User's Manual

Dosimeter Setting Device System NRZ

For Dosimeter NRF series

(Units: mSv Version:0.26 English)

Preface

Thank you for purchasing the Dosimeter Setting Device; a product by FUJI ELECTRIC CO., LTD. This User's Manual is intended to provide the descriptions of name of parts, functions, and operational instructions for proper use of the product. Please read this manual carefully before operating the Dosimeter Setting Device.

Notes on Safety

	**Do not use the Setting Device if any smoke, odor, or noise is present.**
	**Do not insert not designated socket.**
	**Do not use cables other than provided.**
	**Do not disassemble, repair, or alter the Dosimeter Setting Device.**
 **CAUTION**	
	**Use the dosimeters with power ON.** **May lost data if power turned OFF.**

Table of Contents

1. Introduction

1.1 Overview

The Dosimeter Setting Device is designed for acquiring data from/ changing settings of the Pocket Dosimeter NRF via its infrared data communication interface. This device provides features such as reading out configurations/ cumulative dose from the dosimeter, and writing PC-entered values into backward. The reading trend that is read out from the dosimeter can be exported in a text format. The Dosimeter Setting Device Program supplied with the Dosimeter Setting Device (hereinafter, the Program) is based on the Microsoft® Windows® operating system.

1.2 Product Package

(1)	Dosimeter Setting Device	1
(2)	Software CD-ROM	1
(3)	User's manual	1

2. Mechanical characteristics

2.1 General

(1) External Dimensions : For NRF3 and 4: 76×94.5×59.5mm
(excluding protrusions)

(2) Basic functions:

1. Reading out configurations and cumulative data from dosimeters
2. Writing user-edited configurations to dosimeters
3. Data trending and display in provided graph formats.

(3) Peer : Electronic dosimeter NRF series

(4) Temperatures : 0 to 40℃

(5) Humidity : 30 to 85%

(6) Power supply : DC4.5 to 6.0 V (supplied from a computer)

2.2 Required Environment

The following hardware of (1) and software of (2) with latest versions are required

(1) Hardware

One set of PC/AT compatible platform and peripherals (hereinafter, PC) that meet the following specifications

・CPU : Pentium 2GHz, or greater
・Memory : 1GB, or greater
・Hard Drive : Free disc space of 20 MB, or greater
・Display : Resolutions 800 × 600, or greater
・Communications Interface : USB × 1ch
・Others : Mouse and keyboard

(2) Software

The PC mentioned in (1) should have the following software installed.

・Operating system : Windows®7 operating system

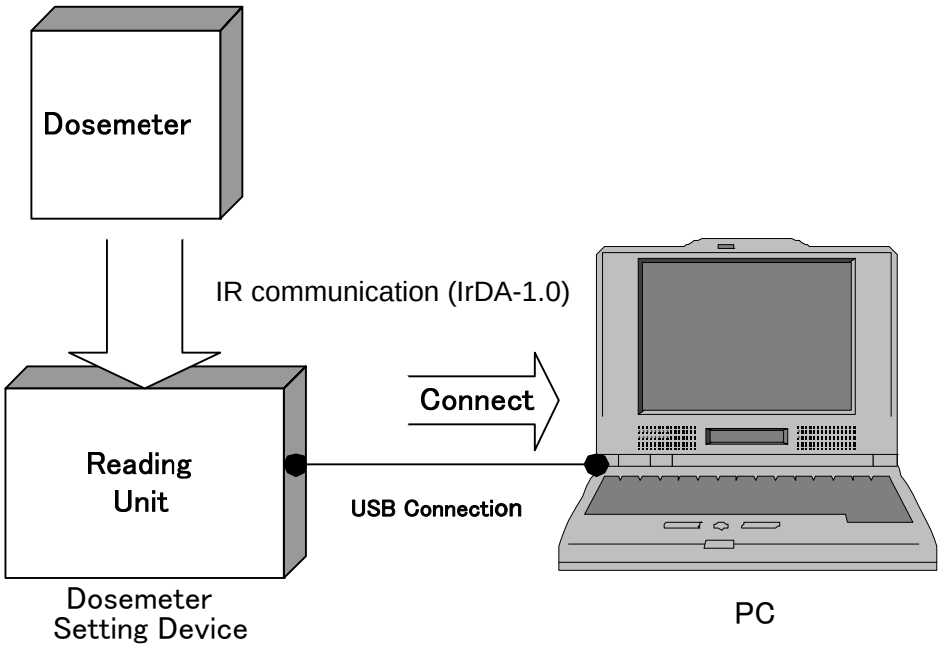
3. Device structure

- Common structure to both of NRF 3 & NRF4 series

4. Descriptions and setting-ups

4.1 System Configuration

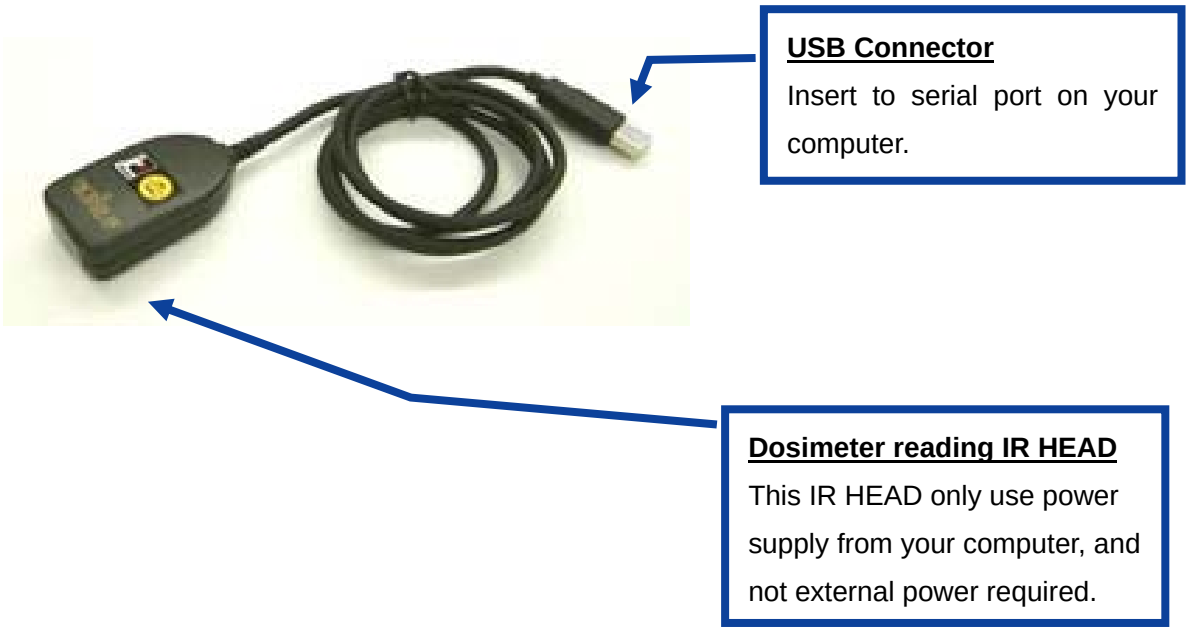
System Configuration of the Dosimeter Setting Device.



System Configuration

4.2 Product configuration

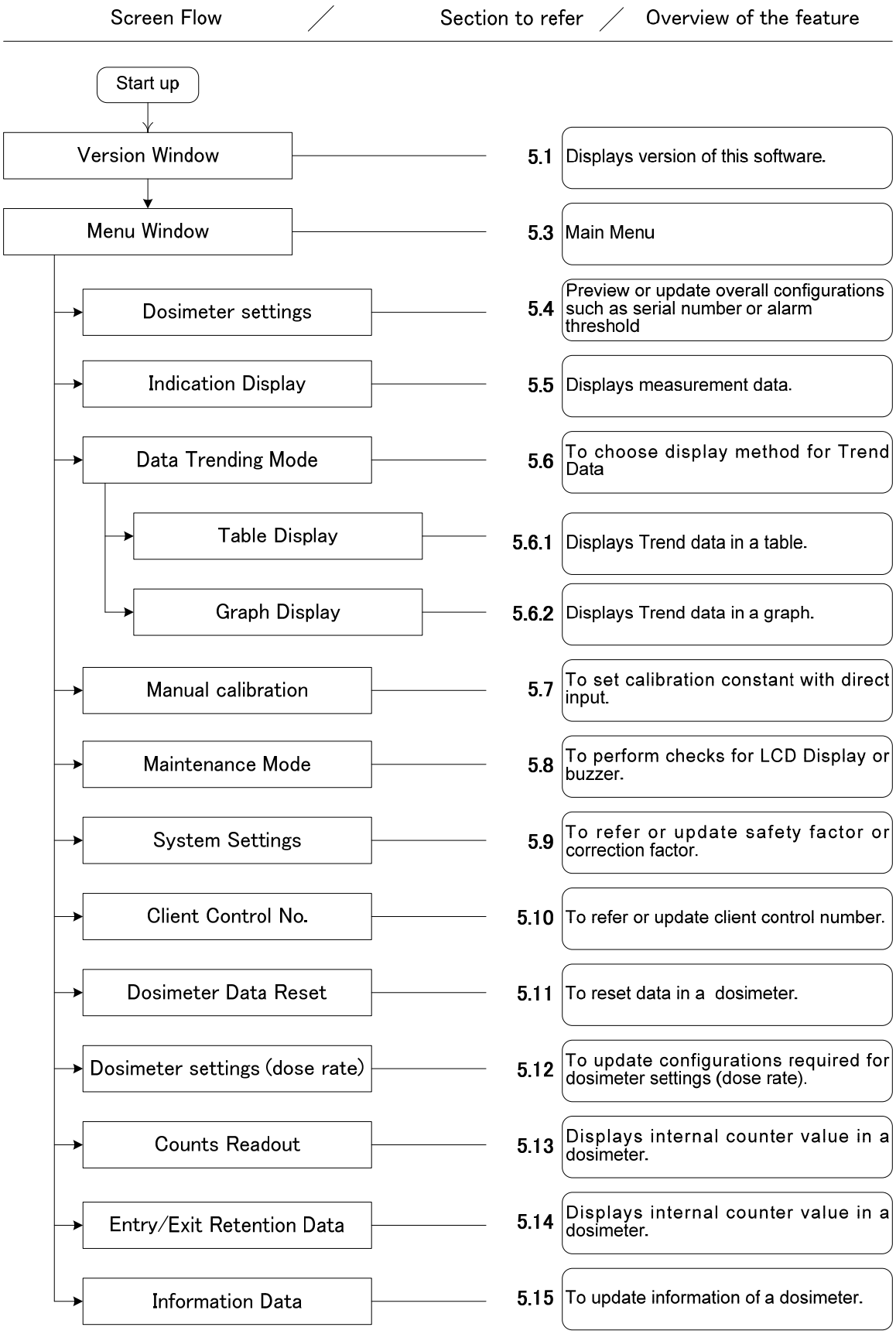
The configuration of the Dosimeter Setting Device



Product Configuration

4.3 Program Menu Windows (The Dosimeter Setting Device Program)

Feature description of each program menu is shown below:



4.4 Setting up

Setup the software, first, then the hardware.

[Required for setup]

-- Dosimeter Setting Device 1 set

-- PC 1 set

[Software setups] (Also, see the CD package)

(1) Place the Program installation CD in the CD-ROM drive on the PC.

(2) Launch ”**Setup.exe**” file in the “**NRF_Tool**” folder.

[Hardware setups]

(1) Insert the USB connector of Dosimeter Setting Device into USB port on your computer.

Note) If USB ports on your computer were already occupied with mouse or modem, you require to take one of them off or add a USB port to the computer.

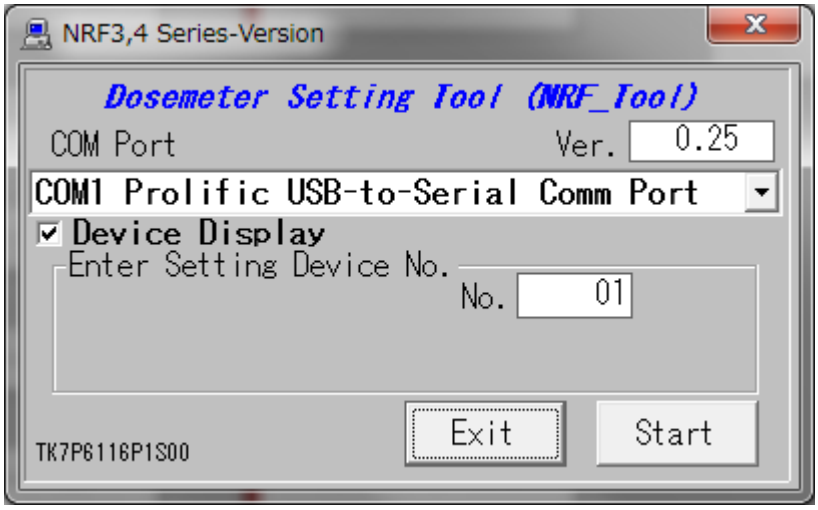
5. Operational Instructions

5.1 Starting the Program

(1) Select the icon [NRF_Tool(Sv)Eng_R]

Start up of the Program

(2) The software, dosimeter setting device program, starts running, then the Version window will appear.

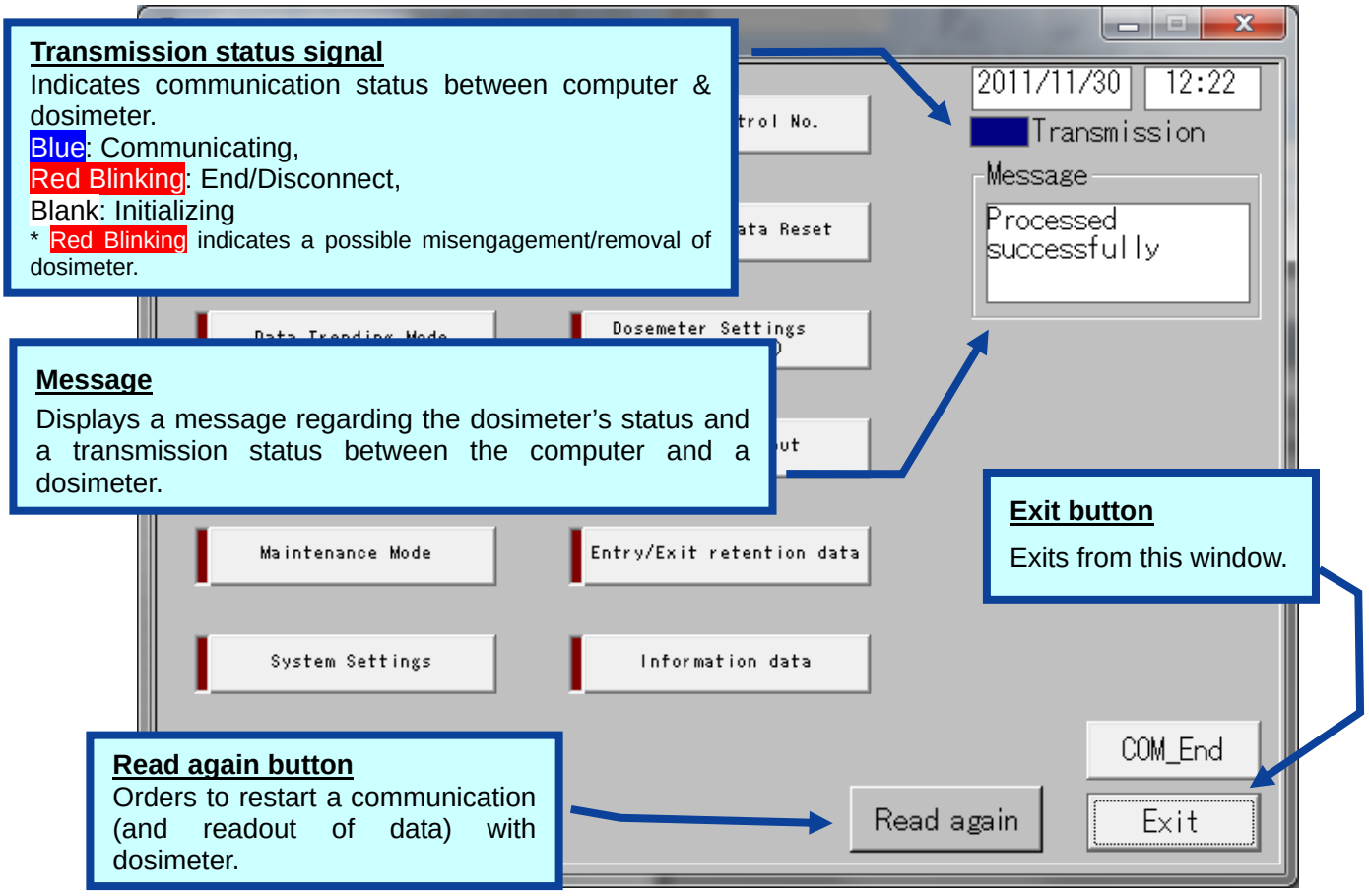


Version window

⚠ **Caution!**	For IrDA COM port number on USB-serial, serial port number following to serial port number on your computer (COM1, COM2) will be assigned. (e.g. from COM3)

5.2 Screen interface

The fields and buttons on the following screen are common to all windows. See the following sections for details of each window.



Common features of the menu window (functions and layout)

These messages will be indicated in the Message box. The message severity is as follows;

Severity	Messages	Descriptions
1	LOW Battery	Dosimeter's battery power is critically low.
2	Please place Dosimeter into Reader	Communication with dosimeter has not been established yet.
3	Maintenance mode	Dosimeter is in Maintenance mode.
4	Processed Successfully	Communication between the setting device and dosimeter has been established.
5	Initializing...	In the process of establishing communication between the setting device and a dosimeter.

*** Note:** Features on the menu will function only when the dosimeter is in communication. If <Transmission> window is Red blinking, place/replace the dosimeter into the reading unit, and then click <Read again> button. Data communication will be started/resumed, and <Transmission> will be Blue.

5.3 Menu

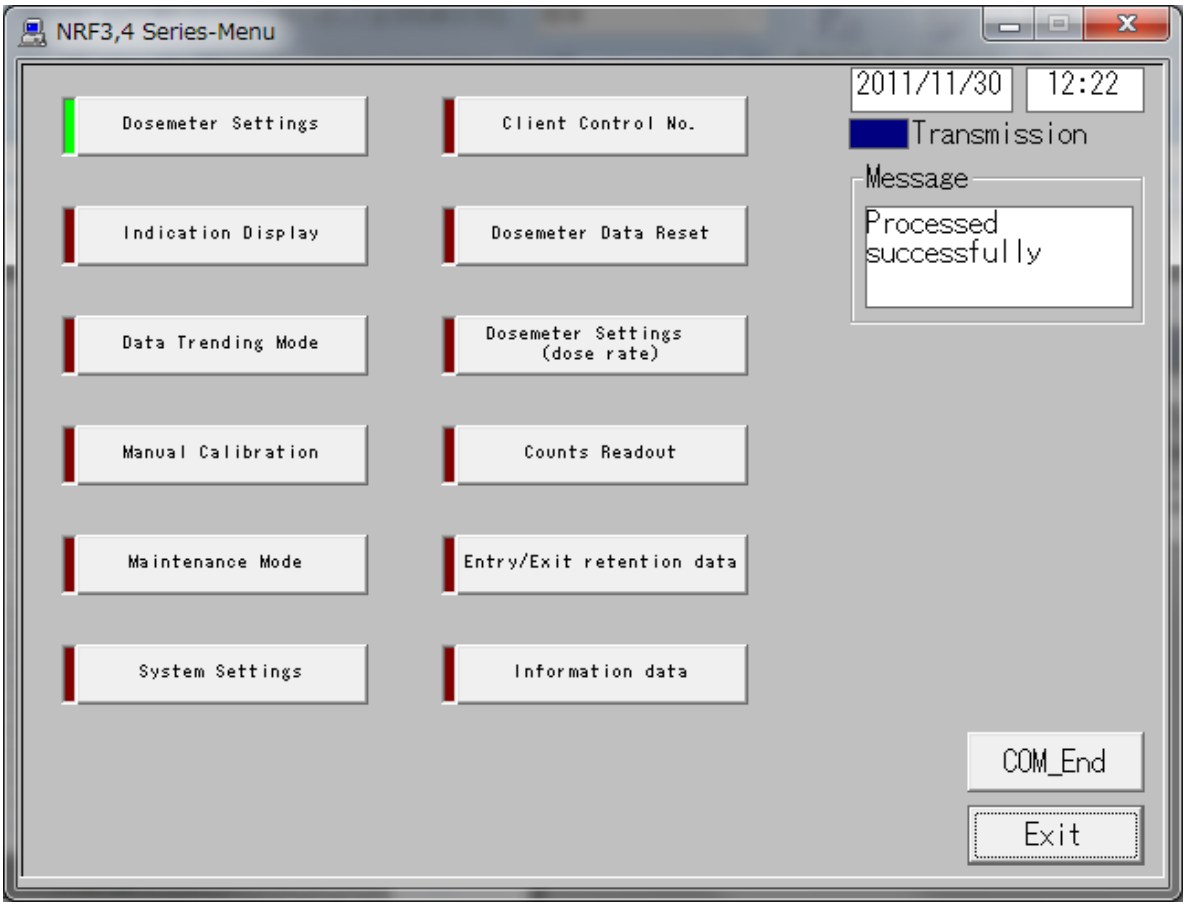


Figure 5-1 Menu screen

-- All functions that are performed via data communication with dosimeters are listed.

-- You can select one function to go to the window of the function selected.

<Menu Button>

Dosimeter Settings	Goes to the next window: Fig. 5-2
Indication Display	Goes to the next window: Fig. 5-3
Data Trending Mode	Goes to the next window: Fig. 5-4
Manual Calibration	Goes to the next window: Fig. 5-5
Maintenance Mode	Goes to the next window: Fig. 5-6
System Settings	Goes to the next window: Fig. 5-7
Client Control No.	Goes to the next window: Fig. 5-8
Dosimeter Data Reset	Goes to the next window: Fig. 5-9
Dosimeter Settings (dose rate)	Goes to the next window: Fig. 5-10
Counts Readout	Goes to the next window: Fig. 5-11
Entry/Exit retention data	Goes to the next window: Fig. 5-12
Information data	Goes to the next window: Fig. 5-13

<Command Button>

Read again*	Re-starts communication with a dosimeter. If it starts communication by establishing transmission, it processes data read out automatically. *: This is indicated while communication is not established.
Exit	Closes the current window

5.4 Dosimeter Settings

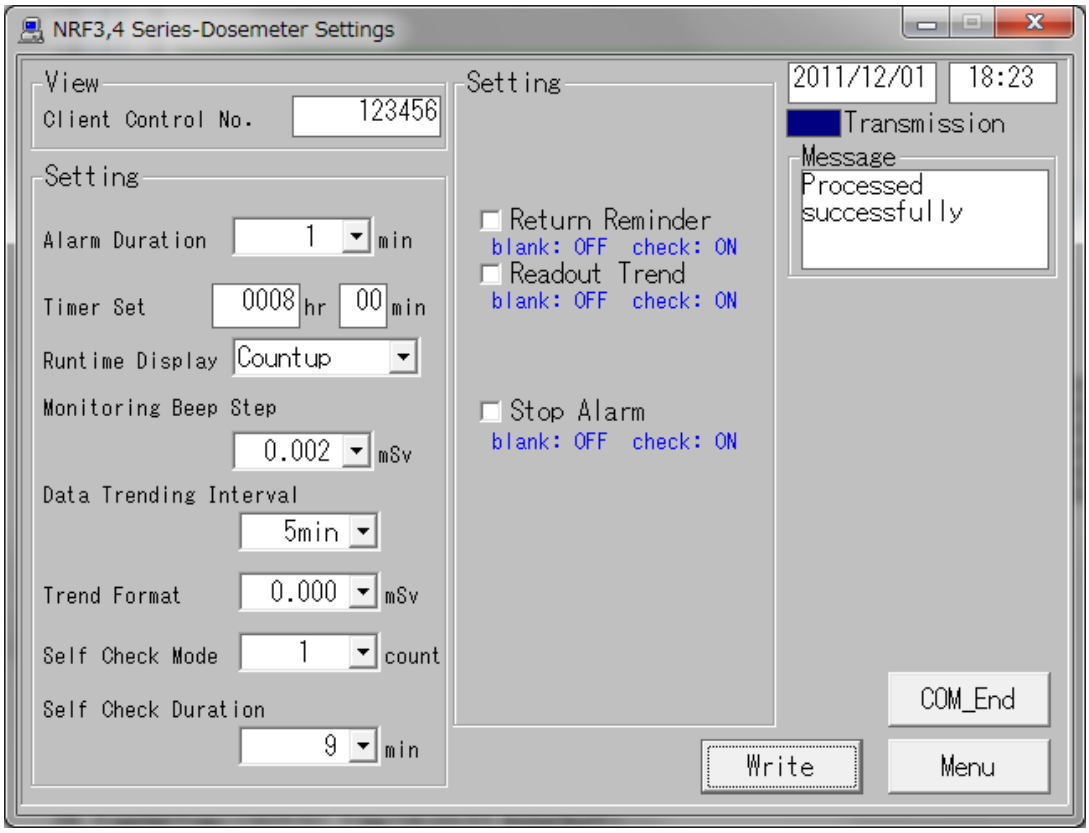


Fig. 5-2-1 Dosimeter Settings Window (for NRF30 or NRF40)

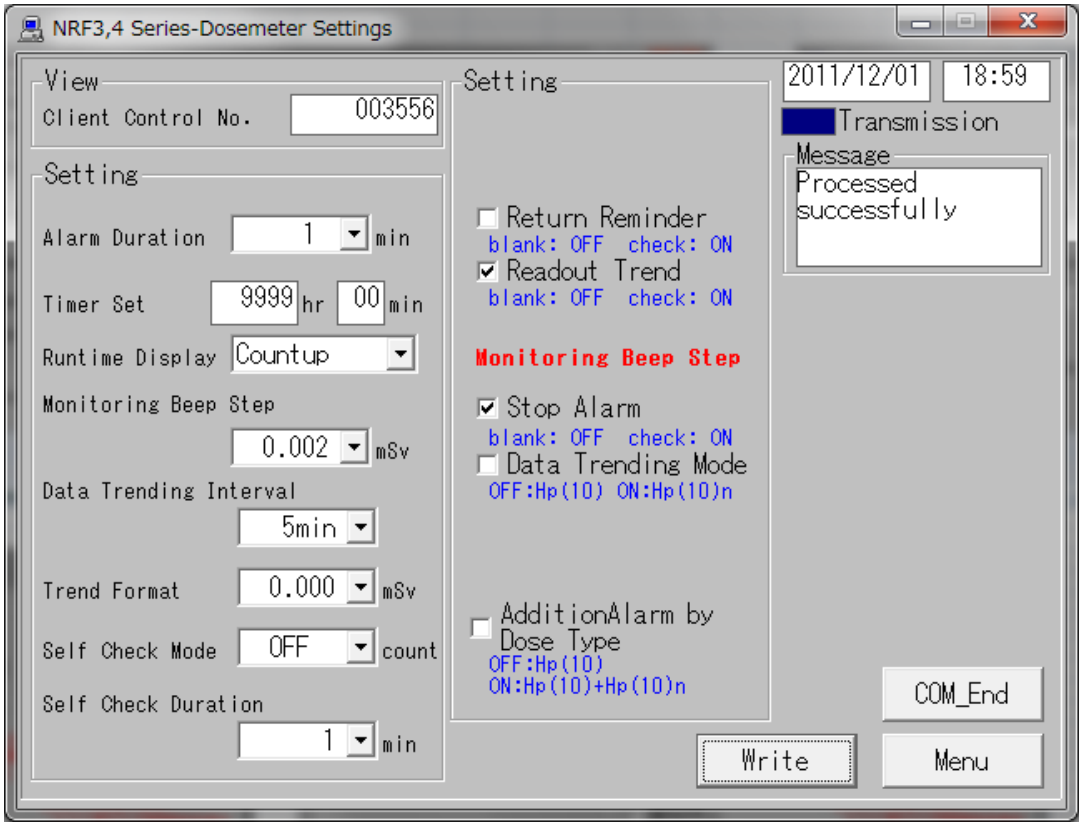


Fig. 5-2-2 Dosimeter Settings Window (for NRF31)

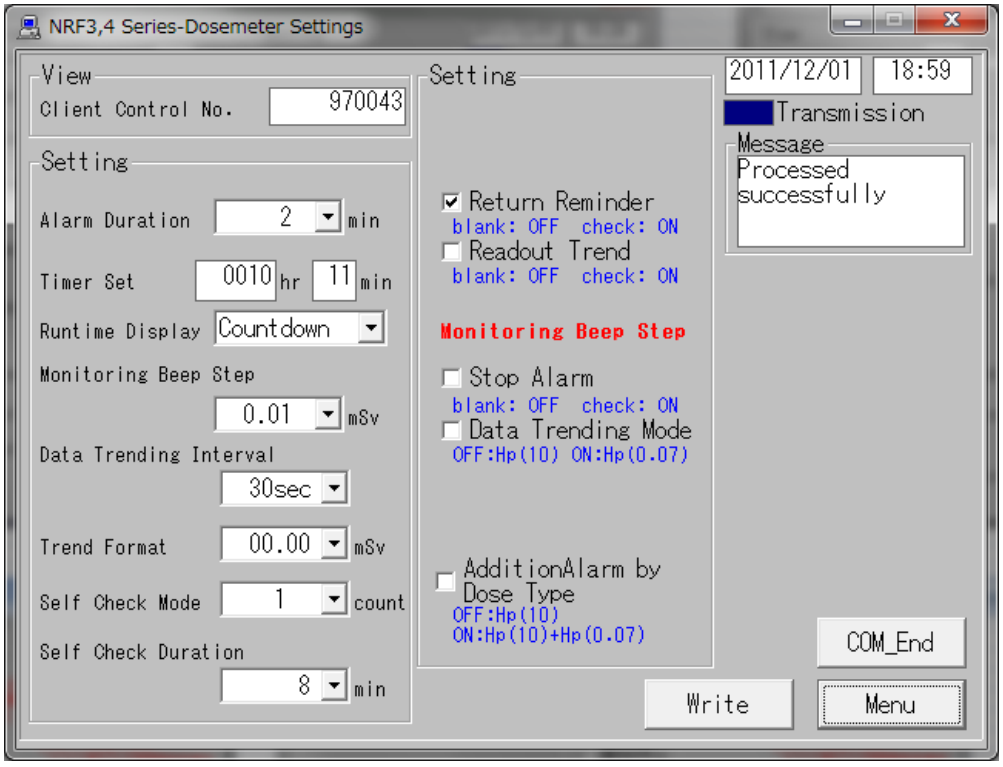


Fig. 5-2-3 Dosimeter Settings Window (for NRF34)

-- You can display the configurations read out from the dosimeter.

-- You can edit the configuration, and then write the values to the dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999

<Setting>

Name	Definition, range and unit of the functions	
Alarm Duration	Alarm duration length	1 to 9 min
Timer Set	Alarm activation when the work time limit is exceeded.	0000h:01min to 9999h:59min
Runtime Display	Mode selection for indicating operation time.	Countdown Countup
Monitoring Beep Step	Beep activation intervals according to the dose increment.	OFF / 0.001 / 0.002 / 0.01 / 0.1 mSv
Data Trending Interval	Data Trending intervals	15 sec/ 30sec/ 1 min/ 5 min/ 10 min/ 30 min/ 60 min/ 90 min
Trend Format	Shifts the decimal point for data trending.	00.00 / 000.0 mSv

Self Check Mode	Enables/ disables Self check, and sets the check count value.	OFF / 1/3/5/10/20/40/80/100 count
Self Check Duration	Decision time for Self check.	1 to 10 minutes (Note) The time is displayed except when the feature is disabled.
Return Reminder	Alarm not to forget to get a dosimeter back.	ON / OFF
Readout Trend	Enables/ disables data acquisition through a dedicated external device.	ON / OFF
Stop Alarm	Enables/ disables the button on the dosimeter for alarm cancellation.	ON / OFF
Data Trending Mode*[1]	Selection of the trend data storage format by dose type.	Hp(10)g Hp(10)n/ Hp(10)g
Addition Alarm by Dose Type *[1]	Dose type for cumulative dose.	Hp(10)g Hp(10)n/ Hp(10)g

*1: Indicated only on NRF31 and NRF34

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Write	Updates the dosimeter in communication to the configurations on the screen.
Menu	Goes back to the Menu window: Fig. 5-1

5.5 Indication Display

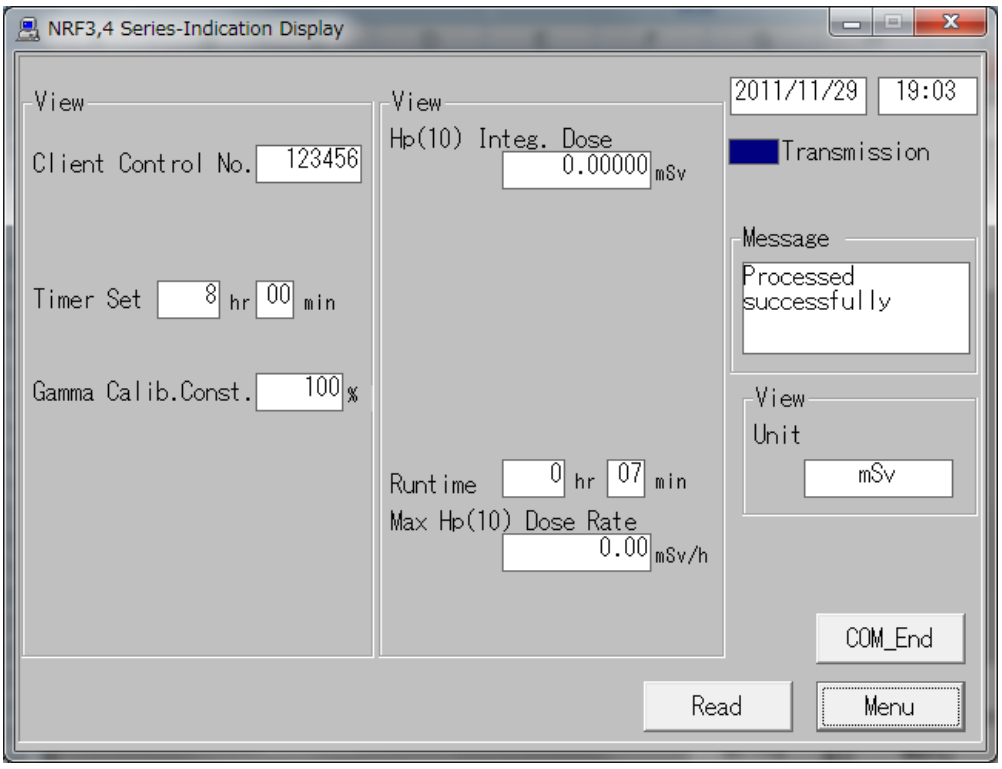


Fig. 5-3-1 Indication Display Window (for NRF30 and NRF 40)

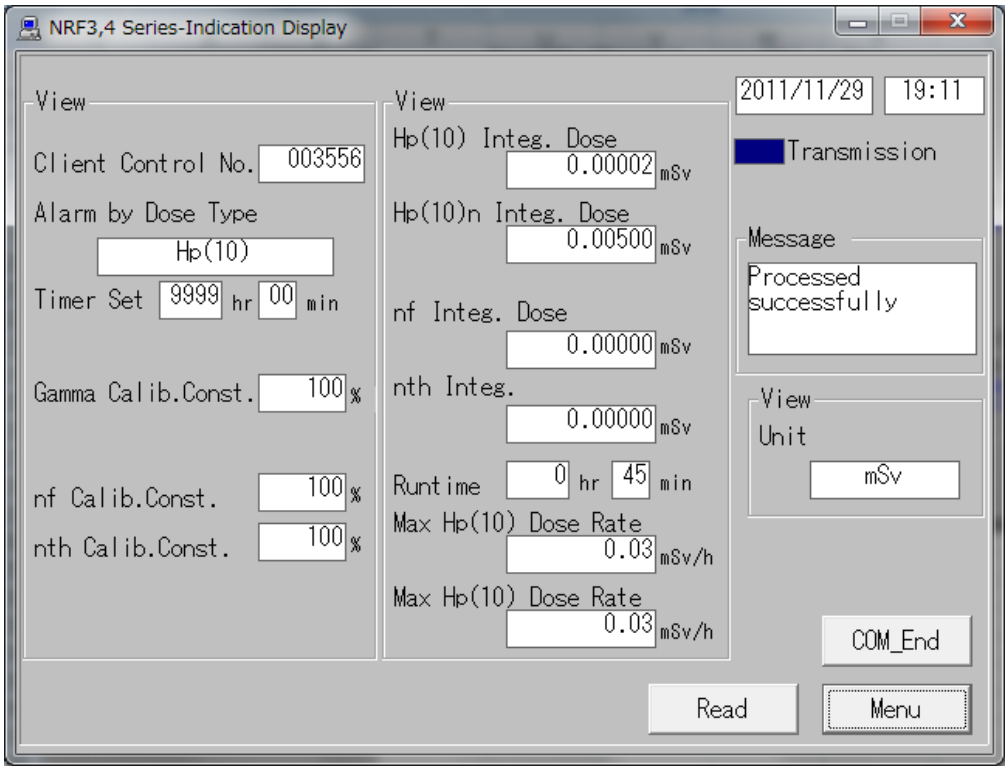


Fig. 5-3-2 Indication Display Window (for NRF31)

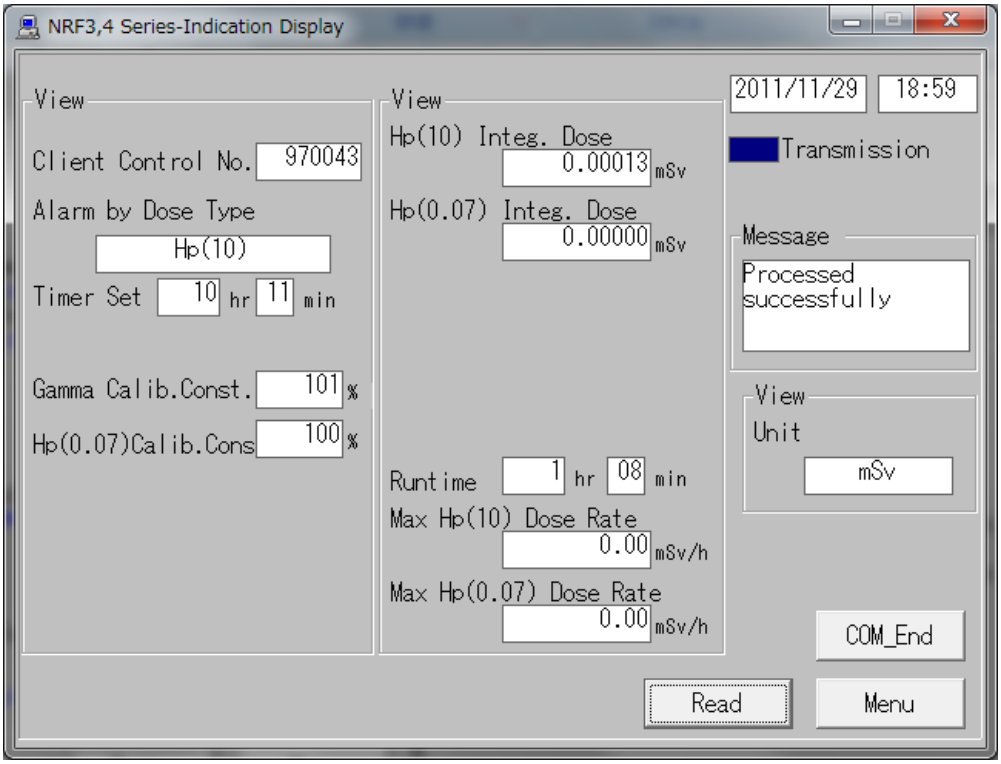


Fig. 5-3-3 Indication Display Window (for NRF34)

-- You can preview the measured values read out from the dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999
Alarm by Dose Type *1	Alarm output according to the provided dose type(s)	Hp(10)g alarm
Timer Set	Alarm activation when the work time limit is exceeded.	0000h:01min to 9999h:59min
Gamma Calib. Const.	Calibration constant for gamma-ray	Gamma: 60 to 160%
nf Calib. Const. **nth Calib. Const.*2**	Calibration constant for neutron	nf, nth: 20 to 255%
Hp(10) Integ. Dose	Integrated dose of gamma-ray.	0.0 to 9999.999 mSv
Hp(10)n Integ. Dose *2	Integrated dose neutron	0.0 to 9999.999 mSv
Hp(0.07) Calib. Const.*3	Calibration constant for Hp(0.07)	Hp(0.07): 60 to 160%
nf Integ. Dose *2	Integrated dose of nf.	0.0 to 9999.999 mSv
nth Integ. Dose *2	Integrated dose of nth.	0.0 to 9999.999 mSv

Runtime	Operation time length of the dosimeter.	0000 h 00 min to 99 h 59 min
Max Hp(10) Dose Rate	Maximum dose rate of gamma-ray	0.0 to 9999.99 mSv/ h
Max Hp(0.07) Dose Rate *3	Maximum dose rate of beta-ray	0.0 to 9999.99 mSv/ h

*1) Only displayed on NRF31 and NRF34.

*2) Only displayed on NRF31.

*3) Only displayed on NRF34.

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Read	Starts reading out for data display. This will be executed from initializing the already established communication even during transmission.
Menu	Goes back to the Menu window: Fig. 5-1

5.6 Data Trending Mode

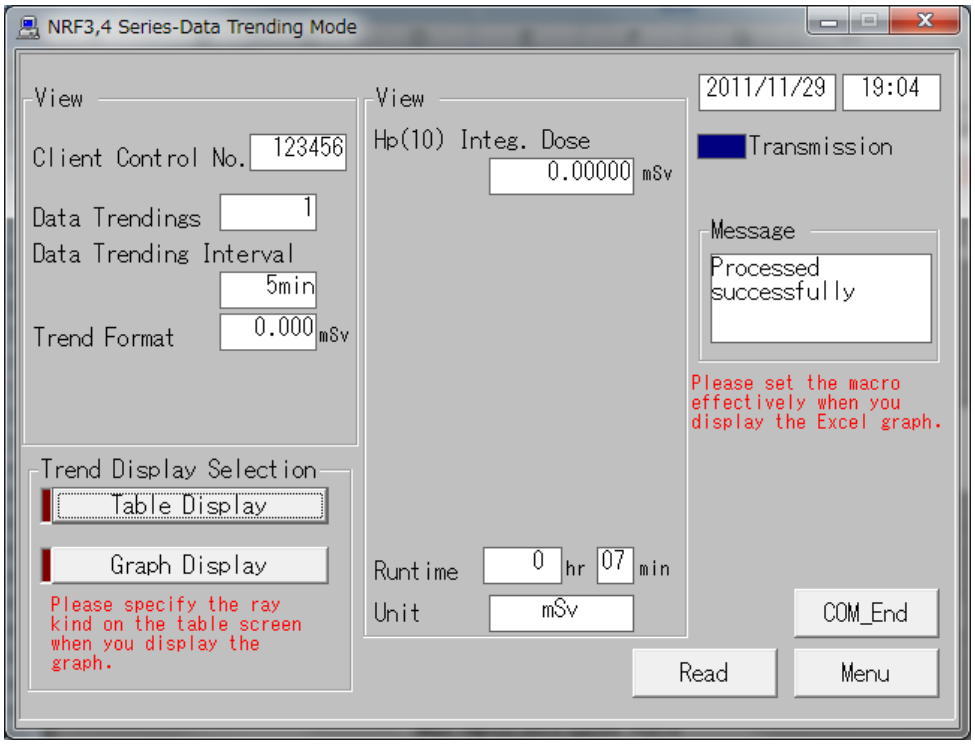


Fig. 5-4-1 Data Trending Mode Window (for NRF30 and NRF40)

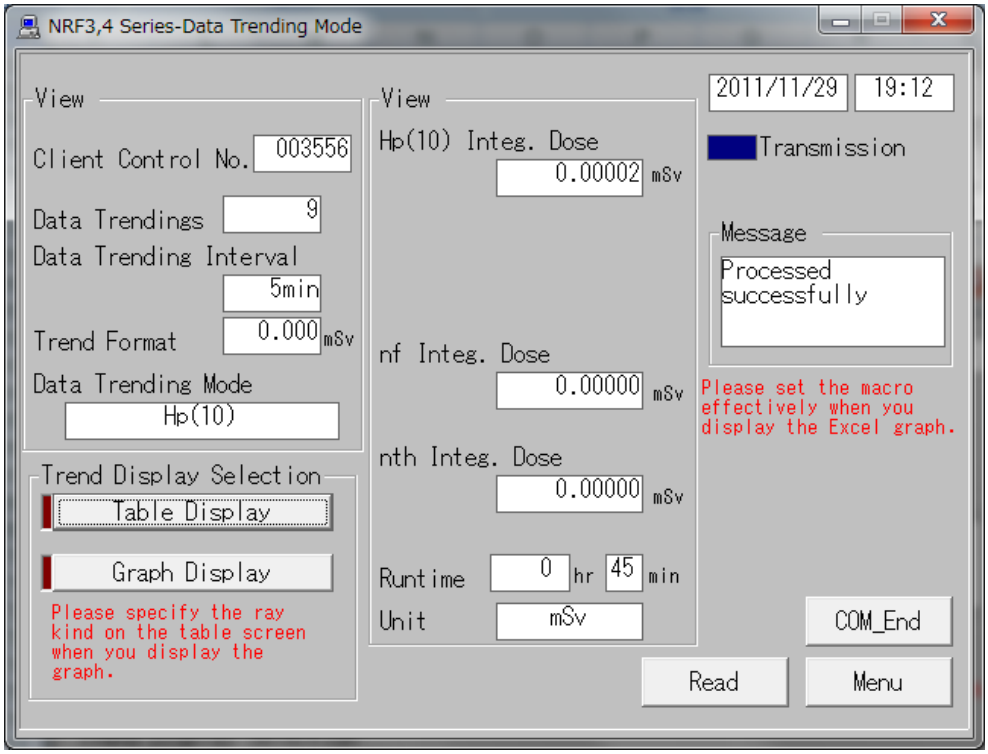


Fig. 5-4-2 Data Trending Mode Window (for NRF31)

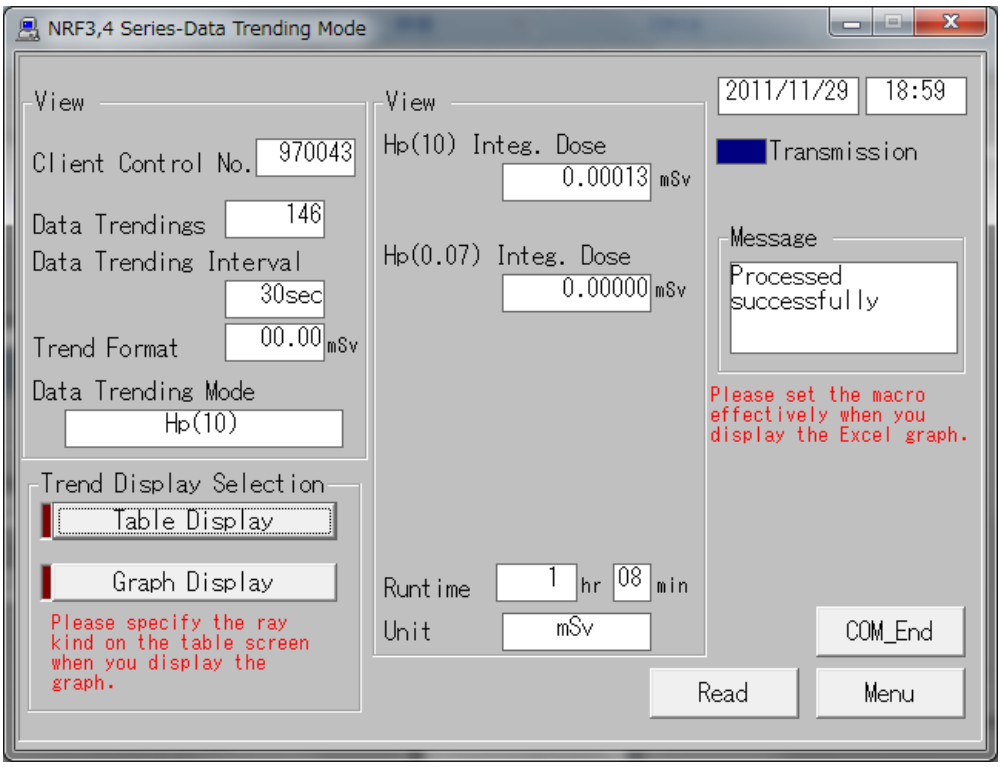


Fig. 5-4-3 Data Trending Mode Window (for NRF34)

-- You can preview the trend data read out from the dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999
Data Trendings	The total of the variations of a trend.	One dose type: 1 to 600 Two dose types: 1 to 300
Data Trending Interval	Data Trending intervals	15 sec/ 30sec/ 1 min/ 5 min/ 10 min/ 30 min/ 60 min/ 90 min
Trend Format	Shifts the position of decimal point for data trending.	00.00 / 0.000 mSv
Data Trending Mode	Selection of the trend data storage format by dose type.	Hp(10)g, Hp(10)n / Hp(10)g
Hp(10) Integ. Dose	Integrated dose of gamma-ray	0.0 to 9999.999 mSv
Hp(0.07) Integ. Dose*3	Integrated dose of neutron	0.0 to 9999.999 mSv
nf Integ. Dose*3	Integrated dose of nf.	0.0 to 9999.999 mSv
nth Integ. Dose*3	Integrated dose of nth.	0.0 to 9999.999 mSv
Runtime	Operation time length of the dosimeter	0000 h 00 min to 9999 h 59 min

Unit	Unit to be used.	mSv, mrem

*2) Only displayed on NRF31.

*3) Only displayed on NRF34.

<Command Button>

Table Display	Reads out the Data Trend, and then goes to the next window:Fig. 5-4-4
Graph Display	Reads out the Data Trend, and then goes to the next window:Fig. 5-4-5
Com_End	Finishes the communication with a dosimeter.
Read	Starts reading out for data display. This will be executed from initializing the already established communication even during transmission.
Menu	Goes back to the Menu window: Fig. 5-1

Attention	The prompt window <Communication error> will appear during data readout if a new trend does not exist. You need to wait until a data trending step given in the Dosimeter Settings window has passed, and then start data readout.

5.6.1 Table Display

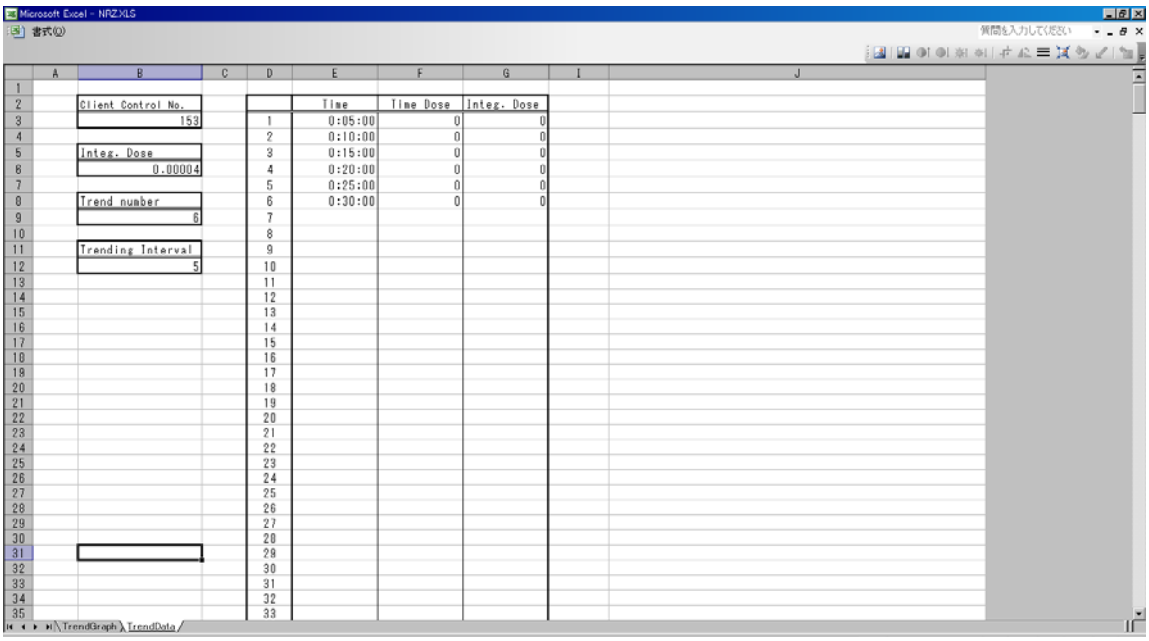


Fig. 5-4-4 Table Display Window

-- You can display the Data Trend read out from a dosimeter in an EXCEL sheet.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999
Integ. Dose	Integrated dose	0.0 to 9999.999 mSv
Trend number	The total of the variations of a trend.	One dose type: 1 to 600 Two dose types: 1 to 300
Trending Interval	Data creating intervals	15 sec/ 30sec/ 1 min/ 5 min/ 10 min/ 30 min/ 60 min/ 90 min
Time	Elapsed time	00:00:00 to 99:99:99
Time Dose	Dose per trend pitch duration	0.0 to 99.99 mSv or 0.000 to 9.999 mSv
Integ. Dose	Integrated value of time dose	0.0 to 9999.999 mSv

5.6.2 Graph Display

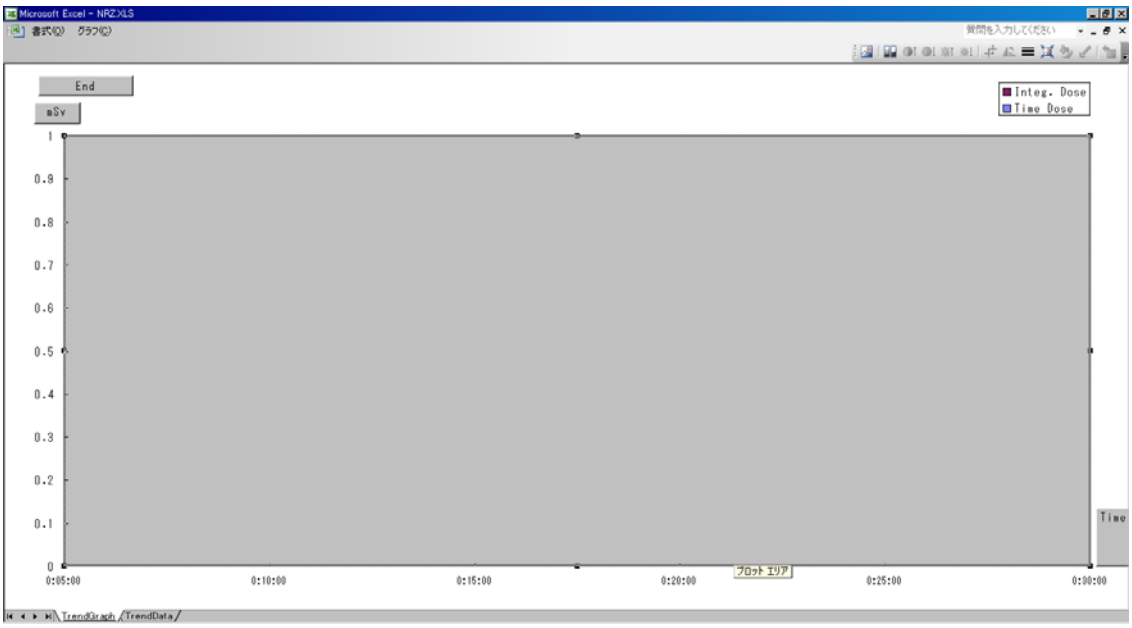


Fig. 5-4-5 Graph Display Window

-- You can display the Data Trend read out from a dosimeter in an EXCEL sheet.

<Command Button>

End	Close this Graph Display window.

5.7 Manual Calibration

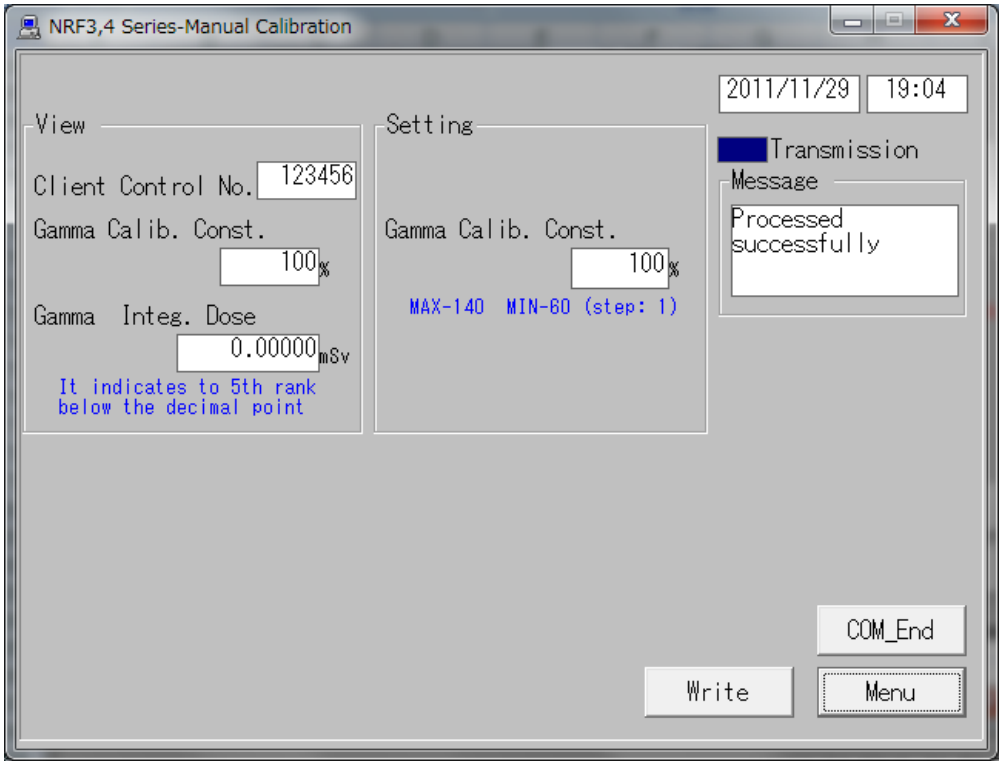


Fig. 5-5-1 Manual calibration Window (for NRF30 and NRF40)

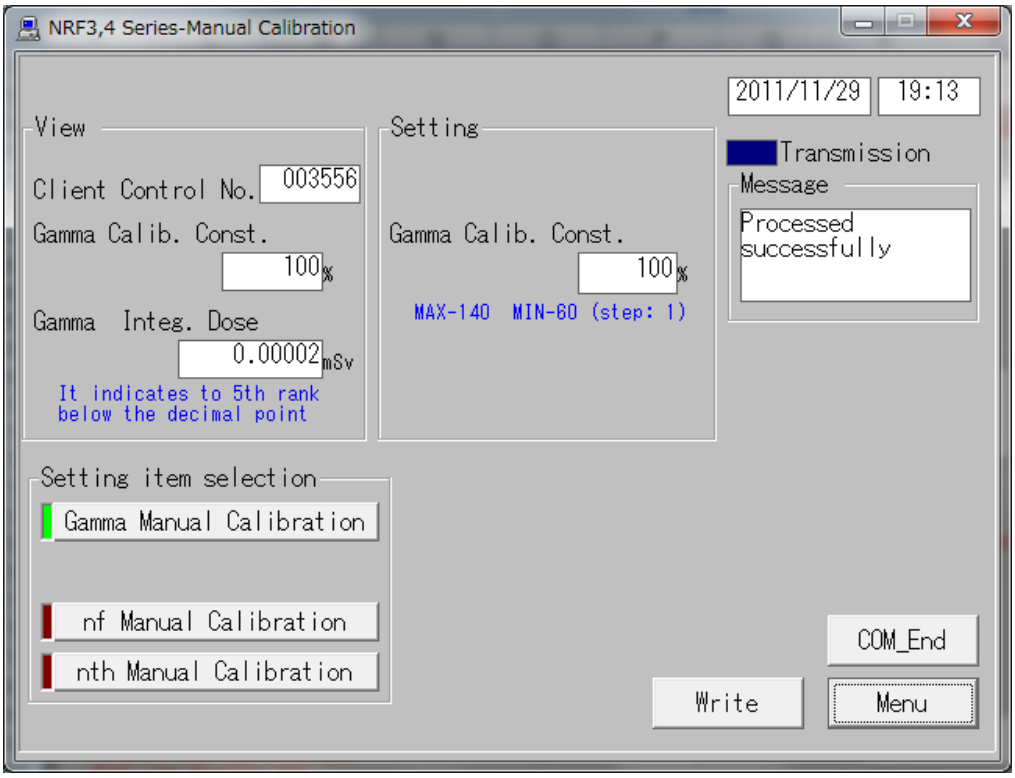


Fig. 5-5-2 Manual calibration Window (for NRF31)

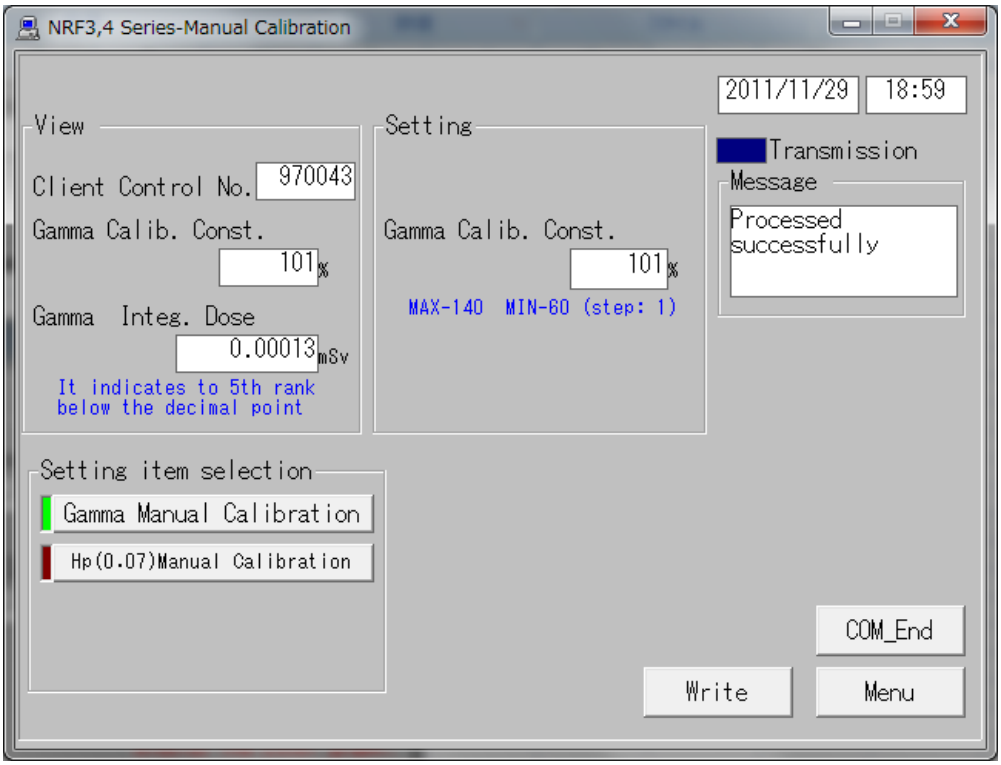


Fig. 5-5-3 Manual calibration Window (for NRF34)

-- You can preview integrated dose and calibration constant read out from a dosimeter.

-- You can edit the configuration directly, and then write the values to the dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999
Calib. Const.	Calibration constant read out from a dosimeter. (for gamma/ nf / nth rays)	Gamma: 60 to 140% nf, nth: 20 to 255% (Unit: 1)
Integ. Dose	Integrated dose (for gamma/ nf / nth rays)	0.0 to 9999.999mSv

<Setting>

Name	Definition, range and unit of the functions	
Calib. Const.	Update value of dose to be written to a dosimeter. (for gamma/ nf / nth rays)	Gamma: 60 to 140% nf, nth: 20 to 255% (Unit: 1)

<Command Button>

Gamma Manual Calibration *1	Goes to Manual Calibration window for gamma-ray.
Hp(0.07)Manual Calibration *3	Goes to Manual Calibration window for beta-ray.
nf Manual Calibration *2	Goes to Manual Calibration window for nf-ray.
nth Manual Calibration *2	Goes to Manual Calibration window for nth-ray.
Com_End	Finishes the communication with a dosimeter.
Write	Updates the dosimeter in communication to the configurations on the screen.
Menu	Goes back to the Menu window: Fig. 5-1

*1) Only displayed on NRF31 and NRF34.

*2) Only displayed on NRF31.

*3) Only displayed on NRF34.

5.8 Maintenance Mode

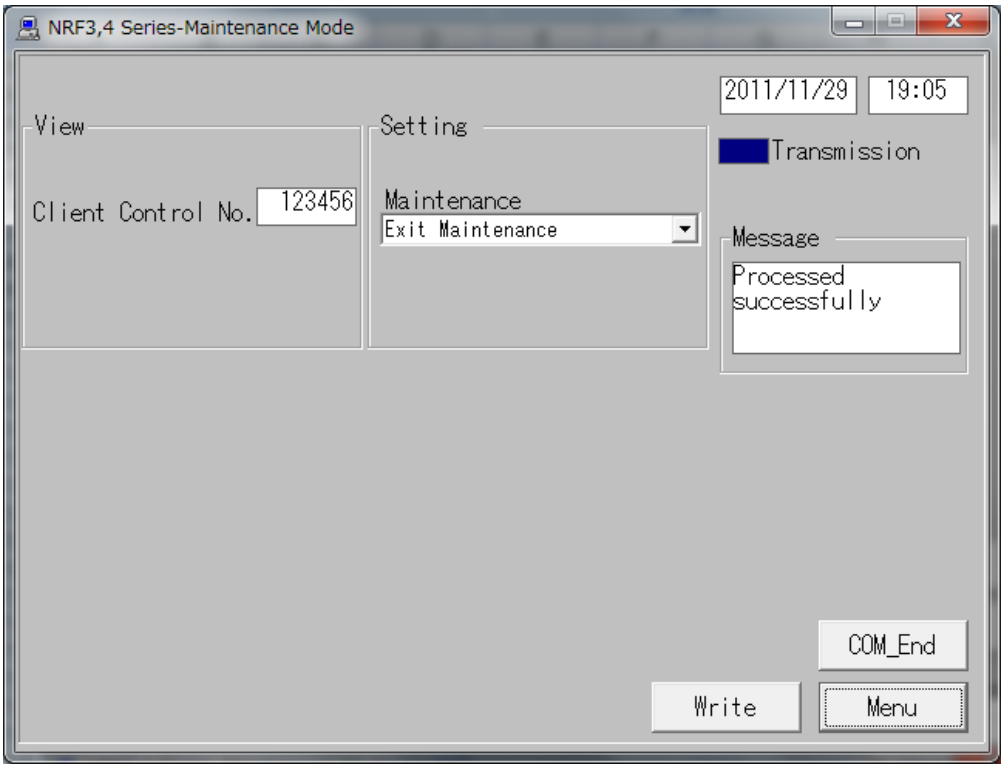


Fig. 5-6 Maintenance Mode Window

-- With selection of maintenance mode needed for dosimeter maintenance and checking work, you can write (switching of Maintenance mode and normal mode) to a dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999

<Setting>

Name	Definition, range and unit of the functions
LCD Check Mode	Turn on all of LCDs.
Count Value Display Mode	Indication of internal counter
Buzzer Volume Check Mode	Activation of continuous buzzer.
Exit Maintenance	Cancelation of Maintenance mode (switching to normal mode).

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Write	Updates the dosimeter in communication to the configurations on the screen.
Menu	Goes back to the Menu window: Fig. 5-1

5.9 System Setting

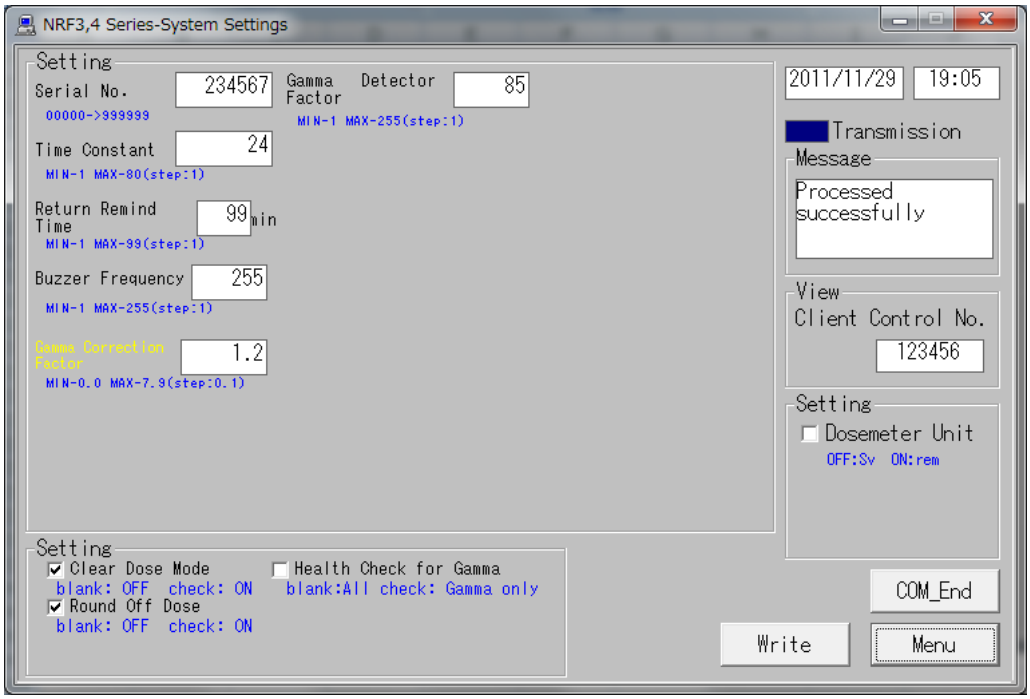


Fig. 5-7-1 System Setting Window (for NRF30 and NRF40)

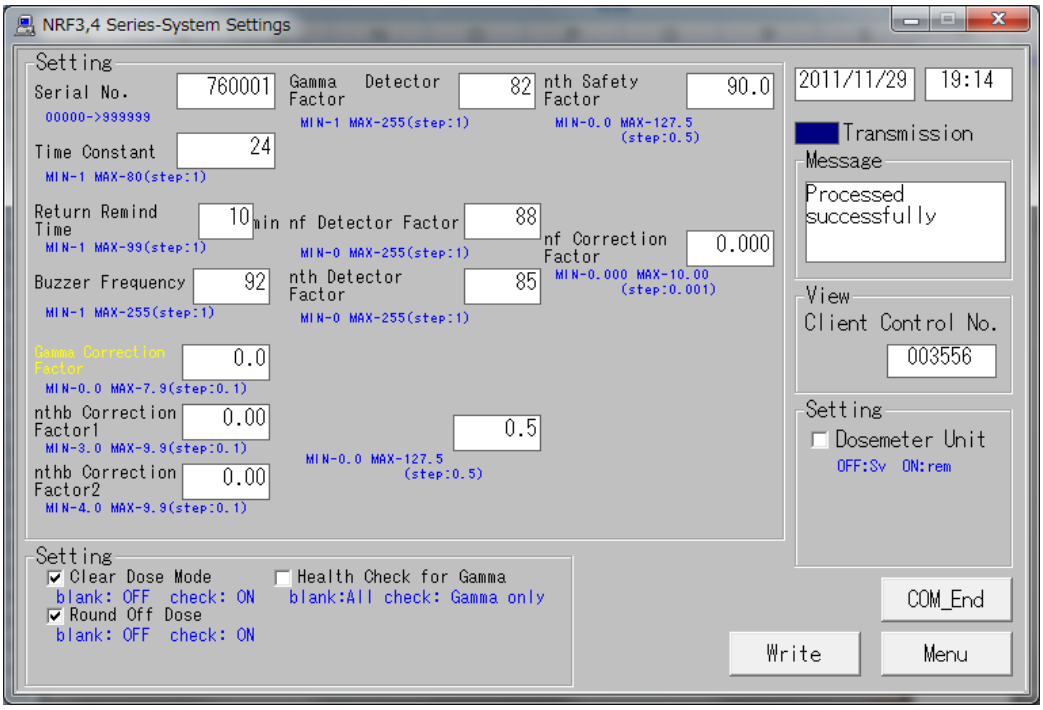


Fig. 5-7-2 System Setting Window (for NRF31)

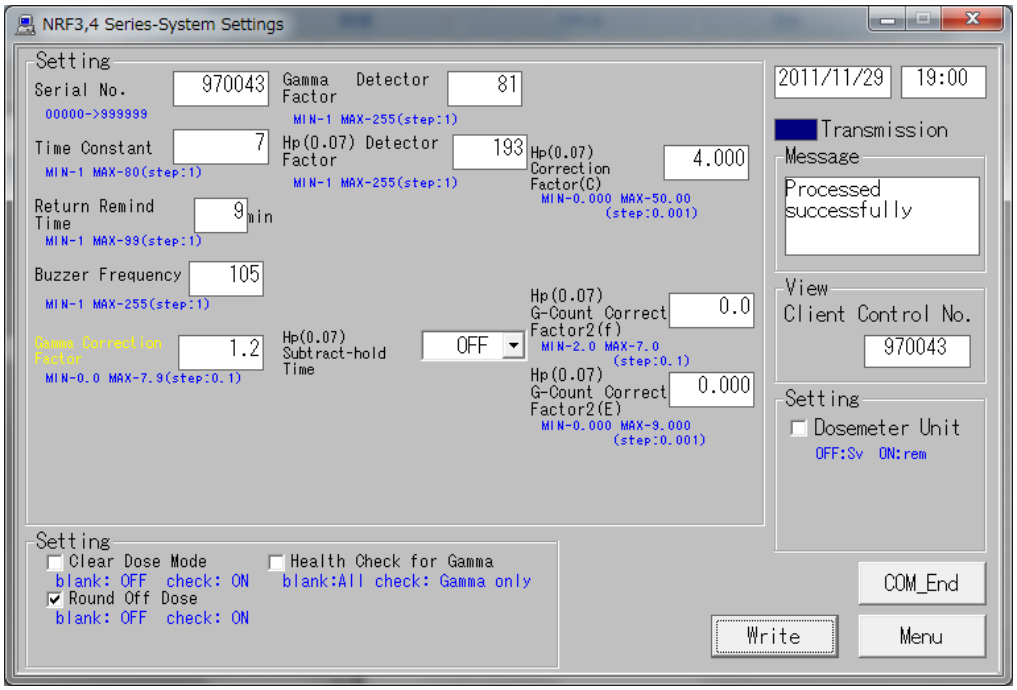


Fig. 5-7-3 System Setting Window (for NRF34)

-- You can preview integrated dose and calibration constant read out from a dosimeter.

-- You can edit the configuration directly, and then write the values to the dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999

<Setting>

Name	Definition, range and unit of the functions	
Serial No.	Setting of dosimeter ID	Display only
Time Constant	Setting of gamma constant	1 to 80 (Step: 1)
Return Remind Time	Reminder time not to forget to get the dosimeter back	1 to 99 (Step: 1)
Buzzer Frequency	Setting of the buzzer frequency	1 to 255 (Step: 1)
Gamma Correction Factor1	Setting of Gamma correction factor	0.0 to 7.9 (Step: 0.1)
nthb Correction Factor1*[2]	Setting of nthb correction factor 1	3.0 to 9.9 (Step: 0.1)
nthb Correction Factor2*[2]	Setting of nthb correction factor 2	4.0 to 9.9 (Step: 0.1)
Gamma Detector Factor	Setting of gamma Detector factor	Display only

nf Detector Factor *2	Setting of nf detector factor	Display only
nth Detector Factor *2	Setting of nth detector factor	Display only
nf Correction Factor *2	Setting of nf correction factor	0.000 to 10.00 (Step: 0.001)
nth Safety Factor *2	Setting of nf safety factor	0.0 to 127.5 (Step: 0.5)
Hp(0.07) Correction Factor (C) *3	Setting of Hp(0.07) correction factor	0.000 to 50.000 (Step: 0.001)
Hp(0.07) Detector Factor *3	Setting of Hp(0.07) detector factor	Display only
Hp(0.07)Subtract-hold Time *3	Determined time of Hp(0.07)	OFF / ON
Hp(0.07) G-Count Correct Factor2(f) *3	Hp(0.07) gamma correction factor 2(f)	2.0 to 7.0 (Step: 0.1)
Hp(0.07) G-Count Correct Factor2(E) *3	Hp(0.07) gamma correction factor (E)	0.000 to 9.000 (Step: 0.001)
Clear Dose Mode	Enable/disable initialization of integrated dose data with insertion of a reset pin.	OFF / ON
Round Off Dose	ON/OFF of rounding off for integrated dose.	OFF / ON
Health Check for Gamma	Enable/disable soundness check for gamma detector	OFF / ON

*1) Only displayed on NRF31 and NRF34.

*2) Only displayed on NRF31.

*3) Only displayed on NRF34.

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Write	Updates the dosimeter in communication to the configurations on the screen.
Menu	Goes back to the Menu window: Fig. 5-1

5.10 Client Control Number

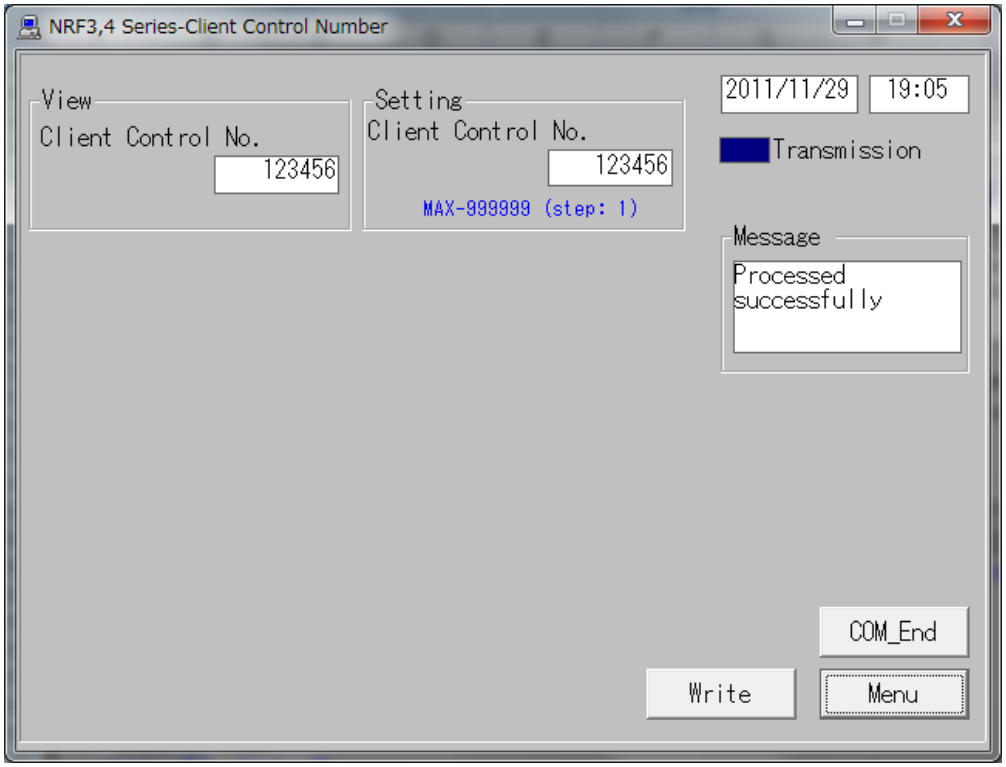


Fig. 5-8 Client Control Number Window

-- You can preview the Client Control Number read out from a dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999

<Setting>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Write	Updates the dosimeter in communication to the configurations on the screen.
Menu	Goes back to the Menu window: Fig. 5-1

5.11 Dosimeter Data Reset

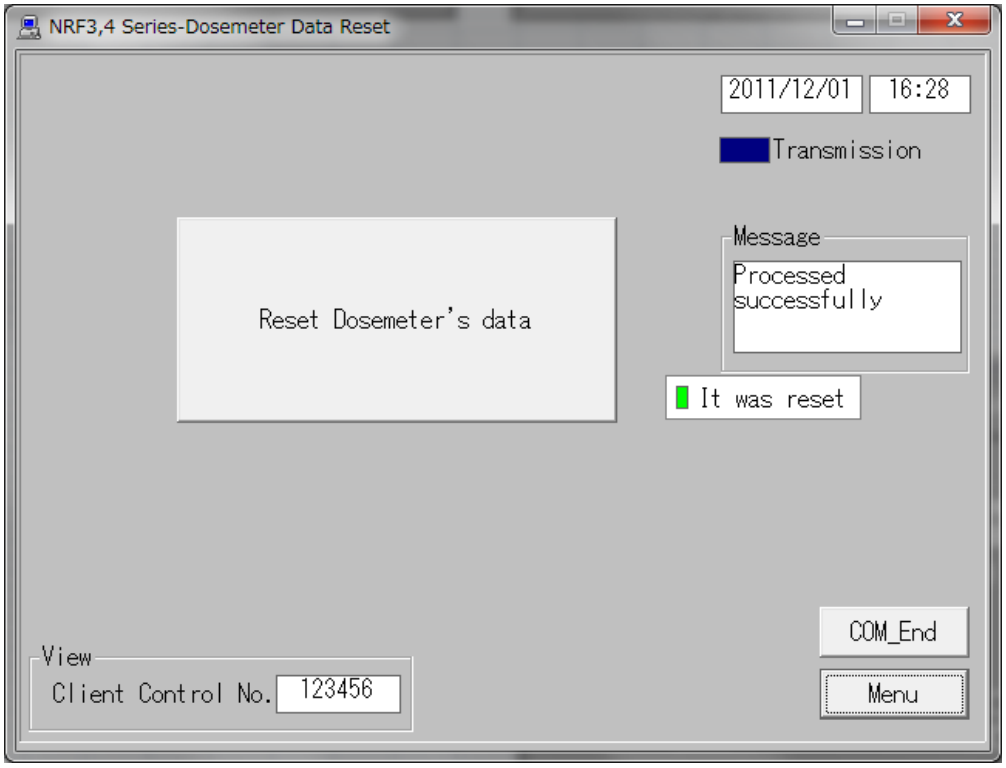


Fig. 5-9 Dosimeter Data Reset Window

-- Initialize the internal data in a dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Reset Dosemeter's data	Resets information on a dosimeter.
Menu	Goes back to the Menu window: Fig. 5-1

Attention	By clicking "Reset Dosimeter's Data", following data will be deleted. Process it with caution. • Integrated Dose • Data Trend

5.12 Dosimeter Settings (dose rate)

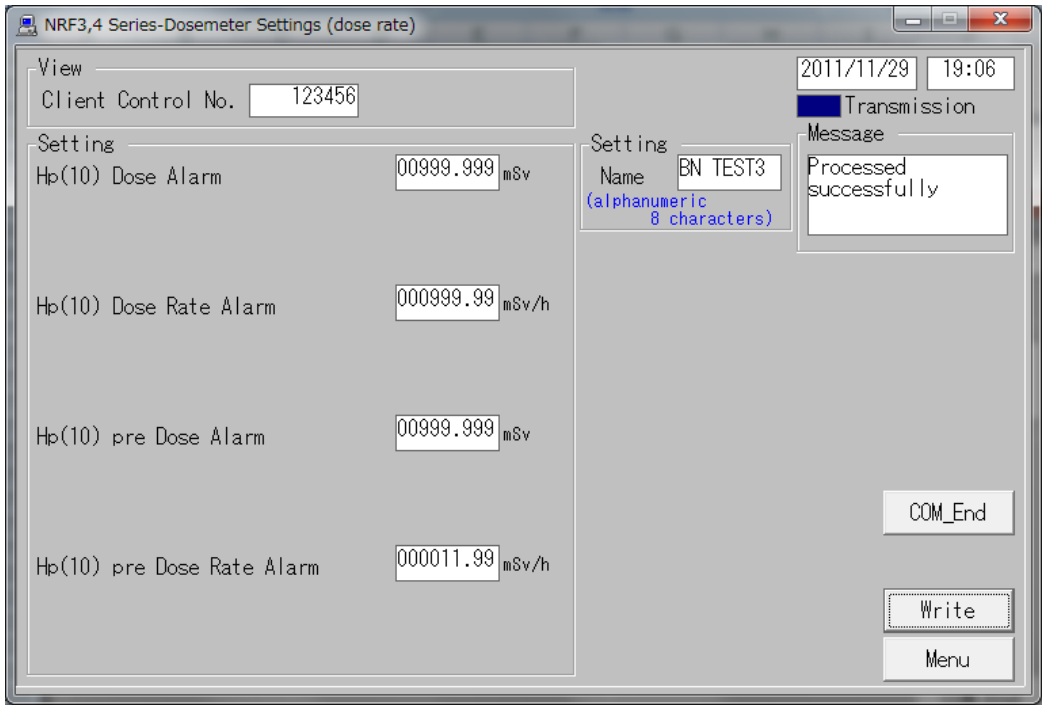


Fig. 5-10-1 Dosimeter settings (dose rate) window (for NRF30 and NRF40)

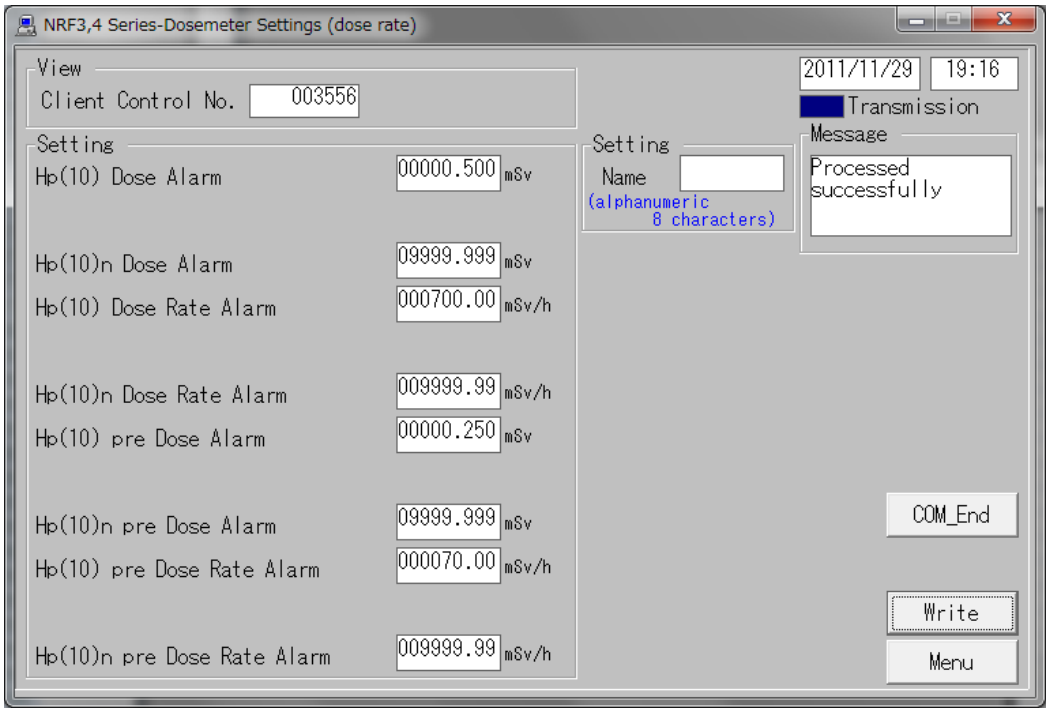


Fig. 5-10-2 Dosimeter settings (dose rate) window (for NRF31)

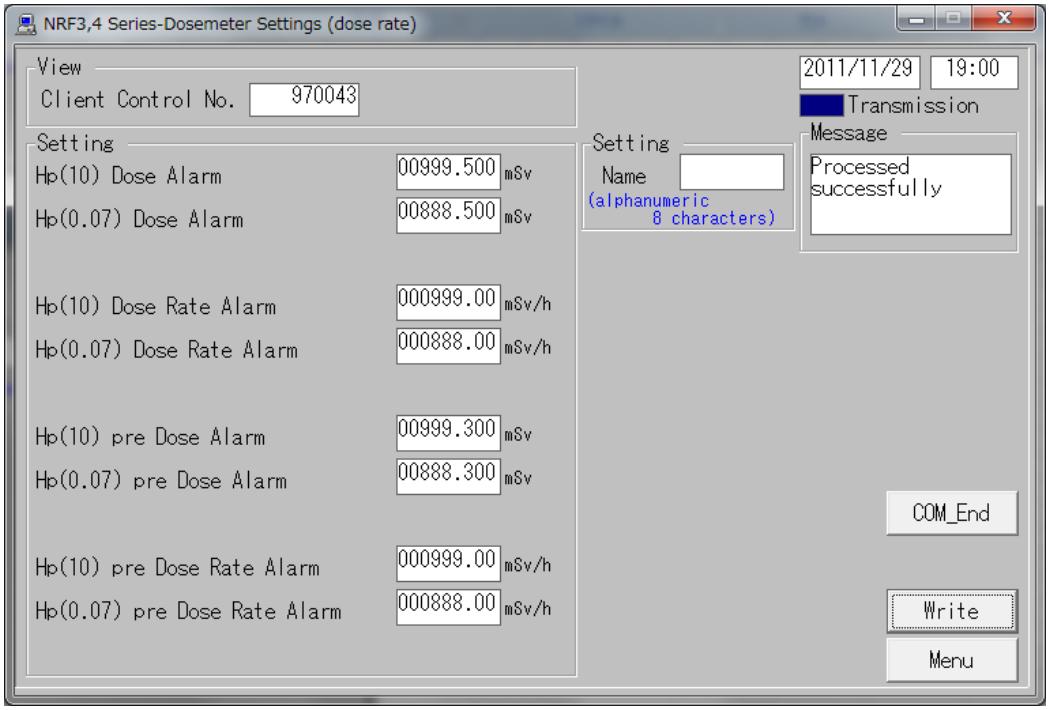


Fig. 5-10-3 Dosimeter settings (dose rate) window (for NRF34)

-- You can readout required information for dosimeter settings (dose rate) and update them to the dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999

<Setting>

Name	Definition, range and unit of the functions	
Hp(10) Dose Alarm	Hp(10) integrated dose alarm threshold	0.001 to 9999.999 mSv
Hp(0.07) Dose Alarm	Hp(0.07) integrated dose alarm threshold	0.001 to 9999.999 mSv
Hp(10)n Dose Alarm	Hp(10)n integrated dose alarm threshold	0.01 to 9999.99 mSv/ h
Hp(10) Dose Rate Alarm	Hp(10) dose rate alarm threshold	0.01 to 9999.99 mSv/ h
Hp(0.07) Dose Rate Alarm	Hp(0.07) dose rate alarm threshold	0.001 to 9999.999 mSv
Hp(10)n Dose Rate Alarm	Hp(10)n dose rate alarm threshold	0.001 to 9999.999 mSv
Hp(10) Pre Dose Alarm	Hp(10) integrated dose pre alarm threshold	0.001 to 9999.999 mSv

Hp(0.07) Pre Dose Alarm	Hp(0.07) integrated dose pre alarm threshold	0.001 to 9999.999 mSv
Hp(10)n Pre Dose Alarm	Hp(10)n integrated dose pre alarm threshold	0.01 to 9999.99 mSv/ h
Hp(10) Pre Dose Rate Alarm	Hp(10) dose rate pre alarm threshold	0.01 to 9999.99 mSv/ h
Hp(0.07) Pre Dose Rate Alarm	Hp(0.07) dose rate pre alarm threshold	0.001 to 9999.999 mSv
Hp(10)n Pre Dose Rate Alarm	Hp(10)n dose rate pre alarm threshold	0.001 to 9999.999 mSv
Name	User name	8 alphanumeric characters (capital) Note) Indicates up to 8 characters on dosimeter's display.

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Write	Updates the dosimeter in communication to the configurations on the screen.
Menu	Goes back to the Menu window: Fig. 5-1

5.13 Counts Readout

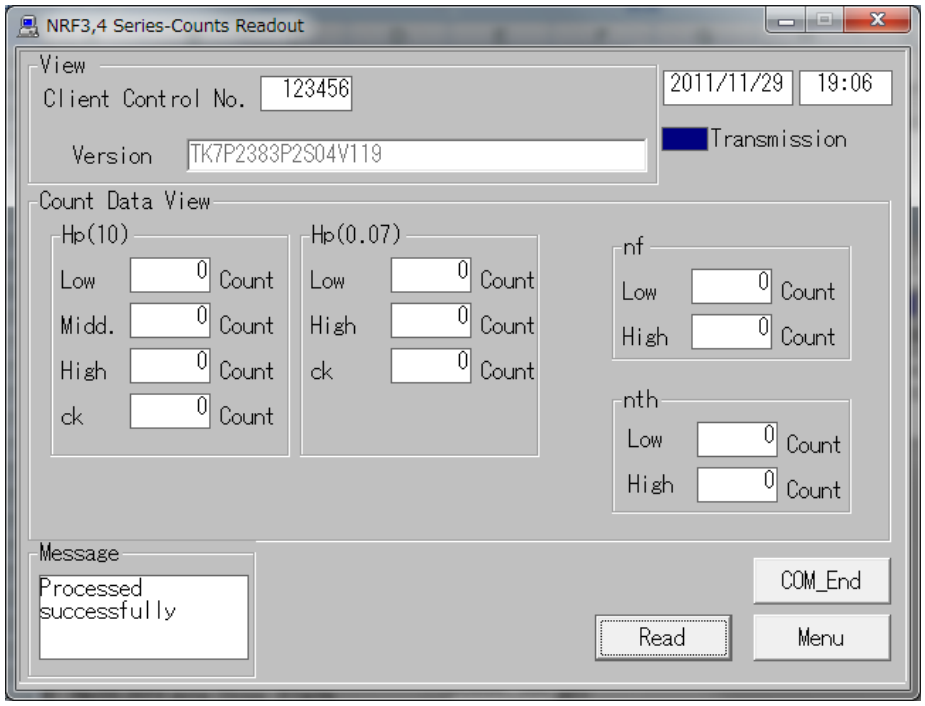


Fig. 5-11 Counts Readout window

-- You can preview count values read out from a dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999
Hp(10)Low	Count of Hp(10)Low	000000 to 999999 count
Hp(10)Mid	Count of Hp(10)Mid	000000 to 999999 count
Hp(10)High	Count of Hp(10)High	000000 to 999999 count
Hp(10)ck	Count of Hp(10)ck	000000 to 999999 count
Hp(0.07)Low	Count of Hp(0.07)Low (reserved)	000000 to 999999 count
Hp(0.07)High	Count of Hp(0.07)High (reserved)	000000 to 999999 count
Hp(0.07)ck	Count of Hp(0.07)High (reserved)	000000 to 999999 count
nf Low	Count of nf Low	000000 to 999999 count
nf High	Count of nf High	000000 to 999999 count
nth Low	Count of nth Low	000000 to 999999 count
nth High	Count of nth High	000000 to 999999 count

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Read	Starts reading out for data display. This will be executed from initializing the already established communication even during transmission.
Menu	Goes back to the Menu window: Fig. 5-1

5.14 Entry/Exit retention data

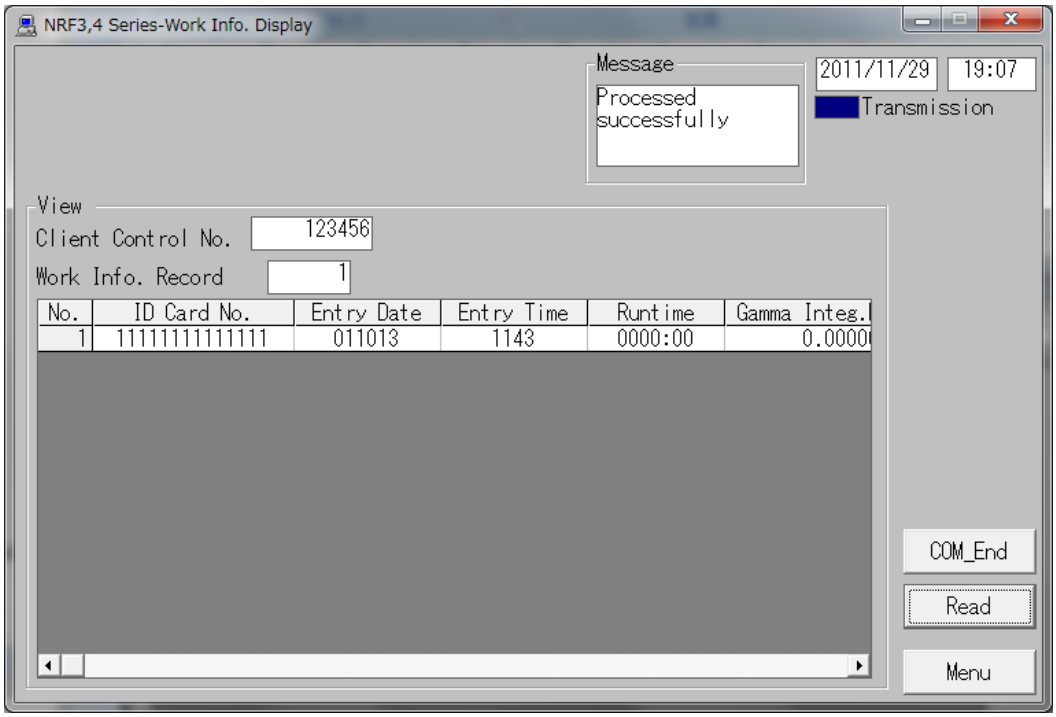


Fig. 5-12 Entry/Exit retention data Window

-- Displays entry/exit history data in a dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999
Work Info. Record	Number of work info record data	0 to 500 count
ID Card No.	ID card number	000000 to 999999
Entry Date	Entry date	YYMMDD
Entry Time	Entry time	hhmm
Runtime	Operation time length of the dosimeter	hhhh:mm
Gamma Integ. Dose	Gamma-ray integrated dose	0.001 to 9999.999 mSv
Beta Integ. Dose	Beta-ray integrated dose	0.001 to 9999.999 mSv

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Read	Starts reading out for data display. This will be executed from initializing the already established communication even during transmission.
Menu	Goes back to the Menu window: Fig. 5-1

5.15 Information Data

(1) Dose information

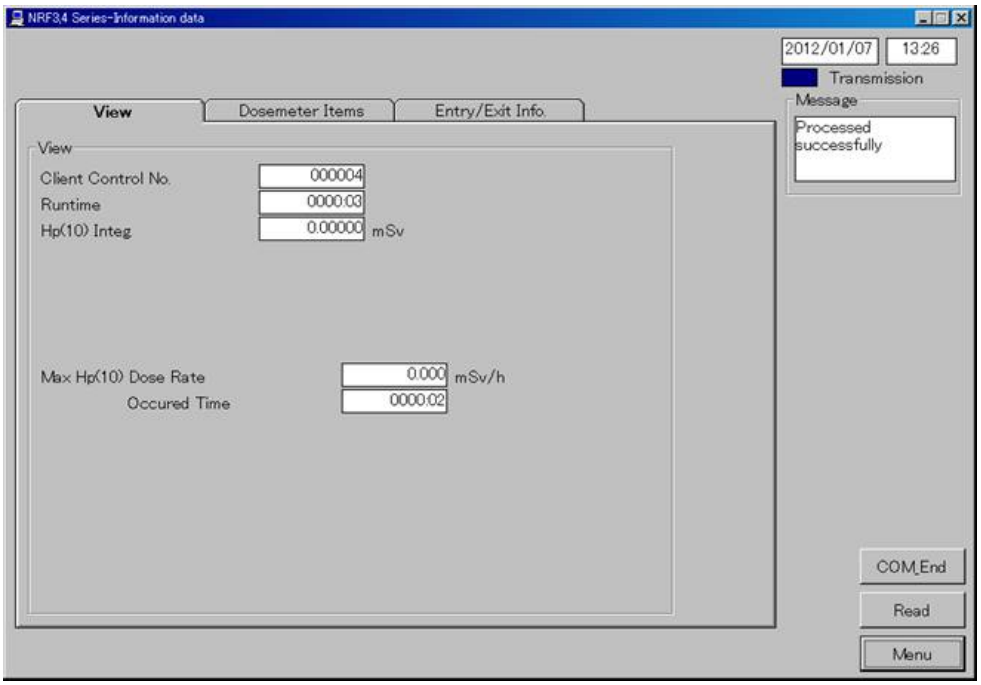


Fig. 5-13-1 Dose Information Window (for NRF30 and NRF40)

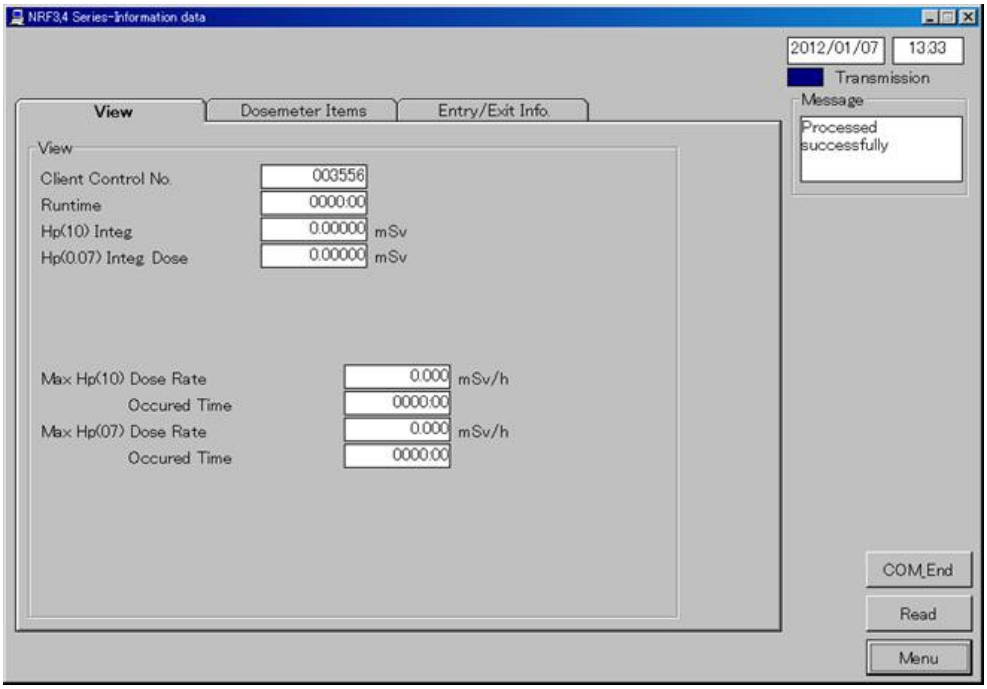


Fig. 5-13-2 Dose Information Window (for NRF31)

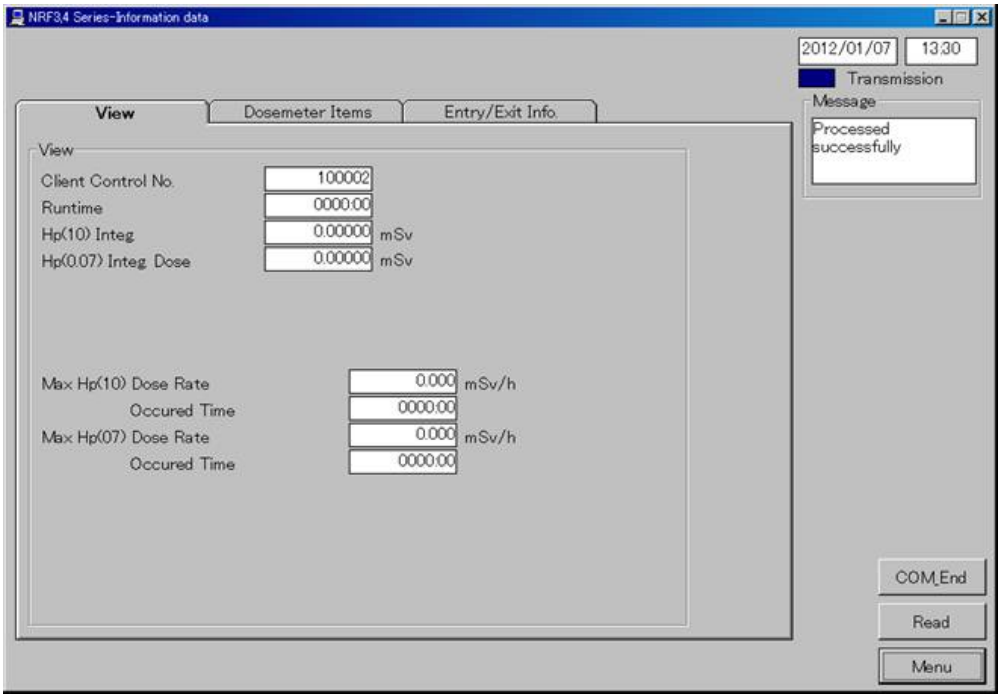


Fig. 5-13-3 Dose Information Window (for NRF34)

-- Displays dose information by reading data in a dosimeter.

<View>

Name	Definition, range and unit of the functions	
Client Control No.	Dosimeter ID.	000001 to 999999
Runtime	Operation time length of the dosimeter	hh:mm
Hp(10) Integ. Dose	Hp(10) integrated dose	0.000 to 9999.999 mSv
Hp(0.07) Integ. Dose	Hp(0.07) integrated dose	0.000 to 9999.999 mSv
Max Hp(10) Dose Rate	Maximum Hp(10) dose rate	0.01 to 9999.99 mSv/ h
Max Hp(10) Occurred time	Maximum Hp(10) dose rate time	hh:mm
Max Hp(0.07) Dose Rate	Maximum Hp(0.07) dose rate	0.01 to 9999.99 mSv/ h
Max Hp(0.07) Occurred time	Maximum Hp(0.07) dose rate time	hh:mm

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Read	Starts reading out for data display. This will be executed from initializing the already established communication even during transmission.
Menu	Goes back to the Menu window: Fig. 5-1

(2) Setting value information

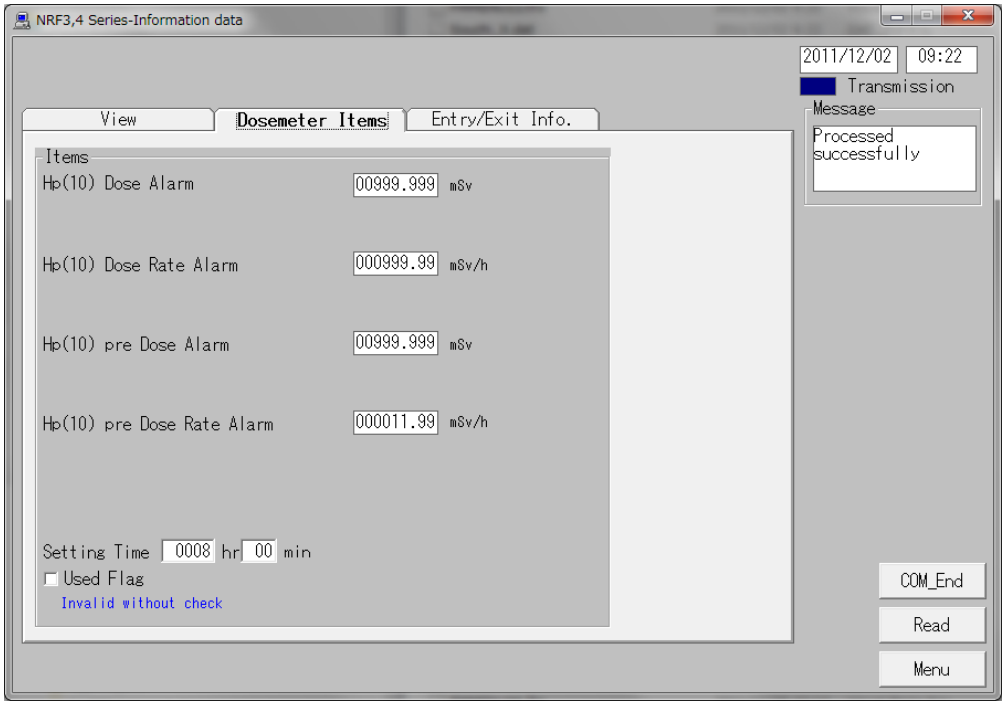


Fig. 5-13-4 Setting value Information Window (for NRF30 and NRF40)

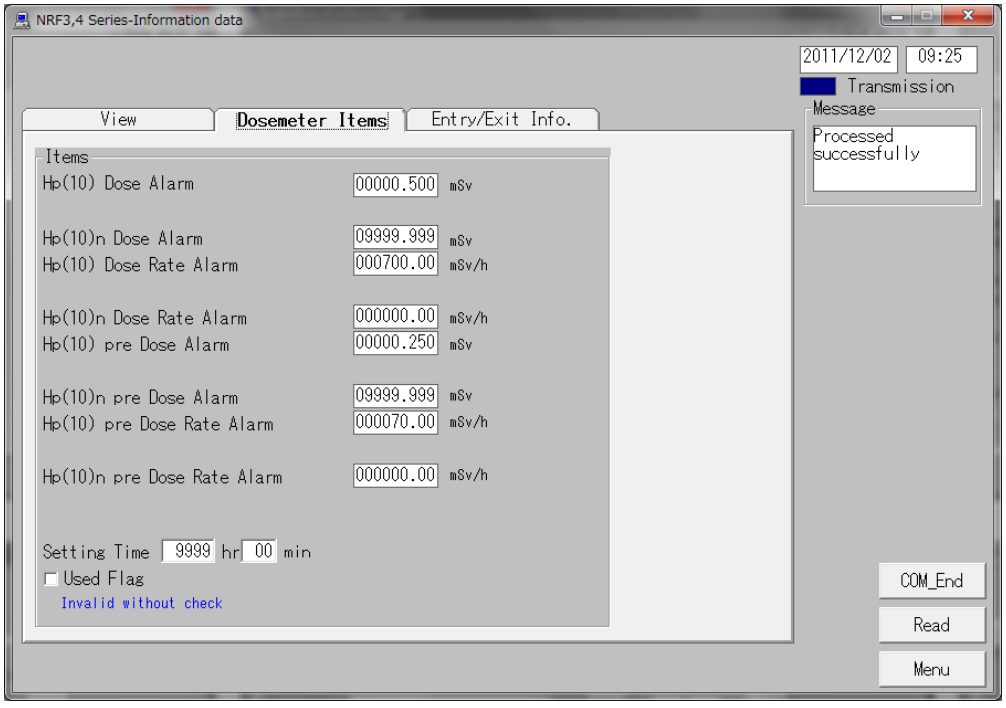


Fig. 5-13-5 Setting value Information Window (for NRF31)

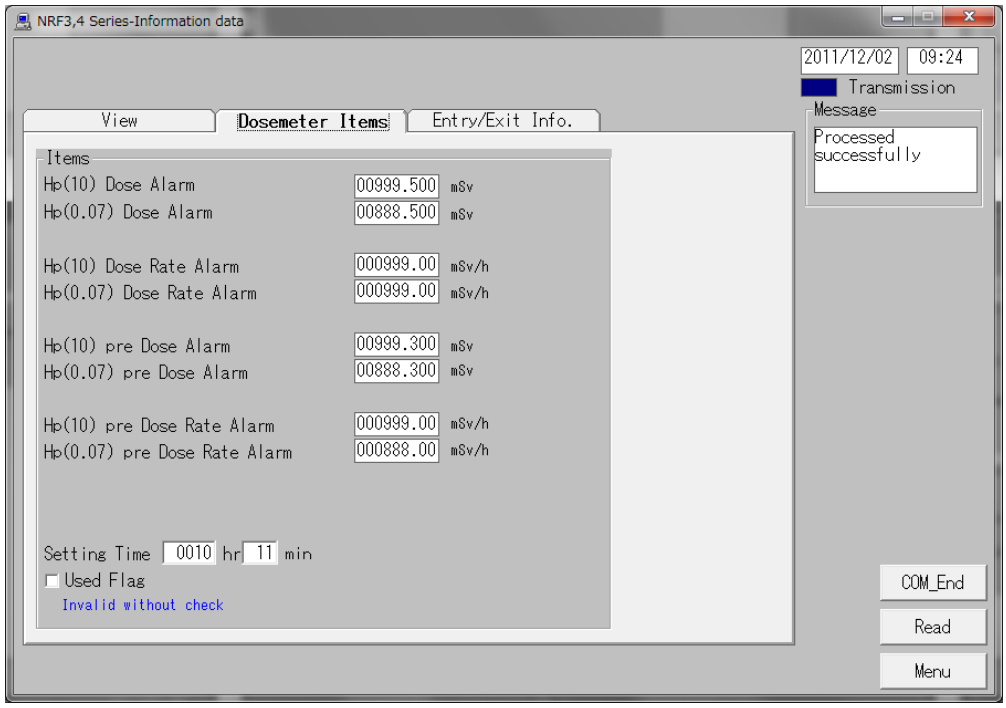


Fig. 5-13-6 Setting value Information Window (for NRF34)

-- Displays alarm setting value information by reading data in a dosimeter.

<View>

Name	Definition, range and unit of the functions	
Hp(10) Dose Alarm	Hp(10) integrated dose alarm threshold	0.001 to 9999.999 mSv
Hp(0.07) Dose Alarm	Hp(0.07) integrated dose alarm threshold	0.001 to 9999.999 mSv
Hp(10)n Dose Alarm	Hp(10)n integrated dose alarm threshold	0.01 to 9999.99 mSv/ h
Hp(10) Dose Rate Alarm	Hp(10) dose rate alarm threshold	0.01 to 9999.99 mSv/ h
Hp(0.07) Dose Rate Alarm	Hp(0.07) dose rate alarm threshold	0.001 to 9999.999 mSv
Hp(10)n Dose Rate Alarm	Hp(10)n dose rate alarm threshold	0.001 to 9999.999 mSv
Hp(10) Pre Dose Alarm	Hp(10) integrated dose pre alarm threshold	0.001 to 9999.999 mSv
Hp(0.07) Pre Dose Alarm	Hp(0.07) integrated dose pre alarm threshold	0.001 to 9999.999 mSv
Hp(10)n Pre Dose Alarm	Hp(10)n integrated dose pre alarm threshold	0.01 to 9999.99 mSv/ h
Hp(10) Pre Dose Rate Alarm	Hp(10) dose rate pre alarm threshold	0.01 to 9999.99 mSv/ h
Hp(0.07) Pre Dose Rate Alarm	Hp(0.07) dose rate pre alarm threshold	0.001 to 9999.999 mSv

Hp(10)n Pre Dose Rate Alarm	Hp(10)n dose rate pre alarm threshold	0.001 to 9999.999 mSv
Setting time	Alarm setting time	hh:mm

<Command Button>

Com_End	Finishes the communication with a dosimeter.
Read	Starts reading out for data display. This will be executed from initializing the already established communication even during transmission.
Menu	Goes back to the Menu window: Fig. 5-1

(3) Entry/Exit information

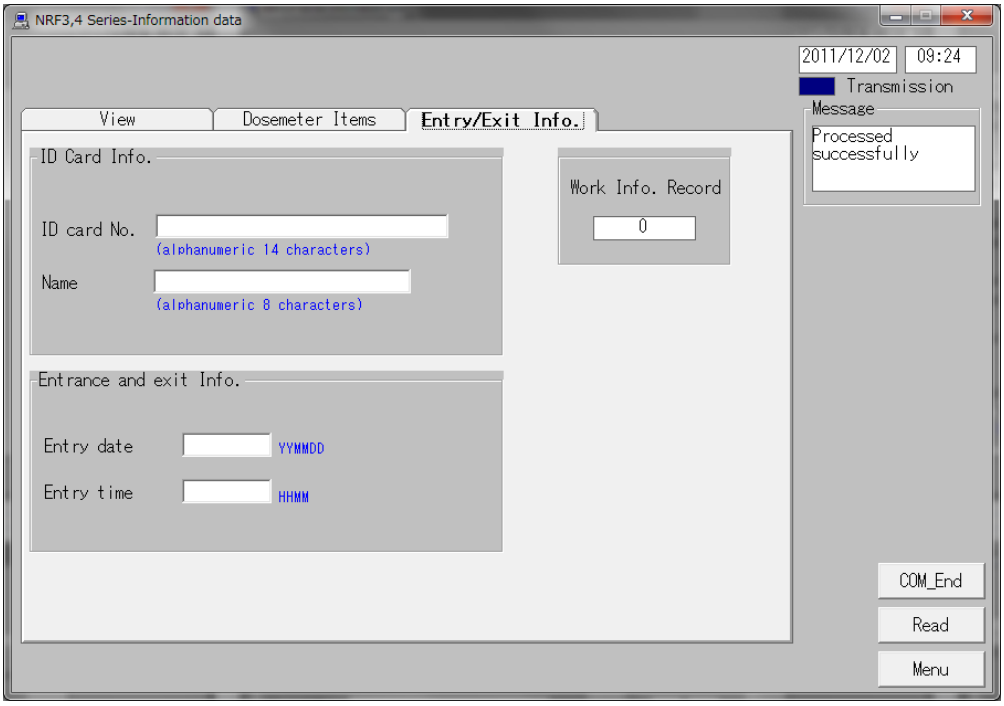


Fig. 5-13-7 Entry/Exit Information Window

-- Displays entry/exit information by reading data in a dosimeter.

<View>

Name	Definition, range and unit of the functions	
ID Card No.	ID card number	000000 to 999999
Name.	User name	8 alphanumeric characters (capital) Note) Indicates up to 8 characters on dosimeter's display.
Entry Date	Entry date	YYMMDD
Entry Time	Entry time	hhmm
Work Info. Record	Number of work information record	0 to 10 count

<Command Button>

Name	Definition, range and unit of the functions
Com_End	Finishes the communication with a dosimeter.
Read	Starts reading out for data display. This will be executed from initializing the already established communication even during transmission.
Menu	Goes back to the Menu window: Fig. 5-1

6. Troubleshooting

6.1 Errors and Solutions

(1) Transmission Error

Communication error between a computer and a Dosimeter Setting Device.

- During computer start up, processing, or data communication:

Error	Suggested Solution
<Establishing communication> Reading unit, or cable abnormal	Check the cable connection.
<Status process> No response	Check the cable connection.

- During data readout from a dosimeter:

Error	Suggested Solution
<Reading Process (Trend data acquisition)> Dosimeter Not Communicating	Retry reading out.
<Reading Process (Trend data acquisition)> Dosimeter communication error	Retry reading out.
<Reading Process (Trend data acquisition)> No response	Check the Dosimeter Setting Device. Check the connection with USB cable.
<Trend data reading process> Trend data does not exist	No Trend data. Create Trend data first, and then read out.

-During writing configurations to the dosimeter.

Error	Suggested Solution
<Writing Process> Dosimeter Not Communicating	Process reading out, first
<Writing Process> Dosimeter communication error	Process reading out, first
<Writing Process> No response	Process reading out, first. Check the cable connection.

★ Please restart PC if the errors not listed in this section occurred.

(2) Internal Error:

-Errors detected by an internal check.

- At starting of writing / Occurrence of abnormality on configuration range:

Error	Suggested Solution
Input Error of xxxx	Re-enter the value within the valid range.

(3) Error during at communication start:

-Errors detected by a computer internal check when attempted to write, or to readout trend data.

-When attempting writing process.

Error	Suggested Solution
Dosemieter Not Communicating Cannot write.	Start reading process, first.

- Error when attempted to reading out trend data:

Error	Suggested Solution
Dosemieter Not Communicating	Cancel the trend data readout, then start regular reading process.

★ Please restart PC if the errors not listed in this section occurred.

7. Abnormalities

Problem	Solution
Cannot establish communication.	May not connected properly. Check the cable connection. Please contact Fuji Electric if experiencing frequent transmission errors.

8. Maintenance

Check the Dosimeter Setting Device as specified below to ensure its performance.

To be checked:	Procedure
External Appearance	Visual check for any foreign objects such as dirt or dust balls. Check every six months, or every time a transmission error occurs. Check point; Inside of USB port.
Cable connection	Check any looseness on connection of cables. Check every six months, or every time a transmission error occurs. Check point; Cables
Infrared communication	Put close dosimeter to the IR Head and check the transmission. Check every six months, or every time a transmission error occurs.

★ Your comment ★

Dear customers,

Any comments/ requests/ suggestions regarding our instruction manual? Please feel free to contact us just by filling out this form and give to our sales representative.

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