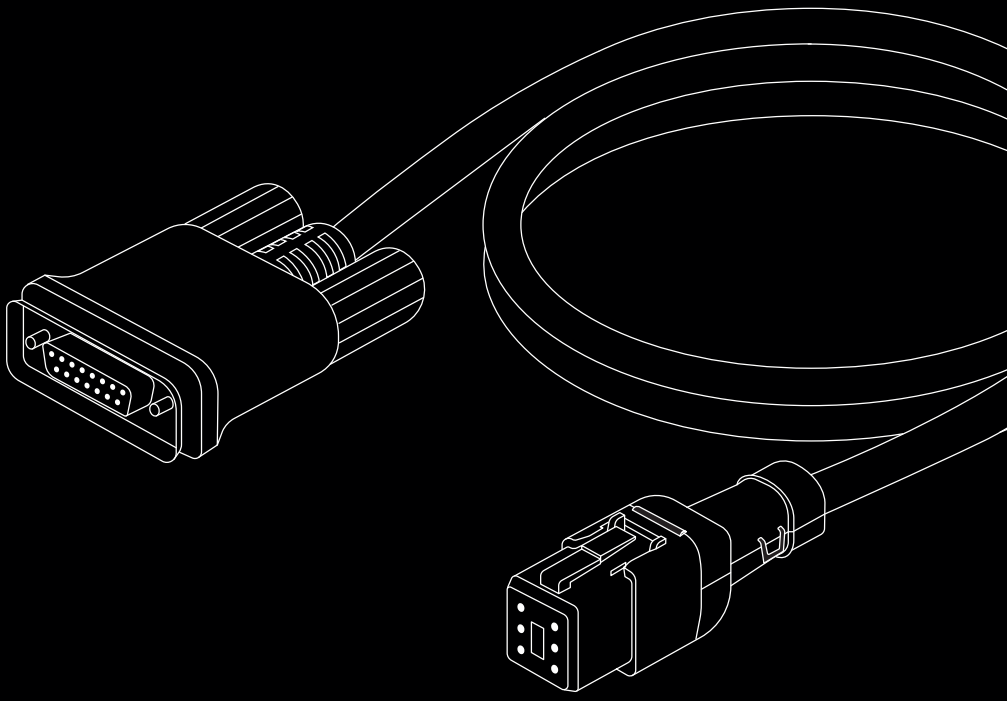
Cable 4000

Asset Gateway AG-55 installation guide
for Thermo King reefer integration



Motive

Introduction

The Motive integration solution for Thermo King refrigeration units provide two key benefits:

- Real-time monitoring of refrigerated trailer telematics data such as set point, return air, discharge air, alarm codes, fuel level, and much more.
- Remote control of refrigeration units through commands like set point, change mode, run pre-trip, turn reefer on/off, and turn the zone on/off (for multi-temp refrigerated trailers).

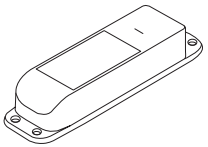
Compatibility

Motive supports the following Transport Refrigeration Units (TRUs):

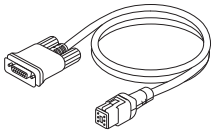
- C-600, S-600, S-700 - single-temp units
- C-600M, S-600M, S-610M, S-600DE, S-610DE - multi-temp units
- SB-130, SB-230, SB-330
- SB-110, SB-210, SB-310, SL-400E

Requirements

Please ensure that you have the following components:



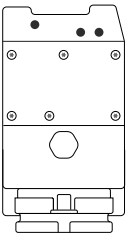
Motive Asset Gateway AG-55



Motive Cable 4000

Motive Cable 4001 Adapter

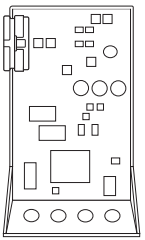
BlueBox

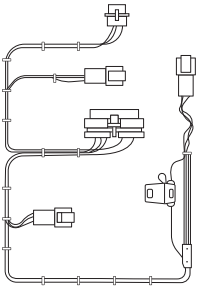


Thermo King BlueBox or iBox unit

Note: All 2018 and newer model units of Thermo King are shipped by default with a BlueBox device. For 2017 and older models, either BlueBox (P/N: 401634) or iBox units (P/N: 401243) should be purchased from your Thermo King dealer.

iBox





Thermo King 3rd Party Harness

This harness would be pre-installed if the customer selected the 3rd party gateway enabled option when ordering their Thermo King refrigeration unit. If this is not installed, this harness needs to be purchased from your Thermo King dealer.

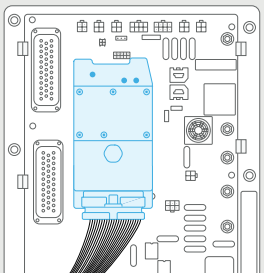
Single-temp harness (P/N: 422867)
Multi-temp harness (P/N: 422869)

Pre-install steps

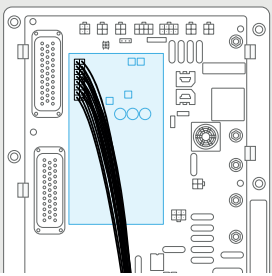
Step 1

Identify whether you have a **BlueBox** (P/N: 401634) or **iBox** (P/N: 401243) unit installed on your refrigerated trailer.

BlueBox



iBox



Step 2

If you have a BlueBox unit installed, please reach out to your Thermo King dealer to enable a software setting that allows 3rd Party Mode on your BlueBox unit. The dealer can turn this setting on remotely.

Step 3

Follow the steps below to go to **Guarded Access Mode** on your Thermo King physical controller unit (installed on your refrigerated trailer). To navigate between pages, press the **Up** and **Down** buttons.

a. Press the **ON** button on the display screen.

b. Press the **Menu** button as it appears.

c. Press the **Exit** and **Unlabeled** button at the same time for 5 seconds.

d. The display screen will now show the Maintenance menu.

e. Press the **Next** button until the screen will not advance further.

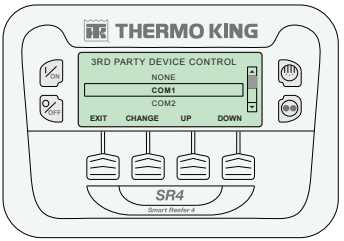
Step 3 (cont.)

f. Press the **Exit** and **Unlabeled** button at the same time for 5 seconds.

g. The display screen will now show the **Guarded Access menu**.

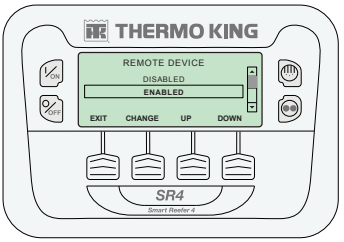
Step 4

From Guarded Access Mode, navigate to Hardware Configuration and then to 3rd Party Device Control and set it to **COM1.**



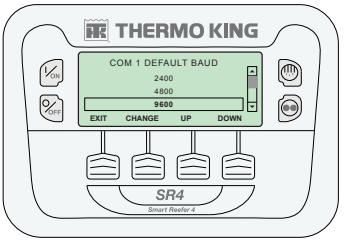
Step 5

From Guarded Access Mode, navigate to Programmable Features and then Remote Device and set it to **Enabled**.



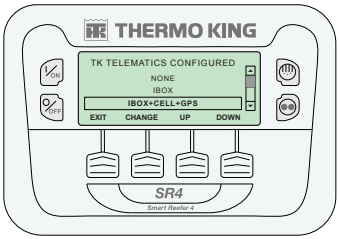
Step 6

From Guarded Access Mode, navigate to Programmable Features and then COM1 Default Baud Rate and set it to **9600**.



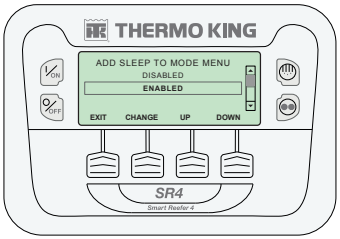
Step 7

From Guarded Access Mode, navigate to REB Type or TK Telematics Configured and set it to **Ibox+Cell+GPS.**



Step 8

From Guarded Access Mode, navigate to Main Menu Configuration and **Add Sleep** to the Mode Menu.



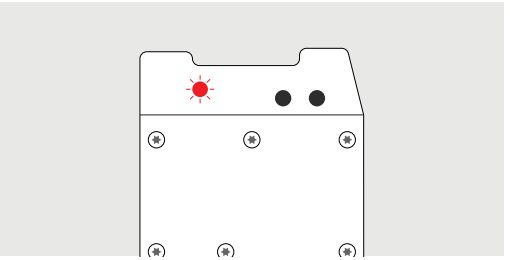
Step 9

Verification

For iBox units, no additional verification is needed as 3rd Party Mode is enabled by default.

For BlueBox units, additional verification is necessary. To enable 3rd Party Mode, turn on the Thermo King refrigeration unit and make sure the LEFT #1 LED is blinking red. If the LED is solid red, please make sure you've successfully completed the steps listed above. If the issue persists, please reach out to your Thermo King dealer again to ensure they have correctly set the software setting on their end to enable 3rd Party Mode.

Step 9 (cont.)



Installation

Step 1

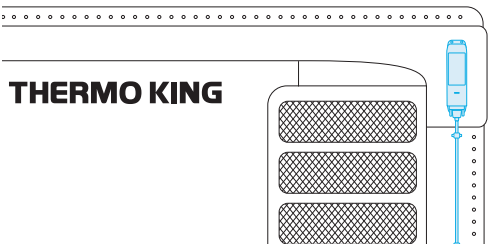
Download and log into the Motive Fleet App from Google Play Store or Apple App Store.

Step 2

Choose where to install the Asset Gateway on your refrigerated trailer. We strongly recommend following these guidelines:

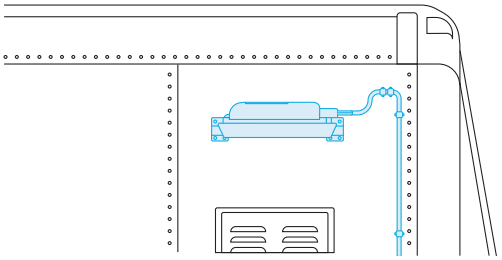
- Place the Asset Gateway on a flat surface.
- Avoid placing the Asset Gateway near any heat sources (such as compressors or fans) and vibrations that are caused by the refrigeration unit.
- Position the Asset Gateway towards the sky. This will allow the device to receive backup solar power if the cable power is not available.

Asset Gateway installed without a solar mount on the side of the refrigeration unit.

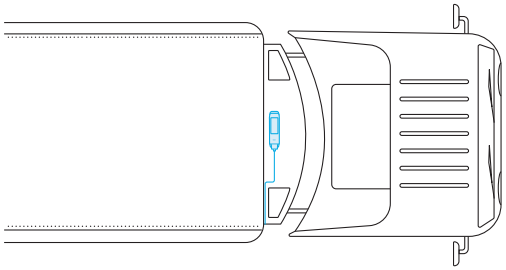


Step 2 (cont.)

Asset Gateway installed with a solar mount on the refrigeration unit.

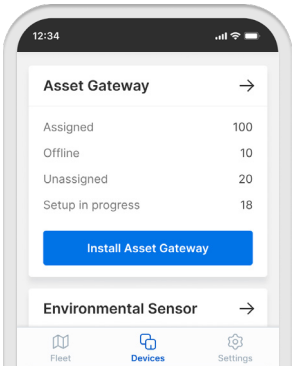


Asset Gateway installed without a solar mount on the top of the refrigeration unit.



Step 3

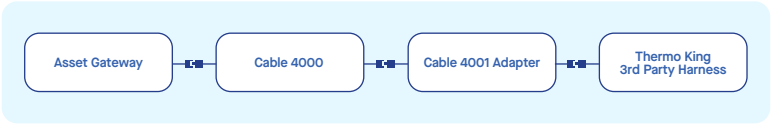
Go to the **Devices** tab and follow the in-app instructions to guide you through installing the Asset Gateway.



Step 4 Connect Cable 4000 to the Asset Gateway.

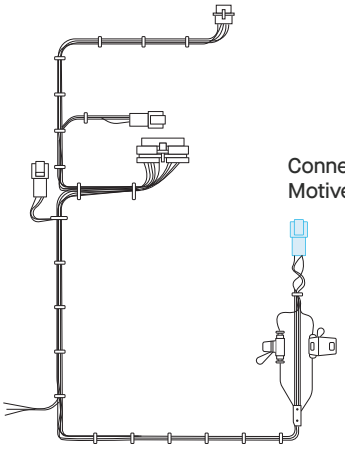
Step 5 Connect the orange 6-pin Deutsch connector of Cable 4000 to the Cable 4001 Adapter.

Step 6 Connect the other end of the Cable 4001 Adapter to Thermo King's 3rd party harness.



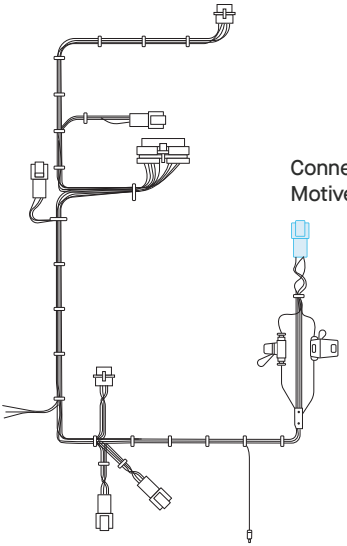
Step 7 Refer to the Thermo King instructions that came with your 3rd party cable harness for more details on connection points for installing in single and multi-temp units.

Single-temp units only



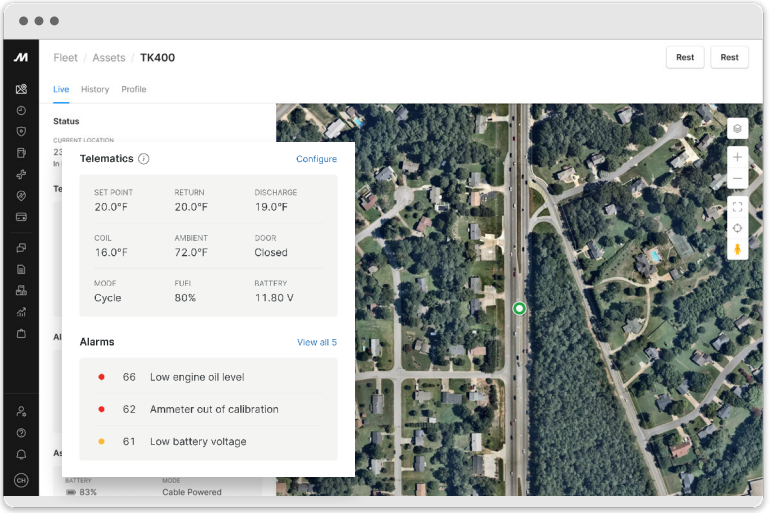
Step 7 (cont.)

Multi-temp units only



Connect this end to Motive Cable 4001

Once installation is complete, you'll be able to monitor reefer telematics data live in Fleet View from the Motive Fleet Dashboard.



Potential Unlocked

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