

A. PHYSICAL DESCRIPTIONS

1. LCD DISPLAY
2. MODE BUTTON
3. BATTERY CAP
4. SET BUTTON
5. CONTACTS
6. SENSOR RUBBER PAD
7. BRACKET ZIP TIE (200mm) x 4
8. BRACKET & HANDLEBAR RUBBER PAD
9. SPEED SENSOR
10. CADENCE SENSOR
11. MAGNET
12. RING
13. 1.5V BATTERY (LR44 IS TYPICAL)
14. CADENCE MAGNET
15. SENSOR & CABLE TIES (165mm) x 5
16. SENSING ZONES (S)

B. INSTALLATION

SPEED SENSOR and WHEEL MAGNET MOUNTING

1. Choose a suitable location for the speed sensor and wheel magnet that will allow no more than a 4mm gap between them when mounted.
2. Mount SPEED SENSOR (9) and RUBBER PAD (6) on fork leg as shown in Fig. B0. Speed sensor should be facing spokes.
3. Mount MAGNET (11) on wheel spoke facing sensor. Be sure it is within the SENSING ZONES (S). Use ring (12) as shown in Fig. B1 to stabilize magnet.
(Magnet will fit both round and bladed spokes. Choose appropriate spoke slot.)
4. Adjust relative position of speed sensor and magnet before tightening magnet screw and sensor ties. (Fig. B2)
A) Align center of magnet with either sensing zone.
B) Gap between sensor and magnet should not exceed 4mm (1/6 inch). Achieve desired gap by moving sensor and wheel magnet up and down.
Note: If A or B is not correct, signal will be unreliable.
5. Tighten all fasteners after all relative positions are correct. Trim cable tie excess.

CADENCE SENSOR and CADENCE MAGNET MOUNTING

1. Choose a suitable location for the cadence sensor and cadence pedal magnet that will allow no more than a 10mm gap between them when mounted.

2. Mount CADENCE SENSOR (10) and RUBBER PAD (6) on chain stay as shown in Fig. B3. Sensor should be facing crank.
3. Mount CADENCE MAGNET (14) on crank facing sensor. Be sure it is within the SENSING ZONES (S). Use CABLE TIES (15) as shown in Fig. B4 to stabilize magnet.
4. Adjust relative position of cadence sensor and cadence magnet before tightening magnet ties.
A) Align center of magnet with either sensing zone.
B) Gap between cadence sensor and cadence magnet should not exceed 10mm (2/5 inch). Achieve desired gap by moving cadence sensor and cadence magnet left and right.
Note: If A or B is not correct, signal will be unreliable.
5. Tighten all fasteners after all relative positions are correct. Trim cable tie excess.

BRACKET & HANDLEBAR RUBBER PAD MOUNTING

Mount BRACKET & HANDLEBAR RUBBER PAD (8) on handlebar . Use BRACKET ZIP TIE (7) to tighten the bracket and rubber pad. (Fig.B5)

SECURING SENSOR CABLE

1. Secure sensor cable to frame with CABLE TIES (15). Be sure handlebar rotates freely before tightening cable ties. (Fig. B6)
2. Tighten cable ties only enough to secure sensor cable. Do not crush sensor cable. Trim cable tie excess being careful not to cut sensor cable.

MAIN UNIT MOUNTING

1. Mount main unit by sliding onto bracket from front. Unit will lock into position. (Fig. B7)
2. To remove unit, press down LOCK LEVER then slide unit forward. (Fig. B7)

C. CHANGING BATTERY

1. All data will be cleared when replacing battery.
2. Replace BATTERY (13) as shown in Fig. C. Battery is LR44 (cross reference A76, AG13 or V13GA).
3. Initialize main unit. (Fig. E)

D. FUNCTIONS

SPD: Current Speed
Current speed is always displayed using the large display set. It will displays speeds up to 199.9 Km/h (120.0 Mile/h).

MAX: Maximum Speed
Displays the highest speed from last RESET operation.

DST: Trip Distance
DST accumulates distance data from last RESET and only while bicycle is moving.

ODO: Odometer
1. Odometer accumulates the total distance only when bicycle is moving.
2. Odometer can be cleared by CLEAR operation.

AVG: Average Speed
1. Average speed is calculated from last RESET to current position.
2. "0.0" will display if trip ride time (TM) is less than 4 seconds.
3. "E" will display if TM is over 100 hours or trip distance (DST) is over 1000 (km or miles). Reset computer to restart average speed function.

TM: Riding Time
1. TM counts ride time from last RESET.
2. TM begins counting time when bicycle starts to move and stops 2 seconds after bicycle has stopped. The computer will automatically subtract the 2 additional seconds for accurate time readings.
3. TM is measured in 0.1 second increments for trip time less than 1 hour. Increment is increased to 1 second for trip time over 1 hour. TM will reset to zero if ride time is over 100 hours.

12HR Clock
12hr time format can be displayed.

rpm: Current Cadence
1. The current cadence is the pedal revolutions per minute (rpm). It is displayed on the upper left three - digit set and is updated every second.
2. The normal display range is from 0 to 199 rpm in 1 rpm increments. A "0" is displayed if the pedal crank has not turned past the crank sensor for 4 seconds.
3. The last 2 digits will blink and the hundreds digit will be blank if the rpm exceeds 200rpm. A blinking "18" means 218rpm.

Mrpm: Maximum Cadence
1. It records the highest cadence from the last RESET operation.
2. The maximum cadence display range is the same as the current cadence.

rpm: Average Cadence
1. The average cadence is calculated from total pedal revolutions divided by pedal revolution time and is independent of wheel riding time. rpm is counted from last RESET operation to current point and updated every second.
2. A "0" is displayed when either pedal revolution time is six seconds or less, or total pedal revolution is less than 10.
3. An "E" is displayed when either total rpm is over 1 million or the pedal revolution time is over 100 hours. Reset unit to clear error reading.

DST: Distance Test
Please refer to the "DISTANCE TEST OPERATION".

TM: Time Test
Please refer to the "TIME TEST OPERATION".

E. SPECIFICATIONS

FUNCTIONS		SPECIFICATIONS	INCREMENTS	ACCURACY
Current Speed	SPD	0-199 Km/ H or 0-120 Mile/ H	1 KPH/MPH	1.5 %
Maximum Speed	MAX	0-199 Km/H or 0-120 Mile/H	1 KPH/MPH	1.5 %
Average Speed	AVG	0.0-199.9 Km/ H or 0.0-120.0 Mile/ H	0.1 KPH/MPH	0.1 %
Trip Distance	DST	0.00-999.99 Km or Mile	0.01 Km/Mile	0.1 %
Odometer	ODO	0-99999 Km or Mile	1 Km or Mile	0.1 %
Riding Time	TM	0:00'00"-9:59'59"	1 Second	0.005 ± 1 Sec
12HR Clock		1:00' - 12:59'	1 Minute	0.005 %
Current Cadence	rpm	0-199 rpm	1 rpm	1.5 %
Average Cadence	rpm	0-199 rpm	1 rpm	0.1 %
Maximum Cadence	Mrpm	0-199 rpm	1 rpm	1.5 %
Distance Test	DST	0.00-999.99 Km or Mile	0.01 Km or Mile	0.1 %
Time Test	TM	0:00'00"-9:59'59"	1 Second	0.005 %
Remark: A). All functions data are updated about one second. B). Speed Pacer, please refer to the "OPERATIONS".				

Sensor:
Wheel Circumference Setting:
Operation Temperature:
Storage Temperature:
Battery Type:
Battery Operating Life:

No Contact Magnetic Sensor.
1000mm - 2999mm (1mm increment)
0°C ~ 50°C (32°F ~ 122°F)
- 20°C ~ 70°C (- 4°F ~ 158°F)
1.5V Battery x 1 (LR44 Typical.)
About 2 years (Based on an average of 1.5 hours use per day.)
(The original factory-attached battery may be shorter than this period due to shipping and storage time.)

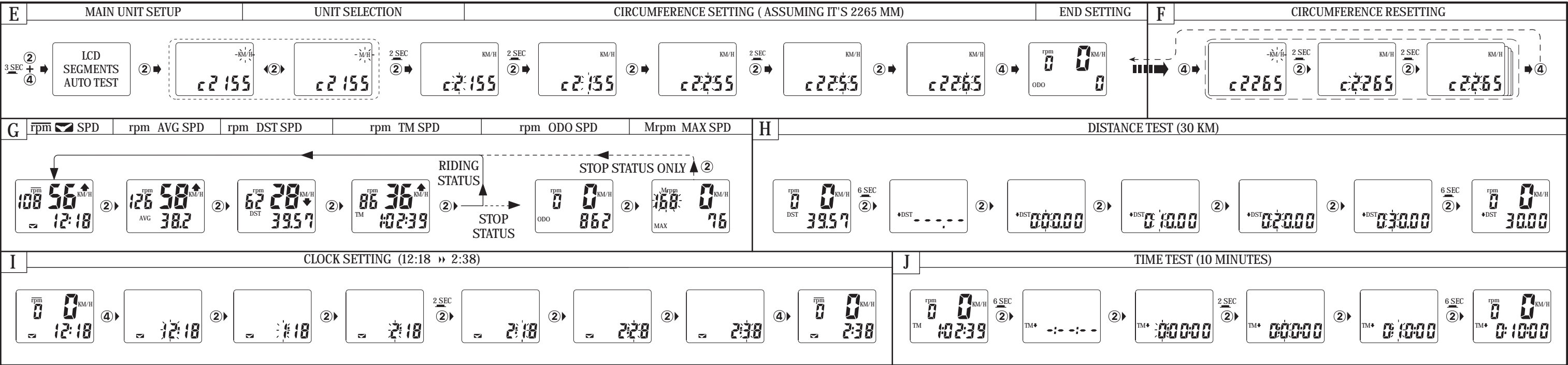
Dimensions/Weight:

M-TPC5-GB 5/05

INDEX: (N) 2 SEC Means press and hold button N for more than 2 seconds.

(N) Means press button N quickly.

N=KEY NUMBER: (②):Mode Button; (④):Set Button)



●INDEX: (N) 2 SEC MEANS PRESS AND HOLD BUTTON N FOR MORE THAN 2 SECONDS.
(N) MEANS PRESS BUTTON N QUICKLY
{N=KEYNUMBER: ② MODE Button. ④ SET Button.}

F. MAIN UNIT SETUP (ALL CLEAR)

INITIATING COMPUTER

1. A battery comes installed in the computer.
2. Press and hold SET button (4) and MODE button (2) simultaneously for more than 3 seconds to initiate computer and clear all data.
Note: Run errors may occur if computer is not initiated before first use.
3. LCD segments will be tested automatically after the unit is initiated.
4. Press MODE button (2) to stop LCD test. A blinking "Km/h" and c2153 will be displayed.

UNIT SELECTION

Press MODE button (2) to choose Km/h or Mile/h. Press and hold MODE button (2) for more than 2 seconds to choose the desired units and to proceed with wheel circumference input.

DATA SETTING PROCESS

1. Digit field being modified will blink.
2. Press MODE button (2) to change value of blinking digit field.
3. Press and hold MODE button (2) for more than 2 seconds to move to next digit field.
4. Press SET button (4) to store displayed data and move to next stored function data entry or to normal operation.

WHEEL CIRCUMFERENCE

1. Position wheel with valve stem at bottom and note position on ground. (Fig. D1)
2. Roll bicycle forward one complete revolution until valve stem returns to bottom. Note second position and measure distance between both positions in millimeters. This measurement is more accurate if you are on the bicycle. Ask an assistant to mark valve stem positions.
3. Enter millimeter value into computer as described in Data Setting.
Option: Use suitable circumference value from table. (Fig. D2)

G. BUTTON and NORMAL OPERATIONS

MODE BUTTON (2) (Fig. G)

Press MODE button to cycle between function screens.

SET BUTTON (4)

Press SET button to enter data setting functions for wheel circumference, or change current time.

CLOCK SETTING (Fig. I)

1. Press MODE button (2) to change to clock screen.
2. Press SET button (4) to enter clock setting function.
3. Adjust time as described in section F, data setting procedures.

RESET OPERATION

1. Press and hold MODE button until LCD screen goes blank. Release MODE button to reset TM, MAX, AVG, DST, Mrpm, rpm, TM TEST and DST TEST data from stored values to zero.
2. CLOCK and ODO will not be reset by this action.

AUTOMATIC START/STOP

1. The computer will automatically start or stop when bicycle moves or stops.
2. A blinking icon "▲" or "▼" will indicate when computer is counting data.

POWER AUTO ON/OFF

Computer will automatically turn off after 4 minutes of inactivity and display only the time. The computer will turn on when the bicycle begins to move, or MODE button (2) is pressed.

CIRCUMFERENCE RECALIBRATIONS

1. Press MODE button (2) to change to ODO display.
2. Press SET button (4) to enter circumference setting screen.
3. Press MODE button to select Km/H or Mile/H.
4. Adjust data as described in section F, data setting procedures.

PACE INDICATOR

The computer will display ▲ or ▼ to indicate if your current speed is above or below your average speed. Pace indicator is displayed only while bicycle is moving.

CLEAR OPERATION (Initiate the Computer)

Press SET button (4) and MODE button (2) simultaneously for more than 3 seconds to INITIATE computer and CLEAR all stored data.

DISTANCE TEST

1. The DST TEST function changes the DST function from count-up to count-down. The entire LCD screen will blink to remind the user and freeze the DST, TM, AVG, MAX, Mrpm and rpm data when the countdown reaches zero.
2. The purpose of this function :
A). REMIND ALARM
For example, if the rider wants to ride a total 30 Kms, by presetting this distance in the computer, the rider is reminded by the unit's LCD screen blinking then 30 Kms is reached.

B). TEST MEASURE DISTANCE

For example, if the rider wants to test measure a particular distance along a road or trail. The rider can enter the distance to be measured, and the unit will blink the LCD screen when that distance is reached.

3. Presetting the desired distance: (Fig. H)

- A). The target distance must be preset before executing the DISTANCE TEST function. The setting procedures are as following.
 - B). Change the normal display to the DST screen first, then hold down the MODE button (2) for over 6 seconds until it enters into the DST SETTING SCREEN when it is at stop status.
 - C). The first display is "-.-.-" on the DST setting screen. The "-.-.-" means that there is no preset data now.
 - D). The first pressing of the MODE button (2) will reset the TM, DST, AVG, MAX, Mrpm and rpm function data to zero automatically for a new testing cycle after it is entered onto the setting screen.
 - E). A quick press (< 2 seconds) of the MODE button (2) advances the blinking digit by 1. To change the blinking digit, hold down the MODE button (2) until the blinking digit is changed to the next digit.
 - F). Complete the DST setting and store the desired data by holding down the MODE button (2) (> 6 seconds) until it changes to the normal display.
 - G). The symbol "▼DST" appears instead of the DST, meaning that the DST will count down.
4. The computer will automatically begin countdown data upon riding. You do not need to operate button. It will freeze the DST, TM, AVG, MAX, Mrpm and rpm data and flash on the entire LCD screen to remind you when it has reached the target distance.
 5. Press the MODE button (2) to stop the LCD screen blinking, but the "▼DST" symbol will continue blinking to indicate it is at LATCHING status.
 6. RESET the computer in order to release the latching status. This also resets all other data.

TIME TEST (Fig. J)

1. The TM TEST function changes the TM function from count-up to count-down. It also blinks on the entire LCD screen to remind the user and freeze the DST, TM, AVG, MAX, Mrpm and rpm data when the countdown reaches zero.
2. For instructions for use of the TIME TEST function, refer to the descriptions in the DISTANCE TEST section.

TM TEST & rpm (AVERAGE RPM)

1. Some cycle computers with the pedal rpm function can only be read while riding. They do not keep any record when riding is stopped. This computer is designed with the rpm (average rpm) and Mrpm (maximum rpm) to record the rpm data.
2. Traditionally, an assistant is needed to measure the 1-minute rpm in outdoor test. Now, you can use the Comp 140 cycle computer to achieve the test easily by yourself. The procedures are:
A). Preset the TIME TEST value at 1 minute. (Fig. J)
B). It will begin counting data automatically upon riding. Concentrate on riding since there is no need to operate the computer at this time.
C). The computer will blink the entire LCD screen to remind you, also it will LATCH the rpm and other function data automatically when it reaches 1 minute. It records the 1-minute rpm even when riding continuously.
D). Press the MODE button (2) to stop the entire LCD screen from blinking and the rpm data can be easily read.

●IMPORTANT NOTES

1. The computer is water resistant and can be used in the rain, however, the unit should never be submerged in water.
2. Do not expose computer to direct sunlight if you are not riding.
3. Never attempt to disassemble computer or accessories.
4. Check relative position of sensor and wheel magnet periodically.
5. Clean contacts of bracket and computer periodically.
6. Do not use harsh chemicals to clean computer or accessories. Use only soft moist cloth.
7. Remember to pay attention to the road while riding.

●TROUBLE SHOOTING

PROBLEM	CHECK ITEM	REMEDY
No display	1. Is the battery dead? 2. Is battery installed correctly?	1. Replace the battery. 2. Make sure battery is installed as shown in Fig. C. Positive side of battery should be facing up.
No current speed, no rpm, or incorrect data	1. Is computer on Calibrating, CLOCK, TM TEST or DST TEST setting screen? 2. Is there positive contact between computer and bracket? 3. Are the relative positions and gap of sensor and magnet correct? 4. Is sensor cable cut? 5. Is the circumference correct?	1. Refer to the setting procedure and complete the adjustment. 2. Make sure computer is mounted securely in bracket. Wipe contacts clean. 3. Refer to Fig.B1 and Fig. B2 and re-adjust correctly. 4. Repair or replace cable. 5. Refer to "CIRCUMFERENCE" and enter correct value.
Irregular display		Refer to the "MAIN UNIT SETUP" and initiate the computer again.
LCD is black	Did you leave main unit under direct sunlight when not riding the bike for a long time?	Place main unit in the shade to return to normal state. No adverse effect on data.
Display is slow	Is the temperature below 0°C (32°F)?	Unit will return to normal state when the temperature rises.

LIMITED WARRANTY

2-year Warranty: All electronic and mechanical components against manufacturer defects only.
Battery is not covered under any implied warranty.

Warranty Claim Requirements

To obtain warranty service, you must have your original sales receipt. Items returned without a sales receipt will assume that the warranty begins on the date of manufacture. All warranties will be void if Comp 140 cycle computer is damaged due to user crash, abuse, system alteration, modification, or used in any way not intended as described in this operating manual.

* The specifications and design are subject to change without notice.

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For customers in the USA, call: 1-800-250-3068 Website: www.topeak.com

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