

Alarms & Routine Maintenance info;

access to the portal;

**is provided to all companies!
get your access codes from the
service coordinator of your
company**

Topics Covered

Alarms

- OAU Alarms
- NMEA/Mux Log Errors
- L3 Capsule Error Log

Routine Maintenance



OAU Alarms

- Alarms received from DMM Record App
- If Power to OAU Reset
 - Displayed Alarms are Lost
 - Only Displayed Again if Record App Resends
 - Only for NEW Alarm Condition
 - Most Alarms ONLY Sent
 - Original Alarm Condition

System Error

- Communication Lost with Record App
- Most Common Causes
 - DMM's Windows OS has Frozen
 - DMM Hardware is Dead
 - OAU is Faulty
 - Serial Data Cable
 - Serial Cable/Connection Faulty (Com1 to OAU via DPU main terminal block)
 - OAU & DMM Software Versions not Compatible

Video Error

- Communication Lost with Video Module
- Most Common Causes
 - Network Data Cable
 - Ethernet Cable/Connection Faulty
 - VidChan.ini files may be corrupt or missing
 - Video Module may be faulty

Audio Error

- Communication Lost with Audio Module
- Most Common Causes
 - Network Data Cable
 - Ethernet Cable Connection Faulty
 - Audio Module may be faulty
 - vdrparams.ini file may be corrupt

FRM Error

- Communication Lost with FRM
 - Network Data Cable
 - Ethernet Cable/Connection Faulty
 - FRM may be faulty
 - Vdrparams.ini file settings may be incorrect

Power Failure

- Loss of utility power
- Most Common Causes
 - Main Utility Power Failure
 - Main Power circuit breaker off
 - DPU power supply fuse
 - DPU power supply faulty

PCM Error

- Communication lost with PCM
 - Serial Data Cable
 - Serial Cable/Connection Faulty (Com2 to PCM)
 - Vdrparams.ini file setting
 - PCM faulty

Remote Error

- Communication Lost with RSM
- Ethernet & USB Cannot Both be Connected
- Most Common Causes
 - Network Data Cable
 - Ethernet Cable/Connection Faulty
 - RSM disk may be corrupt
 - RSM power switch may be turned off or power cable has been removed
 - RSM HDD may be dead

Serial Error

- Communication Lost from NMEA Module
- Most Common Causes
 - No Data Input to NMEA Module
 - Network Data Cable
 - Ethernet Cable/Connection Faulty
 - NMEA Module Faulty
 - NMEA Module Configuration
 - Vdrparams.ini File Configuration
 - NumNMEAModules Settings

GPS Error

- No GPS signal
- Most Common Causes
 - NMEA Module Problem
 - NMEA Module Faulty
 - vdrparams.ini File Configuration
 - Wrong Sentence or Port
 - GPS Source Off or Faulty



Disk Error

- Failure to Store Data Set on Internal HDD
- Most Common Causes
 - HDD not connected or dead
 - Secured data drive (E) is full and Record App is previous to 4.06.00
 - Corrupt file

Mic Error

- Microphone failed the microphone test for 12 hours
- Indicates Microphone
 - Audio Module Input Channel
 - Record App. Version 4.02.2 or Later
- Record App Restarted
 - 12 Hrs Again Before Mic Error
- To Clear Error Message (Without Restart)
 - Must Pass Microphone Test

Mic Error

- Most Common Causes
 - Microphone Cable /Connections Faulty
 - Microphone is Faulty
 - Audio Pre-Amp is Faulty
 - Buzzer is Faulty
 - Detection Threshold Setting is Too High
 - Audio Module is Faulty



Testing Microphones

- Record App Audio Test
 - Tap/Scratch on Mic
 - Confirm Results on Audio Histogram

Testing Microphones

- AudioConfigSuite – Real Time Audio
 - Speak at each Mic
 - Listen at Laptop (via Remote Connection)
 - Check for Missing Audio, Low Level, Distortion
 - Buzz Test
 - Verify each Buzzer is Working
 - Buzzer not Working
 - Connect Buzzer Directly to 9V Battery
 - Connect Intermittently, DO NOT Leave Connected
 - Verify Buzzer Operates

Special Decode Error Codes

- Displayed in Playback LOG Window
- 99\$0 Status Clear
- 99\$1 Storage Error
- 99\$2 Video Error
- 99\$4 Audio Error
- 99\$8 NMEA Error
- 99\$16 Power Error

Decode Error Codes

- 99\$32 Microphone Error
- 99\$64 FRM Error
- 99\$128 Lyngso Error
- 99\$256 Power Communications Error
- 99\$512 Remote Error
- 99\$1024 GPS Error

Decode Error Codes

- Binary Coding
 - 11 Digit 01010011011

0	1	0	1	0	0	1	1	0	1	1
1024	512	256	128	64	32	16	8	4	2	1

Decode Error Codes

- Example
 - Convert number (99\$xxx) to binary
 - 99\$340 = 0101010100
 - Errors 256 = Power Communications
 - 64 = FRM
 - 16 = Power
 - 4 = Audio

Decode Error Codes

- OR Basic Subtraction - Error Code 99\$340

- Error Code is 340
- Subtract Highest Multiple of 2 256
- Remainder 84
- Subtract Highest Multiple of 2 64
- Remainder 20
- Subtract Highest Multiple of 2 16
- Remainder 4
- Subtract Highest Multiple of 2 4
- Remainder 0

– Errors are 256, 64, 16 & 4

L3 HVR Alarm Codes

SEEN IN THE VDR ERROR LOG ON E:\DRIVE

- ***'B' Busy***
 - HVR is Not Ready
 - Boot Up Operation
 - Maximum Number of concurrent operations on these partitions have been reached.
 - Normal during Start-Up or Power Cycle

L3 HVR Alarm Codes

SEEN IN THE VDR ERROR LOG ON E:\DRIVE

- ‘ ‘**S**’ *Improper Stream Id*
 - Unknown partition name passed in.
 - Check Spelling “Stream Names” in Capsule
 - Match vdrparams.ini File Names

L3 HVR Alarm Codes

SEEN IN THE VDR ERROR LOG ON E:\DRIVE

- ***'E' Empty***
 - No memory granules have been assigned to this partition.
 - Check Capsule Partitions
 - If no Memory Shown
 - Internal memory Connecting Cable
 - Memory Dead
 - Or Processor PCB

L3 HVR Alarm Codes

SEEN IN THE VDR ERROR LOG ON E:\DRIVE

- **‘O’** *Out of Service*
 - Cannot Write to Partition
 - Likely L3 Processor

L3 HVR Alarm Codes

- ***Other Codes not Normally Seen***
- ***'U' Unrecognized Request Code***
 - Command sent to HVR was unknown
 - If seen – Noise on Ethernet Corrupting Data

L3 HVR Alarm Codes

- ***Other Codes not Normally Seen***
- ***'G' Good***
 - Command received was satisfactory.
 - This is NOT Recorded to Error Log
 - Would Fill Error Log VERY Fast

NMEA Module Error Codes

- Displayed in 2 locations
 - Record App Log Window
 - Playback Log Window
- Indicates NMEA Module and Input Port Data Problem
- Displayed as NerrorXX
 - N is NMEA Module ID
 - XX is NMEA Module Error Code

NMEA Module Error Codes

Code	NMEA Module Port
A	232/422 Output
B	422 Input
C	Input 1
D	Input 2
E	Input 3
F	Slave/Master Link (Inputs 4-8 Missing)
SA	Output to Slave (Internal error, same as F)
SB	Input Port 4
SC	Input Port 5
SD	Input Port 6
SE	Input Port 7
SF	Input Port 8

NMEA Module Error Codes

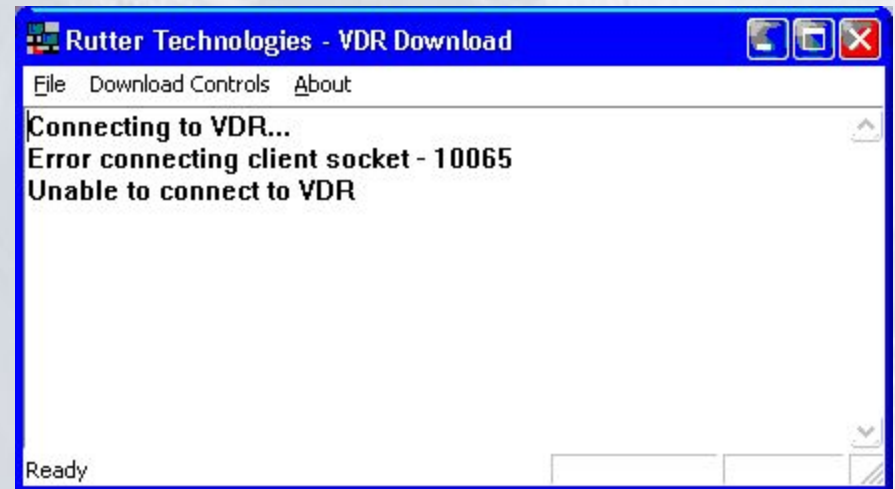
- Example
 - 2error SD
 - Data on Input6 on NMEA Module 2 is Bad
 - Check Baud Rate & Polarity – Most Common

Windows Errors

- There are MANY Windows Error
 - LAN Communications
 - Permissions
- Some Commonly Seen Errors

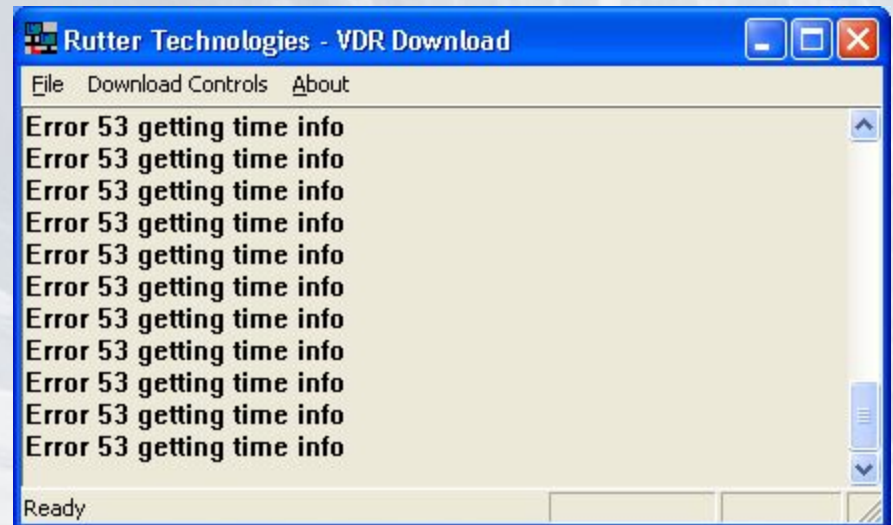
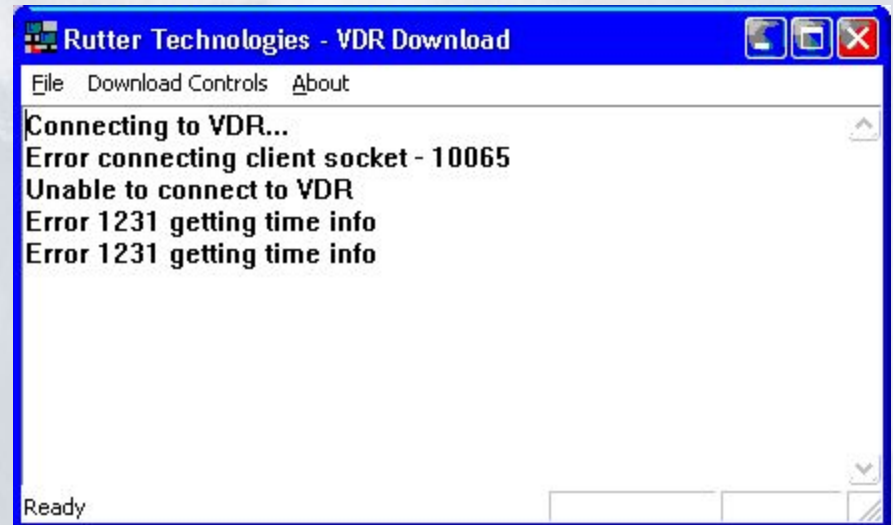
Download Errors

- Error 10065 indicates that no LAN communication is available
- Error 10060 indicates Record app is not running



Error Getting Time Info

- Error 1231 is due to connection trouble no LAN communication
- Error 53 indicates no administrator privileges – cannot access time info



NEW DMM

- IN CASE OF WINDOWS ERRORS, GET US THE REVISION LOG AND RELEASE DATE OF VERSIONS;
- C:WINDOWS
- (SEE NEXT SLIDE);
- DMM_G3pp_2013071001
- DMM_G3pp_revision_log

Video Data

Audio Data

SYSTEM (C:)

File Edit View Favorites Tools Help

Back Forward Up Search Folders

Address C:\ Go

System Tasks

- Hide the contents of this drive
- Add or remove programs
- Search for files or folders

File and Folder Tasks

- Move the selected items
- Copy the selected items
- Publish the selected items to the Web
- E-mail the selected items
- Delete the selected items

Other Places

- My Computer
- My Documents
- Documents
- My Network Places

cygwin Documents and Settings

Program Files SFU

System Volume Information VDRApps

WINDOWS

autorun Setup Information 0 KB

boot Configuration Settings 1 KB

DMM_G3pp_revision_log Text Document 1 KB

DMM_G3pp_2013071001 Text Document 1 KB

fbwf.cfg CFG File 4 KB

id XML Document 1 KB

manifest Text Document 0 KB

NTDETECT MS-DOS Application 47 KB

ntldr File 266 KB

ReadMe Text Document 0 KB

WERUNTIME Configuration Settings 1 KB

Routine Maintenance

- **Security**

- Check that DPU is locked. It is important that that this is **locked at all times** in order to prevent any inappropriate access or tampering.

Routine Maintenance

- **Visual Inspection**
 - Power LEDs
 - All Equipment
 - Inspect Cables
 - Check ALL Connections

Routine Maintenance

- **Air Flow**
- There are two (2) fans in the unit:
 - one (1) in the DPU cabinet,
 - one (1) in the power supply (not accessible to user)
- There is one (1) air filter in the unit:
 - exterior of the intake vent
 - Older units DO NOT have fiber filter.

Questions?

