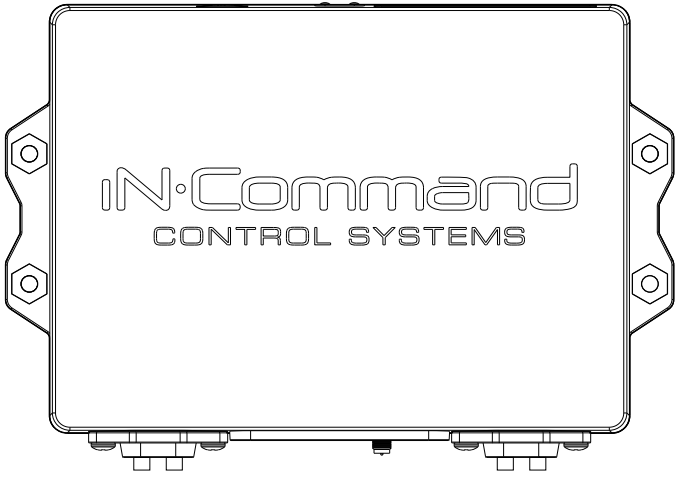
iN·Command®

CONTROL SYSTEMS

NCS40T

Trailer Control and Monitoring system

Installation and Operation Manual



Patent # US 9,679,735

Important Safety Information

Read the iN-Command Manual, and these warnings and instructions carefully before using this product. Failure to follow the use instructions in this owner's manual, or improper use of the Mobile Application, Display Commander and/or Body Control Module, could result in personal injury, including death.

Do not operate while vehicle is being driven.
The Mobile Application, Display Commander and/or Body Control Module should not be used while the vehicle is being driven. Use of the Mobile Application, Display Commander and/or Body Control Module while the vehicle is being driven is dangerous and may cause personal injury or property damage.

For adult use only.
The Mobile Application, Display Commander and Body Control Module are intended for adult use only, and are not to be used by persons under the age of 18. Use by children may cause personal injury or property damage.

Operate only when you have a clear line of sight.
Do not operate any moving parts (including, but not limited to, awnings, jacks and slides), unless you have a clear line of sight to the moving part. The Mobile Application, Display Commander or Body Control Module may be used only if you are giving instructions to, and receiving instructions from, another person at least age 18 or older who can clearly see the moving part. Failure to follow these instructions may result in serious personal injury or property damage.

Do not operate under the influence of alcohol or drugs.
Do not operate the Mobile Application, Display Commander or Body Control Module while under the influence of alcohol or drugs. Doing so may result in personal injury or property damage.

Avoid moisture.
To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.

Use recommended accessories.
To reduce the risk of fire or electric shock and annoying interference, use only the recommended accessories.

- Table Of Contents

Introduction 5
Thank You! 5
Feature Description 5
Precautions 5
Packing List 5
Installation and Mounting instruction 6
Tools and Supplies 6
Connecting to the Battery 6
Selecting the Mounting Location 6
Mounting the NCS40T 6
Mounting the BT Antenna 6
Wiring 7
Travel Lock out information 8
Mobile Devices 9
Pairing A Mobile Device 10
iOS Pairing Instructions 10
Android Pairing Instructions 11
Passcode Protection 13
App Configuration 13
Adding Auxiliary Function 14
Adding TPMS 15
Low Battery Voltage Alert 16
Home Page Operation 17
Battery Check 17
Hydraulic 18
Light Check 19
Auxiliary 20
TPMS 21
Troubleshooting 22
Specificatons 23
FCC NOTES 24

• Introduction

• Thank You!

Thank you for choosing iN-Command. We hope you will find the instructions in this owner's manual clear and easy to follow. If you take a few minutes to look through it, you'll learn how to use all the features of your new NCS40T for maximum enjoyment.

• Feature Description

What does iN·Command for Trailers control?*

- Hydraulic lift control
- Latch and momentary auxiliary functions
- Light checks for running, brake, and turn signal lights

What does iN·Command for Trailers monitor?*

- Battery level monitoring and low voltage alert

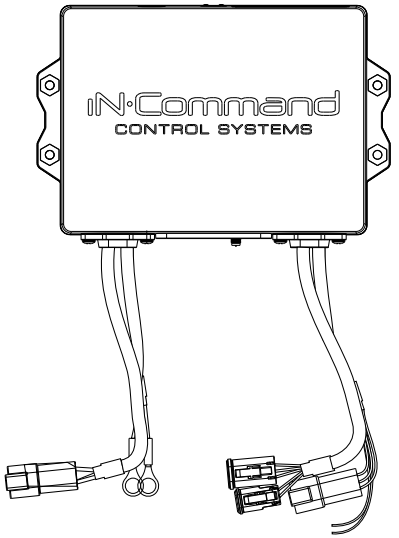
*** Functions may vary by trailer model**

• Precautions

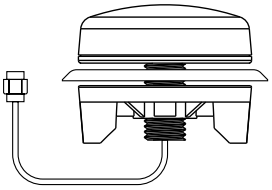
- **Use the Proper Power Supply**.
  This product is designed to operate with a 12 volt DC, negative ground battery system (the standard system in a North American vehicle).
- **Use Authorized Service Centers.**
  Do not attempt to disassemble or adjust this precision product; contact a professional for assistance.
- **Avoid Moisture.**
  To reduce the risk of fire or electric shock, do not expose this equipment to rain or moisture.
- **Avoid Cleaning Products.**
  The front of this unit should only be cleaned with a slightly damp cloth. Do not use cleaning products.
- **Use Recommended Accessories.**
  TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK AND ANNOYING INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES.

• Packing List

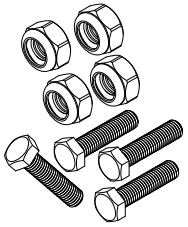
(1) Control System



(2) External Antenna



(3) Four 1/4" bolts & nylock nut.



• Installation and Mounting instruction

It's a good idea to read all of the instructions before beginning the installation.

• Tools and Supplies

You will need these tools and supplies to install your NCS40T :

- 7/16" socket with ratchet – or 7/16 wrench
- 1/4" drill/bit and drill
- 3/4" hole saw for mounting BT antenna
- Four ¼" bolts. Length determined by material thickness you are mounting to.
- Four ¼" lock nuts.

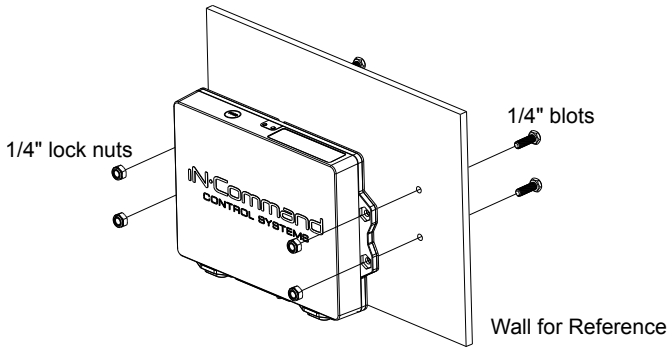
• Connecting to the Battery

- To prevent a short circuit, make all other connections on the NCS40T before connecting the Trailer Battery Power Input Red wire ring terminal to the +12V battery post and the White wire ring terminal to the negative battery post.

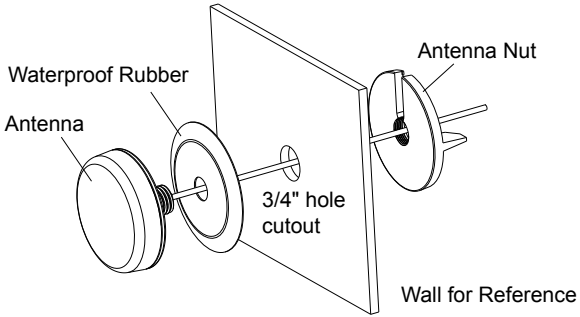
• Selecting the Mounting Location

- Select a location that provides access to the Pair button.
- Select a location that provides access to the wiring and in range of all connections.

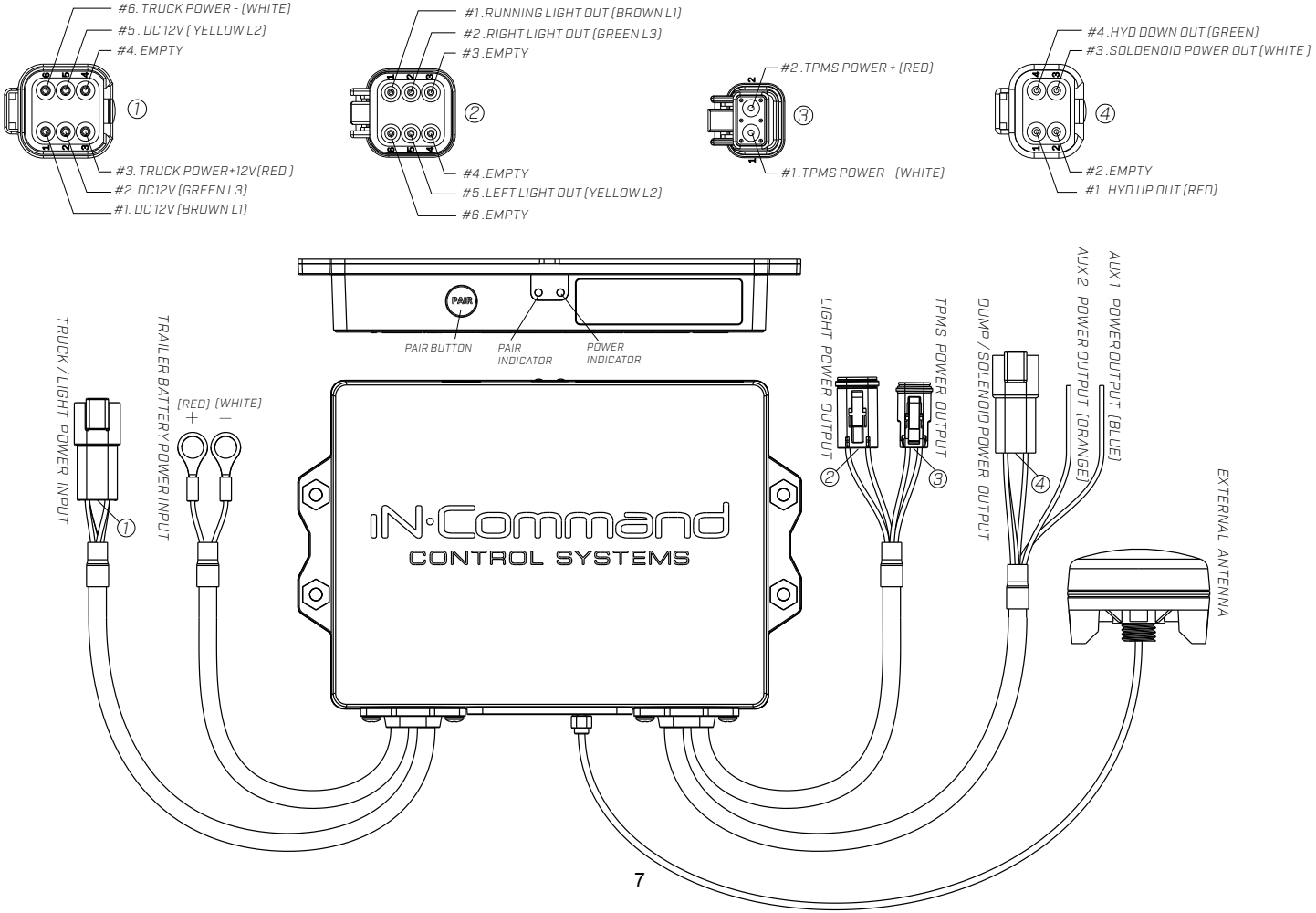
• Mounting the NCS40T



• Mounting the BT Antenna

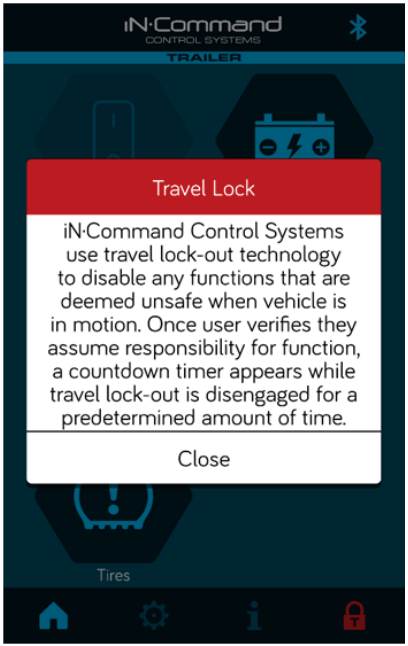


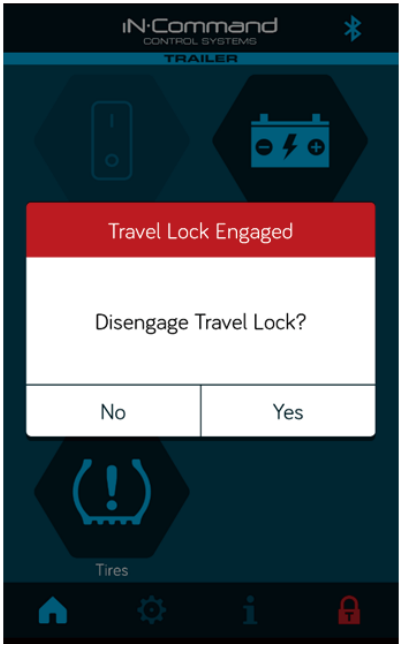
• Wiring

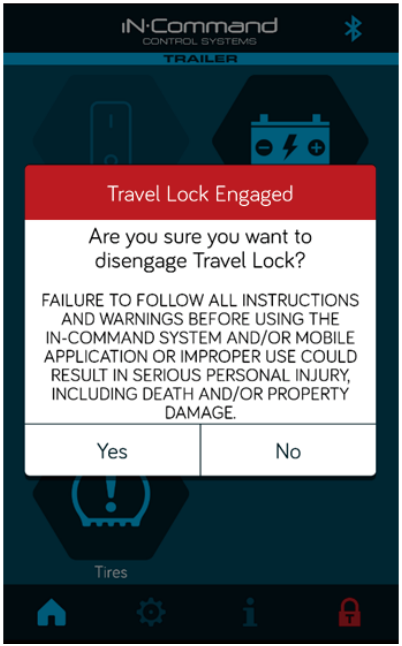

#6. TRUCK POWER - (WHITE)
#5 . DC 12V (YELLOW L2)
#4. EMPTY
#3. TRUCK POWER+12V(RED)
#2. DC12V (GREEN L3)
#1. DC 12V (BROWN L1)
#1 .RUNNING LIGHT OUT (BROWN L1)
#2 .RIGHT LIGHT OUT (GREEN L3)
#3 .EMPTY
#4 .EMPTY
#5 .LEFT LIGHT OUT (YELLOW L2)
#6 .EMPTY
#2 .TPMS POWER + (RED)
#1 .TPMS POWER - (WHITE)
#4 .HYD DOWN OUT (GREEN)
#3 .SOLDENOID POWER OUT (WHITE)
#2 .EMPTY
#1 . HYD UP OUT (RED)
PAIR
PAIR BUTTON
PAIR INDICATOR
POWER INDICATOR
TRUCK / LIGHT POWER INPUT
TRAILER BATTERY POWER INPUT
(RED) +
(WHITE) —
LIGHT POWER OUTPUT
TPMS POWER OUTPUT
DUMP / SOLENOID POWER OUTPUT
AUX 2 POWER OUTPUT (ORANGE)
AUX 1 POWER OUTPUT (BLUE)
EXTERNAL ANTENNA
iN·Command
CONTROL SYSTEMS

- **Travel Lock out information (Safety)**

iN·Command ® Control Systems use travel-lock-out technology to disable any functions that are deemed unsafe when the vehicle is in motion.

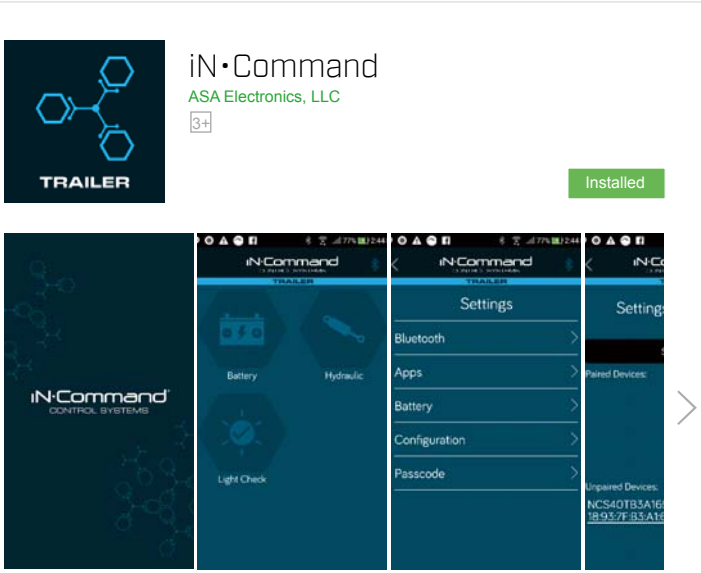






• Mobile Devices

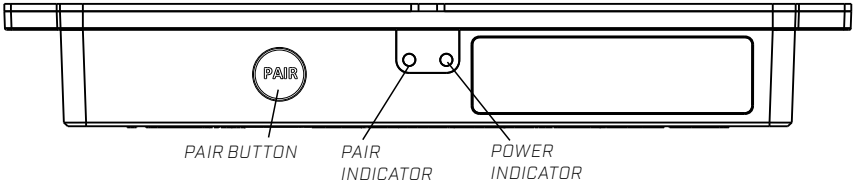
The iN-Command Trailer Control System requires a mobile app to operate the system.
Visit the Google Play and Apple App stores on your mobile device to download and use the iN-Command Trailer App.
Only one device can be actively paired to the iN-Command Trailer Control System at a time.
To use another device, the active device needs to shut down its iN-Command App to allow another device to pair.



The iN-Command Trailer Control System requires a mobile app to operate the system.
Visit the Google Play and Apple App stores on your mobile device to download and use the iN-Command Trailer App.
Only one device can be actively paired to the iN-Command Trailer Control System at a time.
To use another device, the active device needs to shut down its iN-Command App to allow another device to pair.

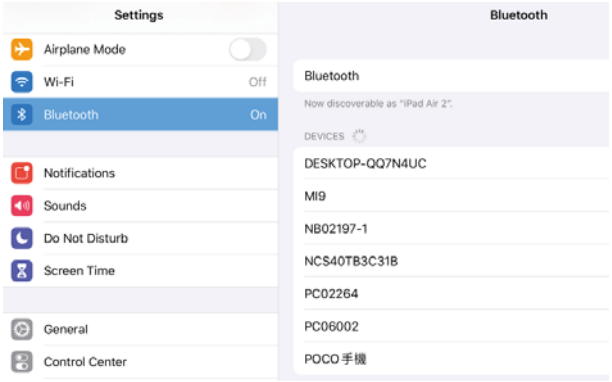
• Pairing A Mobile Device

Click " Pair " button to enter discovery mode.(Long press " Pair " button for 5-8 seconds to disconnect device.)

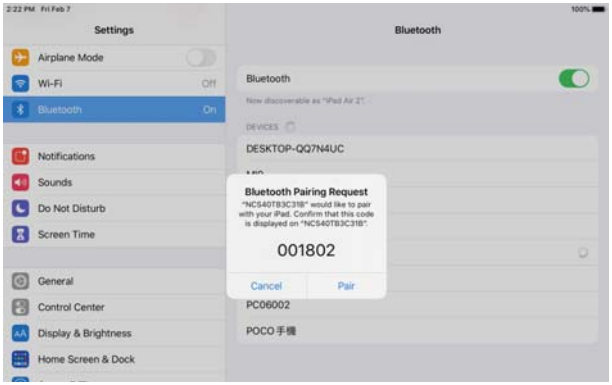


• iOS Pairing Instructions

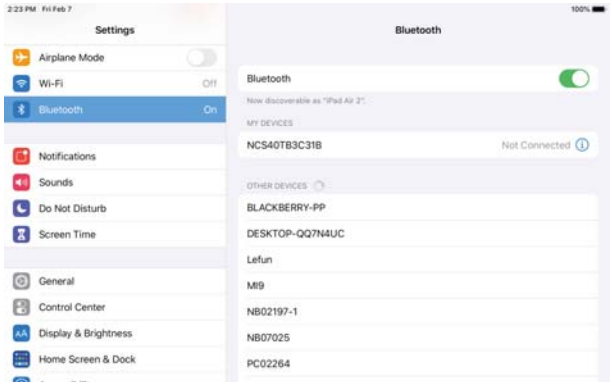
1. Enable "Bluetooth" in the system settings of the mobile device.



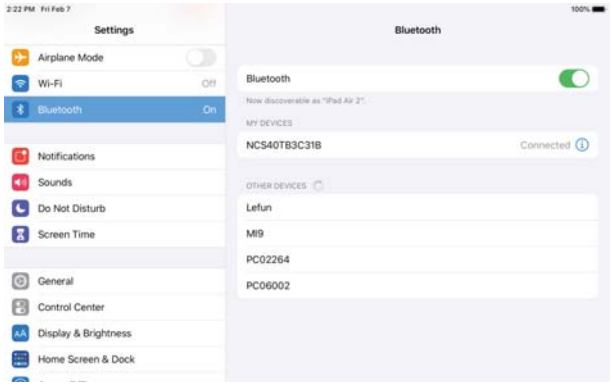
2. Press "Pair" on the mobile device.



3. The DC will be displayed on the mobile device list in the format NCS40TXXXXX.

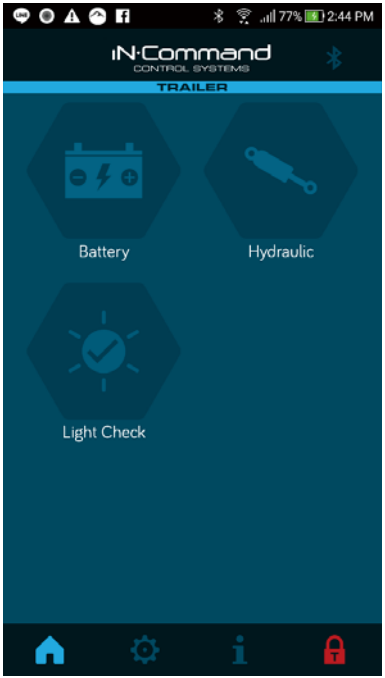


4. The mobile device now shows that the DC is connected.

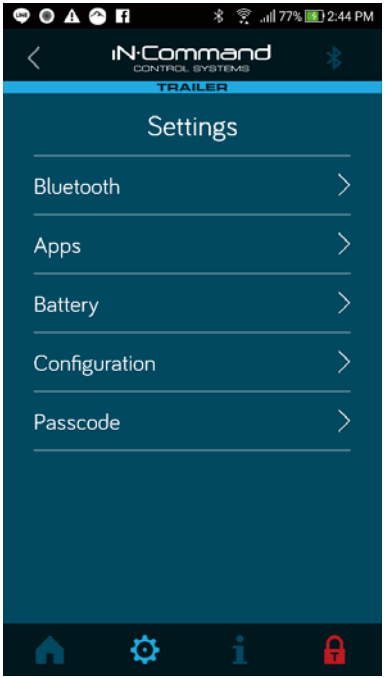


- **Android Pairing Instructions**

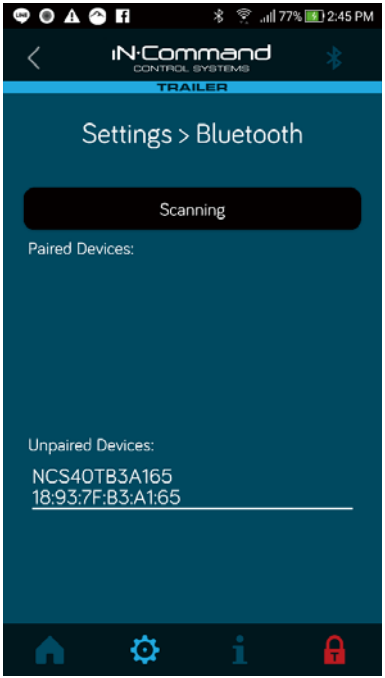
1. From the App Home Page select settings.



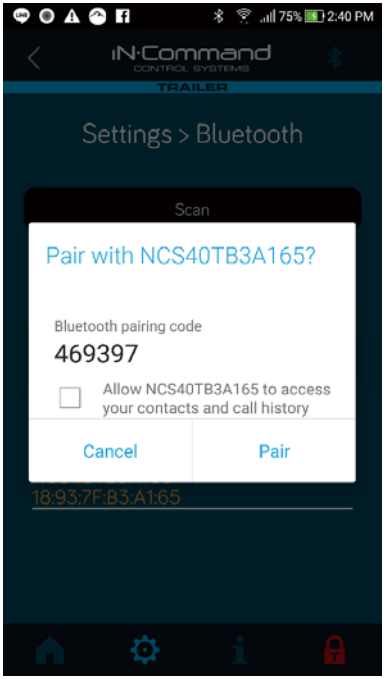
2. Select the "Bluetooth" tab



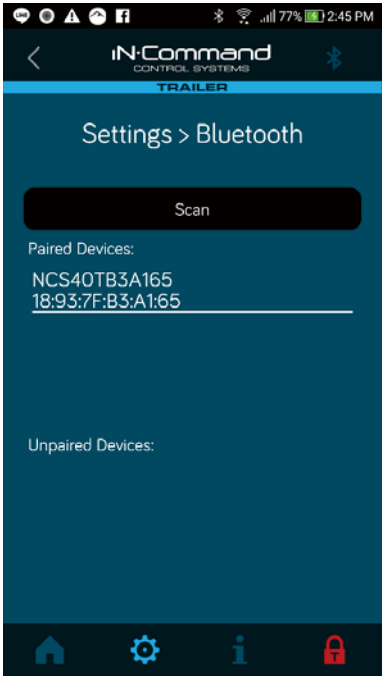
3. Press Scan to start scanning for Unpaired devices. Select the device by pressing it.



4. A Bluetooth pairing request will appear on the mobile device.
5. Press " Pair " on the mobile device.



6. The mobile device will be displayed in the "Paired devices " list on the mobile App.

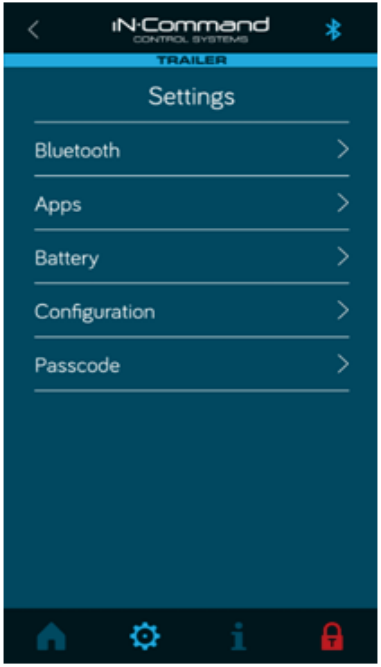


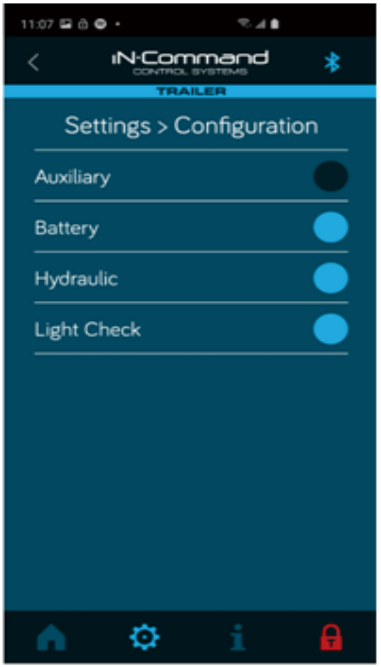
- **Passcode Protection**

  A passcode is required to access the system.
  The first time the App is opened, the user is required to enter and confirm a new passcode.

- **App Configuration**

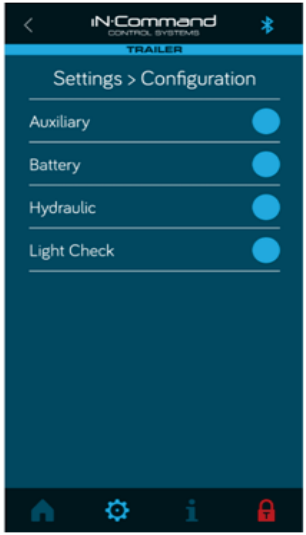
  The iN-Command Trailer App is configurable. The user can select which functions are populated on the home page.
  Select the Settings icon at the bottom of the home page, then press the Configuration tab. The default configuration is Battery, Hydraulic and Light Check. To select or deselect an item, press on the circle next to the function. When an item is selected, the circle is hightled blue.

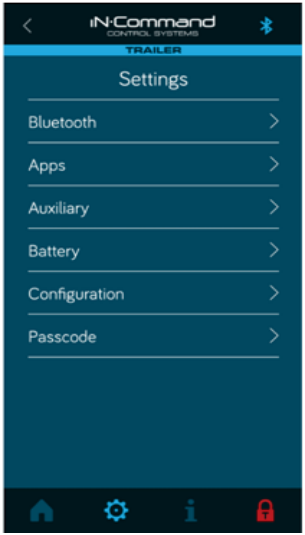


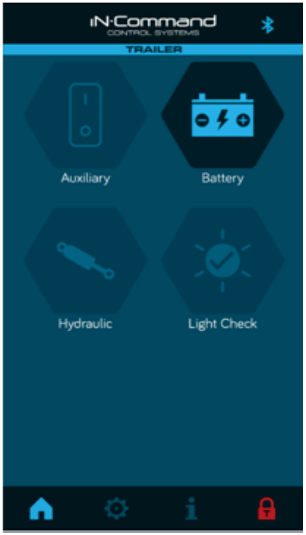


• Adding Auxiliary Function

The iN-Command Trailer App is configurable. The user can select which functions are populated on the home page.
Select the Settings icon at the bottom of the home page, then press the Configuration tab. The default configuration is Battery, Hydraulic and Light Check. To select or deselect an item, press on the circle next to the function. When an item is selected, the circle is hightled blue.

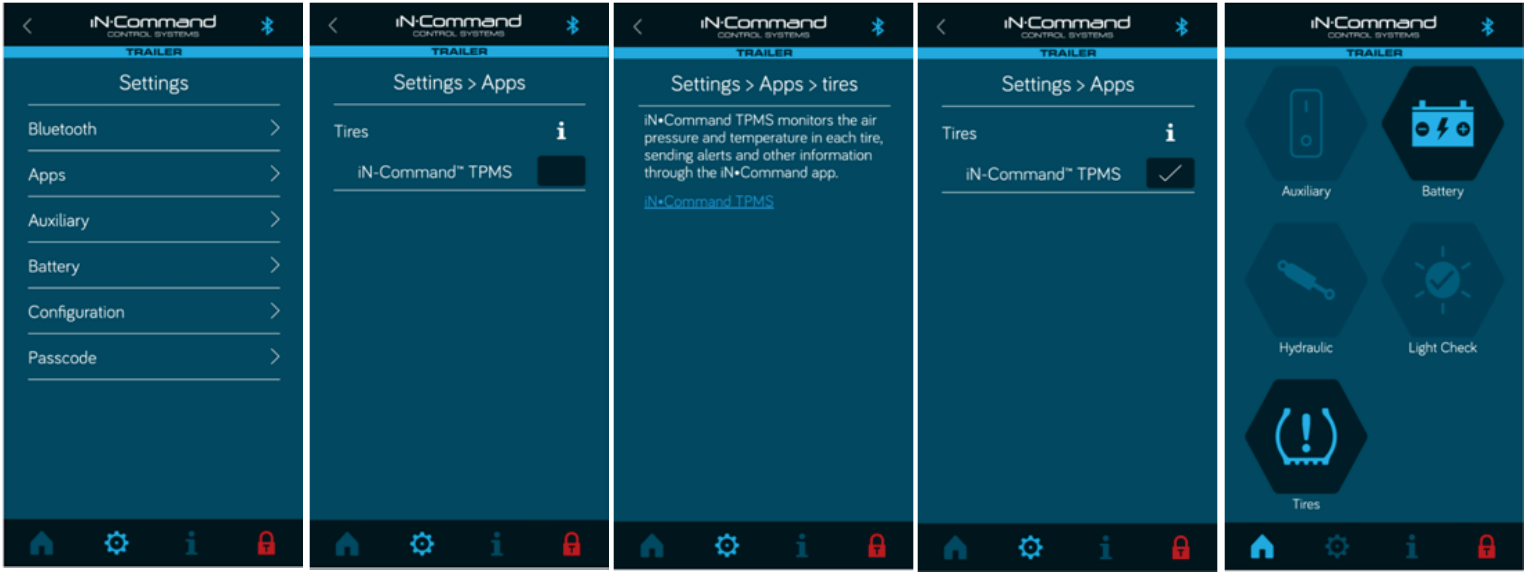






• Adding TPMS

If the user has iN-Command TPMS Sensors installed on the trailer, a TPMS icon can be added to the home page to provide a quick link to the iN-Command TPMS App. In the Settings page, select the Apps tab. Once in the App page, there is a selection for tires. There is an info icon that provides a description of the TPMS function and a link to the iN-Command TPMS App on the App store, if the user currently does not have the iN-Command TPMS App installed on their device. To add the TPMS icon, press the box next to iN-Command TPMS. A check mark will appear in the box indicating that it is selected. The TPMS icon will now appear on the home page.



• Low Battery Voltage Alert

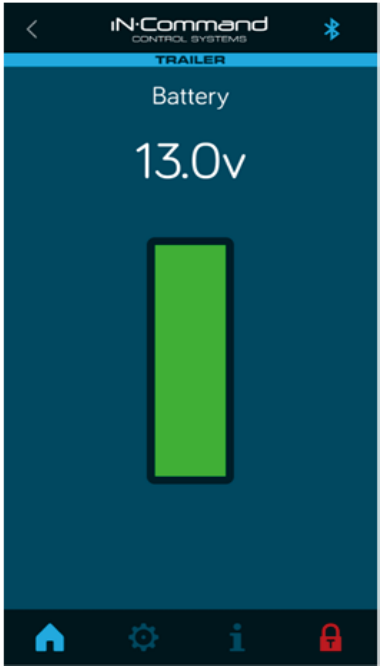
The iN-Command Trailer App is equipped with a Low Voltage Alert. If the battery voltage drops below the setpoint for three minutes, a popup will appear notifying the user that the battery voltage is low. The Low Voltage Alert can be adjusted from 11.8V to 12.4V, or the alert can be turned off. The Default setting is On at 12.4V. To adjust the Low Voltage Alert, select the Battery tab in the Settings page, then move the voltage slider to the desired voltage. To turn off the Low Voltage Alert, press the circle next to Low Voltage Alert. When off, the circle will be black and the voltage slider will disapear.

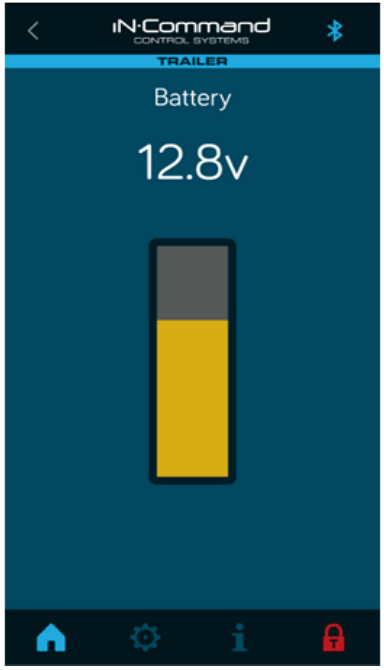
• Home Page Operation

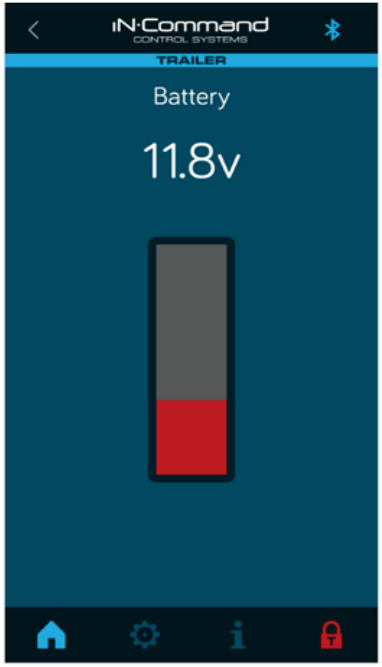
From the home page, you can check the battery voltage, operate the hydraulic lift, perform a light check on the trailer lights, operate the auxiliary function and check the TPMS sensors.

• Battery Check

To check the battery level, press the Battery icon on the home page. In the battery page, the voltage will be displayed and there is a bar graph to indicate the state of the battery. The graph will be green at 12.9V volts or higher. The graph will be yellow between 11.9 to 12.8V. The graph will be red at 11.8V and lower.

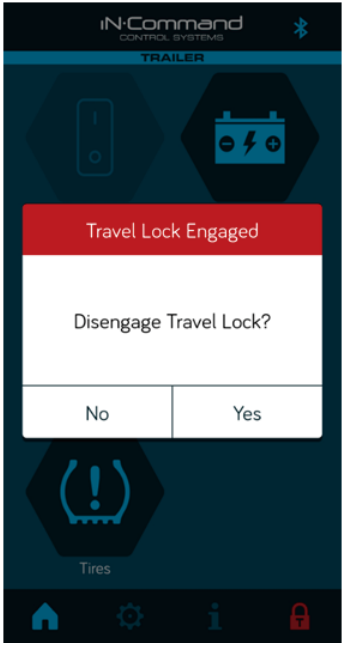


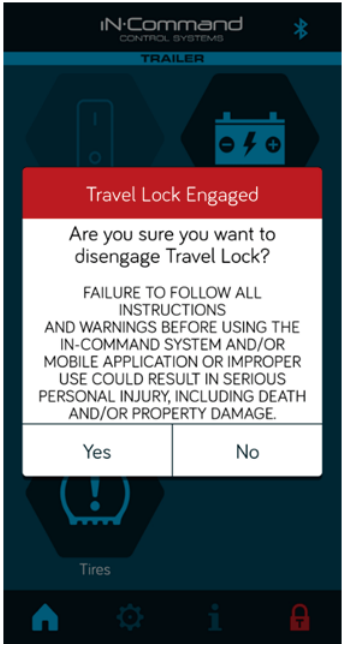


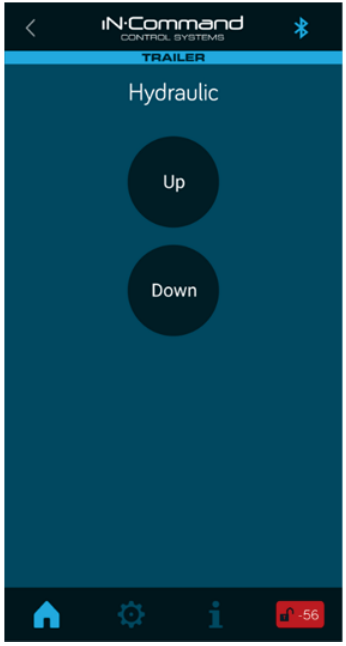


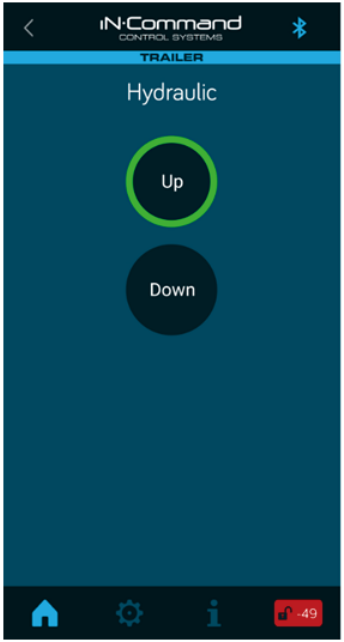
• Hydraulic

To perform the Hydraulic lift function, press the Hydraulic icon from the home page. The user will be prompeted with two Travel Lock Engaged popups. To proceed, make sure it is safe to proceed, then press Yes on the first popup. The second popup will appear, press Yes again. Once in the Hydraulic page, the Travel Lock counter will start counting down from 60 seconds. Press the Up button to raise the hydraulic lift and press down to lower the hyrdaulic lift. If the Travel Lock timer runs out before the hydraulic function is completed, press either the Up or Down buttons to start the process over.



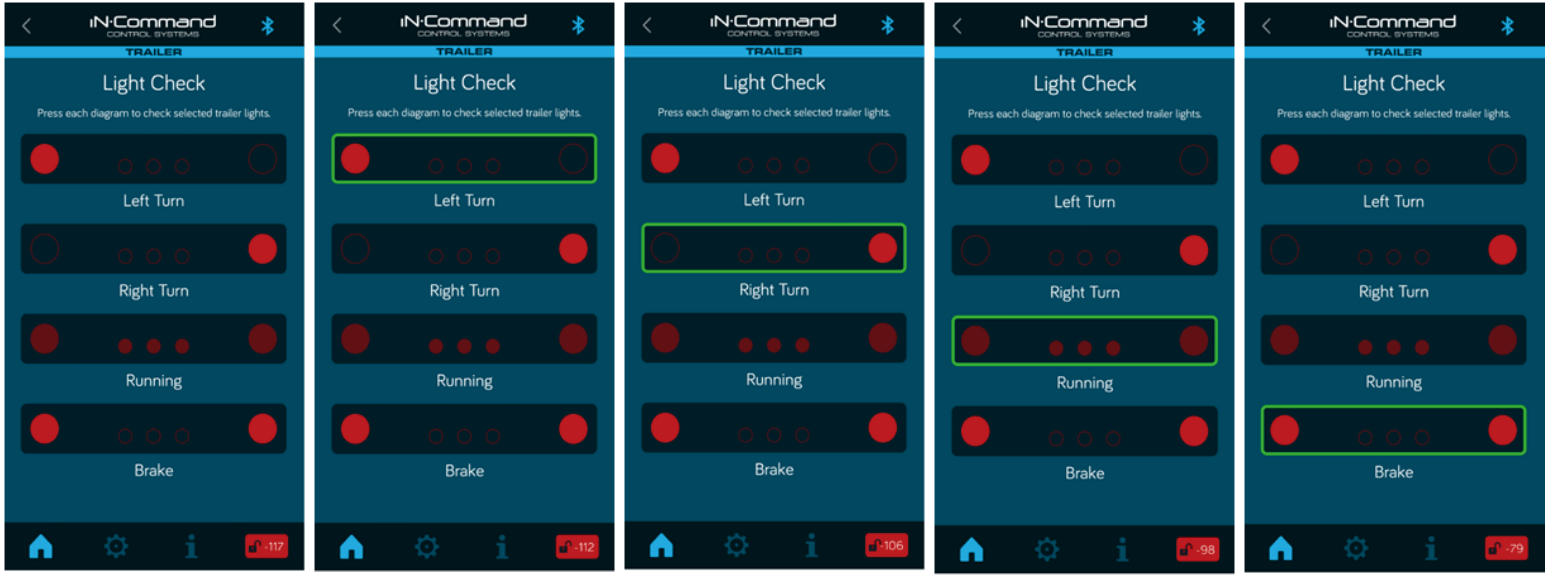






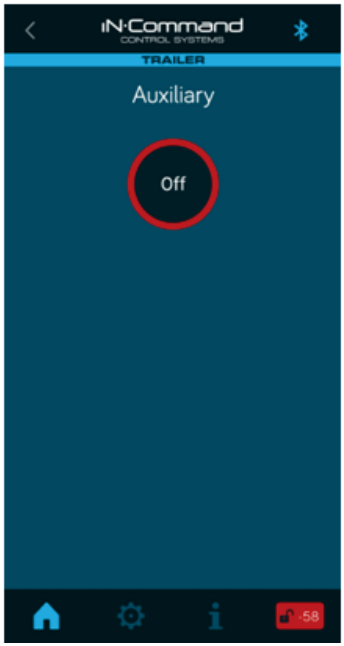
• Light Check

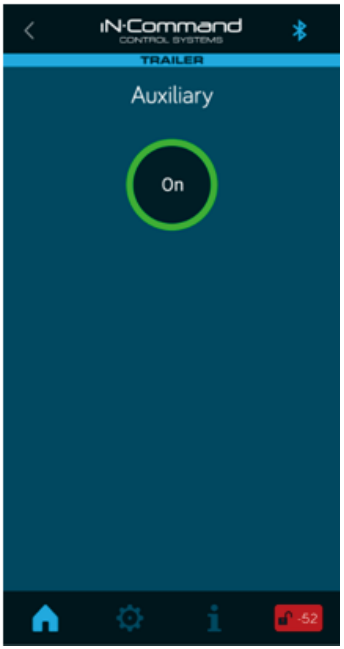
To perform the Light Check, press the Light Check icon on the home page. The user will be prompeted with two Travel Lock Engaged popups. To proceed, make sure it is safe to proceed, then press Yes on the first popup. The second popup will appear, press Yes again. Once in the Light Check page, the Travel Lock Counter will start counting down from 120 seconds. Press either the Left Turn, Right Turn, Running or Brake light bar. The light group being checked will be highlighted with a green outline around the bar. The light group will stay on until the next light bar is pressed, leaving the Light Check page, or the Travel Lock timer runs out. If the Travel Lock timer runs out before all lights have been checked, press on any of the light group bars to start the process over. The Travel Lock popups will appear again also.

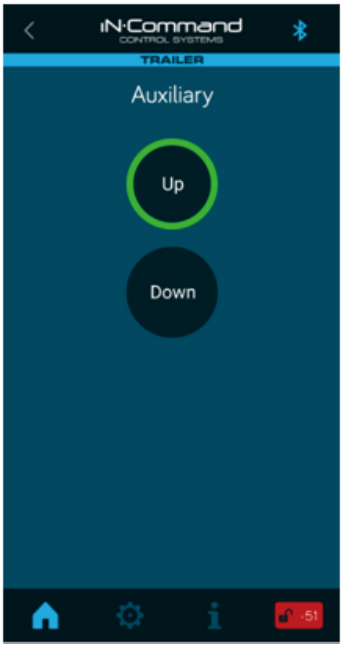


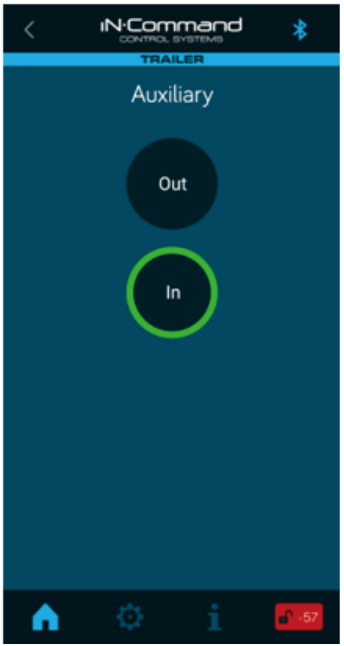
• Auxiliary

To perform an Auxiliary function, press the Auxiliary icon on the home page. The user will be prompeted with two Travel Lock Engaged popups. To proceed, make sure it is safe to proceed, then press Yes on the first popup. The second popup will appear, press Yes again. Once in the Auxiliary page, the Travel Lock timer will start counting down from 60 seconds. If the latch function was selected in the Auxiliary Settings page, there will be an On/Off button to operate. When Off, the button will have a red border. When On, the button will have a green border. The latch will stay on until the Travel Lock runs out or leaving the page.



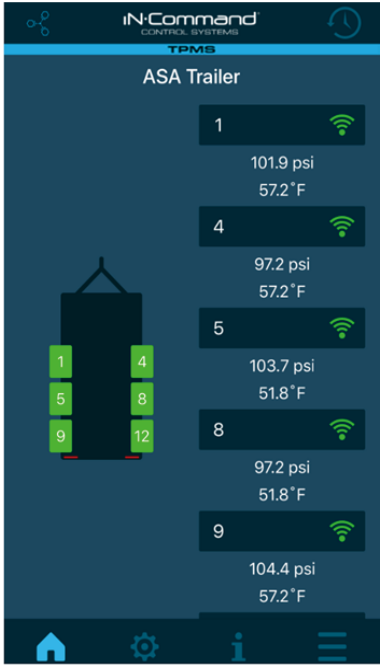






• TPMS

To access the iN-Command TPMS App, press the Tire icon on the home page. The TPMS App will then launch. Please see the iN-Command TPMS manual for operation instructions. To go back to the iN-Command Trailer App, press the iN-Command App icon at the top left corner of the TPMS App. You can also use the devices back button to return to the previous app.



• Troubleshooting

Symptom	Solution
Not powering up	• Check for a solid red light on top of the NCS40T. A solid red light indicates it is powered on. A flashing red light indicates it is in the boot up process.
	• Check for +12V on the charge line in the 7-way connector.
	• Check for Ground in 7-way connector.
	• Check the Truck/Light Power Input connector to make sure it is fully seated with the mating trailer connector.
Not able to pair device app	• Check that the NCS40T is powered on.
	• Check if another device is paired. If there is a solid blue light next to the red power light, a device is paired. Press and hold the pair button for 5 seconds to unpair the device. The blue light should flash and turn off. Try pairing process again.
Trailer Lights not working	• Check the +12V light circuit pins in the 7-Way connector to verify getting signal from truck.
	• Check the Light Power Output connector and make sure it is fully seated into the trailer connector.
	• Bypass the NCS40T by unplugging the Truck/Light Input connector and the Light Power Output connector from the associated trailer side connectors, then plug the trailer connectors together and test the trailer lights again
The Motor functions or Light Check do not activate from the iN-Command Trailer App	• Go into the Battery Page on the Trailer app to verify the trailer battery voltage +9V.
	• Check that the Trailer Battery Power Input Red ring terminal is connected to the +12V positive post on the trailer battery.
	• Check That the Trailer Battery Power Input White ring terminal is connected to the negative post on the trailer battery.
Hydraulic pump is not activating from the app	• Check that the Dump/Solenoid Power Output connector is fully seated into the hydraulic pump connector.
	• Unplug the Dump/Solenoid Power Output connector and plug in the manual up/down hydraulic pump switch. If still not working, see hydraulic pump manual for troubleshooting.

For additional troubleshooting, call ASA Electronics Technical Support at 1-800-688-3135, email info@asaelectronics.com or visit our website in-command.net.

• Specificatons

App Support	iOS 10.0 and up, Android 6.0 and up. (1 device at a time)
Button	Bluetooth pairing button
LEDs	Power Status (boot status), Pairing Status
Operation voltage	12 VDC
Max curuent draw at	12 VDC / 650mA
Dimension	228.3(W) x 150.8(H) x 33.0 (D) mm 8.99 (W) x 5.94 (H) x 1.30 (D) inch
Water resistance	IP65
Working temperature	-20~+85 ℃
Weight	Approx. 1.06kg / 2.34lbs
Certification	FCC part 15 C

• FCC NOTES

IMPORTANT NOTE:
To comply with the FCC RF exposure compliance requirements, the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. No change to the antenna or the device is permitted. Any change to the antenna or the device could result in the device exceeding the RF exposure requirements and void user's authority to operate the device.

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

2602 Marina Drive • Elkhart, IN 46514
www.asaelectronics.com
www.jensenrvdirect.com
©2015 ASA Electronics LLC.

600-2100010-001