

# DPR180/DPR250 PCMCIA OPTION MANUAL



# TABLE OF CONTENTS

1. OVERVIEW	1
1.1 Warning 1.2 Main functions	1 2
2. INSTALLATION	3
2.1 INSTALLING THE PCMCIA OPTION BOARD	3
3. OPERATION	13
31 OVERVIEW	13
3.1.1 PCMCIA card standard compatibility	
3.1.2 PCMCIA card handling	13
3.1.3 Archives summary	14
3.1.4 DOS compatibility	14
3.2 SETUP	14
3.2.1 PCMCIA communication interface configuration	14
3.2.2 PCMCIA card initialization	15
3.2.3 PCMCIA card test	15
3.2.4 Charts selection	15
3.3 ARCHIVE MANAGEMENT	16
3.3.1 Continuous archiving	16
3.3.2 Event driven archiving	16
3.4 KEYBOARD ARCHIVE MANAGEMENT	16
3.4.1 START/STOP actions	16
3.4.2 RESET PCMCIA files	
3.4.3 REMOVE PCMCIA function	1/
3.5 PCMCIA INFORMATION	1/
3.5.1 PCMCIA status	1/
3.5.2 PCMCIA card status display	
3.0 PUNUIA FILE DESCRIPTIONS	
3.0.1 File name conventions	
3.0.2 Import data to the Trendmanager software	19

4. PCMCIA CONFIGURATION	23
4.1 PCMCIA SUB-MATRIX PARAMETERS	
4.1.1 PCMCIA sub-matrix parameters list	23
4.1.2 Explanation of the classification	23
4.1.3 PCMCIA sub-matrix parameters description	23
4.2 PCMCIA SUB-MATRIX SERVICES	25
4.2.1 PCMCIA sub-matrix services list	25
4.2.2 PCMCIA sub-matrix services description	
·	

# TABLE OF CONTENTS, Continued

5. KITS LIST	29
6. TROUBLESHOOTING	31
6.1 PCMCIA OPTION IS NOT RECOGNIZED BY THE RECORDER (PCMCIA MATRIX DOES NOT APPEAR)	31
6.2 PCMCIA INIT SERVICE IS NOT POSSIBLE	31
6.3 "PCMCIA FULL" MESSAGE IS DISPLAYED ON THE RECORDER	31
6.4 "PCMCIA NOT INIT" MESSAGE IS DISPLAYED ON THE RECORDER	31
6.5 "PCMCIA BAD" MESSAGE IS DISPLAYED ON THE RECORDER	31
6.6 "PCMCIA PENDING" MESSAGE IS DISPLAYED ON THE RECORDER	32
6.7 PCMCIA TRIANGLE DOES NOT APPEAR ON THE DISPLAY WHEN ARCHIVING	32
6.8 NO DATA HAVE BEEN WRITTEN ON THE CARD	32
6.9 SDA GENERATES AN ERROR WHILE OPENING TREND FILES IN CHART DISPLAY	
7. PROMPTS TRANSLATION	

# **FIGURES**

FIGURE 2-1	3
FIGURE 2-2	4
FIGURE 2-3	5
FIGURE 2-4	5
FIGURE 2-5	6
FIGURE 2-6	6
FIGURE 2-7	7
FIGURE 2-8	7
FIGURE 2-9	8
FIGURE 2-10	8
FIGURE 2-11	9
FIGURE 2-12	9
FIGURE 2-13	10
FIGURE 2-14	10
FIGURE 2-15	

# 1. OVERVIEW

Before running your PCMCIA option, please read the following explanations on how to install it.

# 1.1 Warning

### > If you received your optional PCMCIA board as a spare part:

You are going to install your optional PCMCIA board.

To run properly, this application needs recorder firmware release 001AK or higher.

To determine the version of your recorder firmware, refer to your product manual (sub-section 3-2) or read it on the recorder in SERVICE / MISCELLANEOUS, SOFTWARE.

# If your recorder firmware release is lower than 001AK (or if you wish to upgrade it), follow the procedure given in the **PC Configurator Kit Notice (CK 214)**:

1. Install the PC configurator software (included in this kit) on your PC.

The minimum PC configuration required is a 486 with 4 Mb of RAM and 10 Mb free on your hard disk.

The software is compatible with Windows 3.1, Windows 3.11 and Windows 95.

- 2. Install the new recorder firmware (included in this kit) on your PC.
- 3. Connect the PC Recorder interface (Kit # 46190409-501 not included).
- 4. Upgrade the recorder firmware.
- Install the optional PCMCIA board as described in this manual (refer to Section 2; sub-section 2.1)
- 6. Configure the PCMCIA option board as described in section 3 of the manual.

### > If you received your optional PCMCIA board with your recorder:

The PCMCIA board is already installed.

However, you have to configure the PCMCIA option as described in Section 3 of this manual.

# > Note that you can only upgrade the recorder firmware from the front panel of the recorder (with a jack cable) using the PC Configurator Kit.

# 1.2 Main functions

- Selectable start conditions of archiving
- Rollover recording capability to keep the more recent informations
- Recorded informations selectable among: trends, alarms, digital events and internal diagnostics with configurable file names
- Recorded trends may be analog inputs, math results (if Maths option present) or communication PV's
- Ten selectable trends login frequencies from 1 second up to 30 minutes
- Check of the PCMCIA memory card (can be done before storing process data)
- PCMCIA event selectable on a configurable filling level
- Displaying PCMCIA card status (with specific led)
- Activating relay or displaying message on "PCMCIA" event
- PCMCIA memory cards used are ATA type II compatible and are made with the flash technology
- Internal buffer (128 Kb) to store the data during the change of the PCMCIA memory card.

# 2. INSTALLATION

# 2.1 Installing the PCMCIA option board

→ WARNING: Please use an antistatic ground strap to avoid possible electrostatic damage to the printed circuit boards.

- 1. Turn off the power to isolate the recorder from the main supply.
- 2. Open the recorder door and remove the chart cassette from the chassis.
- 3. Turn OFF the switch. (See Figure 2-1)



Recorder's main power switch located behind the chart cassette

Figure 2-1

- 4. Remove the cover from the power supply terminal block. (See ref. E, Figure 2-15)
- 5. Disconnect the main supply from the power supply terminal block.
- 6. Unscrew the 3 fixing screws from the rear cover. (See ref. A, Figure 2-2)
- 7. Remove the rear cover. (See ref. B & C, Figure 2-2)



Figure 2-2

8. Remove all the terminal blocks. (See Figure 2-3)



Figure 2-3

- 9. Remove all the grommets. (See ref. A, Figure 2-4)
- 10. Unscrew the 4 fixing screws (M4) and remove from the chassis with the Torx key T20. (See ref. B, Figure 2-4)



Figure 2-4

11. Slide the recorder chassis out of the case. (See Figure 2-5).



Figure 2-5

- 12. Unscrew the 2 fixing screws from the power supply.
- 13. Remove the power supply by removing 5 screws; two at the top, one in the middle and two at the bottom. (See Figure 2-6)



Figure 2-6

- 14. Remove the slot covers in the right hand side location, and the Communications card if installed.
- 15. Remove the cover which protects the CPU board. Unscrew the 3 fixing screws. (See Figure 2-7).



Figure 2-7

- 16. Ensure your antistatic ground strap is connected to earth before proceeding to avoid possible electrostatic damage to the CPU board or PCMCIA board.
- 17. Disconnect the flat cable from the CPU board. (See Figure 2-8)



#### Figure 2-8

- 18. Remove the MMI flat cable plastic protection.
- 19. Remove the 3 flat cable clips. (See ref. A, Figure 2-9)
- 20. Remove the ink ribbon carriage stop (see ref. B standoff, Figure 2-9). Unscrew the fixing screw.
- 21. Remove the reinforcing bar (see ref. C, Figure 2-9) by unscrewing the 2 screws.



Figure 2-9

22. Unscrew the 3 fixing screws from the PCMCIA sub-assembly. (See Figure 2-10).



Figure 2-10

- 23. Remove the MMI with 2 screws (see B in Figure 2-11)
- 24. Put in place the PCMCIA sub-assembly on the left hand printer chassis side plate. (See Figure 2-11)
- 25. Fix the PCMCIA sub-assembly with the 3 screws M3. (See ref. A, Figure 2-11) one from the carriage stop.

**WARNING**: The 3 PCMCIA board fixing holes may have a wrong diameter (2.2 mm) but only on the very first 180 mm units.

In this case, you have to enlarge them to 3+ 0.5/0 mm.

- Insert fully your memory card (not supplied) in the card guides.

- Fix the memory card guides with the 2 screws M2. (See ref. B, Figure 2-11) by reinstalling the MMI.



Figure 2-11

- 26. Reinstall reinforcing bar (see ref. C, Figure 2-9)
- 27. Pass the PCMCIA flat cable through the opening at the rear of the printer chassis.
  Fix the PCMCIA flat cable on the rear metal sheet with the double-side adhesive tape. (See ref. C, Figure 2-11). The adhesive tape is located on the flat cable.
  Ensure the printer carriage can move properly.
- 28. Replace the MMI flat cable plastic protection.
- 29. Connect the PCMCIA flat cable to the CPU board (see Figure 2-12). Ensure the connectors are located correctly.



Figure 2-12

- 30. Put in place the MMI flat cable on the PCMCIA cover.
- 31. Fix it with the 2 flat cable clips supplied (with foam). (See ref. A, Figure 2-13)



Figure 2-13

- 32. Ensure the MMI can open properly.
  - Open the MMI fully.
  - Remove the protection of the double-side adhesive tape located on the PCMCIA cover.
  - Fix the MMI flat cable.
  - Put in place the MMI flat cable at the rear of the PCMCIA cover. (See ref. C, Figure 2-13)
- 33. Put in place the third MMI flat cable clip (not supplied) at the rear of the printer chassis. (See ref. B, Figure 2-13).
- 34. Connect the MMI flat cable to the CPU Board (see Figure 2-14). Ensure the connectors are located correctly.



Figure 2-14

- 35. Replace the CPU board protection cover. Replace the 3 fixing screws.
- 36. Replace the slot covers.
- 37. Replace the power supply. Replace the 2 rightest fixing screws.
- 38. Slide the recorder chassis back into the outer case.
- 39. Replace the 4 fixing screws (M4) with the Torx key T20. (See ref. B, Figure 2-4)
- 40. Replace all terminal blocks and grommets.
- 41. Replace the rear cover. Replace the 3 fixing screws. (See ref. A, Figure 2-2)
- 42. Reconnect the main supply to the power supply terminal block.
- 43. Replace the power supply terminal block cover. (See ref. E, Figure 2-15)
- 44. Turn ON the switch. (See Figure 2-1).
- 45. Replace the chart cassette.
- 46. Switch ON the main supply.
- 47. Upgrade your recorder firmware if the revision is lower than 001AK. (See CK 214).



Figure 2-15

# 3.1 Overview

## 3.1.1 PCMCIA card standard compatibility

The embedded PCMCIA driver supports all **ATA flash card devices** with a size from 2Mb up to 75Mb and is compatible with the PC card format (type II).

The write-protected signal available on these cards is not tested and not used because of a lack of standard rules.

### 3.1.2 PCMCIA card handling

If your recorder is equipped with the PCMCIA option board, you can use a memory card to store the recorder information.

For this, proceed as indicated in the following figure to introduce the memory card:

![](_page_16_Picture_8.jpeg)

Figure 3-1: Card loading in the 180mm or 250mm recorder

**Note**: The recorder will automatically detect the card presence.

The recorder indicates the writing status by lighting a led located under the display (see Figure 3-2).

This led must be off when removing the memory card (this can be done with the remove or stop function), if not, some data may be lost.

To remove the memory card press the button located above it.

![](_page_17_Figure_0.jpeg)

Figure 3-2: PCMCIA led in the 180mm or 250mm recorder

### 3.1.3 Archives summary

Archived data on a PCMCIA memory card may be:

- charts i.e analog inputs, math results or communication data,
- analog alarms,
- digital events,
- recorder events: (no paper, end of paper, burnout ...)

#### 3.1.4 Recorder firmware compatibility

The PCMCIA option is compatible with the **001AK recorder firmware or higher**. Older firmware revisions will not allow your recorder to recognize the PCMCIA option board, the recorder will need to be updated (see the OVERVIEW section of this manual).

# 3.2 SETUP

### 3.2.1 PCMCIA communication interface configuration

The PCMCIA option board is detected at power up during the recorder's initialization time but, to be able to use it, the INTERFACE parameter of the MISCELLANEOUS configuration matrix must be set to PCMCIA.

The default configuration of this parameter is JACK, which allows to configure the recorder with the PC Configurator software.

When the option board has been detected, the PCMCIA configuration matrices (READ-WRITE, PRINT CONF and SERVICE) appear and this option becomes TRUE in recorder's hardware configuration (see the CARD USED service in the MISCELLANEOUS matrix).

SUB-MATRIX	PARAMETER	CLASSIFICATION
MISCEL	INTERFACE	* * * *
Definition:	Determines which of the PCMCIA connected to the recorder.	option board or the JACK board is
How to modify it:	Select a new value.	
Possible choices:	JACK PCMCIA	
Default value:	JACK	
Note:	This parameter cannot be modified	by the PC Configurator software.

Note: The PCMCIA service functions are only available when the interface parameter is set to PCMCIA.

### 3.2.2 PCMCIA card initialization

When using a memory card for the first time or when changing the file structure of that memory card (example: adding a file to it), it must be formatted by the recorder.

The recorder formats the memory card in a DOS compatible way and creates ALARMS, EVENTS and DIAGNOSTIC files if needed, the remaining space is used to create the TREND files.

To archive TRENDS on the memory cards, the DESTINATION parameter of the READ-WRITE\CHART matrix must be configured (see the chart configuration paragraph). The storage frequency must also be programmed (see FREQUENCY parameter in the READ-WRITE\PCMCIA matrix).

The INITIALIZATION service is located in SERVICE\PCMCIA matrix. During its completion, "PCMCIA INIT" will be displayed and the PCMCIA led will light ON.

**Note**: All the created files are empty at the initialization time.

#### 3.2.3 PCMCIA card test

The recorder has an internal function that enables to test the memory card. This test takes about 1 minute per Megabyte (4 minutes for a 4Mb memory card).

During the test the recorder checks the possibility to erase, write and read the entire memory space. Previous data are temporarily stored in a buffer and then re-written after the test so that this PCMCIA TEST function can be done on DOS formatted cards or not.

In case of error, the PCMCIA status is set to PCMCIA BAD, another status displayed means that the test has succeeded. (Refer to PCMCIA status § 4.2.2).

During the test the PCMCIA led lights on indicating that data are written on the card.

To stop this test at any time without damaging the card, press the SETUP key.

For more details see the TEST function in the PCMCIA\SERVICE matrix.

**Note:** Do not remove the card during the test function progress, this may damage the recorded data.

#### 3.2.4 Charts selection

The TREND storage configuration is done in two steps:

- Select TRACE choice in the TRACE parameter of the READ-WRITE\CHART matrix.
- Select a value for the DESTINATION parameter, in the same matrix. See the following table:

SUB-MATRIX	PARAMETER	CLASSIFICATION
CHART	DESTINATION	* * * *
Definition:	Determines where to print or copy ch	arts.
How to modify it:	Select a new value.	
Possible choices:	ON PAPER: trends are printed on pa ON FILE: trends are stored on PCMO PAPER & FILE: trends are both print	aper only CIA only ted and stored in TRENDS file
Default value:	ON PAPER	
Note:	24 trends can be stored in the PCMC mm recorder.	CIA card TREND files with a 180
	32 trends can be stored in the PCMC mm recorder.	CIA card TREND files with a 250

PCMCIA Option Manual

# 3.3 Archive management

The archive management is detailed in the configuration chapter of this manual. Archiving on the PCMCIA memory card may be continuous or event driven depending on the START condition (see § 4.1.3).

### 3.3.1 Continuous archiving

If the START parameter is configured to CONTINUOUSLY, the information are continuously stored on the memory card.

However the archiving is stopped each time the measures are stopped, this may happen when a parameter of the configuration is changed or when a service function is running (all configuration or service parameters with the "  $\diamond$  +" classification stop the measures and so the archiving when they are modified).

The archiving may also be stopped and restarted with the keyboard when the recording is continuous. On the contrary, the recording may be started and stopped again if the START parameter is set to NO ARCHIVE.

**Note:** At the beginning of the archiving, the alarms, the digital events and the recorder events which are active are recorded in the corresponding file with a star (\*), this to indicate that the event or the alarm may be former to the recording date.

### 3.3.2 Event driven archiving

The recording may also be driven by a logic input or an alarm: an alarm on or a digital input closed to start the recording and the same alarm off or the same logic input opened to stop it (see § 4.1.3)

As in the continuous archiving mode, the operator can start or stop the archiving with the keyboard (see § 3.4).

The recorder continuously stores the alarms and events status changes in an internal buffer. Therefore, when the archiving starts, the recorder stores the latest alarm or event status change. Consequently the alarm or event dates may be prior to the archiving start date.

**Note:** When driving the archiving both with an event and with the keyboard, the latest action takes the priority.

# 3.4 Keyboard archive management

The archive may be managed automatically, but in addition some actions may be done with the keyboard.

### 3.4.1 START/STOP actions

By pressing the PRINT key it is possible to access to the "STOP ARCHIVE" or to the "START ARCHIVE" action depending whether the archiving is running or not.

When the storage is in progress, the "STOP ARCHIVE" message will be displayed, otherwise the "START ARCHIVE" message will be displayed.

The archiving can also be started or stopped by pressing F1 or F2 keys if the parameters F1 KEY or F2 KEY in the READ-WRITE\MMI matrix are configured to "START/STOP ARCH".

### 3.4.2 RESET PCMCIA files

The way to erase the files content (to start a new archive session) is to RESET the PCMCIA card by pressing RESET key and selecting the RESET PCMCIA choice. This is also an easy way to initialize a new PCMCIA card using.

WARNING → The RESET PCMCIA action will delete all the data stored on the card! There is no backup done by the recorder. Information must be saved if needed with an external PC by using a File manager for example.

## 3.4.3 REMOVE PCMCIA function

To prevent any loss of data when removing the memory card, the REMOVE PCMCIA function must be used if the archiving is running (PCMCIA triangle lit ON).

The "REMOVE PCMCIA" action is accessible through the PRINT key.

The "REMOVE PCMCIA" action is also accessible by pressing the F1 or F2 keys if the parameters F1 KEY or F2 KEY in the READ-WRITE\MMI matrix are configured to "REMOVE PCMCIA". The system data is saved so that the card can be removed.

During this time, PCMCIA card status becomes CARD PENDING and possible data will be stored in a temporary buffer.

# 3.5 **PCMCIA** information

### 3.5.1 PCMCIA status

The recorder provides a memory card status (see § 4.2.2 STATUS service) to help in the card utilization. This status may be one of the following cases:

Status	Description	Solution
PCMCIA MISSING *	There is no PCMCIA memory card inside the recorder or the card has not been detected.	Insert a compatible PCMCIA memory card
PCMCIA NOT INIT***	Card has been recognized but it has not been initialized.	Initialize the memory card (see § 4.2.2)
PCMCIA PENDING**	Data cannot be stored on the PCMCIA card because the configuration stored on it does not match the recorder configuration or there is no memory card.	Insert a memory card, Initialize it or reset it.(see § 4.2.2)
PCMCIA BAD***	Some data could not have been stored on PCMCIA because of a physical problem on it.	Change the memory card
CARD PRESENT*	A PCMCIA card is present with no problem detected.	
PCMCIA CONF CHG**	There is a difference between the configuration of the recorder and the parameters stored on the memory card, the parameters may be one of the following: the ld number, the language, the trace, the destination, the tagname and the engineering unit.	Restore the same configuration on the recorder or RESET the memory card.
PCMCIA FULL***	One of the PCMCIA files is nearly full according to the EVENT definition (see the "%FULL" parameter in § 4.1.3).	Remove the PCMCIA card and save the files on your computer. Introduce it back and reset it (see § 4.2.2).
PCMCIA DATA LOST**	This message is displayed if data to be written on the PCMCIA card have not been stored and have been removed from the internal buffer.	See the PENDING case
	This appears when the recorder archiving has started data and no memory card is inserted for a long period.	

\* Information accessible through the STATUS service described in the paragraph 4.1.3.

\*\* Information displayed in run mode, not visible with the STATUS service.

\*\*\* Information displayed in run mode and visible with the STATUS service.

## 3.5.2 PCMCIA card status display

If PCMCIA card attribute is STORING, then a triangle appears. This means that any card removal could cause data losses on the card.

![](_page_21_Figure_2.jpeg)

This triangle is turned off during the recorder configuration.

"PCMCIA BAD", "PCMCIA NOT INIT", "PCMCIA FULL" or "PCMCIA PENDING" could be displayed on the lower display as blinking message, depending on the corresponding status.

Note: The PCMCIA led must be lit on, for the recorder to be able to store data on the PCMCIA card.

### 3.5.3 PCMCIA event

The PCMCIA EVENT located in the READ-WRITE\EVENTS matrix (refer to the product manual) is activated if the PCMCIA card or the driver is in one of the following conditions:

MESSAGE DISPLAYED	DESCRIPTION	SOLUTION
PCMCIA NOT INIT	The card has not been initialized by the recorder.	Initialize the memory card.
PCMCIA BAD	There is a failure in the card device.	Change the memory card.
PCMCIA FULL	At least one archive file (TRENDS, ALARMS, EVENTS or DIAGNOSTIC) has reached the user-defined %full threshold (see the % FULL parameter in the READ-WRITE\PCMCIA matrix).	Save the files on your computer and reset the memory card (see § 4.2.2).

**Note**: When the PCMCIA FULL message is displayed, the recording continues till the 100% full is reached then all additional informations to this file are lost except if the ROLLOVER option is set (see § 4.1.3). Other files continue to be normally updated.

# 3.6 PCMCIA file descriptions

All PCMCIA card files are PC-compatible and are readable by the TrendManager Software package.

### 3.6.1 File name conventions

PCMCIA files have a fixed extension according to their content: TRENDS (\*.LNT), ALARMS (\*.LNA), EVENTS (\*.LNE) and DIAGNOSTICS (\*.LND).

The content of each type of file is:

- .LNT files contain CHARTS records
- .LNA files contain ALARMS records (all analog alarms)
- .LNE files contain DIGITAL events records
- .LND files contain recorder EVENTS records.

The recorder stores data depending on its configuration: TRENDS (**charts** channels records) informations are sent to the PCMCIA driver at user-defined frequency, ALARMS (**alarms** records), EVENTS (**digital events** records) and DIAGNOSTIC (**recorder events** records) are asynchronous informations and so, are sent at each occurrence.

## 3.6.2 Import data to the TrendManger software

The TrendManager Software Suite has a built in Data Conversion Tool that will accurately reproduce data from the Honeywell VRX recorder range

The data is imported from the device media using the TrendManager Pro Software Suite Import function into the database.

Select the Import button from the main tool bar and the External import box will appear.

	🖼 TrendServer Pro			
	Edit. Help			
	Graphs			
	Recorder	External Import		
_	Realtime	Select type of import: Pen data and events Setup only.		
	Import	Import Close	1	
	Help	Source Location: From Directory From Network (FTP) D:\Recorders\DPR\Data Change		
	Trash	General options:		
	<b>@</b>	Make a log file in the program directory		
	Batch	🖵 Include extra diagnostic details		
	System			
	Servers			

Select the data option and select From Directory as the source location.

Use the Change button to browse your PC or network to locate the data.

Press the Import button when the correct location has been selected.

User Acknowledgement VRX100/150/180 - Trend Manager Software (TMP) package uses the full scale pen ranges when importing, UMC800 & HC900 - TMP uses the Programmed range limits when importing, but they may be less than the Full range limits	
VRX100/150/180 - Trend Manager Software (TMP) package uses the full scale pen ranges when importing.	0
UMC800 & HC900 - TMP uses the Programmed range limits when importing, but they may be less than the Full range limits from the data. TMP will check and warn of this case and the user must then make a selection of how the data will be imported and displayed.	8
Help -	
The Symbol: > indicates that data has been found where the highest value found exceeds the range limit.	
The Symbol: < indicates that data has been found where the lowest value found exceeds the range limit.	*
I Acknowledge Do Not Acknow	ledge

The User Acknowledgement box will appear; to proceed this must be acknowledged.

	v or Existing Device	1
end Manager Im	Add Data Import Files to a New or Existing Device? New Existing	

Select to import data to a New or Existing device. For an Existing device the Importing Controller box will display the existing devices in the TMP databases.

nporting Contro	oller Data		
Select device contro	oller from the list below		
Controller Type	Description		
UMC800 HC900	UMC800 HC900		
DPR.	DPR250/180		
Next Available ID N	umber 500!	Cancel	nt >

Select the device you wish to import the data from and click on Next. This will start the data importing.

If the data is for a New device, a list of device types will appear, select one and go to Next.

	New DPR D	evice Properties
Trans	Enter a uniq	ue Name for the device
	Name	DPR Test
rend M	Description	Recorder 1
		Cancel OK

Enter a device name and description and click on OK.

![](_page_24_Picture_3.jpeg)

Next choose the format type for the importing data. The two different formats are:

X Series (recommended) - This has the benefit of flexible pen scale limits that can be changed at any time in the X Series release of TrendServer. Data imported in this format cannot be loaded into a version 5 release of TrendServer.

Version 5 - Pen scale limits will be fixed once set, and any data values imported outside of the pen scale limits will be capped at the appropriate limit. However, this data can be read in by version 5 release of TrendServer. Click on OK and the data will start to import.

If there is a device in the database with the same Serial number but a different ID, this will be flagged up and you can choose to add the data to this device or a new device will be created. For a new device choose from the Database Device Destination User Selection box.

VRX Recorder Data File Conversion	
Reading File: TREND1.LNT	(Build)
Transfering Blocks to Complete: 0 Errors:	
EVENT.LNE Contains no log data	<u> </u>
DIAG.LND Finished reading Diagnostic Data File TREND1.LNT File Contains Batched Records Finished reading Unit Data File	
	×

The Data File conversion will start and the destination box will appear to confirm the correct device. When the file conversion is complete press ok.

![](_page_25_Figure_2.jpeg)

When the import is complete the data will be automatically displayed as a graph showing the data as pen traces and displaying each associated pen. Any events will be imported (via Trendbus only) with the data and can be displayed on the graph using the Event button at the bottom of the graph.

The device is loaded into the recorders list for identification purposes, click on the Recorders icon to display the list of recorders. The device can not be configured from the software. The imported data can be graphed, analyzed, archived, printed and exported to a spread sheet.

For data imported from Honeywell V5, X Series recorders, an Event viewer is available by right clicking on the recorder in the recorders list and selecting Events.

Refer to the TrendManager Pro Software Suite manual 43-TV-25-11 for further information. Available at <u>www.honeywell.com/ps</u>

# 4. PCMCIA CONFIGURATION

# 4.1 PCMCIA sub-matrix parameters

### 4.1.1 PCMCIA sub-matrix parameters list

![](_page_26_Figure_3.jpeg)

### 4.1.2 Explanation of the classification

This section will describe all the matrices that have been modified by the PCMCIA option and then, how configuration will be possible.

•	Means that parameter can be modified in RUN mode (measures are still done)
♦ ♦	Means that parameter can be modified in STOP mode (measures are stopped)
*	Means that parameter can be modified with password 1 or password 2
<b>* *</b>	Means that parameter can be modified with password 2 only

# 4.1.3 PCMCIA sub-matrix parameters description

SUB-MATRIX	PARAMETER	CLASSIFICATION
PCMCIA	START	* * * *
Definition:	Automatic start conditions	
How to modify it:	Select a new start condition	
Possible choices:	NO ARCHIVE CONTINUOUSLY DI CLOSED # AL ON #	
Default value:	NO ARCHIVE	
Note:	Stop conditions are the following: DI OPENED # AL OFF #	

SUB-MATRIX	PARAMETER	CLASSIFICATION
PCMCIA	ROLLOVER	* * * *
Definition:	Determines if, once the end of archive file has been reached, new data are copied at the beginning of this file, so that it contains the most recent data, or not.	
How to modify it:	Select or not rollover mode	
Possible choices:	e choices: DISABLE ENABLE	
Default value:	DISABLE	

SUB-MATRIX	PARAMETER	CLASSIFICATION	
PCMCIA	LOG FREQ	* * * *	
Definition:	Archive frequency used to log TREN	Archive frequency used to log TRENDS files.	
How to modify it:	Select a new frequency.		
Possible choices:	1 s 5 s 10 s 15 s 30 s 1 mn 5 mn 10 mn 15 mn 20 mn		
Default value:	10 s		
Note:	In case of a change in the login freques of a change in the login freques of tware will make interpolations (de or not) to produce a trend at the high	uency on the same file, the SDA pending if that option is configured nest frequency.	
	It is recommended in that case to rea	ad the file without interpolation.	

SUB-MATRIX	PARAMETER	CLASSIFICATION
PCMCIA	% FULL	٠.
Definition:	Determines PCMCIA EVENT thresho	ld.
How to modify it:	Select a threshold in %.	
Possible choices:	0 to 100%	
Default value:	90% *	
See also:	PCMCIA in EVENTS matrix	

\* The default value is 0% if the recorder was previously equipped with a firmware revision older than 001AK.

# 4.2 PCMCIA sub-matrix services

![](_page_28_Figure_1.jpeg)

## 4.2.1 PCMCIA sub-matrix services list

**NOTE**: The memory card must be present in the recorder in order to access to the service functions and the INTERFACE parameter must be set to PCMCIA.

# 4.2.2 PCMCIA sub-matrix services description

SUB-MATRIX	PARAMETER	CLASSIFICATION
PCMCIA	INITIALIZATION	* * * *
Definition:	Formats and initializes PCMCIA board.	
How to use/execute it:	to use/execute it:At first, you have to enter the number of records you want for ALARMS files: "Nb ALARM REC ?" is blinking and you can type it (1651 max).Then their file name (7 characters max.): "ALARM NAME ?" is blinking and you can type it .	
	Then the number of records for EVENTS "Nb EVENT REC ?" is blinking and you	5 files: can type it (1651 max).
	Then its file name (7 characters max.): "EVENT NAME ?" is blinking and you ca	an type it.
The number of records for DIAGNOSTIC files: "Nb DIAG REC ?" is blinking and you can type it (266		; files: an type it (2667 max).
	Then its file name (7 characters max.): <b>"DIAG NAME ?"</b> is blinking and you can type it.	
And finally, we have to type TRENDS file names (7 characters "TREND NAME ?" is blinking and you can type it.		e names (7 characters max.) : an type it.
	During completion, "PCMCIA INIT" is dis	played.
Notes:	• At each step, you can abort this initia SET UP key.	lization by pressing
	<ul> <li>Default file names are "ALARM" for for DIAGNOSTIC and their extension name has been entered, then it to following answers.</li> </ul>	ALARM, "EVENT" for EVENT, and "DIAG" ons are automatically added. If another file akes the place of the default one for the
	<ul> <li>A digital index is automatically added</li> <li>ALARM, EVENT and DIAG records a sectors of 512 bytes (as in the DOS) segreater than the programmed num</li> <li>If the number of records is set to "0", "</li> </ul>	to trend file names on PCMCIA card. re organized in blocks and the files use so that the effective number of records may ber of records. the corresponding file is not created.

SUB-MATRIX	PARAMETER	CLASSIFICATION	
PCMCIA	TEST	* * * *	
Definition:	Tests PCMCIA device.		
How to use/execute it:	By pressing ENTER, PCMCIA board driver tests the whole PCMCIA device: during execution, the percentage of test completion is displayed on the screen:		
	For example: "15% PASSED"		
	If an error occurs during this test, "FA PCMCIA status becomes PCMCIA B	AILED" appears during 2s. Test is aborted and AD.	
Note:	At any moment, you can abort the pro	ocess by using SETUP key.	
	The test duration is about 1 minute p	er Megabyte of capacity.	

SUB-MATRIX	PARAMETER	CLASSIFICATION
PCMCIA	SOFTWARE	* ۴
Definition:	PCMCIA board driver software revision.	
How to use/execute it:	You can only read the value.	
	You can exit by pressing SETUP key.	

SUB-MATRIX	PARAMETER	CLASSIFICATION
PCMCIA	SIZE	* *
Definition:	PCMCIA board size in Mb.	
How to use/execute it:	You can only read the value.	
	You can exit by pressing SETUP key.	

SUB-MATRIX	PARAMETER	CLASSIFICATION	
PCMCIA	STATUS	<b>*</b> *	
Definition:	Return status of PCMCIA board.		
	PCMCIA MISSING: the card is not inboard		
	<b>PCMCIA NOT INIT</b> : the card has to be initialized (cf INITIALIZATION parameter in this matrix)		
	<b>PCMCIA BAD</b> : the card cannot be correctly used by the PCMCIA d Initialize it again or test it.		
	<b>PCMCIA FULL</b> : at least, one of the included file is full according to the threshold configured by the user (cf "%FULL" parameter in READ/WRITE PCMCIA matrix.		
	PCMCIA PRESENT: the card is ready to be used		
How to use/execute it:	You can only read the status.		
	You can exit by using SETUP key.		

SUB-MATRIX	PARAMETER	CLASSIFICATION		
PCMCIA	DIRECTORY	* ۴		
Definition:	Allows you to read PCMCIA card directory: the names of the files on the memory card (with DOS extension), the number of records used and remaining per file are displayed (only the files compatible with the recorder data are displayed).			
How to use/execute it:	If a file exists, its name and its index are first displayed in the PCMCIA care			
	<u>Ex</u> : 01 ALARN	I.LNA		
	With the $\uparrow$ and $\checkmark$ keys, you can scroll all SDA files written on the card. The $\leftarrow$ and $\rightarrow$ keys allow you to display the number of records already used in this file and the number of remaining records. The file index is st displayed to show you which is the corresponding file. <u>Ex</u> : Press $\rightarrow$ . Then the following message appears on the display: 01 U: 12			
That means that 12 records hat Press → again: The following 01 R:		ready been written on the 1st file. is shown:		
	That means that 1488 records are s	still available for this 1st file.		
	Or the following string is shown for	TREND files:		
	01 R: 1 1	0:45		
	That means that there is still space archiving time.	for 1 day 10 hours and 45 minutes of		
	Note that except for TREND files, the to the size given or computed during	ne total number of records corresponds g PCMCIA card initialization.		
	You can exit by using SETUP key.			

# 5. KITS LIST

KITS LIST	PART #		
PCMCIA upgrade kit	46190163-501		
Compact Flash Card 256MB	50001011-504		
Compact Flash to PCMCIA Adapter	50001014-501		
TrendManager Analysis software	50016133-501		

# 6.1 PCMCIA option is not recognized by the recorder (PCMCIA matrix does not appear)

#### CHECK

Check if the flat cable connection between PCMCIA board and CPU board is correct.

#### **DIAGNOSTIC / ACTION**

**1. NO:** Check for the proper connection.

1. NO: Insert the card into the board.

### 6.2 PCMCIA INIT service is not possible

#### CHECK

#### **DIAGNOSTIC / ACTION**

Is PCMCIA memory card really plugged into the driver? Is problem corrected ?

**2. NO:** Verify you only use **ATA flash card** devices (see Section 5 - Kits list for certified cards).

### 6.3 "PCMCIA FULL" message is displayed on the recorder

CHECK	DIAGNOSTIC / ACTION
What is the threshold value in READ- WRITE\PCMCIA matrix?	<b>1.</b> Increase this value to disable "PCMCIA FULL" message display.
Is problem corrected ?	<b>2. NO:</b> Initialize PCMCIA card again with INIT utility in PCMCIA / SERVICE matrix and increase the number of records for the files which are too small.

# 6.4 "PCMCIA NOT INIT" message is displayed on the recorder

CHECK

#### **DIAGNOSTIC / ACTION**

**1.** Initialize the card by using INIT menu in PCMCIA / SERVICE matrix.

### 6.5 "PCMCIA BAD" message is displayed on the recorder

#### CHECK

#### **DIAGNOSTIC / ACTION**

Is the card readable by an external driver?

1. NO: Change the card.

2. YES: Run a TEST (PCMCIA / SERVICE).

- If the test is successful, then the card is OK.

- If the test stops before reaching 100 % of completion then an area of the card is bad. The card has to be changed.

#### "PCMCIA PENDING" message is displayed on the recorder 6.6

CHECK Check the PCMCIA STATUS in PCMCIA / SERVICE :	DIAGNOSTIC / ACTION
PCMCIA MISSING	The archive is ON and no card has been inserted in the driver. Insert a card to turn off the display.
PCMCIA BAD	The archive is ON and the inserted card is bad. Refer to § 6.5 to check card validity or insert a valid card.
PCMCIA NOT INIT	The archive is ON and the inserted card is not initialized. Refer to § 6.4.
PCMCIA PRESENT	The card has been initialized but part of the archiving configuration stored on the card does not match with the configuration of the recorder. Press RESET key and select RESET PCMCIA menu to make both configurations match.

WARNING → A RESET PCMCIA will erase all previous data stored on the card.

### 6.7 PCMCIA triangle does not appear on the display when archiving

#### CHECK

Check INTERFACE parameter in **MISCELLANEOUS / Read/Write** 

Check START parameter in

#### **DIAGNOSTIC / ACTION**

Turn parameter to PCMCIA.

If the archive is triggered by an alarm or a digital status, PCMCIA / Read/Write check alarm or digital status which should start the archiving (Press the DISPLAY key and select ALARM STATUS or LOGIC STATES).

Is PCMCIA PENDING displayed on the MMI ?

Refer to § 6.6

### 6.8 No data have been written on the card

#### CHECK

Check START parameter in PCMCIA / Read/Write

Was PCMCIA PENDING displayed on the MMI ?

Check ROLLOVER parameter in PCMCIA / Read/Write

#### **DIAGNOSTIC / ACTION**

The archiving start condition has not been met. No data have been stored on the card.

Refer to § 6.6

If ROLLOVER is set on DISABLE, check in DIRECTORY (PCMCIA / SERVICE) the amount of records that it is still possible to store. If this amount is 0, no data will be recorded on this file. Turn ROLLOVER to ENABLE or either reset or initialize the card.

### 6.9 SDA generates an error while opening trend files in chart display

#### CHECK

#### **DIAGNOSTIC / ACTION**

**1.** An archived Math function has returned an error code which prevents SDA from charting correctly this channel. Open the trend file in the data table format and note the math in error. Open the trend file in the trend format and remove the math function in error from the list of selected traces to be charted.

**2.** When the archiving process is incorrectly interrupted (ie : power off while archiving), it may happen that SDA displays an error message while opening the archive files. Files are nevertheless still readable except for their last data part. It is then recommended in that case to reduce the last time to display in the SDA opening trend files window.

# 7. PROMPTS TRANSLATION

EN	FR	GE	SP	IT
PCMCIA CONFIRM	PCMCIA CONFIRMER	PCMCIA BESTÄTIGEN	PCMCIA CONFIRM	PCMCIA CONFERMA
PARAMETERS				
START R0LLOVER LOG FREQ % FULL INIT TEST SOFTWARE SIZE STATUS DIRECTORY	DEMARRAGE RE-ENRG FREQ ENRG % PLEIN INIT TEST LOGICIEL TAILLE ETAT REPERTOIRE	START UEBERSCHR FREQ AUFZ % VOLL INIT TEST SOFTWARE GROESSE STATUS VERZEICHNIS	EMPEZAR VUELTA FREC LOG % LLENO INICIALIZ PRUEBA SOFTWARE TAMANO ESTADO REPERTORIO	PARTENZA RICARICARE FREQ LOG % PIENO INITIALIZZA TEST SOFTWARE DIMENSIONE STATO DIRECTORY
POSSIBLE VALUES				
NO ARCHIVE AL ON # DI CLOSED# CONTINUOUSLY NB ALARM REC? ENABLE DISABLE ALARM NAME? NB EVENT REC? EVENT NAME NB DIAG REC? DIAG NAME TREND NAME % PASSED FAILED PCMCIA BAD PCMCIA BAD PCMCIA FULL PCMCIA PENDING PCMCIA DATA	PAS ARCHIVE AL ON N° LO FER N° CONTINU NB PTS ALARME ? AUTORISE REFUSE NOM ALARME ? NB PTS EVT ? NOM EVT ? NOM EVT ? NOM DIAG ? NOM DIAG ? NOM TRACE ? % TEST BON ECHEC PCMCIA MAUVAISE PCMCIA PLEINE PCMCIA NON INIT PCMCIA EN ATT. PERTE DE DONNEES	KEIN ARCHIV AL EIN NR BI SCHL NR DAUERND ANZ REG ALARM AKTIVIEREN INAKTIVIEREN ALARM BEZEICHNG ANZ REG EREIGN EREIGN BEZEICHNG ANZ REG DIAGR DIAGR BEZEICHNG TREND BEZEICHNG % ERFOLG FEHLERHAFT PCMCIA AUSFALL PCMCIA AUSFALL PCMCIA NICHT INI PCMCIA WARTEZUST VERLOR DATEN	NO ARCHIVO AL ACTIV # ED CERRA # CONTINUAMENT N REG ALARMAS ? ACTIVAR DEACTIVAR NOMBRE ALARMA ? N REG EVENTOS ? NOMBRE EVENTO ? N REG DIAG ? NOMBRE DIAG ? NOMBRE TRAZA ? % BUENA MALA PCMCIA DEFEC PCMCIA DEFEC PCMCIA LLENA PCMCIA SIN INIC PCMCIA PENDIENTE DATOS PERDIDOS	NO ARCHIVIO ALL ON# DI CHIUSO# CONTINUO N PUNTI ALLARME ABILITATO DISABILITATO NOME ALLARMI N PUNTI EVENTI N PUNTI DIAG NOME DIAG NOME TRACCE % TEST BUONO NO RIUSCITO PCMCIA GUASTA PCMCIA PIENA PCMCIA NON INIZ PCMCIA IN ATTESA DATI PERSI
PCMCIA PRESENT PCMCIA MISSING REMOVE PCMCIA RESET PCMCIA PCMCIA INIT Mb PCMCIA CONF CHG START ARCHIVE STOP ARCHIVE PCMCIA EVENT WAIT PLEASE INTERFACE s	PCMCIA PRESENTE PCMCIA ABSENTE RETIRER PCMCIA RAZ PCMCIA INIT PCMCIA Mo PCMCIA CHGT CONF DEBUT ARCHIVE FIN ARCHIVE EVT PCMCIA ATTENDEZ SVP INTERFACE s mn	PCMCIA VORHANDEN PCMCIA VERREIST ENTFERNE PCMCIA PCMCIA ZURUECKS INIT PCMCIA MB PCMCIA KONFÄNDRG START ARCHIVIERG STOP ARCHIVIERG PCMCIA EREIG BITTE WARTEN INTERFACE SEKUNDE SEKUNDEN MINUTE MINUTE	PCMCIA PRESENTE PCMCIA SACADA QUITAR PCMCIA REINICIAR PCMCIA INIC PCMCIA Mb CAMB CONF PCMCIA INICIAR ARCHIVO PARAR ARCHIVO SUC PCMCIA ESPERE P. FAVOR INTERFASE s	PCMCIA PRESENTE PCMCIA ASSENTE TOGLIERE PCMCIA RESET PCMCIA INIZIALIZ PCMCIA MB CAMB CONF PCMCIA START ARCHIVIO STOP ARCHIVIO EVEN PCMCIA ATTENDERE INTERFACCIA s mn

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