Installation Guide

Rugged VT7-GE

Version 1.5E – November 2024

Overview

The VT7-GE is a rugged Android tablet, which comes with a cradle providing inputs and outputs suitable to allow the SmartMove Go vehicle software to interface with various devices in a taxi. The VT7 GE can:

- Turn on (supplies power to) the taximeter when the driver logs into SmartMove.

- Turn off (cuts power to) the taximeter when the driver logs out of SmartMove.

- Detect the engaged/vacant states of an existing meter and reads the total fare at the end of the job of compatible meters via serial connection.

- Trigger the dome light on/off when the taximeter or SmartMove softmeter is engaged/disengaged.

- Receive a signal from the physical duress alarm and trigger the panic functionality in SmartMove (i.e. make a silent call to the base so the base can hear what is going on inside the car).

- Send fares directly to an EFTPOS terminal (when using the built-in Soft Meter).

Important Note:

1. For fares to be transferred to SmartMove Go at the end of the trip, the Cabcharge Fareway meter must be updated to communicate with SmartMove. Please request all your meters to be updated by contacting Cabcharge on **(02) 9332 9246**.

2. The VT7 GE is running Android 11. It has been tested to work with Headwind MDM Kiosk software.

Equipment Checklist

The VT7 GE requires the following parts, available directly from the manufacturer or via SmartMove.

Components:	
1 x VT7 GE device *Includes screw for securing SIM card door*	
1x Panic Switch *Available from SmartMove or other suppliers*	
1 x VT7 Cradle with loom *Note that the cradles are **not** cross compatible between the Pro/GE/A models*	
1 x VT7 Mounting Bracket *Supplied with RAM mount by default. Other options can be used*	
1x Male to Female null modem cable or adapter *For use with the CabCharge Fareway meter Blue DB9 plug. Supplied by SmartMove as needed.*	

1 x VT7 to EFTPOS adapter *Connect to Blue RJ12 plug on CabCharge loom.* *Supplied by SmartMove as needed.*	DB9 Male	RJ12 6P6C	
	2	2	
	3	3	
	4	5	
	5	4	

1 x VT7 to other Taxi Meter adapter *Configured adapter available from SmartMove*	DB9 Male	RJ12 6P6C	
	2	2	
	3	3	
	5	5	

1 x Secondary Screen (*Lilliput UM-70/C*) *Used to display the soft meter to customers*	

Wiring Diagram

Serial cable – Meter connection:
Use null modem with CabCharge

External USB: Connect
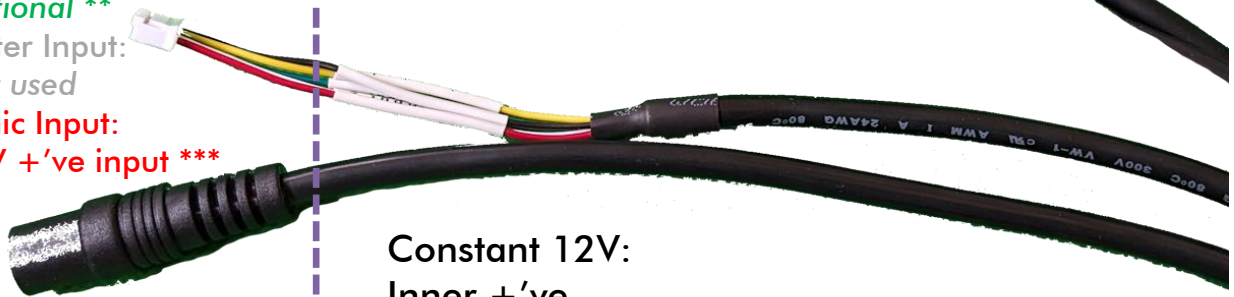secondary screen
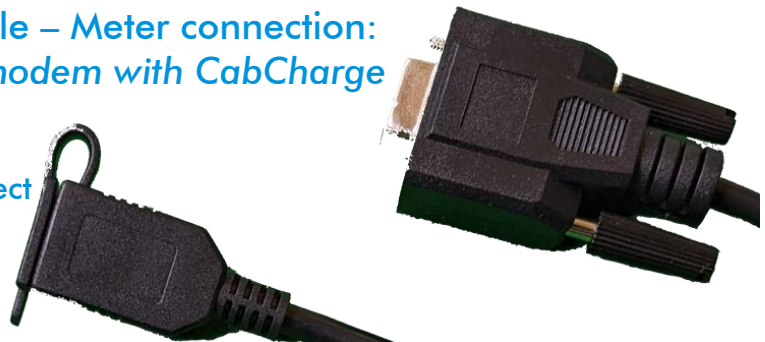
Can1/Can2:
Not used

Common GND:
Not required
Meter Power:
Optional
Dome Light:
*Optional **
Meter Input:
Not used
Panic Input:
12V +'ve input ***

Constant 12V:
Inner +'ve

Ignition wire:
*Required**

Cut wires on dotted line
to hard-wire as required

Notes:
Ignition wire: * Connect to 12V alongside main power connector
Dome light: ** Use a relay – see pg.7
Panic input: *** Positive input, *not* ground input.

If your loom has a red button attached, please contact us for an older
version of the install guide – it has been removed from recent kits.

Installation

- *The cradle **requires** power input for any of the connected devices to communicate. For this reason, we strongly recommend wiring power directly to the battery, not an accessory circuit or similar with only an intermittent power supply.*

- *The ignition wire connection is also required for the cradle to function. The behaviour can be controlled using the "ACC Settings" (under System settings) on the device.*

Connecting to a CabCharge Fareway Plus meter requires a DB9 Null Modem item. A cable or an adapter can be used depending on the length required (see page 3).

Make sure to connect it to the blue serial cable on the CabCharge loom.

- If using an extension cable, make sure not to "double up" on null modem items – many of the commonly available DB9 cables are not straight-through, so if the extension lead is a null modem cable, you **do not** need the orange adaptor as well.

Connecting to a CabCharge *EFTPOS* system requires a special adapter, likewise for other taximeter systems. Contact SmartMove for the appropriate cable.

The Ignition Wire (yellow) allows the device to automatically turn on/off based on the ignition. This can be useful for tracking a vehicle and preserving battery life. On the GE model tablet, this is **required** for the operation of the cradle.

Connectors can be cut to expose cables for hard wiring. This is useful for the input power and GPIO connections.

On the GPIO, a ground wire is available. If GPIO are being used, connecting the GND wire is recommended.

GPIO Outputs switch from floating to GND and must be connected via a Relay:
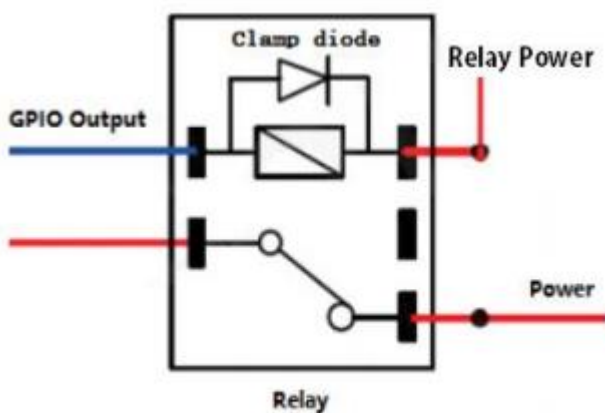
Typical relay connection

The maximum sink current rating of GPIO output is 300mA.

GPIO Inputs are based on a Positive Trigger Input.

Tablet Setup

The device requires SmartMove Go to be installed. This is most commonly done via MDM or Kiosk software, which allows devices to be managed in bulk.

Alternatively, navigate to the Google Play store, search, and install *SmartMove Go*:

https://play.google.com/store/apps/details?id=com.smartmovetaxis.driver.smartmove&hl=en_AU&gl=US

After installation, on first run the app will require that various permissions be accepted. These provide the app with the ability to show job offers and access the device location.

When presented with the initial screen a SmartMove Go Key is required. This unique key associates this tablet with a specific vehicle in your fleet.

The keys are available on the Fleet Management website:

https://fleets.smartmovetaxis.com/WebAdmin/WebAdmin.html#MANAGE_HANDSETS

You can also get the key by hovering the mouse over the vehicle ID on the Dispatch Client.

Vehicle Management is used to ensure the vehicle is configured for this hardware type:

https://fleets.smartmovetaxis.com/WebAdmin/WebAdmin.html#PROPERTY_VEHICLE

Search for "external" (ID 843):

Select a Vehicle : ✕ braa	New Vehicle... ?				
Display Properties	Upload Vehicle Logs	Upload Screenshot	Update Billing Type		

General Properties ? | Vehicle Attributes ? | Vehicle Requirements ? | Hardware History

Properties for braa in HardwareTest DEV : 2				Save	Cancel	📊 🖨 📊	Q exter	✕
Source	**Category**	**Property Name**	**Property Desc.**	**Value**		**Note**		
braa	Vehicle Properties	External Device Config	ID 843: Identifies what extern	8:: VT7GE/GA				🔄
braa	Vehicle Properties	Meter Printer	ID 870: Enables and configur	0::None		Using the fleet default		🔄

For VT7-GE devices, the setting should be "8:: VT7GE/GA" in all standard cases.

You can also find this property in Fleet Configuration; click the binoculars to change settings on a vehicle-by-vehicle basis as needed, or change the fleet default to set it for all vehicles.

Tablet Installation with Headwind MDM

The VT7 GE is intended to be used with Headwind MDM (mobile device management). We can provide a login if needed; this service is included with the standard SmartMove fees.

1. Setup the device with a QR code as described here.
   If the device has been taken through the initial setup previously, it will need to be factory reset.
   The QR code to scan is accessible on the "actions" section on the right-hand-side of the device list and looks like this:

   Like the handset key for SmartMove Go, this is individual to each device.

2. Allow the permissions Headwind requests during setup such as display on top, etc.

3. Continue with the setup of SmartMove Go (*see Tablet Setup*)

CabCharge EFTPOS Setup

On the EFTPOS handset the **meter type** needs to be changed.
Login and follow these steps:
1. Press #
2. Enter 84554411 (admin password)
3. Press 4 (Other)

On the SmartMove side, the following vehicle settings should be observed:
Meter Protocol   8:: VTD Eftpos
Meter Listen   1:: Listen Interactively (No EFTPOS).