

# TRAC-Mini™ Controller

Installation User Manual

### **Product Overview**

Supra® TRACcess® TRAC-Mini™ controllers are used with electronic locks controlled by the TRACcess Manager System.

TRAC-Mini controllers contain Bluetooth® wireless technology, enabling a mobile key solution. With the TRACcess eKEY™ mobile app and Bluetooth feature, users can securely open Supra-controlled locks.

### **Product Features**

- TRACcess Manager with eKEY app compatible devices
- Bluetooth LE Technology and IrDA
- Lock types supported solenoid, motorized, magnetic, and swing bolt
- FCC, IC, CE



Bezel Cover

### **Configurable Product Settings**

### Option 1 - Pulse Mode (no hold)

This option contains one factory-installed 3V battery, which lasts the life of the product. Using a charge pump, the circuit charges to 24V and is applied to a solenoid lock. When the TRAC-Mini battery is low, a low-battery notification is sent to the TRACcess Administrator through the TRACcess Manager System and the TRACcess electronic key.

### Option 2 - Relay Mode (7 seconds hold or 60 seconds hold)

This option contains one factory-installed 3V battery and requires a latching relay. The controller supplies a 24V SET pulse to a latching relay, that connects an external power source (not supplied) to drive the lock. The controller supplies 24VDC to a latching relay a second time, through the RESET line seven (7) or 60 seconds later. TRACcess Manager low-battery notifications are specifically for the TRAC-Mini controller 3V battery and not for external power. Recommendation: Select the seven (7) seconds option for a single lock and the 60 seconds option for multiple locks.

These instructions are applicable to the door, surface, and cabinet mount installation of a TRAC-Mini product. If the TRAC-Mini components are not mounted accurately, it will not function properly. Supra is not responsible for replacing the TRAC-Mini product or its components if it is damaged or destroyed during installation or removal. For more information, navigate to www.suprasystems.com/Products/Pages/TRACcess User Resources.aspx.

# **Light Indicators**

Light		Description
	Slow Red	The red LED flashes slowly when the activation button is pressed and device is seeking to establish a connection.
	Flashing Red	The red LED flashes quickly three times to signal the communication seeking time has ended.



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# **Product Specifications**

### **Hardware**

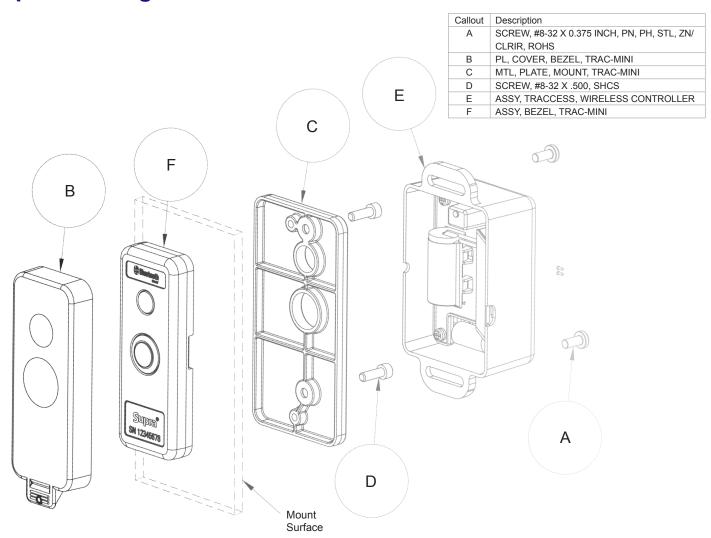
### **Hardware Specifications**

- External bezel dimensions: 3.84"L X 1.5"W X .05"D
- External mounting plate dimensions:
   4.35"L X 2.25"W X 0.25"D
- Controller internal dimensions:
   4.25"L X 2.25"W X 1.25"D
- Controller external dimensions:
   4.375"L X 2.25"W X 2.125"D
- Input power, controller: 3V battery
- Operational temperature limit:
   22° to 167°F (- 30°to 75°C)
- Storage temperature limit:
   40° to 185°F (- 40° to 85°C)
- Option 1, Pulse Mode: SET only. 24V @ 680 µf
- Option 2, Relay Mode: SET and RESET output. 24V @ 50mA max., for 20 ms each

### **Software**

Software Specifications		
<ul> <li>Operating systems supports: Apple<sup>®</sup> iOS<sup>®</sup> and Android<sup>™</sup>OS</li> </ul>	Bluetooth range: 3 ft. /1 m	IrDA range: 24 in. / 61 cm

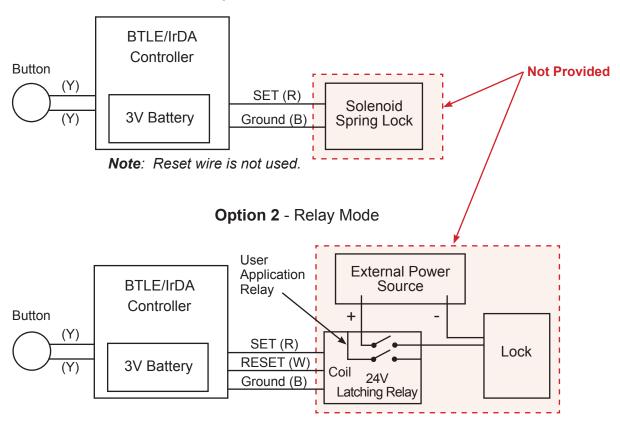
# **Exploded Diagram**



# **TRAC-Mini Wiring**

Wiring Colors		
<b>Red (R)</b> - Wire for <i>SET</i> when used with a latching relay and positive polarity with a solenoid	White (W) - Wire for RESET when used with a latching relay and is not used with a solenoid lock	<b>Black (B)</b> - Ground wire <b>Yellow (2)</b> - Button wires, non-polarized
Note: All wires are 22 gauge.		

Option 1 - Pulse Mode



# **Installation Requirements**

This section provides step-by-step instructions to install the TRAC-Mini controller. Read through these instructions before performing any installation steps. Verify all components are not energized when connecting wiring or during assembly. Accurate mounting is essential for the TRAC-Mini to function properly, see the *TRAC-Mini Controller Drill Template*.

Best Practice: For externally powered locks, hard-wire the latching relay to the facility power to reduce the risk of lock failure.

The TRAC-Mini controller is designed to be installed above, below, or to the side of the lockset. In extremely hot climates, place the TRAC-Mini controller in the shade to prevent it from becoming too hot, which may reduce battery life. In extremely cold weather conditions, place the TRAC-Mini controller where it can be protected from harsh climate and precipitation.

# Sealant Selection (Surface Mount) For protection against moisture, choose a sealant that is compatible with the mounted surface and includes these requirements. Choose sealants appropriate for sealing surfaces Waterproof Exterior rated UV resistant Mounting Surface Condition and Preparation Prepare the surface per the sealant manufacturer's instructions. Suitable for sealing Free of loose material Clean and dry Flat and free of irregularities Use and apply sealants per the Manufacturer's instructions

**Best Practice**: Installation 6 in. (15 cm) above the lockset, or as far above the lockset as needed to be out of the way of door hardware. Install the lockset per manufacturer's instructions.

### **Required Skills**

A General Mechanical/Electrical Technician skill level is required to perform the installation procedures.

### **Required Tools and Equipment**

QTY	Description	QTY	Description
1	Pen (or pencil)	1	Wrench, Hex Key, 9/64"
1	Level	A/R	Connectors, wire (not provided), as required
1	Drill (or punch)	1	Screwdriver, Phillips
A/R	Drill bits, as required per drill template	1	Relay, latching, 24V, (optional per setup)
A/R	Sealant (optional), as required	A/R	File, as required

### **Reference Documentation**

Nomenclature	Document Number
TRAC-Mini Controller Drill Template	10104943P1

### **Prerequisites**

The TRACcess eKEY app is required to configure the controller. For more information on how to download and authorize the TRACcess eKEY app go to <a href="https://www.traccessmanager.com">www.traccessmanager.com</a> and click <a href="https://www.traccessmanager.com">User resources: downloads</a>, <a href="https://www.traccessmanager.com">videos and more</a>.

### **Technical Support**

For technical support in the U.S., call 1-800-689-9896 (5 a.m. to 7 p.m., Pacific Standard Time, 7 days a week) or contact your sales representative.

## **Install the Controller**

Step	Action
1.	Record the serial number of the TRAC-Mini controller for record keeping.
2.	Using the drill template (10104943P1) and level, position the template to drill holes for the surface.
3.	Using the drill and drill bit, drill holes through the template into the surface.
4.	If applying sealant, apply sealant to the exterior mounted bezel assembly (F).
5.	Pass two (2) yellow button wires from the bezel assembly through the center drill hole.
6.	Using a Hex Key wrench and two (2) #8-32 x .5 screws (D), attach the bezel to the mounting surface and the mounting plate (C).
7.	Attach the yellow button wires from the bezel assembly to the yellow wires from the TRAC-Mini controller (E) and secure with wire connectors, as required.
8.	Trim, tuck, or coil the yellow wires and store in the recess area of the TRAC-Mini controller.
9.	Using a Phillips screwdriver and two (2) #8-32 x .375 screws (A), attach the TRAC-Mini controller to the mounting plate.
respec	When connecting to a solenoid lock, the white wire is not used. Connect the red and black wires to the lock wires, tively. When connecting to a latch relay, all three control wires (red, black, and white) are connected to their bonding lock wires.
10.	Connect the TRAC-Mini controller wires to the solenoid (or relay wires) and cap with wire connectors.
11.	Attach the TRAC-Mini bezel cover (B), as required.

# **Configure TRAC-Mini Controller**

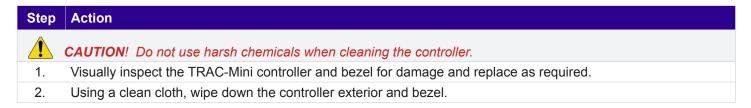
Step	Action		
1.	From your device app store, download and then authorize the TRACcess eKEY app.		
2.	Open the eKEY app and tap <b>Settings</b> .		
3.	Check Install Mode and Save.	Install Mode  Save Cancel	
4.	Tap Install.		
5.	Enter the eKEY app PIN (or device access code) and tap <b>Begin</b> .	Begin	
Note:	If the wrong setting is installed, perform the install function again (begin	at step 2) to reset the setting.	
6.	Choose the appropriate programming mode for the lock.	Pulse (no hold)  Relay (7 seconds hold)  Relay (60 seconds hold)	

# **Open the Lock**

Direct sunlight can interfere with infrared communication; shade the area between the lock and key when using this feature. For more information on using TRACcess eKEY, see the *TRACcess User Resources* page found at *www.suprasystems.com/Products/Pages/TRACcess User Resources.aspx*.

Step	Action
1.	On the TRACcess eKEY app, tap <b>Open Device</b> .
2.	Enter the PIN code.
3.	Enter the access code, if required.
4.	Press the TRAC-Mini controller button to turn it on.
5.	Tap <b>Begin</b> .

# **General Maintenance**



# TRAC-Mini Controller Battery

The TRAC-Mini controller uses a long-life lithium battery to power the SET and RESET button or solenoid lock. No battery maintenance is required and the battery is designed to last a minimum of six (6) years. Replace the controller when the battery is spent.



Dispose of all batteries as required by local ordinances, regulations, and/or the latest WEEE and European 2012/19/CE requirements. Do not throw batteries in the common garbage.

TRACcess Manager shows the battery status for TRAC-Mini controllers (low-battery notifications are specifically for the 3V battery and not for external power). A low battery warning message for the TRAC-Mini controller also displays on the eKEY mobile app. Make sure to take steps to monitor battery levels regularly.

**WARNING!** If locks are not hard-wired to facility power and batteries lose power, the locks may not open. Make sure to take steps to monitor lock and controller battery levels regularly.

# **Environmental Compliance**

Supra controllers adhere to environmental regulations established by the current European Union (EU) RoHS, WEEE, and REACH directives.

Supra declares that its products and packaging do not contain any of the SVHCs, identified by EHCA, in any concentration above 0.1%, and hereby certify that its products are in full compliance with all aspects of Commission Regulation (EU) 2017/999 of 13 June 2017 amending Annex XIV to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

### **Certifications**

Certifications	Label Example
FCC, IC, CE	TRAC-Mini <sup>™</sup>
• AS/NZS 4268:2012 +A1:2013	MODEL NUMBER:10105244G1
• EN 300 328 V2.1.1:2016	FCC ID:TCZ-10105244G1 IC:1175F-10105244G1
• EN 301 489-17 V3.1.1:2017	
• FCC 15.247: <del>2018</del>	
• RSS-247:2017	CE ROHS COMPLIANT
	SN: 45000000

# Regulatory

For regulatory identification purposes, the product is assigned a Regulatory Model Number (RMN). The RMN for TRAC-Mini Controllers are listed below. Do not confuse this regulatory number with the marketing name or product part numbers.

Regulatory Model Number (RMN)	Lock Family Name	Description	Commercial Model Number (CMN)
10106056P1	TRACcess Controllers	TRAC-Mini	10106057P1

Regulatory Statements	
United States (FCC)	This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:  1. This device may not cause harmful interference.  2. This device must accept any interference received, including interference that may cause undesired operation.
	Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
Canada (IC)	This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:  1. This device may not cause interference; and 2. This device must accept any interference, including interference that may cause undesired operation of the device.
	Cet équipement est conforme à la (aux) norme(s) canadienne(s) d'exemption de licence RSS Industry Canada. Son opération est sujette aux deux conditions suivantes: (1) cet équipement ne provoquera aucune interference el (2) cet équipement doit tolérer toute in interférence pouvant provoquer une opération indésirable de l'equipement.
European Union (CE)	This Class B digital apparatus conforms to the requirements of the following EU directives:  1. RED, 2.4GHz, Bluetooth Power class 1 2. WEEE Directive (2012/19/EC) 3. Frequency Range: 2402MHz - 2480MHz. Output Power: 8dBm.