 0v can bring on the fuel symbol and/or LED indicator instantly..
- \*It displays Ir, EF1, EF2 or EF3, Ir means you elect IR receiver as the sensor of LAP timer, and the selection of EF1, 2 or 3 is a magnetic field sensor for LAP timer, the number of 1, 2 or 3 is means the number of magnetic sensor in track, for example EF2 means the track has 2 magnetic sensor and it will combine 2 sensing signals in one. Follow the item 2 to set sensor type of LAP timer and jump to odometer setting.
- It displays "ODO & 00000X km", the "X" is from odometer testing 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 (18.6Miles) or your setting is over 30km

