

# Crit-Line<sup>®</sup> Printer User's Guide

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### 1 Scope

#### 1.1 Identification

The CLM Printer program provides a means by which data generated by Crit-Line units can be printed and/or saved to a file.

#### 1.2 System Requirements

1. The CLM Printer program is compatible with Microsoft Windows 7 and Windows 10.

#### 1.3 Document Review

The purpose of this document is to provide a means by which the user of the CLM Printer program can successfully load and process critline unit patient data.

## 2 Installation



**Note**: This installation is for CLM Printer versions 1.6 and later. If the host system has an existing installation of a previous version of the CLM Printer application perform the following steps prior to installation of the updated application:

- 1. Close the CLM Printer application.
- 2. Use the Device Manager to uninstall the application.

Note: This may require administrative privileges.

**Note:** The instruction 'click' refers to pressing the left mouse button.

- 1. Insert CLM Printer installation media into the Host PC.
- 2. Run the installer program setup.exe, in the root directory of the installation media.
- 3. Follow the installation wizard instructions.

😸 CImPrinter			
Welcome to the ClmPrint	er Setup W	ïzard	
The installer will guide you through the ste	ps required to insta	ll ClmPrinter on your	computer.
WARNING: This computer program is pro Unauthorized duplication or distribution of or criminal penalties, and will be prosecute	tected by copyright this program, or any ed to the maximum of	law and internation y portion of it, may re extent possible unde	al treaties. ssult in severe civil er the law.
	Cancel	< Back	Next >

Figure 2-1 Click "Next"

😸 CImPrinter	
Select Installation Folder	
The installer will install ClmPrinter to the following folder.	
To install in this folder, click "Next". To install to a different folder, enter it be	low or click "Browse".
Eolder: C:\Program Files\Microsoft\CImPrinter\	Browse Disk Cost
Install ClmPrinter for yourself, or for anyone who uses this computer:	
Everyone	
© Just me	
Cancel < Back	Next >

Figure 2-2 Click "Everyone" then click "Next"

UmPrinter			
Confirm Installation			
The installer is ready to install ClmPrinter on	your computer.		
Click "Next" to start the installation.			
[	Cancel	< Back	Next >

Figure 2-3 Click "Next"

闄 CImPrinter			
Installing ClmPrinter			
CImPrinter is being installed.			
Please wait			
	Cancel	< Back	Next>

Figure 2-4 Wait for installation to be completed.

😸 CImPrinter	-	- L.	
Installation Complete			
ClmPrinter has been successfully installed	L		
Click "Close" to exit.			
	Cancel	< <u>B</u> ack	Close

Figure 2-5 Click "Close"

4. Restart the system to activate the application. The first time the program runs the following screen will be displayed:

Select COM Port	Job Count 0	Output V Print File Image File	Include in file name Use PID Use Name Use PID and Name None	Radio Type
File Directory				
: \Users \Public \Documer	nts\			Browse

Figure 2-6 CLM Printer Dialog Window

5. Proceed to Setup



**Note**: The installation application has generated a shortcut to the system Startup folder. The CLM Printer application will automatically load following a system start/restart.

## 3 Setup

The first time the program runs a dialog window appears to allow the user to configure the program.



**Note**: If the system is using the Telegesis ZigBee radio network:

- 1. Assure that the Telegesis USB drivers have been installed.
- 2. Insert a Telegesis USB ZigBee radio into an available USB port on the host PC.
- 3. Use the Device Manager to identify the COM port assigned to the Telegesis ZigBee radio.
- 1. If not already active, activate the CLM Printer dialog window (See Figure 2-6) by clicking the CLM Printer minimized button located on the Windows program bar (See Figure 3-1).



Figure 3-1 CLM Printer minimized button.

2. Communications port selection. Click on the COM port list button. This will display a list of available communications ports. Select the communications port that will be used to communicate with the Crit-Line devices (See Figure 3-2).

CLMPrinter V1.6				
Select COM Port	Job Count 0	Output V Print File Image File	Include in file name	Radio Type ConnexLink Telegesis
C:\Users\Public\Documer	its\			Browse

Figure 3-2 Communications port selection

3. Output Selection. The CLM Printer application allows the data from Crit-Line units to be printed on the system default printer and/or stored to files. JPEG (\*.jpg) image files of the reports can also be generated by selecting the <u>Image File</u> check box(See Appendix B for sample files). To activate/deactivate an output mode click the corresponding check box (See Figure 3-3)

CLMPrinter V1.6				
Select COM Port COM1 Clinic Code	Job Count 0	Output Print File Image File	Include in file name	Radio Type OcnnexLink Telegesis
File Directory C:\Users\Public\Documen	its\			Browse

Figure 3-3 Output selection

4. File naming. The CLM Printer application allows the output and image file names to include the Patient ID and or Patient Name. To select the desired file naming convention click the corresponding radio button (See Figure 3-4)

CLMPrinter V1.6 Select COM Port	Job Count	Output	Include in <del>file name</del> Ise PID Use Name	Radio Type  ConnexLink  Telegesis
Clinic Code	Ilinic Code	🔲 Image File	Use PID and Name	
C: \Users\Public\Documer	nts\			Browse

Figure 3-4 File name selection

5. Radio Type. The Crit-Line IV devices have an additional option which uses a Telegesis ZigBee radio network. The ZigBee network interfaces with USB ports on the host PC and Crit-Line IV panel PC. To select the desired radio type select the corresponding radio button (See Figure 3-5)

Note: The printer software can also be used to capture data wirelessly from 2008T hemodialysis machines that have the wireless data card installed. However, wireless printing is not available for 2008T hemodialysis machines with software version 2.81 or later. Please contact your sales representative concerning other options for retrieving treatment data.

Select COM Port	Job Count	Output	Include in file name	Radio Type
COM1 -	0	V Print	Use PID	ConnexLink
		File	Use Name	🔘 Telegesis 🌖
Clinic Code		Image File	O Use PID and Nar	ne
🔲 Use (	Clinic Code		None	
File Directory				
: \Users\Public\Docume	nts\			Browse

Figure 3-5 Radio type selection

6. File directory selection. To select the destination file directory click the Browse button (See Figure 3-6) and follow the directory path to the target directory. Note: The target directory must exist prior to being selected.



Note: The target directory must exist prior to being selected.

The default directory is "C:\Users\Public\Documents\"

CLMPrinter V1.6				
Select COM Port	Job Count 0	Output V Print File Image File	Include in file name	Radio Type © ConnexLink © Telegesis e
File-Directory C:\Users\Public\Documen	ts			Browse

Figure 3-6 File directory selection

- 7. Clinic Codes. To allow flexibility with multiple installations a clinic code may be assigned to individual clinics. When selected, the clinic codes are included in the output file name. To include the clinic code in output file names:
  - a. Enter the clinic code in the Clinic Code edit box.
  - b. Check the "Use Clinic Code" check box (See Figure 3-7).

CLMPrinter V1.6 Select COM Port	Job Count	Output	Include in file name	Radio Type ConnexLink Telegesis
File Directory C:\Users\Public\Document	nic Code	🔲 Image File	○ Use PID and Name ○ None	Browse

Figure 3-7 Clinic codes

8. Job Count. The Job Count display box maintains a counter indicating how many patient runs have been processed by the CLM Printer application since the last application start.



**Note**: Following the initial configuration, future application starts will be in minimized mode.

## 4 Using the CLM Printer Application

The CLM Printer application is designed to run as a background process which normally runs in minimized mode. User intervention should be limited to configuration modifications.

Patient run file names are generated using the following format:

<fdir>CCCC\_Hsn\_YYYYMMDD\_PPPP\_NNNN where: <fdir> = Destination file directory CCCC = Clinic Code (Optional) H = 'H' sn = Station Number YYYY = Year MM = Month DD = Day PPPP = Patient ID (Optional) NNNN = Patient Name (Optional)

Example : "C:\DSIData\H27\_20070227\_1234567.txt" refers to a file :

- Stored in the directory "C:\DSIData"
- Generated by the critline unit station 27
- File created on February 27, 2007
- Patient #1234567



**Note**: The Crit-Line IV uses a 19 character Patient ID which can be configured to be a combination of Patient ID and Patient Name. The Crit-Line III TQa uses a separate 4 character Patient ID and a 12 character Patient Name.

Note: See Appendix B for sample files.

## 5 Appendix A: Telegesis ZigBee Radio Driver Installation

Telegisis ZigBee drivers must be installed if the CLM Printer application is to be configured to interface with the Telegesis ZigBee radio network. Use the following steps to install the Telegesis ZigBee drivers:

- 1. Insert CLM Printer installation media into the Host PC.
- 2. Select the "TelegesisUSB\_Driver(6.1) folder.
- 3. Run the installer program TGvcpInstaller.exe.
- 4. Follow the installation wizard instructions.

🚜 Telegesis USB Device Driver Installer		×
Telegesis		
Installation Location:	Driver Version 6.1	
C:\Program Files\Telegesis\USBDriver		
Change Install Location	Install Cancel	

Figure 5-1 Telegesis Driver Installation. Click "Install"





Figure 5-3 Telegesis Driver Installation Complete. Click "OK"



**Note**: It is recommended that the Telegesis ZigBee radio drivers be installed prior to the installation of the CLM Printer application.

The installation may require administrative privileges.

## 6 Appendix B

#### 6.1 Standard Critline Output Data

0000,0002,CL0002,11/21/2015,00:14:46, 0,000,35.930, 0.000,93.670,00,0 0000,0002,CL0002,11/21/2015,00:14:46, 0,001,35.907, 0.065,93.607,00,0 0000,0002,CL0002,11/21/2015,00:14:46, 0,002,35.837, 0.260,93.533,00,0 0000,0002,CL0002,11/21/2015,00:14:46, 0,003,35.783, 0.410,93.520,00,0 0000,0002,CL0002,11/21/2015,00:14:46, 0,004,35.777, 0.429,93.097,00,0 0000,0002,CL0002,11/21/2015,00:14:46, 0,005,35.760, 0.475,93.163,00,0

Field 1 = Always 0 Field 2 = Patient ID Field 3 = Patient Name Field 4 = Date Field 5 = Start Time Field 6 = Minutes since "Start Time" Field 7 = Hematocrit (Hct) Field 8 = Percentage change in blood volume (% $\Delta$ BV) Field 9 = Oxygen saturation (O<sub>2</sub> Sat) Field 10 = Status Field 11 = Event

#### 6.2 JPEG Report Image File

