CARPE ITER Terrain Command III Bluetooth Low Energy Remote Controller User Manual

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CARPE ITER Terrain Command III Bluetooth Low Energy Remote Controller

Terrain Command III (TCMDC0071) User Manual

- **Applicable Model:** TCMDC0071

Description

Terrain Command III is a Bluetooth low-energy remote controller designed to be mounted on a motorcycle.

TCMD3 comprises of the following main parts:

1. Two button sections are to be mounted on motorcycle handlebars. The button sections are interchangeable (Button Section)
2. The main hub, which contains electronics required for TCMD3 operation
3. Please refer to the graphics for details
4. **Functions:** [Function details not provided in the usermanual]

Installation

Button Sections

- Buttons Sections are designed for permanent installation on 22mm diameter handlebar via the provided mounting brackets and screws.
- The Button Sections can be mounted on opposite sides of the handlebars:
- or side-by-side:
- Make sure the stock control elements, especially brake and clutch levers, turn-signal, and light switches are still within reach.
- Depending on your riding style (mostly on the foot pegs / sitting down) rotate Button Sections to find the

appropriate angle to have its control elements within reach of your thumb.
- Use the provided bracket and M4 screws to secure the Button Sections on the handlebar. Required tool (not provided): 2,5mm HEX key.
- Route cables close to the handlebar and secure them with zip ties.
- Make sure that neither the Button Sections, nor the cables are obstructing normal operation of your motorcycle instruments, including especially clutch and brake levers. In case you detect any such obstruction, relocate the Button Sections and/or the cables.

Main Hub

- Place the Main Hub behind your motorcycle fairing, ideally behind the front mask.
- Route Button Section cables to the Main Hub and connect to the appropriate socket. BTN1 flag marks the Button Section to be placed on the left side of your handlebar from the rider's perspective or to the left of the other Button Section, in case the Button Sections are mounted side-by-side.
- It is recommended to connect the Main Hub to the ignition-switched auxiliary power outlet to prevent motorcycle battery drain when stationary for extended periods of time (weeks or longer).
- The total length of input power leads connected to the Main Hub must not exceed 2.5 m.
- TCMD3 has an onboard auxiliary power source, which can sustain normal TCMD operation for up to 30 minutes even after it is cut from power (motorcycle ignition OFF).
- Secure the Main Hub and associated cable assemblies with zip ties.

Use

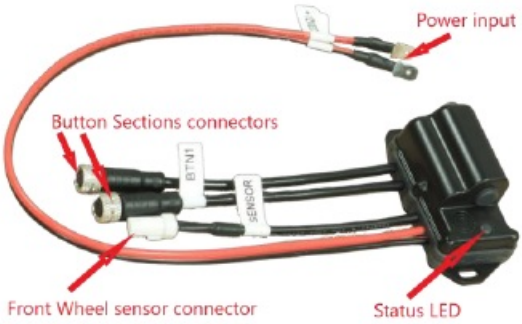
First connection

- Download and install the Carpe Control app from the Play Store (pre-installed on CI Pad). If already installed, update it to the latest version (check for updates on Play Store in case of other than CI Pad device / check for updates in Carpe Manager in case of CI Pad). DO NOT install the Play Store version of the Carpe Control app on the CI Pad.
- Grant all permissions requested by the Carpe Control app during installation. If you deny any of the requested permissions, the Carpe Control app (and consequently TCMD3) will not work.

Applicable Model: TCMDC0071

Description

- Terrain Command III is a Bluetooth low-energy remote controller designed to be mounted on a motorcycle.
- TCMD3 comprises of the following main parts:
- Two button sections to be mounted on motorcycle handlebars. The button sections are interchangeable ("Button Section");
- Main hub, which contains electronics required for TCMD3 operation;
- Please refer to the graphics for details:



Functions

Installation

Button Sections:

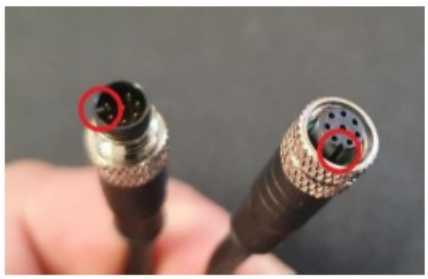
- Buttons Sections are designed for permanent installation on 22mm diameter handlebar via the provided mounting brackets and screws.
- The Button Sections can be mounted on opposite sides of the handlebars:

or side-by-side:

- **WARNING –** to mount Buttons Sections as shown above, you will need to create space by moving stock control elements. The ideal location for the Buttons Sections is between the handlebar grip and the stock instrument cluster.
- Make sure the stock control elements, especially brake and clutch levers, turn-signal and light switches are still within reach.
- Depending on your riding style (mostly on the foot pegs / sitting down) rotate Button Sections to find an appropriate angle to have its control elements within reach of your thumb.
- Use the provided bracket and M4 screws to secure the Button Sections on the handlebar. Required tool (not provided): 2,5mm HEX key.
- Route cables close to the handlebar and secure them with zip ties.
- Make sure that neither the Button Sections, nor the cables are obstructing normal operation of your motorcycle instruments, including especially clutch and brake levers. In case you detect any such obstruction, relocate the Button Sections and/or the cables.

Main Hub

- Place the Main Hub behind your motorcycle faring, ideally behind the front mask.
- Route Button Section cables to the Main Hub and connect to the appropriate socket. BTN1 flag marks the Button Section to be placed on the left side of your handlebar from the rider's perspective or to left of the other Button Section, in case the Button Sections are mounted side-by-side.
- Ensure correct Button Section connectors orientation when mating the Button Sections with the Main Hub – mind the locking elements:



- Tighten the Button Sections connectors firmly by hand – the mating pairs screw into each other (it is not sufficient to plug the connectors. They will get undone due to vibrations). Do NOT use tools to torque the connectors or you will damage them.
- It is recommended to connect the Main Hub to the ignition-switched auxiliary power outlet to prevent motorcycle battery drain when stationary for extended periods of time (weeks or longer).

- The total length of input power leads connected to the Main Hub must not exceed 2.5 m.
- TCMD3 has an onboard auxiliary power source, which can sustain normal TCMD operation for up to 30 minutes even after it is cut from power (motorcycle ignition OFF).
- Secure the Main Hub and associated cable assemblies with zip ties.
- Front Wheel Sensor
- **Optional:** Should you choose to use TCMD3 magnetic sensor reading capability, connect the standard magnetic 2-wire reed switch to the connector marked as „SENSOR“. Connecting SENSOR is only needed, in case you plan to use front wheel revolutions readings and it is not required for normal TCMD3 operation. The SENSOR connection is polarity ignorant. DO NOT connect the SENSOR with the stock front wheel sensor on your motorcycle or TCMD3 or your motorcycle electronics could be destroyed or malfunction (different voltage levels). In other words, except connecting the 12VDC and GND terminals, TCMD3 MUST NOT be connected to your motorcycle electrical system/electronics through the SENSOR.
- There is a 3-wire connector on the SENSOR cable. To accommodate standard magnetic reed switches found on the market, please use the provided adapter cable for the SENSOR socket. The color code of the adapter cable is red-black-yellow. Connect your reed switch to black and yellow wires and leave red blank – simply fold the red wire and wrap it e.g. with electrician’s tape. The Reed switch is polarity ignorant – it does not matter how exactly you will wire the reed switch, as long as you connect to black and yellow wire on the adaptor cable.
- Do not cut away our stock connector on the SENSOR input cable or you lose compatibility with our sensors to be soon introduced as an optional accessory (our sensors will be hall effect – virtually limitless life span and reliability).

Use

- TCMD3 is not operational as a self-standing device. It requires the installation of the companion software – the Carpe Control app and enabling certain services to run on your Android-powered smart device.
- In order to work properly, TCMD3 MUST be connected to your Android-powered smart device via the companion software – Carpe Control app or the controller will not work properly (it is not enough to make manual Bluetooth pairing via stock Bluetooth manager on your device).
- First connection
- Download and install the Carpe Control app from the Play Store (pre-installed on the CI Pad). If already installed, update it to the latest version (check for updates on Play Store in case of other than CI Pad device / check for updates in Carpe Manager in case of CI Pad). DO NOT install Play Store version of the Carpe Control app on the CI Pad.
- Grant all permissions requested by Carpe Control app during installation. If you deny any of the requested permissions, the Carpe Control app (and consequently TCMD3) will not work.
- Ensure TCMD3 is connected to power (if connected to an ignition-switched power outlet on your bike, put the ignition into the ON position). Then open the Carpe Control app on your

Android-powered device and follow on-screen instructions. Your Android-powered device must be within Bluetooth range, to complete the process.

- The Carpe Control app will try to bond (pair) TCMD3 with your Android device automatically. Should the automatic connection fail for any reason (the connection page in the Control app will hang for more than 1 minute), pair TCMD3 manually in the device Bluetooth manager and restart the Control app. When asked by

the Control app if you want to connect a previously paired controller, confirm (click “Yes”).
- Once the first connection is completed, a bond is created between your Android-powered device and TCMD3 and you can start using TCMD3 to control supported applications (see Carpe website for details).
- TCMD3 may be bonded to more than 1 Android-powered device. WARNING – make sure only one of the previously bonded devices has active Bluetooth, when both are within range of TCMD3 – it is not possible to control to which device TCMD3 would connect (first come first serve in terms of Bluetooth connection routine). If you must keep Bluetooth active on both previously bonded devices for any reason, you will need to delete the connection to TCMD3 on the one, that you presently do not intend to use together with TCMD3 (please see Section 3.5).

Subsequent connections

- Following the first connection described in Section 3.3, TCMD3 will connect automatically when a bonded device is detected. The connection is almost instantaneous under normal conditions.
- To detect the presence of a bonded device: (A) TCMD3 must be powered (in case you connected it to your motorcycle ignition-operated auxiliary power outlet, this requires putting the ignition to the ON position), (B) Bluetooth must be enabled and within range on the bonded device.

Unpairing

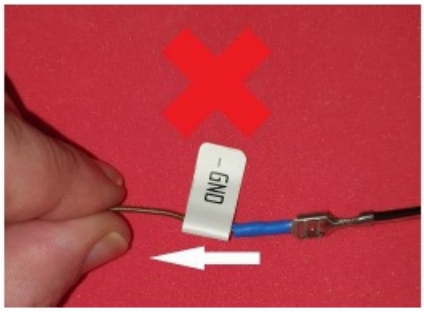
- The pairing relationship between your Android-powered device and TCMD3 can be deleted either manually in the device Bluetooth manager or directly via the function in the Carpe Control app – Configuration – Delete controller.

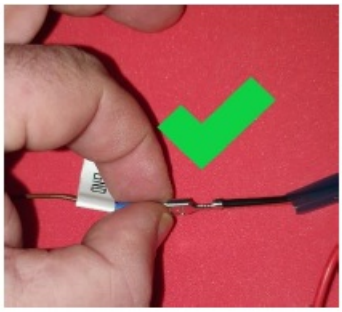
Initialization routine explained (automatic)

- Active mode is indicated by a blue LED blink on the Main Hub. Any LED color indicates that TCMD3 is powered.
- The rapid flash of the blue LED indicates advertising for Bluetooth pairing.
- A slow flash of the blue LED indicates a successful Bluetooth connection to a bonded (previously paired) device and TCMD3 being ready for normal operation.

Operating considerations

- Never exceed the operating parameters stated in Section 5 or TCMD3 will get damaged or destroyed.
- Ensure correct polarity of the TCMD3 input leads.
- Do not pull on any cables/wires.
- When disconnecting the TCMD3 cable assembly from your motorcycle or when disconnecting the magnetic sensor, never pull wires:





- Exceeding upper operating temperature range will result in overheating. When overheating occurs, TCMD3 will resume its normal operation after it cools down to normal operating temperature (unless the heat exceeds the operating parameters to such a degree to inflict permanent damage).
- It is recommended not to leave TCMD3 exposed to direct sunshine in high-temperature locations. When parking a motorcycle in the shade is not an option and in case TCMD3 is not shaded by your motorcycle fairings, cover TCMD3 with a piece of cloth to prevent overheating.
- DO NOT apply jet water on TCMD3, especially the Button Sections (e.g. when cleaning your motorcycle, avoid hitting TCMD3 with direct stream from WAP or other jet water system).
- DO NOT use button combos (pressing more than one button at the same time) during normal operation – it may lead to unexpected behavior.

Specifications

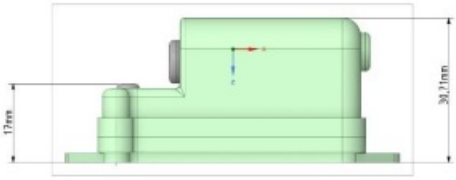
Operating voltage: 10-16V DC.

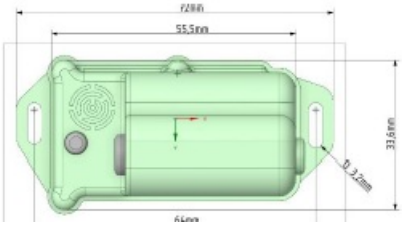
- Average power consumption when in use: 5mA@12V (BT Connected, Wheel Sensor being used).
- Onboard auxiliary power supply (supercapacitors) that will ensure up to 30 minutes of self-standing operation after disconnecting from power, when fully charged.
- Water and dust resistant. Official IP rating has not been done, but TCMD3 is designed to survive on a motorcycle in any weather conditions (subject to operating limitations stated in Section 4).
- Operating temperature: minus 15 to 60 C° (the upper range includes heat accumulated in the TCMD3 enclosure by external sources, such as the Sun).
- Storage temperature: minus 15 to 60C° (the upper range includes heat accumulated in the TCMD3 enclosure by external sources, such as the Sun).
- Operating humidity: 0-95%
- Storage humidity: 0-70%

Control elements:

- 8x mechanical pushbutton.
- Maximum operating force on control elements: 2kgf.
- Normal operating force on control elements: 0.5kgf.
- User feedback system: 1xRGB LED on Main Hub.
- Maximum SENSOR frequency: 40Hz (that equals more than 300km/h with a 21-inch wheel). Subject to the correct function of the reed switch.
- **Radio:**
    - **Operating frequency:** 2,402 – 2,480 GHz

    - **TX power:** < 10dBm e.i.r.p.
    - **Modulation type:** wide band modulation
    - BT 5.0 compliant
- **Connectors:**
    - 6,3mm Faston tab on power input;
    - JST 03R-JWPF-VSLE style connector for SENSOR.
- TCMD3 is not designed to be worn on the human body while in operation. The minimum distance between the human body and the Main Hub is 40cm.
- **Dimensions:**
    - **Button Section WxLxH:** 19x72x29 (height above handlebar)
    - **Main Hub WxLxH:** 33,6×55,5×31 mm (excluding cables)





Disclaimer

- Unless explicitly stated for a specific Carpe Iter item (TCMD3, CI Pad, Holder, their accessories, brackets and other Carpe Iter equipment) (“Item”) otherwise, no testing or homologation procedures were taken to ensure compliance with regulations associated with using the Items in regular traffic – on the streets. Use at your own risk.
- Make sure that Items with sharp edges are positioned so that the sharp edge does not face the rider. Always dismount Items, which you are not currently using – especially empty holders and brackets (which may form a sharp edge when empty).
- Even if the Items are mounted to your vehicle properly, you might suffer an injury to your body (bruises, tearing, fractures, etc.) or damage to your gear (tearing, breakage, etc.), especially in case of an accident (e.g. dismounting your vehicle in other than standard way).
- Manuals and use instructions are only provided in electronic form and can be viewed and/or downloaded on our website. Manuals and instructions for use shall not be provided in printed form.
- Our manuals and instructions for use assume casual experience with smart devices (such as smartphones) and basic manual dexterity. I case of doubt, the installation of Items on a vehicle must be performed by a specialized workshop.
- Manuals and instructions for use, as well as technical support, are only provided in English.

Warranty

- Carpe provides a worldwide warranty in the scope set forth below for defects, that exist upon delivery of an Item to the shipping address provided by you upon purchase and which shall manifest within the period of 2 years as of the date of the original purchase, if you are a consumer, and1 year as of the date of the original purchase if you are a business (you provided business identification number or VAT number upon purchase). This warranty does not apply to software and batteries (see below). The date of dispatch of an Item to your shipping address is deemed to represent the date of original purchase.

- A limited 6-month warranty is provided for batteries included in an Item or, as the case may be, sold separately. In the course of this limited battery warranty, we guarantee that the battery will retain at least 60% of its nominal capacity. No warranty is provided for batteries beyond the period of 6 months following the date of original purchase. Warranty for batteries is subject to adhering to the use instructions set forth above.
- Our warranty only covers defects that preclude the use of an Item for its purpose. In view of the intended purpose of use of the Items, our warranty does not cover in particular: defects of cosmetic nature, such as discoloration, paint fading, rusting that does not hinder the use, etc.
- Our warranty is subject to adhering to manuals and use instructions published on our website or stated above in this manual for individual Items. Our warranty does not cover defects occurring due to misuse of Items and lack of maintenance. Our warranty does not cover usual wear and tear.
- No warranty is provided for software.
- No warranty is provided for defects occurring as a result of outside forces (abrasion, shock, water, pressure, vibration, UV light, etc.).
- Plastic and rubber parts of Items are considered expendable materials.
- Item, in respect of which our defect warranty is claimed, including a detailed written description of the defect, must be delivered for inspection to the address published for that purpose on our website. Any and all costs associated with the delivery, including without limitation fees and other duties incurred by us in association with re-importing the Items into the EU, will be borne by you and we will be entitled to request the respective reimbursement to be credited to our bank account before your warranty claim is processed.
- We shall be free to choose any of the following actions to satisfy your warranty claim:
- repair, if repair is economical;
- adequate monetary compensation;
- replacement of the defective Item. We may choose to replace the defective Item with the newer generation or, if the Item was discontinued, with an Item offering similar features.
- We may always choose to replace a defective Item instead of carrying out a repair or providing monetary compensation.
- Your warranty claim shall be reviewed and responded to within 30 days following the delivery of the defective Items at the address provided by us for that purpose.
- It is strongly recommended that you contact us through Support ticket system on our website before dispatching an Item, in respect of which you plan to claim a warranty. We might choose to satisfy your claim without the need to return the defective item, which will save time and shipping cost.

ULW Czech, s.r.o.

- **Seat:** V Ráji 34, Praha 9 – Hostavice, 198 00, CZ, Business
- Id: 28256212, VAT No.: CZ28256212

Documents / Resources

	**CARPE ITER Terrain Command III Bluetooth Low Energy Remote Controller** [pdf] User Manual 0071, Terrain Command III, Terrain Command III Bluetooth Low Energy Remote Controller, Bluetooth Low Energy Remote Controller, Energy Remote Controller, Remote Controller, Controller