AGFA *Agfa*

DX-D 100
DX-D 100 Wireless

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Type 5411   No. 146

Radiology Solutions *Services*

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Service Information Bulletin

This Bulletin is for information only.

Increasing the accuracy of the VacuDap 1580013 internal dose meter

Task

Timing		Category	
⦿	**Next service**	◯	**Apply at all sites**
		◯	**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:	**69323357**	*
* Insert the document number into the field "Comment" (SMS form).		

Purpose of this document:

This document provides a configuration instruction to increase the accuracy of the VacuDap 1580013 internal dose meter.

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10-2019

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1   Introduction

The currently installed VacuDap 1580013 internal dose meter has two modes (high resolution and high rate).

Currently the high rate is used. This high rate mode is not compliant with the DIN60580 norm and IEC_60580_ed2.0 for paediatrics as the lowest value should be 0.1 cGym2.

The high resolution mode will support this functionality.

This document provides the instruction to switch to high resolution mode.

(!) IMPORTANT:

The high resolution mode is limited to a max dose rate = 4750 uGym2/s (= Dose Area product)

High rate max = 30000 uGym2/s. This can be reached if to high KV settings are used.

Some examples:

150kV 250mA 160ms
798uGym2
->4987 uGym2/s

145kV 250mA 160ms
798uGym2
->4987 uGym2/s

140kV 250mA 160ms
798uGym2
->4987 uGym2/s

135kV 250mA 160ms
771uGym2
->4818 uGym2/s

(1)   Adapt the serial configuration as described in section 3 Instructions of this document.

2   Prerequisites

TOOLS:
- Standard service tool kit
- Service PC with serial port or USB to serial port (RS 232) converter
- HyperTerminal software installed on this Service PC

IMPORTANT:

The installation and service of the product(s) described herein is to be performed by qualified personnel who are employed by Agfa NV or one of its affiliates or who are otherwise authorized by Agfa NV or one of its affiliates to provide such services.

IMPORTANT:

Strictly observe all safety directions within the "Generic Safety Directions", Document ID 11849633.

3   Instructions

REQUIRED TIME:
- Approx. 30 minutes for serial configuration
- Approx. 5 minutes for verification

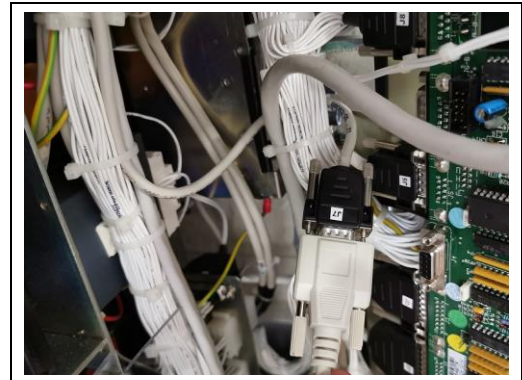(1)   Disconnect the connector DB9 connected on J7 of the ATP console.

Figure 1

(2)   Connect this connector to
        a serial port of the Service PC.

Figure 2

(3)   Turn ON the generator and reset the error 41 or error 42.

(4)   Start **HyperTerminal** on the Service PC with default settings.

(5)   Set the serial Com Port used in the computer in the Terminal software
        that is used.

(6)   Set the serial configuration
        as shown in figure 3.

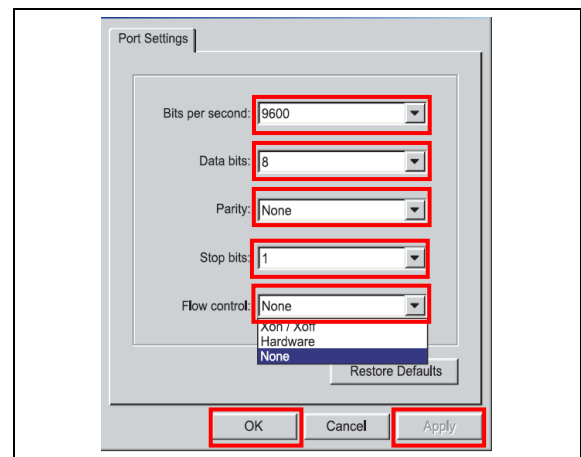(7)   Click **Apply**.

(8)   Click **OK**.

Figure 3

NOTE:

Make sure that the Terminal is configured to send the command <crlf> (CR = Carriage
return and LF = Line Feed) when pressing ENTER on the keyboard.
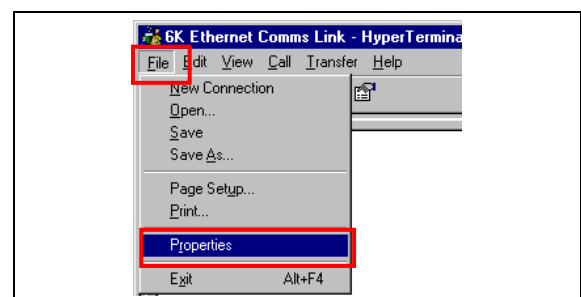
(9)   Click **File**.

(10)   Click **Properties**.

Figure 4

(11) Click **Settings**.

(12) Click **ASCII Setup**.

(13) Select **Send line ends with line feeds** and **Echo typed characters locally**.
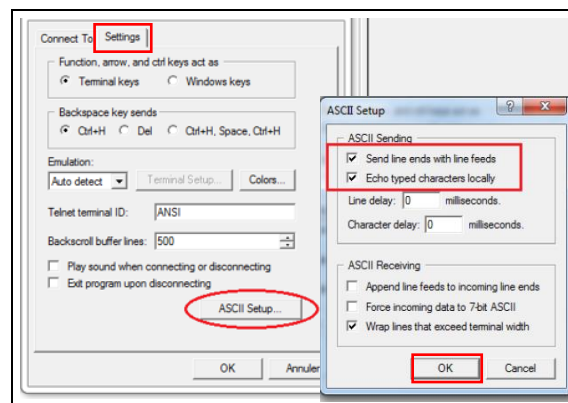
(14) Click **OK**.

Figure 5

(15) In the terminal, write the following command:

- To set the Vacudap to High RES write the following command
  - o **Acl1** and press **ENTER**
  - o **Aw** and press **ENTER**
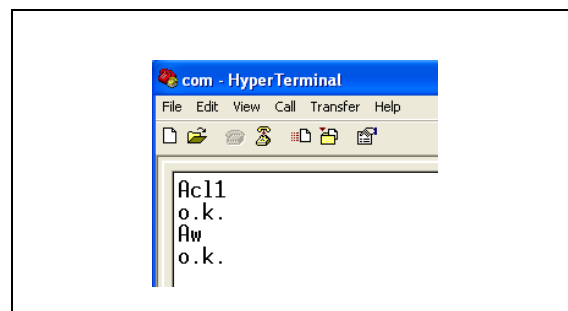
  The DAP meter will answer with an **o.k.**.

Figure 6

- To set the Vacudap to High RATE write the following command
  - o **Acl0** and press **ENTER**
  - o **Aw** and press **ENTER**

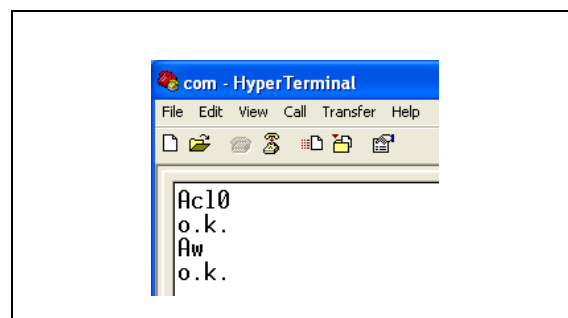 The DAP meter will answer with an **o.k.**.

Figure 7

(16) Connect the DB9 connector to the J7 of the ATP console and reboot the unit.

4   Verification

Make an exposure which lead to a DAP lower than 1 cGy cm2 but higher 0.1 cGy cm2. Check that 2 digits behind the decimal point are shown, for example 0.18 cGy cm2.

5   Keywords

Internal dose meter, VacuDap, High res - High rate

6   Version history

Version	Change	Date
1.0	Initial Version	10-2019