

# Quick Start

Original Instructions



**Allen-Bradley**

by ROCKWELL AUTOMATION

## Second-generation MobileView Tethered Operator Terminal

Catalog Numbers 2711T-B1011N1, 2711T-T1011N1-TC

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The following publication provides a brief overview of how to install and operate the second-generation MobileView™ 2711T terminal. For more detailed information on this terminal, refer to MobileView 2711T Tethered Operator Terminal User Manual, publication [2711T-UM001](#), which is available online at <https://rok.auto/literature>.

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**IMPORTANT**

This quick start publication must be kept throughout the entire service life of the second-generation MobileView 2711T terminal.

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## Summary of Changes

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

| Topic   | Page |
|---|------|
| Updated color description for cable connector and Junction Box connector. | 28   |
| Update color description to cable connector footnote.                     | 45   |

## MobileView 2711T Terminal Dimensions and Weight



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

## MobileView 2711T Terminal Component Description



| Item | Description   | Standard | 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 emergency stop (E-stop) push button, twin-circuit, N.C. contacts, 24V DC, 500 mA max  | •        | -      |
| 4    | Backside membrane keypad with tactile feedback <sup>(1)</sup>                                     | -        | •      |
| 5    | USB port  | •        | -      |
| 6    | Product nameplate   | •        | -      |
| 7    | Handle to hold the terminal, to store the connection cable, and to attach to the mounting bracket | •        | -      |
| 8    | 3-position, twin circuit, enabling switch for safety system interface                             | •        | -      |
| 9    | Plug for alternate cable outlet not used (meets degree protection IP65)                           | •        | -      |
| 10   | Back cover to access connection compartment   | •        | -      |

(1) The 2711T-T1011N1-TC MobileView terminal does not have this feature.

## Safety Precautions and Elements

This section covers general safety precautions and important information on the power supply, illuminated emergency stop (E-stop) switch, and enable switches that are used with the second-generation 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.
- When applying functional safety, restrict access to qualified, authorized personnel who are trained and experienced.
- 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 illuminated E-stop button and enabling switch at least once every 6 months. Verify that the machine or plant operation stops when the button is pushed.
- If the second-generation 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 second-generation MobileView 2711T terminal and controller is recommended for a higher speed connection.
- When a second-generation 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 second-generation 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.

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## Programmable Electronic Systems



**ATTENTION:** Personnel responsible for the application of safety-related Programmable Electronic Systems (PES) shall be aware of the safety requirements in the application of the system and shall be trained in using the system.

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### MobileView 2711T Terminal Operation

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

#### Power Supply

The second-generation MobileView 2711T terminal meets the Safety Class III requirements for electrical shock in accordance with EN 61131-2. For the DC power supply requirements, see [page 44](#) for the second-generation MobileView 2711T terminal and [page 45](#) for the IP65 junction box.

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 Ω/km (<219 Ω/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.

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#### Enabling Switch

On the second-generation 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 second-generation 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 second-generation 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.

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#### 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.

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

The illuminated E-stop push button of the second-generation 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 5](#).

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:** Illuminated E-stop push buttons that are not fully functional can have fatal consequences.

Illuminated E-stop push buttons must be effective under all circumstances in all operating modes of a machine or plant.

- When the illuminated E-stop push button is not wired into an emergency stop circuit, the second-generation 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 illuminated E-stop push button does not replace other safety devices or E-stop buttons mounted directly on machines.
  - Test the functionality of the illuminated E-stop push button at least once every 6 months. Verify that machine or plant operation stops when the button is pushed.
  - When a second-generation 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.'

The control system must be designed for the safety level that results from the risk assessment of ISO 12100.

## The Second-generation MobileView 2711T Terminal

This section provides details on the following topics:

- [Remove the Back Cover](#)
- [Install the Connection Cable to the Second-generation MobileView 2711T terminal](#)

### Remove the Back Cover

This section shows how to remove the back cover of the second-generation 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 second-generation MobileView 2711T terminal before you remove its back cover. When the back cover is removed, the second-generation MobileView 2711T terminal is sensitive to electrostatic discharge (ESD).

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1. Place the second-generation 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.

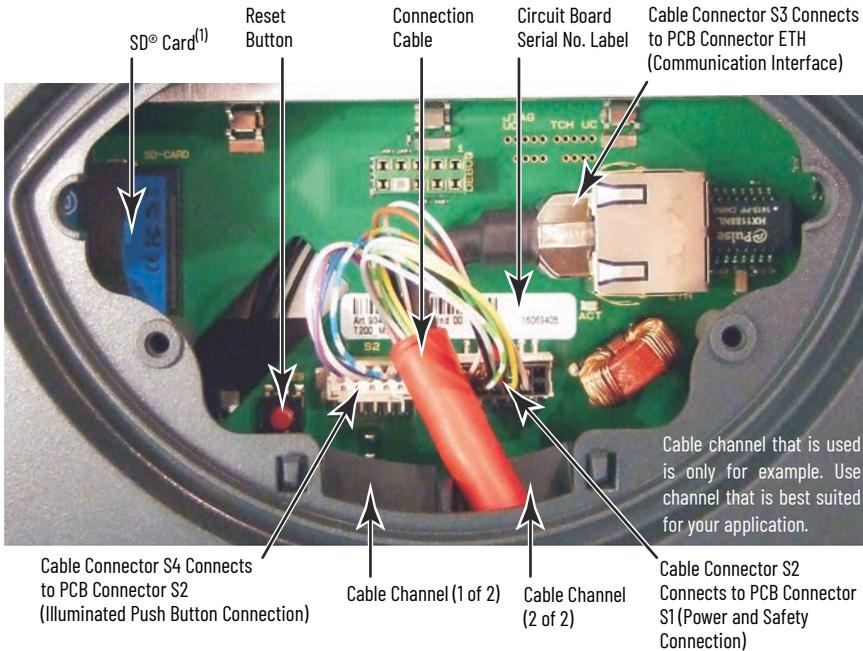


The 'Image Applied' label on the back cover was part of the manufacturing process. You can remove and discard this label.

3. Carefully lift off the back cover and set it aside. [Figure on page 7](#) shows the main circuit board of the second-generation MobileView 2711T terminal with the back cover removed.



### Printed Circuit Board (PCB) with Back Cover Removed



<sup>1)</sup> The 2711T-T1011N1-TC MobileView terminal does not have this feature.

**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 Second-generation MobileView 2711T terminal

A 22-pin connection cable can be attached on the right or left side of the second-generation MobileView 2711T terminal for right- or left-hand operation.

**IMPORTANT** The second-generation MobileView 2711T terminal is shipped with the cable connection port open for right-hand operation. For more information, see [Figure on page 8](#).

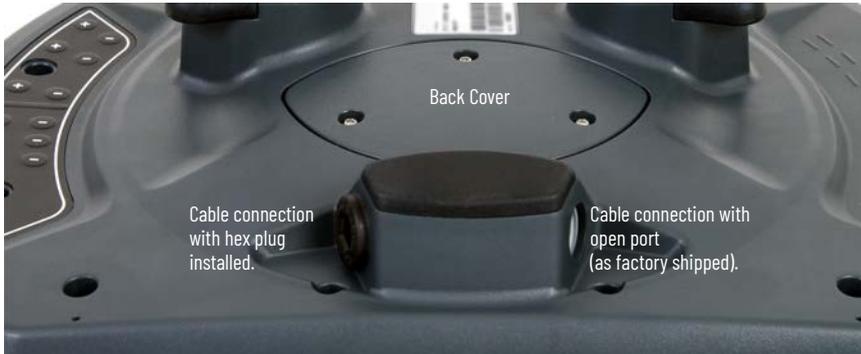
Use the following tools to install the 22-pin connection cable:

- 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 on page 8](#).

### Cable Connections on MobileView 2711T Terminal

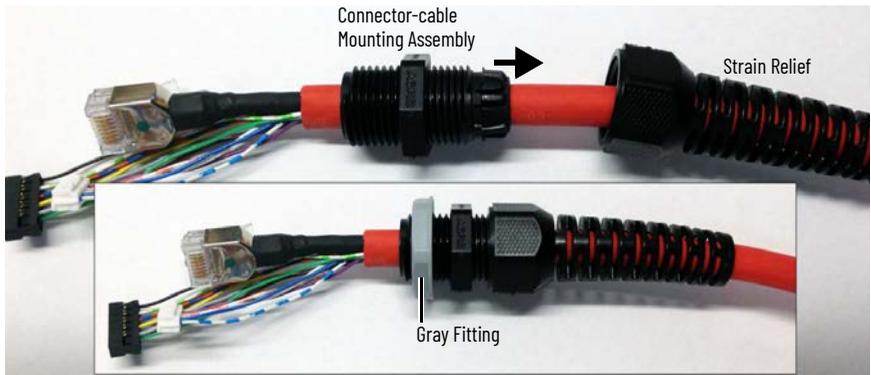


#### **IMPORTANT**

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

When the 22-pin 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.
3. Set the plug aside.
4. Remove the back cover as detailed on [page 6](#).
5. If present, unscrew and remove the gray fitting from the connector-cable mounting assembly.
6. Unscrew the strain relief from the connector-cable mounting assembly to allow the red cable to slide freely.



7. 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.

8. When the three terminals reach the main circuit board, carefully plug each terminal into its connection. See [Figure on page 7](#) for where each terminal is connected. Each terminal is keyed and can fit only one way on its corresponding connection.

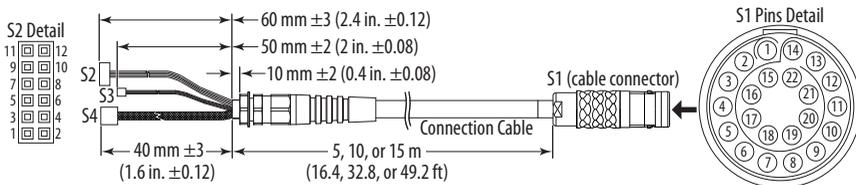
**IMPORTANT**

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

9. After each terminal is securely connected, reinstall the back cover.
10. Use a Torx T10 screwdriver to reinstall the three cover screws.
11. Install the connector-cable mounting assembly into the cable connection of the second-generation MobileView 2711T terminal.
12. Reinstall the strain relief to the connector-cable mounting assembly.
13. Tighten the strain relief and the connector-cable mounting assembly with the 19 mm open-end wrench or spanner.
14. Torque the connector-cable mounting assembly to 1.2 N•m (10.6 lb•in).
15. If you chose left-hand operation, reinstall the plug in the open cable-connection port with an 8 mm hex key.
16. Torque the plug to 1.2 N•m (10.6 lb•in).

### The 22-pin MobileView Connection Cable

The 22-pin connection cable connects the second-generation MobileView 2711T terminal to an IP65 junction box. The connection cable is 5 m, 10 m, or 15 m (16.4 ft., 32.8 ft., or 49.2 ft.) long. This cable withstands water, cleaning agents, motor oil, drilling oils, grease, lubricants, and condensates that contain hydrochloric acid.



## Second-generation MobileView Tethered Operator Terminal Quick Start

| MobileView Terminal                       | Connection Cable |                   |                  |                  |                                |
|---|------------------|-------------------|------------------|------------------|--------------------------------|
| PCB Connector                             | Connector No.    | Connector Pin No. | S1 Cable Pin No. | Cable Wire Color | Signal Description             |
| S1,<br>Power and<br>Safety<br>Connections | S2               | 1                 | 10               | pink             | 24V DC                         |
|   |                  | 2                 | 9                | black            | GND_IN                         |
|   |                  | 3                 | 7                | brown            | E-stop, circuit 2 (+)          |
|   |                  | 4                 | 22               | white-green      | E-stop, circuit 2 (-)          |
|   |                  | 5                 | 6                | gray             | E-stop, circuit 1 (+)          |
|   |                  | 6                 | 19               | red-blue         | E-stop, circuit 1 (-)          |
|   |                  | 7                 | 18               | green-brown      | Enabling switch, circuit 1 (+) |
|   |                  | 8                 | 20               | yellow           | Enabling switch, circuit 1 (-) |
|   |                  | 9                 | 8                | green            | Enabling switch, circuit 2 (+) |
|   |                  | 10                | 21               | gray-pink        | Enabling switch, circuit 2 (-) |
| ETH,<br>Communicatio<br>n Interface       | S3               | 1 <sup>(1)</sup>  | 1                | blue             | TD+ (transmit)                 |
|   |                  | 2 <sup>(1)</sup>  | 2                | orange           | TD- (transmit)                 |
|   |                  | 3 <sup>(1)</sup>  | 3                | white            | RD+ (receive)                  |
|   |                  | 6 <sup>(1)</sup>  | 4                | red              | RD- (receive)                  |
| S2,<br>Illuminated<br>Push Button         | S4               | 2                 | 11               | violet           | E-stop, illuminated (+)        |
|   |                  | 4                 | 12               | white-pink       | E-stop, illuminated (-)        |
|   |                  | 1                 | 5                | white            | Semi-wireless jumper           |
|   |                  | 3                 | 14               | blue             | Semi-wireless jumper           |
|   |                  | 5                 | 13               | white-blue       | Box ID                         |
|   | -                |                   | 15               | Li1              | Bridge                         |
|   |                  |                   | 16               | Li1              | Bridge                         |
|   |                  |                   | 17               | -                | Not used                       |

(1) Shielded.

## The MobileView IP65 Junction Box

There are two IP65 junction boxes that work with second-generation MobileView terminals and 22-pin connection cables. 2711T-JBIP65DC1 is the IP65 junction box with cord grips that must be wired by the customer. 2711T-JBIP65DM1 is the IP65 junction box with M12 On-Machine™ connections that is factory wired.

This section provides information on the following topics.

| Description   | Page |
|---|------|
| Mount the IP65 Junction Box Back Plate                                  | 11   |
| Temporarily Mount the IP65 Junction Box                                 | 13   |
| Wire the 2711T-JBIP65DC1 Junction Box                                   | 14   |
| Configure the 2711T-JBIP65DC1 Junction Box                              | 18   |
| Configure the 2711T-JBIP65DM1 Junction Box                              | 20   |
| Mount the IP65 Junction Box to Its Back Plate                           | 20   |
| Connect M12 On-Machine Connectors to the 2711T-JBIP65DM1 Junction Box   | 21   |
| Connect Power to IP65 Junction Boxes                                    | 22   |
| IP65 Junction Box Status Indicator Lights                               | 24   |
| Connect a Second-generation MobileView Terminal to an IP65 Junction Box | 27   |
| Connect a Black Bridge Connector to an IP65 Junction Box                | 28   |
| Connect to an Ethernet Network  | 28   |

### Mount the IP65 Junction Box Back Plate

IP65 junction boxes are shipped with their back plate removed so you perform certain functions for each junction box as needed. This section provides information on how to mount the back plate of either IP65 junction box.

IP65 junction boxes are shipped with Second-generation MobileView Tethered Operator Terminal IP65 Junction Box Mounting Template, publication [2711T-DS004](#). Use this mounting template or the back plate of the IP65 junction box to drill the mounting holes.

#### IMPORTANT

Consider the following before you mount an IP65 junction box:

- Do not mount near a heat source or where direct sunlight is likely.
- Do not mount where excessive mechanical vibrations, excessive dust, humidity, or strong magnetic fields are likely.

#### *2711T-JBBKCOVER Back Cover Plate Accessory*

This accessory is for rear access to the junction box from inside a control cabinet. This cover plate provides quick access to configurable components for both junction boxes (see [Figure on page 18](#)), and to reduce cables that might otherwise be directed through cord grips on the 2711T-JBIP65DC1 junction box.

The cover plate is fitted with a seal. To maintain a tight seal and the IP65 rating (when installed on an IP65-rated control cabinet), install the cover plate on an even surface.

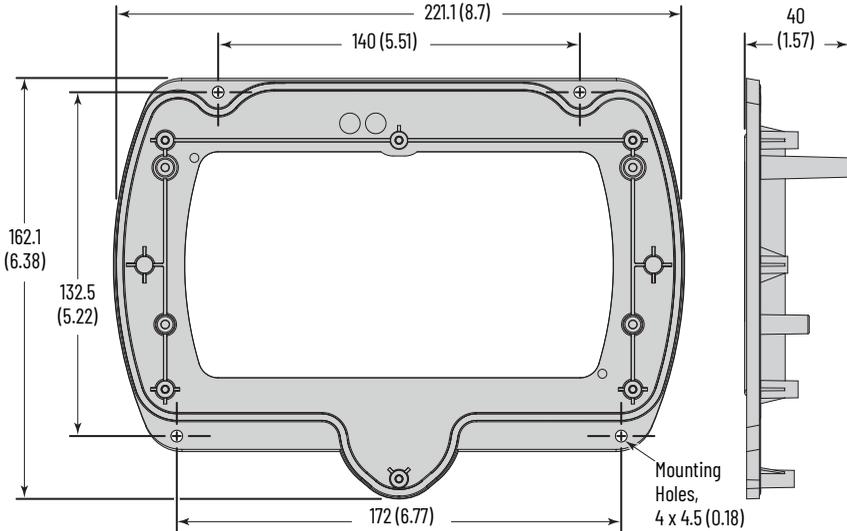
### IMPORTANT

Any cable that is fed through the control cabinet wall must be smaller than the hole in the cabinet wall.

Provide stress relief for the cables on the control cabinet side when you wire an IP65 junction box with this back cover plate.

### 2711T-JBBKCOVER Back Cover Plate Dimensions

All dimensions are in mm (in.)



The following instructions also apply to the back cover plate accessory.

To mount the back plate of an IP65 junction box, perform the following steps.

1. Determine where to mount the junction box.

Use the dimensions in [Figure on page 13](#) to decide where to locate the junction box in a safe area that is easily accessible for a terminal operator.

**IP65 Junction Box Dimensions (for 2711T-JBIP65DC1 and 2711T-JBIP65DM1)**



2. Use the back plate or the supplied cutout template to mark where to drill the four mounting holes for the junction box.

**IMPORTANT**

Take precautions so metal cuttings do not enter components that are already installed in the control cabinet or in the junction box.

3. With a drill and drill bit, drill the four holes.



Use four M4 bolts with a maximum bolt head diameter of 9 mm, and with self-locking M4 nuts. However, the fasteners depend on the material of the mounting surface, such as the wall of a control cabinet or a machine.

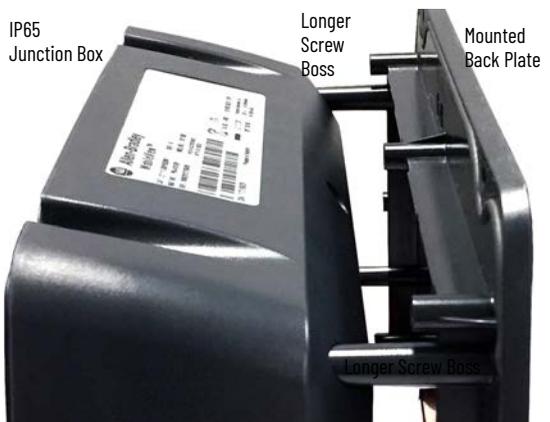
4. Attach the back plate to the mounting surface.

**Temporarily Mount the IP65 Junction Box**

Temporarily mount an IP65 junction box to its installed back plate for the following:

- For hands-free wiring and subsequent configuring of 2711T-JBIP65DC1, the IP65 junction box with cord grips
- For Box ID configuring and brightness setting of 2711T-JBIP65DM1, the IP65 junction box with M12 On-Machine connections

You can slide the IP65 junction box onto the longer screw bosses of the mounted back plate; no screws are needed.



## Wire the 2711T-JBIP65DC1 Junction Box

To wire the 2711T-JBIP65DC1 junction box, perform the following steps.

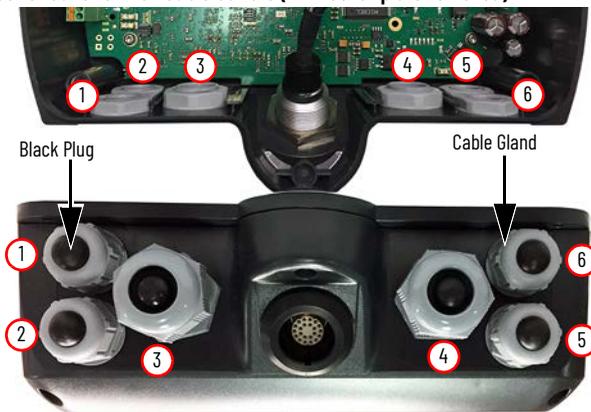


**SHOCK HAZARD:** When the back plate is removed, the circuit board inside the junction box is sensitive to electrostatic discharge (ESD).

**SHOCK HAZARD:** Use an anti-static wriststrap that is connected to the work surface, and properly grounded tools and equipment.

1. See [Figure on page 14](#) to determine the appropriate cable outlets for the wires to be installed.
2. Remove the cable glands from the cable outlets at the bottom of the junction box that you plan to use.
3. With a small screwdriver, remove the black plugs from the seal rings that you plan to use.

### 2711T-JBIP65DC1 Junction Box Cable Outlets (with cover plate removed)



| Item No. | Cable Outlet Description | Gland Size | Cable Dia. Range              | Protection Class |
|----------|--------------------------|------------|-------------------------------|------------------|
| 1        | Standard                 | M16 x 1.5  | 4...10 mm<br>(0.16...0.4 in.) | IP68             |
| 2        | Standard                 |            |                               |                  |
| 3        | Ethernet                 | M20 x 1.5  | 3...6 mm<br>(0.12...0.24 in.) | IP66             |
| 4        | Ethernet                 |            |                               |                  |
| 5        | Standard                 | M16 x 1.5  | 4...10 mm<br>(0.16...0.4 in.) | IP68             |
| 6        | Standard                 |            |                               |                  |

4. Place the corresponding seal rings over each wire.
5. Place the corresponding cable gland over each wire.
6. Feed each wire through the corresponding cable outlet.
7. See [page 15](#) for where to attach each wire to the appropriate terminal.

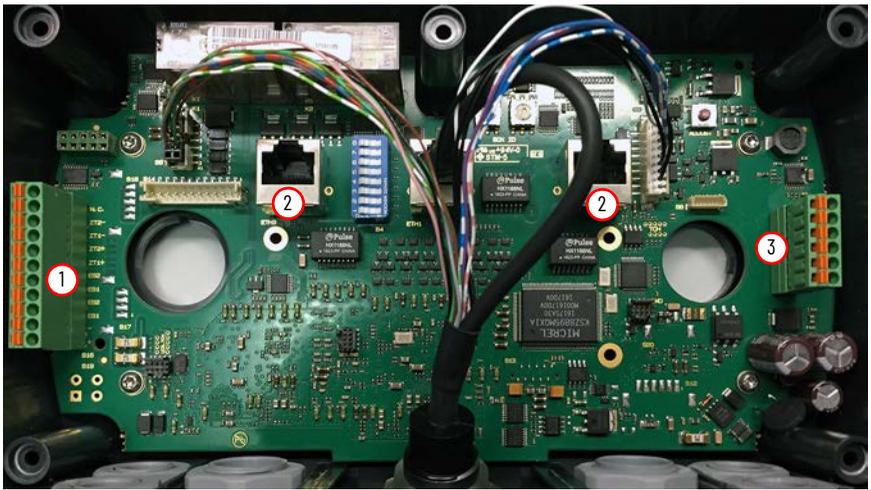
8. After all wires are attached, hand-tighten the cable glands to secure the wires.

**IMPORTANT** To maintain the protection class, any unused cable outlet must be sealed with a black plug.

9. Before you reinstall the junction box to its back plate, consider how you plan to use the junction box with a second-generation MobileView terminal.

| If  | Then  |
|---|---|
| You plan to use a second-generation MobileView terminal that does not have Box ID functionality                     | You must activate a DIP switch; see <a href="#">DIP Switch on page 18</a> .   |
| You plan to use a second-generation MobileView terminal with Box ID functionality with multiple IP65 junction boxes | You can assign an address for each junction box specific to its application; see <a href="#">BoxID Functionality on page 19</a> .             |
| You want to adjust the brightness of the illuminated E-stop button on a second-generation MobileView terminal       | You can press an adjustment button for four possible brightness levels; see <a href="#">Illuminated E-stop Button Brightness on page 19</a> . |

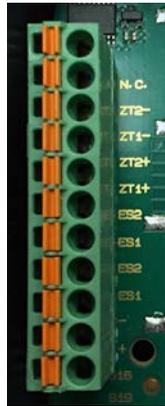
10. After you perform any suggestions in [step 9](#), use a Torx 10 screwdriver and the six screws to reinstall the junction box to its cover plate.



| Item | PCB Description | Description  |
|------|-----------------|--|
| 1    | S16             | 11-pin terminal for power, and safety circuits of E-stop push button and enabling switch of the MobileView 2711T terminal. For more details, see <a href="#">S16 Terminal Pin Descriptions on page 16</a> .  |
| 2    | ETH3, ETH2      | 8-pin, RJ45 terminal for Ethernet connectivity to a control system network. Use one terminal for input and the other terminal for output. For more details, see <a href="#">Ethernet (ETH3, ETH2) Connections on page 16</a> .   |
| 3    | S10             | 6-pin terminal for an application or control system where multiple IP65 junction boxes are used. This terminal helps identify which IP65 junction box has a second-generation MobileView terminal that is attached to it. For more details, see <a href="#">S10 Terminal Pin Descriptions on page 17</a> . |

### S16 Terminal Pin Descriptions

| Pin No. | PCB Description | Description  |
|---------|-----------------|--|
| 1       | N.C.            | Not connected  |
| 2       | ZT2-            | Enabling device, circuit 2-  |
| 3       | ZT1-            | Enabling device, circuit 1-  |
| 4       | ZT2+            | Enabling device, circuit 2+  |
| 5       | ZT1+            | Enabling device, circuit 1+  |
| 6       | ES2             | Emergency stop (E-stop), circuit 2                                   |
| 7       | ES1             | E-stop, circuit 1  |
| 8       | ES2             | E-stop, circuit 2  |
| 9       | ES1             | E-stop, circuit 1  |
| 10      | -               | Ground (GND)   |
| 11      | +               | 24V DC power supply<br>(see <a href="#">Power Supply on page 4</a> ) |



### Ethernet (ETH3, ETH2) Connections

Second-generation MobileView 2711T terminals are equipped with an Ethernet interface that supports TCP/IP protocol at 10/100 Mbps for half/full-duplex communication.

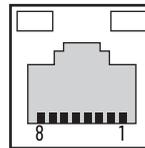


**ATTENTION:** Under high noise situations, the Ethernet network can have packet loss of <10% at 100 Mbps. By design, Ethernet communication resends packets, so there is no data loss but there is a possible reduction in communication speed.

The two Ethernet connectors on the IP65 junction box provide connection to an Ethernet network. Each connector uses an 8-pin, RJ45 modular jack connector. Pinouts are as follows.

| 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        |



S10 Terminal Pin Descriptions

| Pin No. | PCB Description | Description  |
|---------|-----------------|--|
| 1       | DRY             | Closed when a second-generation MobileView terminal is connected.<br>When an application or control system has multiple IP65 junction boxes available, this I/O is used to determine which junction box has a second-generation MobileView terminal that is connected to it. |
| 2       | DRY             |  |
| 3       | KEY3            | Not used.  |
| 4       | KEY2            |  |
| 5       | KEY1            |  |
| 6       | KEY0            |  |

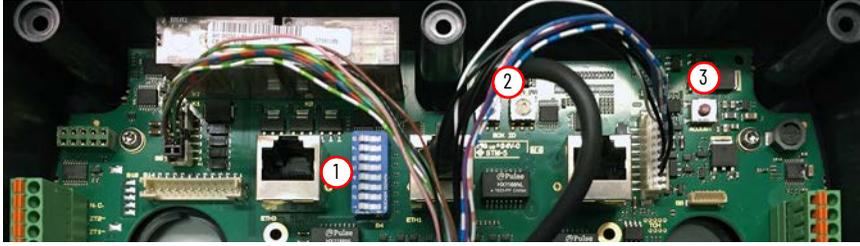


**IMPORTANT** The DRY contact signal can be used in the control application and is only designed for purposes that are not safety related.

## Configure the 2711T-JBIP65DC1 Junction Box

The 2711T-JBIP65DC1 junction box can be configured to work with second-generation MobileView terminals with Box ID functionality and illuminated E-stop buttons.

### IP65 Junction Box Configurable Components



| Item | PCB Description | Description  |
|------|-----------------|--|
| 1    | B4              | A DIP switch meant for MobileView terminals <u>without</u> Box ID functionality. Activate this DIP switch if the MobileView terminal has an illuminated E-stop button. For more details, see <a href="#">DIP Switch on page 18</a> . |
| 2    | BOX ID          | Two address switches to set the address when Box ID functionality is available on a MobileView terminal. For more details, see <a href="#">BoxID Functionality on page 19</a> .  |
| 3    | ADJUST          | Use this switch to set the brightness of the illuminated E-stop button on a second-generation MobileView terminal. For more details, see <a href="#">Illuminated E-stop Button Brightness on page 19</a> .                           |

### DIP Switch

If a MobileView terminal does not have Box ID functionality, then use this DIP switch to configure whether an illuminated E-stop button is used on the MobileView terminal.

| If   | Then   |
|--|--|
| The MobileView terminal to be used has no Box ID functionality and no illuminated E-stop button (such as MobileView terminals with gray push buttons, cat. nos. 2711T-F10G1N1 and 2711T-T10G1N1) | All DIP switches must be deactivated (factory set as standard)  |
| The MobileView terminal to be used has no Box ID functionality but has an illuminated E-stop button  | Activate DIP switch 8   |

**IMPORTANT** If the MobileView terminal being used has Box ID functionality and an illuminated E-stop button, then no action is needed. The IP65 junction box automatically detects the illuminated E-stop button, and all factory set DIP switch settings remain deactivated.

*BoxID Functionality*

If you have a second-generation MobileView terminal with Box ID functionality, then you can set an address on the IP65 junction box. With an address, only settings specific to that application are available on the MobileView terminal. Use the two address switches whenever one MobileView terminal with Box ID functionality is used between multiple IP65 junction boxes in various locations. With the two address switches, you can set Box IDs from 0 to 255 as hexadecimal values.

To use Box ID functionality with FactoryTalk® View ME software, access the Rockwell Automation Knowledgebase link at [rok.auto/knowledgebase](http://rok.auto/knowledgebase) and search for AID 1043633.

**Address Examples**

| Left Address Switch | Right Address Switch | MobileView Terminal Address |
|---------------------|----------------------|-----------------------------|
| 0                   | 0                    | 0 <sup>(1)</sup>            |
| 0                   | F                    | 15                          |
| 1                   | 0                    | 16                          |
| 1                   | F                    | 31                          |

| Left Address Switch | Right Address Switch | MobileView Terminal Address |
|---------------------|----------------------|-----------------------------|
| A                   | 0                    | 160                         |
| A                   | F                    | 175                         |
| F                   | 0                    | 240                         |
| F                   | F                    | 255                         |

(1) Factory set as standard.

*Illuminated E-stop Button Brightness*

You can use a button on the IP65 junction box terminal to adjust the illuminated E-stop push button on a second-generation MobileView terminal.



**WARNING:** To adjust the brightness, power must be applied to the IP65 junction box, and a second-generation MobileView terminal must be connected to the junction box. To avoid ESD damage to the junction box and to avoid electrical shock to the adjuster, only qualified personnel should perform this adjustment.

The following brightness levels can be selected.

- 95% (factory setting)
- 25%
- 50%
- 12.5%

Each press of the button moves to the next brightness level. After you reach 12.5% brightness, the next press cycles back to 95%.

**IMPORTANT** Only adjust the brightness level of the illuminated E-stop button if it is appropriate for the environment where the second-generation MobileView terminal is being used. Too low of a brightness setting can be difficult to see or can be misinterpreted.

The set brightness level is maintained, even after a power loss.

### Configure the 2711T-JBIP65DM1 Junction Box

The 2711T-JBI65MI junction box with M12 On-Machine connections is factory wired. It is still shipped with the back plate removed, so you can configure Box ID functionality or adjust the brightness of the illuminated push button on the MobileView terminal before you mount the junction box to its back plate and connect the M12 On-Machine connections.



**SHOCK HAZARD:** When the back plate is removed, the circuit board inside the 2711T-JBIP65DM1 junction box is sensitive to electrostatic discharge (ESD). Use an anti-static wriststrap that is connected to the work surface, and properly grounded tools and equipment.

---

#### Box ID Functionality

See [Figure on page 18](#) for where to find the Box ID address switches on the junction box circuit board.

See [page 19](#) for how to configure Box ID functionality for your 2711T-JBI65MI junction box.

#### Illuminated E-stop Button Brightness

See [Figure on page 18](#) for where to find the illuminated E-stop button on the junction box circuit board.

See [page 19](#) for how to set the brightness of a second-generation MobileView terminal meant to attach to your 2711T-JBI65MI junction box.

### Mount the IP65 Junction Box to Its Back Plate

To mount an IP65 junction box to its back plate, perform the following steps.

1. If you temporarily mounted the IP65 junction box as detailed in [Temporarily Mount the IP65 Junction Box on page 13](#), remove the junction box from the screw bosses.
2. Align the IP65 junction box with its mounted back plate.

---

**IMPORTANT**

To maintain a tight seal and the IP65 rating, verify that the junction box is seated properly to the cover plate.

---

3. Mount the junction box to its back plate with the six supplied screws. Torque the six screws to 0.85...1.15 N•m (7.5...10.2 lb•in).



## Connect M12 On-Machine Connectors to the 2711T-JBIP65DM1 Junction Box

To connect M12 On-Machine connectors to the 2711T-JBIP65DM1 junction box, perform the following steps.

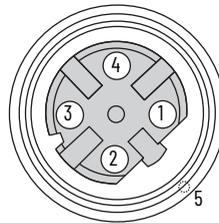
1. Determine where to connect each M12 On-Machine connection.

| Item No. | Connector Description | M12 Connector Type     |
|----------|-----------------------|------------------------|
| 1        | Ethernet I/O          | D-code pin female      |
| 2        | Dry contact           | 5-pin micro-style male |
| 3        | Enabling device       | 5-pin I/O male         |
| 4        | Control power         | Mini 4 pin male        |
| 5        | E-stop                | 5-pin I/O male         |



### M12 Ethernet Pin Descriptions

| Pin No. | Description                | Wire Color   | 8-way Modular RJ45 Pin |
|---------|----------------------------|--------------|------------------------|
| 1       | M12_Tx+                    | White-orange | 1                      |
| 2       | M12_Rx+                    | White-green  | 3                      |
| 3       | M12_Tx-                    | Orange       | 2                      |
| 4       | M12_Tx-                    | Green        | 6                      |
| 5       | Connector shell shield GND |              |                        |



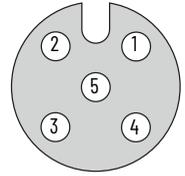
For the D-code M12 female network connectors, use polyamide small-body unshielded or zinc die-cast large-body shielded mating connectors.

If you use shielded (STP) cable with metal housing, isolate the shield at the junction box end of the cable to minimize ground offsets.

## Second-generation MobileView Tethered Operator Terminal Quick Start

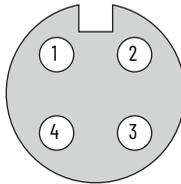
### M12 Dry Contact, E-stop, and Enabling Device Pin Descriptions

| Pin No. | M12 Dry Contact Pin Descriptions | Pin No. | M12 E-stop Pin Descriptions | Pin No. | M12 Enabling Device Pin Descriptions |
|---------|----------------------------------|---------|-----------------------------|---------|--------------------------------------|
| 1       | External 24V input               | 1       | E-stop 2 test output        | 1       | Enabling device 2 test output        |
| 2       | —                                | 2       | E-stop 2 safe input         | 2       | Enabling device 2 safe input         |
| 3       | Ground (GND)                     | 3       | —                           | 3       | —                                    |
| 4       | Dry contact output               | 4       | E-stop 1 safe input         | 4       | Enabling device 1 safe input         |
| 5       | —                                | 5       | E-stop 1 test output        | 5       | Enabling device 1 test output        |



### M12 Power Pin Descriptions

| Pin No. | Description        |
|---------|--------------------|
| 1       | Output power +     |
| 2       | Sensor/MDL power + |
| 3       | Sensor/MDL power - |
| 4       | Output power -     |



## Connect Power to IP65 Junction Boxes

After an IP65 junction box has been mounted, configured, and wired or connected, apply power to the junction box.

For information on 24V DC power supply requirements, see [Power Supply on page 4](#).



**SHOCK HAZARD:** Supply the IP65 junction box and the second-generation MobileView terminal exclusively from power sources with SELV or PELV circuit protection according to EN 61131-2. Only connect voltages and circuits that are separated from dangerous voltages (for example, with sufficient insulation) to connections, terminals or interfaces up to a rated voltage of 50V DC.

After power has been applied, perform the following steps to verify that the IP65 junction box is performing correctly.

**IMPORTANT** See [Table on page 24](#) for what the following colors represent.

1. Verify that the power status indicator on the front of the IP65 junction box is lit and green.
2. Verify that the Ethernet status indicator on the front of the IP65 junction box is lit and green.
3. Connect a second-generation MobileView terminal.

- a. If the MobileView terminal has an illuminated E-stop button, verify that the illuminated E-stop status indicator on the front of the IP65 junction box is lit and green.
- b. Verify that the status indicator bar on the front of the IP65 junction box is lit and steady green.
4. Push the illuminated E-stop push button on the second-generation MobileView terminal to trigger a stop. Verify that the status indicator bar on the front of the IP65 junction box is lit and steady red.
5. Disconnect the MobileView terminal.

---

**IMPORTANT**

When you disconnect a second-generation MobileView terminal from an IP65 junction box, it begins a 10-second countdown to a system emergency stop. Therefore, you have 10 seconds to reconnect a second-generation MobileView terminal or black bridge connector to keep the safety circuit complete.

---

- a. Verify that the status indicator bar on the front of the IP65 junction box changes from steady red to steady yellow.
- b. Verify that the status indicator bar reduces one flashing yellow light after each 1.67 second of disconnect time.

---

**IMPORTANT**

Only perform step c if you are commissioning the unit, performing maintenance, or testing safety equipment, because step c triggers a system emergency stop.

---

- c. After 10 seconds of disconnect time, verify that all six lights of the status indicator bar are off and then replaced by a flashing yellow status indicator bar.

The flashing yellow status indicates that the relay outputs of the IP65 junction box are de-energized and therefore open, which triggers an emergency stop of the system or machine.

---



**WARNING:** An IP65 junction box does not protect against the restart of a system or machine. Separate protection must be provided on the system or machine, such as an Acknowledgment key.

---

## IP65 Junction Box Status Indicator Lights

The front of each IP65 junction box has three status indicators and a status indicator bar.



[Table on page 24](#) explains what each color signifies on the lights and status indicator bar.

### IP65 Junction Box Status Indicators and Bar Colors

| Indicator          | Color Displayed | Status Indicated   |
|--------------------|-----------------|--|
| Power              | Green           | Power is present and the IP65 junction box is ready for operation.   |
|                    | No color        | No power is present or there is a fault during startup.  |
| Illuminated E-stop | Green           | A second-generation MobileView terminal with an illuminated E-stop button is connected to the junction box.    |
|                    | No color        | A second-generation MobileView terminal without an illuminated E-stop button is connected to the junction box. |
| Ethernet           | Green           | The junction box is connected to an Ethernet network.  |
|                    | No color        | The junction box is not connected to an Ethernet network.  |

IP65 Junction Box Status Indicators and Bar Colors (Continued)

| Indicator                           | Color Displayed | Status Indicated   |
|-------------------------------------|-----------------|--|
| Status indicator bar <sup>(1)</sup> | Steady green    | A second-generation MobileView terminal with an E-stop button is connected correctly and the E-stop has not been pressed.  |
|                                     | Solid white     | No second-generation MobileView terminal is connected but a 22-pin bridge connector is connected correctly.  |
|                                     | Blinking white  | No second-generation MobileView terminal or 22-pin bridge connector is connected to the junction box.  |
|                                     | Steady yellow   | Begins the disconnect count time of 10 seconds after a second-generation MobileView terminal or 22-pin bridge connector is disconnected from the junction box.   |
|                                     | Partial yellow  | Going from right to left, a light on the status bar shuts off after 1.67 seconds of disconnect time has passed. For example, only three of the six lights remain lit after 5 seconds of disconnect time. |
|                                     | Flashing yellow | When no plug is connected after 10 seconds, the disconnect timeout forces the junction box into a safe mode.   |
|                                     | Steady red      | An E-stop button on a second-generation MobileView terminal has been pressed and safe mode is activated.   |

(1) The IP65 junction box must have power (green at power status indicator) for the status bar to display status.



**ATTENTION:** Other colors signify when a second-generation MobileView terminal or IP65 junction box are in an error state. To identify these colors, see the Troubleshooting section in the MobileView Tethered Operator Terminal User Manual, publication [2711T-UM001](#).

## Second-generation MobileView Tethered Operator Terminal Quick Start

### Reconnect Power to IP65 Junction Boxes

If the IP65 junction box is powered off, the relays of the emergency stop circuits are no longer actively held closed and the emergency stop circuit is then opened, which is comparable to an activated E-stop.

When powered off, the input states and E-stop state then are saved in the IP65 junction box memory. When power is restored, these saved states are then retrieved.

Therefore, the IP65 junction box can have the following states.

| State         | Description  |
|---------------|--|
| Normal        | A second-generation MobileView terminal (with an unactivated E-stop push button) is connected.   |
| Bridge active | A black, 22-pin bridge connector is connected.   |
| E-stop        | The E-stop push button on the second-generation MobileView terminal has been activated.  |
| Error state   | The E-stop push button on the connected, second-generation MobileView terminal and the retrieved E-stop in the IP65 junction box memory are not the same. In this case, the E-stop push button of the connected MobileView terminal is unactivated but the saved, retained E-stop in the IP65 junction box memory is activated. Therefore, the E-stop push button on the MobileView terminal must be activated and then unlocked to reset the IP65 junction box. |

### Connected/Disconnected Timer State

A second-generation MobileView terminal or a black bridge connector must be connected to the IP65 junction box. When you disconnect one to connect the other, the IP65 junction box recognizes the disconnection and enters a timer state, when the operator has a maximum of 10 seconds to reconnect a device.

During this disconnected time, the E-stop of the IP65 junction box is bypassed until a MobileView terminal with an unactivated E-stop push button or a black bridge connector is connected.

| If   | Then  |
|--|---|
| The connected, second-generation MobileView terminal has an illuminated E-stop push button that is unactivated <sup>(1)</sup>        | The E-stop push button is recognized by the IP65 junction box and it is illuminated.  |
| The connected, second-generation MobileView terminal has an illuminated E-stop push button that is properly configured but activated | The E-stop push button on the second-generation MobileView terminal must be deactivated and reset before the IP65 junction box returns to the normal state mentioned in <a href="#">Reconnect Power to IP65 Junction Boxes on page 26</a> . |
| A black bridge connector is being connected  | The black bridge connector must be connected within 10 seconds for the IP65 junction box to recognize the device and enter the bridge active state mentioned in <a href="#">Reconnect Power to IP65 Junction Boxes on page 26</a> .         |
| No second-generation MobileView terminal or black bridge connector is connected within 10 seconds                                    | The IP65 junction box timer state times out and an E-stop is triggered.   |

(1) You must first configure an IP65 junction box to recognize an illuminated E-stop push button on a second-generation MobileView terminal. For more information, see [DIP Switch on page 18](#).

## Connect a Second-generation MobileView Terminal to an IP65 Junction Box

To power up or start a second-generation MobileView 2711T terminal, insert a 22-pin connection cable into the MobileView IP65 junction box. A 22-pin connection cable has a black or anthracite colored cable connector.



Red dot on cable connector must align with red dot on junction box.



Connection Cable with Black color



Connection Cable with Gray color



Cable connector and the Junction Box connector will both be changing color and could be black or Gray colored. The 22-pin bridge connector is not changing color and will remain black.

### IMPORTANT

You can use a 22-pin connection cable with all second-generation MobileView terminals, first generation MobileView terminals 2711T-F1061N1 and 2711T-T1061N1, and both IP65 junction boxes.

You cannot use a silver 22-pin connection cable with first generation MobileView terminals 2711T-B10K1N1, 2711T-B10M1N1, and 2711T-T10R1N1, or an IP20 junction box.

### Connect a Black Bridge Connector to an IP65 Junction Box

An optional black, 22-pin bridge connector (Cat. No. 2711T-22JUMP) is available for the IP65 junction box. It is for situations when the IP65 junction box is powered on but a second-generation MobileView terminal is not connected to the junction box.

In these situations, the black bridge connector is connected so the IP65 junction box is placed in a bridge active state and its E-stop circuits are bypassed.

The black bridge connector includes a tethered cable so it can be secured with one of the bottom screws of an IP65 junction box. For more information on the bottom screws, see [Mount the IP65 Junction Box to Its Back Plate on page 20](#).

### Connect to an Ethernet Network

Second-generation MobileView 2711T terminals are equipped with an Ethernet interface that supports TCP/IP protocol at 10/100 Mbps for half/full-duplex communication.

The Ethernet connector on IP65 junction boxes provides a connection to an Ethernet network. The connector uses an 8-pin, RJ45 modular jack connector.

To connect to an Ethernet network, see [Ethernet \(ETH3, ETH2\) Connections on page 16](#).

## Initial Power-up of the Second-generation MobileView 2711T Terminal

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

- [Verify the Connection](#)
- [Test Safety Functions](#)
- [Initial Configuration of the Windows Operating System](#)
- [Icons on the Terminal Desktop Taskbar](#)

### Verify the Connection

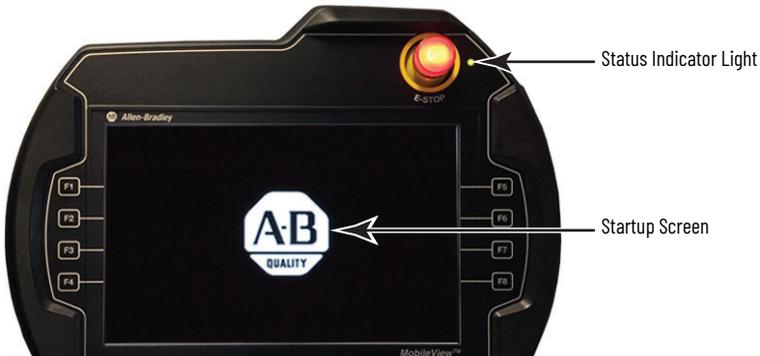
To verify that the second-generation MobileView 2711T terminal is properly connected, perform the following steps.

1. Attach the 22-pin MobileView connection cable to the IP65 junction box as shown on [page 27](#).



**ATTENTION:** The second-generation MobileView 2711T terminal automatically starts when the 22-pin connection cable is connected to an IP65 junction box with 24V DC power applied.

2. Check the second-generation MobileView 2711T terminal for a startup screen.



If the startup screen does not appear, check the 24V DC power source and cable connections at the IP65 junction box and second-generation MobileView 2711T terminal.

#### IMPORTANT

If the second-generation MobileView 2711T terminal is properly connected to the IP65 junction box, a status indicator light on the terminal next to the E-stop is illuminated green. When a second-generation MobileView 2711T terminal is powered up, a dark screen is present for several seconds between the startup screen and the next available screen.

### Test Safety Functions

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

1. Connect the safety terminations for the E-stop and 3-position enable switch to the IP65 junction box.
2. Apply power to the IP65 junction box.
3. Attach the 22-pin MobileView connection cable to the IP65 junction box as shown on [page 27](#).
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 second-generation MobileView 2711T terminal is powered up for the first time, several setup 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 restarts. After the startup screen appears, another setup 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 second-generation 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 second-generation 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.



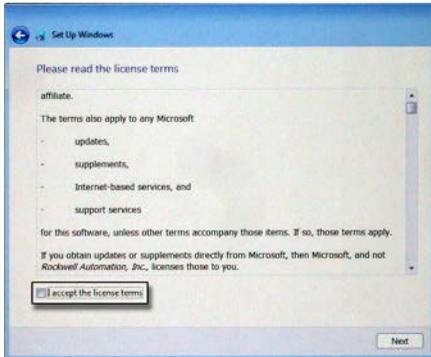
An account password is recommended but not mandatory; if you do not want one, press Next.

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.

## Second-generation MobileView Tethered Operator Terminal Quick Start

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

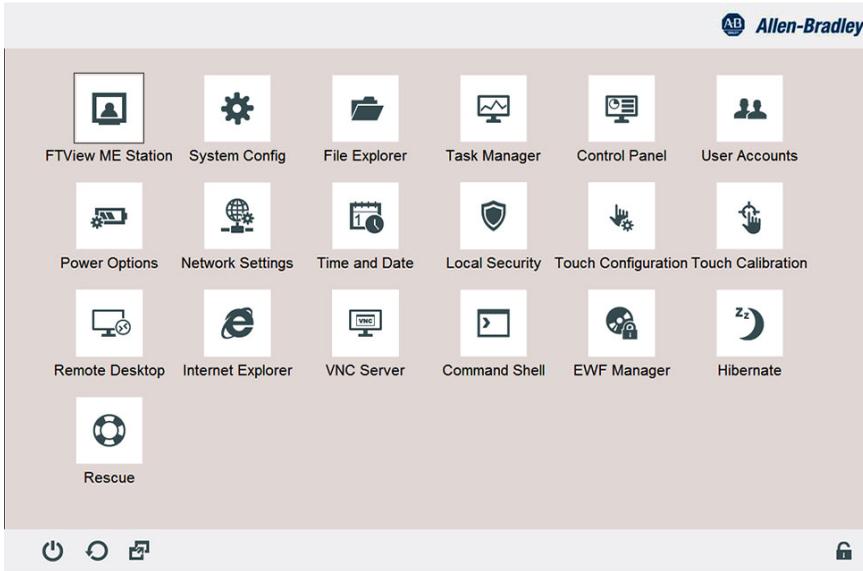


6. Choose your appropriate date and time settings, and press Next.



A popup dialog box appears, 'Windows is finalizing your settings.'

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



### Icons on the Terminal Desktop Taskbar

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

| Button   | Description  |
|--|--|
|    | Press to power down the second-generation MobileView 2711T terminal.   |
|    | Press to restart the second-generation MobileView 2711T terminal.  |
|   | Press to toggle between open tasks and applications on the second-generation MobileView 2711T terminal (similar to Alt+Tab on a keyboard). |
|  | Status indicator for Enhanced Write Filter (EFW).<br>Closed lock signifies EFW is enabled and open lock signifies EFW is disabled.         |

## Initial Configuration of MobileView Application Settings

### Enhanced Write Filter (EFW)

The Enhanced Write Filter (EFW) is a feature within the operating system of the second-generation MobileView 2711T terminal. When EFW is enabled, the system volume within the operating system is write-protected, which provides an additional level of robustness for the operating system.

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

### IMPORTANT

By default, EWF is disabled. EWF must be disabled or any application changes are lost when the second-generation 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 second-generation MobileView 2711T terminal such as FactoryTalk® View Machine Edition (ME) have been configured.

EWF applies only to the internal storage drive (C:) of the second-generation MobileView 2711T terminal and not to the internal Secure Digital (SD) card drive (D:).

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To enable EWF, perform the following steps.

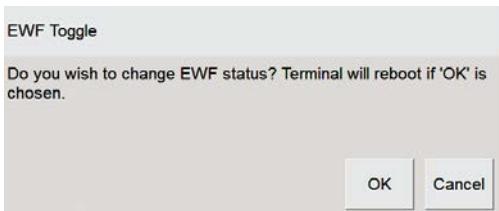
1. On the terminal desktop taskbar, verify that the EWF is unlocked.

EWF is enabled if the status icon is locked ; EWF is disabled if the status icon is unlocked . By default, EWF is disabled.

2. On the second-generation MobileView 2711T terminal desktop, press the EWF Manager.



3. The following screen appears. Press OK.



If you change the EWF status, then the second-generation 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 second-generation MobileView 2711T terminal such as FactoryTalk View ME software have been configured.

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

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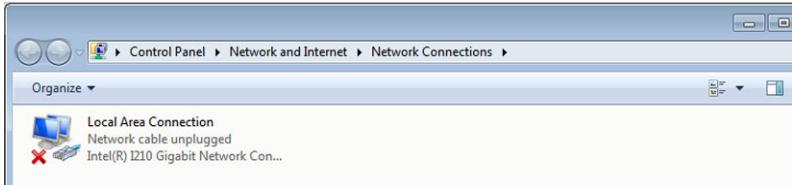
### Network Settings

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

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

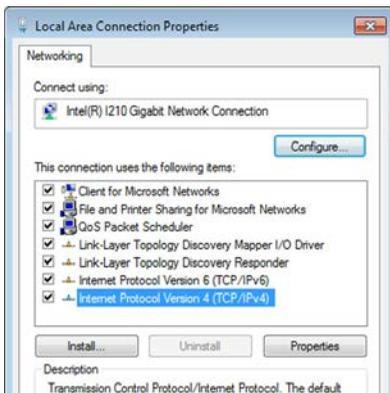


The Local Area Connection icon appears with the network cable unplugged.



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.
4. On the Properties dialog box, press to select Internet Protocol Version 4 (TCP/IPv4).

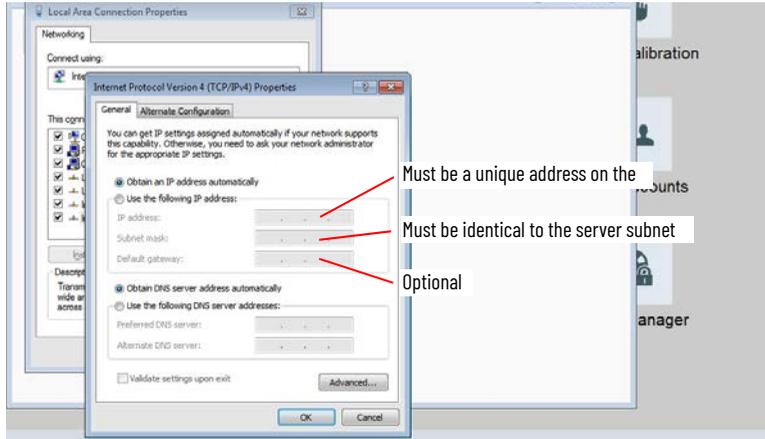


5. Press Properties.

## Second-generation MobileView Tethered Operator Terminal Quick Start

- 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 second-generation 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 Internet service provider.

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



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

### FTView ME Station

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

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**IMPORTANT** EWF must be disabled before you configure FactoryTalk View ME settings, and then enabled afterwards. For more information, see [Enhanced Write Filter \(EWF\) on page 33](#).

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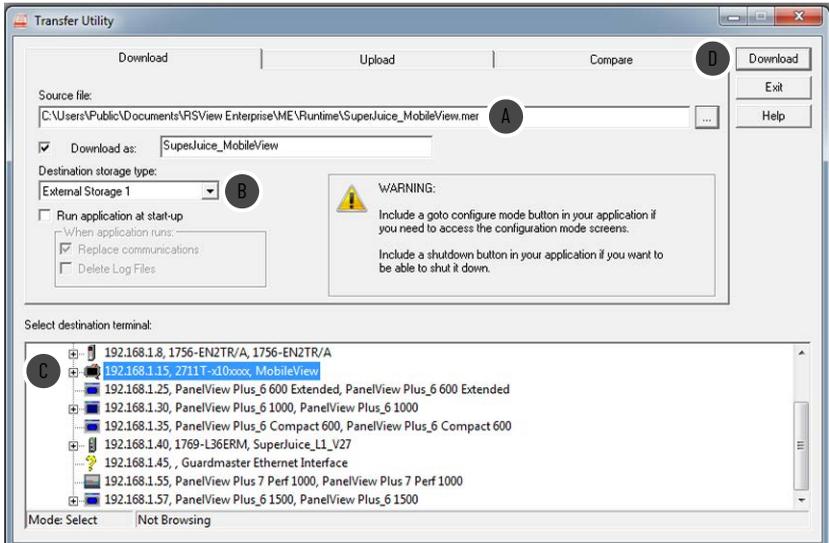
To initially configure FactoryTalk View ME Station, perform the following steps.

- Create a runtime application file (MER) with FactoryTalk View Studio software.
- Within FactoryTalk View Studio software, launch the transfer utility.

- On the Download tab of the Transfer Utility dialog box, select the following:
  - The MER file that you 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 second-generation MobileView terminal.
  - Select your second-generation MobileView terminal as the destination terminal (C).
  - Click Download (D).



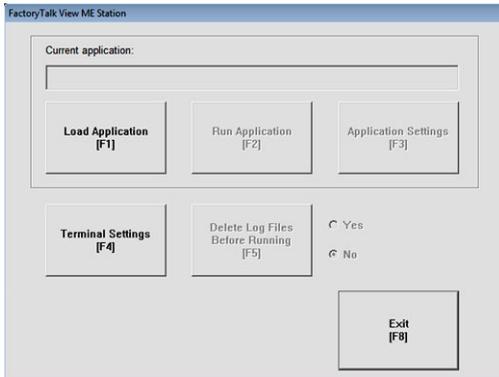
See the graphic with [step 6](#) on [page 38](#) to view the MER file location on the SD card.



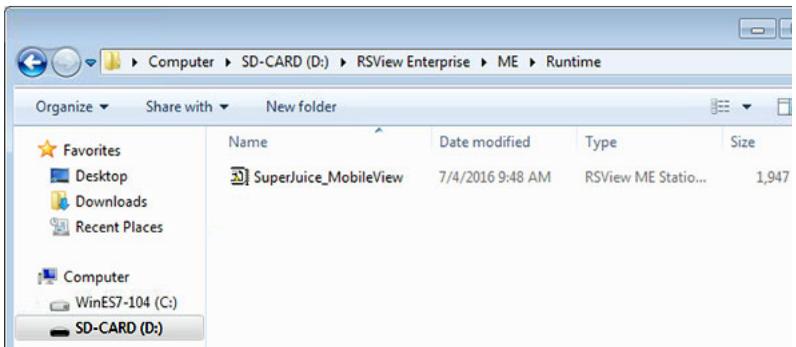
- On the second-generation MobileView 2711T terminal desktop, press FTView ME Station.



This dialog appears.



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



- Press Open.  
You are prompted if you wish to replace the current communication configuration of the terminal with the communication configuration of the application.
- Depending on your application, press Yes or No. Wait while the application loads.
- 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 restart).
- If desired, press Application Settings or F3 to configure FactoryTalk View ME Station application-specific settings (for example, device shortcuts or startup language).
- Press the second-generation MobileView terminal desktop to access EWF Manager and enable EWF; see [page 33](#) 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 second-generation MobileView 2711T terminal startup or restart, 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 second-generation 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 33](#).

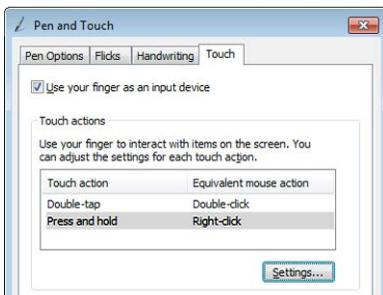
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To disable right-click touch screen functionality, perform the following steps.

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

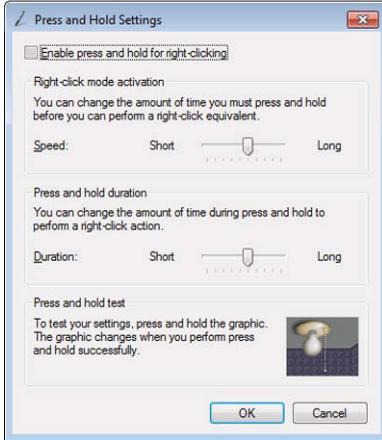


2. On the Touch tab of the Pen and Touch dialog box, press Press and hold.

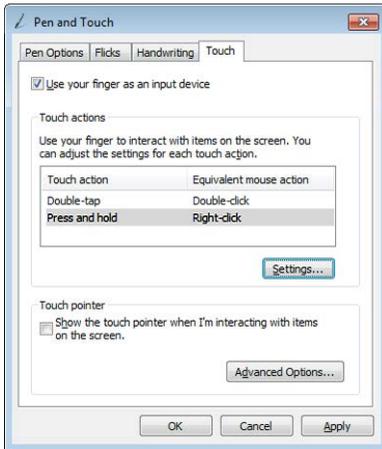


With Press and hold highlighted, press Settings.

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 33](#).

## Shut Down the Second-generation MobileView 2711T Terminal

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

---

### IMPORTANT

If you disabled EWF to make application changes, then you must enable EWF again before you shut down the second-generation MobileView 2711T terminal. Review [Enhanced Write Filter \(EWF\) on page 33](#) before you shut down the second-generation MobileView 2711T terminal.

---

1. Close FTView ME Station and return to the second-generation MobileView terminal desktop.
2. Press  on the desktop taskbar to shut down the second-generation 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 IP65 junction box.

---

**IMPORTANT** Do not disconnect the tethered cable from the MobileView IP65 junction box until you first shut down the second-generation MobileView 2711T terminal. See publication [2711T-UM001](#), 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

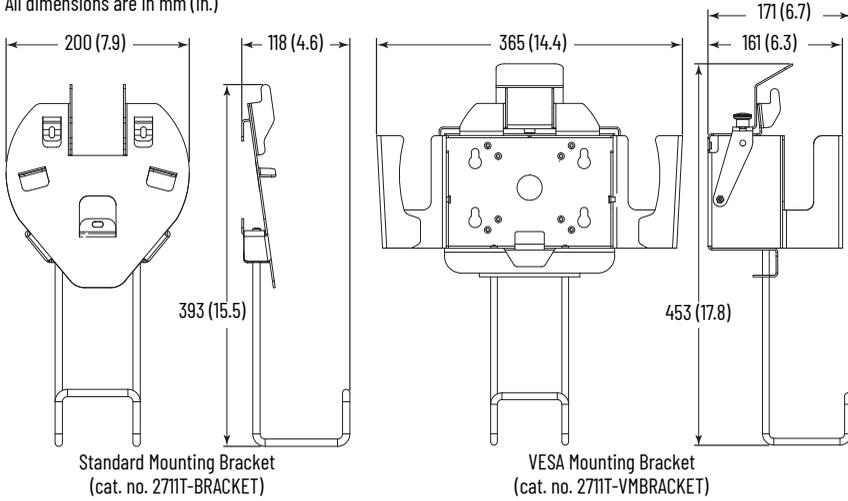
There are two mounting brackets available for second-generation MobileView terminals. Both mounting brackets are an accessory, which means they must be ordered separately from the second-generation MobileView 2711T terminal.

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) connects to the back of the MobileView terminal, so the terminal can be mounted, stored, and locked into the 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.

### MobileView Terminal Mounting Brackets

All dimensions are in mm (in.)



## European Communities (EC) Directive Compliance

Rockwell Automation hereby declares that second-generation MobileView 2711T terminals with E-stop functionality are in conformity with Directive 2006/42/EC as specified in the Declaration of Conformity available from [rok.auto/certifications](http://rok.auto/certifications).

The second-generation MobileView 2711T terminal and IP65 junction boxes have a CE marking and are approved for installation within European Union and European Economic Area (EEA) regions. The second-generation MobileView 2711T terminal and IP65 junction boxes have been designed and tested to meet the following directives.

### EMC Directive

The second-generation MobileView 2711T terminal and IP65 junction boxes are tested to meet the Council Directive 2014/30/EU Electromagnetic Compatibility (EMC) by applying the following standards, in whole or in part, which is documented in a technical construction file.

- EN 61131-2:2007–Programmable Controllers–Part 2: Equipment Requirements and Tests (pertinent EMC sections)
- EN ISO 10218-1:2011–Robots and Robotic Devices–Safety Requirements for Industrial Robots–Part 1: Robots (this standard applies only to the IP65 junction boxes)
- The second-generation MobileView 2711T terminal and IP65 junction boxes are intended for use in an industrial environment.



**ATTENTION:** The second-generation 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 second-generation MobileView 2711T terminal and IP65 junction boxes meet the following machinery standards:

- EN ISO 13850:2015–Safety of Machinery–Emergency Stop Function–Principles for Design
- EN 60204-1:2006+A1:2009–Safety of Machinery–Electrical Equipment of Machines–Part 1: General Requirements

In addition, the IP65 junction boxes meet the following machinery standards:

- EN ISO 13849-1:2015–Safety of Machinery–Safety-related Parts of Control Systems–Part 1: General Principles for Design
- EN 62061:2005+A1:2013+A2:2015–Safety of Machinery–Functional Safety of Safety-related Electrical, Electronic, and Programmable Electronic Control Systems

A declaration of conformity (DoC) is available upon request or from [rok.auto/certifications](http://rok.auto/certifications).

## Second-generation MobileView Terminal Specifications

### General

| Attribute                | 2711T-B101N1                          | 2711T-T101N1-TC |
|--------------------------|---------------------------------------|-----------------|
| Processor                | Intel Atom 3815, 1.46 GHz             |                 |
| Operating system         | Microsoft Windows Embedded Standard 7 |                 |
| Memory                   | 4 GB DRAM/32 GB Flash                 |                 |
| Display Size (in.)       | 10.1                                  |                 |
| Color/resolution         | WXGA/1280 x 800 pixels                |                 |
| Touch screen             | Analog resistive                      |                 |
| Function keys            | Yes                                   | No              |
| 3-position enable switch | Yes                                   | No              |
| 2-circuit E-stop         | Yes                                   | No              |
| USB drive slot           | Yes                                   |                 |
| Communication            | 10/100 Ethernet                       |                 |
| Dimensions               | See <a href="#">page 2</a>            |                 |
| Weight                   | 1550 g (3.42 lb) without options      |                 |

### Electrical

| Attribute                      | 2711T-B101N1              | 2711T-T101N1-TC |
|--------------------------------|---------------------------|-----------------|
| Rated supply voltage           | 24V DC                    |                 |
| Supply voltage tolerance range | 19.2...30V DC (EN 6131-2) |                 |
| Input current                  | 500 mA at 24V DC          |                 |
| Peak inrush current            | 5.6 A (max)               |                 |
| Cycle duration <sup>(1)</sup>  | 5000 (typical)            |                 |

(1) Applies only to the connection cable connector and the junction box.

**Environmental**

| Attribute                         | 2711T-B101N1  | 2711T-T101N1-TC |
|-----------------------------------|---|-----------------|
| Operating temperature             | 0...50 °C (32...122 °F) <sup>(1)</sup><br>The MobileView 2711T is UL rated for 0...45 °C (32...113 °F) under full load. |                 |
| Storage temperature               | -25...+70 °C (-13...+158 °F)  |                 |
| Relative humidity (noncondensing) | 5...95% at 0...50 °C (32...122 °F)<br>The MobileView 2711T is UL rated for 5...95% at 0...45 °C (32...113 °F)           |                 |
| Vibration (operating)             | 5...150 Hz<br>5...8.4 Hz, 3.5 mm p-p<br>8.4...150 Hz, 1 G peak  |                 |
| Shock (operating)                 | 15 G (1/2 Sine, 11 msec) IEC 60068-2-27   |                 |
| Operating altitude                | 0...2000 m (0...6,562 ft)   |                 |

(1) 0...50 °C (32...122 °F) temperature range is with typical device utilization of 100% CPU, display brightness at 50%, and GPU set to maximum battery life.

When operating under full load, a derating of 5 °C (9 °F), absolute 45 °C (113 °F) must be considered.

To adjust the display brightness and GPU energy setting, see the MobileView Tethered Operator Terminal User Manual, publication [2711T-UM001](#).

If you need assistance setting CPU and GPU ratings, contact your local Rockwell Automation sales office or Allen-Bradley distributor.

## IP65 Junction Box Specifications

**General**

| Attribute      | Cat. No. 2711T-            |           |
|----------------|----------------------------|-----------|
|                | JBIP65DC1                  | JBIP65DM1 |
| USB drive slot | Yes (2.0)                  |           |
| Communication  | 10/100 Ethernet            |           |
| Dimensions     | See <a href="#">page 2</a> |           |
| Weight, approx | 500 g (1.1 lb)             |           |

**Electrical**

| Attribute                               | Cat. No. 2711T-            |           |
|---|----------------------------|-----------|
|   | JBIP65DC1                  | JBIP65DM1 |
| Rated supply voltage                    | 24V DC                     |           |
| Supply voltage tolerance range          | 19.2...30V DC (EN 61131-2) |           |
| Input current <sup>(1)</sup>            | 500 mA at 24V DC           |           |
| Peak inrush current                     | 5.6 A (max)                |           |
| Connector cycle duration <sup>(2)</sup> | 5000 (typical)             |           |

(1) Without a MobileView terminal that is connected to the junction box.

(2) Applies to black or gray colored, 22-pin cable connector. Test the connector monthly to verify that it locks properly. Remove the IP65 junction box from operation after the connection cycles have been exceeded.

Electrical specifications continue on the next page.

## Second-generation MobileView Tethered Operator Terminal Quick Start

### Electrical (continued)

| Attribute  | Cat. No. 2711T-   |           |
|--|---|-----------|
|  | JBIP65DC1   | JBIP65DM1 |
| E-stop functions <ul style="list-style-type: none"> <li>• Voltage, min</li> <li>• Current, min (<math>I_p</math>)</li> <li>• Current carrying capacity, min</li> <li>• Usage category</li> <li>• Reaction time, max<sup>(1)</sup></li> <li>• Isolation</li> <li>• Bounce time</li> <li>• Proof-test interval<sup>(2)</sup></li> <li>• Switching cycles relay</li> <li>• PFH<sub>d</sub></li> </ul> | <ul style="list-style-type: none"> <li>• 5V DC per contact</li> <li>• 10 mA per contact</li> <li>• 1000 mA per contact</li> <li>• DC-13 (IEC 60947-5-1)</li> <li>• 19 ms</li> <li>• 500V AC to rest</li> <li>• &lt;10 ms</li> <li>• 20 years</li> <li>• <math>10 \times 10^5</math></li> <li>• <math>9.79 \times 10^{-10}</math> (1/h)</li> </ul> |           |

(1) Reaction time is time before the E-stop is triggered.

(2) Decommission the safety function once the E-stop has been activated 250,000 times or after 20 years, whichever comes first.

### Environmental

| Attribute                         | Cat. No. 2711T-  |           |
|-----------------------------------|--|-----------|
|                                   | JBIP65DC1  | JBIP65DM1 |
| Operating temperature             | 0...50 °C (32...122 °F)  |           |
| Storage temperature               | -25...+70 °C (-13...+158 °F)                                   |           |
| Relative humidity (noncondensing) | 5...95% at 0...50 °C (32...122 °F)                             |           |
| Vibration (operating)             | 5...150 Hz<br>5...8.4 Hz, 3.5 mm p-p<br>8.4...150 Hz, 1 G peak |           |
| Shock (operating)                 | 15 G (½ Sine, 11 msec) IEC 60068-2-27                          |           |
| Altitude                          | 0...3000 m (0...9,843 ft)                                      |           |

## MobileView Accessories

| Cat. No.        | Description   |
|-----------------|---|
| 2711T-5MCABLE2  | 22-pin connection cable (5 m/16.4 ft) to connect the second-generation terminal to the IP65 junction box.       |
| 2711T-10MCABLE2 | 22-pin connection cable (10 m/32.8 ft) to connect the second-generation terminal to the IP65 junction box.      |
| 2711T-15MCABLE2 | 22-pin connection cable (15 m/49.2 ft) to connect the second-generation terminal to the IP65 junction box.      |
| 2711T-JBIP65DC1 | A 24V DC powered, IP65 junction box with cord grips.  |
| 2711T-JBIP65DM1 | A 24V DC powered, prewired IP65 junction box with metal connections.  |
| 2711T-JBBKCOVER | A back cover accessory plate for the 2711T-JBIP65DC1 and 2711T-JBIP65DM1 junction boxes.                        |
| 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-22JUMP    | A black, 22-pin bridge connector to bypass E-stop contactors in an IP65 MobileView junction box. <sup>(1)</sup> |

(1) 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 <a href="#">2711T-UM001</a>            | Provides information to install, operate, and troubleshoot MobileView 2711T terminals and junction boxes.   |
| FactoryTalk View Machine Edition User's Guide, publication <a href="#">VIEWME-UM004</a>               | 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 <a href="#">1770-4.1</a>           | Provides general guidelines to install a Rockwell Automation industrial system.   |
| Product Certifications website, <a href="https://rok.auto/certifications">rok.auto/certifications</a> | Provides declarations of conformity, certificates, and other certification details.   |

You can view or download publications at <https://rok.auto/literature>.

## Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental compliance information on its website at [rok.auto/pec](http://rok.auto/pec).

Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at [rok.auto/docfeedback](http://rok.auto/docfeedback).

For technical support, visit [rok.auto/support](http://rok.auto/support).

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