

# REF RAC-U1600

## ACC Event Connect Software Instructions

Data Retrieval and Event Reporting Software for the Defibtech RMU-1000 Automated Chest Compression System

### Summary

ACC Event Connect is PC-based software that is intended to allow users of the Defibtech RMU-1000 Automated Chest Compression (ACC) System to connect the ACC's Compression Module via USB to retrieve configuration data and log files, as well as generate event summary reports using this retrieved information.

The downloadable software and installation instructions (including minimum system requirements) are available at [www.defibtech.com/eventconnect](http://www.defibtech.com/eventconnect).

ACC Event Connect software includes the following capabilities:

- Establishing a USB connection to the ACC's Compression Module.
- Displaying the status of the connected Compression Module.
- Assigning a user-defined Compression Module name.
- Syncing the date/time settings on the Compression Module with the date/time settings of host PC.
- 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 ACC Event Connect 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.

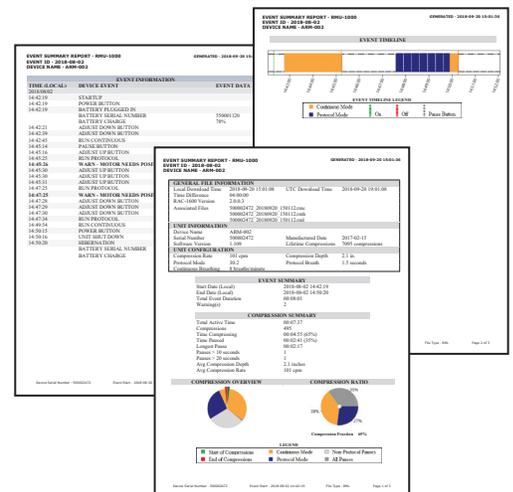
The appearance and functionality of the ACC Event Connect interface screens - the Data Extraction Screen and the Report Generation Screen - are addressed in detail on pages 2-5. In addition, a sample Event Summary Report generated using extracted data is presented and the information contained within it is explained on pages 6-7.



Data Extraction Screen  
(see pages 2-3)



Report Generation Screen  
(see pages 4-5)



Event Summary Reports  
(see pages 6-7)

**The Defibtech RMU-1000 ACC User Manual  
is a supplement to this document.**

## Downloading and Installing Software

Go to [www.defibtech.com/eventconnect](http://www.defibtech.com/eventconnect) to download ACC Event Connect software, making sure that your PC meets the minimum system requirements listed. Launch the installer and follow the on-screen instructions until installation is complete.

## Connecting to the ACC Compression Module

Connect the ACC's Compression Module to the host PC via a USB cable (USB-A to Mini-B). The Module's USB (Mini-B) port is located on the underside of the device, as shown at right. Power on the Module by pressing and holding its power button for at least one second.



## Launching ACC Event Connect



Launch ACC Event Connect software by double-clicking the ACC Event Connect shortcut icon (shown at left) on your PC's desktop.

## THE DATA EXTRACTION SCREEN

When ACC Event Connect is launched, the Data Extraction Screen will appear as shown in Figure 1. The numbers listed below correspond to the call-outs in this image.

### 1. Help Button.

Clicking on this button calls up a PDF of these instructions.

### Selecting an ACC Event Connect Screen (Data Extraction and Report Generation)

#### 2. Report Generation Screen Tab.

The Report Generation Screen can be accessed at any time by clicking this tab. Details about the functionality of this screen can be found on pages 4-5.

#### 3. Data Extraction Screen Tab.

The Data Extraction Screen covered in this section can be accessed at any time by clicking this tab.

## Viewing the ACC Compression Module Status and General Information

### 4. Connection Status.

Indicates if a USB connection has been established between the Compression Module and the host PC. If connected, a green check mark appears. If a connection has not been made, a red "X" appears.

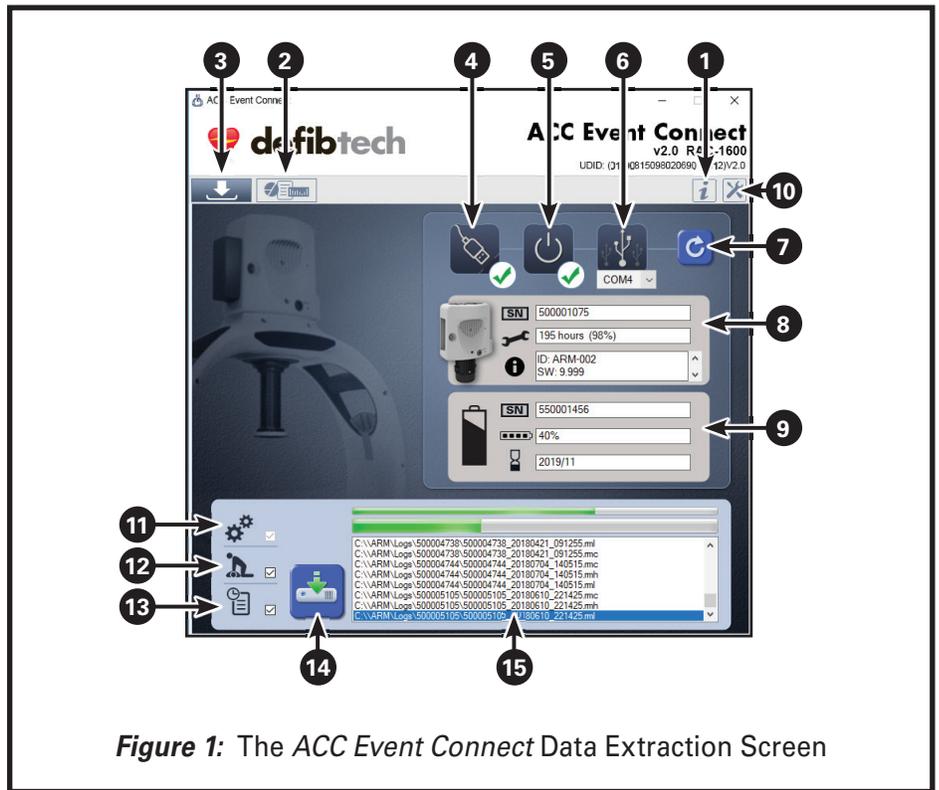


Figure 1: The ACC Event Connect Data Extraction Screen

### 5. Power Status.

Indicates power status of a successfully connected Compression Module. If powered on, a green check mark appears. If powered off, a red "X" appears. **NOTE:** If the Compression Module is running from battery power, it is recommended that the battery charge be at least 20% capacity while using ACC Event Connect.

### 6. USB Port Connection/Selection.

When the Compression Module has been detected, the connected PC COM port is displayed below the USB port icon. If more than one Compression Module is connected to the PC, the user may select which Module is actively connected to the software by changing the PC COM port via the listing shown in the drop-down menu.

### 7. Refresh Button.

Used to retry/refresh the connection to the device.

### 8. Unit Information Area: Compression Module.

Shows Compression Module information including serial number, time remaining (in hours and percentage usage) until required maintenance, Module name (if assigned; see item 10, "Administrative Settings"), and Module software version number.

### 9. Unit Information Area: Battery Pack.

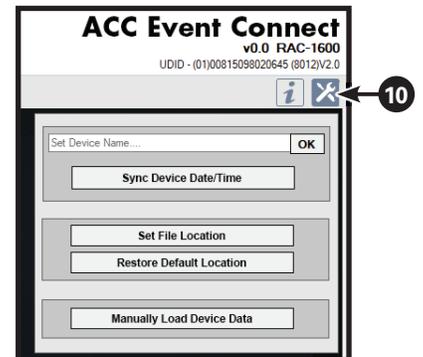
Shows information about the current Battery Pack in the Compression Module including serial number, battery charge status, and battery expiration.

## Changing Administrative Settings

ACC Event Connect allows the user to customize the Compression Module and the target directory where extracted data and reports are stored.

### 10. Administrative Settings.

When this button is clicked, a drop-down menu appears (clicking on the button again returns the user to the Data Extraction Screen):

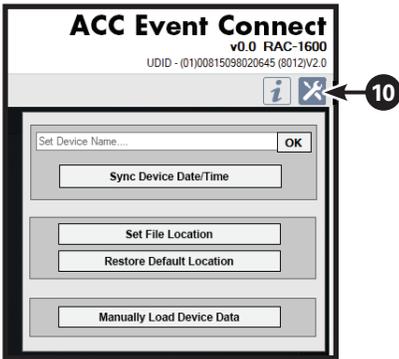


### Set Device (Compression Module)

**Name:** This field allows the user to set a custom Compression Module name (60 characters maximum) to the connected Module. Clicking "OK" will store the name

## Changing Administrative Settings (continued)

entered to the Module's memory. This name will now appear in the Compression Module Unit Information Area (8) and on subsequently generated Event Summary Reports (see item C on page 6).



### Sync Device (Compression Module) Date/Time:

Allows the user to synchronize the connected Compression Module's date/time factory settings (GMT) to the date/time set on the host PC.

After this button is pressed, a dialog box appears that indicates the difference (if any) between the time/date settings on the Compression Module and those on the host PC. **IMPORTANT:** Before starting the synchronization process, ensure that the date/time on the host PC is correct.

**Set File Location:** Allows the user to specify the locations on the host PC that extracted data and reports will be stored to. **NOTE:** Default directories are C:\ACC\Logs and C:\ACC\Reports.

**Restore Default Location:** Clicking this button restores the locations on the host PC that extracted data and reports will be stored to as C:\ACC\Logs and C:\ACC\Reports.

**Manually Load Device (Compression Module) Data:** Allows the user to manually load specific extracted data files from C:\ACC\Logs (or any directory where extracted files have been saved to). **NOTE:** This function will only appear in the drop-down menu if the user has the Report Generation Screen activated (see item 2 and pages 4-5). In addition, this function can only be used after at least one data extraction from the Compression Module has occurred.

## Extracting Data

Select the data types to extract and initiate the extraction process. **NOTE:** For support purposes, Defibtech recommends that all three data types described below in 11, 12, and 13 be extracted. As such, all three extraction selection checkboxes default as checked.

### 11. Extract Selection Checkbox: Configuration.

 Indicates that configuration files will be extracted when the Extract

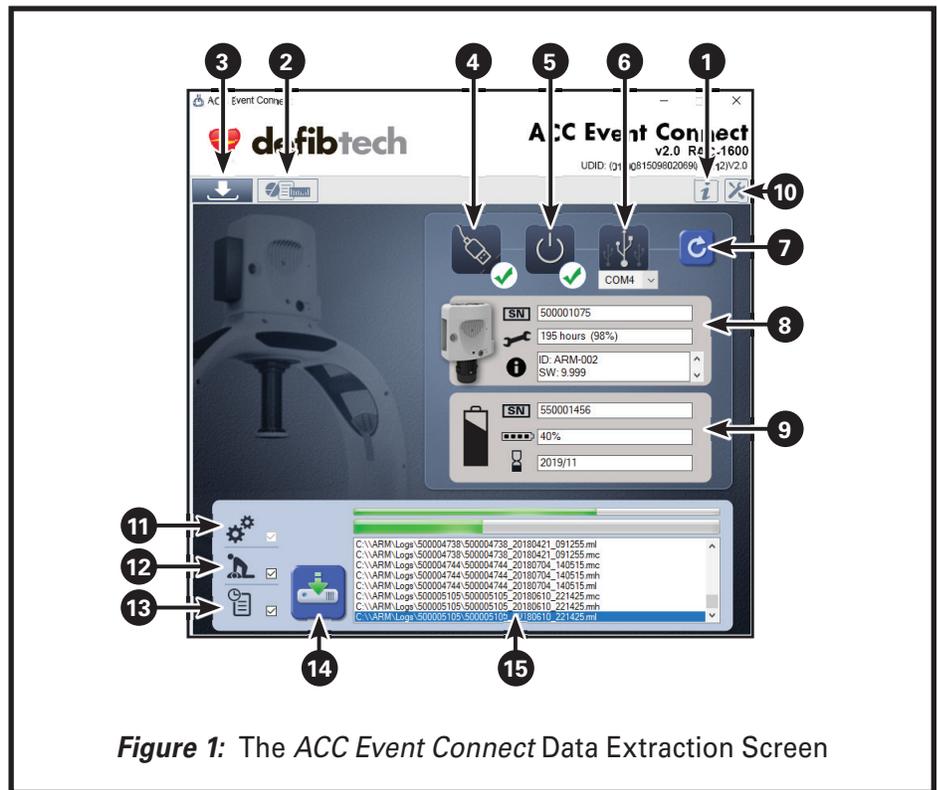


Figure 1: The ACC Event Connect Data Extraction Screen

Data Button (14) is clicked. **NOTE:** A configuration data extract will always be performed, no matter what other extract selections are made in the LOG and HISTORY extract selection checkboxes (12, 13).

### 12. Extract Selection Checkbox: Log.

 When checked, log files (detailed compression data from approximately the last hour of Compression Module operation) will be extracted when the Extract Data Button (14) is clicked. If log files are not desired, uncheck this selection's checkbox.

### 13. Extract Selection Checkbox: History.

 When checked, history files (significant events since the Compression Module was manufactured) will be extracted when the Extract Data Button (14) is clicked. If history files are not desired, uncheck this selection's checkbox.

### 14. Extract Data Button.

 Used to start the data extraction process. When pressed, the types of extract data selected from the checkboxes (11, 12, 13) will be saved to C:\ACC\Logs (default) or the user-defined directory (see "Set File Location" in item 10). Two green download bars appear above the Extracted Files List (14), indicating progress of the data extraction (the thinner top bar indicates total progress; the thicker bottom bar indicates incremental progress). When data extraction has been completed, both bars will be completely green.

**15. Extracted Files List.** Any previously extracted files are shown here. As new extracts are performed, this list will be updated with the additional files. Double-clicking on a desired file from this list will open the contents of C:\ACC\Logs (or the user-defined directory; see "Set File Location" in item 10). The user may then select what to do with any file in the directory using Windows Explorer functionality. **NOTE:** Defibtech recommends that extracted data files not be renamed.

**IMPORTANT NOTE:** Turn off the Compression Module when the data extraction process is complete to conserve battery power. Follow the RMU-1000 User Manual steps to prepare the RMU-1000 for clinical use.

### Sending Extracted Data to Defibtech Support (optional)

If necessary (e.g. for service/diagnosis purposes), select extracted data files and attach them to an e-mail to Defibtech support ([support@defibtech.com](mailto:support@defibtech.com)).

For additional assistance, contact Defibtech Customer Service using the contact information on the bottom of page 7.

For the latest versions of user documentation or software, visit [www.defibtech.com/eventconnect](http://www.defibtech.com/eventconnect).

## THE REPORT GENERATION SCREEN

At any point after data has been extracted from the ACC's Compression Module (see pages 2-3), Event Summary Reports (see pages 6-7) can be generated in PDF form using the Report Generation Screen. The numbers listed below correspond to the call-outs in the image shown at right.

**IMPORTANT NOTE:** As certain details that are stored in the Compression Module's Log files are removed from those files when they are automatically converted to History files by the device, Defibtech recommends that an Event Summary Report be generated as soon as possible after the ACC is used and before it is utilized for additional events.

### 16. Help Button.

 Clicking on this button will call up a PDF of this set of instructions.

### 17. Administrative Settings.

 When this button is clicked, a drop-down menu appears that allows the user to set the device name, sync date/time, set/reset the location on the host PC where downloaded files are stored, and manually load ACC data. For full details, see item 10 on page 2.

### Selecting an ACC Event Connect Screen (Data Extraction and Report Generation)

#### 18. Report Generation Screen Tab.

 The Report Generation Screen covered in this section can be accessed at any time by clicking this tab.

#### 19. Data Extraction Screen Tab.

 The Data Extraction Screen can be accessed at any time by clicking this tab. Details about the functionality of this screen can be found on pages 2-3.

### Selecting the Event

#### 20. Select Compression Module Serial Number (S/N).

 Allows the user to select, by Compression Module serial number, which specific Module's log files are to be used to generate an Event Summary Report. If logs for more than one device are stored in C:\ACC\Log (or the user-defined directory; see "Set File Location" in item 10), clicking on this box displays a drop-down menu with all device serial numbers for which data has been extracted and saved to the host PC. If no serial numbers appear in this box, either no data has been downloaded from any device or no data can be found at the specified Logs directory.

#### 21. Select Event Year and Month.

Two drop-down menus above the calendar (22) allow the user to select which year and month the event took

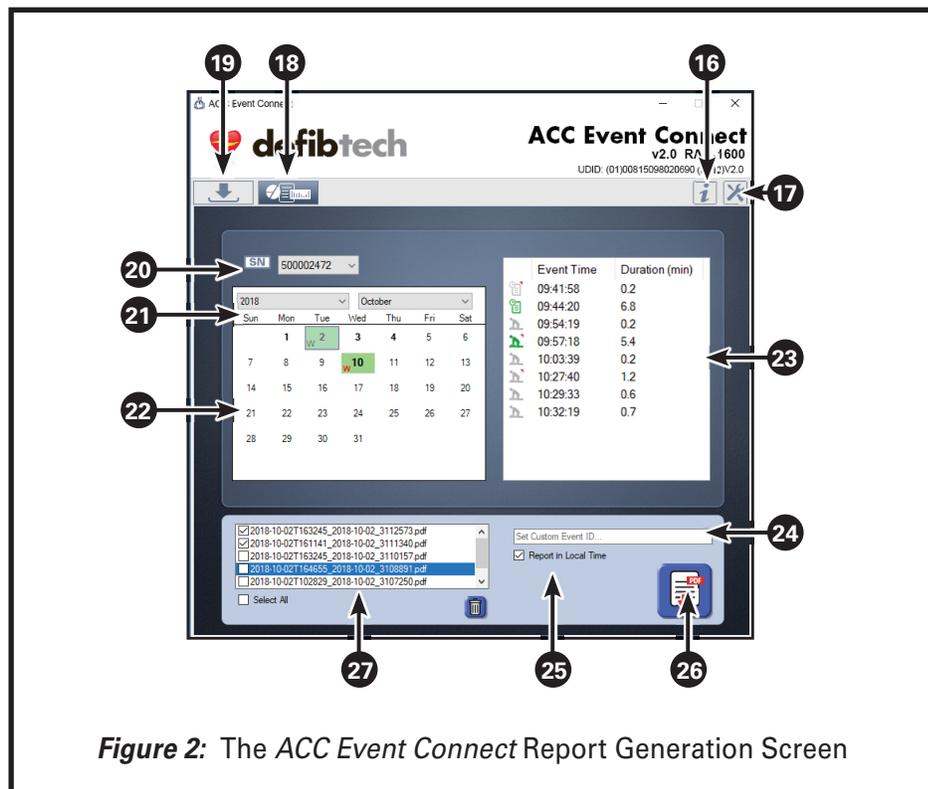


Figure 2: The ACC Event Connect Report Generation Screen

place that will be represented in the report. **NOTE:** The drop-down menus will only display years and months for which event data exists at the specified Logs directory.

**22. Select Event Day.** Allows the user to select which day the event took place that will be represented in the report.

- Days for which there is no event data appear in plain type.
- Days with event data appear in **bold type**.
- Days that include events with 2+ minutes of compressions are highlighted in **green**.
- Days with that include events containing device alerts appear with a "W" to the immediate lower left of the date.

Clicking on any date within the calendar will cause the event details box (23) to populate with the event data recorded for that day. Individual events are defined by power on/off cycles that are separated by 30 seconds or more. In addition, events are sorted by day based upon the compression module's date/time factory settings (GMT) unless they are altered by the user (see "Sync Device (Compression Module) Date/Time" in Item 10). If the desired event does not appear in a particular day's event list, check the day before or the day after to see if the event appears in either of those event lists.

#### 23. Select Event.

This table details the specific events associated with the day selected in the

event calendar (22) and allows the user to select a specific event (or series of contiguous events) for inclusion in the Event Summary Report. **NOTE:** If a series of contiguous events are selected via the select event table, one Event Summary Report that summarizes all of the selected events will be generated.

In addition to listing the time of day when each event took place and its duration, icons on the far left side of the table indicate the extracted data file type: log (see item 12) or history (see item 13), if 2+ minutes of compressions are associated with the event, and if one or more device alerts occurred during the event.

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

**NOTE:** To manually load specific extracted data files from C:\ACC\Log (or the user-defined directory; see "Set File Location" in item 10), use the "Manually Load Device (Compression Module) Data" function that can be accessed via the Administrative Settings drop-down menu (see item 10).

(continued on page 5)

## Customizing the Event Summary Report

**24. Set Custom Event ID.** This field allows the user to assign an event ID that will appear on the header of every page in the Event Summary Report (see item **A** on page 6). If an event ID is not entered, this field will show the date the event took place.

**25. Report in Local Time.** By default, this box is checked so that all dates/times in the Event Summary Report will be converted to the local PC's date/time settings. If this is not desired, uncheck this box.

## Generating the Event Summary Report

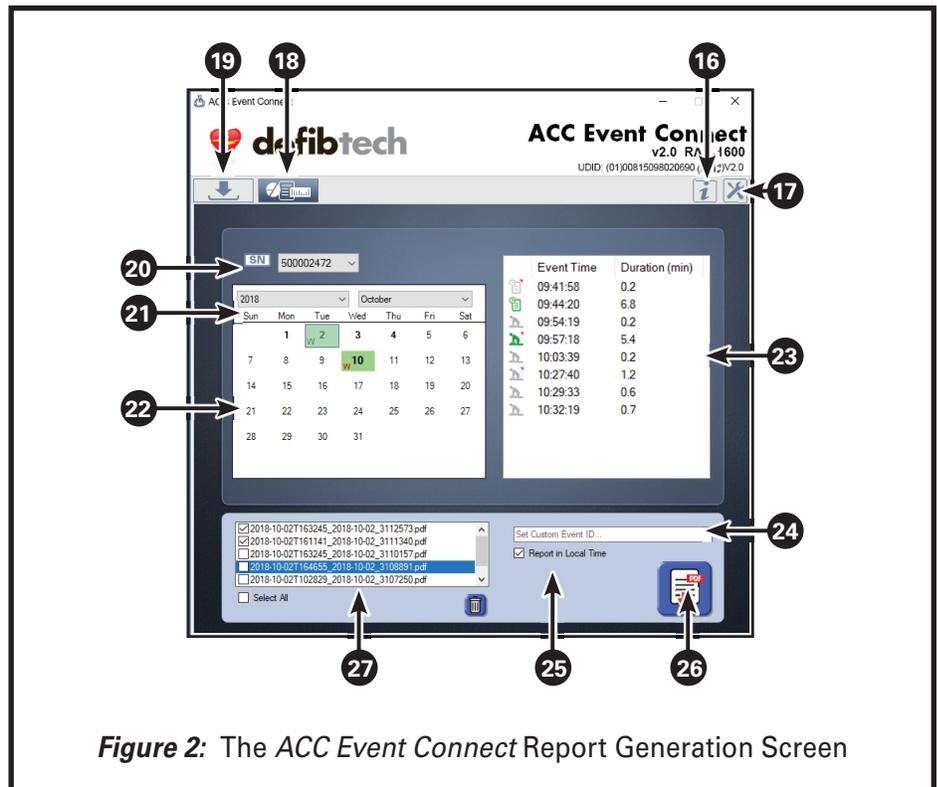
**26. Generate Report Button.**

After all selections have been made, click the Generate Report Button to generate the Event Summary Report. These reports are stored at **C:\ACC\Reports** (or the user-defined directory; see *“Set File Location”* in item **10**). For a detailed overview of a sample report, see pages 6-7.

## Managing Event Summary Reports

**27. Event Summary Reports List.**

As Event Summary Reports are generated, this window displays the filenames of the reports generated during the *ACC Event Connect* session (restarting the program will reset the list). Double-clicking on a file from this list will open the contents of **C:\ACC\Reports** (or the user-defined directory; see *“Set File Location”* in item **10**). To delete any undesired reports, click the box to the left of the report filename, which will result in a checkmark appearing in the box. To delete all displayed reports, click the *“Select All”* box below the report list window. Selected files can then be deleted by clicking the Trash Button.



**Figure 2:** The ACC Event Connect Report Generation Screen

For the latest versions of user documentation or software, visit [www.defibtech.com/eventconnect](http://www.defibtech.com/eventconnect).

## EVENT SUMMARY REPORTS

### Device Information & Event Summary

**A. Header.** Appears on the top of all Event Summary Report pages and includes a custom event ID if one has been set by the user on the Report Generation Screen (see item **24** on page 5) and a custom Compression Module name if one has been assigned (see “Set Device (Compression Module) Name” in item **10** on pages 2-3). **NOTE:** If an event ID has not been entered, this field will show the date the event took place.

**B. General File & Unit Information.** Includes information about the event files that were used in the creation of the Event Summary Report as well as information about the Compression Module that the data was extracted from. The unit information section will include a custom Compression Module name if one has been assigned (see item **10** on page 2, “Administrative Settings”).

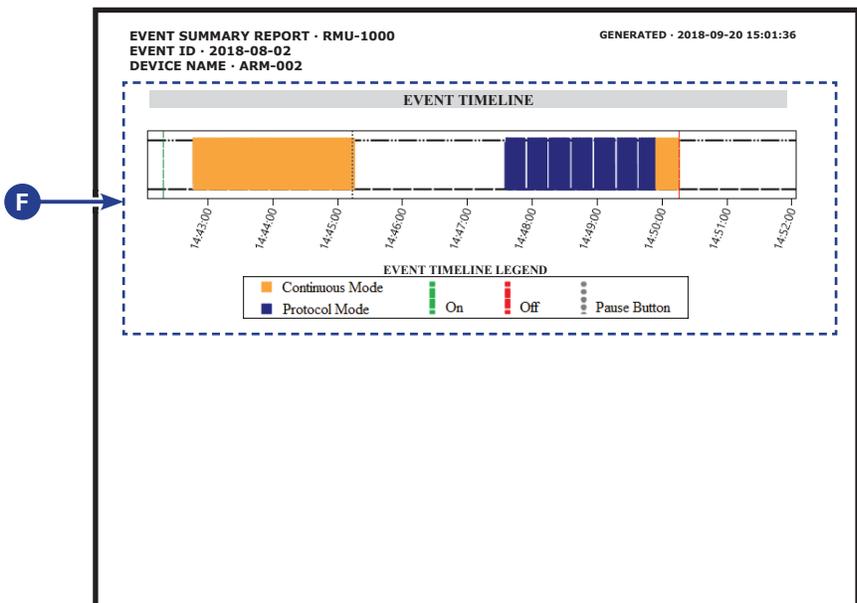
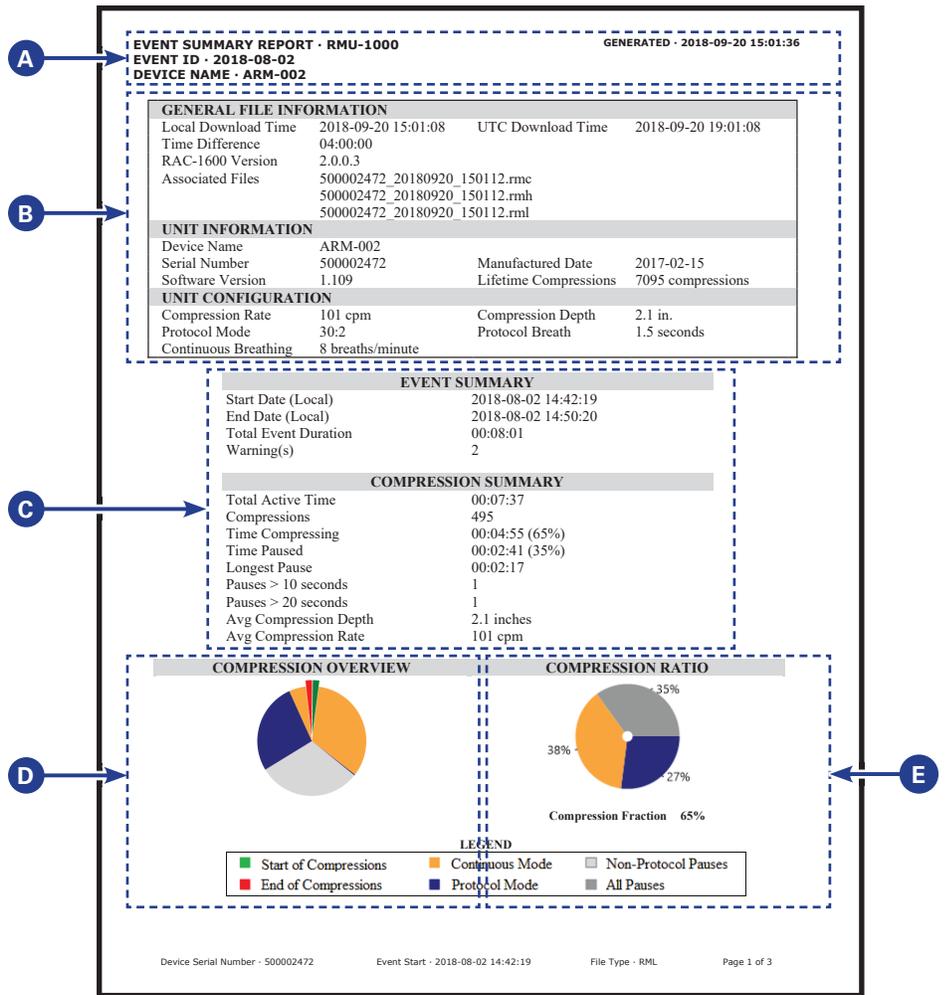
**C. Event & Compression Summary.** Includes summarized information about the event being reported as well as summarized compression information (if the event included compressions).

**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.

**E. Compression Overview Chart.** A color-coded sequential representation of all compression activity that occurred during the event (i.e. start of compressions, continuous compressions, non-protocol pauses, and end of compressions). This chart is meant to be read starting at the green “start compressions” marker. Compression information then follows in a clockwise sequence until the red “end compressions” marker is reached. **NOTE:** This chart will only be included if the event being detailed in the Event Summary Report included compressions.

### Event Timeline

**F. Event Timeline.** 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 in one-minute increments. **NOTE:** This report information will only be included if the event being detailed in the Event Summary Report included compressions.



## Detailed Event Information

**G. Event Information.** Detailed time-stamped listing of event information from start-up of the device to unit shutdown. Also includes device serial number and 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.



EVENT SUMMARY REPORT - RMU-1000			GENERATED - 2018-09-20 15:01:36
EVENT ID - 2018-08-02			
DEVICE NAME - ARM-002			
EVENT INFORMATION			
TIME (LOCAL)	DEVICE EVENT	EVENT DATA	
2018/08/02			
14:42:19	STARTUP		
14:42:19	POWER BUTTON		
14:42:19	BATTERY PLUGGED IN		
	BATTERY SERIAL NUMBER	550001120	
	BATTERY CHARGE	78%	
14:42:21	ADJUST DOWN BUTTON		
14:42:39	ADJUST DOWN BUTTON		
14:42:45	RUN CONTINUOUS		
14:45:14	PAUSE BUTTON		
14:45:16	ADJUST UP BUTTON		
14:45:25	RUN PROTOCOL		
<b>14:45:26</b>	<b>WARN - MOTOR NEEDS POSITION ADJUSTMENT</b>		
14:45:30	ADJUST UP BUTTON		
14:45:30	ADJUST UP BUTTON		
14:45:31	ADJUST UP BUTTON		
14:47:25	RUN PROTOCOL		
<b>14:47:25</b>	<b>WARN - MOTOR NEEDS POSITION ADJUSTMENT</b>		
14:47:28	ADJUST DOWN BUTTON		
14:47:29	ADJUST DOWN BUTTON		
14:47:30	ADJUST DOWN BUTTON		
14:47:34	RUN PROTOCOL		
14:49:54	RUN CONTINUOUS		
14:50:15	POWER BUTTON		
14:50:16	UNIT SHUT DOWN		
14:50:20	HIBERNATION		
	BATTERY SERIAL NUMBER	550001120	
	BATTERY CHARGE	73%	

Device Serial Number - 500002472

Event Start - 2018-08-02 14:42:19

File Type - RML

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For additional assistance, contact Defibtech Customer Service using the contact information below.



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