

TrendView
R220.3.04
Software Change Notice

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
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Symbol Definitions

The following table lists those symbols that may be used in this document to denote certain conditions.

| Symbol | Definition |
|---|--|
|  | ATTENTION: Identifies information that requires special consideration. |
|  | TIP: Identifies advice or hints for the user, often in terms of performing a task. |
|  | REFERENCE -EXTERNAL: Identifies an additional source of information outside of the bookset. |
|  | REFERENCE - INTERNAL: Identifies an additional source of information within the bookset. |
| CAUTION | Indicates a situation which, if not avoided, may result in equipment or work (data) on the system being damaged or lost, or may result in the inability to properly operate the process. |
|  | CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. CAUTION symbol on the equipment refers the user to the product manual for additional information. The symbol appears next to required information in the manual. |
|  | WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in serious injury or death. WARNING symbol on the equipment refers the user to the product manual for additional information. The symbol appears next to required information in the manual. |
|  | WARNING, Risk of electrical shock: Potential shock hazard where HAZARDOUS LIVE voltages greater than 30 Vrms, 42.4 Vpeak, or 60 VDC may be accessible. |
|  | ESD HAZARD: Danger of an electro-static discharge to which equipment may be sensitive. Observe precautions for handling electrostatic sensitive devices. |
|  | Protective Earth (PE) terminal: Provided for connection of the protective earth (green or green/yellow) supply system conductor. |

| Symbol | Definition |
|---|--|
|  | Functional earth terminal: Used for non-safety purposes such as noise immunity improvement. NOTE: This connection shall be bonded to Protective Earth at the source of supply in accordance with national local electrical code requirements. |
|  | Earth Ground: Functional earth connection. NOTE: This connection shall be bonded to Protective Earth at the source of supply in accordance with national and local electrical code requirements. |
|  | Chassis Ground: Identifies a connection to the chassis or frame of the equipment shall be bonded to Protective Earth at the source of supply in accordance with national and local electrical code requirements. |

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1 Introduction

1.1 About TrendView

Honeywell offers TrendView data recorders and an advanced analysis software suite to meet users' data recording needs. Four models are available with screen types that display various combinations of horizontal and vertical charts, digital values, and bar graphs. To complement these recorders, Honeywell offers the TrendManager Software Suite.

This package of tools helps in graphing continuous and batch data, analyzing and archiving data, configuring the paperless recorders, setting up scheduled uploads of recorder data or acquiring data in real-time and exporting this to other software packages such as Excel. The software suite includes TrendViewer Pro, TrendManager Pro, TrendServer Pro, TrendServer Pro with an OPC Server, and a database management tool.

1.2 About this Document

This guide describes the functions and features of TrendView R220.3.03. In addition, this guide consists of the updates that might not be reflected in the user documentation. Additionally, it contains last minute documentation updates and any special considerations for the current release.

1.3 Limitations

N/A

1.4 Technical Assistance

For any issue/information reach out to technical assistance at [TAC](#).

2 Contents of Release

Table 1: TrendView

| Product | Description/Hash Code |
|-----------|--|
| TrendView | Firmware Hash 220-3-04-R-0: 5c43cd2b18337d4e7b1bfe8d2a216deed58b4ef5f1b01f50f7caffc66d1ecd9f Note: This Hash code would be displayed on the status screen of the recorder once FW is upgraded to this release. |

Following components of the product are released as part of this release

| | |
|-----------------------|--|
| Firmware Upgrade File | FW-220-3-04-R-0.XSU File Hash: 07884e61abea92f8c309a3152820ee2e4e9b499cffe58ddca683b241be3bbbe |
| Trend Manager Suite | TrendManagerSuite220.3.1.0R02_setup.exe File Hash: f8ca4648b21c975dab7f16a4e580469dfc90f0d00e0b0f6b9c933c9e1d2780e3 |
| AMS 2750 Tool | AMS2750 Tool220.3.1.0R02_setup.exe File Hash: 7518356c2b4dc97b7b068cd6fff4050d169fd7cbd8002c5c28044f9af4a4f349 |
| Screen Designer | ScreenDesigner220.2.1.0R02_setup.exe File Hash: 4e4d8d42c68fd7ac37c789ce850b5b5ca7aed890e2a2e6fb9057db57a5905d9b |
| Remote Display Client | RemoteDisplayClient_v4.7.5.0.exe File Hash: 30b06b9d36829f6de53d686f8a9ed7fb0024b3128c17c0131af583a10d73c276 |
| Database Tool | Database Tool220.2.1.0R02_setup.exe File Hash: c4782482cd014ef16d599942d9f7af1f62ad51a5a3cb784a44fca33f73d59f22 |
| TrendView Historian | TrendviewHistorian211.4.0.0R05_setup.exe File Hash: 5063aaa57450d7474b6ebf63cff1699ae76d31645286664c3567e3df1cf62b0c |

3 Getting Started

Refer installation guide for instructions on deploying this application as a fresh instance or an existing TMS Application.

4 Release Overview

This release R220.3.04 addresses the AMS Rev G compliance. Recorder firmware & AMS tool both are updated to be AMS Rev G complaint. This release also addressed the issue related to printing of the Batch events and the TMS DLL hijacking issue due to *PEGRP32D.DLL* which is a third-party DLL from Gigasoft used for chart rendering feature in TMS.

5 Overview of Prior Releases

5.1 Prior Release R220.3.03 Overview (Jan 2023)

This release R220.3.03 addresses the email time mismatch issue and the display issue related to date cropping in some languages.

5.2 Prior Release R220.3.02 Overview (Dec 2022)

This release R220.3 addresses the Time Drift issue, wrong temperature units on AMS report issue and email not including the attached report issue.

5.3 Prior Release R220.2.01 Overview (July 2022)

This released R220.2 addresses the issues related to Email from recorder with future time. This release has changes in firmware and TMS. User may come across the scenarios listed in section 10.1 while attempting firmware upgrade and advised to replace the battery on low battery indication.

5.4 Prior Release R220.1.01 Overview (October 2021)

This released R220.1 added to the support of the AMS2750 Rev. F for GR Series recorders only. This release has changes in firmware, AMS and TMS.

5.5 Prior Release R211.5.01 Overview (May 2021)

This release R211.5.01 addresses the issues related to recorder lock up due to Security Scan.

5.6 Prior Release R211.4.09 Overview (January 2021)

This release R211.4.09 addresses the issues related to AMS report corruption when TUS is stopped manually, recorder not supporting more than one RDT connection and SNTP support for 32 characters. IQ/OQ issue.

5.7 Prior Release R211.4 Overview (September 2020)

5.7.1 New Feature

The following new features are added in this release:

1. Option to communicate with Email Server over secure communication using TLS1.2.
2. Option to configure an email in “Pen Alarm Configuration” itself and sending the PV value in the email when Pen alarm is triggered.
3. Increased a number of available email address that can be configured in the recorder to 50 from existing limit of 12.

5.8 Prior Release R211.2 Overview (March 2020)

This release addresses the issues related to unit lock up issues resulting in SD Card replacement and the Ez Trend *** issue. The SD Card issues were due to low voltage battery and the unit was not able to retain the SRAM data. This version of the FW would detect low voltage and recover from fault instead of locking up the device.

Users may come across scenarios listed in section 9.1 while attempting to do a firmware upgrade and advised to replace the battery on low battery indication.

Note: Ez Trend *** issue fix is available for units with IO FW version AK-18 only.

5.8.1 New Feature

The following two new features are added in this release:

1. The battery replacement procedure is added to set a recorder in a safe state to ensure the critical data is retained during battery replacement as part of routine maintenance activity.
2. Firmware integrity check is introduced to validate the integrity and authenticity of the Recorder FW.
 - a. SHA256 algorithm is used for performing integrity checks.
 - b. For every FW release, the HASH code would be published along with the FW which can be used for cross-checking the Firmware authenticity and integrity by the end-user.
 - c. The unit also performs the Firmware integrity check on power on

- i. On failure of integrity check, the unit would pop an error message and one should take corrective action to get a new SD Card with valid Firmware.
- ii. On Success of integrity check, the unit would proceed normal boot-up sequence and the user can see the integrity hash code on the General status screen.

Instructions to View FW Hash code: Go to Menu->Status->System->General.

5.9 Prior Release R211.1 Overview (December 2019)

This release addresses the following changes

- All customers (external) reported cyber security issues (PSIRT)
- It addresses the security threats found internally which are having high risk (CVSS > 7)
- Securing TrendView communications like HDT, password net sync and remote display tool communication with latest security algorithms/cryptography using TLS 1.2.
- All application tools are also migrated from legacy VS2008 (no more supported by Microsoft) to latest version VS2017 which will enable easy migration to newer versions and porting in future.
TMS and Remote Display Tool (RDT)
- Improved stability due to critical static code analysis issue (potential software hangs and memory corruptions) fixes done.

5.9.1 New Features

This release contains the following enhancements:

- Secure Data transfer between Recorder and TMS using TLS 1.2
- Support for certificates from Certification Authorities
- Support for certificates with RSA 2048 encryption key
- Support for strong cyphers
- Secure storage of critical information

5.9.2 Changes to Existing Functionality

This release contains the following changes to existing functionality:

- By default, FTP option for data transfer is disabled with the New recorders. For existing recorders, it is recommended to disable the FTP to avoid the security vulnerabilities.

5.9.3 Retired Features

The following Operating Systems are reaching its End of Life (EOL) and are advised not to be used with R211.X release onwards:

Windows 7 32 Bit

Windows 7 64 Bit

Windows 8 32 Bit

Windows 8 64 Bit

Windows Server 2008 32 Bit

Windows Server 2008 64 Bit

Windows 8.1 32 Bit

Windows 8.1 64 Bit

6 Software/Hardware/Firmware Compatibility

The new firmware and SW applications are backward compatible for existing released versions.

Operating Systems Compatibility Matrix:

| <i>Operating systems</i> | <i>Supported edition</i> | <i>Service Pack / Windows Update</i> | <i>R200.3.3R</i> | <i>R211.1.10R onwards</i> |
|--------------------------|--------------------------|---|------------------|---------------------------|
| Windows 7 | 32 bit | SP1 | Yes | Not Supported |
| Windows 7 | 64 bit | SP1 | Yes | Not Supported |
| windows 8 | 32 bit | None | Yes | Not Supported |
| windows 8 | 64 bit | None | Yes | Not Supported |
| windows 8.1 | 32 bit | Download and Install the packages in below sequence. Search text as 1) Update for windows 8.1 32-bit (KB2919442-x86). 2) Update for windows 8.1 32-bit (KB2919355-x86). | Yes | Not Supported |
| windows 8.1 | 64 bit | Download and Install the packages in below sequence. Search text as 1) Update for windows 8.1 64-bit (KB2919442-x64). 2) Update for windows 8.1 64-bit (KB2919355-x64). | Yes | Not Supported |
| Windows 10 | 32 bit | None | Yes | Yes |
| Windows 10 | 64 bit | None | Yes | Yes |
| Windows server 2008 | 32 bit | Download and Install the packages in below sequence. 1) SP2 2) Update windows6.0-kb2999226-x86 is required 3) Update windows6.0-kb4474419-x86 is required | Yes | Not Supported |
| Windows server 2008 | 64 bit | Download and Install the packages in below sequence. 1) SP2 2) Update windows6.0-kb2999226-x64 is required 3) Update windows6.0-kb4474419-x86 is required | Yes | Not Supported |
| Windows server 2008 R2 | 64 bit | SP1 | Yes | Not Supported |
| Windows server 2012 | 64 bit | None | Yes | Yes |
| Windows server 2012 R2 | 64 bit | Download and Install the packages in below sequence. Search text as 1) Update for windows server 2012 R2 64-bit(KB2919442-x64). 2) Update for windows server 2012 R2 64-bit(KB2919355-x64). | Yes | Yes |
| Windows server 2016 | 64 bit | None | Yes | Yes |
| Windows server 2019 | 64 bit | None | No | Yes |

| | | | | |
|---------------------|-------------------|------|----|----------------------|
| Windows Server 2022 | 64 bit | None | No | R220.3.04 Supported. |
| Windows 11 | 32 bit and 64 bit | None | No | Yes |

NOTE: The Windows 7, Windows 8, Windows 8.1, and Windows Server 2008 Operating Systems have reached their end of life from Microsoft and are not recommended to be used.

7 Documentation Updates/Additional Information

N/A

8 Resolved

This section provides an overview of the problems resolved in this release and prior releases.

8.1 Following are the Anomalies that has been resolved in this release (Recorder Firmware & AMS Tool R220.3.04, TMS R220.3.02)

| S. No | Description of Problem Solved | ID(s) | Component Type |
|-------|--|-------------|------------------------------|
| 1 | Reported issue in the Batch area for printing all events related to a batch. | RTVIEW-2495 | TMS |
| 2 | Security issue reported in TSP | RTVIEW-2499 | TMS |
| 3 | AMS Rev G Compliance | NA | Firmware (Recorder) AMS Tool |

9.1 Following are the Anomalies that has been resolved in this release (R220.3.03)

| S. No | Description of Problem Solved | ID(s) | Component Type |
|-------|--|-------------|---------------------|
| 1 | Email sent time and received time has difference of 20min | RTVIEW-2487 | Firmware (Recorder) |
| 2 | Minitrend Truncates the date in vertical screen in R220.2 Localization issue | RTVIEW-2489 | Firmware (Recorder) |

9.2 Following are the Anomalies that has been resolved in this release (R220.3.02)

| S. No | Description of Problem Solved | ID(s) | Component Type |
|-------|-------------------------------|-------|----------------|
|-------|-------------------------------|-------|----------------|

| | | | |
|---|---|-------------|---------------------|
| 1 | Reported time drift outside the published spec on large Eztrend installation. | RTVIEW-2179 | Firmware (Recorder) |
| 2 | Issue with C vs F temp units in AMS2750F report. | RTVIEW-2472 | Firmware (Recorder) |
| 3 | Email not including the report that is supposed to be attached. | RTVIEW-2477 | Firmware (Recorder) |

9.3 Following are the Anomalies that has been resolved in this release (R220.2)

| S. No | Description of Problem Solved | ID(s) | Component Type |
|-------|--|---------------------------------------|---------------------|
| 1 | PV value in Alarm email showed up as Emoji | RTVIEW-2437 | Firmware (Recorder) |
| 2 | Sent time of Alarm notification mail marked with future time | RTVIEW-2421 | Firmware (Recorder) |
| 3 | Flushing Unpersisted Blocks error message | RTVIEW-2456 | Firmware (Recorder) |
| 4 | Launching Disk Services | RTVIEW-2459 | Firmware (Recorder) |
| 5 | Email not including attachment report | RTVIEW-2477 | Firmware (Recorder) |
| 6 | Firmware Integrity Error after firmware upgrade | RTVIEW-2463 | Firmware (Recorder) |
| 7 | Error trying to print the audit trail | RTVIEW-2455 | Software (TMS) |
| 8 | TMS Import error- Res Pack ID Mismatch | RTVIEW-2460, RTVIEW-2466, RTVIEW-2465 | Software (TMS) |

9.4 Following are the Anomalies that has been resolved in this release (R220.1)

| S. No | Description of Problem Solved | ID(s) | Component Type |
|-------|---|-------------|----------------|
| 1 | Lotus csv export issue from TMS 211.4.09 release. | RTVIEW-2232 | Software (TMS) |

9.5 Following are the Anomalies that has been resolved in this release (R211.5.01)

| S. No | Description of Problem Solved | ID(s) | Component Type |
|-------|-------------------------------|-------|----------------|
|-------|-------------------------------|-------|----------------|

| | | | |
|---|--|-------------|-------------------------------------|
| 1 | Reported recorder locking up with the use of RDT 4.7.3 and also abrupt closure of the application on connection failure. | RTVIEW-2152 | Firmware (Recorder)/ Software (TMS) |
| 2 | Migration issue with ART tool installer 200.3 | RTVIEW-2228 | Software (AMS) |

9.6 Following are the Anomalies that has been resolved in this release (R211.4.09)

| S. No | Description of Problem Solved | ID(s) | Component Type |
|-------|--|-------------|-------------------------------------|
| 1 | AMS Report Generation Software not processing TUS file due to file corruption. | RTVIEW-2159 | Firmware (Recorder) |
| 2 | RDT tool was not able to take multiple view of a recorder. | RTVIEW-2183 | Firmware (Recorder) |
| 3 | SNTP server information wrong, 31 not 32 characters | RTVIEW-2181 | Firmware (Recorder)/ Software (TMS) |

9.7 Following are the Anomalies that has been resolved in this release (R211.4)

| S. No | Description of Problem Solved | ID(s) | Component Type |
|-------|--|----------------------------|---------------------|
| 1 | Time offset between the replay and the main screen when recorders are running for longer duration. | RTVIEW-1703 RTVIEW-1946 | Firmware (Recorder) |
| 2 | MFree block, Recover low memory related issues | RTVIEW-2054 RTVIEW-1943 | Firmware (Recorder) |
| 3 | Scheduled CSV export was not working as expected and was over writing the data | RTVIEW-2060 | Firmware (Recorder) |
| 4 | Reported RDT program showing (not responding) each time they add a recorder. | RTVIEW-2101 | Software (RDT) |
| 5 | Upgrade issues with rev number and screen reference numbers | RTVIEW-2100 | Software (RDT) |
| 6 | RDT issue with new version and new firmware, Chart mode not working properly in RDT | RTVIEW-2099 | Software (RDT) |
| 7 | RDT Bug reported on help tab case # 661242 | RTVIEW-2106 | Software (RDT) |
| 8 | Batch shows wrong end time, end time 26 days before start time | RTVIEW-2105 | Software (TMS) |
| 9 | Case # 611962 End user says he cannot install .NET Framework 3.5 when 4.5 is also installed | RTVIEW-2102 | Software (TMS) |

| | | | |
|----|--|-------------|---------------------|
| 10 | When printing from TSP, the pen engineering units and the pen name overlap. | RTVIEW-2094 | Software (TMS) |
| 11 | Case # 473948 Eztrend bug when using Mark on Chart Option | RTVIEW-1952 | Firmware (Recorder) |
| 12 | RTVIEW-1546 Case # 401786 Printout reports unit as Aristos, not GR Recorder. | RTVIEW-1546 | Software (TMS) |
| 13 | RTVIEW-1637 Case # 437011 Error after install of tv5.ini corrupted | RTVIEW-1637 | Software (TMS) |
| 14 | RTVIEW-1722 Case # 452661 GR does not support 10 Base T comms | RTVIEW-1722 | Firmware (Recorder) |
| 15 | Report Generation issues | RTVIEW-1893 | Software (TMS) |
| 16 | Modbus profile issue with HC900 | RTVIEW-1926 | Software (TMS) |

9.8 Following are the Anomalies that has been resolved in this release (R211.2)

| S. No | Description of Problem Solved | ID(s) |
|-------|---|--|
| 1 | The issues related to unit lock up issues during power up with block ID mismatch, integrity error failure messages. | RTVIEW-1803 RTVIEW-310 RTVIEW-2055 |
| 2 | **** Issue-EZ : Error message on multiple EzTrend, customer wants explanation/definition of error message and how to prevent this issue | RTVIEW-846 |
| 3 | Not able to detect the WiFi network adapter in the RDT application | Case# 559119 |

9.9 Following are the Anomalies that has been resolved in R211.1

| S. No | Description of Problem Solved | ID(s) |
|-------|---|-------------|
| 1 | Graph not able to populate all 96 pens and TMS reports limit reached as time adjusted pens were considered | RTVIEW-933 |
| 2 | RDT Tool is crashing after closing of windows from cross sign | RTVIEW-800 |
| 3 | Locate Device - Locate Device window is taking more time for closing | RTVIEW-310 |
| 4 | EZ-Browse window in Batch report shows an extra character | RTVIEW-261 |
| 5 | CSV export issue Pens configured without decimal point (Full Value) but always gets the data with decimal point | RTVIEW-1212 |
| 6 | New unit from factory has error "Secure WSD Certificate installation failed" | RTVIEW-1062 |
| 7 | Issue with recorder certificate for DR Graphics recorder | RTVIEW-887 |

| | | |
|---|--|------------|
| 8 | LCF files not coming over during and FTP download. | RTVIEW-832 |
| | IQ/OQ | |

10 Installation and Migration

For TMS installation, refer chapter 3 in 43-TV-25-11_Issue 34_TMS_Software_Manual and for setting up recorder refer Chapter 2 in 43-TV-25-41_iss11_RecorderManual_Honeywell Un-Install Instructions.

Note: Ensure to upgrade the TMS and RDT software applications to the latest available versions when recorder FW is upgraded. These software applications would be backward compatible and work with recorders running with older versions as well.

10.1 Upgrading Firmware for GR Series Recorders

Instructions to upgrade the Firmware for GR Series recorders in the following scenarios:

| Scenario | Description | Instructions for FW upgrade | Comments |
|----------|--|---|---|
| 1 | When the recorder is in Powered On state | <ol style="list-style-type: none"> 1. Export data 2. Perform FW Upgrade 3. When the recorder indicates “Battery low” warning message, replace the battery as per SOP. | N/A |
| 2 | When the recorder is in Powered Off state | <ol style="list-style-type: none"> 1. Turn on the recorder | N/A |
| 2.1 | Unit is up and running, date is also correct | <ol style="list-style-type: none"> 1. Export data 2. Perform FW Upgrade 3. When the recorder indicates “Battery low” warning message, replace the battery as per SOP. | Indicates the battery condition is good. User can follow usual FW upgrade procedure. |
| 2.2 | Unit is up and running, date is set to 2006 | <ol style="list-style-type: none"> 1. Set Date and time 2. Export Data 3. Perform Data Reset 4. Perform FW Upgrade 5. Replace the battery as per the SOP | Indicates Battery is drained completely and power up sequence would treat it as first time use scenario. All the data on the SD Card would be lost. |
| 2.3 | Unit Locked up on Power ON | <ol style="list-style-type: none"> 1. Remove Battery for 30 minutes 2. Replace with new battery 3. Power On the recorder 4. Set date and time 5. Perform Data Reset 6. Perform FW Upgrade 7. Perform battery reset operation to reset the battery life details and power cycle the unit. | Indicates Battery voltage is low (0.4 to 0.7V) and SRAM data is corrupted causing the unit to lock up. |

Note: For Standard Operating Procedure (SOP), refer to “43-TV-33-75” Application Note.

10.2 Firmware Upgrade Special Cases.

10.2.1 Upgrade to Release: R220.3.04

Upgrade to 220.3.04 is supported for versions 200.3.03, 211.5.01, 220.1.06 and 220.2.02. For version 102.6.02 or below one must upgrade to 200.3.03 version as an intermediate step which shall be followed by upgrade to 220.3.04

| Upgraded From | Intermediate release required for upgrade | Intermediate Release |
|---------------|---|----------------------|
| 102.6.02 | Yes | 200.3.03 |
| 200.3.03 | No | NA |
| 211.5.01 | No | NA |
| 220.1.06 | No | NA |
| 220.2.02 | No | NA |

11 Issues

Based on information and data available to us to date, this section describes some currently identified issues related to this release.

11.1 TrendView Recorder

| | Description | Workaround | ID(s) |
|---|---|--|-------------|
| 1 | During Pen Data import if any Pop up comes it does not appear and need to go from Task Manager to perform action. During this time user cannot do any other user action on TMS. | Occurrence is very rare, if it come then user has to use task manager to close the application | RTVIEW-2050 |

12 Security-Related Issues

Based on information and data available to us till date, this section describes currently identified security issues related to this release.

13 Special Considerations

Not applicable

14 Third-Party Software Components

N/A

14.1 External Certified Software Components

N/A