

PCS-2000-64

Universität zu Köln

Configuration
of the Sodar PC

SODAR-39



METEK GmbH
Meteorologische Meßtechnik

Front View / Back View



Computer Type

Model	Dell Optiplex 330
Serial No.	DMNHM3J
Express Service Code	29667879199 (from type plate on the top of the case)

Components

CPU	Pentium 4 Dual Core 64 Bit, E2180 2.0 GHz, 800 MHz FSB	
RAM	1024 MB DDR2-SDRAM 667 MHz	
Hard disk	Seagate ST3250310AS, 250 GB, SATA	
Graphics (on board)	Intel G33/G31 Express Chipset Family, 384 MB, VGA	
DVD-RW	PBDS DVD+/-RW DH16W-1S	
FD	not installed	
Network (on board)	BroadCom NetXtreme 57xx Gigabit Controller	
Sound (on board)	SoundMAX Integrated Digital Audio HD Audio (disabled)	
Sound PCI-Slot 2	M-Audio Audiophile 24/96	
Watchdog	QuanCom PWDOG1	
USB-Ports	6 x back (Modem, Keyboard, Mouse, LabJack) + 2 x front	
Parallel Port (on board)	LPT1, 0378, ECP	connected to Sodar-Interface
Serial Port (on board)	COM1, 03F8, IRQ 4	connected to Sonic USA1
Analog Input (USB)	Meilhaus LabJack® U12	connected to Temp.-Sensor
Modem (Line-Modem, USB)	devolo MicroLink 56k Fun USB	installed as COM3
Keyboard (USB)	Dell SK-8115, US Layout, black	
Mouse (USB)	Optical Scroll Mouse, Dell, black	
Monitor	19" TFT Dell E198FP	
UPS (USB)	APC Back-UPS RS 500 Type BR500I	

Installed Software

<u>BIOS-Settings</u>	(Changes from default)	
AC Power Recovery	On	(Off)
Integrated Audio	Disabled	(Enabled)
Boot sequence	HD, CD	(FD, HD, CD)
LPT Port Mode	ECP	(PS/2)
Serial Port	COM1	(Auto)
SMART Reporting	On	(Off)
HDD Acoustic Mode	Quiet	(Bypass)
Keyboard Error	Do Not Report	(Report)

Disk Partitioning, Drive Letters, Volume Name, File System, Capacity

Primary Partition	C:	System	NTFS	16 GB
Extended Partition	D:	Data	NTFS	200 GB
	E:	Backup	NTFS	16 GB
CD-ROM	F:			

Installed Software Continued (1)

Operating System

System	Microsoft Windows XP professional deutsch
Version	2002
Service Pack	SP2
Product Key	FM77B-7J62G-Q8H4V-FJ3YR-24QF6
Register Key	76497-OEM-0011903-00102
Registered to	Metek Sodar
Organization	Universität zu Köln
Computer Name	SODAR-39
Computer Description	METEK PCS-2000-64 SODAR System
Workgroup	Sodar

Drivers

Video	Intel G33/G31	Version 6.14.10.4838	06.05.07
Network	BroadCom 67xx Gigabit	Version 10.39.0.0	06.05.07
Audio System	M-Audio 24/96	Version 5.10.0.5047	07.08.04
Watchdog	QuanCom Pwdog1/2/2n	Version 1.9.8.27	14.02.06
Analog In	Meilhaus LabJack	Version 1.17	

Operating System Settings

Users	1 st Administrator, <u>no password</u> 2 nd Metek, <Metek password>, administrator rights 3 rd Sodar, password 'sodar', standard user
Display	1280 x 1024 pixel, 60 Hz, 32 bit True Color
Date/Time	GMT+00:00 do <u>not</u> automatically adjust clock for daylight saving time
Power Options	Turn off monitor 30 min Turn off hard disk never Standby mode never
Virtual Memory	Initial = 2048 MB, maximum = 2048 MB on E:
Performance Options	Optimize performance for background services
System Failure	Automatically reboot

Network

Shared Directories	C:\METEK Metek Programs D:\ Data files E:\Transfer Any file transfer
Local Area Connection	TCP/IP IP address = 192.168.001.239 Subnet mask = 255.255.255.000
Incoming Connections, Remote Access Service	Device MicroLink 56k Fun USB s TCP/IP Address range = 192.168.002.238 to = 192.168.002.239 Users Administrator, Metek, Sodar

Installed Software Continued (2)

Nero Essentials 8, OEM Version 8.1.1.1
Licence=2K26-3014-0E85-7431-501K-A4M3-406M

C:\WINNT\gzip.exe (file compression)

Total Commander Version 6.53

Acrobat Reader Version 6.0

APC PowerChute Personal Edition Version 2.0

IrfanView Version 3.99

RAdmin Server Version 3.2

License = RADPR-188303-C9037453-4FB320DC

Set to Windows NT security for users Administrator, Metek and Sodar (Windows password)

METEK Graphics	V. 2.30.0.2	File = Graphics.exe	(749.568)	30.01.2007 16:19
METEK Sodar Control	V. 3.4.1.6	File = SodarCtrl.exe	(229.376)	23.05.2007 10:18

Services (start up type = automatic)

SODAR2000	V. 3.1.2.9	File = Sodar2000.exe	(237.568)	03.09.2007 11:34
SODARComm	V. 3.3.0.10	File = SodarComm.exe	(106.496)	09.05.2007 13:33
SODARData	V. 3.2.0.6	File = SodarData.exe	(81.920)	23.05.2007 11:00

Services (start up type = manual, **if you want to use it, set start up type to automatic**)

TCopy-COM1 (RS232)	V. 4.5.0.3	File = TCopy.exe	(77.824)	08.04.2008 06:57
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FTP-Server activated, available directories C: D: E:

Telnet activated for users Administrator (requires non-blank password), Metek

Scheduled Task (daily @ 3:02)

Compr.exe Calling batch file Compr.bat
File compression for last day's data file
This file may be modified for user's own purposes

Automatically Reboot (daily @ 00:01)

Reboot.bat Executes the program C: \ Metek \ psShutDown.exe -r

Extra Icons on the Desktop

DOS	DOS Command Window
Windows Cmd	Total Commander
Windows Explorer	C \ Windows \ Explorer.exe
Nero Express	Nero Burning Rom, Essentials 8
RegEdit	C: \ Windows \ Regedit.exe
Event Viewer	Start \ Programs \ Administrative Tools \ Event Viewer
Control Panel	Start \ Settings \ Control Panel
Services	Programs \ Administrative Tools \ Services
SODAR Control	C: \ Metek \ SdrCtrl.exe = Metek Sodar Control Program
Start Services	C: \ Metek \ StopServices.bat
Sodar Access	C: \ Metek \ Sodar-Access.bat
Stop Services	C: \ Metek \ StartServices.bat
Metek Graphics	C: \ Metek \ Graphics.exe = Metek graphics programs
Sonic Access	C: \ Metek \ Sonic-Access.bat
Modem Access	C: \ Metek \ Modem-Access.bat
Manuals	C: \ Metek \ Manuals (PDF)
WordPad	WordPad text editor for notes

Installed Software Continued (3)

Program Directory

C:\Drivers containing Hardware drivers for devices added by Metek
 C:\Metek containing Metek programs
 C:\Metek\Installations containing Metek and other program installation files
 C:\Metek\Manuals containing Metek manuals in PDF file format

Data Directories

D:\Data containing the averaged data in a subdirectory structure which is automatically created by the Sodar control program
 D:\RawData containing the raw data in an identical subdirectory structure
 D:\ActData containing the last data sets

Batch files

StopServices.bat : *All three Sodar services are stopped*
 net stop SODAR2000 Stops the PCS-2000 service
 net stop SODARData Stops the SODAR Data service
 net stop SODARComm Stops the SODAR Communication service
 pause Success monitoring before the window is closed

StartServices.bat : *All three Sodar services are started*
 net start SODARComm Starts the SODAR Communication service
 net start SODARData Starts the SODAR Data service
 net start SODAR2000 Starts the PCS-2000 service
 pause Success monitoring before the window is closed

Sodar-Access.bat : *Offers a Telnet-Access to the SODAR2000 service*
 net stop SODARComm Stops the SODAR Communication service
 start /wait C:\Metek\Telnet40.exe localhost 5000 Opens a Telnet connection
 net start SODARComm Starts the SODAR Communication service
 pause Success monitoring before the window is closed

Sonic-Access.bat : *Offers an HyperTerminal-Access to the USA1*
 net stop Tcopy-COM1 Stops the Tcopy Registration service
 start /wait C:\Metek\COM1-Modem-9600.ht Opens an HyperTerminal connection
 net start Tcopy-COM1 Starts the Tcopy Registration service also if not running before
 pause Success monitoring before the window is closed

Modem-Access.bat : *Offers an HyperTerminal-Access to the USB Modem*
 net stop "Routing und RAS" Stops the RAS service
 start /wait C:\Metek\COM3-Modem-115200.ht Opens an HyperTerminal connection
 net start "Routing und RAS" Starts the RAS service again
 pause Success monitoring before the window is closed

InstCompr.bat
 at 3:02 / every:mo,di,mi,do,fr,sa,so c:\metek\compr.exe Installs an at-job every day @ 3:02

InstReboot.bat
 at 0:01 / every:mo,di,mi,do,fr,sa,so c:\metek\reboot.bat Installs an at-job every day @ 0:01

Installed Software Continued (4)

Compr.bat : *Performs a file compression and an Event-Dump*

findstr /B /V F D:\Data\%1.sdr > D:\Data\%1.sdx	extracts filter values from Sodar data
gzip -9 d:\Data\%1.sdr	compresses the Sodar data files
gzip -9 d:\RawData\%1.sdr	compresses the Sodar raw data files
gzip -9 d:\Data\%1.sdx	compresses the extracted data files
gzip -9 d:\Data\%1.snc	compresses the Sonic data files
d:	changes to volume D:
cd \	Change directory
del appl.log.gz	erases the dump file from yesterday
del syst.log.gz	erases the dump file from yesterday
c:\metek\ApplEventReader.exe > appl.log	creates the application-log-dump
c:\metek\SystEventReader.exe > syst.log	creates the system-log-dump
gzip -9 appl.log	compresses the log-file
gzip -9 syst.log	compresses the log-file
c:	Return to volume C:

Reboot.bat :

SetRegEntry /n=ForceWatchDog /t=REG_DWORD	Enable W.dog when service stops
net stop Sodar2000	Stop the Sodar2000 service program
c:\metek\AwakeDog.exe	Enables Watchdog anyway
c:\metek\psShutDown.exe -r	Shutdown and reboot in 20 seconds

Notice

User

When installing another user access, remember to disable all system sounds.

Password

An administrator password is not yet defined. It is required for telnet access.

IP Address

Adjust the IP addresses for TCP / IP appropriate to your own network purposes.

USB Modem

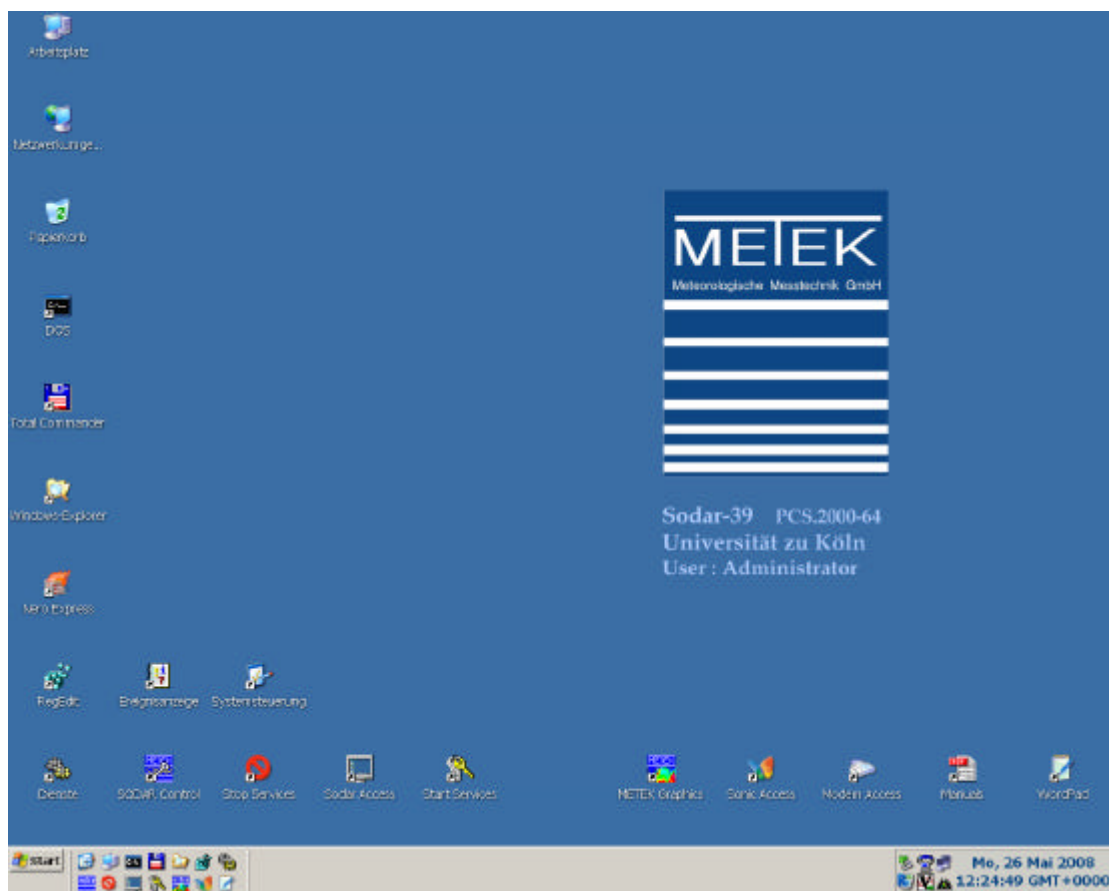
If you plug the USB modem into another USB port, Windows will install the modem again with another name (#2, #3 ...) and the modem is not automatically available for remote access service. The first installation was done using the lower, most left USB port on the rear panel which is marked with a blue label and got the virtual COM port number COM3.

The driver from the vendors CD was not used to prevent the output of modem sounds through the Sodar speakers.

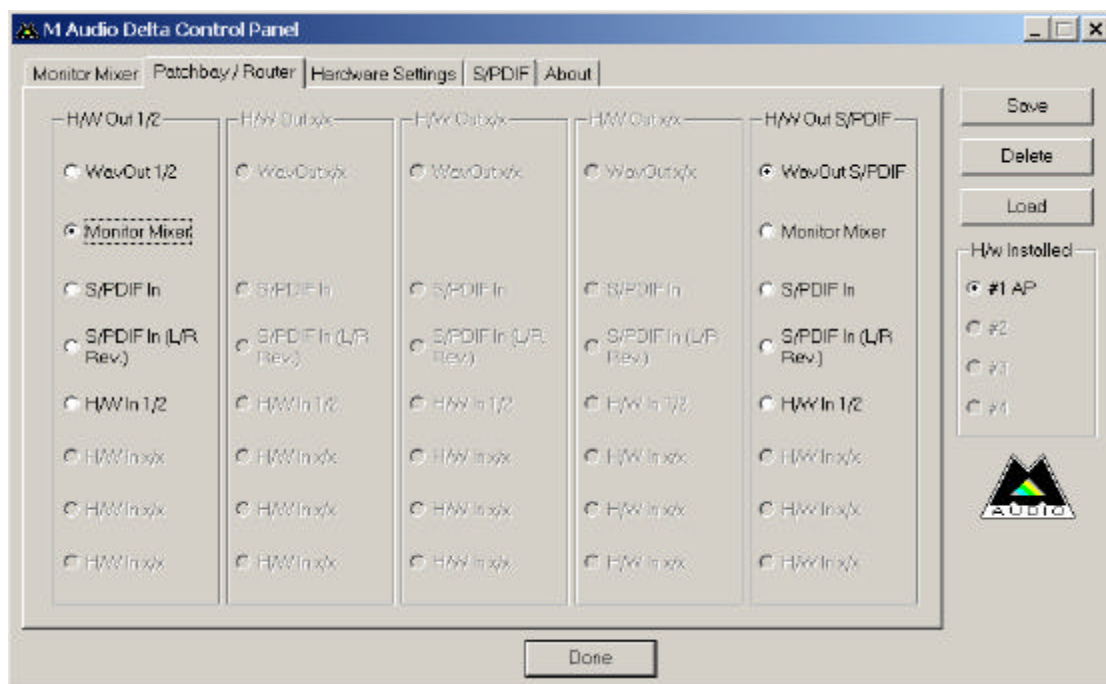
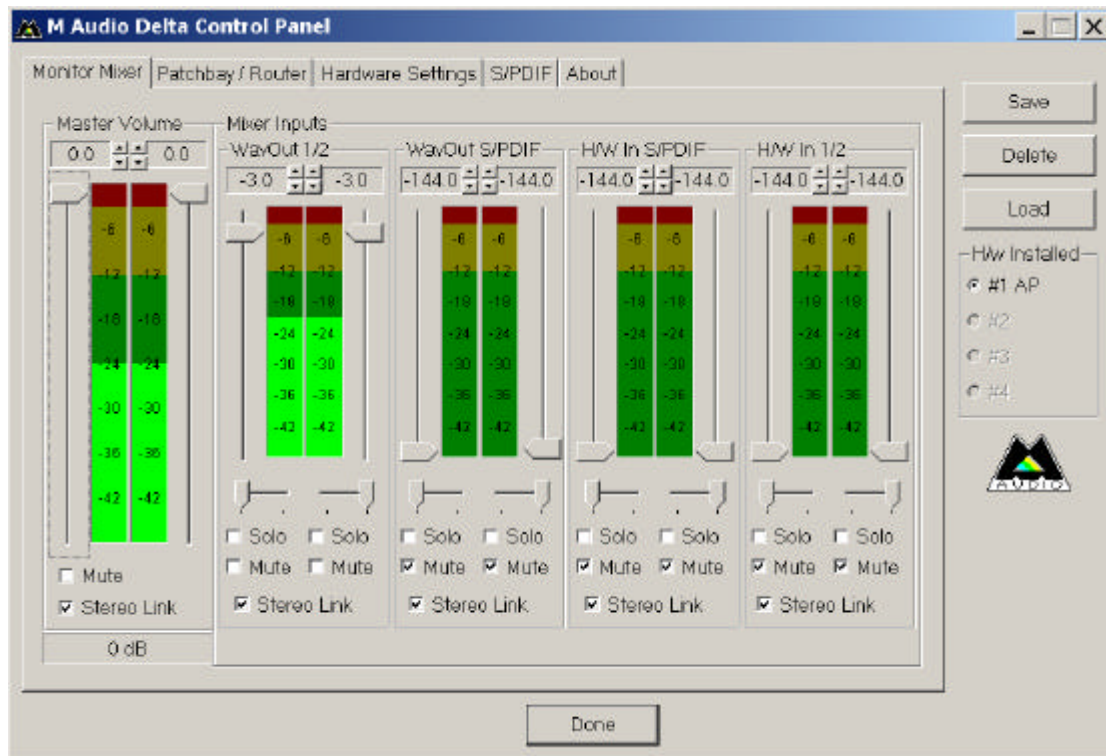
Serial Numbers of Hardware Components

SODAR-38	PC including PC Sodar	DMNHM3J
Sound Card	M-Audio Delta Audiophile 24/96	E074003124
Analog Input USB	Meilhaus electronic LabJack® U12	100049681
Modem	devolo MicroLink 56k USB s	0703154170002754
Display	19" TFT Dell E198FP	CN-0HU177-72872-83D-0YMS
Keyboard	Dell SK-8115, deutsches layout	CN-0UY783-65891-813-00NY
Mouse	Dell Optical Scroll Mouse, 0XN967	H0B01DOM
UPS	APC Back-UPS RS 500 Type BR500I	5B0751T53733

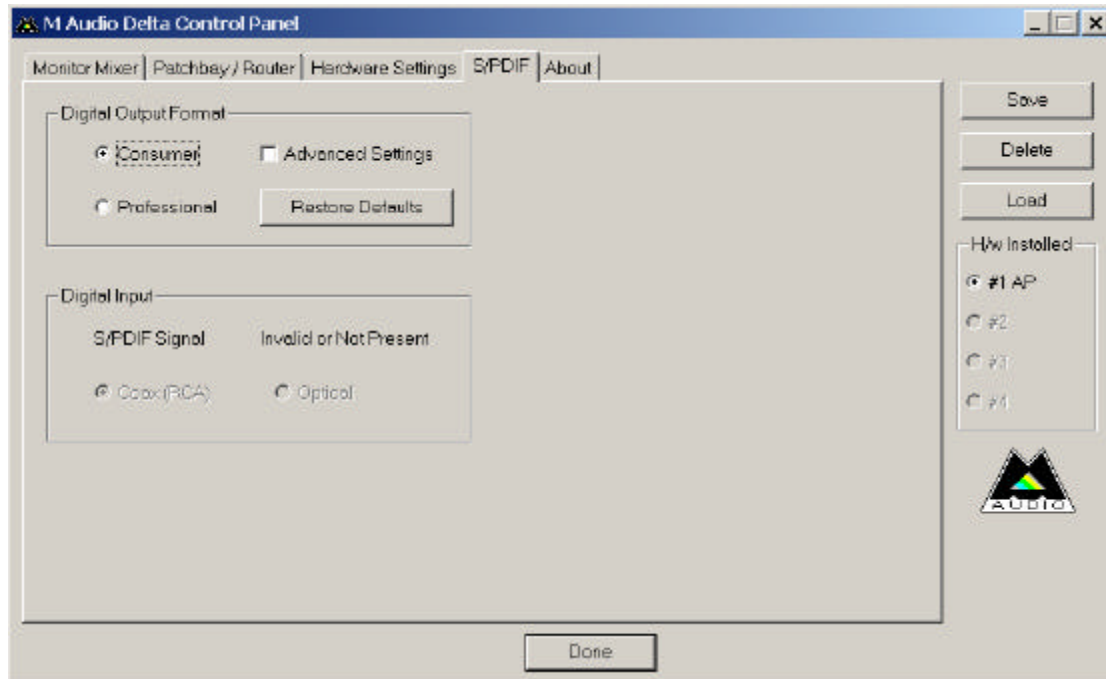
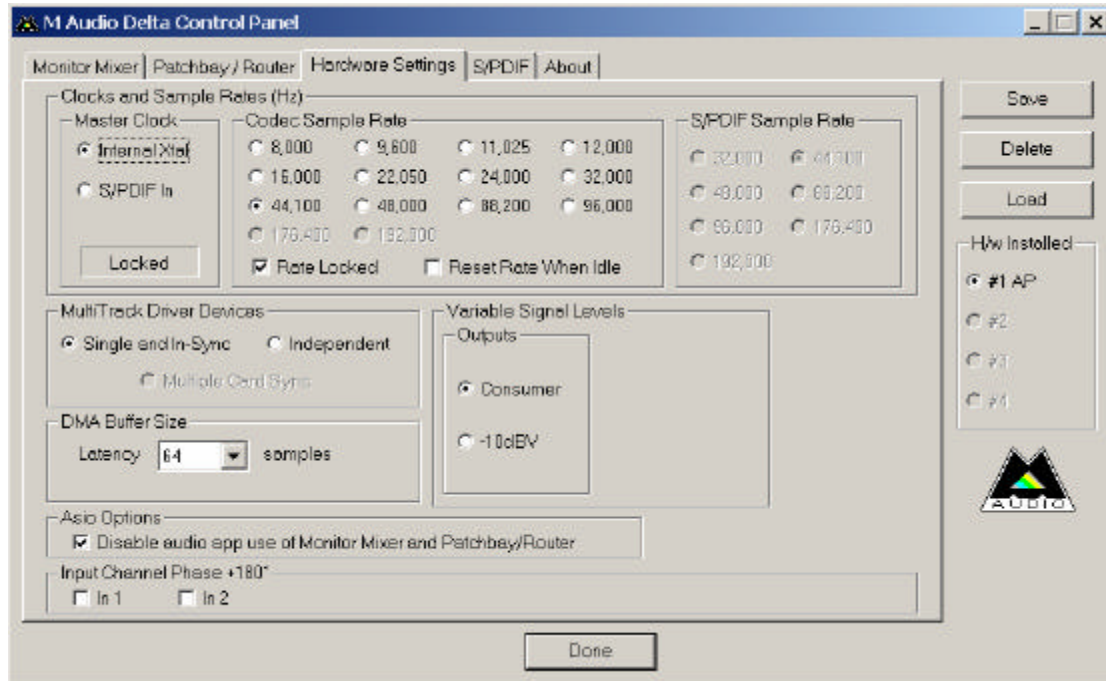
Desktop user Administrator (desktops for users Metek and Sodar look similar)



Sound Card Settings



Sound Card Settings Continued



UPS Settings

APC PowerChute Personal Edition

Willkommen in Ihrem Stromschutzsystem.

Optionen

- PowerChute-Signaltöne aktivieren.
- PowerChute Begrüßungsbildschirm beim Starten aktivieren.
- Datenerfassung aktivieren.

PowerChute Personal Edition kann regelmäßig Informationen über die Verwendung dieses Produkts und die Qualität der örtlichen Netzspannung an APC senden. Diese Informationen können von APC dazu verwendet werden, zukünftige Produktverbesserungen zu entwickeln und die Stromqualität in Ihrer Region zu bewerten. Beachten Sie bitte, dass keine persönlichen Informationen gespeichert oder übertragen werden.

Standard Übernehmen Abbrechen

Erwartete Batterielaufzeit 22 Min Stromquelle Netzstrom

Die USV arbeitet ordnungsgemäß.

APC PowerChute Personal Edition

Willkommen in Ihrem Stromschutzsystem.

Laufzeit

Sie können die Dauer ändern, für die die USV Batteriestrom liefert.

Batteriekapazität aufsparen
Herunterfahren, wenn auf Batteriebetrieb nach:
2 Min (Mit dieser Option können Sie Batteriekapazität für weitere Stromausfälle aufsparen.)

Computer so lange wie möglich in Betrieb lassen
Computer herunterfahren, wenn die verbleibende Batterielaufzeit ausreicht für:
5 Min (Verwenden Sie diese Option, um den Computer so lange wie möglich in Betrieb zu lassen, wenn er mit Batteriestrom versorgt wird. Achten Sie darauf, dass die verbleibende Laufzeit zum Speichern aller Dateien und zum ordnungsgemäßen Herunterfahren des Systems ausreicht.)

Standard Übernehmen Abbrechen

Erwartete Batterielaufzeit 23 Min Stromquelle Netzstrom

Die USV arbeitet ordnungsgemäß.

UPS Settings Continued (1)

The screenshot shows the 'Benachrichtigung' (Notification) settings page in the APC PowerChute Personal Edition software. The window title is 'APC PowerChute Personal Edition'. The main heading is 'Willkommen in Ihrem Stromschutzsystem.' (Welcome to your power protection system.) with the APC logo and 'Legendary Reliability' tagline. The left sidebar contains three sections: 'System überwachen' (System monitoring) with sub-items 'Leistung' (Performance), 'Aktueller Status' (Current status), and 'Selbsttest durchführen' (Perform self-test); 'Konfiguration' (Configuration) with sub-items 'Optionen' (Options), 'Laufzeit' (Runtime), 'Benachrichtigung' (Notification), 'Empfindlichkeit' (Sensitivity), and 'Spannung' (Voltage); and 'Hilfe und Support' (Help and Support) with sub-items 'Hilfe' (Help), 'Technische Daten' (Technical data), and 'Info' (Info). The main content area is titled 'Benachrichtigung' and contains the following text: 'Die USV generiert bei Stromereignissen hörbare Alarmsignale. Sie können diese Alarmsignale wie folgt einstellen:' (The UPS generates audible alarm signals in the event of a power event. You can set these alarm signals as follows:). There are three radio button options: 'Akustische USV-Alarmsignale immer aktivieren' (Always activate audible UPS alarm signals), 'Akustische USV-Alarmsignale immer deaktivieren' (Always deactivate audible UPS alarm signals), and 'Bei ausgeschaltetem PC oder PC im Ruhezustand akustische USV-Alarmsignale deaktivieren' (Deactivate audible UPS alarm signals when the PC is off or in sleep mode). The third option is selected. Below this, there is a checkbox '...oder in der Zeit von' (or during the time from) with a dropdown menu set to '20:00:00' and 'bis' (until) with a dropdown menu set to '08:00:00'. At the bottom right, there are three buttons: 'Standard', 'Übernehmen' (Apply), and 'Abbrechen' (Cancel). At the bottom of the window, there is a status bar showing 'Die USV arbeitet ordnungsgemäß.' (The UPS is operating normally.), a clock icon, 'Erwartete Batterielaufzeit 23 Min' (Expected battery runtime 23 Min), a green leaf icon, and 'Stromquelle Netzstrom' (Power source: Mains power).

The screenshot shows the 'Empfindlichkeit' (Sensitivity) settings page in the APC PowerChute Personal Edition software. The window title is 'APC PowerChute Personal Edition'. The main heading is 'Willkommen in Ihrem Stromschutzsystem.' (Welcome to your power protection system.) with the APC logo and 'Legendary Reliability' tagline. The left sidebar is identical to the previous screenshot. The main content area is titled 'Empfindlichkeit' and contains the following text: 'Die Empfindlichkeitseinstellung steuert, unter welchen Umständen die USV wegen elektrischer Störungen auf Batterieversorgung umschaltet. Obwohl die niedrige Einstellung für die gängige Computerhardware sicher ist, funktionieren manche Geräte bei dieser Einstellung möglicherweise nicht ordnungsgemäß.' (The sensitivity setting controls, under which circumstances the UPS switches to battery power supply due to electrical disturbances. Although the low setting is safe for common computer hardware, some devices may not function properly with this setting.). There are three radio button options: 'Hoch' (High), 'Mittel' (Medium), and 'Niedrig' (Low). The 'Hoch' option is selected. Below this, there are three paragraphs of text describing each setting: 'Hoch' is described as suitable for most devices and offering optimal protection; 'Mittel' is described as used when the UPS frequently switches to battery operation; 'Niedrig' is described as used when the UPS also switches to battery operation with the 'Mittel' setting, typically when the generator is on, and notes that it is exposed to larger voltage distortions. At the bottom right, there are three buttons: 'Standard', 'Übernehmen' (Apply), and 'Abbrechen' (Cancel). At the bottom of the window, there is a status bar showing 'Die USV arbeitet ordnungsgemäß.' (The UPS is operating normally.), a clock icon, 'Erwartete Batterielaufzeit 23 Min' (Expected battery runtime 23 Min), a green leaf icon, and 'Stromquelle Netzstrom' (Power source: Mains power).

UPS Settings Continued (2)

The screenshot displays the 'Spannung' (Voltage) configuration page in the APC PowerChute Personal Edition software. The interface is in German and includes a sidebar with navigation options: 'System überwachen', 'Konfiguration', and 'Hilfe und Support'. The main content area provides information about the UPS's automatic switching to battery mode based on AC voltage levels. It shows the current voltage at 228 Volt and allows the user to set upper and lower voltage thresholds. The current settings are 260 Volt for the upper limit and 196 Volt for the lower limit. A status bar at the bottom indicates an expected battery runtime of 23 minutes and that the power source is 'Netzstrom' (AC power).

APC PowerChute Personal Edition

Willkommen in Ihrem Stromschutzsystem.

Spannung

System überwachen

- Leistung
- Aktueller Status
- Selbsttest durchführen

Konfiguration

- Optionen
- Laufzeit
- Benachrichtigung
- Empfindlichkeit
- Spannung**

Hilfe und Support

- Hilfe
- Technische Daten
- Info

Die USV schaltet auf Batteriebetrieb, wenn AC-Netzspannung unter 196 Volt fällt oder 260 Volt übersteigt. Die normale AC-Netzspannung beträgt 230 Volt. Die aktuelle Spannung beträgt 228 Volt.

Die USV wird aktiv bei:

bei Netzspannung über: **260 Volt**

bei Netzspannung unter: **196 Volt**

Wenn die USV weniger häufig aufgrund von Über- oder Unterspannung eingreifen soll, erhöhen Sie die Einstellungen für die obere oder verringern Sie die Einstellung für die untere Spannungsgrenze. Dadurch wird Kapazität für weitere Stromausfälle eingespart. Hinweis für empfindliche elektronische Ausrüstung. Wenn die Funktion der Geräte durch zu hohe oder zu niedrige Netzspannung beeinträchtigt werden kann, können Sie die Einstellung für die obere Spannungsgrenze herabsetzen oder die Einstellung für die untere Spannungsgrenze heraufsetzen.

Übernehmen Abbrechen

Erwartete Batterielaufzeit: **23 Min**

Stromquelle: **Netzstrom**

Die USV arbeitet ordnungsgemäß.