

**User Manual** 

#### Call us: 1-800-641-RAND (7263)

E-ail us: fleetsupport@randmcnally.com

#### Write to us:

Rand McNally Attn: HD 100<sup>®</sup> Customer Support 106 Hi-Lane Richmond, KY 40475

# This product is powered by lead-acid battery ,Don't Short Circuit.

When using the device, maintain a distance of 20cm from the body to ensure compliance with RF exposure requirements.

## Safe Driving Practices:

Always use your best judgment, exercise caution and common sense when the vehicle is in motion. Do not become distracted by the device while driving. Minimize the amount of time spent looking at the device while driving and use voice prompts when possible.

Do not input destinations, change settings, or access any functions requiring prolonged use of the device controls while driving. Pull over in a safe and legal manner before attempting such operations.

HD 100 User Manual 3

## **FCC Compliance Statement**

This device complies with part 15 of the FCC rules. to the following two conditions: (1) this device may not cause harmful Operation is subject interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 may cause harmful interference to radio communications if not installed and used in accordance with the instructions. 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 of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet that is on a different circuit from the telematics unit.
- Consult the dealer or an experienced radio/TV technician for help.
- **NOTE:** The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications or changes to this equipment. Such modifications or changes could void the user's authority to operate the equipment.

# **Table of Contents**

Activating Your HD 100 for the First Time	5
Download Dock	5
Connect HD 100	6
Activate Service Plan	
Configure Account Settings	
ConnectTND <sup>™</sup> 720	
Installing Your HD 100	7
Installation Kit	
Installation Instructions	
Alternative Install Options	
Quick Diagnostics	
Troubleshooting	
Accessing the Connect Web Portal	
Log On	
Feature Overview	
Using the HD 100 Software	15
Getting Started	
Power On	
Log On	
Warning Screen	
On-screen Keyboard	
Status Bar	
Screen Calibration	
HD 100 Home Menu	
Home Menu Safe-driving Screen	21

HD 100 Mail	22
Inbox	
Open Message	24
Outbox	
Send Messages	
Options	
Mail Safe-driving Screen	
HD 100 Hours of Service	
Summary	
Duty Status	
Logs	
DVIR	
Options	
Company	
HOS Safe-driving Screen	
HD 100 SysInfo	
Settings	
Info	
Diagnostics	
SysInfo Safe-driving Screen	
HD 100 Stats	
Driver Performance	
Fault Codes	
Help & Customer Support Information	
User Documentation	
Additional Resources	

4 HD 100 User Manual

# Activating Your HD 100 for the First Time



**NOTE:** You need a TND<sup>™</sup> 720 device to use your HD 100. Activating your HD 100 will require you to plug both your HD 100 and your TND<sup>™</sup> 720 into your computer.

#### **Download the Dock**

If you do not already have the Rand McNally Dock downloaded, go to randmcnally.com/HD100dock and download and install the Dock.

The Rand McNally Dock is an essential part of your Rand McNally GPS device. It provides you with free software upgrades and access to map updates. Through the Dock, you can also access the user guide for your device and send feedback to Rand McNally via "Tell Rand".

To get started, click the link below to download the installation file. Save the file to your desktop or another folder on your computer, then select the file and click "run" to begin the installation. If the download does not start, please adjust the settings on your Internet browser and/or anti-virus software.

Please connect your IntelliRoute<sup>®</sup> TND<sup>™</sup> to your computer to begin using the Rand McNally Dock.

#### Connect HD 100

Connect your HD 100 device to your computer with the provided USB cable.

The Dock will then walk you through step by step to activate your service plan, configure your account settings and pair your HD 100 and TND<sup>TM</sup> 720.

#### **Activate Service Plan**

Select and purchase the HD 100 service plan that works for your needs. The Dock will display information on these service plans.

#### **Configure Account Settings**

The Dock will walk you through the essential settings and account information you need to configure so you can use your HD 100 device out of the box.

**NOTE:** For more information on additional settings to further customize your user experience, log in to the portal and click the Help tab, then select Connect Help. The Connect web portal User Manual will appear in a new tab in your browser. Click on the Management section to view all account settings available to you.

## Pair HD 100 with TND<sup>™</sup> 720

You will be instructed to unplug your HD 100 first, then plug in your TND<sup>m</sup> 720 device. The Dock will then pair these two devices, enabling them to work together once you install them in your truck.

# **Installing Your HD 100**

Installing your HD 100 can take as little as 10 minutes. Install instructions are provided here, as well as quick diagnostic information so you can make sure your device is working correctly.

#### Installation Kit

HD 100 DeviceHD 100 Get Started Card9-pin Power CableHD 100 User ManualUSB CableRand McNally Hours of Service Visor CardAdhesive Velcro StripsCable Ties

## Installation Instructions

- 1. Locate the truck's diagnostic port. Remove the plug on the diagnostic port, connect the cable, and lock the collar and place.
- 2. Route cable from the diagnostic port to the area where you would like the HD 100 to be mounted, making sure to place it away from any vents and where it won't interfere with driver (the right-most corner of the dash is usually an ideal area to place the device), tucking the cable in the space between the windshield and the dash.

- 3. Connect the device to the cable. You may choose to position the device so the LEDs on the front of your device face away from you so as to not distract while driving.
- 4. Wipe the dash area where you would like to place the HD 100 with the alcohol-based wipe, making sure the surface dries thoroughly. Peel the protective layer off one side of the Velcro strips and place on the bottom of the HD 100 device, then peel the other protective layer and place the device on your dash in the desired location, pressing firmly to secure it to the dash surface.
- 5. Once the HD 100 is installed and connected to vehicle with the cable, turn your truck on to accessory mode (the mode you use to operate your radio and A/C without turning the ignition on fully). The four lights on the side of the device should illuminate. Check the colored LEDs on the side of your HD 100 to ensure the device is connected and running properly (Power: Red, Wi-Fi: Amber, Cell: Green, Jbus: Blue).
- Turn on your TND<sup>™</sup> 720 device. You will first see the IntelliRoute<sup>®</sup> software Home Menu. Click the HD 100 button on this screen.

7. Once the HD 100 software loads, log onto the HD 100 software by entering the Driver ID you created when activating your device through the Rand McNally Dock. NOTE: you can also refer to the Rand McNally HD 100 Activation email you received after you completed this process. Your log-in information is in this email for your records.

**NOTE:** Do not cover the device or place anything over it that may disable the GPS signal.

#### **Alternative Installation Options**

Contact Rand McNally Customer Support at **1-800-641-RAND (7263)** or **fleetsupport@randmcnally.com** for more information on alternative installation options.

Accessories and parts for alternative installations can also be purchased at **randmcnally.com/fleetaccessories**.

- 9 to 6-pin Cable Adapter
- Drill-in Dash Mount Base

#### **Quick Diagnostics**

Check the colored LEDs on the side of your HD 100 to ensure the device is connected and running properly (Power: Red, Wi-Fi: Amber, Cell: Green, Jbus: Blue).

#### Verify GPS Communication

Select SysInfo icon from Home Menu. Select Diagnostics, then the GPS tab. Verify GPS status is good and that there are values in the Latitude and Longitude fields.

#### Verify J1708/1939 Communication

Drive the truck at least .2 miles. Select the SysInfo icon from Home Menu. Select Diagnostics, then the J-Bus tab. Verify that there is an odometer value in the Eng. odom. field. Then go back to the Home Menu and select Stats. icon, then the Driver Performance tab. Verify there is a value in the Miles field on the second line in the first column. (Enterprise Plan only)

#### Send Test Message

Select the Mail icon on the Home Menu and tap Send. Type message subject and message text and tap Send in the upper left hand corner. Make sure message indicator changes from X to a green check mark. (Basic & Enterprise Plan only)

# **Installing Your HD 100**

## Troubleshooting

The LEDs on the side of the HD 100 illuminate to indicate that the device is connected and running properly. If one or more of the four lights are not illuminated, meaning they are either off or flashing, there may be an error.

Power	<b>On</b> – Application up and running
	Off – Power Off
	Fast Flash - System error
	Slow Flash – Bootloader running
	On – VNC client is connected to VNC server
Display	Off – Wi-Fi modem is off
Display	Fast Flash – Wi-Fi error
	Slow Flash - Wi-Fi client connected
ATTN	On – Attention necessary by Driver
	Off – No attention necessary
	Fast Flash – Not supported
	Slow Flash – Not supported
JBus	On – Data received from at least one JBus
	Off - No data received from any Jbus
	Fast Flash – JBus error (iBridge not responding, etc.)
	Slow Flash – Missing data from JBus

#### No power or intermittent power loss:

#### Check power connection

Ensure that the cable is secured to the HD 100 device. Reestablish the cable connections by unplugging them, then plugging them back in. Make sure locking collar is turned. Then check that the red LED light is on, which indicates the device is powered on.

#### **Check communications**

Check that the colored LEDs on the front of your HD 100 are illuminated which indicate the device is connected and running properly (Wi-Fi: Amber, Cell: Green, Jbus: Blue).

# Unable to send and receive messages: (Basic & Enterprise plan only)

#### **Check communications**

Check that the colored LEDs on the front of your HD 100 are illuminated which indicate the device is connected and running properly (Wi-Fi: Amber, Cell: Green, Jbus: Blue).

#### **Restart the device**

Restart the device by first logging off on your target device, then pressing the Power button. Then disconnect the cable from your HD 100 device. This will cause the device to reset and reconnect.

## Unable to connect Cell or Wi-Fi®:

#### **Restart the device**

Restart the device by first logging off on your target device, then pressing the Power button. Then disconnect the cable from your HD 100 device. This will cause the device to reset and reconnect.

#### **Check communications**

Move the truck to ensure that the issue is not signal interference.

# Nothing appears on device:

Make sure your target device is charged and powered on.

#### **Check communications**

Move the truck to ensure that the issue is not signal interference.

# **Installing Your HD 100**

## Screen not responding:

#### Check power connection

Ensure that the cable is secured to the HD 100 device. Reestablish the cable connections by unplugging them, then plugging them back in. Make sure locking collar is turned. Then check that the red LED light is on, which indicates the device is powered on.

Hold down the Home button on the bottom right corner of your device for 5 seconds. This will cause the Calibration screen to come up. Follow the instructions provided on the screen.

#### **Restart the device**

Restart the device by first logging off on your target device, then pressing the Power button. Then disconnect the cable from your HD 100 device. This will cause the device to reset and reconnect.

### JBus not responding:

#### Make sure truck ignition is on

#### **Restart the engine**

#### **Restart the device**

Restart the device by first logging off on your target device, then pressing the Power button. Then disconnect the cable from your HD 100 device. This will cause the device to reset and reconnect.

# Accessing the Connect Web Portal

mail		
maii		ĩ
assword		
		1
Remember	me? Forgot Passwo	ord?
Log On		
Log on		

The Rand McNally Connect web portal is the web-based compliance reporting & vehicle performance tool that allows you to view the Hours of Service and vehicle performance data that your HD 100 collects.

Sign onto the portal on your computer to view your driver logs in various different reports. Log data in the portal available for six months in the portal, per the U.S. Department of Transportation's requirement.

**NOTE:** You do not have to log onto the Connect web portal before you can use your HD 100 in your truck the first time. You may refer to the portal when you would like to view your driver log history.

#### Log On

Sign on to the Rand McNally Connect web portal on your computer to view your HOS logs and performance\*.

To log onto the Connect web portal, go to connect.randmcnally.com.

Enter the email and password that you created during the HD 100 Activation process on the Dock (you can also reference the HD 100 Activation email you should have received after completing this process).

## **Feature Overview**

Depending upon the service plan you select, you will be able to access various features in the Connect web portal. The table below summarizes these features and which service plans include each feature.

	EOBR	Basic	Enterprise
Dashboard			
The Dashboard is the home screen of the portal. It provides configurable gauges and charts for at-a-glance analysis of critical performance metrics and trends. Each portal user can configure the data in their dashboard, with the ability to compare a specific driver or vehicle group's performance to the fleet's overall performance.			Х
Management			
The Management application allows you to configure your Rand McNally Connect web portal experience so you and your organization can maximize the value of its tracking, reporting and communication features. The Management application enables you to create and modify driver log-in credentials and settings, portal user log-in credentials and settings, reporting groups, Portals well as perform all other functions related to setting up your Rand McNally Connect web portal account.		Х	Х
Reports			
The Reports application enables you to gain insight into your fleet's performance so you can make sense of what happens on the road, whether you want to run reports for one driver or vehicle, a particular group of drivers or vehicles, or your whole fleet. The Reports application allows you to manage driver and vehicle performance data, fuel consumption by state, diagnostic fault codes for vehicle maintenance purposes, and more.	Driver/ Vehicle Info	Driver/ Vehicle Info	All
Compliance			
The Compliance application is the core of Rand McNally's electronic driver logs solution, allowing you to keep all of your Hours of Service and DVIR records accurate, up-to-date, and in one easy-to-access location for the required 6-month period, without the mistakes and hassle of paper log books. The Compliance application enables you to manage HOS logs, DVIR entries, personal conveyance usage (if enabled), and more.		Х	Х
Mail			
The Mail application enables you to have constant communication with your drivers while they are out on the road. If you are an owner operator, you can also configure your settings and use the Mail application to communicate with your team driver or spouse.		х	Х
Mapping			
The Mapping application enables you to view where your drivers and vehicles are at right now and how they're performing, as well as where they've traveled recently. The Mapping application features tools that can help you drill into how your drivers are progressing through their day and how they're performing, such as performance and Hours of Service alerts (in addition to the alerts that can be set up via the Management > System Settings > Email Alerts section of the portal), as well as others that can help you find the closest truck to a saved location, enabling you to find the vehicle best suited to pick up an available load from a customer location.		Х	Х
Help			
Provides various instructional resources for your HD 100 device and the Connect web portal, such as user manuals and how-to videos.	Х	Х	Х

# **Getting Started**



#### Exhibit 2. HD 100 Log On Screen



# Power On

Turn on your truck to accessory mode (the mode you use to operate your radio and A/C without turning on the ignition fully) to power on your HD 100 device.

Press the Power button on your TND<sup>™</sup> 720.

#### Log On You will first see the IntelliRoute® software Home Menu. Click the HD 100 button on this screen.

Once the HD 100 software loads, log onto the HD 100 software by entering the Driver ID you created when activating your device through the Rand McNally Dock. Tap Submit [Exhibit 2, (c)].

**NOTE:** You can also refer to the Rand McNally HD 100 Activation email you received after you completed this process. Your log-in information is in this email for your records.

To go back to the IntelliRoute Home Menu, select the Back button.

**NOTE:** To log off your HD 100, select the Logoff icon on the HD 100 Home Menu.

# **Getting Started**

#### Exhibit 3. Warning Screen



lcon	Definition
(10-	Wi-Fi
	Cell

#### Warning Screen

The Warning Screen [Exhibit 3] reminds you that using your HD 100 and TND<sup>TM</sup> 720 while driving can be distracting. Be cautious and wise.

Tap Continue [Exhibit 3] to complete the logon.

#### **Communication Status**

You must have a cell or Wi-Fi connection to log on for the first time.

Locate the communication icon on the status bar. Icons and their definitions are shown in the table to the left.

Tap the **keyboard** button in the bottom left corner of the keyboard if you cannot view the status bar.

**Note:** If you have a signal but still see errors (such as Invalid Logon), refer to the Rand McNally HD 100 Activation email you received after you completed the activation process through the Dock. This email contains your Driver ID.

# **On-Screen Keyboard**

## Exhibit 4.

On-screen Keyboard



# **On-screen Keyboard**

The HD 100 on-screen keyboard is quick to access and easy to use.

- All controls are on the screen.
- Large button faces fit your fingers.

To use the keyboard:

- Tap the **keyboard** button [Exhibit 4, (e)] on the HD 100 status bar to display the keyboard.
- Tap the **ABC** or !@# buttons [Exhibit 4, (a)] to view alphanumeric characters and symbols respectively. The arrow button [Exhibit 4, (c)] on the right on the ABC screen allows you to change between upper and lower-case letters.
- Tap the **Delete** button [Exhibit 4, (b)] to erase a character.
- Tap the space bar button to insert a space [Exhibit 4, (f)].
- Tap Enter [Exhibit 4, (d)] to type on the next line.
- Tap the **keyboard** button [Exhibit 4, (e)] again to hide the keyboard.



lcon	Definition
E	Driver Peformance. Balloon messages appear over the icon to help you manage your performance. Messages are related to metrics such as over idling and speeding.
HOS	HOS. The icon changes color according to your HOS status. The icon is green when you are within acceptable limits for each HOS status. The icon changes to yellow when you are nearing violation status and to red when you are in violation.
$\mathbf{\overline{\vee}}$	Mail. The icon appears on the status bar when you have unopened mail.
110	<b>Communications.</b> The icon shows your communication status (Wi-Fi, Cellular, No communication).
(!)	System message. System alerts appear in balloon messages over the icon.

#### Status Bar

The status bar remains visible at the bottom of every screen and gives you access to current information about the HD 100.

Any status or alert icons are found on the status bar [Exhibit 5, (a)]. Icons and their definitions are shown in the table to the left.

## The status bar also allows you to:

- Check your terminal time [Exhibit 5, (b)].
- Pull up the on-screen keyboard [Exhibit 5, (c)].
- Return to the Home Menu [Exhibit 5, (d)].

# **Screen Calibration**

## Exhibit 6.

Calibrate Screen



#### **Screen Calibration**

As soon as you are logged in with the HD 100 software, calibrate your screen.

Recalibrate from time to time, especially if the screen "slips" when you touch it.

#### To calibrate your screen:

- Press and hold the Home button for 10 seconds. Calibration starts once button is released.
- Tap the center of the crosshairs as they appear on the calibration screen [Exhibit 6]. There are four total.
  - Tap as close to the center of the crosshairs symbol (+) as possible.
  - Use the same pressure you normally use when tapping the screen
  - If you receive an error, try again.

**NOTE:** Do NOT press and hold finger on the center of the crosshairs. Just tap.

#### Exhibit 7. Home Menu Screen





#### Home Menu

The Home Menu [Exhibit 7] is the home screen of the HD 100 software. The applications available to you on the HD 100 are identified by icons.

The icons on the Home Menu are explained in the table to the left.

• Press the Menu button on the left of the status bar to return to the Home Menu screen.

# HD 100 Home Menu

## Exhibit 8.

Home Menu Safe-driving Screen



## Home Menu Safe-driving Screen

Menu options are limited while you are driving. When your truck is moving, the home menu safe-driving screen displays.

**NOTE:** Functionality within the Mail, HOS and SysInfo applications is simplified while you are driving.

#### Exhibit 9. Mail Icon on Home Menu



Tab	Function
Inbox	Holds incoming messages.
Outbox	Holds outgoing messages.
Send	Allows you to send messages.
Work	Helps you process assignments.
Options	Displays your e-mail address and allows you to manage your e-mail contacts.

## Mail

Select the Mail icon on the Home Menu [Exhibit 9] to access messages and send e-mails.

Mail opens to the Inbox tab. The tabs in Mail are explained in the table to the left.

# HD 100 Mail

## Exhibit 10.

Inbox Tab



# Inbox

All incoming messages appear in your Inbox [Exhibit 10]. Special features of the Inbox tell you details about your messages.

Status information is clustered together [Exhibit 10, (a), (b) and (c)].

- (a). A blank space in this column means the message has been opened. An envelope means it has not been opened.
- (b). A red exclamation point ( ! ) icon means the message is important. A paperclip (<sup>U</sup>) icon means the message has an attachment.
- (c). When you are working in another Mail tab, an envelope icon appears on the tab indicating that you have an unopened message.

Other columns in the Inbox tell you more about your messages [Exhibit 10, (d), (e) and (f)].

(d). This column tells you who sent the message. (e).

This column tells you the subject of the message. (f).

This column tells you when the message arrived.

- The time displays for messages that arrived on that current day (based on your terminal time).
- The date displays for messages that arrived on previous days.

#### Exhibit 11. Open Message Screen



## Open Message

Select a message to open it [Exhibit 11].

Four action buttons are available once a message is open.

- (a). Back returns you to the Inbox.
- (b). Play lets you listen to the message.
- (c). Reply lets you send a response to the message.
- (d). Delete lets you delete the open message.

Your Inbox holds 200 messages. When more messages arrive, the oldest messages in your Inbox are automatically deleted.

## **Personal E-mail Access**

If you would like to use your in-cab device to message people other than those who have a manager log-in to your Connect Web Portal account, you can save up to 5 personal e-mail addresses to communicate with while on the road.

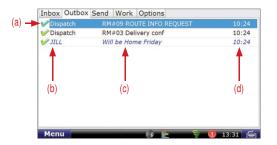
Personal e-mails are color-coded blue in your Inbox so you can identify them quickly. The color coding remains after the e-mail is read.

You can view your assigned e-mail address by selecting the **Options** tab on the Mail screen and tapping the **View E-mail Address** button.

# HD 100 Mail

# Exhibit 12.

Outbox Tab



# Outbox

All outgoing messages appear in your Outbox [Exhibit 12]. Special features of the Outbox tell you details about your messages.

Your Outbox holds 50 messages. When you have sent more than that, the oldest messages in your Outbox are automatically deleted.

(a). A green check mark (✓) icon means the message has been sent. An orange arrow (←) icon means the message is waiting to be sent. A red X ( ≍) icon means the message has not yet been sent.

Other columns in the Outbox tell you more about your messages [Exhibit 10, (b), (c) and (d)].

- (b). This column tells you who received the message.
- (c). This column tells you the subject of the message.
- (d). This column tells you when the message arrived.
  - The **time** displays for messages that arrived on that current day (based on your terminal time).
  - The date displays for messages that arrived on previous days.

#### Exhibit 13. Send Tab



## Send Messages

You can send messages from the Send tab [Exhibit 13].

The on-screen keyboard [Exhibit 13, (a)] appears automatically when you select the Send tab.

Drop-down boxes [Exhibit 13, (b)] make it easy for you to complete the **To** and **Subject** fields.

- The **To** field automatically selects **Dispatch**. The drop-down box lists other saved contacts.
- You can fill in the **Subject** field by using either the drop-down list (if you want to send a form) or the on-screen keyboard (if you want to send a message). If you choose a form from the drop-down list, the screen displays the form in the message field (the body of the screen).

When you are done, tap Send [Exhibit 13, (c)].

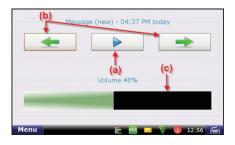
# HD 100 Mail

# Exhibit 14.

**Options Tab** 



#### Exhibit 15. Mail Safe-driving Screen



# Options

The Options tab has two buttons [Exhibit 14].

**Manage Contacts** [Exhibit 14, (a)]. This button lets you add contacts (for the list that displays in the **To** drop-down box on your Send message screen), request your contact list when you enter a new truck and make changes to your contact list.

**View E-mail Address** [Exhibit 14, (b)]. This button displays the email address assigned to your HD 100 device.

## Mail Safe-driving Screen

When you select the Mail icon while vehicle is in motion, the mail safe-driving screen will appear. With the mail safe-driving screen [Exhibit 15], you can hear a message rather than read it.

- Play and stop messages [Exhibit 15, (a)].
- Hear the previous or next message [Exhibit 15, (b)].
- Control volume by dragging a finger across the volume box [Exhibit 15, (c)].

#### Exhibit 31. HOS Icon on Home Menu



Tab	Function
Summary	Displays critical HOS information based on your current duty status.
Logs	Displays list of duty statuses for the current 8-day period.
DVIR	Allows you to enter and certify your DVIRs for the current 8-day period.
Options	Allows you to manage log information and settings related to violations and enforcement.
Company	Displays information related to your carrier and terminal.

#### Hours of Service

With the HD 100 software, your HOS information is well-organized and user-friendly.

## What You Do

Mark the beginning of your day by submitting an On Duty status and Trip Info entry. From that point on, the HD 100 device records Driving and On Duty segments automatically. The only entries you need to submit manually are Off Duty and Sleeper Berth statuses. When your day ends, you can review and certify your logs—all in one streamlined process.

## What the System Does

The HD 100 device logs all your HOS activities with accurate-to-thesecond technology so you can make the most of each day.

- When you tap the Trip Info button, the 14-hour day officially begins.
- When you begin driving after your pre-trip work is complete, Driving status is activated as soon as the tractor detects motion.
- When you stop, the system waits to be sure you have completed a driving segment before marking the time and activating the On Duty status. You do not need to worry about the system changing statuses when you stop for traffic lights or signs.

# HD 100 Hours of Service

## Exhibit 32.

HOS Main Screen-Summary Tab



## Summary

This tab gives you critical HOS information at-a-glance.

- The top of the Summary tab shows the name and HOS status of the driver logged into the HD 100 software [Exhibit 32, (a)]. If the driver shown is not you, log off then log back on.
- The **Status Box** provides a summary of your current status [Exhibit 32, (b)].
- Screen left tells the time remaining before you reach HOS limits and whether you can use the 16-hour rule [Exhibit 32, (c)]. Tap the (?) button for details.
- Screen right shows the time remaining before each type of reset occurs [Exhibit 32, (d)].
  - **70hr total.** Time until a new 70-hour log starts.
  - 10hr Reset. Time until a 10-hour reset.
  - **Split Reset.** Time until reset with sleeper-berth statuses calculated in.

**NOTE:** The HD 100 device is compliant with FMCSA regulation §395.15.

## Exhibit 32.

HOS Main Screen - Summary Tab



#### Summary (continued)

• The Summary tab also reports Hours gained back from 70hr total after midnight [Exhibit 32, (e)].

Buttons at the bottom let you change your HOS status or add specific trip information to the log [Exhibit 32, (f)]. The buttons display at the bottom of each HOS tab.

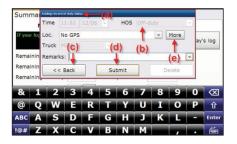
The **Today's log** button accesses the graph and tabs you need to manage your day [Exhibit 32, (g)].

The functions of adding a duty status, adding trip information and managing the current day's log are explained on the following pages.

# HD 100 Hours of Service

## Exhibit 33.

Pop-up for Adding a Duty Status



# Exhibit 34.

Pop-up for Choosing a Location



# Add a Duty Status

- Tap any duty-status button to view the [Exhibit 32, (f)) Adding record of duty status pop-up [Exhibit 33, (a)]. Most fields are grayed out, which means you do not need to do anything; the system records the required information automatically.
- The pop-up shows the status selected [Exhibit 33, (b)].
  For a different status, tap **Back** [Exhibit 33, (c)] and select the status you want.
- Tap Submit [Exhibit 33, (d)] if the record is correct.
- If GPS is on, the Loc. field will be grayed out. If GPS is off, tap More [Exhibit 33, (e)] to view the Choose location pop-up [Exhibit 34].

# **Choose a Location**

- Begin typing your location in the **Search** box [Exhibit 34, (a)] to bring up the section of the location list showing places beginning with those letters [Exhibit 34, (b)].
- Select your location to fill in the Loc. field.

# Exhibit 35.

Pop-up for Adding a Duty Status - Remarks Field



## Add a Remark to a Duty Status

You may need to include a comment about your duty status. The cursor automatically appears in the **Remarks** field [Exhibit 35].

- Use the drop-down arrow to view company-provided options.
- If a standard remark applies, select it to fill in the field.
- If a standard remark does not apply, type your own remark using the on-screen keyboard.
- Tap **Submit** to record the enhanced duty-status entry.

# HD 100 Hours of Service

## Exhibit 36.

Pop-up for Adding Trip Information

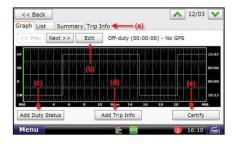


## Add Trip Information

- Tap the **Trip Info** button on the Summary tab to view the **Adding trip information** pop-up [Exhibit 36, (a)]. The on-screen keyboard automatically appears so you can enter **Load**, **Co-driver** (if appropriate), **Trailer** numbers and **Remarks**.
- The cursor appears in the active field. To move the cursor to another field, just touch the field you want.
- Standard remarks are included in the **Remarks** drop-down [Exhibit 36, (b)]. Select the remark you want or use the on-screen keyboard to enter a non-standard remark.
- Tap **Submit** [Exhibit 36, (c)] to record your information and return to the Summary tab. Tap **Back** [Exhibit 36, (d)] to return to the Summary tab without recording your information.

## Exhibit 37.

Today's Log Main Screen - Graph Tab



### Today's Log

The Today's log button can be accessed on the Summary tab [Exhibit 32, (g)]. Four tabs display across the top of the Today's log screen [Exhibit 37, (a)].

Graph is the tab that opens when you select Today's log. This screen has three buttons: Edit, Add Duty Status and Add Trip Info.

- Edit. This button [Exhibit 37, (b)] allows you to edit any uncertified log from the last 8 days (select the arrow buttons and to view a previous day's log).
- Add Duty Status. This button [Exhibit 37, (c)] on the Today's Log Graph screen allows you to add a current duty status to the current day. Any changes to earlier statuses must be made using the Edit button.
- Add Trip Info. This button [Exhibit 37, (d)] allows you to add information for a new trip for the current day. Any changes to the trip information for previous trips must be made using the **Edit** button.

NOTE: Driving status time cannot be edited once recorded.

### Exhibit 38.

Pop-up for Editing Trip Information



## **Edit Trip Information**

Before selecting the **Edit** button [Exhibit 37, (b)], you can tap the graph screen on the point where you would like to make an edit.

The green line on the graph indicates a change in duty status. You can also tap the **Prev** and **Next** buttons to move the green line to the desired point on the graph.

Once you tap **Edit**, the Editing trip information pop-up will appear [Exhibit 38, (a)]. Make any changes to the preexisting information [Exhibit 38, (b)].

- Tap **Delete** [Exhibit 38, (d)] if you wish to delete the entire status entry.
- Tap **Back** [Exhibit 38, (e)] to go back to the Graph tab.
- Tap Submit [Exhibit 38, (c)] to save your entry.

## Exhibit 39.

Graph Tab - Day to be Certified

~	<	Pre	ev.	N	ext	>>	>		Edit			Off-duty (00:00:00) - No					10 0	o GPS							
OF	T	ψ	μ	ľ	11	-	11	11	Ĩ	1	UU	111	11	1	11	1	11	1	U	l.	H	Ш		μ	13:4
SB	Π	ų,				ľ	Ψ	ηı	(b)				Ч	ηı	'I'	ľ		ιlı	Ψ	η	Γ	Ψ	Ψ	η	00:0
D	1	6	¢)	, I	ılı.	1.	ıl.	.1.	, li li	1		(	1)	ılı	il.	1,	,lı	ı.	di	di	1,	6	-)	.1.	00:0
ON	4		ļ		4		6				0		-		4	Ļ	16	I.	.8	1	0	II,	4	M	10:1 d.
	_	Du	uty	_	4 itus	7	6		8	1		17	6	o In	_	1	16		8	[	0	C	ert		d.

## **Certify Logs**

- If you have outstanding uncertified log entries (those that do not have a check mark next to them), you should review and certify them as soon as possible.
- Uncertified log entries must be certified in order of oldest to newest.
- Review the entry using the tabs (Graph, List, Summary and Trip Info) to verify that the log is accurate.
- Make any required changes.
  - To change an incorrect status, select the correct status from either the Graph or the List tab. Tap **Edit** [Exhibit 39, (b)] to access the required pop-up. Make your changes and tap **Submit**.

NOTE: Driving status time cannot be edited once recorded.

### Exhibit 39.

Graph Tab - Day to be Certified

_		_	List		C			ary	LT.	da	Inf				_ (	a)				1.4	~		12/	05	
	<		-	_	ext		-	_	Ed				_	uty	(00	-		00)	- 1	No (	GPS	5			
OF	T	1	μ	ľ	11	Ľ	Π	11	I	UI.	Ш	Ψ	1	1	U V	1	11	1	U	P.	H	1	11	11	13:47
58	T					ŀ.	Ψ	ηı	(b		Ψ	J.	Ţ	T.	ιŀ	Γ	Ψ	ψ	Π	η	ľ	Ψ	Ψ	Ψ	00:00
D	.1.	(	¢)	, L	.1.	1,	.1.	.1.	,h	Л,	.1.	(	1)	.1.	ılı.	1	,lı	ı.	di	d.	1,	.(	e)	ılı	00:00
ON		1	ļ		Į.		6	.1.	8		10				4	L	16		.8	ı.	0			M	10:13
	_	Du	uty	Sta	tus	-	0		0			d -	Frip	_	_		10		0		0	0	ert		
Μ	le	nu											-		ноз							1	6:	10	~

## Certify Logs (continued)

-To add a status, tap Add Duty Status [Exhibit 39, (c)]. Fill in the time, change the duty status field (if required) and enter the location. Add Remarks if appropriate. Tap Submit.

- -To alter the trip information record, tap **Add Trip Info** [Exhibit 39, (d)], fill in the form and tap **Submit**.
- Once you are satisfied that the log is accurate, tap **Certify** [Exhibit 39, (e)]. A pop-up asks you to confirm the log is correct.

-Tap **No** to return to the previous screen.

-Tap Yes to return to the Logs tab.

When the log has been certified and recorded, a green check mark appears at the beginning of the row.

# Exhibit 40.

Logs Tab

	1-1			1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	
	(a) —	Mike_St	ephenson is 'd	Off-duty'	
Date	Miles	Off-duty	S.B.	Driving	On-duty
12/06	0.0	12:03:14	00:00:00	00:00:00	03:37:20
12/06	0.0	24:00:00	00:00:00	00:00:00	00:00:00
12/04	0.0	24:00:00	00:00:00	00:00:00	00:00:00
12/03	0.0	13:47:29	00:00:00	00:00:00	10:12:31
12/02	0.0	24:00:00	00:00:00	00:00:00	00:00:00
12/01	0.0	24:00:00	00:00:00	00:00:00	00:00:00
11/30	0.0	24:00:00	00:00:00	00:00:00	00:00:00
11/29	0.0	24:00:00	00:00:00	00:00:00	00:00:00
Off-du	ty S	. Berth	Driving	On-duty	Trip Info

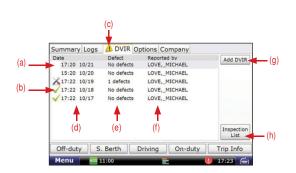
## Logs

The Logs tab gives a summary of the totals for the last 8 days [Exhibit 40]. Past days that you want to review, edit, or certify are displayed.

- The top of the tab lists your name and current HOS status [Exhibit 40, (a)]. If you are not the driver shown, log off the HD 100 software, then log back on.
- The columns on this tab show summary information about each day's log.
  - **Date.** Displays the last eight days with the current date at the top of the list.
  - Miles. States the number of miles traveled for the day.
  - Off-duty. Gives the number of off-duty hours logged for the day.
  - S.B. Indicates the time spent in the sleeper berth for the day.
  - Driving. Gives the time spent driving for the day.
  - On-duty. Gives the time spent on-duty but not driving for the day.
- The check marks to the left of the **date** column show which days have been certified [Exhibit 40, (b)].

Exhibit 41.

DVIR Tab



## DVIR

The DVIR (Daily Vehicle Inspection Report) tab contains information regarding all DVIR entries from the last 8 days.

DVIR information is clustered together [Exhibit 41, (a), (b) and (c)].

(a). A blank space in this column means the DVIR entry has not yet been certified.

(b). A green check mark certified.

(⋘) means the DVIR has been

- A tool icon ( $\swarrow$ ) means a DVIR entry has been added and that there is an outstanding defect that should be reviewed and certified.
- (c). A warning icon (<sup>(L)</sup>) on the DVIR tab means there is an outstanding defect.
- (d). This column tells you when the DVIR entry was made.
  - The time and date are listed.
- (e). This column tells you the number of defects listed in the DVIR entry.
- (f). This column tells you the Driver ID of the person who added the DVIR entry.

# Exhibit 42.

Pop-up for Adding DVIR

Summary	Add DVIR	
Date	Trailer(s)	Add DVIR
17:20 1	26167	
15:20 1		
17:22 1	Defects found during inspection? 11:43 11/02 -	
17:22 1		
17:22 1	Yes No Cancel	
		Inspection List
Off-duty	S. Berth Driving On-duty T	rip Info
Menu	E () 1	1:43 📻

## Exhibit 43.

Pop-up for Adding Defect

Date	Location	General Truc	k Condition	~		Add	d DVIR
17:					~	<< Baci	
17:							_
17:	4				_		
		no derece			-	-	
						Γ	
							Inspection List
Off-	duty	5. Berth	Driving	On	duty		Inspection List

## Add a DVIR

- Add DVIR. Use this button when you want to add a DVIR for the current day or for any day within the last 8 days [Exhibit 41, (g)].
  - Trailer(s).
  - Time and Date.

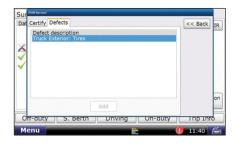
You may have to enter defects from your inspection. If so, select **Yes** [Exhibit 42].

- Enter the Location and Defect fields [Exhibit 43]
- You can also add other notes about the inspection in the Remarks field.

**NOTE:** You can also view this screen by selecting any DVIR entry from the past 8 days on the DVIR main screen. This will allow you to add a defect to a previous day's DVIR.

## Exhibit 44.

DVIR Record-Defects Tab



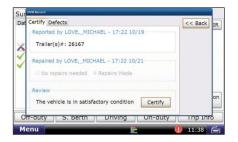
## **Certify DVIR Entries and Repairs**

To review the entered defects of previous DVIR entries, select any entry from the last 8 days on the DVIR tab [Exhibit 40].

-Defects tab [Exhibit 44].

Select this tab to view the description of each defect listed for the selected DVIR. Click on any of the defect entries to view any entered remarks.

### Exhibit 45. DVIR Record - Certify Tab



### Certify DVIR Entries and Repairs (continued)

- Certify tab [Exhibit 45].

Select this tab to certify the DVIR entry.

- Reported by: lists Driver ID and time and date of DVIR entry.
- Repaired by: lists Driver ID and time and date of repair.
  - Tap No repairs needed.
  - Tap **Repairs Made** to indicate that defects have been repaired.

**Note**: You must select one of these options in order to certify your DVIR.

- Review:
  - Tap Certify to submit the DVIR.

As with other HOS screens, you can update your current status with the buttons at the bottom [Exhibit 40].

### Exhibit 46.

**Options Tab** 

Summary Logs	A DVIR Op	otions Co	mpany	
Request Logs	Change Tru	cks Fa	ax/Email Logs	4 (2)
View Violations	Change Mo	de		(a)
			(t	)
Off-duty S.	Berth D	Driving	On-duty	Trip Info
Menu		HOS		14:02 🚟

### The Options tab allows you to:

**Request Logs**. Use this button when you want to move your logs from a previous tractor or when you have previous logs that you cannot view. The button brings up a pop-up box that displays the following notice:

"Those portions of your log that haven't been received by the back-end may be deleted when your HOS logs are downloaded."

- You choose whether to continue (Yes) or to cancel the request (No).

**Change Trucks.** Use this button before you move to another tractor to confirm for yourself that your logs are sent to the server and will be available for you when you log on in the new truck (you may need to use **Request Logs** on the new truck, but usually the logs arrive as you log in).

#### Exhibit 46. Options Tab

Summary Logs	A DVIR Options	Company	
Request Logs	Change Trucks	Fax/Email Logs	4 (0)
View Violations	Change Mode		(a)
		(	b)
		(	b)
Off-duty S.	Berth Driving	g On-duty	) Trip Info

### **Options (continued)**

Fax/E-mail Logs. Use this button to fax or e-mail your logs.

Select to send logs by Email or Fax, enter the email address or fax number of the law enforcement official, and tap **Send**.

**Note:** You cannot send your logs unless you have certified all logs from the last 8 days, and you must be in Roadside Audit Mode. Be sure to enter the email address or fax number correctly, as you must wait 10 minutes before sending your logs again.

View Violations. Use this button to review any violations that are currently part of your weekly log.

- The screen shows the type of violation, the time and date the violation began, and the time and date the violation ended.
- If you have multiple violations on the same day, each driving segment is its own violation. However, violations on the same day count as a single violation for the day.

## Exhibit 47.

Pop-up for Changing Mode

Summary Logs	DVIR Options	Company	
Request Logs	Change Trucks	Fax/Email Logs	
View Violations	Change Mode	Enter Alt. Truck#	
Request Last DVIR	Decore H25 mode		
	<< Back	Normal	
		Roadside audit	
		Personal conveyant	ce
Off-duty S	. Berth Drivin	ng On-duty	Trip Info
Menu		HOS 🔽 🤇	14:59 🚝

## **Options (continued)**

**Change Mode**. This button lets you govern the information displayed within the HD 100 software.

- Normal. This option is the default or standard working mode.
- Roadside Audit. This option provides limited access to your logs when enforcement asks to see them. No additional information is shown except what is required by law. No log information can be changed by you or enforcement while you are in Roadside Audit mode.
  - Tap Normal to exit Roadside Audit mode.
    - Enter your Driver ID.
- **Personal Conveyance.** This option lets you use your vehicle for personal use. Use this mode only when your vehicle is not laden. You must also be Off Duty first before you can enter Personal Conveyance Mode.

As with other HOS screens, you can update your current status with the buttons at the bottom [Exhibit 46, (b)].

#### Exhibit 48. Company Tab

Name	Company ABC	DOT# 123456	
Address	857 Main Street Central City, VA 12345		(a)
Terminal Name	ABC Boise	Start 00:00 MST	
Address	6238 State Street Boise, ID 84932		(b)

### Company

The Company tab [Exhibit 48] contains information required for your log. If any of the information is incorrect, please refer to the Connect Web Portal User Manual (Help > Connect Help > [Management > System Settings > Company Settings])

#### Carrier

The upper half of the screen identifies your carrier [Exhibit 48, (a)].

- Name.
- Address.
- DOT number.

#### Terminal

The lower half of the screen identifies the home terminal to which the HD 100 is assigned [Exhibit 48, (b)].

- Name.
- Address.
  - Start. This field shows the time and time zone for the terminal, which governs the HOS information captured by the unit.

### Exhibit 49.

HOS Safe-driving Screen



## **HOS Safe-driving Screen**

The time shown on the HOS safe-driving screen is the effective drive time available to you for the day [Exhibit 49]. The time indicates how long you can drive before going into *any* violation, so the time displayed may not be your actual available drive time if you are close to your 14 or 70-hour limit.

**Time.** Two numbers appear for your remaining drive time if the 16-hour rule is active.

**Color.** Color coding lets you closely monitor your HOS statuses and take whatever action is necessary to remain in compliance.

When vehicles are in compliance with HOS limits, the time displays in green.

When a vehicle is within one hour of the legal limit for any HOS requirement, the display changes to yellow.

When a vehicle is out of time for *any* HOS requirement, the display changes to **red**.

# HD 100 SysInfo

### Exhibit 50. SysInfo Icon on Home Menu



Tab	Function
Settings	Allows you to control the volume and screen brightness.
Info	Displays system information.
Diagnostics	Displays information related to your HD 100's communication status.

## SysInfo

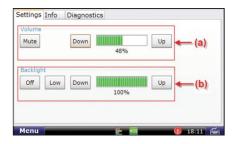
Select the **SysInfo** icon on the Home Menu [Exhibit 50] to control system settings and to view technical information about your HD 100 device.

SysInfo opens to the Settings tab. The tabs in SysInfo are explained in the table to the left.

# HD 100 SysInfo

# Exhibit 51.

Settings Tab



## Exhibit 52.

Info Tab



## Settings

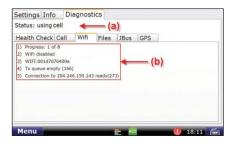
**Volume.** Control the volume of your in-cab device by selecting **Mute** or by tapping the **Down** and **Up** buttons [Exhibit 51, (a)]. Each tap changes the volume by 10 percent. You can also change the volume by pressing down and drawing your finger across the percentage box.

Backlight. Control the backlight by selecting Off or by adjusting the screen's brightness by tapping the Down and Up buttons [Exhibit 51, (b)]. You can also press down and draw your finger across the percentage box. Low dims the screen to less than 10 percent.

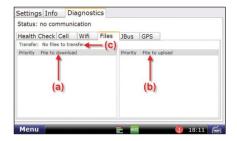
## Info

Tap **Info** to access registration information for your HD 100. The fields on the tab window include Cust. ID. (Customer Number), **Software** Version, **Truck #** and **S.N.** (Serial Number).

### Exhibit 53. Diagnostics – Wi-Fi Sub-Tab



### **Exhibit 54.** Diagnostics – Files Sub-Tab



### Diagnostics

**Status.** Shows the current method of communication [Exhibit 53, (a)].

Health Check. Confirms function of system hardware.

Cell. Provides status of cell connection.

**Wi-Fi.** Provides status of Wi-Fi connection [Exhibit 53, (a) and (b)].

Files. Shows files scheduled for download or upload [Exhibit 54].

- Downloads to the truck [Exhibit 54, (a)] can include software updates and dispatch files.
- Transfer [Exhibit 54, (c)] provides the current status of the file being transferred. If you are expecting a software update, you can look here to see the status of that download. The percentage shown indicates how much of the file has been received.

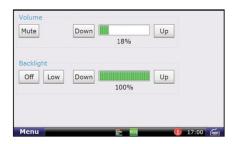
JBus. Confirms connection to on-board computer.

**GPS.** Captures latitude, longitude, altitude, speed, direction and provides debug information for the GPS.

# HD 100 SysInfo

## Exhibit 55.

SysInfo Safe-driving Screen



## SysInfo Safe-driving Screen

The SysInfo safe-driving screen allows you to adjust your TND<sup>™</sup> 720's volume and screen brightness [Exhibit 55].

## HD 100 Stats

### Exhibit 56. Stats Icon on Home Menu



Tab	Function
Driver Performance	Displays statistics based on idle time, RPM, engine and motion time.
Fault Codes	Displays fault codes and the location and type of fault in relation to your vehicle.

## Stats

Select the **Stats** icon on the Home Menu [Exhibit 56] to access information about driver performance and fault codes.

Stats opens to the Driver Performance tab. The tabs in stats are explained in the table to the left.

# HD 100 Stats

## Exhibit 57.

Driver Performance Tab

Today		Month (No data rec	eived)
Hard brakes	0	Hard brakes	N/A
Miles / MPG	0.0 / N/A	Miles	N/A
Short idle%	0.0 (00:00:00)	Short idle%	N/A
Mid Idle%	0.0 (00:00:00)	Mid Idle%	N/A
Long idle%	0.0 (00:00:00)	Long Idle%	N/A
Over idle%	0.0 (00:00:00)	Over idle% (C)	N/A
Over RPM%	0.0 (00:00:00)	Over RPM%	N/A
Speeding%	0.0 (00:00:00)	Speeding%	N/A
Show more n	netrics for today	Request metrics fo	r month

### **Driver Performance**

The Driver Performance tab displays these statistics:

Hard brakes—where vehicle speed is over 20MPH.

Miles / MPG.

Idling percentages for Short, Mid and Long Idles.

Over Idle %-where idle is over your fleet's grace period.

Over RPM%.

Speeding%.

You can tap the **Show more metrics for today** button [Exhibit 57, (b)] to view a pop-up with information on Idle fuel, Stop Idle %, Total Idle %, Driving %, Engine time and Motion time.

You can tap the **Request metrics for month** button [Exhibit 57, (c)] to receive an update on driver performance. The report includes month-to-date information.

### Exhibit 58. Fault Codes Tab

Driver Performance	ault Codes 🖛 (a)	
Source Engine 81 Engine 81 Engine 81 (b)	Subsystem / Parameter Anterianes (Dasse Periodus Filter Affertrativent ) Diese Periodus Filter Engine Codard Level	
Menu	🖹 KOS 🕕 19:10	5 🝝

## Fault Codes

The **Fault Codes** tab [Exhibit 58, (a)] displays recorded fault codes for the vehicle.

Two columns provide details about the fault [Exhibit 58, (b)].

**Source.** Indentifies the location of the fault (e.g., engine, cab controller, etc.).

Subsystem/Parameter. Identifies the type of fault.

# **Help Resources**

Rand McNally provides you with various how-to documents and media for both the HD 100 device and the Connect web portal.

User Documentation (These items are included in your HD 100 box)

#### HD 100 User Manual

This document gives you instruction on how to activate and install your HD 100 the first time, as well as how to use the HD 100 device software. Keep this document in your truck for future reference.

### Rand McNally Hours of Service Visor Card

This visor card gives you instruction on the HD 100 Hours of Service application and what to do during a roadside inspection. Keep this document in your truck at all times.

Additional Resources (These items can be accessed in the Connect web portal)

#### **Connect Web Portal**

While you are using the portal, you can refer to the Connect web portal User Manual. Select the Help tab, then click Connect Help. The User Manual will open in a new tab in your browser.

If you would like to save the Connect web portal User Manual to your computer or print it out, click Download PDF or Print.

Where to access: Help > Connect Help

### **Training Videos**

Rand McNally offers various instructional videos on how to use the HD 100 device software, such as the Hours of Service application.

Where to access: Help > Training > Training Videos

#### **User Documentation**

If you lose the user documentation that is included in your HD 100 box or if you would like additional copies, you can save or print these items. This includes documents such as the HD 100 User Manual and Rand McNally Hours of Service Visor Card.

Where to access: Help > Training > User Documentation

### **Customer Support**

If, after reviewing the documentation above, you still have questions regarding how to activate or install our HD 100 or how to use the device or Connect web portal, please contact Rand McNally's Customer Support team.

## **Help Resources**

Call us: 1-800-641-RAND(7263)

Email us: fleetsupport@randmcnally.com

Write to us: Rand McNally Attn: HD 100 Customer Support 9855 Woods Drive Skokie, IL 60077

#### Rand McNally follows a continuous improvement process and reserves the right to provide enhancements that may not be reflected in the pictures and specifications of this manual.

Rand McNally and IntelliRoute are registered trademarks and TND is a trademark of Rand McNally.

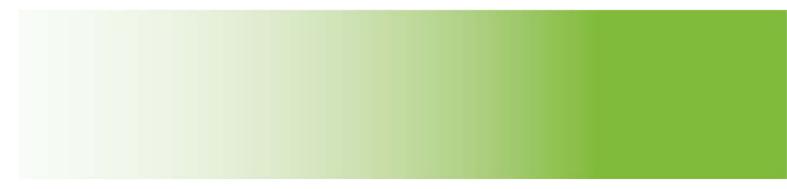
The Trucker's Friend and National Truck Stop Directory are registered trademarks of TR information Publishers, Truck Down is a registered trademark of TruckDown Info International, Inc.

NAVTEQ ON BOARD is a trademark of NAVTEQ ©NAVTEQ. All rights reserved.

©2013 Rand McNally. All rights reserved.

While the information contained herein is believed correct when compiled, Rand McNally does not guarantee its accuracy.

U.S. Patent No. 7,580,791



# **Installing Your HD 100 > Installation Instructions**

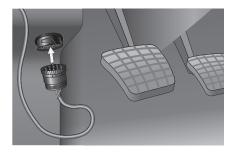
Installing your HD 100 can take as little as 10 minutes. Install instructions are provided here, as well as quick diagnostic information so you can make sure your device is working correctly.

- HD 100 Device with tray
- HD 100 Get Started Card
- 9-pin Power Cable
- HD 100 User Manual
- USB-to-Mini USB Cable
- Adhesive Mounting Strips (2)
- Cable Ties

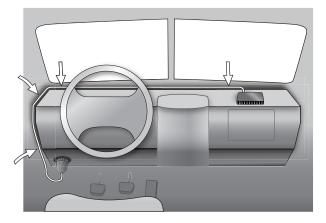
- Rand McNally Hours of Service Driver & DOT Ouick Reference Card
- Rand McNally Vehicle E-Logs Sticker

### Installation Instructions

1. Locate the truck's diagnostic port. Remove the plug on the diagnostic port, connect the cable, and lock the collar in place.



 Route cable from the diagnostic port to the area where you would like the HD 100 to be mounted, making sure to place it away from any vents and where it won't interfere with driver (the right-most corner of the dash is usually an ideal area to place the device), tucking the cable in the space between the windshield and the dash.



8 HD 100 User Manual

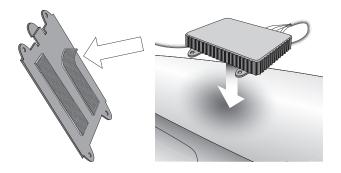
# Installing Your HD 100 > Installation Instructions

3. Connect the device to the cable and place the device (with the tray attached) where you would like to mount it. You may choose to position the device so the LEDs on the front of your device face away from you so as to not distract while driving.



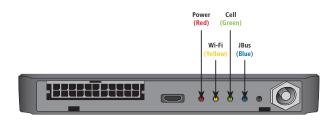
4. Make sure the area where you would like to place your HD 100 is clean and dry. Peel the protective layer off one side of the adhesive mounting strips and place on the bottom of the HD 100 tray, then peel the other protective layer and place the device with tray attached on your dash in the desired location, pressing firmly to secure it to the dash surface.

NOTE: Do not cover the HD 100 device or place anything over it that may disable the GPS signal.



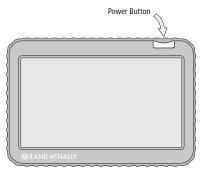
## **Installing Your HD 100 > Installation Instructions**

5. Once the HD 100 is installed and connected to vehicle with the cable, turn your truck on to accessory mode (the mode you use to operate your radio and A/C without turning the ignition on fully). The four lights on the side of the device should illuminate. Check the colored LEDs on the side of your HD 100 to ensure the device is connected and running properly (Power: Red, Wi-Fi: Amber, Cell: Green, Jbus: Blue).



 Turn on your TND<sup>™</sup> 720 device. You will first see the IntelliRoute<sup>®</sup> software Home Menu. Click the HD 100 button on this screen.

NOTE: Because your TND<sup>™</sup> 720 displays your Hours of Service logs and helps you keep track of your compliance, Rand McNally recommends that you keep your TND<sup>™</sup> 720 plugged in with the charging cable while in use with the HD 100.



7. Once the HD 100 software loads, log on by entering the Driver ID you created when activating your device through the Rand McNally Dock.<sup>™</sup> NOTE: you can also refer to the Rand McNally HD 100 Activation email you received after you completed this process. Your log-in information is in this email for your records.

# Installing Your HD 100 > Alternative Installation Options

### **Alternative Installation Options**

Accessories and parts for alternative installations can also be purchased at **randmcnally.com/fleetaccessories**.

• 9- to 6-pin Cable Adapter: for use in trucks with a 6-pin-compatible diagnostic port



• **External antenna**: for use with the HD 100 when installing behind the dash or under the seat



Contact Rand McNally Customer Support at **1-800-641-RAND (7263)** or **fleetsupport@randmcnally.com** for more information on alternative installation options.

Rand McNally also offers professional installation options. A list of certified installers can be found at **randmcnally.com/HD100installation**.

Once your HD 100 and TND $^{\rm m}$  720 are installed in your truck, follow the Quick Diagnostic steps to ensure your system is working properly.

### **Quick Diagnostics**

### Verify HD 100 Connectivity

Verify that the four colored LEDs on the side of your HD 100 device are illuminated. (Power: Red, Wi-Fi: Yellow, Cell: Green, JBus: Blue)

### **Verify GPS Communication**

Select SysInfo icon from Home Menu. Select Diagnostics, then the GPS tab. Verify GPS status is good and that there are values in the Latitude and Longitude fields.

### Verify J1708/1939 Communication

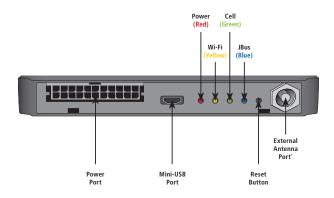
Drive the truck at least .2 miles. Select the SysInfo icon from Home Menu. Select Diagnostics, then the J-Bus tab. Verify that there is an odometer value in the Eng. odom. field. Then go back to the Home Menu and select Stats. icon, then the Driver Performance tab. Verify there is a value in the Miles field on the second line in the first column. (Safety & Performance Plan needed)

### Send Test Message

Select the Mail icon on the Home Menu and press Send. Type message subject and message text and press Send in the upper left hand corner. Make sure message indicator changes from a red X icon ( 💥 ) to a green check mark icon ( 🗸 ). (Communication Plan needed)

NOTE: Rand McNally recommends you keep paper logs if your compliance system is not functioning properly.

The LEDs on the side of the HD 100 illuminate to indicate that the device is connected and running properly. If one or more of the four lights are not illuminated, meaning they are either off or flashing, there may be an error.



\*For use with external antenna when installing HD 100 device behind the dash or under the seat.

Power (Red)	On	Device Powered On
	Flashing	System alert/attention
	Off	No power/device turned off
Wi-Fi <sup>®</sup> (Yellow)	On	Connected
	Flashing	Connecting/attempting to connect
	Off	Not connected
Cell (Green)	On	Connected
	Flashing	Connecting/attempting to connect
	Off	Not connected
JBus (Blue)	On	Connected to JBus/ECM
	Off	Not connected to JBus/ECM

Legalese needed about up-to-date HOS timers that are not available if HD 100 and TND 720 are not connected...

# Installing Your HD 100 > Troubleshooting Tips

#### No power or intermittent power loss:

#### **Check power connection**

Ensure that the cable is secured to the HD 100 device. Reestablish the cable connections by unplugging them, then plugging them back in. Make sure locking collar is turned. Then check that the red LED light is on, which indicates the device is powered on.

#### **Check communications**

Check that the colored LEDs on the front of your HD 100 are illuminated which indicate the device is connected and running properly (**Wi-Fi**: **Yellow**, **Cell**: **Green**, **Jbus**: **Blue**).

#### Unable to connect Cell or Wi-Fi®:

### **Restart the device**

Restart the device by first logging off on your target device, then pressing the Power button. Then disconnect the cable from your HD 100 device. This will cause the device to reset and reconnect.

### **Check communications**

Move the truck to ensure that the issue is not signal interference.

### Nothing appears on TND<sup>™</sup> 720 screen:

#### Make sure your TND<sup>™</sup> 720 is charged and powered on.

#### **Check communications**

Move the truck to ensure that the issue is not signal interference.

### **Check power connection**

Ensure that the cable is secured to the HD 100 device. Reestablish the cable connections by unplugging them, then plugging them back in. Make sure locking collar is turned. Then check that the red LED light is on, which indicates the device is powered on.

#### **Restart the device**

Restart the device by first logging off on your TND<sup>M</sup> 720, then pressing the Power button. Then, disconnect the cable from your HD 100 device. This will cause the device to reset and reconnect.

You can then reconnect your HD 100 and restart your TND<sup>™</sup> 720.

### JBus not responding:

Make sure truck ignition is on

### Restart the engine

### **Restart the device**

Restart the device by first logging off on your target device, then pressing the Power button. Then disconnect the cable from your HD 100 device. This will cause the device to reset and reconnect.