

Observation/DVR System Troubleshooting Guide

For systems using the VOSDVR414PNP Kit Containing DVR414, CSW3014 & AOM713WP

Monitor and Camera Operation

Monitor will not turn ON – no backlight on the POWER button:

- Verify +12V power is applied to monitor (ignition set to ACC or RUN).
- Check fuse; power & ground wire.
- Replace monitor.

******It is important to understand the Rear camera(s) are powered by the CSW3014 switcher (located inside the DVR4PNPGMS enclosure), whereas the Left, Right and Forward-facing cameras are powered by the DVR414. For example, it could be possible to have image on CA1 but not CA2/CA3 or vice versa. Keep this in mind when troubleshooting “no image” conditions.***

Monitor turns ON, but has no picture on any input:

- Remove & re-apply power from monitor. Re-test for image.
- Verify DVR is powered ON (RED PWR LED is illuminated).
- Verify connections are good between monitor and camera cables.
- Verify DVR CAMERA OUT harness is connected to correct Monitor Inputs.
- Connect one of the cameras direct to the monitor input, bypassing all DVR input and output harnesses.
 - If image is restored, replace DVR4PNPGMS (metal DVR enclosure).
 - If image is still out, replace monitor.

Monitor turns ON, but has no picture on one input:

- Remove & re-apply power from monitor. Re-test for image.
- Verify DVR is powered ON (RED PWR LED is illuminated).
- Verify DVR CAMERA OUT for suspect camera is connected to the monitor’s input.
- Swap the camera in question with another input and see if it works there. Connect the other camera to the original input and see if it has picture or not.
 - If the suspect camera works on the other input and the working camera no longer works on the original suspect input, replace the monitor.
 - If the suspect camera still does not work on the other input and the other camera still works on the original suspect input, bypass the camera extension cable between the DVR CAMERA OUT harness and the monitor’s junction box and connect the camera direct to the junction box input.
 - If the camera works in this fashion, replace the camera cable.
 - If the camera still does not work, replace the camera.

No image when rocker switch is set to PUP Trailer camera

- Verify trailer coil cord is connected securely to both trailer and truck bulkheads.
- Inspect bulkheads and coil cord connectors for damage or corrosion.
- Verify trailer camera and extension cable are both connected to the same input on the truck and trailer bulkheads.
- Bypass the bulkhead system and test the trailer camera on the truck camera extension cable.
 - If the camera now works, the bulkhead system is the fault. Ohm out or swap with known good parts to determine faulty component and replace as necessary.
 - If camera still doesn't work, test camera direct at DVR4PNPGMS (bypassing camera extension cable).
 - If camera now works, replace camera extension cable.
 - If camera still doesn't work, test camera direct at monitor's junction box.
 - If camera now works, replace DVR4PNPGMS (metal DVR enclosure).

Monitor's Inputs do not trigger properly:

- When the brake is pressed, the monitor switches to one of the side cameras.
 - This indicates the triggers for the inputs are picking up a shared turn signal/brake light circuit.
 - Move the triggers to a location forward of the brake lights to prevent the monitor from being triggered by the brake lights.
 - Typically this will require picking up the turn signal circuits in the engine compartment at the front turn signal lamps.
- Monitor does not switch to correct input when vehicle is in Reverse gear or turn signals active
 - Verify monitor inputs can be selected manually.
 - If not, a trigger is active and locking the monitor in the current input mode.
 - Verify monitor's trigger wires receive +12V from the desired source (only when active).
- Monitor does not switch between the Truck's rear camera and the PUP Trailer's rear camera.
 - Flip the switch on the dash to the desired selection.
 - Verify switch is receiving +12V from the truck's Reverse circuit.
 - Verify the switch is good.
 - Verify the camera switcher is receiving the +12V signal from the switch on the desired trigger input.

DVR Operation

DVR status LED's are all dark:

- Check power harness and verify +12V and Ground are good.
 - Replace DVR4PNPGMS (metal DVR enclosure).

PWR LED is illuminated, but REC LED is dark:

- Allow unit at least 1-2 minutes to completely boot-up and begin recording process.
- Verify SD card(s) are inserted in DVR card slots (behind door).
- SD card(s) error. Re-format SD card in computer (deep-level, not quick format).
 - If reformatting does not correct, or unable to reformat, replace SD card(s).
 - If REC LED remains dark, replace DVR4PNPGMS (metal DVR enclosure).

PWR LED is illuminated, but REC LED flashes:

- SD card(s) error. Re-format SD card in computer (deep-level, not quick format).
 - If reformatting does not correct, or unable to reformat, replace SD card(s).
 - If REC LED continues to flash, replace DVR4PNPMS (metal DVR enclosure).

SD LED is not illuminated

- SD cards not recognized. Restart DVR.
 - Turn OFF DVR. Eject SD cards and restart DVR.
 - Format SD cards in DVR menu (refer to manual).
 - Replace SD cards.

One or more channels do not show recorded video when reviewing the SD cards:

- Re-start vPlayer software.
 - Re-test the video in question.
 - Check other available files and see if the signal is present at different times.
- Verify camera signal is present at the DVR input (troubleshoot cameras as noted above).
 - Confirm camera in question is able to be displayed on the monitor.
 - Note: As the forward-facing camera is not wired to the monitor, if this is the signal that was missing from the recorded video, temporarily connect this camera to another DVR channel's input cable and check for signal.

DVR emits continuous or frequent beeping tone

- Inspect DVR status LED's and troubleshoot as noted above.
- Verify SD card slot door is fully tightened.
- Restart DVR. See if tone is silenced.
- Test all cameras for video signal into DVR
- Have the SD card(s) pulled and reviewed with manager.

