HD5 Maintenance Quick Guide

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1 Introduction 3
2 System Maintenance Check 4
3 Laptop Setup when Using a Web User Interface 8
4 Conduct Ping Test to Verify Connectivity 10
5 HD5 Maintenance Check Off Sheet 12

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1 Introduction

This document outlines the step-by-step process for conducting a system maintenance check for HD5 series DVRs.

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2 System Maintenance Check

The vehicle must be powered on.

Assure the DVR is in record mode by checking that the hard drive is locked in the DVR. The REC light is illuminated when this occurs.

REC Light Indicates Record Mode is Active

The monitor video cable and the USB mouse should be plugged in the front of the DVR. Refer to **Section 3** if the web interface is being used for setup information.

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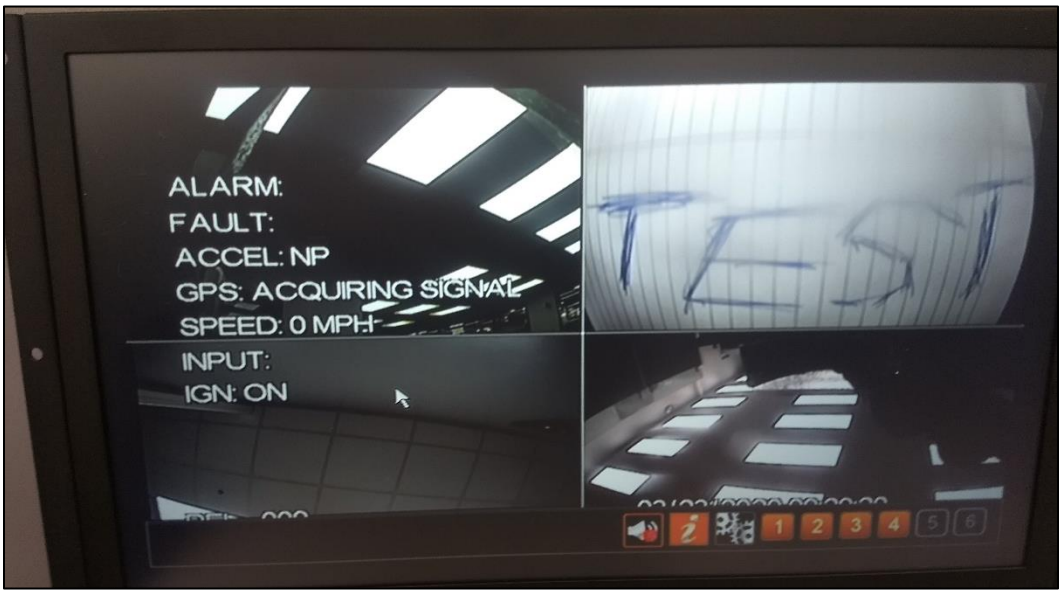

Video Should Appear on Active Channels

Assure there is video appearing on all the activated channels. If a blue screen appears, it could be caused by the following:

- The camera is not plugged in
- The camera is not working
- The port needs to be turned off

Open the OSD window. Right click on the Setup button and select System Settings.

Check the ID, time, and date.

Check the firmware version by clicking the Info button and then the Versions button on the left column of the window.

The firmware version needs to be at least T2019092601. The current firmware version can be located at http://radioeng.info. Update the firmware by using a prepared USB drive. An alternate method of upgrading the firmware is via the web: UI/ Maintenance/Firmware and verify the upgrade.

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Checking Firmware Version

The Event Marker/Panic Button illuminates when the DVR is recording. It can be verified that when the Panic button is pressed, it will be indicated as **PB** on the Info/Inputs field as depicted below.

Panic Button Selection Indicated on Inputs View

It is recommended that HDD storage is formatted at least annually. Formatting is performed by selecting Maintenance/Storage/Format/Clear HDD. If DVR usage is heavy, HDD formatting should occur more frequently.

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Warning: All video data will be lost during formatting.

Selections made to Format/Clear HDD

After the drive is formatted, check if the following indicators are illuminated on the front of the DVR:

On:
PWR
REC

Off:
FLT
ALM
VLOSS

Inputs have three different types: School Bus, Transit, and Custom. The inputs to test for School Bus are as follows:

RW: Red Warning
YW: Yellow Warning
LT: Left Turn
RT: Right Turn
SA: Stop Arm
BK: Brakes
FD: Front Door
RD: Rear Door

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Verify the Accelerometer is working by checking if the X:, Y:, and Z: Coordinates are visible. An illuminated green light in the check box next to the Accelerometer indicates a good connection.

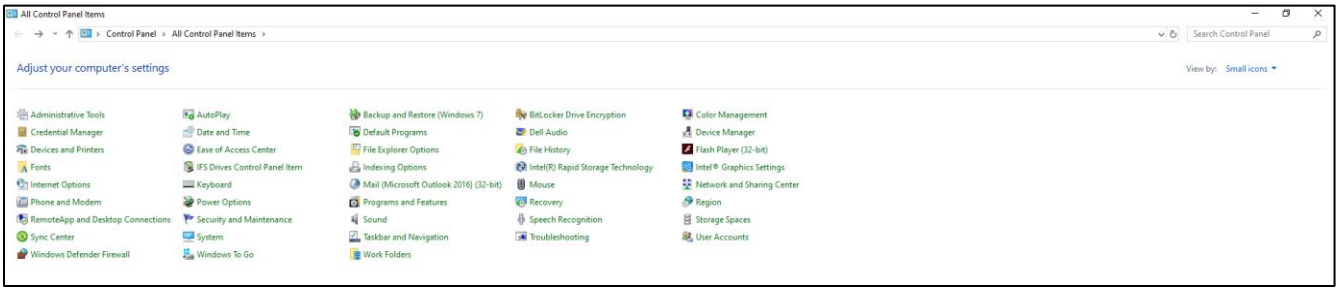
Verify if the GPS is working by checking if the LON: and LAT: data indicators are visible. An illuminated green light in the check box next to GPS indicates a good connection.

Speed settings are made using the Speed Source drop-down menu on Setup>Speed window. The GPS and J1939 selections are the types of speed sources used by the DVR.

3 Laptop Setup when Using a Web User Interface

To configure the network adapter:

Go to the Control Panel and in the upper right corner of the panel, set the View by: field to Small Icons.



Set View By: Field to Small Icons

Go to Network and Sharing Center.

Network and Sharing Center Window

Change the adapter settings. Reset the ethernet cord to verify target adapter.

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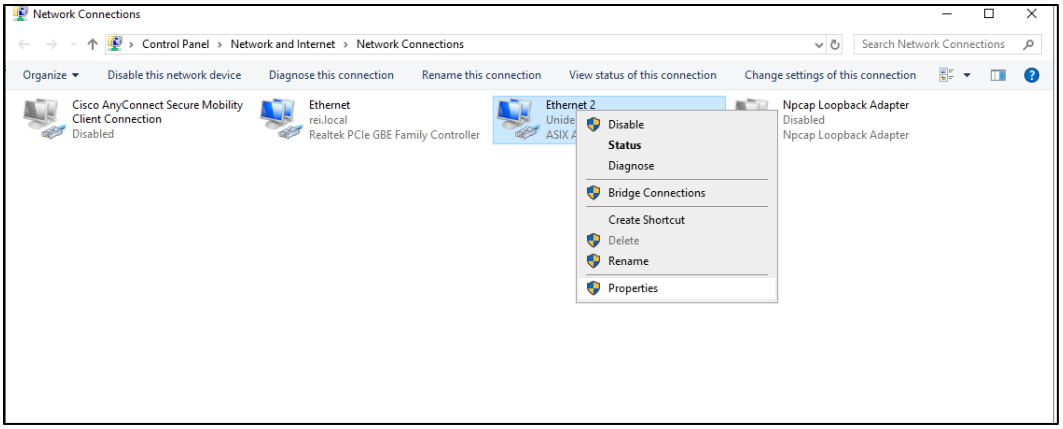
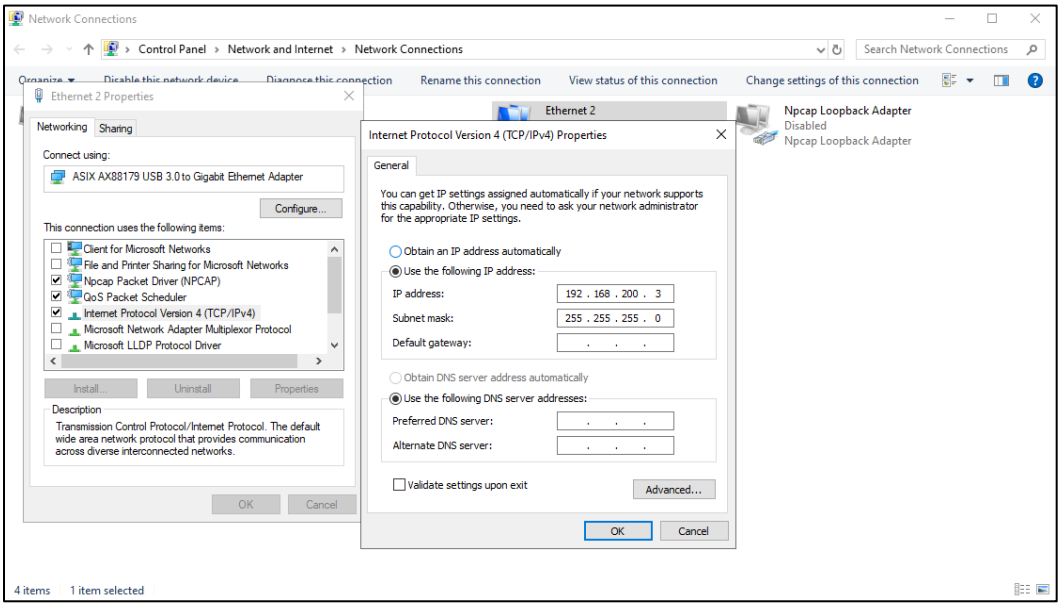
Right click adapter and select Properties.



Selecting Properties

Select Internet Protocol Version 4 (TCP/IPv4) and select properties.



Adapter Configuration Settings

Configure adapter with settings as depicted above. Click OK to finalize.

Connect ethernet cable to front port.

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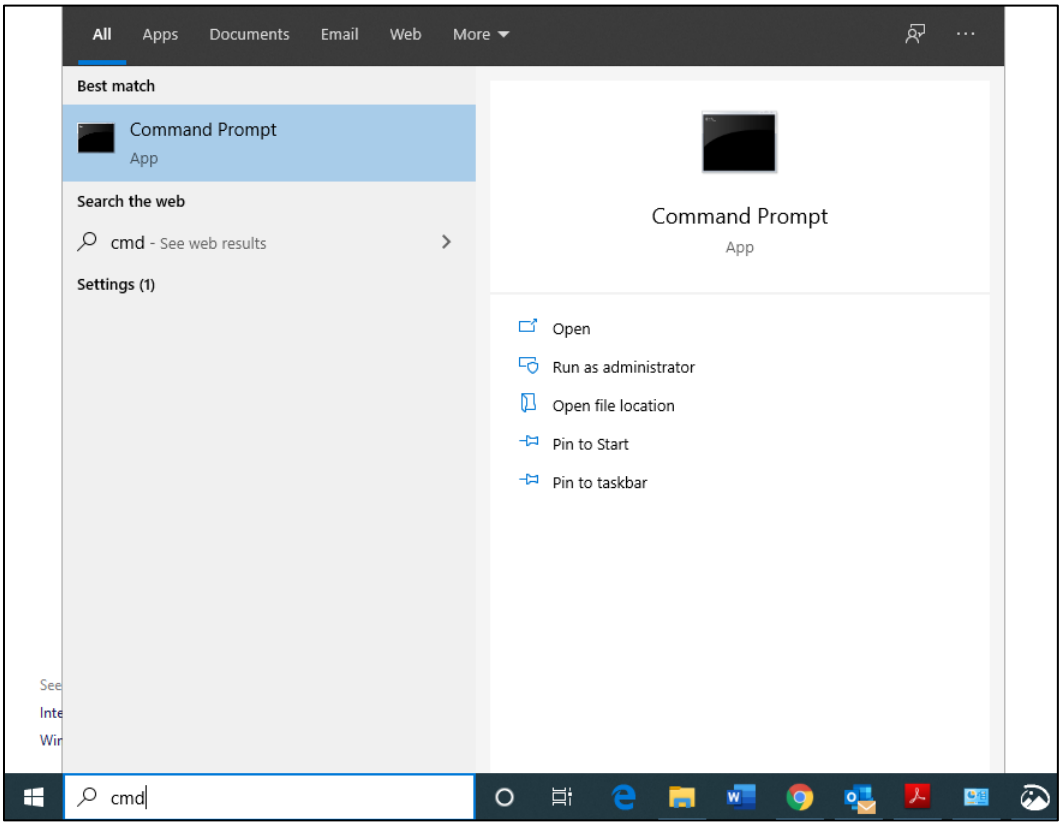
4 Conduct Ping Test to Verify Connectivity

Open the command prompt.



Searching for and Opening the Command Prompt

Enter “ping 192.168.200.200” and press enter.

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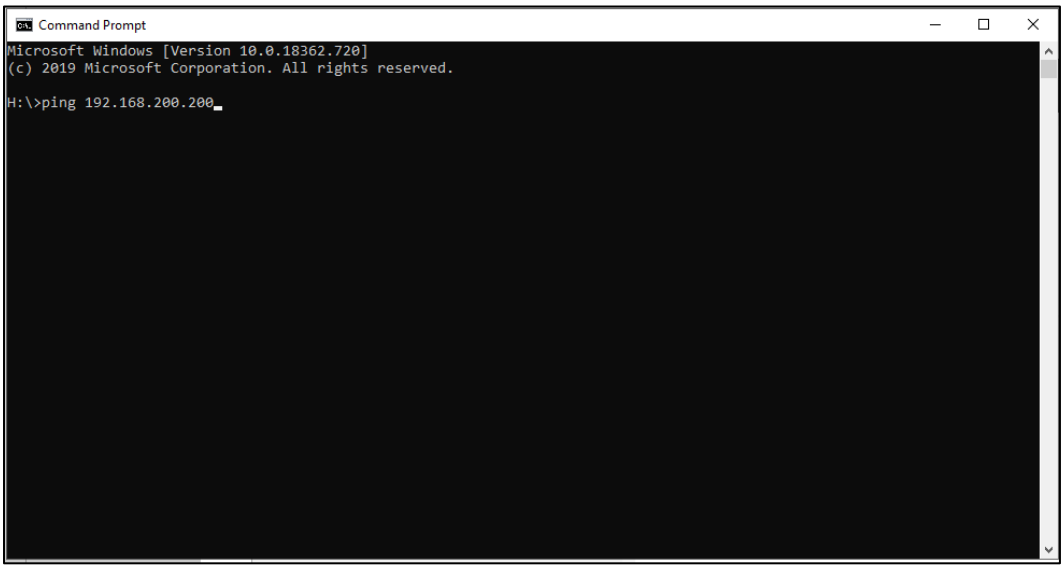
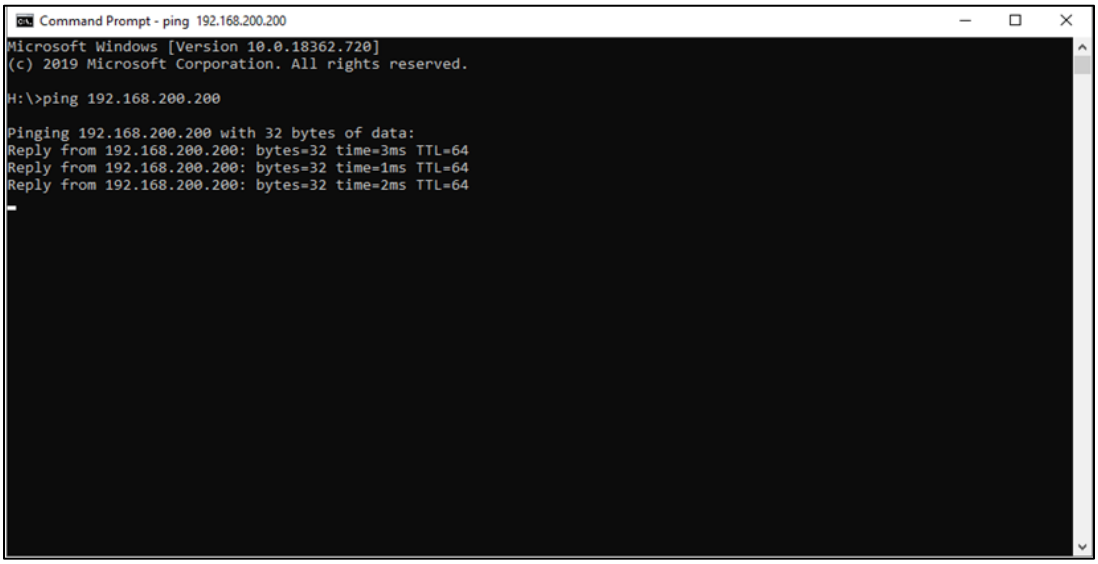


Enter IP address at Prompt



Successful Ping Test

After the ping test is successful, the DVR web user interface can be accessed using Google Chrome or Microsoft Edge browser. The default password is 11111111.

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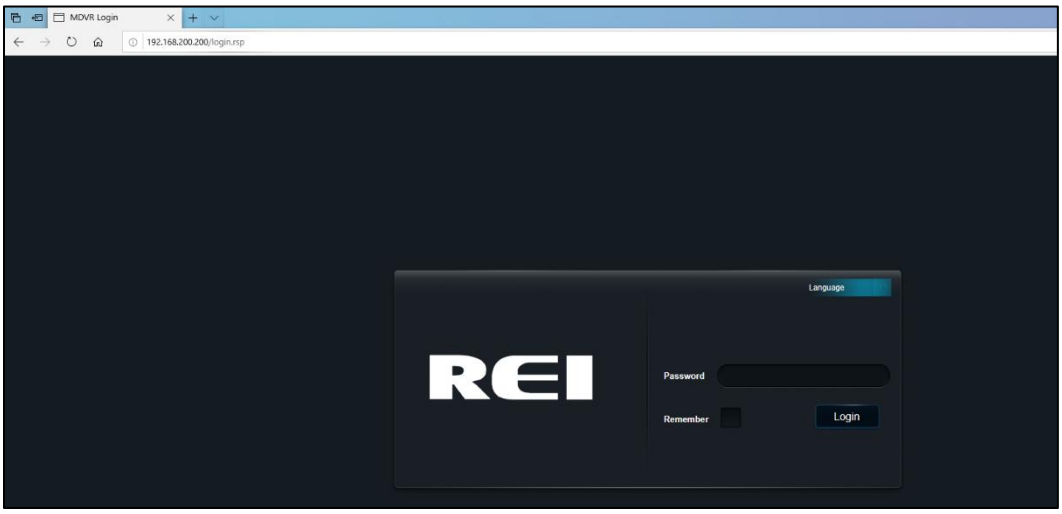

Initial View of DVR Web User Interface

5 HD5 Maintenance Check Off Sheet

- ☐ Hard Drive Locked
- ☐ DVR Recording
- ☐ Video on all channels
- ☐ Time and Date confirmed
- ☐ Firmware up to date
- ☐ Event marker/Panic Button light when DVR in Record mode
- ☐ Panic button shows up in inputs when pressed
- ☐ All inputs working (School bus)
- ☐ Red Warning – RW
- ☐ Yellow Warning – YW
- ☐ Left Turn – LT
- ☐ Right Turn – RT
- ☐ Stop Arm – SA
- ☐ Brakes – BK
- ☐ Front Door – FD
- ☐ Rear Door – RD
- ☐ ACCEL showing X,Y,Z value (can be checked on live screen)
- ☐ GPS showing coordinates (can be checked on live screen)
- ☐ If speed is set up (GPS or J1939)
- ☐ If speed is J1939, is J1939 ACTIVE

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Vehicle ID:

Date:

Technician:

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