REF **RAC-U1600**
ARM EventView **Software (v3.0) Quick Reference Guide**
Data Retrieval and Event Reporting Software for Defibtech
RMU-1000 and RMU-2000 Automated Chest Compression Systems

Click on interactive links to see more information about a topic.

START
Launch *ARM EventView*

EXTRACT DATA

1. Power on the ACC's Compression Module

2. Connect via USB or enable Bluetooth®

   Connection and extraction are automatic.*

REVIEW EVENTS

1. Select Compression Module Serial Number

2. Filter events

3. Select event(s)

4. Generate Event Summary Report

BROWSE REPORTS

1. Select Compression Module Serial Number

2. Select Report

3. View Report (or double-click on selected report)

*Connection via Bluetooth® is automatic after initial pairing and Bluetooth® is enabled on the ACC's Compression Module. Bluetooth® is only available on the Defibtech RMU-2000 ACC.

REF **RAC-U1600**

ARM EventView Software (v3.0) Instructions

Data Retrieval and Event Reporting Software for Defibtech
RMU-1000 and RMU-2000 Automated Chest Compression Systems

Summary

ARM EventView is a PC-based software application that is intended to allow users of Defibtech RMU-1000 and RMU-2000 Automated Chest Compression (ACC) Systems to connect the ACC's Compression Module via USB (both models) or via Bluetooth® (RMU-2000 only) to retrieve configuration data and log files, as well as generate event summary reports using this retrieved information. Additionally, the user can set a custom name for the Compression Module name or synchronize time on the Compression Module to the host PC via USB connection.

The downloadable software and installation instructions (including minimum system requirements) are available at www.defibtech.com/acc-software.

ARM EventView software includes the following capabilities:

- Establishing a connection via USB (RMU-1000 or RMU-2000) or Bluetooth® (RMU-2000 only) to the ACC's Compression Module.
- Displaying the status of the connected Compression Module.
- Assigning a user-defined Compression Module name (via USB only).
- Syncing the date/time settings on the Compression Module with the date/time settings of host PC (via USB only).
- Selecting configuration and data files to be retrieved from the Compression Module.
- Storing configuration and data files to the local host PC for further distribution.
- Generating Event Summary Reports using retrieved information.

These instructions provide information about downloading and installing *ARM EventView* software, connecting the ACC's Compression Module to the host PC, extracting data from the Compression Module, as well as generating Event Summary Reports using the extracted data.

The appearance and functionality of the *ARM EventView* main interface screen and its three panels - the Connection/Data Extraction Panel, the Events/Report Generation Panel, and the Report and Help Viewer Panel - are addressed in detail on pages 3-6. In addition, a sample Event Summary Report generated using extracted data is presented and the information contained within it is explained on pages 7-9.
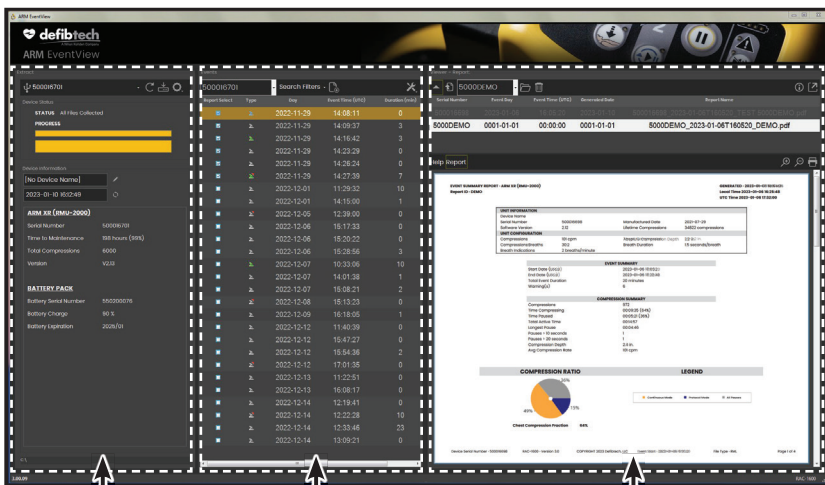
Connection/
Data Extraction
Panel
(see pages 3-4)

Events/Report
Generation
Panel
(see page 5)

Report and Help
Viewer Panel
(see page 6)

Event Summary
Reports
(see pages 7-9)

The Defibtech RMU-1000 and RMU-2000 ACC User Manuals are supplements to this document.

Downloading and Installing the Software

Go to www.defibtech.com/acc-software to download the *ARM EventView* software, making sure that your PC meets or exceeds the minimum system requirements listed. Launch the installer and follow the on-screen instructions until installation is complete.

Launching ARM EventView

Launch *ARM EventView* software by double-clicking the *ARM EventView* shortcut icon (shown at left) on your PC's desktop. This will cause the *ARM EventView* main screen to appear, as shown in the Quick Reference Guide contained in page 1 of this document.

Note: *If the main screen is not fully-viewable after ARM EventView has been launched (e.g. the right-most panel is cut off), click the minimize/maximize button in the top right of the software application's window and resize as necessary.*

Choose a Connection Type between ARM EventView and the ACC's Compression Module

ARM EventView software is capable of connecting to the ACC's Compression Module (or "Module") either by a wired USB connection (RMU-1000 or RMU-2000) or wirelessly via Bluetooth® (RMU-2000 only).

Note: *Assigning a user-defined Module name and/or syncing the date/time settings on the Compression Module with the date/time settings of host PC can only be done via a wired USB connection between the Module and the host PC. These functions are not available when the Module and host PC are connected wirelessly via Bluetooth®.*

Connecting via USB (RMU-1000 and RMU-2000)

To establish a wired USB connection from the ACC's Compression Module to the host PC, attach a USB cable (USB-A to Mini-B) from the host PC (USB-A) to the Module's USB (Mini-B) port. If necessary, a USB-C to Mini-B cable or a USB-C to USB-A adapter or hub can be used. The Module's USB port is located on the underside of the device, as shown at right. Once connected, power the Module on by pressing and holding its power button for at least one second and skip to *The Connection/Data Extraction Panel* section of this page.

USB Port

Initially Pairing via Bluetooth® (RMU-2000 only)

To establish an initial first-time pairing between an RMU-2000 ACC's Compression Module and the host PC via Bluetooth®, see item **5** ("Bluetooth® Configuration/Pairing") on page 4 of this document.

IMPORTANT: If the Compression Module is running from battery power, it is recommended that the battery charge be at least 20% capacity while using ARM EventView.

THE CONNECTION/DATA EXTRACTION PANEL

The Connection/Data Extraction Panel is the left-most panel in the *ARM EventView* main screen and bears the heading "Extract." The numbers associated with the items below correspond to the call-outs in *Figures 1 & 2*.

IMPORTANT: Turn off the Compression Module when the data extraction process is complete to conserve battery power. Follow the steps in the ACC's User Manual to prepare the ACC for clinical use.

1. **Connected Device**
    This field shows the serial number and the user-defined name (if assigned; see item **9**) of the connected Compression Module (or "---" if no devices are connected). A dropdown menu can be accessed by clicking anywhere within this field. This dropdown shows all Modules that have ever been connected to *ARM EventView* and allows for switching from one Module to any other that appears in the list. The icon preceding the device information text indicates the method of connection: USB or Bluetooth®. When the Module is connected via USB or if the Module has previously been paired via Bluetooth® and the Module has Bluetooth® enabled (blue LED near Bluetooth® ON/OFF button is flashing), this field should populate immediately and data file download will occur automatically. If the Module has never been paired via Bluetooth®, see item **5** ("Bluetooth® Configuration/Pairing") on page 4 of this document.

    Note: *Only one Module may be actively connected to ARM EventView at any given time.*

2. **Rescan Ports Button**
    If a Module has recently been connected and doesn't appear in the Connected Device field (item **1**), click the Rescan Ports button to update the list.

3. **Download Files Button**
    Once a USB or Bluetooth® connection has been established between a Compression Module and the host
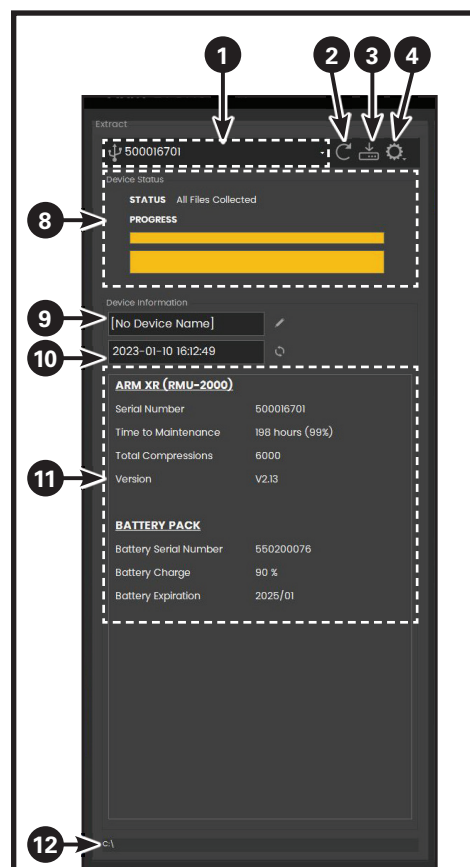

Figure 1: The *ARM EventView* Connection/Data Extraction Panel
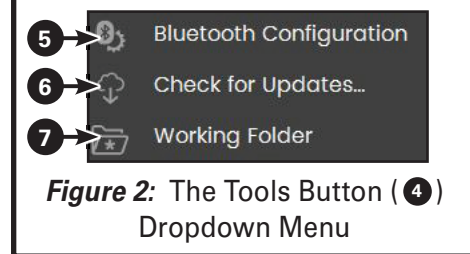
Figure 2: The Tools Button (**4**) Dropdown Menu

PC, data file download should occur automatically. If you wish to manually initiate the data file download process, press the Download Files button. If *ARM EventView* detects that the Module's data files have already been downloaded, a dialog box will alert the user and give the options of downloading the files again or canceling the download operation. If you wish to stop a download that is in progress, click on the "**X**" icon that will appear while a download is occurring.

4. **Tools Button/Dropdown Menu**
    The Tools button calls up a dropdown menu that includes options for Bluetooth® configuration, checking for *ARM EventView* software updates, and changing the working directory, as shown in *Figure 2*.

5. Bluetooth® Configuration/Pairing (RMU-2000 only)

The Bluetooth® Configuration option in the Tools dropdown menu (see *Figure 2*) allows for initial paring of an RMU-2000 ACC's Compression Module to *ARM EventView* as well as management of Modules connected via Bluetooth®. Selecting this option will cause a pop-up window to appear, as shown here:
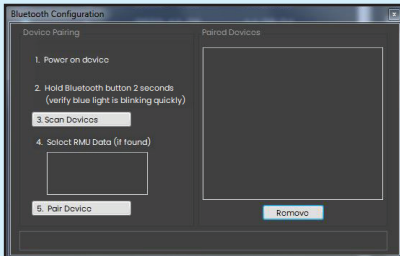
If the Compression Module is not already powered on, do so by pressing and holding its power button for at least 1 second. Once the Module is powered on, press and hold the Bluetooth® ON/OFF button for at least 2 seconds until the blue LED to the left of the button is quickly blinking, then click on *"3. Scan Devices."* When the Module has been found, "RMU Data" should appear in the area below *"4. Select RMU Data (if found)"* and the status notification area at the bottom of the Bluetooth® Configuration pop-up window should state "Scanning completed - device list updated," as shown here:
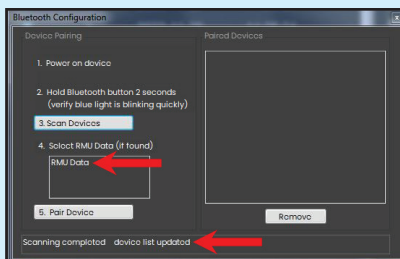
Click on the "RMU Data" entry in the box below *"4. Select RMU Data (if found)"* so that the entry is highlighted and then click on *"5. Pair Device."* This will cause the Module's information to appear in the box below "Paired Devices," as shown here:
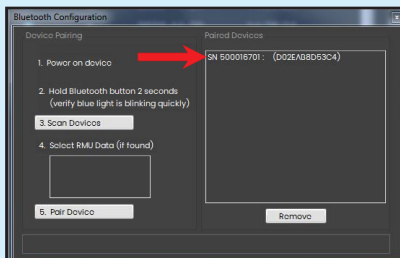
The Compression Module is now paired with the host PC.

To remove any previously-paired Compression Modules, click and highlight the Module in the "Paired Devices" list and click the *"Remove"* button.

Note: If more than 3 minutes elapse after Bluetooth® is enabled and no connection is established, the Compression Module will automatically disable Bluetooth® and the blue LED will no longer be illuminated.

Note: If initial pairing fails, click on "5. Pair Device" again, ensure that the blue LED near the Bluetooth® ON/OFF button on the Compression Module is quickly blinking, and then re-attempt the pairing procedure as defined in this highlighted section.

6. Check for Updates

To check for updates to *ARM EventView* software, select the Check for Updates option in the Tools dropdown menu (see *Figure 2*).

7. Working Folder

The Working Folder option in the Tools dropdown menu (see *Figure 2*) allows the user to specify the locations on the host PC that extracted data and reports will be saved to. **NOTE:** *The default directories are C:\ACC\Logs and C:\ACC\Reports.*

8. Device Status

The Device Status area displays the current status of any connected device. Two download bars appear below the status which indicate data extraction progress (the thinner top bar indicates individual file progress; the thicker bottom bar indicates total progress). When data extraction has been completed, both bars will be completely yellow.

9. Device Information: User-Defined Device Name

This field displays the connected device's custom name (if assigned; "[No Device Name]" will appear if not assigned). To do this, click the pencil icon that appears to the right of this field and type in the desired name (60 characters maximum). **Note:** *Assigning a user-defined Module name to the Compression Module can only be done via a wired USB connection between the Module and the host PC. This function is not available when the Module and host PC are connected wirelessly via Bluetooth®.*

10. Device Information: Device Date/Time Settings & Sync Date/Time to Host PC

This field displays the connected Compression Module's date/time factory settings (GMT). It also allows the user to synchronize the connected Module's date/time to the date/time set on the host PC. To do this, click the sync icon that appears to the right of this field.
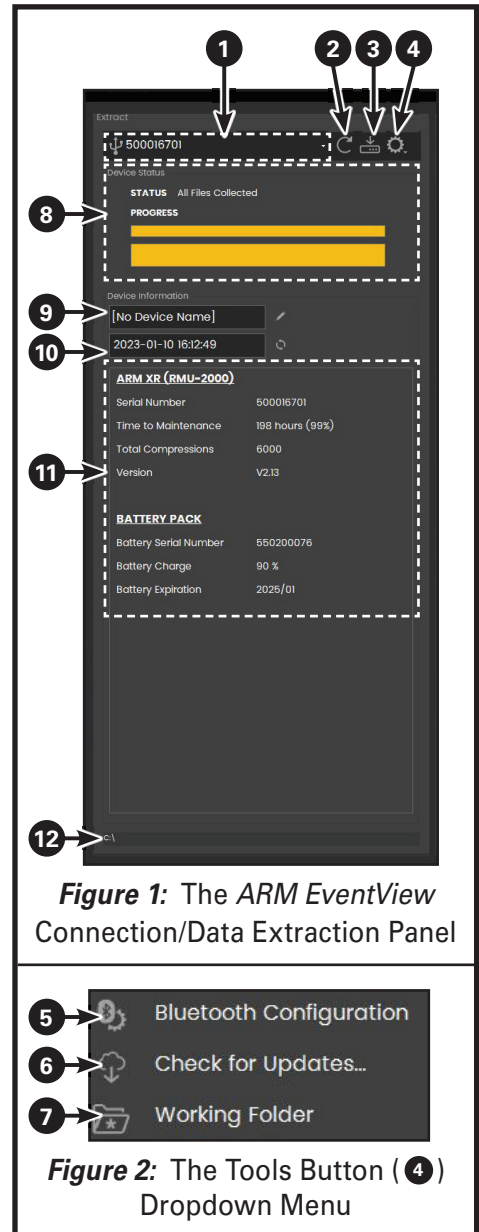
Figure 1: The *ARM EventView* Connection/Data Extraction Panel
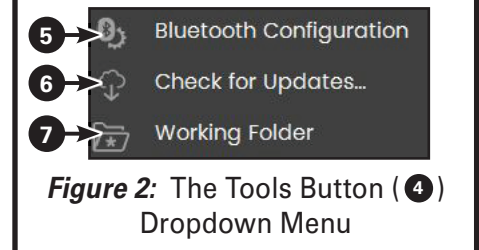

Figure 2: The Tools Button (④) Dropdown Menu

Note: Syncing the date/time settings on the Compression Module with the date/time settings of host PC can only be done via a wired USB connection between the Module and the host PC. This function is not available when the Module and host PC are connected wirelessly via Bluetooth®.

11. Device Information

This area displays information about the connected Compression Module as well as the installed Battery Pack.

12. Current Working Folder

The area displays the current location on the host PC where *ARM EventView* files and folders are stored. To change this location, see item **7** ("Working Folder").

IMPORTANT: *Defibtech recommends that extracted data files not be renamed or edited in any way.*

THE EVENT/REPORT GENERATION PANEL

The Events/Report Generation Panel is the center panel in the *ARM EventView* main screen and bears the heading "Events." The numbers associated with the items below correspond to the call-outs in *Figures 3 & 4*.

13. Device Serial Number

This field shows the serial number of the Compression Module associated with the items listed in the Events Listing Area directly below it (item **14**). A dropdown menu can be accessed by the clicking anywhere within this field. This dropdown shows all Module serial numbers for which event files exist in the current working directory and allows the user to select the Module for which information will be displayed in the Events Listing Area.

The dropdown menu also contains a listing for "**5000DEMO**" which has 3 sample events associated with it. These sample events are the ones shown in the *Report/Help Viewer Panel* section's *Figure 5*, item **20** on page 6 and are the ones used in the example report shown in the *Event Summary Reports* section (pages 7-9).

14. Events Listing Area

This area lists the events associated with the Compression Module serial number listed in the Device Serial Number field (item **13**) and includes information about each event's type, date, time, and duration as well as whether or not the event has been previously reported.

The event type icon associated with a listing will vary in appearance depending upon whether or not 2+ minutes of compressions are associated with the event and/or if one or more device alerts occurred during the event, as shown here:

Green icons indicate that the event includes 2+ minutes of compressions; gray icons indicate that the event has fewer than 2 minutes of compressions.

If a red triangular corner appears to the upper right of the icon, there are one or more device alerts associated with the event.

In order to select events that will be included in an Event Summary Report, click on the event rows desired for inclusion in the "Report Select" column. The events that will be included in the Report will be the ones with their "Report Select" boxes checked.

Note: *Only events that occurred within the same day can be selected for inclusion in an Event Summary Report.*

15. Search Filters

Search Filters allows the user to choose what specific type of event information is shown in the Events Listing Area (item **14**). A dropdown menu showing these filters can be accessed by clicking on "Search Filters." These options include: **Show All** *[default]*, **Rescue**, **Error**, and **Date Range (yyyy-mm-dd to yyyy-mm-dd)**. The dates shown in the Date Range option represent the oldest event date and the most recent event date shown in the Events Listing Area (item **14**). This range can be customized via a pop-up box that can be accessed by selecting **Date Range** from the Search Filters dropdown menu.

16. Generate Report Button

After the events desired for inclusion in an Event Summary Report have been selected, click the Generate Report button. This will result in *ARM EventView* creating a PDF of the Report that will appear in the Help/Report Viewer Panel's Viewing Window (item **20** on page 6).

17. File Tools Button

The File Tools button calls up a dropdown menu that includes options for showing the directory where downloaded event data files are located on the host PC as well as importing event data files from other directories into the current working folder, as shown in *Figure 4*.

18. Show File Location

To display the directory where downloaded event data files displayed in the Events Listing Area (item **14**) are located on the host PC, select the Show File Location option in the File Tools dropdown menu (see *Figure 4*).

19. Import File

To import event data files from other directories into the current working folder, select the Import File option in the File Tools dropdown menu (see *Figure 4*).

IMPORTANT: *Defibtech recommends that extracted data files not be renamed or edited in any way.*

Sending Extracted Data to Defibtech Technical Support (optional)

If necessary (e.g. for service purposes), select extracted data files and attach them to an e-mail addressed to Defibtech support (techsupport@defibtech.com).
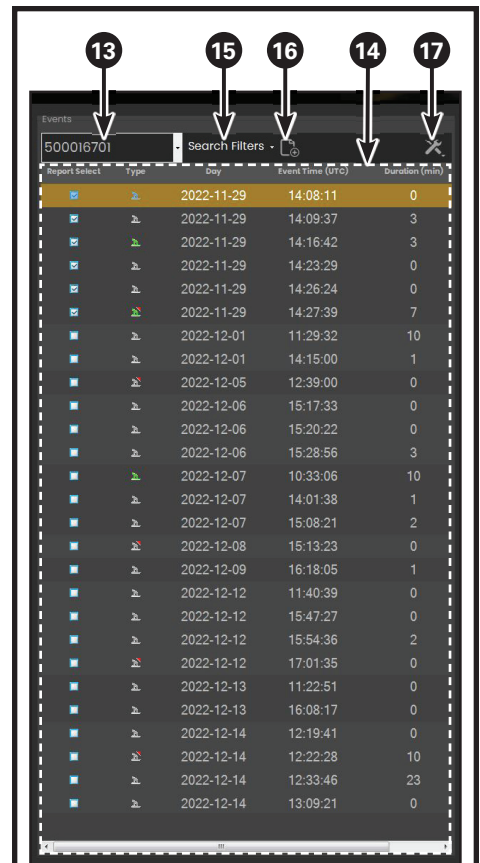
Figure 3: The *ARM EventView* Events/Report Generation Panel
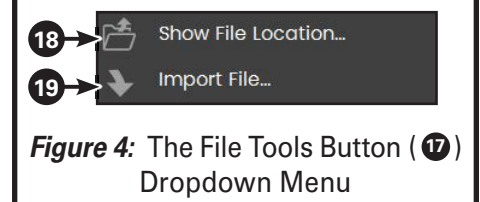
Figure 4: The File Tools Button (**17**) Dropdown Menu

For the latest versions of user documentation or software, use *ARM EventView*'s "Check for Updates" function (see item **6** on page 4) or visit www.defibtech.com/acc-software.

If you have questions or comments pertaining to this software, please contact Defibtech via email at techsupport@defibtech.com. Your comments are appreciated and will help us to create a better product for our customers in future releases.

THE REPORT/HELP VIEWER PANEL

The Report/Help Viewer Panel is the right-most panel in the *ARM EventView* main screen and bears the heading "Viewer - Report" or "Viewer - Help." The numbers associated with the items below correspond to the call-outs in *Figure 5*.

20. Report/Help File Viewing Window
This area of the Report/Help Viewer Panel displays Event Summary Reports immediately after they have been generated or when they are called up from the host PC. It will display the *ARM EventView* help file (this document) when an Event Summary Report is not available for viewing or when the "Help" tab directly above the viewing area has been clicked (item **21**).

21. Help and Report Tabs
The Help and Report tabs can be used to have the Report/Help File Viewing Window (item **20**) display an Event Summary Report or the *ARM EventView* help file (this document).

22. Zoom In/Zoom Out/Print Buttons
The Zoom In, Zoom Out, and Print buttons can be used to magnify, reduce, or print the document displayed in the Report/Help File Viewing Window (item **20**).

23. Expand/Collapse to Fill Main Screen
The Expand/Collapse to Fill Main Screen button can be used to toggle between having the Report/Help File Viewing Window (item **20**) expand to fill all of the *ARM EventView* main screen's panels (the Connection/Data Extraction and Events/Report Generation panels will no longer be viewable) and collapsing it to occupy the bottom of the Report/Help File Viewer Panel (*Figure 5*).

24. Expand/Collapse to Fill Panel
The Expand/Collapse to Fill Panel button can be used to toggle between having the Report/Help File Viewing Window (item **20**) expand to fill the entire and collapsing it to occupy the bottom of the Report/Help File Viewer Panel (*Figure 5*).

25. Select Device Field
The Select Device field shows the serial number of the Compression Module associated with Event Summary Report shown in the Report/Help File Viewing Window (item **20**). A dropdown menu can be accessed by clicking anywhere within this field. This dropdown shows all Module serial numbers for which Event Summary Reports exist in the current working directory and allows the user to select the Module for which information will be displayed in the Report/Help File Viewing Window (item **20**).
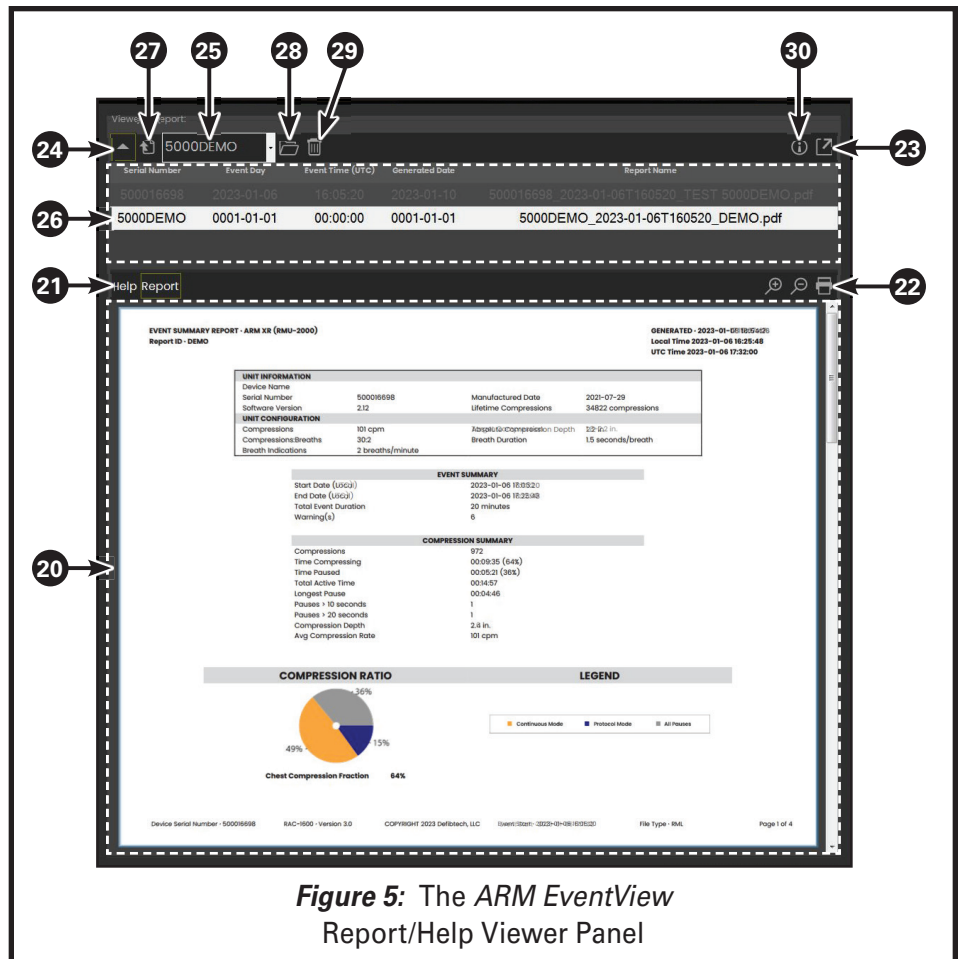
Figure 5: The *ARM EventView* Report/Help Viewer Panel

The dropdown also contains a listing for "**5000DEMO**" which has a sample Event Summary Report associated with it. This sample report is highlighted in the Reports Listing Area shown in item **26** and is also the one used as the example report shown in the *Event Summary Reports* section (pages 7-9).

26. Reports Listing Area
The Reports Listing area lists the Event Summary Reports associated with the Compression Module serial number shown in the Select Device field (item **25**) and includes basic information about each report's associated event date, event time, generation date, and file name. Any report listed in this area can be highlighted by clicking on it once and can be opened for viewing in the Report/Help File Viewing Window (item **20**) by double-clicking on it.

If "**5000DEMO**" has been selected in the Select Device field (item **25**), the sample Event Summary Report associated with it will be displayed in the Reports Listing Area. This sample report is highlighted in the Reports Listing Area shown in this item and is also the one used as the example report

shown in the *Event Summary Reports* section (pages 7-9).

27. Open Report File Button
The Open Report File button can be used to open any Event Summary Report highlighted in the Reports Listing area (item **26**).

28. Show File Location Button
The Show File Location button can be used to display the directory where any Event Summary Report highlighted in the Reports Listing area (item **26**) is located on the host PC.

29. Delete Report Button
The Delete Report button can be used to delete any Event Summary Report highlighted in the Reports Listing area (item **26**) from the host PC.

30. About Button
The About button calls up a pop-up window that contains the full text of the Defibtech Software Licensee License Agreement (EULA).

EVENT SUMMARY REPORTS — *Device Information & Event Summary*

A →

EVENT SUMMARY REPORT · ARM XR (RMU-2000)
Report ID · DEMO

GENERATED · 2023-01-17 15:07:47
Local Time 2023-01-06 16:25:48
UTC Time 2023-01-06 17:32:00

B →

UNIT INFORMATION			
Device Name			
Serial Number	500016698	Manufactured Date	2021-07-29
Software Version	2.12	Lifetime Compressions	34822 compressions
UNIT CONFIGURATION			
Compressions	101 cpm	Target Compression	1.8-2.2 in.
Compressions:Breaths	30:2	Breath Duration	1.5 seconds/breath
Breath Indications	2 breaths/minute		

C →

EVENT SUMMARY	
Start Date (UTC)	2023-01-06 17:11:32
End Date (UTC)	2023-01-06 17:32:00
Total Event Duration	20 minutes
Warning(s)	6

COMPRESSION SUMMARY	
Compressions	972
Time Compressing	00:09:35 (64%)
Time Paused	00:05:21 (36%)
Total Active Time	00:14:57
Longest Pause	00:04:46
Pauses > 10 seconds	1
Pauses > 20 seconds	1
Compression Depth	2.6 in.
Avg Compression Rate	101 cpm

D →

COMPRESSION RATIO · **LEGEND**

· 36%
49% ·
15%

Legend: ■ Continuous Mode ■ Protocol Mode ■ All Pauses

Chest Compression Fraction   64%

A. Event Summary Report Header
This header appears on the top off all Event Summary Report pages and includes the device name, the report's filename, the date and time that the report was generated, and the date and time in which the events summarized in the report took place.

B. Unit Information and Configuration
Includes information about the Compression Module from which the event data was extracted. This information includes the device's serial number, custom name (if assigned), software version, date of manufacture, and total compressions run. In addition, the Module's configuration/protocol settings such as compression rate, compression/breaths ratio, absolute compression depth, and breath indications/duration are shown.

C. Event and Compression Summaries
Includes summarized information about the event being reported as well as summarized compression information (if the event included compressions).

D. Compression Ratio Chart
A color-coded representation of the amount of time during the event that the device was delivering compressions versus protocol and non-protocol pauses.

Note: This chart will only be included if the event being detailed in the Event Summary Report included compressions.

EVENT SUMMARY REPORTS — Event Timeline

COMPRESSION GRAPH – 1/6/2023

COMPRESSION GRAPH LEGEND

■ Continuous Mode	│ On	│ Off	┊ Pause Button
■ Protocol Mode			

Device Serial Number · 500016698   RAC-1600 · Version 3.0   COPYRIGHT 2023 Defibtech, LLC   Event Start · 2023-01-06 17:11:32   File Type · RML   Page 2 of 4
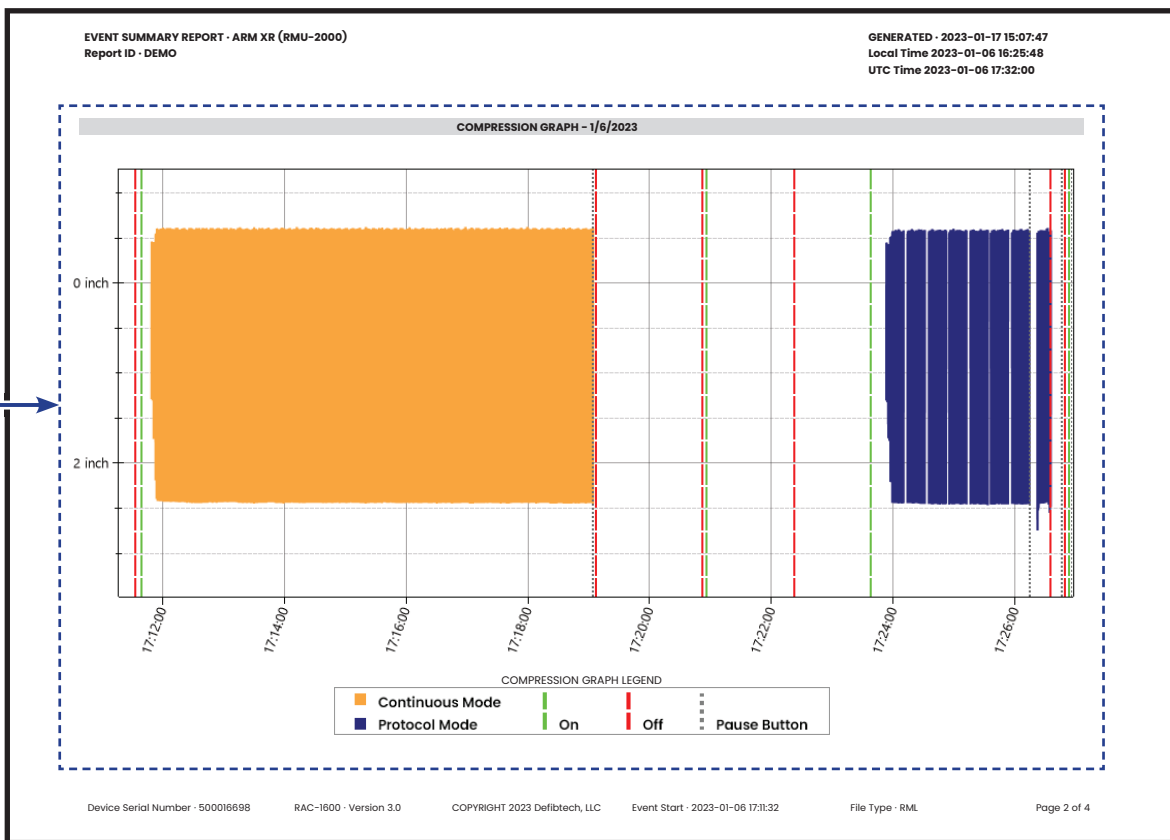
E. Event Timeline

This portion of an Event Summary Report includes a color-coded linear representation of all compression activity that occurred during the event (i.e. unit power-up, continuous compressions, protocol and non-protocol pauses, and unit power-off). The timeline reads from left to right. Markers below the timeline indicate elapsed event time.

Note: *This report information will only be included if the event being detailed in the Event Summary Report included compressions.*

EVENT SUMMARY REPORTS — Detailed Event Information

EVENT INFORMATION

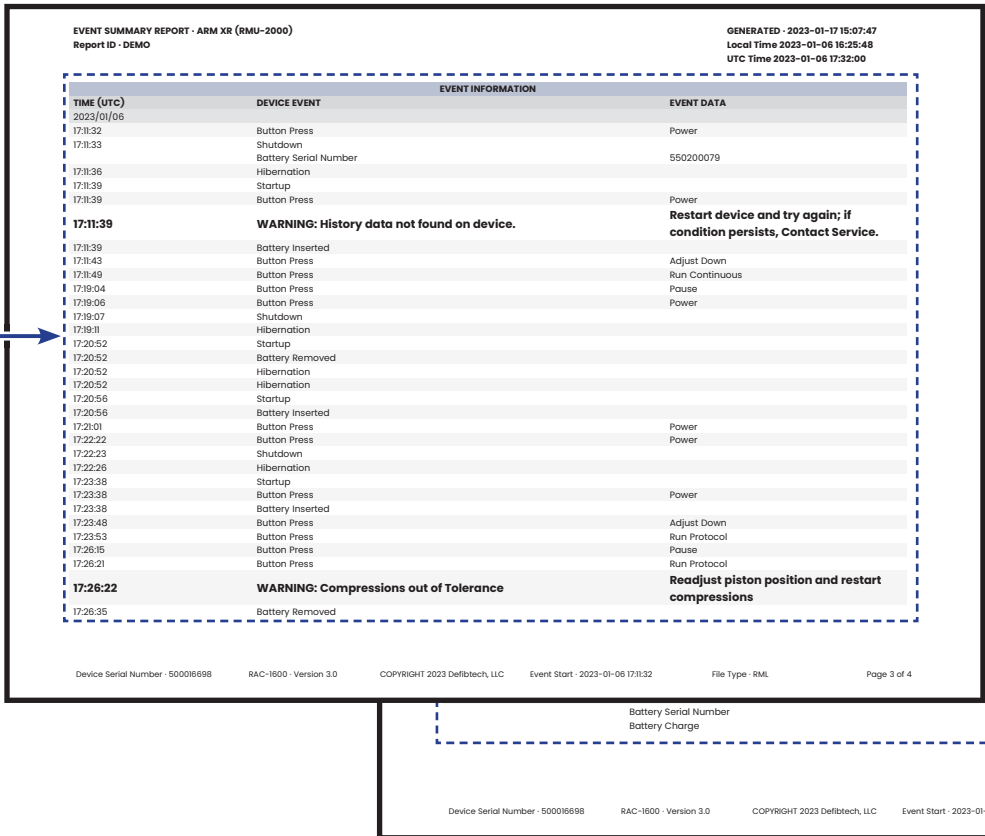| TIME (UTC)	DEVICE EVENT	EVENT DATA
2023/01/06		
17:11:32	Button Press	Power
17:11:33	Shutdown	
	Battery Serial Number	550200079
17:11:36	Hibernation	
17:11:39	Startup	
17:11:39	Button Press	Power
17:11:39	**WARNING: History data not found on device.**	**Restart device and try again; if condition persists, Contact Service.**
17:11:39	Battery Inserted	
17:11:43	Button Press	Adjust Down
17:11:49	Button Press	Run Continuous
17:19:04	Button Press	Pause
17:19:06	Button Press	Power
17:19:07	Shutdown	
17:19:11	Hibernation	
17:20:52	Startup	
17:20:52	Battery Removed	
17:20:52	Hibernation	
17:20:52	Hibernation	
17:20:56	Startup	
17:20:56	Battery Inserted	
17:21:01	Button Press	Power
17:22:22	Button Press	Power
17:22:23	Shutdown	
17:22:26	Hibernation	
17:23:38	Startup	
17:23:38	Button Press	Power
17:23:38	Battery Inserted	
17:23:48	Button Press	Adjust Down
17:23:53	Button Press	Run Protocol
17:26:15	Button Press	Pause
17:26:21	Button Press	Run Protocol
17:26:22	**WARNING: Compressions out of Tolerance**	**Readjust piston position and restart compressions**
17:26:35	Battery Removed	

EVENT DATA
Cycle power; if condition persists, Contact Service
Pause
Power
Power
Check nothing impedes motor motion; if condition persists, Contact Service
Check nothing impedes motor motion; if condition persists, Contact Service
Check nothing impedes motor motion; if condition persists, Contact Service
Check nothing impedes motor motion; if condition persists, Contact Service
Check nothing impedes piston extension or retraction; if condition persists, Contact Service
Pause
Power
Power
Power
Power
550200079
78%

F. Event Information

This portion of an Event Summary Report includes a detailed time-stamped listing of event information from start-up of the device to unit shutdown. It also includes device serial number and the battery charge levels at the start and the end of the event. If the event detailed in the Event Summary Report includes any device alerts, they will appear in **bold type**.

For the latest versions of user documentation or software, use *ARM EventView*'s "Check for Updates" function (see item **6** on page 4) or visit www.defibtech.com/acc-software.

If you have questions or comments pertaining to this software, please contact Defibtech via email at techsupport@defibtech.com. Your comments are appreciated and will help us to create a better product for our customers in future releases.

Information in this document is subject to change without notice.

Copyright © 2023 Defibtech, L.L.C. All Rights Reserved.

For patent information, see www.defibtech.com/support/patents.

Defibtech, L.L.C.
741 Boston Post Road, Suite 201
Guilford, CT 06437 • USA
Web: www.defibtech.com
Tel: 1-(866)-333-4241 (toll-free within North America) • 1-(203) 453-4507
Email: techsupport@defibtech.com (service and repair); sales@defibtech.com (sales)

Page 9 of 9

RAC-U1511EN rev A

ELECTRONIC DISTRIBUTION

Issued: 2023-01-18