**Original Instructions** 

# **MobileView Tethered Operator Terminal**

2711T-T10R1N1, 2711T-B10R1K1, 2711T-B10R1M1, 2711T-F10G1N1, 2711T-T10G1N1





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The following publication provides a brief overview of how to install and operate the MobileView™ 2711T terminal. For more detailed information on this terminal, refer to publication 2711T-UM001, MobileView 2711T Tethered Operator Terminal User Manual, which is available online at http://www.rockwellautomation.com/literature/.

## **Summary of Changes**

This publication contains new and updated information as indicated in the following table.

Topic	
Added 2711T-F10G1N1 catalog number for available MobileView 2711T terminal models.	
Added 2711T-F10G1N1 catalog number to footnote 1 as a terminal model with a gray push button.	3
Switched wire cable colors for pins 14 and 15 in the Cable Wire and Pin Connections table.	12
Switched wire cable colors for pins 14 and 15 in Figure 6.	
Updated MobileView Mounting Brackets section to include new VESA mounting bracket.	31
Added Figure 7 that shows dimensions of both available mounting brackets.	
Added 2711T-F10G1N1 column to each table in Specifications section.	33
Added VESA mounting bracket to Accessories table.	34

## **MobileView 2711T Terminal Dimensions and Weight**



All MobileView 2711T terminals weigh 1550 g (3.42 lb) without options.

## **MobileView 2711T Terminal Component Description**



ltem	Description		Option	
1	Membrane keypad with tactile feedback		•	
2	10 inch WXGA (1280 x 800 pixels) TFT color LCD display with analog-resistive touch screen	•		
3	Illuminated momentary push button, normally open OR 3-position key switch			
4	Red-yellow emergency stop (E-stop) push button, twin-circuit, N/C contacts, 24V DC, 500 mA max <sup>(1)</sup>			
5	Backside membrane keypad with tactile feedback •		•	
6	USB port •			
7	Product nameplate •			
8	Handle to hold the terminal, to store the connection cable, and to attach to the mounting bracket	•		
9	3-position, twin circuit, enabling switch for safety system interface	•		
10	Plug for alternate cable outlet not used (meets degree protection IP65)	•		
11	Back cover to access connection compartment	•		

<sup>(1)</sup> MobileView terminal cat. nos. 2711T-F10G1N1 and 2711T-T10G1N1 are equipped with a gray push button that is classified as a stop button but not an E-stop button.

## **Safety Precautions and Elements**

This section covers general safety precautions and important information on the power supply, emergency stop (E-stop) switch, and enable switches that are used with the MobileView 2711T terminal.

### General Safety

It is important to follow the instructions in this document in all circumstances. Failure to do so can result in potential sources of danger or the possible override of safety features that are integrated in the terminal.

Besides the safety instructions in this document, you must also use safety precautions and accident prevention measures that are appropriate to the situation.



**ATTENTION:** Consider or perform the following as part of general safety.

- Verify that interrupted processes can be properly restarted after power failures or power dips.
   Do not allow any dangerous operating conditions to occur, even temporarily.
- In situations where faults that occur within the automation system could cause personal injury
  or significant damage to machinery and equipment, take extra safety measures to confirm that
  the system remains in an acceptable operating condition.
- Verify that unauthorized persons are not allowed to adjust settings or make memory modifications that can lead to dangerous situations.
- Test the functionality of the E-stop button and enabling switch at least once every six months.
   Verify that the machine or plant operation stops when the button is pushed.
- If the MobileView 2711T terminal and controller do not communicate with a point-to-point connection, then keypad data could transmit with a delay. An Ethernet switch that is used between the MobileView 2711T terminal and controller is recommended for a higher speed connection.
- When a MobileView 2711T terminal has been exposed to shock (for example, it is dropped on the ground), test to verify that the E-stop button and enabling switch still function properly.
- The USB port on the backside of the MobileView 2711T terminal is only for maintenance. Do not
  operate the terminal while a USB drive is connected to it.
- Risk assessment and risk reduction are important precautionary measures for machine safety.
   For more information, see ISO 12100.

### **MobileView 2711T Terminal Operation**

See publication 2711T-UM001, MobileView 2711T Tethered Operator Terminal User Manual, for more handling instructions to avoid terminal malfunctions or damage.

### Power Supply

The MobileView 2711T terminal meets the Safety Class III requirements for electrical shock in accordance with EN 61131-2. See Electrical on page 33 for the DC power supply requirements for the MobileView 2711T terminal, junction box, and connection cable.

Supply the junction box and terminal exclusively from power sources with safety extra-low voltage (SELV) or protected extra-low voltage (PELV) circuit protection according to EN61131-2.

Specifications of power supply lines in the connection cable are:

Cross section: 26 AWG (0.126 mm<sup>2</sup>)

Material: zinc-coated copper strand

Line resistance:  $<136 \Omega/\text{km}$  ( $<219 \Omega/\text{mi}$ )



**ATTENTION:** The 24V DC power supply to the control cabinet or operator panel must have a fuse that is rated 3.15 A (maximum) and complies with UL 248.

Failure to install a fuse can result in fire from component failure.

### **Enabling Switch**

On the MobileView 2711T terminal, the enabling switch consists of a 3-position operating element with two independent circuits.



**ATTENTION:** Only the operator of the enabling device on the MobileView 2711T terminal is allowed in the dangerous area or zone.

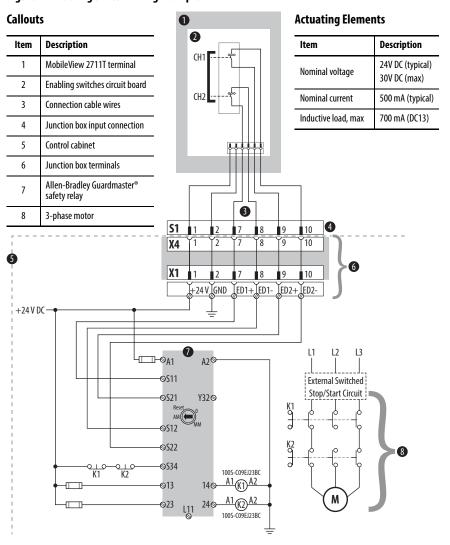
The enabling switch is only suitable as a safety device if the operator of the enabling switch on the MobileView 2711T terminal recognizes the dangerous situation and reacts in time to avoid the danger.

Consider reduced speed of movements as a precautionary measure, which can be done through the risk assessment of machinery.

### **Enabling Switch Connection Example with a Control Relay**

Figure 1 shows suggested wiring for the enabling switch with an Allen-Bradley\* safety control relay. If this wiring example is followed, then the safety function meets Category 4, Performance Level e (CAT. 4, PLe) in accordance with ISO 13849-1. See publication 2711T-UM001, MobileView 2711T Tethered Operator Terminal User Manual, for enabling switch function description and contact travel diagram.

Figure 1 - Enabling Switch Wiring Example



### Foreseeable Misuse of Enabling Switch

Foreseeable misuse is when the enabling switch is modified so it stays in the enabling position. The foreseeable misuse of the enabling switch must be restricted. The following measures are recommended, which cause the machine to stop in manual mode.

- Inquiry of the enabling switch when you turn on the machine/plant, and inquiry of the enabling switch when you change the operating mode from automatic to manual (the enabling switch must not be in the enabling position).
- The enabling switch must be released within a defined time period and pushed into the enabling position again, with the time length defined by the activity.

### Emergency Stop (E-stop) Push Button

The E-stop push button of the MobileView 2711T terminal meets the requirements of ISO 13850. The push button must be designed as a Category 0 or Category 1 emergency stop by the risk assessment for the machine. The connection of the force-guided contacts to an appropriate monitoring system must meet the safety level that results from the risk assessment of the machine. See Risk Assessment of Machinery on page 8.

The E-stop has two potential-free, normally closed contacts to connect external peripherals, a nominal operating voltage of 24V (safety low voltage in accordance with EN61131-2), and a maximum operating current of 500 mA at 24V DC.



**ATTENTION:** E-stop push buttons (red-yellow in color) that are not fully functional can have fatal consequences. E-stop push buttons must be effective under all circumstances in all operating modes of a machine or plant.

- When the E-stop push button is not wired into an emergency stop circuit, the MobileView 2711T terminal must be stored where it is not visible to operators.
- The reset of an activated E-stop push button must not result in the uncontrolled startup of machines or installations.
- The E-stop push button does not replace other safety devices or E-stop buttons mounted directly on machines.
- Do not use MobileView 2711T terminals with red-yellow E-stop buttons in applications where the terminal is plugged in and out of junction boxes frequently or meant for temporary use. Only MobileView 2711T terminals with gray stop push buttons are meant for these applications.
- Test the functionality of the E-stop push button at least once every six months. Verify that machine or plant operation stops when the button is pushed.
- When a MobileView 2711T terminal has been exposed to shock (for example, it is dropped on the ground), test to verify that the E-stop push button still functions properly.

### Risk Assessment of Machinery

For the risk assessment for the machinery, use the standards in ISO 12100, "Safety of machinery - General principles for design - Risk assessment and risk reduction."

Figure 1 on page 6 shows how the MobileView 2711T terminal uses an Allen-Bradley control relay with the enabling switches. The control system must be designed for the safety level that results from the risk assessment of ISO 12100.

### The MobileView 2711T Terminal

This section provides details on the following topics:

- Remove the Back Cover
- Install the Connection Cable to the MobileView 2711T terminal

#### Remove the Back Cover

This section shows how to remove the back cover of the MobileView 2711T terminal. When the back cover is removed, you have access to the area that contains all connectors except the USB port.



SHOCK HAZARD: Disconnect all power to the MobileView 2711T terminal before you remove its back cover.

When the back cover is removed, the MobileView 2711T terminal is sensitive to electrostatic discharge (ESD).

- 1. Place the MobileView 2711T terminal with the display side down on a stable, flat surface free of debris.
- 2. Use a Torx T10 screwdriver to remove the three screws that secure the back cover.
  - TIP The 'Image Applied' label on the back cover was part of the manufacturing process. Therefore, you can remove and discard this label.
- 3. Carefully lift off the back cover and set it aside.

Figure 2 shows the main circuit board of the MobileView 2711T terminal with the back cover removed.



Communication Reset Connection Circuit Board SD Card Button Cable Serial No. Label Interface (S3) Cable channel that is used is only for example. Use channel that is best suited for your application. Push Button or Key Switch Connection (S2) Cable Channel Cable Channel Power and Safety (1 of 2) (2 of 2) Connection

Figure 2 - Main Circuit Board with Back Cover Removed

IMPORTANT

Use the reset button when MobileView 2711T terminal functionality 'locks up' and you cannot restart from the terminal-desktop screen.

### Install the Connection Cable to the MobileView 2711T terminal

The connection cable can be attached on the right or left side of the MobileView 2711T terminal for right- or left-hand operation.

**IMPORTANT** 

The MobileView 2711T terminal is shipped with the cable connection port open for right-hand operation. For more information, see Figure 3 on page 10.

Use the following tools to install the connection cable:

- 19 mm open-end wrench or spanner
- Torx T10 screwdriver
- 8 mm hex key

To install the cable, perform the following steps.

1. Decide on which cable-connection port of the terminal to install the cable; see Figure 3.

Figure 3 - Cable Connections on MobileView 2711T Terminal

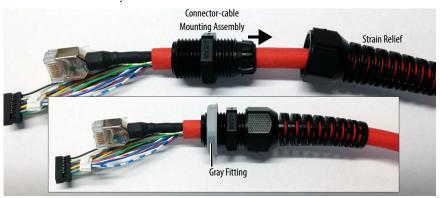


#### **IMPORTANT**

The MobileView 2711T terminal is shipped with the above cable-connection port open for right-hand operation.

When the cable is connected to this port, you can hold the terminal with your left arm, operate the enabling switch with your left hand, and operate the terminal touch screen with your right hand.

- 2. If you want left-hand operation, remove the plug with an 8 mm hex key. Set the plug aside.
- 3. Remove the back cover as detailed on page 8.
- 4. If present, unscrew and remove the gray fitting from the connector-cable mounting assembly.
- 5. Unscrew the strain relief from the connector-cable mounting assembly to allow the red cable to slide freely.



6. Gently feed the three terminals at the end of the red cable into the chosen cable connection and up through the cable channel.

IMPORTANT	Do not force the cable terminals through the channel. If you encounter resistance, slowly pull the cable towards you until it moves freely again.
	If necessary, slide the connector-cable assembly farther down the cable to assist cable feed through the channel.

7. When the three terminals reach the main circuit board, carefully plug each terminal into its connection. See Figure 2 on page 9 for where each terminal is connected.

Each terminal is keyed and can fit only one way on its corresponding connection.

IMPORTANT	Verify that there is a snap sound when you plug each terminal into its corresponding
	connection, which confirms that the terminal is properly connected.

8. After each terminal is securely connected, reinstall the back cover.

Use a Torx T10 screwdriver to reinstall the three cover screws.

- 9. Install the connector-cable mounting assembly into the cable connection of the MobileView 2711T terminal.
- 10. Reinstall the strain relief to the connector-cable mounting assembly.
- Tighten the strain relief and the connector-cable mounting assembly with the 19 mm open-end wrench or spanner.

Torque the connector-cable mounting assembly to 1.2 Nom (10.6 lboin).

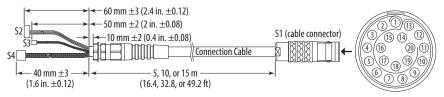
12. If you chose left-hand operation, reinstall the plug in the open cable-connection port with an

8 mm hex key.

Torque the plug to 1.2 N•m (10.6 lb•in).

### The MobileView Connection Cable

The connection cable connects the MobileView 2711T terminal to the junction box. The connection cable is 5, 10, or 15 m (16.4, 32.8, or 49.2 ft.) long. This cable withstands water, cleaning agents, motor oil, drilling oils, grease, lubricants, and condensates that contain hydrochloric acid.



#### **Cable Wire and Pin Connections**

Terminal No.	Cable Pin No.	Cable Wire Color	Junction Box Input (X4)	Signal Description	Junction Box Output
1	1	pink	1	24V DC	X1,#1
2	2	black	2	GND_IN	X1,#2
3	3	brown	3	E-stop, circuit 2 (+)	X1,#3
4	4	white-green	4	E-stop, circuit 2 (-)	X1,#4
5	5	gray	5	E-stop, circuit 1 (+)	X1,#5
6	6	red-blue	6	E-stop, circuit 1 (-)	X1,#6
7	7	green-brown	7	Enabling switch, circuit 1 (+)	X1,#7
8	8	yellow	8	Enabling switch, circuit 1 (-)	X1,#8
9	9	green	9	Enabling switch, circuit 2 (+)	X1,#9
10	10	gray-pink	10	Enabling switch, circuit 2 (-)	X1,#10
11, 12	11	_	11	Not used	_
1 <sup>(1)</sup>	13	blue	13	TD+ (transmit)	X3,#1
2 <sup>(1)</sup>	14	orange	14	TD- (transmit)	X3,#2
3 <sup>(1)</sup>	15	white	15	RD+ (receive)	X3,#3
6 <sup>(1)</sup>	16	red	16	RD- (receive)	Х3,#6
1	12	violet	12	External 1	X2,#1
2	17	white-pink	17	External 2	X2,#2
3	18	white	18	External 3	X2,#3
4	19	blue	19	External 4	X2,#4
5	20	white-blue	20	Not used	_
	No.  1 2 3 4 5 6 7 8 9 10 11,12 1(1) 2(1) 3(1) 6(1) 1 2 3 4	No.         Pin No.           1         1           2         2           3         3           4         4           5         5           6         6           7         7           8         8           9         9           10         10           11,12         11           1(1)         13           2(1)         14           3(1)         15           6(1)         16           1         12           2         17           3         18           4         19	No.         Pin No.         Wire Color           1         1         pink           2         2         black           3         3         brown           4         4         white-green           5         5         gray           6         6         red-blue           7         7         green-brown           8         8         yellow           9         9         green           10         10         gray-pink           11, 12         11         —           1(1)         13         blue           2(1)         14         orange           3(1)         15         white           6(1)         16         red           1         12         violet           2         17         white-pink           3         18         white           4         19         blue	Terminal No.         Cable pin No.         Cable Wire Color         Box Input (X4)           1         1         pink         1           2         2         black         2           3         3         brown         3           4         4         white-green         4           5         5         gray         5           6         6         red-blue         6           7         7         green-brown         7           8         8         yellow         8           9         9         green         9           10         10         gray-pink         10           11,12         11         —         11           1(1)         13         blue         13           2(1)         14         orange         14           3(1)         15         white         15           6(1)         16         red         16           1         12         violet         12           2         17         white-pink         17           3         18         white         18           4         19         blu	Terminal No.         Cable Pin No.         Cable Wire Color         Box Input (X4)         Signal Description           1         1         pink         1         24V DC           2         2         black         2         GND_IN           3         3         brown         3         E-stop, circuit 2 (+)           4         4         white-green         4         E-stop, circuit 2 (-)           5         5         gray         5         E-stop, circuit 1 (+)           6         6         red-blue         6         E-stop, circuit 1 (-)           7         7         green-brown         7         Enabling switch, circuit 1 (-)           8         8         yellow         8         Enabling switch, circuit 1 (-)           9         9         green         9         Enabling switch, circuit 2 (-)           11,12         11         —         11         Not used           1(1)         13         blue         13         TD+ (transmit)           2(1)         14         orange         14         TD- (transmit)           3(1)         15         white         15         RD+ (receive)           6(1)         16         red

<sup>(1)</sup> Shielded.

### The MobileView Junction Box

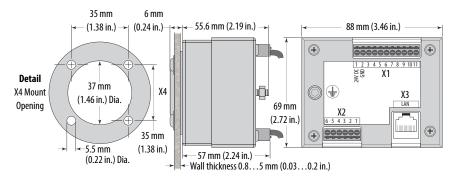
This section provides information on the following topics:

- Mount and Connect the Junction Box
- Connect the MobileView 2711T Terminal to the Junction Box
- <u>Junction Box Pinout and Wiring</u>
- <u>Junction Box Power Supply Requirements</u>

#### Mount and Connect the Junction Box

The MobileView junction box (2711T-JBIP20DC) connects the MobileView 2711T terminal into the control system.

Figure 4 - Junction Box Dimensions and Connector Descriptions



Connector	Description		
X1	11-pin terminal for power, and safety circuits of E-stop push button and enabling switch of the MobileView 2711T terminal.		
Х2	6-pin terminal for the optional push button or the optional key switch.		
X3 LAN switch for Ethernet connectivity to a control system network.			
Х4	20-pin female connection for the MobileView connection cable; see <u>page 12</u> for cable pinout details.		



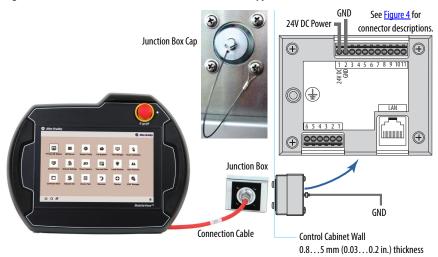
SHOCK HAZARD: Supply the junction box and terminal exclusively from power sources with SELV or PELV circuit protection according to EN61131-2.

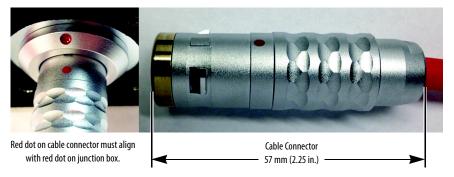
Only connect voltages and circuits that are separated from dangerous voltages (for example, by means of sufficient insulation) to connections, terminals or interfaces up to a rated voltage of 50V DC.

### Connect the MobileView 2711T Terminal to the Junction Box

Figure 5 shows how the MobileView 2711T terminal connects to the junction box.

Figure 5 - MobileView 2711T Terminal to Junction Box Typical Connection



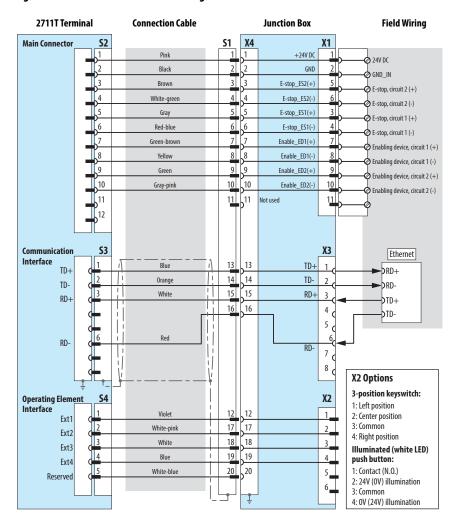


### Junction Box Cap

A cap is provided to cover the junction box opening when the cable is not connected; see Figure 5. The cap protects the opening and its pin connections from environmental elements.

Use one of the two bottom mounting screws to attach the tethered cable of the cap to the control cabinet.

Figure 6 - Junction Box Pinout and Wiring



### Junction Box Power Supply Requirements

Electrical Specifications		
24V DC power supply	See <u>Electrical on page 33</u> for the 24V DC power supply requirements. See <u>Power Supply on page 5</u> for additional information.	
Ground	Connect the ground screw on the junction box to earth ground (see page 14).	

### **Connect to an Ethernet Network**

The MobileView 2711T terminal is equipped with an Ethernet interface that supports TCP/IP protocol at 10/100 Mbps for half/full-duplex communication.



**ATTENTION:** Under high noise situations, the Ethernet network can have packet loss of <10% at 100 Mbps. By design, Ethernet communication resends packets, so there is no data loss but there is a possible reduction in communication speed.

The Ethernet connector at X3 on the junction box provides a connection to an Ethernet network. The connector uses an 8-pin modular jack connector. Pinouts are as follows.

### Junction Box Ethernet Pinouts (X3)

Pin#	Ethernet Signal
1	TD+
2	TD-
3	RD+
4	Not used

Pin#	Ethernet Signal
5	Not used
6	RD-
7	Not used
8	Not used

## Initial Power Up of the MobileView 2711T Terminal

This section applies to when you apply power to the MobileView 2711T terminal for the first time. It provides details on the following topics:

- Verify the Connection
- Test Safety Functions
- <u>Initial Configuration of the Windows Operating System</u>
- Icons on the Terminal-desktop Taskbar

### **Verify the Connection**

To verify that the MobileView 2711T terminal is properly connected, perform the following steps.

1. Attach the MobileView connection cable to the junction box as shown on page 14.



**ATTENTION:** The MobileView 2711T terminal automatically starts when the connection cable is connected to a junction box with 24V DC power applied.

2. Check the MobileView 2711T terminal for a start-up screen.



If the start-up screen does not appear, check the 24V DC power source and cable connections at the junction box and MobileView 2711T terminal.

#### **IMPORTANT**

If the MobileView 2711T terminal is properly connected to the junction box, a status indicator light on the terminal next to the E-stop is illuminated green. When a MobileView 2711T terminal is powered up, a dark screen is present for several seconds between the start-up screen and the next available screen.

### **Test Safety Functions**

To test the safety functions of the MobileView 2711T terminal, perform the following steps.

- 1. Connect the safety terminations for the E-stop and 3-position enable switch to the junction box. See the wiring diagram on page 15.
- 2. Apply power to the junction box.
- 3. Attach the MobileView connection cable to the junction box as shown on page 14.
- 4. Test the E-stop push button and the enabling switch to verify that each safety function is operating properly. Verify that the machine or plant operation stops when the button is pushed.

### **Initial Configuration of the Windows Operating System**

When a MobileView 2711T terminal is powered up for the first time, several set-up messages appear:

- Setup is starting services
- Setup is installing devices
- Setup is applying system settings
- Setup will continue after restarting your computer

The terminal then reboots. After the start-up screen appears, another set-up message appears:

Setup is preparing your computer for first use

This message begins the Windows® End User Setup procedure.

IMPORTANT	Do not disconnect power from the MobileView 2711T terminal until after the Windows End User Setup procedure is completed.
	If power is disconnected during this procedure, it can result in a corrupted system image. $ \\$

To configure the Windows operating system on the MobileView 2711T terminal, perform the following steps.

1. Enter the appropriate information to the screen that prompts you to create an administrator account and a computer name.





Onscreen Keyboard

#### **IMPORTANT**

When you touch a data field in a dialog box, an onscreen keyboard appears so that you can type in your information. You can also connect and use an external keyboard through the USB port on the back of the terminal.

- 2. After you add information, press Next.
- 3. Enter your account password into the next screen.

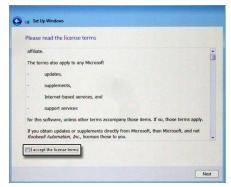


TIP An account password is recommended but not mandatory; if you do not want one, press Next.

4. After you add information, press Next.

A license-terms dialog box appears. The license terms apply to Microsoft® Windows Embedded Standard 7 operating system and all Allen-Bradley software content.

5. Press to check the 'I accept the licensed terms' box, and press Next.



6. Choose your appropriate date and time settings, and press Next.



A pop-up box appears, 'Windows is finalizing your settings.'

When completed, the MobileView 2711T terminal-desktop appears.



### Icons on the Terminal-desktop Taskbar

The icons on the terminal-desktop taskbar serve the following functions.

Button	Description
(h)	Press to power down the MobileView 2711T terminal.
O	Press to reboot (restart) the MobileView 2711T terminal.
<b>2</b>	Press to toggle between open tasks and applications on the MobileView 2711T terminal (similar to Alt+Tab on a keyboard).
	Status indicator for Enhanced Write Filter (EWF). Closed lock signifies EWF is enabled and open lock signifies EWF is disabled.

### Initial Configuration of MobileView Application Settings

### Enhanced Write Filter (EWF)

The Enhanced Write Filter (EWF) is a feature within the operating system of the MobileView 2711T terminal. When EWF is enabled, the system volume within the operating system is writeprotected, which provides an additional level of robustness for the operating system.

Before you configure applications on the MobileView 2711T terminal, verify that EWF is disabled. On the terminal-desktop taskbar, the EWF status icon is unlocked 🔐 when EWF is disabled.

#### **IMPORTANT**

By default, EWF is disabled. EWF must be disabled or any application changes are lost when the MobileView 2711T terminal is powered down.

Rockwell Automation recommends that you enable EWF to preserve operating system and application integrity, especially for where the terminal is expected to be frequently connected and disconnected from junction boxes.

Rockwell Automation recommends that you only enable EWF after applications on the MobileView 2711T terminal such as FactoryTalk® View Machine Edition (ME) have been set up. EWF applies only to the internal storage drive (C:) of the MobileView 2711T terminal and not to the internal Secure Digital (SD) card drive (D:).

#### To **enable EWF**, perform the following steps.

- 1. On the terminal-desktop taskbar, verify that the EWF is unlocked. EWF is enabled if the status icon is locked  $\bigcap$ ; EWF is disabled if the status icon is unlocked . By default, EWF is disabled.
- On the MobileView 2711T terminal desktop, press the EWF Manager.



3. The following screen appears. Press OK.



If you change the EWF status, then the MobileView 2711T terminal automatically restarts.

4. When the terminal desktop reappears, the EWF status icon on the terminal-desktop taskbar is locked 🔒 to signify EWF is enabled.

#### **IMPORTANT**

Rockwell Automation recommends that you only enable EWF after applications on the MobileView 2711T terminal such as FactoryTalk View ME software have been

If you make application changes with EWF enabled, then those changes are lost when the MobileView 2711T terminal is powered down or rebooted.

### Network Settings

To configure the Ethernet communications of your MobileView 2711T terminal, perform the following steps.

1. On the MobileView 2711T terminal desktop, press Network Settings.

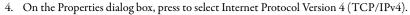


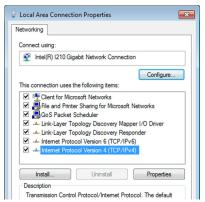
The Local Area Connection icon appears with the network cable unplugged.



TIP You can also press Control Panel>Network and Internet>Network Connections to access the same screen.

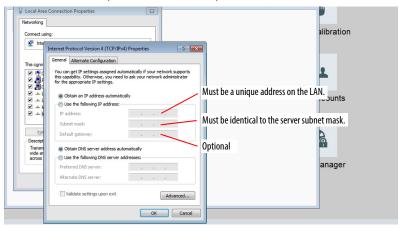
- 2. Touch and hold for about 3 seconds, and then release. A pull-down menu appears.
- 3. Press Properties.





- 5. Press Properties.
- 6. On the General tab of the Properties dialog box, press one of the following buttons:
  - 'Obtain an IP address automatically' if you have a DHCP server on your network that assigns IP addresses to the MobileView 2711T terminal.
  - 'Use the following IP address' to assign a static IP address. Complete the three text boxes with information from your network administrator or ISP.

Use the onscreen keyboard or an external keyboard to enter the text.



- 7. Press OK.
- 8. Press Close on the Local Connection Properties dialog.
- 9. Close Network Connections window to return to the MobileView 2711T terminal desktop.

#### FTView MF Station

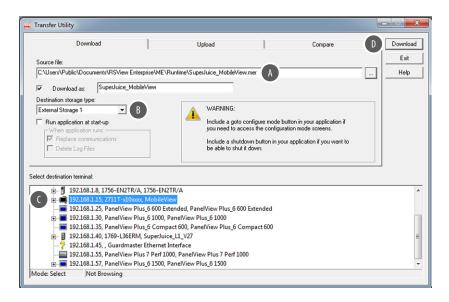
FactoryTalk View Machine Edition (ME) Station software on your MobileView 2711T terminal is dependent on a runtime application file that is configured on a separate personal computer with FactoryTalk® View Studio software installed.

**IMPORTANT** 

EWF must be disabled before you configure FTView ME settings, and then enabled afterwards. For more information, see Enhanced Write Filter (EWF) on page 22.

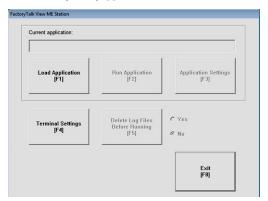
To initially configure FactoryTalk View ME Station, perform the following steps.

- 1. Create a runtime application file (MER) with FactoryTalk View Studio software.
- 2. Within FactoryTalk View Studio software, launch the transfer utility.
- 3. On the Download tab of the Transfer Utility dialog box, select the following:
  - The MER file that you just created on your personal computer as the source file (A).
  - The destination storage type as External Storage 1 (B). This selection places the MER file on the SD card of your MobileView terminal.
  - Select your MobileView terminal as the destination terminal (C).
  - Click Download (D).
    - TIP See the graphic with step 6 on page 26 for where the MER file resides on the SD card.

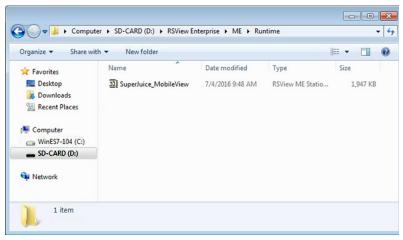




The following dialog appears.



- 5. Press Load Application or F1 to load the MER file.
- 6. Browse to the internal SD card drive (D:) and press the MER file that you wish to load.



7. Press Open.

You are prompted if you wish to replace the current communication configuration of the terminal with the communication configuration of the application.

8. Depending on your application, press Yes or No.

Wait while the application loads.

- 9. Press Terminal Settings or F4 to configure FactoryTalk ME Station-specific settings (for example, for FactoryTalk View ME Station to automatically start on a MobileView 2711T terminal power up or reboot).
- 10. If desired, press Application Settings or F3 to configure FactoryTalk View ME Station application-specific settings (for example, device shortcuts or start-up language).
- 11. Press the MobileView terminal-desktop to access EWF Manager and enable EWF; see page 22 for how to enable EWF.

**IMPORTANT** Do not press the Exit button (F8) in FactoryTalk View ME Station before you access EWF Manager on the MobileView terminal-desktop.

After you enable EWF, the MobileView 2711T terminal automatically restarts.

12. If FactoryTalk View ME Station was configured in step 9 to automatically start after any MobileView 2711T terminal startup or reboot, then the application automatically starts after step 11.

If FactoryTalk was not configured to automatically start, then you must press the FactoryTalk View ME Station icon on the MobileView terminal-desktop to load and run the application.



### Right-click Touch Screen Functionality and FactoryTalk View ME Station

If your FactoryTalk View ME Station uses momentary push buttons and you require long press times to activate those buttons, then the right-click touch screen functionality within the MobileView operating system must be disabled. By default, right-click functionality is enabled for the touch screen.

**IMPORTANT** EWF must be disabled before you change right-click functionality, and then enabled afterwards. For more information, see Enhanced Write Filter (EWF) on page 22.

To disable right-click touch screen functionality, perform the following steps.

1. From the MobileView 2711T terminal desktop, press Touch Configuration.

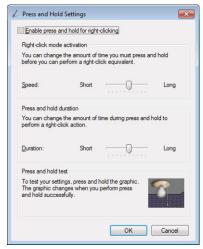


2. On the Touch tab of the Pen and Touch dialog box, press Press and hold.



With Press and hold highlighted, press Settings.

3. Clear the Enable press and hold for right-clicking checkbox.



4. Press OK.

5. On the Touch tab, press Apply.



Right-click functionality for the touch screen is now disabled.

6. Enable EWF to save your settings. For more information, see Enhanced Write Filter (EWF) on page 22.

## Shut Down the MobileView 2711T Terminal

To shut down the MobileView 2711T terminal, perform the following steps.

#### IMPORTANT

If you disabled EWF to make application changes, then you must enable EWF again before your shut down the MobileView 2711T terminal.

Review Enhanced Write Filter (EWF) on page 22 before you shut down the MobileView 2711T terminal.

- 1. Close FTView ME Station and return to the MobileView terminal-desktop.
- 2. Press 😃 on the desktop taskbar to shut down the MobileView 2711T terminal.

3. Press OK on the shutdown confirmation dialog box.

The terminal shuts down.



4. If desired, you can disconnect the tethered cable from the MobileView junction box.

IMPORTANT	Do not disconnect the tethered cable from the MobileView junction box until you first shut down the MobileView 2711T terminal.
	See publication <u>2711T-UM001</u> , MobileView 2711T Tethered Operator Terminal User Manual, for more information on the various ways to shut down and power off the terminal.

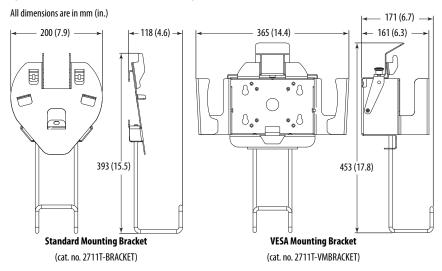
## **MobileView Mounting Brackets**

There are two mounting brackets available for MobileView terminals. Both mounting brackets are an accessory, which means they must be ordered separately from the MobileView 2711T terminal.

The MobileView standard mounting bracket (cat. no. 2711T-BRACKET) is used for stationary operation or storage of the terminal. The MobileView VESA mounting bracket (cat. no. 2711T-VMBRACKET) includes a VESA bracket that connects to the back of the MobileView terminal, which can then be mounted, stored, and locked into a VESA mounting bracket. This bracket is when locked storage is preferred.

Each mounting bracket ships with a cutout template for installation; 2711T-DS001 with the standard mounting bracket and 2711T-DS003 for the VESA mounting bracket.

Figure 7 - MobileView Terminal Mounting Brackets



## **European Communities (EC) Directive Compliance**

Rockwell Automation hereby declares that MobileView 2711T terminals with E-stop functionality are in conformity with Directive 2006/42/EC as specified in the Declaration of Conformity available from <a href="http://www.rockwellautomation.com/certification/overview.page">http://www.rockwellautomation.com/certification/overview.page</a>.

The MobileView 2711T terminal has a CE mark and is approved for installation within the European Union and European Economic Area (EEA) regions. The MobileView 2711T terminal has been designed and tested to meet the following directives.

#### **EMC Directive**

The MobileView 2711T terminal is tested to meet the Council Directive 2004/108/EC Electromagnetic Compatibility (EMC) by applying the following standards, in whole or in part, which is documented in a technical construction file:

- EN 61000-6-4 EMC Part 6-4: Generic standards Emission standard for industrial environments
- EN 61000-6-2 EMC Part 6-2: Generic standards Immunity for industrial
- EN 61131-2 Programmable Controllers Part 2 Equipment Requirement and Tests

The MobileView 2711T terminal is intended for use in an industrial environment.



ATTENTION: The MobileView 2711T terminal meets the requirements of 61000-6-4:2011, Class A Emissions for Industrial Environments. In residential environments, this product can cause high frequency interferences. If necessary, take corrective measures.

## Safety of Machinery Standards

The MobileView 2711T terminal meets the following standards:

- ISO 12100, Safety of machinery General principles for design Risk assessment and risk reduction
- ISO 13850, Emergency stop equipment, function aspects, principles of design
- EN 60204-1, Electrical equipment of machines, general requirements

A declaration of conformity (DoC) is available upon request or from http://www.rockwellautomation.com/certification/overview.page.

# Specifications

### General

Attribute	2711T-T10R1N1	2711T-B10R1K1	2711T-B10R1M1	2711T-F10G1N1	2711T-T10G1N1
Processor	Intel Atom 3815, 1.46 GHz				
Operating system	Microsoft Windows Embedded Standard 7				
Memory	4 GB DRAM/32 GB	4 GB DRAM/32 GB Flash			
Display Size (in.) Color/resolution Touch screen	10.1 WXGA/1280 x 800 pixels Analog resistive				
Function keys	No	Yes		No	
3-position enable switch	Yes				
2-circuit E-stop	Yes No				
USB drive slot	Yes				
Communication	10/100 Ethernet				
Dimensions	See page 3				
Weight	1550 g (3.42 lb) without options				

### **Electrical**

Attribute	2711T-T10R1N1	2711T-B10R1K1	2711T-B10R1M1	2711T-F10G1N1	2711T-T10G1N1
Rated supply voltage	24V DC				
Supply voltage tolerance range	19.230V DC (EN 61131-2)				
Input current	500 mA at 24V DC				
Peak inrush current	5.6 A (max)				
Cycle duration <sup>(1)</sup>	5000 (typical)				

<sup>(1)</sup> Applies only to the connection cable connector and the junction box.

### **Environmental**

Attribute	2711T-T10R1N1	2711T-B10R1K1	2711T-B10R1M1	2711T-F10G1N1	2711T-T10G1N1
Operating temperature	045 °C (3211	045 °C (32113 °F)			
Storage temperature	-25+70 °C (-13.	-25+70 °C (-13+158 °F)			
Relative humidity (noncondensing)	595% at 045 °C (32113 °F)				
Vibration (operating)	5150 Hz 58.4 Hz, 3.5 mm p-p 8.4150 Hz, 1 G peak				
Shock (operating)	15 G (1/2 Sine, 11 msec) IEC 60068-2-27				
Operating altitude	02,000 m (06,562 ft)				

#### **Accessories**

Cat. No.	Description
2711T-5MCABLE	Connection cable (5 m/16.4 ft) to connect the terminal to the junction box.
2711T-10MCABLE	Connection cable (10 m/32.8 ft) to connect the terminal to the junction box.
2711T-15MCABLE	Connection cable (15 m/49.2 ft) to connect the terminal to the junction box.
2711T-JBIP20DC	IP20 junction box that is 24V DC powered and includes a junction box cap.
2711T-BRACKET	Mounting bracket for stationary operation or to store the terminal.
2711T-VMBRACKET	VESA mounting bracket for stationary operation or locked storage of the terminal.
2711T-JUMP	Bridge connector to bypass emergency stop (E-stop) contactors in MobileView junction box. (1)

<sup>(1)</sup> For applications where the customer plans to move one MobileView terminal between many MobileView junction boxes.

## **Additional Resources**

These documents contain more information about related products from Rockwell Automation.

Resource	Description
MobileView Tethered Operator Terminal User Manual, publication <u>2711T-UM001</u>	Provides information to install, operate, and troubleshoot the MobileView 2711T terminal.
FactoryTalk View Machine Edition User's Guide, publication VIEWME-UM004	Provides comprehensive information about FactoryTalk View Machine Edition, procedures to create and run an automation application, and reference information.
Industrial Automation Wiring and Grounding Guidelines, publication 1770-4.1	Provides general guidelines to install a Rockwell Automation industrial system.
Product Certifications website, <a href="http://www.rockwellautomation.com/">http://www.rockwellautomation.com/</a> rockwellautomation/certification/overview.page	Provides declarations of conformity, certificates, and other certification details.

You can view or download publications at <a href="http://www.rockwellautomation.com/literature/">http://www.rockwellautomation.com/literature/</a>. To order paper copies of technical documentation, contact your local Allen-Bradley distributor or Rockwell Automation sales representative.

**Notes:** 

## **Rockwell Automation Support**

Use the following resources to access support information.

Technical Support Center	Knowledgebase Articles, How-to Videos, FAQs, Chat, User Forums, and Product Notification Updates.	https://rockwellautomation.custhelp.com/
Local Technical Support Phone Numbers	Locate the phone number for your country.	http://www.rockwellautomation.com/global/support/get-support- now.page
Direct Dial Codes	Find the Direct Dial Code for your product. Use the code to route your call directly to a technical support engineer.	http://www.rockwellautomation.com/global/support/direct-dial.pag
Literature Library	Installation Instructions, Manuals, Brochures, and Technical Data.	http://www.rockwellautomation.com/global/literature-library/ overview.page
Product Compatibility and Download Center (PCDC)	Get help determining how products interact, check features and capabilities, and find associated firmware.	http://www.rockwellautomation.com/global/support/pcdc.page

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Your comments will help us serve your documentation needs better. If you have any suggestions c to improve this document, complete the How Are We Doing? form at <a href="http://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002\_-en--thtp://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002\_-en--thtp://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002\_-en--thtp://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002\_-en--thtp://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002\_-en--thtp://literature/documents/du/

Rockwell Automation maintains current product environmental information on its website at <a href="http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page">http://www.rockwellautomation.com/rockwellautomation/about-us/sustainability-ethics/product-environmental-compliance.page</a>.

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