



### **FOREWORD**

### Hello!

You are now a proud owner of the iQube Electric S scooter from the house of TVS Motor Company.

The iQube Electric S is an electric scooter like no other. It gives you the unmatched combination of performance, connected technology and practicality of use. So now you can ride in style and comfort, with all the savings benefits of an electric vehicle.

For getting the best out of your iQube Electric S, please read the manual carefully and understand all features and operations of your vehicle. Follow the instructions and enjoy a smart and convenient experience that comes with your iQube Electric S.

To ensure a worry free journey on your TVS iQube Electric S, we urge you to get your vehicle serviced only at TVS Motor Company Authorized Dealers.

We hope you enjoy every aspect of being a proud owner of TVS iQube Electric S and being a part of our community of smart, next-gen and sustainable riders.

Happy riding!

TVS MOTOR COMPANY LIMITED

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### CONTACTS FOR SUPPORT

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V Floor, Gee Gee Universal, No. 2, MC Nichols Road, Chetpet, Chennai - 600 031. Phone: 044-28361651/28361654 Email: AO.Chennai@tvsmotor.com AO.Madurai@tvsmotor.com

### **TAMILNADU-2**

### 2. TVS Motor Company Limited

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Behind Hotel Annapoorna,
R S Puram, Coimbatore - 641 002.
Phone: 0422-4350060/2541035
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### **KERALA**

### TVS Motor Company Limited Ambady Towers, Second Floor,

Door No. 27/631, A6, Edappally-Pookkattupady Road, Edappally PO., Cochin - 682 024. Phone: 0484-2544578/2556938 Email: AO.Cochin@tvsmotor.com

### **KARNATAKA-1, 2 & GOA**

### 4. TVS Motor Company Limited

No. 600, Anand Surya, 2nd Floor, 15th Cross, 6th Phase, JP Nagar, Opp. BMTC Bus Stop, Bangalore - 560 078. Phone: 080-26653433

Email: AO.Bangalore@tvsmotor.com

### **ANDHRAPRADESH -1 & 2**

### 5. TVS Motor Company Limited

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No. 3-11-30, Plot No. 11,
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Secunderabad - 500 003.
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### 6. TVS Motor Company Limited

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### **MAHARASHTRA-3 & CHATTISGARH**

### 7. TVS Motor Company Limited

No. 502B, 6th Floor, B Wing, Shriram Shyam Towers, Near LIC Square, Sardar, Nagpur - 440 001. Phone: 0712-2569932

Email : Service.Nagpur@tvsmotor.com AO.Raipur@tvsmotor.com

### **GUJARAT**

### 8. TVS Motor Company Limited

1208-1213, Shivalik Satyamev, Below Bopal Over Bridge, Ambli-SP Ring Road Junction, Bopal, Ahmedabad- 380058. Phone: 079-65443748 Email: AO.Ahmedabad@tvsmotor.com

### **MADHYA PRADESH-1 & 2**

### 9. TVS Motor Company Limited

No. 211-212, 2nd Floor, Chinar Incube Business Centre, Chinar Fortune City, Near Brindhavan Dhaba, Hosangabad Road, Bhopal - 462 026.

Phone: 0755-2499406/2499306 Email: AO.Bhopal@tvsmotor.com AO.Indore@tvsmotor.com

### **RAJASTHAN-1 & 2**

### 10. TVS Motor Company Limited

Plot No. 17-18, 2nd Floor of National Motors Building, Jhotwara Industrial Area, Jaipur - 302 012.

Phone: 0141-5150901/5150902
Email: AO.Jaipur@tvsmotor.com
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### **DELHI & HARYANA**

### 11. TVS Motor Company Limited

D-3 & D-4, 2nd Floor, Sector - 10, Noida,

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Phone: 011-29834640/29834773 Email: AO.Delhi@tvsmotor.com

### **PUNJAB & CHANDIGARH**

### 12. TVS Motor Company Limited

4th Floor, Royal Business Park, Chandigarh Ambala Highway,

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### **UTTAR PRADESH WEST**

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### **UTTAR PRADESH CENTRAL & EAST**

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Phone: 0522-4918300/4918301 Email: AO.Lucknow@tvsmotor.com

### **WEST BENGAL**

### 15. TVS Motor Company Limited

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Kolkatta - 700 026

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### BIHAR

### 16. TVS Motor Company Limited

N-Plaza, Jamal Road, P.S. Kotwali, Patna - 800 001.

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### **ORISSA & JHARKHAND**

### 17. TVS Motor Company Limited

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### **NORTH EAST STATES**

### 18. TVS Motor Company Limited

147, Udayan, Ganesh Guri, Near Hotel D Courtyard, R G B. Road, Guwahati - 781005. Phone: 0361-2202030/2202031 Email: AO.Guwahati@tvsmotor.com

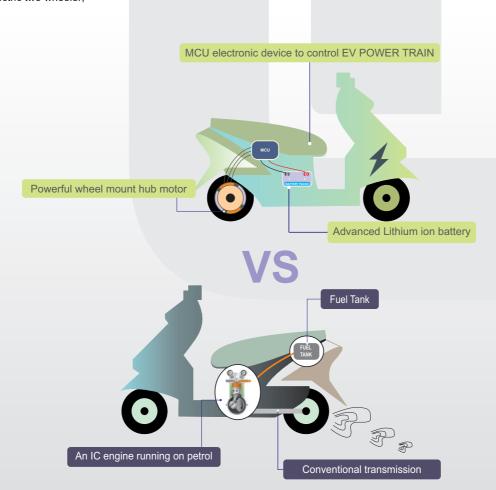
Or

Toll Free Number Relationship Manager : 1800-572-1818 (Mon - Fri: 9am to 6pm)
Toll Free Number Roadside Assistance : 1800-258-7111 (Available 24 x 7)

Email: customercare@tvsmotor.com

### **INTRODUCTION**

One of the finest and modern technology products of TVS Motor is waiting to be unveiled; an electric scooter which is futuristic and contains plenty of features and technological advancements. However, before delving further into this manual, let us first have a glimpse of what your electric two wheeler is and how it is different from an internal combustion engine powered vehicle. The below info-graphic provides a broad idea about an electric two wheeler:



# UNIQUE FEATURES OF TVS iQUBE ELECTRIC S

### LCD / TFT INSTRUMENT CLUSTER



Unlike conventional scooters this vehicle is having a digital instrument cluster which ensures brighter display and allows ease of interaction between vehicle and the rider

### **RETRACTABLE BAG HOOKS**



Your scooter has two retractable Bag Hooks to carry light luggage like carry bags weighing upto 3 kg.

One hook is located below the handle bar on the rear panel and the other one is located on the cover front below the front end of seat Refer <u>page No. 23</u> for details

### TELESCOPIC FRONT FORK



Your Scooter has Motorcycle-like 'Telescopic Front Suspension' for extreme comfort for excellent riding comfort even on bad roads.

### ADJUSTABLE REAR SHOCK ABSORBER



Your Scooter comes with Adjustable Shock Absorber, a first-in-the-industry feature. This allows you to adjust the required level of hardness / softness as per the usage requirement with just a push of a lever. Refer page No. 73 for details

### **TUBELESS TYRES**



Another important unique feature in your scooter is 'Tubeless Tyres'. Tubeless tyres reduce the chances of getting punctured. Even if there is a puncture, sudden leakage of air is avoided, thereby providing better safety and convenience. It is also very easy to repair the punctured tyres.

### ALL BLACK LARGER ALLOY WHEELS



All 'Black Larger Alloy Wheels' with high mechanical advantage gives progressive braking of your scooter, results in best-in-class 'shortest distance' braking. It also provide superior comfort in bad road conditions.

### PARKING BRAKE (BRAKE LOCK LEVER)



'Parking Brake' is another unique safety feature which protects your scooter from falling due to wheel rotation when it is parked with the side stand on a slope. Refer page No. 18 for details.

# DISC SYNCHRONISED BRAKE TECHNOLOGY (SBT)



Taking technological innovation to next level, your scooter comes with 'Synchronised Brake Technology (SBT)'. This feature enhances the safety by avoiding skidding during sudden braking.

### **UNDER-SEAT STORAGE (UTILITY BOX)**



Your scooter has a large under-seat storage space to carry your luggage belongings. Refer <u>page No. 23</u> for details

### **ALL LED ILLUMINATION**





Your Scooter comes in with premium LED lamps. Efficient and bright, this gives TVS iQube Electric S a totally upgraded Look and Style with better visibility for night rides. LED lamps consume less power with increased luminous intensity.

### SIDE STAND INDICATION



Vehicle will be immobile and side stand indication will be shown in the instrument cluster if the vehicle is on side stand

### **∧** Caution

Always release the side stand to its full up position before moving the vehicle

### **FLIP KEY WITH LED LIGHT**



Foldable key with LED light helps you to see ignition lock in dark

### **PLEASANT HORN TONE**

A newly designed horn produces a pleasant tone when pressed by user.

# MALFUNCTION INDICATION AND SERVICE REMINDER



Malfunction indication notifies you if there is an impending warning or if there is a fault to take the vehicle for diagnosis and troubleshooting. Whereas service reminder recalls you to take the vehicle for periodic maintenance (care) at Authorised Service station based on the alert.

### **TEXTURED FLOORBOARD**



Your scooter comes with a stylish textured floor board.

### **TEXTURED FLOOR MAT**



Your scooter comes with a stylish textures floor mat.

### **ACCESSORIES FOR YOUR SCOOTER**

### **SMART PHONE CHARGER\*\***



Your TVS iQube Electric S is provided with a socket for charging your smart phone even while you are traveling and it is located in the utility box below the seat assembly. Refer page No. 24 for usage details.

### **SAFETY INFORMATION**

Operating this vehicle safely is an important responsibility of the rider. To help you make safe decisions while operating the vehicle, we have provided necessary operating procedures and other information in this manual. This information alerts you on potential hazards that could cause injury to you or others. Since it is not possible to warn you about all the hazards associated with operating or maintaining the vehicle, you must use your own judgement.

You will find important safety information in following form in this manual. These words carry the following connotations:



This message provides further clarification for clear understanding of any particular.

### **△** Caution

This message indicates special procedures or precautions to be followed to avoid damage to the vehicle.

### **Warning**

Disregarding this message might result in accidents or injury to the rider.

### **1** Note

- All information, illustrations, photographs and specifications contained in this owners manual are based on
  the latest product information available at the time of this publication. TVS Motor Company Limited may,
  however, incorporate modifications or improvements on its vehicles at any time without notice and therefore,
  in such events it is possible that the relevant part of the owner's manual does not apply to your vehicle.
- Prior permission of TVS Motor Company Limited is required for quoting, copying or reproducing any part of the owner's manual.
- Accessories shown in the picture may not be part of the standard equipment.
- Pictures shown in this manual are of TVS iQube Electric S Disc Brake version unless specified.

### Caution

- Leaving the ignition cum steering lock in 'ON' position for a prolonged time will drain the battery when the vehicle is not in use. Switch OFF and take the key out when the vehicle is not in use.
- 2. Always lock the steering while parking for safety.
- It is recommended to use the tool kit in case of emergency only. It is always advisable to take your vehicle to TVS Motor Company Authorized Main Dealer.
- 4. Never sit on vehicle when it is supported by stands.
- Utility box can be used to carry a load of maximum 10 kg.
- Do not carry perishable items inside the utility box. It is not fully sealed. Do not allow / spray water inside the utility box. Take care not to spill liquid into the utility box.
- Care should be taken not to attach the luggage which hangs out of your scooter. Please note that the luggage attached to your scooter should not interfere with your feet movement.
- 8. The charging time of the vehicle may vary, depending on the vehicle's battery state of charge.
- 9. The flap has been designed to prevent water entry inside the charging port and is not replaceable. No warranty for charger is applicable in case of flap damage.
- 10. Always release the side stand to its full up position before moving the vehicle.
- 11. Be aware of reverse park assist mode. In this mode, the vehicle will move in reverse when throttle is given.
- 12. Always park the vehicle on a flat, firm surface, in shaded area and away from flood, fire and other unsafe environments.
- 13. Do not park the vehicle in direct sunlight or water logged areas for long time.
- 14. Do not ride the vehicle in flooded roads.
- 15. While charging vehicle always switch on AC supply, only after plugging in both end of the charging cord at their respective positions.

### **Warning**

- 1. Never attempt to move the vehicle when the steering is locked, you may lose balance.
- 2. Use appropriate head lamp beam 'high / low' as per the traffic and road conditions for your safety and avoid inconvenience to other riders
- Operating the TVS iQube Electric S overloaded will hamper riding stability and may lead to loss of control.
   Hence, it is advisable to carry the recommended amount of load only.
- 4. Don't touch any open cables or terminals.





### **Vehicle Performance Variation**

We at TVS, value your safety and comfort and hence have taken certain measures to ensure the best riding experience of your TVS iQube Electric S.

In line with this, we have deployed a safety measure for critical vehicle parts like the motor and the MCU.

To ensue the safety of you and your TVS iQube Electric S, in high temperature conditions, whenever the temperature of vehicle components reaches a critical point, as a safety measure performance of some systems are deliberately reduced to optimize the temperature. This is indicated by the MIL on your dashboard glowing after sometime accompanied by a message.

For example, if you have accelerated the scooter with brakes applied, the temperature of the motor and the MCU starts increasing. Once it reaches a critical point, the Motor Controller Unit starts "derating" the vehicle to control the increase in temperature beyond critical point, thus slowing the vehicle down a little. This may result in loss of vehicle performance to a certain extent, and you may experience some drop in performance.

In extreme conditions, for example; when ambient temperature is extremely high and vehicle is being driven continuously in overloaded condition, even after the MIL indication on your cluster is on, it may result in the vehicle coming to a complete stop.

In any such situation that you may face, it is recommend to allow the vehicle to cool down by riding it in slow speed in Eco Mode or stop the vehicle for some time till the MIL indicator on your connected instrument cluster goes away. Usually this should only take a few minutes. This will ensure the safety of you as well as life of electric components in the scooter.

Incase if the MIL indicator is glowing continuously even when vehicle is in cold condition, take your vehicle to TVS Motor Company Authorised Main Dealer for rectification.

### **KNOW YOUR TVS IQUBE ELECTRIC S**

### **VEHICLE IDENTIFICATION NUMBER**

The frame and traction motor serial numbers are the only means of identifying your vehicle from others of the same type. They are also required to assist your Dealer for ordering parts or referring to special information.



The frame serial number is stamped on the frame, at the rear end below the seat assembly. Open the seat assembly and remove the VIN cover to read the frame number.



The traction motor serial number is stamped on the hub of the rear wheel assembly. Rotate the rear wheel assembly to read the motor number.

### **VEHICLE LEFT SIDE**

- 1. Brake Disc
- 2. Front wheel axle
- 3. Side stand
- 4. Pillion foot rest L
- 5. Illuminating logo



### **VEHICLE RIGHT SIDE**

- 1. Seat assembly
- 2. Crash Guard
- 3. Pillion foot rest R
- 4. Cover front
- 5. Bag hook (rear)
- 6. Front wheel axle nut



### **VEHICLE FRONT SIDE**

- 1. Front Position Lamp
- 2. Turn signal lamp front L
- 3. Headlamp (AHO)
- 4. Turn signal lamp front R



### **VEHICLE REAR SIDE**

- 1. Tail/ brake lamp
- 2. Turn signal lamp rear R
- 3. License plate lamp
- 4. Turn signal lamp rear L
- 5. Pillion handle



### **VEHICLE TOP SIDE**



- 1. Instrument cluster
- 2. Rear view mirror R
- 3. Hazard switch
- 4. Right hand brake lever
- 5. Throttle grip
- 6. Park assist switch
- 7. Mode switch
- 8. Ignition cum steering lock
- 9. Bag hook (front)

- 10. Charging socket
- 11. Horn switch
- 12. Turn signal lamp switch
- 13. HMI Switch
- 14. Left hand brake lever
- 15. Left hand brake lever lock
- 16. High/low beam switch
- 17. Rear view mirror L

### CONTROLS

Your TVS iQube Electric S comes with a pair of identical control keys. These keys are to operate ignition cum steering lock and seat lock.

### **IGNITION CUM STEERING LOCK**

The ignition switch enables and disables the electrical circuit and steering lock. The three positions of the switch are described below.





### 1. 'OFF' position

All electrical circuits are deactivated. The key can be removed from the lock.

### 2. 'ON' position

All electrical circuits are activated. Vehicle's instrument cluster will wake up and the vehicle can be shifted to drive mode.

Control key cannot be taken out from the lock in this position.

### 3. 'LOCK' position

Your TVS iQube Electric S steering can be locked in both 'left' and 'right' directions. Turn the handlebar to the 'left' or 'right'. Press the key IN and rotate it to the 'LOCK' position from 'OFF' position.

All electrical circuits are deactivated and the steering is locked. Control key can be removed from the lock.

Insert the key into the lock and press the key IN and turn it to 'OFF' or 'ON' position to unlock the steering.

### Note

Instrument cluster background illumination, front position lamp, illuminating logo, automatic headlamp on (AHO) and tail lamp glow automatically once the ignition key is turned 'ON' without activating any other switches.

### **∧** Caution

Leaving the ignition cum steering lock in 'ON' position for a prolonged time will drain the battery when the vehicle is not in use. Switch OFF and take the key out when the vehicle is not in use.

Always lock the steering while parking for safety.

### **Warning**

Never attempt to move the vehicle when the steering is locked, you may lose balance.

### HANDLE BAR LEFT SIDE



### 11. Horn switch

Press the switch ' 'to operate the horn.

12. Turn signal lamp switch

Slide the turn signal lamp switch to left ' ' or right side ' ' to operate respective turn signal lamps (LH / RH). Press the center button of the switch to turn 'OFF'.

### 13. HMI switch

The HMI switch is used to operate the menu screens on the cluster

### 14. Left hand brake lever

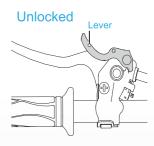
The rear brake is applied by squeezing the rear brake lever gently towards the handle grip. The brake lamp glows on application of rear brake.

### 15. Left hand brake lever lock

Left hand brake lever lock is useful when your scooter is parked with side stand on a slope to avoid falling.

To apply the left hand brake lever lock, squeeze the left hand brake lock lever fully towards the grip. Hold the brake lever at the same position, press and hold the left hand brake lever lock. Now release the brake lever and ensure that the brake is locked properly.

To release the left hand brake lever lock, squeeze the left hand brake lever further in and the lock will release automatically, release the brake lever upon releasing the brake lever lock.



# Locked

### 16. High/low beam switch

With the head lamp 'ON', press the switch towards ' to operate head lamp high beam or press it towards ' to operate head lamp low beam.

### **1** Note

Ensure that the brake lever lock is released (if applied) before riding the vehicle.

### **∧** Caution

Use appropriate head lamp beam 'high / low' as per the traffic and road conditions for your safety and avoid inconvenience to other riders.

### HANDLE BAR RIGHT SIDE



### 3. Hazard Switch

Whenever it is necessary to park TVS iQube Electric S in a hazardous location, press the hazard switch in ignition 'ON' condition to start simultaneously flashing of all turn signal lamps, so as to make others aware of your vehicle presence. Press the switch again to turn-off the lamps.

### 4. Right hand brake lever

The brake lever controls a hydraulic circuit while squeezing and the hydraulic circuit operates the front brake system. The brake lamp glows on application of front brake.

### 5. Throttle grip

Vehicle speed is controlled by the rotation of the throttle grip. Twist it towards you to increase the vehicle speed and twist it away from you or release it to decrease the vehicle speed.

### 6. Park assist switch

Park assist switch activates park assist mode and allows vehicle to roll forward or backward in restricted speed thereby to reduce the effort of parking by yourself.

### 7. Mode switch

Mode switch allows to switch between following modes;

- 1. Economy mode
- 2. Power mode

### **AUTOMATIC HEAD LAMP ON (AHO)**



TVS iQube Electric S comes with a Automatic Headlamp ON (AHO) LED lamp which glows automatically once the ignition is turned 'ON'.

### **PARKING THE VEHICLE**

- User can select Park assistance while parking, by pressing park assist switch (6) & either of the brake switch [(4) / (14)] simultaneously.
- The cluster will enter into park assist forward mode as shown, apply throttle to move.



 Press park assist switch once again, for shifting to reverse mode as shown, apply throttle to move.



 During forward movement the speed is limited to 10 km/h and during reverse speed is limited to 3 km/h

### **△** Caution

Park assist will be activated only when vehicle speed is 0 km/h.

### **DRIVING THE VEHICLE**

+ Switch on the vehicle by turning the key (8) clockwise.



 The instrument cluster will display TVSM logo and and welcome screen as shown below and it will enter into idle mode.



- + To activate the vehicle-
- Press mode switch (7) and either one of the brake switch [(4) / (14)] simultaneously until you hear a beep sound. Once the vehicle is activated, it will enter into economy mode-



Give throttle to start the vehicle in economy mode or press mode switch again to drive in power mode.

### **ECONOMY MODE**



- While in power mode, press mode switch (7) to come in economy mode.
- In this mode the Electric two wheeler is operated with the traction motor and the vehicle speed reaches up to 45 km/h.
- + We can attain more range as compared to power mode

### **POWER MODE**



- While in economy mode, press mode switch (7) to come in power mode.
- + In this mode the Electric two wheeler is operated with the traction motor and the vehicle speed reaches up to 78 km/h.
- + This mode will provide better acceleration than economy mode.

### **1** Note

User can change the mode from economy to power, while the vehicle is running by pressing mode switch (not applicable during re-generation mode).

Switch over from Power to Eco is possible only when speed is below 45kmph. Power to Eco mode change is not allowed when speed > 45kmph

### **△** Caution

Do not apply brakes while accelerating. Doing so reduces your achievable range and increases wear of your brakes.

### SIDE STAND



Side stand can be operated by sitting on vehicle with your left foot by pushing it away from the vehicle till it stops.



Mandatory accessory will be charged extra.

### **△** Caution

Never sit on vehicle when it is supported by stands. Always park the vehicle on a flat, firm surface.

### **Warning**

Always release the side stand to its full up position before moving the vehicle.

### **TOOL KIT AND FIRST AID KIT**



To assist you in performing certain aspects of periodic maintenance and emergency repairs, a tool kit is supplied along with the vehicle and it is located inside the utility box. To access the tool kit, insert the control key into seat lock and rotate it in clockwise direction. Lift and open the seat.



The tool kit consists one number each of the following. Ensure the contents of the tool kit.

- 1. 10x12 mm spanner
- 2. Tool bag
- 3. Screw driver handle
- 4. Combination screw driver bit

### 

It is recommended to use the tool kit in case of any emergency only. It is always advisable to take your vehicle to TVS Motor Company Authorised Main Dealer

### **UTILITY BOX**



Utility box is located below the seat. Lift the seat by unlocking the seat lock as explained in the previous section, to access the utility box.



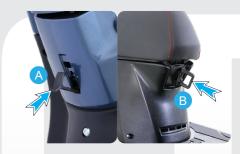
### **△** Caution

- Utility box can be used to carry a load of maximum 10 kg.
- Do not carry perishable items inside the utility box. It is not fully sealed. Do not allow / spray water inside the utility box.
- Do not keep heat-sensitive items inside as it may get hot on long rides.
- Do not keep valuable items inside the utility box when leaving the vehicle unattended.

### Warning

Operating the TVS iQube Electric S in an overloaded condition will reduce range and hamper riding stability and may lead to loss of control. Hence, it is advisable to carry the recommended amount of load only.

### **BAG HOOKS**



There are two bag hooks provided with your scooter to carry light luggage like carry bags weighing upto 3 kg. One hook is located below handle bar on the rear panel.

Just pull out the hook from the top (A) to hang your luggage. Push back the hook once it is free.

Similarly, the other one (B) is located on the cover front below front end of the seat assembly. Pull out the hook from its position. Open the top lid and hang your cargo. Lid will get close automatically. Push back the hook to its original position once it is free.

### **∧** Caution

Care should be taken not to attach the luggage which hangs out of your scooter. Please note that the luggage attached to your scooter should not interfere with your feet movement.

### **SMART PHONE CHARGER**

All new smart phone charger has been provided in the utility box of your vehicle. This will allow to charge your mobile phone as long as the vehicle key is turned on, Please follow the guidelines mentioned below for using it properly:

### DO's

 Ensure that no water enters into the unit, by closing the USB flap properly.



- Use approved, standard USB cable for charging mobile phones.
- Do make sure the flap is not damaged while opening / inserting the USB cable.

### **DON'Ts**

- Do not leave the USB charging flap open / partially closed.
- Do not attempt to use / charge any other device, other than mobile phones. Only one mobile phone should be charged at a given time.
- Do not try to force the USB connector in, check whether it is inserted in the appropriate direction, to prevent the damage to the charger.

### **△** Caution

The charging time of the mobile may vary, depending on the mobile's battery state of charge. The rubber flap in the unit has been designed to prevent water entry and is not replaceable. No warranty will be applicable for charger in case of Cover flap damaged.

### **ILLUMINATING LOGO**



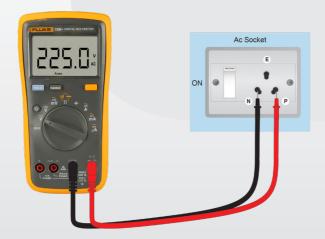
Illuminating logo will display the vehicle type name as 'ELECTRIC' during the vehicle in zero speed conditions. During charging of the vehicle, illuminating logo will blink. The LED color of the illuminating logo is Blue. Illuminating logo is mounted on the swing arm cover as shown above.

### **CHARGER SOCKET**

- The Phase, Neutral & Earth terminals should be placed as per the image.
- Use the Tester to find out the Phase line.



### **Multimeter**



- + As shown in this picture, you can check the input voltage of the available socket.
- Normally the reading would be 230 ± 5V.

### **1** Note

- Multimeter selector should be as shown in the picture for measuring AC voltage of domestic power socket.
- The selector position will vary in each multimeter brand.
- Red & Black couplers need to be connected as shown in the picture with Multimeter as well as the domestic power socket.

### **△** Caution

- You should adhere to the electric tester usage guidelines.
- Input AC voltage should be within the range of 220 to 240V.
- Need to ensure proper earth connection in the AC domestic power socket.
- · Plug the charger in Single phase AC domestic socket only.
- Do not use extension box to charge the vehicle for safety purpose.
- The charger should be stored in a clean, dry and ventilated place.
- The charger fan should be in upward direction while charging.
- Never spray water or any liquid directly on the charger.

# VEHICLE CHARGING Charger

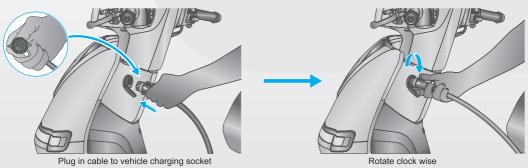


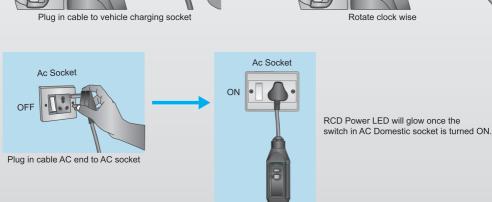
AC 3 Pin plug with Residual Current Device (RCD).



The charger shown is for representative purposes and might be different to that supplied. Depending on charger variant or rated power of charger, a 15A plug might be required for charging.

### **CONNECTING FOR CHARGING\***

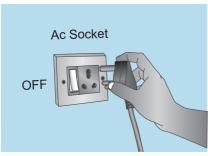




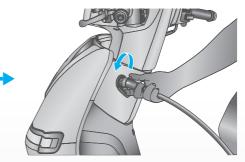
### **1** Note

If RCD LED indication is not observed while power is available in the domestic AC socket, please press 'Reset' button and the LED would glow.

### **DISCONNECTING CHARGER**



Turn off and take out cable AC end from AC socket



Rotate counter clock wise to plug out cable other end from vehicle charging socket & close vehicle charging socket cap

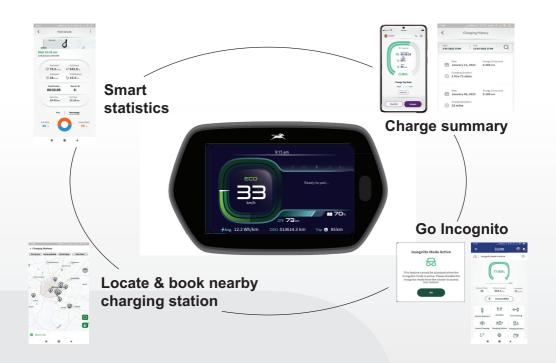
### **CHARGER DO's & DON'Ts**

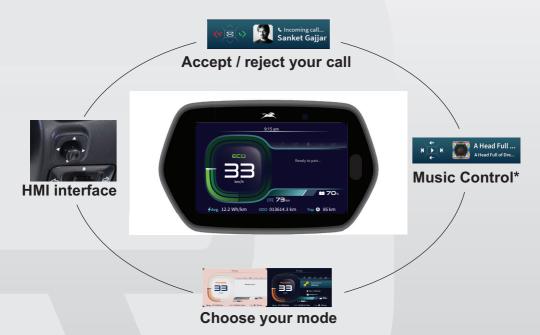
- Never use the charger with damaged housing or cable.
- Never modify a charger or open its housing.
- · Connect the charger to a regular outlet only.
- Never carry the charger by its electrical cable or pull at the cable.
- For disconnection of the charger, remove it through the plug and not by pulling the cable.
- Cables for socket must be installed and dressed neatly to avoid tripping over.
- Use original TVSM recommended spares & accessories only.
- · Never use in the oxygen enriched environments.
- Don't use flammable objects or anesthetics on or adjacent to the charger.
- Don't use the charger in the rooms and areas with high intensity of electromagnetic disturbances (Eg: Surgical equipment room, RF shielded room etc.)
- · Never immerse in water or any other liquids.
- Don't use in conditions which has radical changes in environment.
- Don't use chemical cleaning agents.
- Use dry cloth only to clean the surface.
- Disconnect the charger before cleaning the charger.
- The charger is maintenance free. In case of any faults, kindly contact the nearest dealer.
- The charger should be stored in clean, dry environment only. It should not be stored in corrosive, or with other fluids which might be harmful to it.

### **INSTRUMENT CLUSTER**

Your TVS iQube Electric S is provided with a fully digital connected instrument cluster with lots of feature and modes like Economy, Power, Parking, navigation assist, Bluetooth connected app for mobile devices, etc. Moreover your vehicle's instrument cluster is provided with several tell tales & alerts to inform you about the vehicles current condition, let us have a glimpse of them.







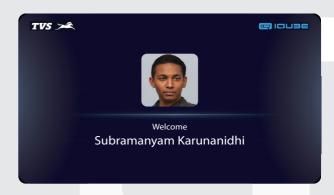
\* Tested with Spotify(TM) functionality might vary based on your application.

### **WELCOME SCREEN**

Rider name and profile picture will get updated in welcome screen.



The name and the profile picture will be same as updated in the mobile app.



### **IDLE SCREEN**

Apply brake (1) and press mode switch (2) to come out of idle mode and start riding.



### **TFT - CLUSTER TELL TALES**



- Turn signal indicator lamp left Flashes when the left side turn signal indication is activated.
- High beam indicator lamp Glows when the head lamp high beam is activated.
- 3. Side stand indicator The side stand warning indicator turns 'ON' to alert you whenever the vehicle's side stand is deployed (vehicle parked condition) and continuous beep sound will be released from the vehicle to alert the rider to retract side stand before starting the vehicle.

### Note

If the side stand is deployed the vehicle will not start. Retract the side stand to start the vehicle

- 4. Park assist indicator Park assist indicator turns 'ON' when the parking switch is pressed.
- 5. Time indicator Shows current time.
- Low battery charge indicator It is yet another unique feature of your scooter which indicates you to charge the vehicle, when the charge percentage goes below minimum safe level.
- Malfunction indicator lamp (MIL) It is turned ON
  when the ECU detects a fault in the system or
  there is an impending warning. If the malfunction
  indicator lamp ' ' is glowing continually when
  the vehicle is in drive mode, immediately contact
  the nearest TVS Motor Company Authorised Main
  Dealer or Authorised Dealer.
- 8. Turn signal indicator lamp right Flashes when

the right side turn signal indication is activated.

- Notification Shows all notifications received in your mobile
- Battery level indicator (SOC) Indicates battery charge in percentage.
- Trip A / Trip B This instrument cluster comes with two trip options Trip A & Trip B to measure to & fro distance between two locations as per your requirement.
- DTE Shows distance to empty, indicates the distance that the vehicle can go with current level of battery charge, depending on riding pattern and road load.
- 13. Odometer Shows maximum distance covered by vehicle till now
- Average energy consumed Indicates the average energy consumed since the last charged.
- Power flow indication Indicates following two condition of vehicle;
  - a. Driving condition: Vehicle is driven by motor by consuming power from the battery.
  - Regeneration condition: Indicates regeneration of power is happening.
- 16. Speedometer Indicates vehicle current speed.
- Mode display Indicates whether the vehicle in economy or power mode.

### **SELECTABLE RIDING MODES**





Economy

### **REGENERATIVE BRAKING**



It recuperates energy lost during braking / deceleration of traction motor under specified conditions and charges the battery.

Regen is a natural phenomena, it does not require to select any mode and screen changes to Regen as shown above automatically and reverts back to drive mode screen when regen deactivates.

### **DAY / NIGHT MODE**





Day/Night mode theme can be selected manually based on users preference

### **PARKING / REVERSE ASSIST**



Press Brake + Park Assist Switch to enter / exit to Park assist mode.

It reduces the effort of parking for you by allowing controlled movement of the vehicle in forward or reverse direction with minimal speed.

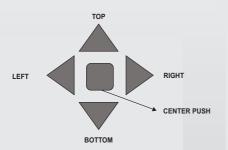


Forward condition



Reverse condition

### HMI SWITCH INTERFACE WITH TFT CLUSTER





To operate the menu screens on the cluster, the HMI switch is used in the following manner:

- Top and Bottom To scroll the menus
- Centre To enter into menu screen / To enter into selected menu
- Left To go back to previous screen
- Right To scroll the widgets in the selected menu in horizontal direction

#### **CONNECTED DRIVE SCREEN**



- Call notification ' '- Shows incoming caller's detail on the screen when it is connected to the bluetooth of your phone.
- Message notification ' Shows the arrival of the message on the screen. Does not display the content.
- 3. Bluetooth '\*\* '- Indicates vehicle is connected with rider's mobile via mobile app.
- Mobile battery level indicator ' Indicates rider's mobile battery level once connected with vehicle via bluetooth.

#### **TURN BY TURN NAVIGATION**

Instrument cluster displays navigation instructions of your desired destination while connected with your smart phone app, just connect and get turn by turn navigation directly on your display.

It indicates the following details,

- 1. Navigation instructions
- Estimated time of arrival
- Distance left



#### **BATTERY CHARGE LEVEL & DTE**

Battery level indication helps you to know how much battery charge is left in the vehicle by displaying percentage of SOC (Stage of Charge).

DTE (Distance to Empty) helps the user to know how much distance can be travelled with the remaining battery charge.



#### **PLUG IN CHARGING**

Plug in charging helps user to charge the vehicle battery with the help of included charger.



# **1** Note

DTE is an estimation which varies based on the rider's driving pattern.

#### **GENERAL SETTINGS**

You can personalize the display settings which includes Date, Display Brightness, Fully adaptive, Day and Night mode.

#### **DATE SETTINGS**

Date can be either tuned ON or OFF.

To tune the display brightness,

- 1. Go to Menu
- 2. Select General Settings



3. Select Display Settings



4. Select On or OFF.



#### **DISPLAY BRIGHTNESS SETTINGS**

Display brightness can be either tuned automatically by the help of ambient light sensor or tuned manually from low to high and vice versa.

To tune the display brightness,

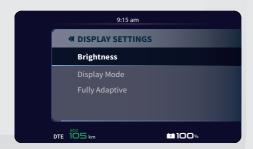
- Go to Menu
- 2. Select General Settings



3. Select Display Settings



4. Select Brightness option



5. Select either Adaptive or Manual options



If manual option is selected, tune manually from low to high or vice versa and save it



### **DISPLAY MODE**

In display mode, you can chose between day and night mode.

To Set the display mode,

- 1. Go to Menu
- 2. Select General Settings



3. Select Display Settings



4. Select Display option



5. Select either day or night mode.



#### **DAY MODE DISPLAY**



#### **NIGHT MODE DISPLAY**



#### **FULLY ADAPTIVE MODE**

In fully adaptive mode, both day/night and brightness gets adjusted automatically with the help of ambient light sensor.

To Set the fully display mode,

- 1. Go to Menu
- 2. Select General Settings



5. Select either On or Off.



3. Select Display Settings



4. Select Display option



### **CLUSTER SOUND SETTINGS**

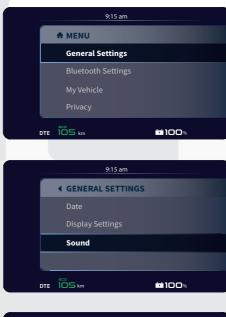
The cluster sound can be turned ON or OFF.

To turn ON or OFF cluster sound,

- 1. Go to Menu
- 2. Select General Settings

3. Select Sound option

4. Select either ON or OFF





#### **CONNECT BLUETOOTH WITH MOBILE APP**

Connect with instrument cluster using mobile app to get access through various features like message notification call accept / reject options etc. on the go.

Telematic unit is used for identifying the vehicle location.

Ride Data Sync (optional) helps you to know about your ride data and many other functions on the mobile app.

To connect bluetooth with mobile app,

- 1. Go to Menu
- 2. Select Bluetooth Settings



3. Select Device name



4. View your device name



Refer page no. 54 for how to connect with smart phone, TVS Connect app, etc.

#### **MY VEHICLE**

From the 'My Vehicle' option in the MENU, to check any active errors, follow the below steps.

To check Error details,

- 1. Go to Menu
- Select My Vehicle option





4. You can check error details



# **Error List and Warning Messages**

| SI. No. | Error / Warning Code | Description to be Displayed   |  |
|---------|----------------------|---|--|
| 1       | B1Warning 000        | B1Warning 000 - Restart the vehicle   |  |
| 2       | B1Warning 001        | B1Warning 001 - Restart the vehicle   |  |
| 3       | B1Warning 002        | B1Warning 002 - Restart the vehicle   |  |
| 4       | B1Error 003          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 5       | B1Error 004          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 6       | B1Error 005          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 7       | B1Error 006          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 8       | B1Error 007          | Battery at most critical condition. Please exit the vehicle and stand far away from it. |  |
| 9       | B2Warning 000        | B2Warning 000 - Restart the vehicle   |  |
| 10      | B2Warning 001        | B2Warning 001 - Restart the vehicle   |  |
| 11      | B2Warning 002        | B2Warning 002 - Restart the vehicle   |  |
| 12      | B2Error 003          | Contact Road Side Assistance (Call - 18002587111)                                       |  |

| SI. No. | Error / Warning Code | Description to be Displayed   |  |
|---------|----------------------|---|--|
| 13      | B2Error 004          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 14      | B2Error 005          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 15      | B2Error 006          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 16      | B2Error 007          | Battery at most critical condition. Please exit the vehicle and stand far away from it. |  |
| 17      | B3Warning 000        | B3Warning 000 - Restart the vehicle   |  |
| 18      | B3Warning 001        | B3Warning 001 - Restart the vehicle   |  |
| 19      | B3Warning 002        | B3Warning 002 - Restart the vehicle   |  |
| 20      | B3Error 003          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 21      | B3Error 004          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 22      | B3Error 005          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 23      | B3Error 006          | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 24      | B3Error 007          | Battery at most critical condition. Please exit the vehicle and stand far away from it. |  |
| 25      | Error 008            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 26      | Error 009            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 27      | Warning 006          | Vehicle needs to cool down.   |  |
| 28      | Warning 007          | Vehicle needs to cool down.   |  |
| 29      | Error 010            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 30      | Error 011            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 31      | Error 012            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 32      | Error 013            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 33      | Error 014            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 34      | Error 015            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 35      | Error 016            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 36      | Error 017            | Contact Road Side Assistance (Call - 18002587111)                                       |  |
| 37      | Error 018            | Contact Road Side Assistance (Call - 18002587111)                                       |  |

#### **UPLOAD DIGITAL DOCUMENTS**

Under 'My Vehicle option' in the MENU, you can upload 3 digital documents.

To upload digital documents,

- 1. Go to Menu
- 2. Select My Vehicle option



3. Select Digital Documents option



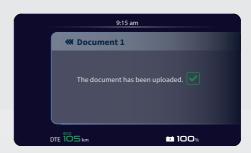
4. You can upload digital document



5. Uploading status will be displayed



After completion, status shows 'The document has been uploaded'



# **TYRE PRESSURE MONITORING SYSTEM (TPMS)\***

You can check for the chosen TPMS from the My Vehicle option.

To check the chosen trip meter readings,

- 1. Go to Menu
- 2. Select My Vehicle option



3. Select TPMS option



4. You can view the tyre pressure of your vehicle.



To be released in the future

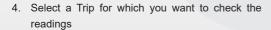
#### TRIP METER READINGS

You can check for the chosen trip meter readings from the My Vehicle option.

To check the chosen trip meter readings,

- 1. Go to Menu
- 2. Select My Vehicle option

3. Select TRIP METER option





9:15 am

9:15 am

100%

**iii** 100%

**♠** MENU

105 km

My Vehicle

**MY VEHICLE** 

TRIP METER

DTE 105 km

You can check the chosen trip meter readings in the display and press center button to reset the trip meter



#### **SOFTWARE\***

The software of your vehicle can be updated remotely whenever a new software is released via OTA (over the air). The update gets downloaded via telematic unit automatically, when the update is available.

OTA software is downloaded in the background if good network connectivity is available. However, in case you are aware of a new campaign being released and still update has not come to your vehicle, then please follow the below steps (Step 1 and Step 2) otherwise skip to Step 3.

- Step 1: In case where a new OTA update campaign is released, but it has not yet downloaded on a specific vehicle, ensure that the vehicle is parked in an area with good mobile data connectivity for downloading the OTA software package.
- Step 2: If download is not completed (showing blue dot as mentioned in Step 3), switch the vehicle ON and keep it in idle condition for 20 minutes (To ensure the software package is downloaded by the TCU and stored in its memory).
- Step 3: Check the Blue/ Green dot in Cluster (Centre push the Joystick) -> My vehicle -> Software.

  Operate through HMI joystick.





Step 4: **Blue dot** indicates that SW package is downloading, **green dot** indicates SW package downloaded and ready to flash. If Blue dot is there, wait for it to **turn green**.



To be released in the future

Step 5: If the green dot is available, then proceed for flashing. Cluster (Centre push the Joystick) -> My vehicle -> Software -> Update -> Update. User must provide consent two times for the software flashing to initiate.

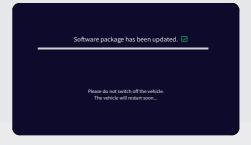




Step 6: Please wait for 4sec for flashing screen to come after the update is clicked for the second time.

Step 7: Wait for up to 30 minutes (depends on the software package) for successful OTA software update of the intended control units. Check for second image below for 'Software package has been updated' which indicates successful OTA software update.





Step 8: After successful flashing, vehicle might restart depending on the controller updated. After restart wait for a minute or 2 and check for Software version in Cluster -> My vehicle -> Software -> Software

Version.





If the green dot is available and there is no SW version displayed in cluster

- O Click Update and check after 30 minutes for successful flashing of vehicle. Ensure screen has changed to software flashing progress screen.
- O Next, check for SW version in Cluster -> My vehicle -> Software -> Software Version
- O If the version has changed compared to the previous software version, the vehicle is loaded with updated software.

### Process followed by TCU if OTA flashing fails:



- If OTA update has failed, Cluster will display Software installation failed message and screen will transform to idle screen after 5 seconds.
- TCU will start flashing the baseline software for VCU, BMS, MCU & TCU after 10-15 min without any intervention from the user, this is called Rollback Flashing.
- 3. Rollback flashing will be only attempted 3 times, before being considered complete failure.
- 4. After rollback flashing starts, screen will change to Software update progress.
- 5. Rollback flashing will be completed within 30-35 minutes depending on the baseline package size.
- 6. Same DO's and DON'TS for regular flashing to be followed.
- 7. The overall time taken from general OTA failure to complete rollback flashing is around 45 minutes.
- 8. TCU will take up to 15 minutes to start flashing rollback software from failure time.
- 9. If the OTA rollback flashing fails consecutively after 3 retries, then rollback will not be attempted furthermore.
- 10. For recovery in case of OTA and Rollback failure, diagnostic tool must be used to flash the ECU's.

#### DOS:

- Though software download happens in the background while riding or while parked if vehicle is in charging or ignition in ON condition, parking the vehicle in good network coverage area may provide faster downloading of Software to vehicle.
- Please charge the vehicle to at least 20% before attempting to update the Software.
- Keep the vehicle in Idle mode before approving software update.
- Keep the vehicle Ignition in ON condition while updating, even if the screen goes blank or vehicle stops responding, wait for at least 30 min. This ensures that the maximum time taken for flashing of all controllers is covered.
- Ensure that the vehicle is not disturbed during entire flashing process (Do not use throttle, side stand, switches etc.)

#### DONT's

- DO NOT switch OFF the vehicle once software update process has started.
- DO NOT move the vehicle till the software update completes, keep the vehicle in Idle position.
- DO NOT switch OFF the vehicle ignition if update is clicked in the software screen.
- DO NOT connect charger if update is clicked in the software screen.
- DO NOT turn off the ignition anytime during OTA update or rollback, even if the display goes blank or the update seems stuck.

#### **NOTIFICATIONS PRIVACY SETTINGS**

You have an option to enable and disable the connected notifications - call, messages and other notifications

To enable or disable the connected notifications,

- 1. Go to Menu.
- 2. Select Privacy option.



3. Select Connectivity option.



 Select either 'Display Calls' or 'Display Messages' or 'Notifications' option from the drop down to enable or disable them.



5. Turn On or Off 'Display Calls' notifications.



6. Turn On or Off 'Display Messages' notifications.



7. Turn On or Off other 'Notifications'.



#### **LOCATION PRIVACY SETTINGS**

You have an option to enable and disable the location services using incognito mode.

To enable and disable the location services,

- 1. Go to Menu.
- 2. Select Privacy option.



3. Select Incognito Mode.



 Turn On or Off the Incognito Mode to enable or disable the location services.



# **△** Caution

Connected services, even if subscribed to, such as live tracking, geofencing, etc. will not work if incognito mode is active

#### **PROFILE SETTINGS**

Profile is same as entered by you in the mobile app.

To view your profile details,

- 1. Go to Menu.
- 2. Select Profile option.

- You can view the below details entered in the mobile app.
  - 1. Profile picture
  - 2. Name
  - 3. Software Version





#### **BATTERY WARNING**

Incase of any critical battery issue, the instrument cluster will display the bellow message. Requesting to step far away from the vehicle.





Mobile phones can be connected with vehicle instrument cluster using Bluetooth, which helps you to know about your ride data and many other functions. Once Bluetooth connection is established between instrument cluster and mobile phone, Bluetooth symbol will glow.

Your vehicle also comes with a Telematic unit. This Telematic unit is under the concept of TVS and it is equipped with electronics to monitor and transmit various vehicle data such as battery, motor and other electrical systems. The vehicle data allows for various remote function services, some them are following.

- + Remote monitoring of charging status The charging status of the vehicle can be checked using your internet enabled smart phone (#TVSM APP name) even if you are not near to vehicle.
- + Live tracking The live status of the vehicle can be checked remotely at any time using TVS mobile app prescribed for this vehicle.
- Geo-fencing The telematics system can be set to provide alerts if your vehicle is moved out of a set geographical boundary (can be defined through mobile app).
- Theft notifications The telematic system can be used to track unauthorised usage but cannot prevent it. The system will notify the unauthorized movement of a vehicle with live location status. The notifications can be checked on the mobile app.
- Voice assist The voice assist can be use your voice to control or know status of various functions like ncrease instrument cluster brightness, what is the charging status etc.

Scan QR codes for downloading the mobile app and then follow on screen instructions.





Note

Android

iOS

"TVS Motor Company Ltd. does not recommend usage of any type of Mobile Hand Held Devices, and applications / features whether installed or associated with the vehicle which deprives the rider's attention and focus while riding the Two Wheeler. The customers and riders are strictly advised to understand the applicable laws, road safety Rules and the local laws on usage of electronic devices while operating the vehicle. Usage of any Mobile or hand held devices, and /or applications / features while riding the vehicle is on move is totally at customer's / rider's risk. The product and features have technical limitations and are for general overview only."

# Bluetooth parring First time bluetooth paring

To pair your Android smart phone or iPhone with your TVS iQube Electric S connected instrument cluster, via Bluetooth, for the first time, follow the procedure as described below:

- 1. Switch 'ON' the vehicle.
- Instrument cluster can be in any mode for first time pairing.
- Open the app and press the 'CONNECT' tab, ensure the smart phone is near to the vehicle.
- The app searches for all Bluetooth devices near by and displays the list of devices available.
- The connected instrument cluster's Bluetooth name is prefixed by TVS IQUBE and followed by alpha-numeric digits. Ex: 'TVS IQUBE DEC3574'. This Bluetooth name can be found by changing the cluster mode into BT pair mode.
- Now, select the 'TVS IQUBE DEC3574' in app to initiate the pairing process.
- 7. On pairing, a Bluetooth icon '\$; phone's battery icon 'n' and signal strength icon 'n' will be displayed on the speedometer's TFT display. In Addition to this icons, will be displayed on connected instrument cluster TFT display.
- 8. For initiating first time pairing, logout from the app, login again using your login credentials and then press 'CONNECT'.

# **1** Note

During the course of pairing process, if there is any occurrence of error, the connected instrument cluster should be turned 'OFF' and 'ON', and the application also need to be restarted.

Please remember that all the smart phones are not compatible for pairing with the TVS iQUBE connected instrument cluster.

During the search of Bluetooth devices in app, if the vehicle connected instrument cluster's Bluetooth device ID is not visible, try for one or two more iterations.

# **1** Note

Any number of Android phones can be auto-paired with the instrument cluster, but only one at any point of time will be actively connected with the speedometer.

Only one iPhone can be auto-paired with a single instrument cluster at a time. If the user need to connect multiple iPhones with the single instrument cluster, the previous connected iPhone has to be forgotten by clicking, 'Forget This Device' from Bluetooth settings in the iPhone.

If the vehicle battery is reset or fuse is blown, then 'Forget This Device' from Bluetooth settings.

### Steps to "Forget This Device" in iPhone:

If the user needs to connect multiple iPhones with the single instrument cluster, the previous iPhone has to be forgotten using "Forget This Device" from Bluetooth settings in the following manner:





- In the previous connected iPhone, open the SETTINGS -> BLUETOOTH.
- Select the instrument cluster, which was connected previously.
- 3. Click on the "Forget this device".



# **Auto pairing**

Once the first time pairing is done between vehicle's instrument cluster and your smart phone, the phone will automatically connect with the vehicle when the following conditions are met:

- 1. Vehicle is switched 'ON' and vehicle is near to the smart phone.
- 2. Smart phone's Bluetooth is turned 'ON'
- 3. First time pairing is ensured.
- In case of iPhone, the 'TVS iQUBE' app should be open or be open in background for auto-pairing to happen.

Every time auto-pairing happens, app will open automatically and connect with the Instrument cluster. The connected instrument cluster's display shows 'iQube is now connected'.



If the phone enters battery saver mode, auto-pairing might not happen. It takes maximum of five minutes for auto-pairing and it can happen in vehicle running or in idle condition.

Auto-pairing happens only if the application is locked in the RAM in multitasking screen of the phone which has customized OS (Ex: MI, Vivo etc.)

In case of Android phones with Android OS version above 8.0, for App to work seamlessly, any battery optimization setting to be removed in the TVS Connect App and GPS shall be allowed to run in background in high accuracy mode.

Even if your phone's Bluetooth is already paired to other gadgets like smart watch, health band or helmet, the auto-paring works with your TVS iQube's connected instrument cluster.

If the application unfortunately stops due to unforeseen circumstances, close and reopen the application and do the manual pairing for the first time, then auto pairing will happen subsequently.

For first time pairing, logout from the app, login again with your login credential and press 'CONNECT' tab.

Once the connected instrument cluster of your TVS iQube is connected with your smart phone, the connected instrument cluster displays Bluetooth icon, your mobiles battery level icon and network providers signal strength icon.



Incase multiple SIM cards are used in smart phone, by default, SIM 1's network provider's signal strength is shown in the display of connected instrument cluster.

Signal strength displayed in the connected instrument cluster might vary from the display in smart phone as the former is referred from telephonic standards.

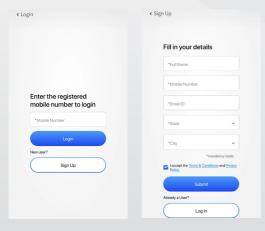
## How to login

On opening the TVS iQube Electric S app the following introductory screens will be displayed.



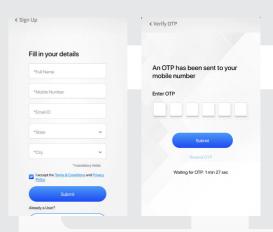


Move to the last screen where you will find the 'SIGN UP' and 'LOGIN' tab. If you are having login already then press login tab. A screen with various login options opens-up as shown.

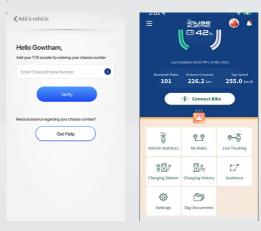


You can login using your mobile number which has been registered already.

If you are a new user then press the "Sign up" tab where you will find registering using your mobile number. A screen opens with various input details. Feed in your details and submit. On submitting the details a screen opens with one time password (OTP) entry.



Enter the OTP which is received from TVS Motor Company Limited and submit. On submitting the OTP, another screen opens where you have to enter your vehicle's chassis number for verification.



After successful verification of your chassis number, the Home screen of the app opens.



Please remember that the Navigation License has to be renewed after 5 years of vehicle purchase and renewal can be done by contacting near by Dealer end.

#### **INCOMING CALL ALERT**



Once mobile app is connected with vehicle instrument cluster, incoming call options (1) will be shown in instrument cluster while you are riding the vehicle as shown above

If it's an important call, you can pull over safely and attend to it. If it's not, then just keep riding.

- Push the HMI switch towards right (2) to accept the call.
- Push the HMI switch towards Left (3) to reject the call.



- Call duration (1) will be shown in the instrument cluster.
- If you receive a second call, push the HMI switch towards Left (2) to reject the second call.

#### **MESSAGE ALERT**



Once mobile phones connected with vehicle instrument cluster, incoming messages notification (1) will be shown in instrument cluster while you are riding the vehicle as shown above.

#### **SOCIAL MEDIA NOTIFICATIONS**





The screen displays only the number of messages, conversations or notifications of social media.

#### **MUSIC CONTROLS\***

Music playing in the connected smart phone will be displayed in the instrument cluster and it can be controlled using HMI switch.

To select the song or adjust the volume, the HMI switch is used in the following manner:

- Top (T) To Increase volume
- Bottom (B) To Decrease volume
- Centre (C) To Pause / Play
- Left (L) To Play previous song
- Right (R)

   To Play next song



Check the youtube link for better understanding <a href="https://youtu.be/da3jzXDoQbQ">https://youtu.be/da3jzXDoQbQ</a>

<sup>\*</sup> Tested with Spotify(TM) functionality might vary based on your application.

#### **VOICE ASSIST\***

Introducing 'Hey TVS' voice assist feature. This will enable iQube customers to speak out certain commands after invoking with 'Hey TVS' and execute tasks handsfree.

Voice assist can also be invoked by the following methods

- By long centre push of HMI switch. (This will work only when vehicle is connected via Bluetooth to iQube mobile application and application is not in power saving mode).
- By pressing the voice assist icon in the app live dashboard as shown on the image. This will work irrespective
  of vehicle is 'ON/OFF'



Voice assist usage and activation for the first time would require download of a large data file.

Location, Microphone, Files & Media Storage, Accessories, Call & Bluetooth, or any other requested permissions need to be granted with ALLOW ALL THE TIME selected, for proper functioning of all iQube app and voice assist functions.

Voice assist will work with screen lock condition /app background condition.

Use wired / wireless headphone for listening and talking.

Option to enable / disable voice assistant and voice feedback is available in App settings.

After invoking voice assist, "Hello, How can i help you?" will appear on the screen and a speak now will be heard on the headset

This is when we have to start speaking / providing the command.

The following are the list of intents recognized by voice assist.

\* Voice assistance functionalities might not be available in all variants and is part of additional software subscription package.

# Voice assist commands and key words

| S. No. | Domain                            | Function                            | Example Commands   | Remarks   |
|--------|-----------------------------------|-------------------------------------|--|---|
| 1      | Navigation                        | Search by<br>Place Name             | Hey TVS, Take me to Bangalore Navigate me to Bangalore Take me to forum mall in whitefield Start navigation to   | -   |
| 2      | Navigation                        | Nearby POI                          | Hey TVS, Find an ATM nearby Take<br>me to nearest petrol pump Locate a<br>restraunt nearby find a place to hang<br>out Navigate to nearest charging<br>station | -   |
| 3      | Navigation                        | ETA, EDR                            | Hey TVS, How long till we reach the destination What is the ETA How much distance is left How much time remaining to reach destination                         | -   |
| 4      | Navigation                        | Location awareness                  | Hey TVS, where are we<br>What is my location?<br>Where am I?   | -   |
| 5      | Navigation                        | Resume/<br>Pause/Stop<br>Navigation | Hey TVS, pause /resume/stop<br>navigation  | Pausing and resumption of navigation might have difficulty in some Android devices. |
| 6      | Navigation                        | Voice Alerts                        | Hey TVS, Mute Navigation Voice Alerts  | In Android this will mute the system volume.  |
| 7      | Command & Control                 | Last parked location                | "Hey TVS, Where are you? Where is my vehicle? Find my bike/vehicle?"   | -   |
| 9      | Command &<br>Control              | Show Distance to Empty/ Range       | "Hey TVS, how far can I travel<br>Show Range<br>Show DTE"  | -   |
| 11     | Command & Control                 | Top/<br>Average<br>Speed            | Hey TVS, What is my top speed?   | -   |
| 12     | TTS (Text<br>To Speech<br>alerts) | TTS Alerts<br>for over<br>speed     | TTS alerts for overspeed based on limit set by the user in the app   | -   |
| 14     | Greeting                          | Greeting                            | TTS Message: Hello/Hi Rithik, You are now connected to the vehicle.  | -   |
| 15     | Call/SMS                          | Incoming call notify                | TTS Message  | -   |

| S. No. | Domain            | Function                        | Example Commands  | Remarks  |
|--------|-------------------|---------------------------------|---|--|
| 16     | Call/SMS          | Make call<br>single<br>match    | "Hey TVS , Call Bala Dial Bala<br>Make a call to Bala Give a call to<br>Bala Can u pls call Bala"                                     | -  |
| 17     | Call/SMS          | Accept /<br>Reject Call         | Hey TVS, Reject Call Decline/<br>Decline call   | This feature is dependent on<br>limitations set by your phones<br>manufacturer and might have<br>limited support for your phone. |
| 18     | Call/SMS          | Make call<br>multiple<br>match  | "Hey TVS , Call Bala Dial Bala<br>Make a call to Bala Give a call to<br>Bala Can u pls call Bala"                                     | This feature will not work in iOS if app is in background.   |
| 19     | Call/SMS          | Call Log                        | "Hey TVS, Whom did I call last, Whom did I talk to last, Who called me last, Who is my last caller"                                   | This feature has limited functionality in iOS.   |
| 20     | Call/SMS          | Dial a<br>Number                | "Hey TVS, Call 10 digit number Dial "" a number"" Make a call to Give a call to I would like to speak to                              | Manual consent by user is required to use this feature in iOS  |
| 21     | Call/SMS          | TVS<br>Service                  | Hey TVS, Call TVS Service   | Manual consent by user is required to use this feature in iOS  |
| 22     | Command & Control | DND                             | "Hey TVS, Enable / Disable Do<br>Not Disturb Mode<br>Enable/disable DND mode Turn<br>on/ Off DND mode Turn on/ off Do<br>not disturb" | This feature has limited functionality in iOS  |
| 23     | Phone<br>Settings | Announce low battery            | TTS Message   | -  |
| 24     | Phone<br>Settings | Announce<br>poor<br>network     | TTS Message   | -  |
| 26     | Media<br>Control  | Volume<br>control               | "Hey TVS, increase/decrease/<br>reduce volume<br>Increase decrease volume to max/<br>min"   | Bluetooth headsets yet to be supported.  |
| 27     | Weather           | Weather<br>forecast<br>specific | "Hey TVS, will it rain now/Is there<br>any chance of rain today<br>When will it stop raining How is<br>the weather"                   | -  |

| S. No. | Domain               | Function                                      | Example Commands   | Remarks   |
|--------|----------------------|---|--|---|
| 28     | Weather              | Weather<br>related<br>queries<br>non-specific | "Hey TVS, Give me weather updates for Sunday/any day or time How is the weather How the weather is going to be Sunday/tomorrow/today/time"   | •   |
| 29     | Weather              | Weather<br>Report                             | "Hey TVS, Give me weather<br>updates of Bengaluru for Sunday/<br>any day or time How is the<br>weather in Bengaluru<br>How the weather is going to be<br>Sunday/tomorrow/today/time"                 | -   |
| 30     | WuW*                 | sos   | SOS (SOS will work as a wake up word)  | User consent is required for calling (Dialing 112)  |
| 32     | Command &            | Geofence                                      | Hey TVS, Create a geofence of 1 km   | -   |
| 33     | Command &<br>Control | Battery<br>Query                              | "Hey TVS, What is the battery<br>SOC What is my battery level<br>How much is my battery/vehicle/<br>bike/iQube charged?"   | -   |
| 34     | Command &            | Charging<br>Status                            | Hey TVS, What is my charging status Is my vehicle charging   |   |
| 35     | Command &            | Time to full charge                           | Hey TVS, How much time to charge full When will my vehicle be full charged   | -   |
| 36     | Command & Control    | Odometer<br>Value                             | Hey TVS, What is my odometer value   | -   |
| 37     | Command &<br>Control | Overspeed<br>Threshold<br>Query               | Hey TVS. What is my overspeed value  Hey TVS. turn on/off overspeed alert  Hey TVS. Enable/disable overspeed alert  Hey TVS. set overpeed alert to 90 KMPH  Hey TVS. put overspeed alert at 100 KMPH | If user gives out of range value it shows as setting up response but later there is TTS as overspeed can be configured between 40 to 70 km/hr |

<sup>\*</sup> This is only provided as an accessory feature and is not intended for use in any emergency scenario. TVS does not bear any liability and its representatives, employees, and affiliates shall not be held responsible or liable for any damages, losses, injuries, or claims arising from your use of our services.

| S. No. | Domain               | Function                               | Example Commands   | Remarks  |
|--------|----------------------|--|--|--|
| 38     | Command & Control    | Incognito<br>status<br>query           | Hey TVS, What is my incognito status   | -  |
| 39     | Command & Control    | Trip meter                             | Hey TVS, Reset trip A/B.   | -  |
| 40     | Vehicle<br>Control   | Hey TVS,<br>Connect to<br>the vehicle  | "Connect to the vehicle Connect<br>me to the vehicle Connect my<br>vehicle<br>Pair with the bike<br>Start connection to vehicle" | -  |
| 41     | Media<br>Control     | Hey TVS,<br>mute /<br>unmute<br>volume | Mute/unmute volume/sound   | Bluetooth headsets yet to be supported.        |
| 42     | Call/SMS             | Hey TVS, Call Emergency services *     | "Hey TVS, Call SOS<br>Call emergency services"   | -  |
| 43     | Call/SMS             | Hey TVS,<br>Enable<br>Auto SMS         | "Hey TVS, Enable Auto SMS Hey<br>TVS, Turn on Auto SMS<br>Hey TVS, Turn on Auto<br>Messages"                                     | This feature has limited functionality in iOS. |
| 44     | Call/SMS             | Hey TVS,<br>Disable<br>Auto SMS        | "Hey TVS, Disable Auto SMS Hey<br>TVS, Turn off Auto SMS<br>Hey TVS, Disable Auto Messages"                                      | This feature has limited functionality in iOS. |
| 45     | TTS                  | TTS for end ride                       | TTS Message: Rithik, your ride has ended.  |  |
| 46     | Command &<br>Control | Trip meter                             | "Hey TVS, Reset trip A/B."   |  |

# **1** Note

The list of commands and intent will be updated periodically and might change, the list mentioned here is for representative purposes only. Please refer to the command list mentioned in the mobile app to stay updated.

\* This is only provided as an accessory feature and is not intended for use in any emergency scenario. TVS does not bear any liability and its representatives, employees, and affiliates shall not be held responsible or liable for any damages, losses, injuries, or claims arising from your use of our services

## Things to do while using voice assistant:

- 1. We recommend to use ANC (Active Noise Canceling) Bluetooth devices for better performance.
- 2. Ensure Microphone is kept near to your mouth while giving out commands.
- Please ensure that it is not exposed to outside environmental noise such as wind noise, other vehicles' noise etc.
- 4. We recommend you to go through the sample command list before trying your intent.
- 5. Kindly refer to the voice feedback of the detected place name when you provide voice command for navigation.

## Things not to do while using voice assistant:

- 1. We recommend you not to use the method of invoking voice assist through mobile App while riding.
- 2. Please do not use voice assist functionality during heavy traffic condition.

#### **Terms & Conditions**

- SmartXonnect feature is now enhanced with Voice Assistance capability. This will enable the user to control
  certain characteristics of the vehicle in a safe manner.
- Customers can use the voice commands listed as part of the voice assistance feature to improve their riding experience.
- SmartXonnect Voice Assistance is intended to minimize the use of Mobile phones while riding, in turn
  providing an exciting experience with the Bluetooth enabled system. We recommend users to take caution
  when providing voice commands.
- SmartXonnect Voice Assistance can be experienced with the help of following entities TVS iQUBE App, TVS iQube and a suitable Bluetooth accessory having a microphone and speaker. Users are recommended to wear certified helmets always while riding.
- · In cases where customer uses a Bluetooth neckband or headset, it is recommended to always wear helmet.
- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc., and any use
  of such marks by TVS Motor Company Limited., is under license.
- Customers must always be cautious of the surroundings when using the SmartXonnect Voice Assist feature, especially while crossing intersections, in traffic, etc. Customers must always observe the roadway, signs, and signals carefully. Lack of attention can cause serious injury or loss of life. TVSM is not liable for any such mishaps.
- Customers must always obey traffic laws while riding. TVSM is not liable for any penalty caused due to user's lack of caution in obeying traffic laws
- Costs of network communication and communication equipment necessary for the use of SmartXonnect voice assist feature shall be borne by the user himself/herself.
- Some smartphones may not be compatible with the SmartXonnect Voice Assistance feature. We shall not
  be liable if there is delayed response from the voice assistance feature due to poor internet connection or
  the phone's performance limitations.
- Use of mobile phones while riding is not safe and is prohibited as per Motor Vehicle law and rules as framed by central / state governments. Hence, Customers should not use the mobile phone while riding. We shall not be liable for any penalties, damages for any violation or trouble in the use of smartphone while riding.
- Bluetooth hands free devices are not included as part of the package
- If you are unsure, proceed with caution. Always use your own good judgement, and obey traffic laws while riding
- Changes in operating systems, hardware, software, and other technology integral to providing SmartXonnect
  Voice assistance feature, as well as new or revised governmental regulations, may result in a decrease or
  cessation of SmartXonnect Voice assist functionality and services. TVSM cannot and does not provide any
  warranty or guarantee of future SmartXonnect Voice assist performance or functionality.

### **Alexa Skill**

You can use Amazon alexa to know the status of your vehicle like location, battery status etc.

To activate TVS iQube in alexa in your alexa app. follow the below steps. Download the alexa app via play store for android or app store for iphone.

# **1** Note

It takes at-least 2 working days to activate Alexa post on-boarding and registration of vehicle on mobile app or purchase of subscription.

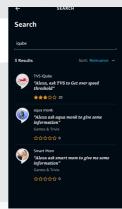
Open alexa app.



Click on Your smart home skills.



Search for TVS iQube.



Click on launch. and provide notification permission.



 Enter the registered mobile number and enter OTP to verify.



# **1** Note

Alexa(TM), Amazon(TM) are registered trademarks of their respective companies and doesn't imply any connections or endorsements by them.

# Alexa skill commands and key words

| S. No. | Command                 | Utterances   |  |
|--------|-------------------------|--|--|
| 1      |                         | What is the battery level?                               |  |
|        | Battamy SOC             | What is the SOC?   |  |
|        | Battery SOC -           | How much is my vehicle / iQube / bike charged?           |  |
|        |                         | Can I take iQube out?                                    |  |
|        |                         | When did I ride last?                                    |  |
|        |                         | When did we go for a ride?                               |  |
|        |                         | When did I take my vehicle out?                          |  |
| 2      | Last updated time stamp | Did we go out yesterday or any other date?               |  |
|        |                         | When did I go out last time?                             |  |
|        |                         | When did we connect last?                                |  |
|        |                         | When did you last updated yourself?                      |  |
|        |                         | Where are you?   |  |
|        |                         | Where is my vehicle?                                     |  |
|        |                         | What is your/my location?                                |  |
| 3      | Location                | Where is my vehicle located?                             |  |
|        |                         | Where will I find you?                                   |  |
|        |                         | Find mu iQube/ vehicle/ bike                             |  |
|        |                         | I can't find my bike / vehicle/ iQube                    |  |
| 4      | Battery status          | What is the charging status                              |  |
| 4      |                         | Is my vehicle on charge / charging?                      |  |
|        |                         | What's my incognito status?                              |  |
| 5      | Incognito mode Status   | IS incognito status ON/ OFF?                             |  |
|        | Incognito mode Status   | Can I currently track my vehicle?                        |  |
|        |                         | Can I know the current location of my vehicle?           |  |
| 6      | Get Top speed           | What is/was the top speed of my vehicle?                 |  |
|        |                         | What was my top speed in the last ride?                  |  |
| 7      | Get Average Speed       | What was my average speed?                               |  |
|        |                         | How long did I ride?                                     |  |
| 8      | Total Drive Time        | How long was our last ride?                              |  |
|        |                         | How much time did I spend riding last?                   |  |
| 9      |                         | When was my vehicle last charged?                        |  |
|        | Get Last Charged Date   | When did I last charge my vehicle?                       |  |
|        |                         | Did I charge my vehicle today/ yesterday?                |  |
|        |                         | How much energy was consumed in the last charge          |  |
| 10     | Get Energy Consumed     | How much energy was consumed by bike in the last charge? |  |
|        |                         | How much energy was consumed by bike?                    |  |

| S. No. | Command                  | Utterances  |  |
|--------|--------------------------|---|--|
|        |                          | How long did I charge my vehicle?                                   |  |
|        | Cat Last Channa Dunation | How long did it take to charge?                                     |  |
| 11     | Get Last Charge Duration | What was the charging duration last time?                           |  |
|        |                          | For how long was the vehicle charging?                              |  |
|        |                          | What are Geofences created?   |  |
|        |                          | What are my vehicle boundaries?                                     |  |
| 12     | Geofence list            | How many Geofences are available for my vehicle?                    |  |
|        |                          | Is there any Geofence created?                                      |  |
|        |                          | Are there any boundaries of my vehicle?                             |  |
|        |                          | Create Geofence.  |  |
| 13     | Create Geofence          | Create a circular boundary  |  |
|        |                          | Create circular geofence  |  |
| 14     | Rename Geofence          | Rename Geofence   |  |
|        |                          | Delete Geofence   |  |
| 15     | Delete Geofence          | Delete Geofence "name"  |  |
|        | Delete Geolefice         | Delete boundary "name"  |  |
|        |                          | Delete boundary   |  |
|        |                          | Show Range  |  |
|        |                          | Show DTE/ What is the DTE?  |  |
|        |                          | How far can I travel with remaining charge                          |  |
| 16     | Range                    | How far can I go? / How far can I travel?                           |  |
|        |                          | What is the distance I can travel?                                  |  |
|        |                          | Can I go "X" km with remaining charge?                              |  |
|        |                          | What is the range of my vehicle?                                    |  |
|        |                          | What is the tyre pressure   |  |
| 17     |                          | is the tyre pressure of my vehicle in safe limits?                  |  |
|        | TPMS* Data               | What is the tyre pressure of the vehicle?                           |  |
|        |                          | Do I need to refill my vehicle tyre? / Do I need to refill my tyre? |  |
|        |                          | Is tyre pressure Ok / in normal condition?                          |  |
|        |                          | What is the Overspeed threshold set?                                |  |
| 18     | Overspeed threshold      | What is the Overspeed threshold?                                    |  |
|        |                          | What are my/the safe drive limits?                                  |  |
|        |                          | How fast can I go?  |  |

<sup>\*</sup> Voice commands mentioned in the above list are not exhaustive or may not be up to date, and are only representative of the commands supported. The full list of commands will be available on the mobile application. Functionality of certain command are specific to the variant of vehicle or the accessories fitted, such as TPMS.

| S. No. | Command             | Utterances  |  |
|--------|---------------------|---|--|
| 19     | Time to charge full | How much time will it take to charge full?        |  |
|        |                     | Is my vehicle fully charged?                      |  |
| 20     | Odometer value      | What is the odometer value?                       |  |
|        |                     | How much total distance travelled by the vehicle? |  |
|        |                     | What is the total distance travelled?             |  |



These are indicative commands and utterances for the skillset and might vary from time to time. Additional commands / utterances might be available on the mobile application and website.

## **MAINTENANCE SCHEDULE**

The maintenance schedule indicates the intervals between periodic services. At the end of each interval, be sure to inspect, check, replace, adjust, lubricate and service as instructed. If the maintenance is not done periodically, it will result in rapid wear and severe damage to the vehicle. If the vehicle is used under high stress conditions such as continuous full throttle operation or is operated in dusty area, certain jobs should be performed more often to ensure reliability of the vehicle. Steering components, suspension and wheel components etc., are key items and require very special and careful servicing.

TVS Motor Company Limited strongly recommends that the jobs as per the maintenance schedule be performed by your TVS Motor Company Authorised Main Dealer.

Periodic inspections may reveal one or more parts that may need replacement. Whenever replacing parts of TVS iQube Electric S, it is recommended that you use only the TVS Motor Company Genuine parts.

# **∧** Caution

Proper maintenance is mandatory for making certain that your vehicle is reliable and gives optimum performance at all times. Make sure that the periodic maintenance is performed thoroughly in accordance with the instructions given in this owner's manual.

| "PAY SERVICE INTERVALS (months or km which ever occurs earlier)" | SERVICE   | 1st      | 2nd      | 3rd      | 4th      | 5th      |
|--|-----------|----------|----------|----------|----------|----------|
| LIST OF OPERATIONS SCHEDULE                                      | MONTHS    | 6        | 12       | 24       | 36       | 48       |
| LIST OF OPERATO  | km x 1000 | 4        | 8        | 12       | 16       | 20       |
| Vehicle software version   |           | 1 & U    | I & U    | 1 & U    | I & U    | 1 & U    |
| HBS cable free play  |           | I, L & A |
| Steering operation   |           | 1 & A    | 1 & A    | I & A    | 1 & A    | 1 & A    |
| <ul> <li>Front and rear axle nut tightness</li> </ul>            |           | 1 & A    | 1 & A    | I & A    | 1 & A    | 1 & A    |
| Swing arm bolt tightness   |           | 1 & A    | 1 & A    | 1 & A    | 1 & A    | I & A    |
| <ul> <li>Center and side stand pivot (optional)</li> </ul>       |           | -        | C, L & A | -        | C, L & A | -        |
| All electrical indication and cluster functions                  |           | - 1      | I        | 1        | I        | 1        |
| Side stand switch mounting bolt tightness                        |           | 1 & A    | 1 & A    | I & A    | 1 & A    | 1 & A    |
| Tyre pressure front and rear at cold condition                   |           | 1 & S    | 1 & S    | 1 & S    | 1 & S    | 1 & S    |
| Brake cam and shoe wear rear                                     |           | 1 & A    | C, L & A | I & A    | C, L & A | 1 & A    |
| Brake rear free play*  |           | 1 & A    | 1 & A    | I & A    | 1 & A    | 1 & A    |
| Brake pad wear   |           | - 1      | - 1      | 1        | - 1      | 1        |
| Brake fluid  |           | 1 & T    | 1 & T    | 1 & T    | I & T    | R        |
| Brake hose   |           | - 1      | I        | 1        | I        | R        |
| Master cylinder cups   |           | -        | -        | -        | -        | R        |
| Charger and charging operation                                   |           | - 1      | 1        | 1        | - 1      | - 1      |
| Rear wheel noise and smooth rotation                             |           | -        | 1 & C    | -        | 1 & C    | -        |
| • Fork oil**   |           | -        | -        | -        | -        | -        |
| Controller cable bolt tightness                                  |           | I & TO   |

- O After 2nd service, each service interval will be at 4000 Km or 1 year which ever is earlier.
- O R Replace; I Inspect; T Top up; C Clean; A Adjust; U Update; L Lubricate; TI Tighten; S Set; To Torque
- O Reset service reminder and check for DTC's using diagnostic tool and correct it if any at every service.
- O Test drive the vehicle and ascertain smooth functioning of all controls and parts.
- O Clean the vehicle before delivery.
- O \*Check the rear brake play periodically. However the brake play needs to be adjusted more frequently depending upon the usage.
- O \*\*Fork oil has to be replaced at every 24000 km.
- O Tyre replacement has to be done based on the assessment of tyre wear as specified in page No. 74.

### **SELF - MAINTENANCE PROCEDURES**

# **REAR BRAKE (DRUM BRAKE)**

- 1. Measure the free play of the rear brake lever at the lever end as shown in the figure.
- 2. Free play of brake lever before the engagement of brake should be between 10 -15 mm.
- If the measured distance is more than the limit, adjust the nut provided at the rear wheel end to obtain the correct play.





 Turn the adjuster nut in clockwise direction for reducing free play or in anti-clockwise direction for increasing the free play.

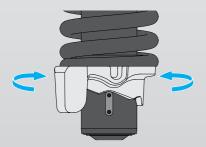
# ▲ Caution

Ensure rear wheel can be rotated freely by hand after adjusting brake. If brakes are overtightened, range will be reduced due to excess energy consumption. Replace the brake shoes as a set, if the wear limit indicator shows beyond the wear limit even after indexing the lever.

#### **REAR SHOCK ABSORBER**

TVS iQube Electric S is provided with 3 step adjustable rear shock absorbers to meet different road and load. There are 3 notches for adjusting spring load.

If the spring is adjusted to the minimum notch, then the shock absorber will be softer which is good for light loads. If the spring is adjusted to maximum notch, then it will be stiffer which is good for heavy loads.

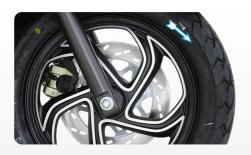


Adjust the spring pre-load by shifting the adjuster to the required notch according to the different load conditions. The more you compress the spring, the suspension becomes more stiff.



### TYRE TREAD CONDITION

Operating the vehicle with excessively worn tyres will decrease riding stability and can lead to loss of control. It is recommended to replace the tyre when the tyre wears off to the tyre wear indicator level (indicated by TWI (A) on the tyre).



# TYRE ROTATION DIRECTION

While reassembling the tyres, after removing from the wheel rim, ensure that the arrow mark facing the direction of wheel rotation while fixing the tyre on the wheel rim.

## **TYRE PUNCTURE**

Your scooter is fitted with a tubeless tyre on both front and rear wheel. Incase of any puncture / tyre damage, it is advised to visit the nearest tyre manufacturer Dealer or the tyre repair shops who knows the repairing method of tubeless tyre.

It is not necessary to remove the tyre from wheel rim always to attend a puncture.

If there is need of tyre removal, it is strongly recommended to use a tyre removal / fitment machine.

If at all, tyre levers needs to be used, the levers should be free from sharp edges. Care should be taken not to damage the tyres and rims.

If there is a need to replace rear tyre, the same should be done at TVS Authorised Main Dealers equipped to service electric vehilces. This is must to avoid damage to the rear hub motor and ensure safety. Any damage caused to motor by servicing rear tyre in unauthorised location may lead to your traction motor warranty being voided.

# Warning

The tyre inflation pressure in cold condition and the tyre tread condition are extremely important for the performance and safety of the rider. Check the tyres frequently for inflation pressure as well as the wear pattern on it.

Use of a tyre other than the standard may cause instability.

# 

The side walls of the tubeless tyre which in contact with the wheel rim are only seals the air inside the wheel assembly. Hence care should be taken not to damage the side walls of the tyres during removal / reassembly.

# **1** Note

Tyre pressure is a very important parameter in the daily operation of the vehicle. In order to extract the best possible range and performance.

## WARRANTY INFORMATION

TVS Motor Company Limited ('the Company') give this warranty with respect to the TVS iQube Electric S manufactured by the Company.

While the Company has taken every care to maintain quality in the manufacture of the iQube Electric S, the above said warranty is subject to other terms of warranty:

Warranty is applicable during 3 years from the date of purchase or first 50,000 km run of the vehicle whichever is earlier for parts like battery, motor, controller and charger.

The Company's obligation under this warranty is limited to repairing or replacing, with new or equivalent of the affected parts at no cost to customer for part or labour. The affected parts must be proven to Company's satisfaction to have manufacturing defect due to faulty material or workmanship and in such cases the Company's decision either to repair or replace the affected parts will be final. In the event of replacement of parts, the Company also reserves the right to use parts of the same brand as the affected parts or any other brand which is used by the Company in the course of manufacture. All parts replaced under this warranty will become the property of the Company and must be returned to the company.

### **Limitations of Warranty:**

The warranty does not cover damage or defects arising from the following conditions:

- 1. Misuse, abuse, or neglect of the Vehicle or the Battery, such as but not limited to:
  - The original serial number on the frame, motor or Battery being removed, distorted or altered.
  - The Battery cover is damaged or broken.
  - Battery cover is opened or attempted to open by force.
  - Short circuit due to misuse or wrongful testing.
  - Uneven charging of all the Batteries in a Vehicle.
  - Leaving battery under fully discharged condition for a long time.
  - Replacing/swapping of the Battery associated with a given Vehicle, with that from another vehicle.
  - Not using Manufacturer recommended charger for charging of the Battery along with or in exclusion of the Vehicle.
  - The Vehicle not being at rest for at least 3 hours in a day
  - Exposure of Battery to direct sunlight or radiation of heat (above 25°C). Any natural wear and tear, including without limitation, aging.
- Warranty claims on proprietary items such as tyres, tubes etc,. should be preferred by the user directly on the respective manufacturer, as per their warranty terms and the Company shall not be liable in any manner in respect to the same.
- Parts repaired or replaced under this warranty are warranted only throughout the remainder of the original warranty period.
- 4. The Company is not liable for any delay in servicing due to reasons beyond the control of the Company or any of its Authorised Main Dealers.
- 5. In any event, the Company is not liable for indirect, remote, incidental or consequential damages.

- 6. The Company may make any modification or improvement to vehicles in future production at any time without prior notice and without any obligation to install the same on vehicles previously dispatched for sale.
- 7. Any claim under this warranty will be valid only when the customer:
  - Takes his vehicle to an Authorised Main Dealer of the Company and reports the problem he / she felt
    in the vehicle to enable the Authorised Main Dealer to inspect the same and assess the cause for the
    reported problems.
- 8. This is the only warranty given by the Company for the TVS iQube Electric S. No employee, Dealer or other persons authorised to extend or enlarge this warranty.

# Warning

Modifications to this vehicle not approved by the TVS Motor Company may cause loss of performance and render it unsafe for use and disqualifies for warranty coverage also.

### LIST OF PARTS NOT COVERED UNDER WARRANTY

#### **ITEM**

Normal Maintenance operations

Wear and tear items

Electrical

Service Maintenance Parts

Rubber, rexine & plastic items

Proprietary Items

Others Factors

### WHAT TO CHECK FOR

Fastener re-tightening, brakes as well as other normal adjustments.

Brake linings, fasteners, shims, washers, etc.

Bulbs and fuses

Brake fluid, fork oil etc.

All hoses, pipes and plastic aesthetics

Tires and tubes (the warranty terms are subject to our agreement with proprietary OEM).

- + Parts of the vehicle getting affected due to atmospheric effect / environmental factors (rusting, paint peel off etc.). However, depending on the vehicle usage condition, warranty would be accepted up to 2 years from the date of purchase.
- Parts of the vehicle which have been tampered with, altered, repaired or replaced by persons not authorised by the Company and which in the sole judgement of the Company affect the performance of the vehicle.
- + Parts which are used in conjunction with parts not made or recommended by the Company.
- Parts suffering damage or resultant damage by accident, misuse, negligent treatment, use of bad quality lubricants or impure fuel or by omission to follow the guidance and instructions contained in this owner's manual.
- Vehicles on which motor number or chassis number is deleted, defaced or altered.
- Vehicles on which any warranty service including scheduled paid service is not availed when it falls due (at TVS Motor Company Authorised Main Dealer / Authorised Dealer).
- → Vehicles sold or transferred by original retail purchaser.
- Vehicles used for racing or any competition or used otherwise than for ordinary personal transportation.
- Vehicles attached with side cars etc.
- Vehicles which have been taken out of India.
- Vehicles affected by natural calamities like flood, earthquake, tsunami, storm etc.

## **WARRANTY OF GPS DEVICE**

Please note that the warranty on GPS device is offered by the manufacturer of GPS device and the same shall be available independently to the customer who owns this vehicle. All or any defects or issues with the GPS device shall be governed by and subjected to the warranty terms offered by the GPS device manufacturer. TVS Motor Company Limited shall not provide warranty to the GPS device independently and shall not be liable in any manner in respect to the same. In order to facilitate you to avail any warranty support from the GPS device Manufacturer, you may please contact Service department, TVS Motor Company Ltd, Harita, PB No. 4, Hosur-635 109, Tamilnadu. Email: customercare@tvsmotor.com

Contact information of such manufacturer of GPS device to avail warranty related support or queries shall be provided to you on your request.

Please refer to product website for further details on terms and conditions of the GPS device.

Periodic maintenance always helps good performance of an automobile and our services are planned to keep your TVS iQube Electric S performing good. Please note that carrying out the services for your vehicle at scheduled intervals at any of the TVS Motor Company Authorised Main Dealer / Authorised Dealer is necessary for availing of warranty. And please also remember that, after the services are over, periodic servicing of your vehicle at appropriate intervals, depending upon its extent of use, will keep your vehicle at its best level of performance.

In case you need any clarification or assistance, please feel free to write to us mentioning the frame serial number, traction motor serial number and date of purchase of your vehicle also the name and place of the Authorised Main Dealer / Authorised Dealer from whom you bought the vehicle and getting it serviced.

Service Department
TVS MOTOR COMPANY LIMITED
P.O. Box No. 4, Harita, Hosur - 635 109,
TAMILNADU, INDIA.
Toll free no:- 1800-572-1818

## TECHNICAL SPECIFICATIONS

MANUFACTURER TVS MOTOR COMPANY LIMITED

P. B. No.4, Harita, Hosur - 635 109, India.

**POWER TRAIN** 

**TYRE** 

Type : Plug ii

Plug in EV Tyre size :

Battery type : Li-ion Front : 90/90-12 54J (Tubeless)

No. of batteries : 2 Packs Rear : 90/90-12 54J (Tubeless)

Rated voltage : 52V Tyre pressure :

Charger specifications \* : 650W Off Board charger Front : 1.69 kg/cm² (24 psi)

Charging time \*\* : 80% SOC - 4.5 hrs. (Approx) Rear (Solo) : 2.25 kg/cm² (32 psi)

Motor type : BLDC

Motor output power : 3.0 kW(Rated) 4.4 kW

(Peak)#

Motor output torque : 33 Nm (Rated) /

140 Nm (Peak)

**BRAKES** 

Rear (Dual)

Front Drum / Disc : 220 mm dia disc

Rear : Hand operated internally

expanding shoe type, 130 mm dia drum

2.54 kg/cm<sup>2</sup> (36 psi)

CHASSIS

Overall length : 1805 mm
Overall width : 645 mm

Overall height : 1140 mm

Ground clearance : 157 mm

Wheel base : 1301 mm

Kerb weight : 118.6 kg
Pay load : 130 kg

Maximum laden weight : 248.6 kg

Frame : Duplex tubular frame

Front suspension : Telescopic hydraulic type
Rear suspension : Hydraulic Twin tube shock

absorber

**ILLUMINATION & TELL - TALES** 

Head lamp (High / Low) : 13.5V, 13W / 8.5W LED

Position lamp : 13.5V, 5.5W LED

Tail / brake lamp : 13.5V, 0.4W / 2.1W LED

Turn signal lamp (F/R) : 13.5V, 2.5W / 1.6W LED

Number plate lamp : 5V, 2A

Horn : 12V, 2.5A

- Included charger specification/rating might vary. This is indicative of a typical offering.
- \*\* Rated time is with 650W charger when used with a 220V 50Hz sinusoidal AC input without interference. The charging duration might be higher or lower depending on the power rating, input voltage and battery capacity of the vehicle.
- # At component level.

#### **INSTRUMENT CLUSTER**

Power rating : 13.5V, 10W TFT

Display : 800 x 480

Display type : TFT

Luminous emittance : 1000 Lux

#### **FUSES**

DC-DC fuse : 58V, 5A

Charger fuse : 58V, 40A

Load fuse before : 32V, 10A

Ignition lock

Load fuse after Ignition

: 32V, 7.5A

lock

### **CAPACITIES**

Range per charge : 100 km at full charge\$

(ECO)

Front fork oil grade : Gabriel front fork fluid

Front fork oil capacity : 91 ± 1 cc

Brake fluid : TVS (DOT 3 / DOT 4)

Top Speed : Around 78 km/h

# **1** Note

Specifications are subject to change without notice.

# **Warning**

Using the bulb other than the specified rating can result in overloading of the electrical system or premature failure of the bulb and compromise safety of vehicle.

Real world range may vary with road, load, driving patterns and ageing of battery packs. The real range for the iQube and iQube S model is 100km under standard riding conditions, which consists of a solo rider of average weight (between 70 - 80kg, might be mentioned only if queried) riding on city roads in Eco mode without any extra payload. The standard conditions also involve the vehicle being used without brake and accelerator being applied together and the recommended tyre pressure being filled up. (cold tyre air pressure of 26 PSI for Front and 34 PSI for Rear tyre)

## **GENERAL INFORMATION**

#### **Dear Customer.**

It is mandatory under the Motor Vehicles Act to insure all motor vehicles. No motor vehicle can be used in a public place without a valid policy of insurance issued by an authorised insurer. Driving a motor vehicle without any such insurance is an offense under Motor Vehicles Act.

To assist our Customers on their insurance requirements such as the prompt issue and renewal of policies as well as expeditious settlement of claims if any, our preferred insurers are:









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