

Start-Up Screen

Merlin™ Patient Care System

HELP MANUAL



ST. JUDE MEDICAL™

CAUTION: Federal (USA) law restricts this device to sale by or on the order of a physician.

Unless otherwise noted, [™] indicates that the name is a trademark of, or licensed to, St. Jude Medical or one of its subsidiaries. ST. JUDE MEDICAL and the nine-squares symbol are trademarks and service marks of St. Jude Medical, LLC and its related companies.

Pat. <http://patents.sjm.com>

© 2018 St. Jude Medical, LLC. All Rights Reserved.

Contents

Start-Up Screen	1
Supported Devices	1
Start-Up Screen	4
? Button	5
RF Telemetry Status Icon	5
Bluetooth® Wireless Technology Icons	6
Tools	6
Session Records	7
PDFs	7
Preferences	7
Print Screen	8
Export Screen	8
Export Data	9
Rhythm Display	9
Waveform Control	9
Adjust Display	9
ECG Configuration	9
Freeze Capture	10
Print Menu Settings	10
Technical Support	10
Error and Informational Messages	11
No PSA Wand Communication or Merlin™ PSA is not Functioning	11
No PSA Detected	11
Help	11
Problem with Media Device	11
No Media Detected	11
Media Invalid or Not Present	11
Sustained Interruption	11
Older Device	12
Device Not Supported	12
Telemetry Interruption	12
Invalid Parameters Detected	12
On-Screen Keyboard	12
Emergency VVI Programming Interrupted	12
Backup VVI Procedure Interrupted	12
Help Not Provided	13
Requires Connection to Computer	13
BVVI Session Must Be Ended	13
Unable to Restore Original Parameters	13
Check Bluetooth® Wireless Technology Hardware	13
No Monitors Detected	13
Index	14

Start-Up Screen

Contents:

- Supported Devices (page 1)
- Start-Up Screen (page 4)
- ? Button (page 5)
- RF Telemetry Status Icon (page 5)
- Bluetooth® Wireless Technology Icon (page 6)
- Tools (page 6)
- Preferences (page 7)
- Print Screen (page 8)
- Export Screen (page 8)
- Export Data (page 9)
- Rhythm Display (page 9)
- Waveform Control (page 9)
- Adjust Display (page 9)
- ECG Configuration (page 9)
- Freeze Capture (page 10)
- Print Menu Settings (page 10)
- Technical Support (page 10)

Supported Devices

The devices listed in the tables below are supported by the Merlin™ Patient Care System equipped with Model 3330 Software.¹ The table also indicates whether the programmer's telemetry wand should be used with the magnet installed or removed. If you attempt to interrogate a device not listed here, the programmer cannot identify the device.

Note

If you do not know the implanted device's model name or number, interrogate the device without the magnet.

Table 1. Bradycardia devices supported by the Merlin™ PCS

Device	Model Number	Magnet
Accent™ DR	PM2110	Remove
Accent™ DR RF	PM2210	Remove
Accent™ SR	PM1110	Remove
Accent™ SR RF	PM1210	Remove
AddVent™	2060	Install
Affinity™ DC	5230, 5231	Remove
Affinity™ DR	5330, 5331	Remove
Affinity™ SR	5130, 5131	Remove
Affinity™ VDR	5430	Remove
Allure™	PM3120	Remove
Allure Quadra™	PM3140	Remove
Allure™ RF	PM3222	Remove
Allure Quadra™ RF	PM3242	Remove
Anthem™	PM3110	Remove
Anthem™ RF	PM3210	Remove
Assurity™	PM1240, PM2240	Remove
Assurity MRI™	PM1272, PM2272	Remove
Endurity™	PM1160, PM2160	Remove
Endurity MRI™	PM1172, PM2172	Remove
Entity™ DC	5226	Remove
Entity™ DR	5326	Remove
Frontier™ II	5586	Remove

¹ Not all device models are available in all countries.

Table 1. Bradycardia devices supported by the Merlin™ PCS

Device	Model Number	Magnet
Frontier™	5508	Remove
Identity ADx™ DC	5286	Remove
Identity ADx™ DR	5380	Remove
Identity ADx™ XL DR	5386	Remove
Identity™ DR	5370	Remove
Identity™ XL DR	5376	Remove
Identity ADx™ SR	5180	Remove
Identity™ SR	5172	Remove
Identity ADx™ VDR	5480	Remove
Integrity ADx™ DR	5360	Remove
Integrity ADx™ XL DR	5366	Remove
Integrity ADx™ SR	5160	Remove
Integrity ADx™ DR	5346, 5342	Remove
Integrity™ SR	5142	Remove
Integrity™ µ DR	5336	Remove
Integrity™ µ SR	5136	Remove
Microny™ SR+	2425	Remove
Microny™ II SR+	2525	Remove
Microny™ K SR	2535	Remove
Paragon™ III	2314, 2315	Install
Phoenix™ 2	2005, 2008, 2009	Install
Phoenix™ III	2204, 2205	Install
Quadra Allure MP™	PM3160	Remove
Quadra Allure MP™ RF	PM3262	Remove
Regency™ SC+	2402	Remove
Regency™ SCX	2408	Remove
Solus™	2002, 2003	Install
Solus™ II	2006, 2007	Install
Sustain™ XL DC	PM2134	Remove
Sustain™ XL DR	PM2136	Remove
Sustain™ XL SC	PM1134	Remove
Sustain™ XL SR	PM1136	Remove
Synchrony™ II	2022, 2023	Install
Synchrony™ III	2028, 2029	Install
Trilogy™ DC+	2318	Install
Trilogy™ DR+	2360, 2364	Install
Trilogy™ SR+	2260, 2264	Install
Verity ADx™ XL DC	5256	Remove
Verity ADx™ XL DR	5356	Remove
Verity ADx™ XL DR M/S	5357	Remove
Verity ADx™ XL SC	5056	Remove
Verity ADx™ XL SR	5156	Remove
Verity ADx™ XL SR M/S	5157	Remove
Verity ADx™ XL VDR	5456, 5456i	Remove
Victory™	5382	Remove
Victory™ XL DR	5816	Remove
Victory™ DR	5810	Remove
Victory™ SR	5610	Remove
Zephyr™ XL DR	5826	Remove
Zephyr™ DR	5820	Remove

Table 1. Bradycardia devices supported by the Merlin™ PCS

Device	Model Number	Magnet
Zephyr™ XL SR	5626	Remove
Zephyr™ SR	5620	Remove

Table 2. Tachycardia devices supported by the Merlin™ PCS

Device	Model Number	Magnet
Atlas™ DR	V-240, V-242	Remove
Atlas™ VR	V-199	Remove
Atlas™+ DR	V-243	Remove
Atlas™+ HF	V-340, V-341, V-343, V-344	Remove
Atlas™ III+ HF	V-367	Remove
Atlas™+ VR	V-193, V-193C	Remove
Atlas™ II DR	V-265	Remove
Atlas™ II HF	V-365	Remove
Atlas™ II VR	V-168	Remove
Atlas™ II+ DR	V-268	Remove
Atlas™ II+ HF	V-366	Remove
Convert™	V-191	Remove
Convert™+	V-195	Remove
Current™ DR	CD2107-30, CD2107-36	Remove
Current™ DR RF	CD2207-30, CD2207-36, CD2207-36Q	Remove
Current Accel™ DR	CD2215-30, CD2215-36, CD2215-36Q	Remove
Current™+ DR	CD2211-36, CD2211-36Q	Remove
Current™ VR	CD1107-30, CD1107-36	Remove
Current™ VR RF	CD1207-30, CD1207-36, CD1207-36Q	Remove
Current Accel™ VR	CD1215-30, CD1215-36, CD1215-36Q	Remove
Current™+ VR	CD1211-36, CD1211-36Q	Remove
Ellipse™ DR	CD2275-36, CD2275-36Q, CD2311-36, CD2311-36Q, CD2411-36, CD2411-36C, CD2411-36Q, CD2411-36QC	Remove
Ellipse™ VR	CD1275-36, CD1275-36Q, CD1311-36, CD1311-36Q, CD1411-36, CD1411-36C, CD1411-36Q, CD1411-36QC	Remove
Epic™ DR	V-233, V-235	Remove
Epic™ HF	V-337, V-338, V-339	Remove
Epic™ VR	V-197	Remove
Epic™+ DR	V-236, V-239, V239T	Remove
Epic™+ HF	V-352	Remove
Epic™+ VR	V-196, V-196T	Remove
Epic™ II DR	V-255	Remove
Epic™ II HF	V-355	Remove
Epic™ II VR	V-158	Remove
Epic™ II+ DR	V-258	Remove
Epic™ II+ HF	V-356	Remove
Fortify™ DR	CD2231-40, CD2231-40Q	Remove
Fortify™ VR	CD1231-40, CD1231-40Q	Remove
Fortify Assura™ DR	CD2257-40, CD2257-40Q, CD2357-40, CD2357-40C, CD2357-40Q, CD2357-40QC	Remove
Fortify Assura™ VR	CD1257-40, CD1257-40Q, CD1357-40, CD1357-40C, CD1357-40Q, CD1357-40QC	Remove

Table 2. Tachycardia devices supported by the Merlin™ PCS

Device	Model Number	Magnet
Photon™ DR	V-230HV	Remove
Photon™ μ DR	V-232	Remove
Photon™ μ VR	V-194	Remove
Promote™	CD3107-30, CD3107-36, CD3107-36Q	Remove
Promote Accel™	CD3215-30, CD3215-36, CD3215-36Q	Remove
Promote RF™	CD3207-30, CD3207-36, CD3207-36Q	Remove
Promote™ Q	CD3221-36	Remove
Promote Quadra™	CD3245-40, CD3245-40Q	Remove
Promote™+	CD3211-36, CD3211-36Q	Remove
Quadra Assura™	CD3265-40, CD3265-40Q, CD3365-40, CD3365-40C, CD3365-40Q, CD3365-40QC	Remove
Quadra Assura MP™	CD3269-40, CD3269-40Q, CD3369-40, CD3369-40C, CD3369-40Q, CD3369-40QC	Remove
Unify™	CD3231-40, CD3231-40Q	Remove
Unify Assura™	CD3257-40, CD3257-40Q, CD3357-40, CD3357-40C, CD3357-40Q, CD3357-40QC	Remove
Unify Quadra™	CD3249-40, CD3249-40Q	Remove

Table 3. Monitoring devices supported by the Merlin™ PCS

Device	Model Number	Magnet
SJM Confirm™	DM2100, DM2102	Remove
Confirm Rx™	DM3500	Hold the magnet over the device for 3 seconds.

Start-Up Screen

The Start-Up screen provides access to the functions shown in the figure below.

Figure 1. Start-Up screen



1. ? Button (page 5). Opens a window that provides access to the Help manual.
2. Tools button (page 6). Opens a menu for the PSA application, preferences, and other programmer functions.
3. RF Telemetry Status Icon (page 5). Reports the RF communication status for RF-capable devices.

4. Bluetooth® Wireless Technology Icon (page 6).² Reports the connection status of the Bluetooth dongle.
5. Waveform Control buttons (page 9). Open controls for the Rhythm Display's gain and configuration.
6. Rhythm Display (page 9)
7. Adjust Display button (page 9). Opens controls for the Rhythm Display's vector, sweep speed, and filter settings.
8. Freeze button. Freezes the Rhythm Display and opens the Freeze Capture window (page 10).
9. Print Settings button. Opens the Print Settings window. An icon without a cord indicates the programmer is using the internal printer. An icon with a cord indicates the programmer is connected to an external printer (see below). The "PDF" icon indicates that a PDF report is available for export. See PDFs (page 7). To change printers, select Tools > Preferences > Printer (Printer Preferences (page 8)).
10. Printer Status panel
11. Interrogate button
12. Interrogate Monitors button

Figure 2. Printer icons



? Button

The ? button opens a window that provides access to the Help manual. You can also access the manual if you select Tools (page 6) > Educational Materials > Help.

Accessed From: Help button

RF Telemetry Status Icon



For more information on RF communication, consult the Merlin™ PCS User's Manual or select the ? button after you interrogate an RF-capable device.

Table 4. RF telemetry icons

Location	RF Telemetry Status	Icon
Start-Up Screen Icons	Disconnected RF Base Station/Not Working	
	Ready to connect to device	
Application Icons	Active RF telemetry connection	

² Bluetooth® is a registered trademark of Bluetooth SIG, Inc.



Table 4. RF telemetry icons

Location	RF Telemetry Status	Icon
	Inactive RF telemetry connection	
	Only wand telemetry is available	

Bluetooth® Wireless Technology Icons

For more information on the Bluetooth® wireless technology icons³, select the ? button.

Table 5. Bluetooth icons

Bluetooth Status	Icon
The Bluetooth dongle is connected.	
The Bluetooth dongle is disconnected or not working.	

Tools

The Tools menu opens a number of programmer tools, including:

- **PSA.** Opens the PSA application for either the Merlin™ PSA Model EX3100 or the Model 3150 Pacing System Analyzer (Tools > Educational Materials > Help).
- **Session Records:**
 - **Session Records.** Opens archived data (for tachycardia devices only).
 - **PDFs** (page 7). Opens the PDFs window to manage the reports stored as PDFs on the programmer's hard disk.
- **Educational Materials:**
 - **Help.** Opens links for on-line Help for all supported devices.
 - **Demos.** Opens device demonstrations.
- **Maintenance.** Opens utilities for programmer maintenance (for use by St. Jude Medical personnel only).
- **Clinical Studies.** Opens information for studies (for use by St. Jude Medical personnel only).
- **Preferences** (page 7). Opens the Merlin PCS settings for language, date, format, audio, etc.
- **Customer Support.** Provides contact information for Technical Support. (page 10)
- **Print Screen (page 8).** Prints an image of the screen.
- **Export Screen** (page 8). Exports an image to a USB flash drive or floppy drive.

Accessed From: Tools Button

³ Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

Session Records

The Session Records window allows you to search, review, and export programming session records that are recorded on the programmer's hard disk. Each session record contains one or more snapshots of the session captured during programming, measurement, and testing. Each snapshot is a representation of the programmer screen performed when the operation took place. The records can be exported to an external media device or a PC in a format for an external PC database or for Merlin.net.

The programmer does not maintain Session Records for all devices. For more information on a specific device, select Educational Materials > Help, and select the device you are interested in.

CAUTION:

Session Records and PDF Reports are erased from the Merlin PCS after the number of days specified in Data Management Preferences. Make sure you select the time limit from Start-up Screen>Tools>Preferences>Data Management.

Accessed From: Tools menu > Session Records > Session Records

PDFs

Every time you select any Print button to create a report, the Merlin PCS programmer saves the report as a PDF (portable document file⁴). This file can be exported to a flash drive connected to one of the programmer's USB ports. You must install AdobeTM AcrobatTM Reader or Adobe ReaderTM on your PC to view the PDF⁵.

From the PDFs window, you can:

- Check the number of PDFs stored on the programmer's hard disk that have not been exported
- Export all the stored PDFs.
- Export the Most Recent PDFs (created in the last actual session or demo session, including your current session).
- Delete all PDFs.

When you select one of the Export buttons, the Export Data (page 9) screen appears.

The file naming and storing of the PDFs are as follows:

All PDFs are stored in a folder entitled "PDFs."

Subfolder Name: "Date of PDF creation"

Sub-subfolder Name: "Patient Name_Model Number_Device Serial Number" (read from the Patient Data)

File Name: "Device name_Device Model Number_Device Serial Number_Reportname.pdf"

Example: In the PDF folder is a subfolder called "2008-03-22." In this subfolder is a sub-subfolder called "John Smith_PromoteRF_3207-36_201399." Inside the sub-subfolder is the PDF titled: "PromoteRF_3207-36_201399_TestResults.pdf" containing the test results for John Smith on 3/22/2008.

The Merlin PCS can store a total of 30 "Date of PDF creation" subfolders containing PDFs. When 30 subfolders are stored on the programmer, the oldest subfolder is erased when a newer subfolder is created.

CAUTION:

Session Records and PDF Reports are erased from the Merlin PCS after the number of days specified in Data Management Preferences. Make sure you select the time limit from Start-up Screen>Tools>Preferences>Data Management.

Accessed From: Tools menu > Session Records > PDFs

Preferences

The Preferences window contains the following tabs for setting the Merlin PCS options:

- **Date and Time.** Sets the year, date and local time
- **Language & Formats.** Sets the:
 - Display and Help Language
 - Date Format
 - Time Format
 - Number Format
- **ECG**
 - Notch Filter. The ECG Notch Filter Frequency reduces ECG interference from the programmer AC power line frequency. Check with your local authorities for your power line frequency.
- **Audio** (page 8)
- **Printer** (page 8)
- **Wireless.** Sets the wireless communications on or off.

⁴ The programmer does not create a PDF for Freezes printed from the Start-Up screen, the Print Screen function, real-time printing, or on-screen Help.

⁵ Adobe, Acrobat, and Adobe Reader are trademarks of Adobe Systems Incorporated.

- **Data Management.** Sets the time limit for the oldest Session Records (maximum of two years) and PDF Reports stored on the Merlin PCS. The programmer erases all Session Records and PDF Reports stored longer than the defined time limit.

Note

It is important to set an accurate date and time because the device's diagnostic tests, and other functions use the date and time from the programmer.

Accessed From: Tools menu > Preferences

Audio Preferences

This screen contains two panels:

- **General Audio.** Select the On button to allow audio cues for programmer activity. You can also select a volume level. The Off button turns all sounds off (except Charging Audio).
- **Charging Audio** (Tachy devices only). Select the On button for an audio cue when the capacitors charge during a programming session.

Note:

An audio cue is always emitted during charging for an Emergency Shock, regardless of the Charging Audio setting.

Accessed From: Tools menu > Preferences button > Audio tab

Printer Preferences

Every time you select any Print button to create a report, the Merlin™ PCS programmer saves the report as a PDF (portable document file)⁶. This file can be exported to a flash drive connected to one of the programmer's USB ports. You must install Adobe™ Acrobat™ Reader or Adobe Reader™ on your PC to view the PDF.

To view the number of stored PDFs and to export or delete PDFs, select Tools > Session Records > PDFs (page 7).

The Printer Preferences window contains two panels:

- **Selected Printer.** You have three choices:
 - PDF Only (Paperless). Sends reports to the programmer's hard disk as a PDF (paperless printing) with no paper documents.
 - Internal & PDF. Sends the report to the programmer's internal printer and simultaneously creates a PDF on the hard disk.
 - External & PDF. Sends the report to an external USB printer and simultaneously creates a PDF on the hard disk. Before reports can be sent to an external printer, you must first connect the external printer to any one of the USB ports on the programmer. For more information on connecting an external printer, see the Merlin PCS User's Manual.
- **Number of Paper Copies.** This selects how many reports are printed by the internal or external printer whenever a Print button is selected.

To view the number of stored PDFs and to export or delete PDFs, select Tools > Session Records > PDFs (page 7).

Note

Supported Printers. The Merlin PCS can print to many laser jet printers. For a list of compatible printers, contact your St. Jude Medical Representative or Technical Support (page 10).

Accessed From: Tools menu > Preferences > Printer tab

Print Screen

The Print Screen button prints an image of the current screen. To send the image to an external printer, go to the Tools Menu > Preferences > Printer tab and select the External button.

This function does not create a PDF.

For more information on printing, see Print Menu Settings (page 10).

Accessed From: Tools menu > Print Screen button

Export Screen

The Export Screen button opens the Export Data (page 9) window, which allows you to save the current screen as an electronic (.png) file and send the file to any storage device (floppy drive, or flash drive) connected to one of the programmer's USB ports. The Merlin™ PCS detects all connected devices and asks you to select the device to receive the data.

Accessed From: Tools menu > Export Screen button

⁶ The programmer does not create a PDF for Freezes printed from the Start-Up screen, the Print Screen function, real-time printing, or on-screen Help.

Export Data

The Export Data window lists the devices that are currently connected to the programmer so that you can export device and session data for certain patient-tracking software programs.

To export data:

1. Insert the USB connector from a device into one of the three USB ports on the programmer.
The device can be a USB floppy drive, a USB flash drive, or a PC connected to the Merlin™ PCS through a 9-pin serial to USB connector cable. The floppy or flash drive must be powered through the USB drive, not by an external power source.
2. Select the Export Data button.
The programmer lists all connected devices.
3. Select the desired device. If a device hasn't been detected, select Redetect Media.
4. Select Export.
The programmer checks the device and writes data to it. Select the Close button to return to the previous window.

NOTE: If you need assistance importing data into a computer database, contact Technical Support (page 10).

Rhythm Display

The Rhythm Display on the Start-Up screen shows up to five ECG waveforms before you interrogate the device. On the left side are up to five Waveform Control (page 9) buttons that are used to adjust each waveform.

EGMs and Markers do not appear on the Start-Up screen.

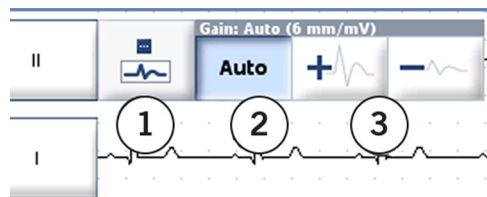
The Rhythm Display allows you to:

- Drag and drop a waveform to a different position.
- Configure the waveform to show a certain vector, change the sweep speed from the Adjust Display (page 9) window and apply the ECG Filter to all waveforms.
- Increase or decrease the waveform Gain setting using the Waveform Control buttons.
- Take a snapshot of the Rhythm Display (see Freeze Capture (page 10)).

Waveform Control

The Waveform Control buttons on the left side of the Rhythm Display control the waveform's appearance. To open the controls, select one of the buttons.

Figure 3. Waveform control buttons



1. The **Configuration** button opens the ECG Configuration (page 9) window.
2. **AutoGain** button allows the programmer to continually and automatically set the gain.
3. The **Plus (+)** and **Minus (-)** buttons allow you to set the gain manually.

Accessed From: Rhythm Display > Waveform Control button

Adjust Display

The Adjust Display window allows you to:

- Select the source for each waveform in the Rhythm Display window.
- Select the Configuration (the ECG Vector) of the waveform.
- Set the Sweep Speed.
- Apply the ECG Filter to reduce electromagnetic interference.

Accessed From: Rhythm Display > Adjust Display button

ECG Configuration

The ECG Configuration window changes the ECG vector on the Rhythm Display (page 9).

Accessed From: Adjust Display > Configuration button

Freeze Capture

The Freeze button captures the most recent 30 s of the waveform and shows the data in the Freeze Captures window. Up to six Freeze Captures are saved in the programmer memory. You can drag and drop any waveform to a new position. The controls on the Freeze Captures window include the:

- **Waveform Control** buttons, including the Hide button, which hides the selected waveform
- **Restore Channels** button, which restores the hidden waveforms
- **Sweep Speed** button
- **Show Calipers** button, which shows calipers that can be moved with button controls to display time measurements for a portion of the freeze
- **Hide Calipers** button, which toggles to the Show Calipers button
- **Scroll** buttons

You can also print the frozen waveform immediately (select the Print button) or at the end of the session (select the Print with Wrap-up button).

Accessed From: Freeze button

Print Menu Settings

The Print button on the Start-Up screen opens the Settings window, which allows you to advance the paper. Select the Printer Preferences (page 8) button to change the number of copies for each report and the type of printer.

Select the appropriate check-mark buttons if you wish to:

- Add the patient's name and ID to the printed report headers. The information comes from the device's memory that can be viewed in the Patient Data window for some devices.
- Add the Clinic Name to the printed report header. Select the blue panel to open the on-screen keyboard and enter the information into the programmer's memory.
- Automatically print the Summary Report on initial interrogation for some devices.

Accessed From: Print button

Technical Support

St. Jude Medical maintains 24-hour phone lines for technical questions and support:

- 1 818 362 6822
- 1 800 722 3774 (toll-free within North America)
- + 46 8 474 4147 (Sweden)
- + 61 2 9936 1200 (Australia)
- manuals.sjm.com

For additional assistance, call your local St. Jude Medical representative.

Error and Informational Messages

No PSA Wand Communication or Merlin™ PSA is not Functioning

If the error message appears after you have verified the connection, there may be a mechanical problem in the PSA Wand Model 3150 or adapter, Merlin PSA Model EX3100, a programmer malfunction, a software problem, or electromagnetic interference. If you have another PSA Wand or adapter or Merlin PSA, connect the replacement and select the Retry button. If the problem continues, contact your St. Jude Medical Representative or Technical Support (page 10).

No PSA Detected

If the error message appears, verify that the Merlin PSA Model_EX3100 is connected. If the problem continues, contact your St. Jude Medical Representative or Technical Support (page 10).

Help

The Help function provides context-sensitive information on programmer and device functions.

When you select the ? button during a session, a Small Help window containing context-sensitive information appears. You can:

- Scroll down the page
- Select the "See More" button to view the information in the large Help window with a Table of Contents, Index, and Search function
- Select the "Search" button to open the Search function in the large Help window

The Large Help window contains:

- Icons for three navigation buttons (Back, Forward, Home) and a Print button
- Tabs for a Table of Contents, an Index, and a Search function
- A topic window with active hyperlinks to other topics.

Print. Select the Print icon to print entire topic.

Search. To search for a specific term, select the Search tab. Then, select the on-screen keyboard icon on the Search button. Type the search term and select the Done button. The Search tab opens with a list of all the entries containing the term.

Table of Contents and Index. Select an entry to display the topic.

Problem with Media Device

The media device is not functioning properly because the device is damaged, is not recognized by the programmer, or is busy.

The programmer can communicate only with USB flash drives, floppy drives, and serial port adapters. Contact your St. Jude Medical representative or Technical Support (page 10) for a list of devices that are compatible with the Merlin™ PCS.

No Media Detected

Reasons for this error message include:

- The media device is not supported by the programmer. Contact your St. Jude Medical representative or Technical Support (page 10) for a list of supported devices.
- The USB port is not functioning. Use another port.
- The device connector is not fully inserted into the port.

Media Invalid or Not Present

Reasons for this error message include:

- The device connector is not fully inserted into the port.
- The media device is full. Select another device or erase enough data to allow room for the file and try again.
- The media device is write-protected or lacks proper read/write permission. Select another device or remove the write-protection or obtain permission and try again.
- The patient-tracking software or the destination PC is not operating. Reboot the PC and restart the patient-tracking software.
- The USB port is not functioning. Use another port.
- The cable for the floppy drive or serial connection is not functioning. Check or replace the cable.

Sustained Interruption

The programmer has tried unsuccessfully to interrogate the device for 15 minutes and has stopped interrogation.

Reasons for this message include:

- The wand is out of range of the device.
- The wand was removed from the programmer.
- Other electronic equipment in the area is interfering with the telemetry.

Either select the End Session button correct any problem and select the Continue Session button.

Older Device

The programmer was unable to communicate with the device because the device may require a magnet.

Other possible reasons for this message include:

- The wand is out of range of the device.
- The wand was removed from the programmer.
- Other electronic equipment in the area is interfering with the telemetry.
- The Model 3530 wand (for the Model 3510/3500 programmer) is connected to the programmer.

Correct any problem and select the Interrogate button.

Device Not Supported

The programmer was unable to communicate with the device because it is not supported or could not be identified.

Attempt to interrogate the device with a Model 3510/3500 programmer.

Telemetry Interruption

Telemetry between the device and the programmer was interrupted.

Reasons for this message include:

- The wand is out of range of the device.
- The wand was removed from the programmer.
- Other electronic equipment in the area is interfering with the telemetry.
- The Model 3530 wand (for the Model 3510/3500 programmer) is connected to the programmer.
- A magnet has been placed in the wand.

Correct any problem and select the Interrogate button.

Invalid Parameters Detected

The programmer detected invalid parameter(s), which also invalidates the recorded diagnostics and episodes. Selecting the Program Nominals button institutes standard or nominal settings in the device.

On-Screen Keyboard

Use the On-Screen Keyboard to enter data.

- **Special Char key.** Select this key and then select the key to display the special character (labeled in green on the key).
- **Inactive Keys.** If the device memory does not support a character, the key may be displayed on the keyboard but it is not active.
- **Repeating Keys.** If you press and hold most keys on the on-screen keyboard, they are not continually typed. The exceptions are the arrow keys, the Space key, the Enter key, and the Backspace key.
- **External Keyboard.** You can use an external keyboard connected to the programmer through any of its USB ports. Both keyboards can operate simultaneously.

Emergency VVI Programming Interrupted

Emergency VVI programming cannot start because the telemetry between the device and the programmer was interrupted.

Reasons for this message include:

- The wand is out of range of the device.
- The wand was removed from the programmer.
- Other electronic equipment in the area is interfering with the telemetry.
- The Model 3530 wand (for the Model 3510/3500 programmer) is connected to the programmer.
- A magnet has been placed in the wand.

Correct any problem and select the Continue Session button or contact Technical Support (page 10) for more information.

Backup VVI Procedure Interrupted

The Backup VVI procedure could not complete because the telemetry between the device and the programmer was interrupted.

Reasons for this message include:

- The wand is out of range of the device.
- The wand was removed from the programmer.
- Other electronic equipment in the area is interfering with the telemetry.
- The Model 3530 wand (for the Model 3510/3500 programmer) is connected to the programmer.
- A magnet has been placed in the wand.

Correct any problem and select the Continue button or contact Technical Support (page 10) for more information.

Help Not Provided

The Merlin™ PCS does not provide context-sensitive help for this topic. Select the See More button to view the Help Table of Contents.

Requires Connection to Computer

Before you can export the data to a computer database, you must connect the computer's serial port to a USB port on the Merlin™ PCS using a USB-to-serial adapter. Contact Technical Support (page 10) for more information.

BVI Session Must Be Ended

You have chosen to cancel the Backup VVI procedure. If you wish to attempt the procedure again, re-interrogate the device. Do not remove the wand until all error messages have been removed. Contact Technical Support (page 10) for more information.

Unable to Restore Original Parameters

An error has occurred during the restoration of new pacemaker software, and the Backup VVI procedure cannot be completed. Contact Technical Support (page 10) for more information.

Check Bluetooth® Wireless Technology Hardware

The Bluetooth® wireless technology accessory on the programmer is not attached correctly or is missing. Check the connection.

No Monitors Detected

The programmer was unable to communicate with the device. For SJM Confirm™ monitors, reposition the wand and try again. For Confirm Rx™ monitors, place a magnet over the monitor for 3 seconds and try again.

Index

B

Backup VVI Procedure Interrupted.....14

C

Clinic Name.....10

D

Devices Supported by Merlin1

E

Emergency VVI Programming Interrupted.....14

Error and Informational Messages13

Export Data.....9

F

Freeze Button4

H

Help.....13

M

Media Device

Media Invalid or Not Present13

No Media Detected13

Problem with Media Device13

O

On-Screen Keyboard14

P

Patient-Tracking Software.....9

Print Menu10

Print Settings10

Printer Icon.....4

Printer Preferences8

Problem13

PSA Wand Application

PSA Wand, No Communication13

R

RF Telemetry Status Icon.....5

S

Start-Up Screen4

Supported Devices1

T

Telemetry, Sustained Interruption13

St. Jude Medical
Cardiac Rhythm
Management Division
15900 Valley View Court
Sylmar, CA 91342 USA
+1 818 362 6822

St. Jude Medical
Coordination Center BVBA
The Corporate Village
Da Vincilaan 11 Box F1
1935 Zaventem
Belgium
+32 2 774 68 11

sjm.com



2018-01
ARTEN100165080 A

100165080