# Trane Technologies TKV5C4 Installation and User Manual

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# **Component Overview**

#### **Jolt Characteristics**

Requirements	Conditions
Operating Temperature	-40° C to 85° C (-40° F to 185° F)
Operating Voltage	10.2 Volts DC to 27.6 Volts DC
Operating Current	1100mA max @ 10.2V
	500mA max @ 27.6V

The Jolt system has no user-serviceable parts. The Jolt contains a 2500mAh rechargeable lithium battery for maintaining the real time clock and for maintaining function for a short period of time when VIN is removed.

Proper recycling or disposal per local law is required for all components of the Jolt.

#### **FCC Compliance Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

#### **Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20cm between the radiator & your body.

#### **IC Compliance Statement**

This device complies with ISED's licence-exempt RSSs. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

This radio transmitter IC: 4638A-TKV5C4 has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna	Antenna Type	Frequency Range (MHz)	Maximum Permissible Gain (dBi)	
ВТ	РСВ	2400-2485	2.80	
GNSS	РСВ	1559-1608	0.82	
WWAN	РСВ	699-960	0.36	
		1710-2155	3.39	

#### **Radiation Exposure Statement:**

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment must be installed and operated with greater than 20cm between the radiator & your body.

#### Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 20 cm entre le radiateur et votre corps.

#### **NOM Compliance Statement**

Operation of this equipment is subject to the following two conditions: (1) this equipment or device may not cause harmful interference, and (2) this equipment or device must accept any interference, including interference that may cause undesired operation.

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

# - Frequency bands

Frequency band(s) in which the radio equipment operates:

# Cellular:

Model	LTE Bands (with Rx-diversity)	WCDMA (with Rx-diversity)	GSM	
	FDD:			
TKV5C4	B2/B4/B5/B12/B13/B25/ B26	B2/B4/B5	Not supported	

#### Bluetooth:

Bluetooth 5.1 @ 2.4GHz

## **Installation Planning**

#### Safety, Reliability, and Accessibility

- Use eye protection when using a drill/performing work that may be hazardous to the eyes.
- Use ear protection in noisy work areas.
- Wear appropriate clothing/uniforms and safety shoes.
- Maintain three points of contact when climbing in and out of cab.
- Make sure you know what is behind the area before you drill.
- Install equipment so it will not cause damage to the vehicle or work loose over time.
- Make sure there are no loose components/cables and no unsecured components.
- Use solid mounting surfaces.
- Route all cables away from hot or abrasive areas.
- Choose installation locations where components can be easily serviced.
- Choose installation locations where components are safe from tampering and damage

#### IMPORTANT SAFETY INFORMATION

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#### **WARNING**

Do not locate the product where it obstructs the driver's field of vision, distracts the driver from the driving task, interferes with the driver's operation of controls or displays, or creates a safety hazard. Follow all laws and regulations governing the placement of equipment and mounts.

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### DO locate the product where:

- it can be safely installed on a secured bracket that is robust enough to minimize any vibration and sustain the weight of the product.
- the mounting surface is strong enough to support the mounting hardware.
- the mounting surface is flat.
- it does not block the view of the road or mirrors.
- the surrounding area is clear of dash controls and gauges.

- it does not limit a passenger's leg room or block access to any other compartments.
- it does not interfere with anyone entering or exiting the vehicle cab.
- it is not likely to impact the driver or passenger in case of an accident or collision.

#### MAY CONTAIN U.S. AND INTERNATIONAL EXPORT CONTROLLED INFORMATION

#### DO NOT locate the Product where it:

- obstructs the driver's field of vision.
- · distracts the driver from the driving task.
- interferes with the driver's operation of controls or shifting.
- obstructs moving parts of the vehicle, if any.
- blocks the deployment of an airbag.

#### Additional information for selecting an installation location:

- Installations should not obstruct the driver's field of vision while operating the vehicle, and should comply with all applicable federal and state laws and regulations regarding
- appropriate installation locations (including restrictions against the mounting of objects on a vehicle's windshield) and driver distraction.
- Consider the owner's preference in selecting the installation location and whether there is a team or a single driver.
- Once a suitable location is selected, verify that there is nothing behind the mounting surface that might be damaged by drilling holes.

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#### **WARNING**

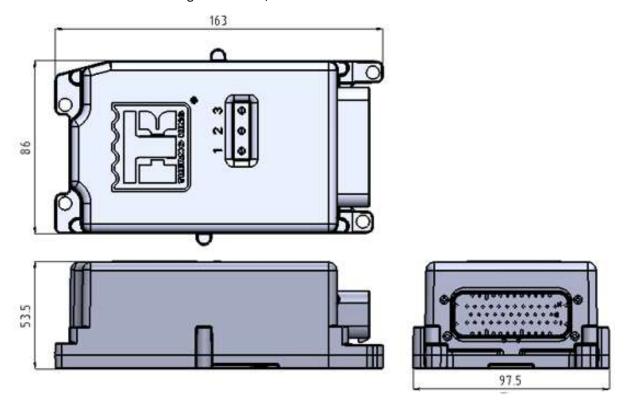
Excess cable can be a tripping hazard. Ensure cable is not draped where it will interfere with either the driver or passenger as they move within the cab.

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# Mounting:

Mounting Screw Locations.

There are a total of 4 mounting screw holes, one at each corner.



Units are in millimeters.