

## **DX-D 100** Type 5410/050

SB No. 73

**DX-D 100 Wireless** Type 5411/050

Type 5411/300

SB No. 68

DD+DIS143.15E

## Service Information Bulletin

This Bulletin is for information only.

Revised information for LED status indicator: Changes in SSerialConfigXML.xml file required during software installation

# **Optional upgrades to Version 7.0:** Installation of LED Status Indicator and Bluetooth

#### **Task**

Timing		Category		
Next service	0	Apply at all sites		
	0	Apply at affected sites as listed below		
	•	Optional to improve functionality of product		

#### Task Tracking

After completion of your task the following entry in your Service Report is required: DD+DIS143.15E \* Insert the document number into the field "Comment" (SMS form).

#### Purpose of this document:

This document contains installation instructions for optional components to upgrade the DX-D 100 / DX-D 100 Wireless system to Version 7.0:

- LED Status Indicator
- Bluetooth Stick

Release date: 08-2018

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## **List of contents**

1	Introdu	uction	3
2	LED S	tatus Indicator	4
	2.1	Prerequisites	4
	2.2	Instructions	5
	2.2.1	Hardware installation	5
	2.2.2	Software installation	13
2.	2.3	Verification	15
3	Parani	UD100 Bluetooth Stick	16
	3.1	Prerequisites	16
	3.2	Instructions	17
	3.2.1	Software installation	17
	3.2.2	Hardware installation	19
	3.3	Verification	23
4	Keywo	ords	23
5	Versio	n history	23



## 1 Introduction

With DX-D 100 / DX-D 100 Wireless Version 7 the following new components can be upgraded optionally:

USB Bluetooth Stick

The Bluetooth stick can be used to connect accessories, for example:

- Keyboard
- o Touchpad
- o Mouse
- Barcode reader



Figure 1

LED Status Indicator ("Beacon Light")

The status indicator is a LED bar which is placed under the control console frame. It indicates the status READY / PREP status or the X-ray exposure status.

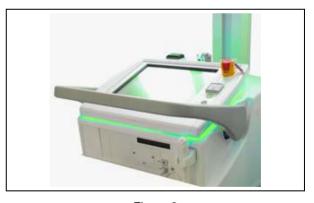


Figure 2



## NOTE:

For more information concerning DX-D 100 / DX-D 100 Wireless Version 7 refer to Service Bulletin "Release of System version 7.0" with Document ID  $\underline{51228746}$ .



### 2 LED Status Indicator

## 2.1 Prerequisites



#### SOFTWARE:

Software driver installer for LED Status Indicator:
 "CP210x\_VCP\_Win\_XP\_S2K3\_Vista\_7.exe" available in the Agfa Medimg Library
 Direct Radiography > DX-D 100 > Software
 Direct Radiography > DX-D 100 Wireless > Software



#### SPARE PARTS:

- Tie wrap (commercially available: Acquire locally)
- SC+A8665-01 Upgrade Beacon Light



Figure 3 - Package "Upgrade Beacon Light"



#### TOOLS:

Standard service tool kit



#### REFERENCED DOCUMENTS:

- DX-D 100 Wireless V 7.0 Service Manual
   Direct Radiography > DX-D 100 Wireless > DX-D 100 Wireless V7 > Service
   Manual, Document ID 51229591
- DX-D100 V 7.0 Service Manual
   Direct Radiography > DX-D 100 > DX-D 100 V7 > Service Manual,
   Document ID 51228328
- DX-D 100 / DX-D 100 Wireless Mobile X-Ray Unit Service Manual
   Direct Radiography > DX-D 100 > DX-D 100 Generic > Service Manual
   Document ID 41600560



#### 2.2 Instructions



#### **REQUIRED TIME:**

2 hours

#### 2.2.1 Hardware installation

- (1) Shut the unit down.
- (2) Disconnect it from the mains.
- (3) Remove the touch screen frame.



#### NOTE:

For details refer to the Agfa Medimg Library
Direct Radiography > DX-D 100 > Service Manual > DX-D 100 / DX-D 100 Wireless Mobile X-Ray Unit - Service Manual, chapter 2.2, Document ID 41600560.

- (4) Remove the detector box cover
- (5) Remove the front cover.
- (6) Unplug the Anderson connector J1 and J1 from the battery test board to isolate the voltage from the batteries.





Figure 4 Figure 5



(7) Remove screws to get access to PC Module, Generator Front Panel and stand-alone module. See figures below.







Figure 6 Figure 7 Figure 8

(8) Mount the LED Status Indicator adaptation board. See figure for the position of the fixing screws.



Figure 9



- (9) Mount the bracket of the power supply with the four screws.
- (10) Mount the power supply.



Figure 10

- (11) Mount the four plastic isolators on the stands off (see Figure 12).
- (12) Mount the warning light PCB with two nylon washers and two screws on the lower part.





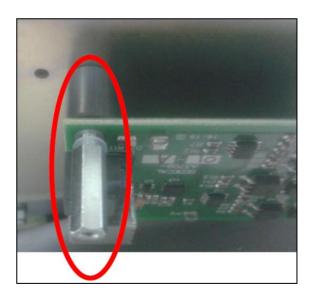


Figure 12



- (13) Remove the plastic protection cover.
- (14) Connect the cable to the power supply.
- (15) Secure the connection with the retaining clip.
- (16) Connect the other end of the cable to the relay K8 points 14, 32 and GND.

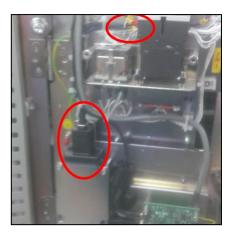


Figure 13

- (17) Connect the following cables at the warning light PCB:
  - Cable from the Power Supply
  - USB Cable
  - Cable to supply the LEDs stripe



Figure 14



- (18) Route the installed wires according to Figure 15 and fix them with tie wrap.
- (19) Connect the USB cable to the PC.



Figure 15

(20) Install the edge protective strip on the frame.



Figure 16



- (21) Clean the inner area of the TPC Frame-Cover with alcohol.
- (22) Install the adhesive LED strip next to the edge of the frame.
- (23) Connect the RGB cable.





Figure 17

Figure 18

- (24) Re-connect J1 (Anderson) connector previously unplugged in step (6).
- (25) Plug the unit to the mains to set the unit in charge mode.





## **IMPORTANT:**

Verify that the green power line connection lamp lights to ensure that the charge is active before reconnecting J1 on the battery test board.

(26) Re-connect J1 on the battery test board.



Figure 19



Figure 20



(27) Mount the new metallic cover with the screws used for the original plastic cover.



Figure 21

(28) Mount the new plastic cover on the warning light PCB.



Figure 22

- (29) Close the PC module.
- (30) Close the generator front panel.
- (31) Close stand-alone module.
- (32) Mount the covers.
- (33) Connect the RGB connector (LEDs stripe).
- (34) Mount the touch screen frame.



#### 2.2.2 Software installation



## NOTE:

Observe the compatibility with XRDI/Windows versions:

LED status indicator software	Windows version	XRDI version
CP210x_VCP_Win_XP_ S2K3_Vista_7.exe	WIN 7	With all versions up to XRDI 19 (or higher)
	WIN 10 *	With XRDI 19 (or higher)

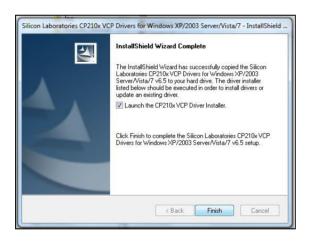
<sup>\*</sup> status 08-2018: not released yet

- (1) Copy the installer file "CP210x\_VCP\_Win\_XP\_S2K3\_Vista\_7.exe" to a USB Stick.
- (2) Execute the installer and follow the installation wizard.



#### NOTE:

The installer can be also copied and executed in the C:\Drivers folder.



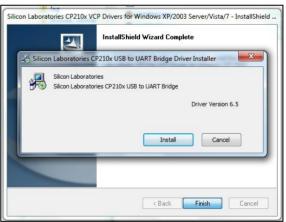


Figure 23 Figure 24

(3) Go to "Devices and Printers" in the control panel to see the port assigned to the device. See Figure 25.



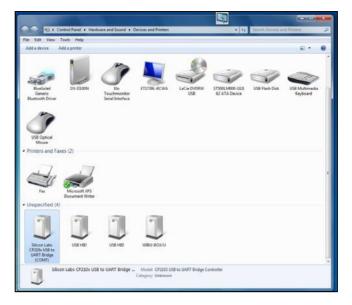


Figure 25 - COM7 is the assigned port in this example.

- (4) Open a text editor.
- (5) In the editor, open the **Leds.xml** file in the **C:/Agfa/Healthcare/Sedecal** directory.
- (6) Replace the x with the port number obtained in step (3) in the line <port>x</port> (e.g.: <port>7</port>)



#### NOTE:

Make sure that the port number is the assigned port number.

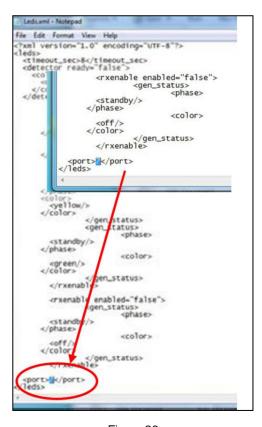


Figure 26

(7) Close the editor.



- (8) Save the **Leds.xml** file.
- (9) Open SSerialConfigXML.xml file in the C:/Agfa/Healthcare/Sedecal directory.
- (10) In the text file, search for <LED> </LEDS>
- (11) Change the value to 1 (LEDS>1</LEDS>)
- (12) Close the editor.
- (13) Save the **SSerialConfigXML.xml** file.
- (14) Reboot the unit.

## 2.3 Verification

- (1) Verify the operation of the LED Status Indicator from the user application (NX):
  - Unit in Ready for exposure and PREP: GREEN light should be on.
  - Unit in X-Ray emission: YELLOW light should be on.



## 3 Parani UD100 Bluetooth Stick

## 3.1 Prerequisites



#### SOFTWARE:

 Parani-UD100\_CDROM Bluetooth stick driver is preinstalled at the Bluetooth dongle itself and available for download via Agfa Medimg Library

Direct Radiography > DX-D 100 > Software
Direct Radiography > DX-D 100 Wireless > Software



#### **SPARE PARTS:**

- Tie wrap (commercially available: Acquire locally
- SC+A521140-01 Kit Upgrade Bluetooth, which includes:
  - USB Bluetooth stick (dongle)
  - Blue USB Cable
  - Fixation tie--wrap and screw.



Figure 27



#### TOOLS:

Standard service tool kit



#### REFERENCED DOCUMENTS:

- DX-D 100 Wireless V 7.0 Service Manual
   Direct Radiography > DX-D 100 Wireless > DX-D 100 Wireless V7 > Service
   Manual, Document ID 51229591
- DX-D100 V 7.0 Service Manual
   Direct Radiography > DX-D 100 > DX-D 100 V7 > Service Manual,
   Document ID 51228328



## 3.2 Instructions



#### **REQUIRED TIME:**

1 hour

#### 3.2.1 Software installation



#### **IMPORTANT:**

Before connecting the Parani UD100 Bluetooth stick:

- Uninstall any Bluetooth driver, if already installed before
- Install Bluetooth software as described below.
- (1) Power the system on.
- (2) Copy the driver software from Bluetooth stick to a USB stick.
- (3) Insert the stick into the laptop.

The AutoPlay functionality will ask what to do:

(4) Select Open folder to view files.



Figure 28

- (5) Navigate to the folder "Instal\_files".
- (6) Execute the **setup.exe** file.
- (7) Click on "Install Bluetooth Utility / Driver". The Choose Setup Language dialog box appears.
- (8) Select a language.
- (9) Click **OK**.



The InstallShield wizard starts.

(10) Follow the instructions of the wizard to install the Bluetooth driver.



Figure 29



#### 3.2.2 Hardware installation

- (1) Shut the unit down.
- (2) Disconnect it from the mains.
- (3) Remove the touch screen frame.



#### NOTE:

For details refer to the Agfa Medimg Library
Direct Radiography > DX-D 100 > Service Manual > DX-D 100 / DX-D 100 Wireless Mobile X-Ray Unit - Service Manual, chapter 2.2, Document ID 41600560.

- (4) Remove the detector box cover
- (5) Remove the front cover.
- (6) Unplug the Anderson connector J1 and J1 from the battery test board to isolate the voltage from the batteries.





Figure 30 Figure 31



(7) Remove highlighted screw to get access to the PC Module.



Figure 32



- (8) Mount the Blue USB cable.
- (9) Fix the cable with tie wrap and screws on the door (see figure below).
- (10) Connect the USB cable to an empty USB port.



## NOTE:

The Bluetooth stick can also be connected to a USB port on the front of the PC if there is no USB Port available at the back.

(11) Plug the Parani Bluetooth Stick into the USB port.

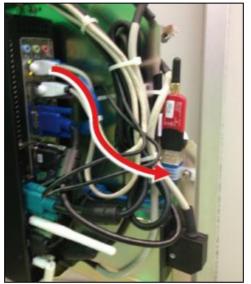




Figure 33 - Example installation from DX-D 100 Wireless



Figure 34 - Example installation from DX-D 100



(12) Plug the unit to the mains to set the unit in charge mode.



#### **IMPORTANT:**

Verify that the green power line connection lamp lights to ensure that the charge is active before reconnecting J1 on the battery test board.

(13) Re-connect J1 on the battery test board.







Figure 35

- (14) Close the PC Module and tighten corresponding screws.
- (15) Close the generator front panel.
- (16) Mount the covers.
- (17) Mount the touch screen frame.



## 3.3 Verification

- (1) Turn on the DX-D 100 / DX-D 100 Wireless.
- (2) Check if Bluetooth device is able to connect.

## 4 Keywords

Light, LED, Bluetooth, dongle

# 5 Version history

Version	Change	Date
1.0	Initial version	12-2015
2.0	Added information for software installation of LED status indicator in section 2.2.2:	08-2018
	Compatibility matrix XRDI/Windows	
	The SSerialConfigXML.xml file must be changed as well.	