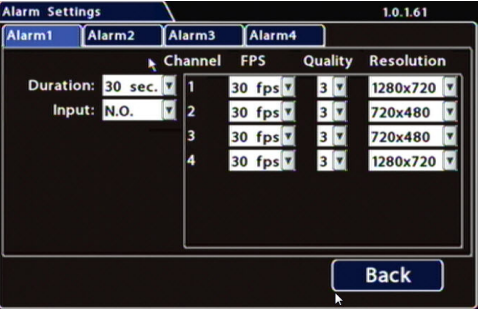


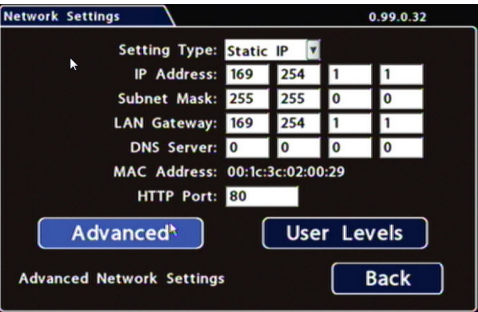
DVR Menu Settings (continued)

8. Alarms



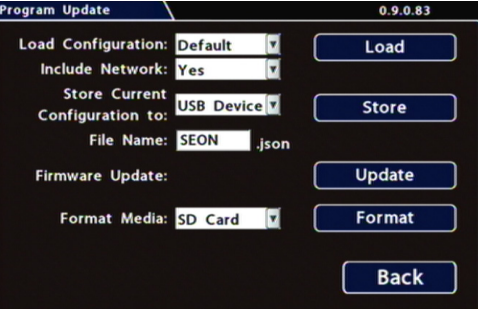
Set unused Channel speeds Off, so the DVR will not generate video loss events. Alarm 1 comes from the Diagnostic button. Alarms 1-4 can come from signals. Duration: Defines the length of time the DVR records video flagged as an alarm. Input: Applies to Alarm 1 only. Choose N.O. (Normally Open) or N.C. (Normally Closed), depending on the switch type used. FPS (frames/second), Quality, and Resolution: For each alarm, select higher settings for better video while the alarm is recording.

9. Network



Setting Type: Leave at default Static IP setting. Use the IP address shown to communicate with the DVR over the network with vMax Web. If the DVR is attached to a Wi-Fi bridge, change these settings to those supplied by the system administrator. Typically, leave HTTP Port set to 80 unless otherwise instructed by IT personnel. If the IP information is changed and saved in a configuration file for upload to other DVRs, their settings must be updated as well.

10. System - Program Update



Store Current Configuration to: Select USB Device as the file saving destination. Plug a USB memory device into the front of the DVR. Click Store to save the file on the USB memory device. Load: See the TH4C product page on the Seon Community Web site for details on uploading configurations to the DVR. Update: Firmware updates can also be delivered by a USB device. The DVR reboots when updates are done. Format: Format the SD Card when the configuration is complete and tested and before final delivery of the installation to the customer.

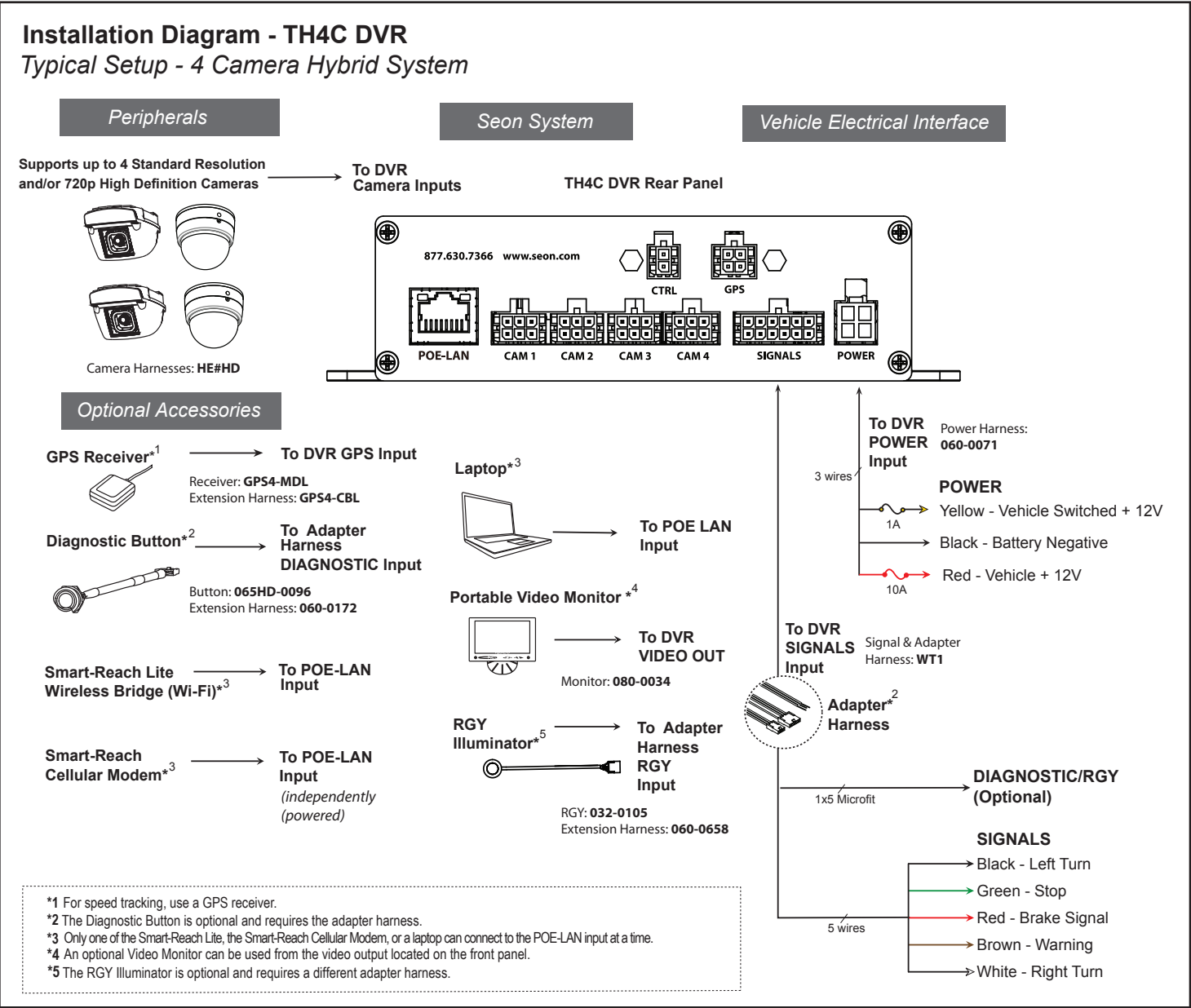
11. Advanced Configuration Options

Alarm/Signal-->Speed: record vehicle speed or trigger notifications for excessive speed. Network-->User Levels: create DVR user logon profiles and assign passwords to enable multiple users remote access to the DVR with various permission levels. System: configure various system-level settings, including a password for local access to the DVR. For more information about these settings, please see the TH4C product page on the Seon Community Web site.

TH4C DVR Quick Install Guide

This Quick Install guide is a basic install and setup reference for the TH4C DVR. Review it completely before installing the DVR. For installation and product details, visit the Safe Fleet Community:

https://community.seon.com If you do not have access credentials, please contact Seon Customer Service - see the last page for details.

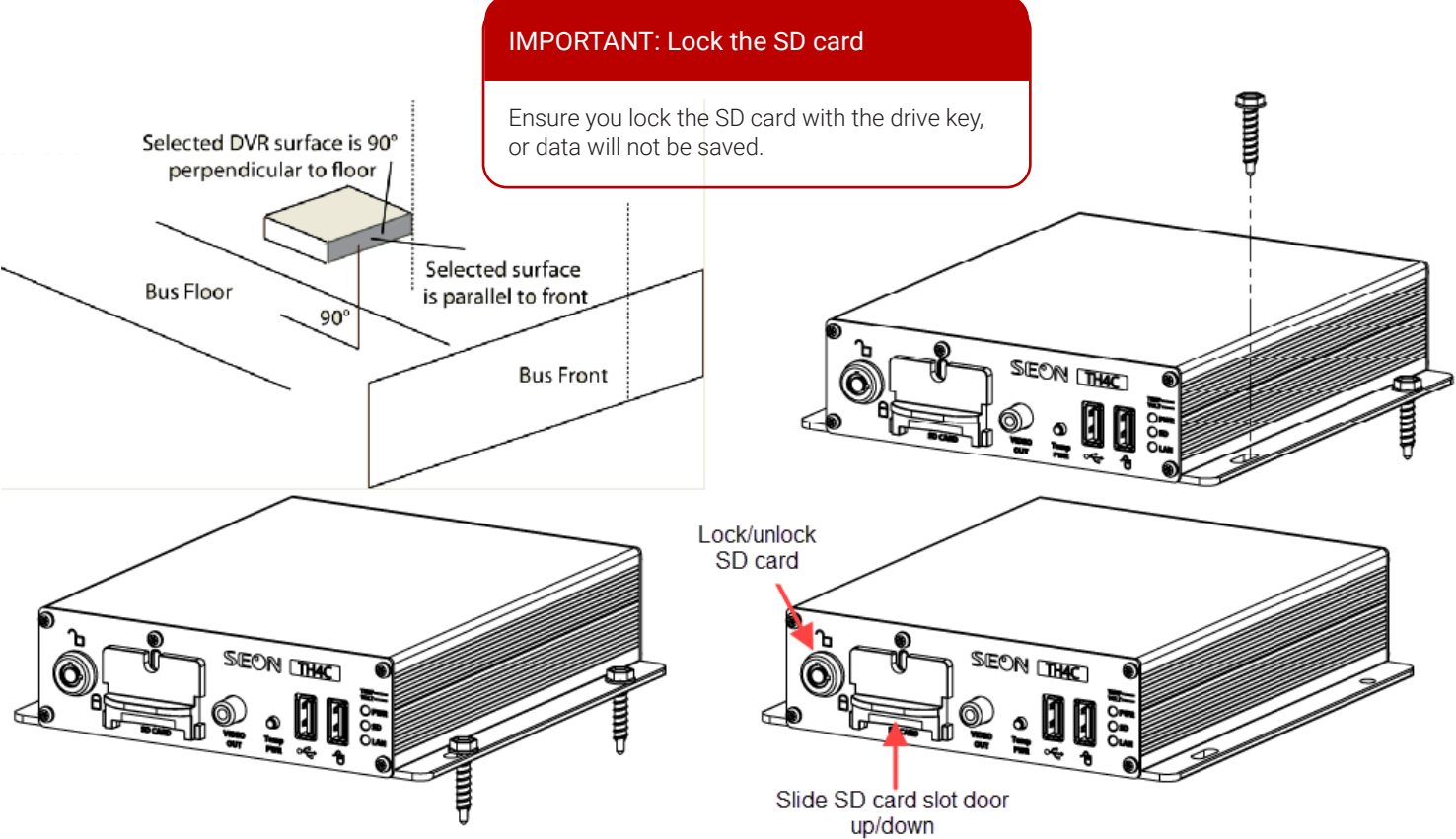


TIP: Do not use output power from noise suppression solenoid

Many school buses include a separate solenoid to power noisy items such as fans. The noise suppression solenoid’s power out can be easily confused with true ignition power. If there is no apparent output from any obvious ignition sources, consult the bus schematic or bus manufacturer to locate a proper power on source for the DVR. Don’t assume that the tested wire operates exactly like an ignition wire, it may not.

DVR Installation

The DVR can be installed horizontally, vertically, or upside-down. **All DVR surfaces must be parallel to the front of the bus and perpendicular to the floor.**



TIP: Avoid installation locations with heat or moisture exposure

Installation close to extreme heat or moisture voids the product warranty. Route the wiring and cables away from sharp edges that might damage the insulation. Avoid sharp bends in the cable. Contact Seon before attaching the DVR to other equipment in the vehicle.

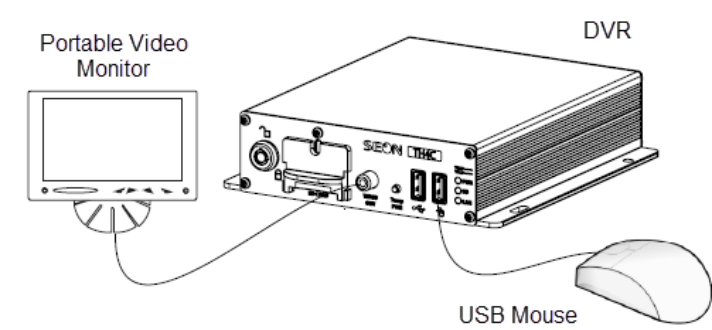
Powering up the system

Turn the vehicle ignition on to power up the DVR. When the PWR and SD LEDs show green, the DVR is operating normally and recording.

Setting up DVR Menus

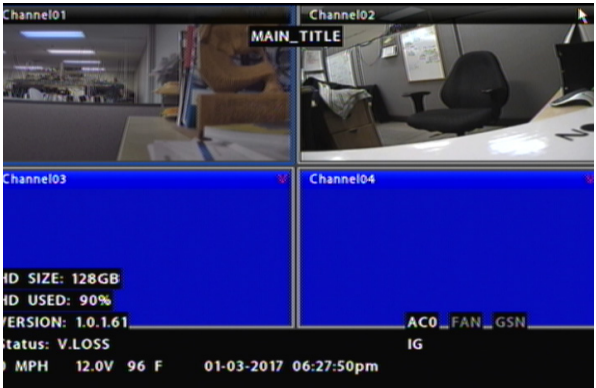
Depending on installed options, the DVR may need certain menu settings updated to operate properly. To access DVR menu settings, connect a portable video monitor and mouse to the DVR.

Connect a portable video monitor to VIDEO OUT on the TH4C front panel. Connect a USB mouse to the USB mouse port on the TH4C front panel.



Camera Views

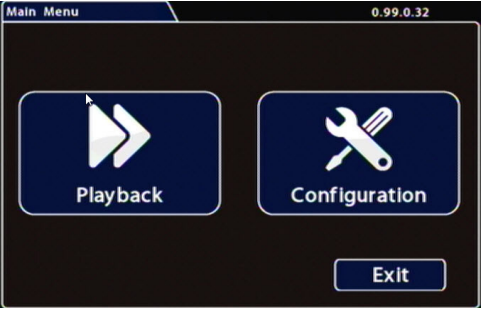
Right-click anywhere in this view to access DVR menus. Return to this view after updating menus.



DVR Menu Settings

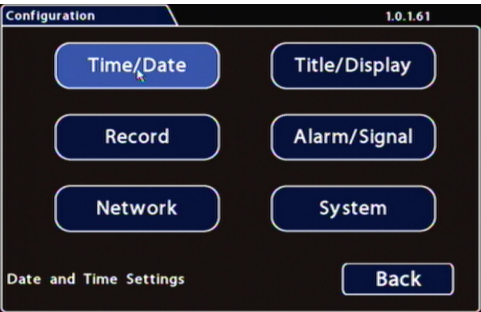
Click **Back** in menus to save updated settings.

1. Main Menu



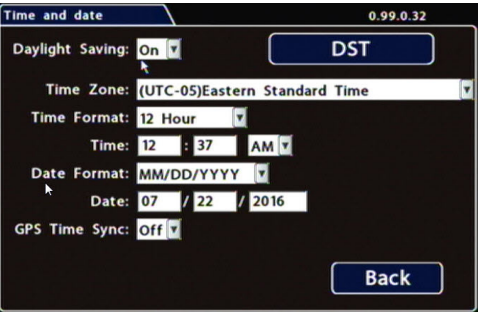
Click **Configuration** to access the Configuration menu.

2. Configuration Menu



Click **Time/Date** to access the Time and Date menu.

3. Time/Date

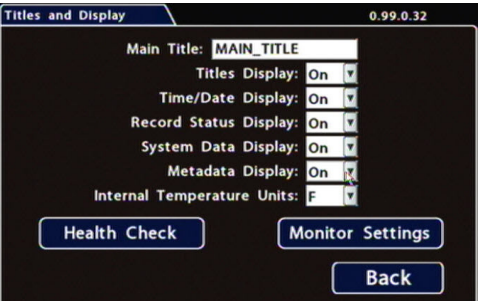


Daylight Saving: Leave **On** and at default dates unless in an area that does not use daylight savings (ex: Arizona, Saskatchewan).

Select your **Time Zone** and enter and **Date** and **Time** values.

GPS Time Sync: If GPS is installed, set this **On** to have system time automatically updated when satellites are detected.

4. Title/Display



Main Title: Enter the bus number.

Titles Display: Leave **On** to overlay Main Title and Camera Name on video images in live and recorded views (see "Camera Views").

If you want to remove a text overlay (**Titles**, **Time/Date**, **Record Status**, **System Data**, or **Metadata**) to reveal more of the video image, set its **Display** value to **Off**.

5. Record



Repeat Record: Leave **On** for the storage media to loop, and record over the oldest recordings when it becomes full.

Record-On DelayTime: Leave at default to let the bus voltage settle after the bus starts up, to prevent voltage drops affecting the DVR.

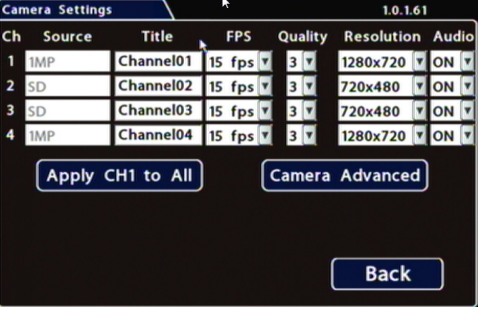
Record-Off Delay Time: To keep the DVR and cameras on after the ignition turns off (e.g. to record the post-trip check), set to 10-20 minutes.

Power-Off Delay Time: This starts up after Record Delay Off time ends. If Wi-Fi is used, set to 2 hours or more. If no Wi-fi, leave at default.

Leave **Record2** at 5 FPS unless instructed otherwise.

Click **Camera** to access camera settings.

6. Camera



Set unused camera FPS speeds Off, so the DVR will not generate video loss events.

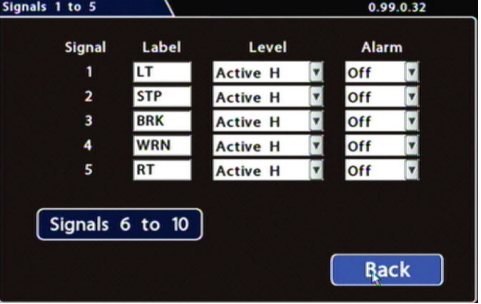
Title: For each camera, enter a name that describes the view it is recording, such as "front", "step", "mid", or "rear".

Leave **FPS**, **Quality**, and **Resolution** at default settings, unless you have special requirements.

Leave **Audio** settings **On**, unless the camera is mounted on the exterior of the vehicle.

In the Configuration menu, click **Alarm/Signal**. In the Alarms and Signals menu, click **Signals**.

7. Signals



Label: For signals 1-5, select from: LT left turn, STP stop, BRK brake, WRN warning light, and RT right turn. Labels can be edited.

Signals 6-10 are available for advanced signal wiring, if equipped (maximum 3 characters).

Level: Set all signal levels as required.

Choose **Active H** (High) if the circuit you are installing into rests at 0 VDC and goes to 12 VDC when active.

Choose **Active L** (Low) if the circuit rests at 12 VDC and drops to 0 VDC when active.

Alarm: If a signal is used to trigger an alarm, that alarm's input must also be set up in the Alarms menu.

In the Alarms and Signals menu, click **Alarms**.