Installation Manual

R&S® UPV
Firmware Version 2.0.0
including SoftwarePlatform 2.1.14

Windows XP Operating System
including backup/recovery

Version: FMR6SPC0203

Printed in Germany

Dear Customer,

throughout this manual, UPV is generally used as an abbreviation for the Audio Analyzer R&S® UPV.

Contents - "Installation Manual"

Certificate of Quality
Support-Center Address
List of R&S Representatives

Certified Quality System

DIN EN ISO 9001 : 2000
DIN EN   9100 : 2003
DIN EN ISO 14001 : 1996

DQS REG. NO 001954 QM/ST UM

QUALITÄTSZERTIFIKAT

Sehr geehrter Kunde,
Sie haben sich für den Kauf eines
Rohde & Schwarz-Produktes entschie-
den. Hiermit erhalten Sie ein nach
modernsten Fertigungsmethoden
hergestelltes Produkt. Es wurde nach
den Regeln unseres Management-
systems entwickelt, gefertigt und
geprüft.
Das Rohde & Schwarz Management-
system ist zertifiziert nach:

DIN EN ISO 9001:2000
DIN EN 9100:2003
DIN EN ISO 14001:1996

CERTIFICATE OF QUALITY

Dear Customer,
you have decided to buy a Rohde &
Schwarz product. You are thus as-
sured of receiving a product that is
manufactured using the most modern
methods available. This product was
developed, manufactured and tested
in compliance with our quality manage-
ment system standards.
The Rohde & Schwarz quality manage-
ment system is certified according to:

DIN EN ISO 9001:2000
DIN EN 9100:2003
DIN EN ISO 14001:1996

CERTIFICAT DE QUALITÉ

Cher Client,
vous avez choisi d'acheter un produit
Rohde & Schwarz. Vous disposez
donc d'un produit fabriqué d'après
les méthodes les plus avancées. Le
développement, la fabrication et les
tests respectent nos normes de ges-
tion qualité.
Le système de gestion qualité de
Rohde & Schwarz a été homologué
conformément aux normes:

DIN EN ISO 9001:2000
DIN EN 9100:2003
DIN EN ISO 14001:1996

ROHDE & SCHWARZ

1171.0200.11-01.00

Customer Support

Technical support – where and when you need it

For quick, expert help with any Rohde & Schwarz equipment, contact one of our Customer Support Centers. A team of highly qualified engineers provides telephone support and will work with you to find a solution to your query on any aspect of the operation, programming or applications of Rohde & Schwarz equipment.

Up-to-date information and upgrades

To keep your Rohde & Schwarz equipment always up-to-date, please subscribe to our electronic newsletter at

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or request the desired information and upgrades via email from your Customer Support Center (addresses see below).

Feedback

We want to know if we are meeting your support needs. If you have any comments please email us and let us know CustomerSupport.Feedback@rohde-schwarz.com.

USA & Canada

Monday to Friday (except US public holidays)
8:00 AM – 8:00 PM Eastern Standard Time (EST)

Tel. from USA	888-test-rsa (888-837-8772) (opt 2)
From outside USA	+1 410 910 7800 (opt 2)
Fax	+1 410 910 7801
E-mail	Customer.Support@rsa.rohde-schwarz.com

East Asia

Monday to Friday (except Singaporean public holidays)
8:30 AM – 6:00 PM Singapore Time (SGT)

Tel.	+65 6 513 0488
Fax	+65 6 846 1090
E-mail	Customersupport.asia@rohde-schwarz.com

Rest of the World

Monday to Friday (except German public holidays)
08:00 – 17:00 Central European Time (CET)

Tel. from Europe	+49 (0) 180 512 42 42
From outside Europe	+49 89 4129 13776
Fax	+49 (0) 89 41 29 637 78
E-mail	CustomerSupport@rohde-schwarz.com

ROHDE & SCHWARZ

Address List

Headquarters, Plants and Subsidiaries

Headquarters

ROHDE&SCHWARZ GmbH & Co. KG
Mühldorfstraße 15 · D-81671 München
P.O.Box 80 14 69 · D-81614 München

Phone +49 (89) 41 29-0
Fax +49 (89) 41 29-121 64
info.rs@rohde-schwarz.com

Plants

ROHDE&SCHWARZ Messgerätebau GmbH
Riedbachstraße 58 · D-87700 Memmingen
P.O.Box 16 52 · D-87686 Memmingen

Phone +49 (83 31) 1 08-0
+49 (83 31) 1 08-1124
info.rsmb@rohde-schwarz.com

ROHDE&SCHWARZ GmbH & Co. KG
Werk Teisnach
Kaikenrieder Straße 27 · D-94244 Teisnach
P.O.Box 11 49 · D-94240 Teisnach

Phone +49 (99 23) 8 50-0
Fax +49 (99 23) 8 50-174
info.rsdts@rohde-schwarz.com

ROHDE&SCHWARZ závod
Vimperk, s.r.o.
Location Spidrova 49
CZ-38501 Vimperk

Phone +420 (388) 45 21 09
Fax +420 (388) 45 21 13

ROHDE&SCHWARZ GmbH & Co. KG
Dienstleistungszentrum Köln
Graf-Zeppelin-Straße 18 · D-51147 Köln
P.O.Box 98 02 60 · D-51130 Köln

Phone +49 (22 03) 49-0
Fax +49 (22 03) 49 51-229
info.rsdc@rohde-schwarz.com
service.rsdc@rohde-schwarz.com

Subsidiaries

R&S BICK Mobilfunk GmbH
Fritz-Hahne-Str. 7 · D-31848 Bad Münder
P.O.Box 20 02 · D-31844 Bad Münder

Phone +49 (50 42) 9 98-0
Fax +49 (50 42) 9 98-105
info.bick@rohde-schwarz.com

ROHDE&SCHWARZ FTK GmbH
Wendenschloßstraße 168, Haus 28
D-12557 Berlin

Phone +49 (30) 658 91-122
Fax +49 (30) 655 50-221
info.ftk@rohde-schwarz.com

ROHDE&SCHWARZ SIT GmbH
Am Studio 3
D-12489 Berlin

Phone +49 (30) 658 84-0
Fax +49 (30) 658 84-183
info.sit@rohde-schwarz.com

R&S Systems GmbH
Graf-Zeppelin-Straße 18
D-51147 Köln

Phone +49 (22 03) 49-5 23 25
Fax +49 (22 03) 49-5 23 36
info.rssys@rohde-schwarz.com

GEDIS GmbH
Sophienblatt 100
D-24114 Kiel

Phone +49 (431) 600 51-0
Fax +49 (431) 600 51-11
sales@gedis-online.de

HAMEG Instruments GmbH
Industriestraße 6
D-63533 Mainhausen

Phone +49 (61 82) 800-0
Fax +49 (61 82) 800-100
info@hameg.de

Locations Worldwide

Please refer to our homepage: www.rohde-schwarz.com
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General Information

This is a major upgrade of UPV firmware including re-installation of the operating system.
Please read this manual carefully.

Before you can upgrade the UPV to firmware version 2.0.0 it is necessary to re-install the Windows XP operating system on firmware partition C:\ and to re-install the hidden backup/recovery partition. This is done by using the supplied bootable CD "UPV Audio Analyzer Firmware Upgrade 2.0.0", ident number 1406.0125.08.

The use of this CD is restricted to the firmware upgrade of your UPV.

Content of the CD

- Tool for re-installation of operating system and backup/recovery partition
- UPV firmware version 2.0.0
- Installation Manual and further Release Information

The new UPV firmware version 2.0.0 consists of three files

- UPVCheckPreconditions.exe
- UPVCompass_2.1.14.0(Release).msi
- setup_200226Release.msi

These files are included on the above CD in the folder I386\SOFTWARE. During re-installation of Windows XP they are copied to partition D:\ for later installation and backup purposes.

- The file "UPVCheckPreconditions.exe" is copied to the folder "D:\R&S_Software\Miscellaneous"
- The file "UPVCompass_2.1.14.0(Release).msi" is copied to the folder "D:\R&S_Software\Softwareplatform"
- The file "setup_200226Release.msi" is copied to the folder "D:\R&S_Software\Firmware"

The folder I386\Documents on the CD contains the following documents

- Installation Manual (this document)
- Release Notes
- Alphabetical list of remote control commands

To operate the UPV during firmware upgrade an external keyboard and a mouse must be connected via USB.

Important Notes

During re-installation of the Windows XP operating system ALL DATA on the firmware partition C:\ and on the hidden backup/recovery partition will be erased. Please save all your personal data on C:\ to an appropriate backup medium, e.g. to an external USB hard disk drive or a network drive, before. Though partition D:\ is not affected, it is strongly recommended to make a backup of this partition, too.

After this firmware upgrade no downgrade to a previous version is possible.

For any upgrade from a version 1.x to a version higher than 2.0.0 the upgrade to this version 2.0.0 is required before.

Re-installation of Windows XP

- Switch off UPV
- Connect external USB keyboard and mouse.
- Configure UPV to boot from CDROM:
   - Switch on UPV and press the **Del** key in order to access the BIOS.
   - Under Advanced BIOS Features - First Boot Device, select **CDROM**.
   - Insert the UPV Audio Analyzer Firmware Upgrade 2.0.0 CD.
   - Press the **F10** key to exit the BIOS with **Save & Exit**, confirm with **Y**.
  The UPV automatically reboots.
- When you are requested on screen press any key to boot from CD.
- Windows Preinstallation Environment starts. This may take up to 3 minutes.
- The following message box will be displayed

```
********************************************************************
*                                                                  *
*   You are running the re-installation of Windows XP              *
*   for RS UPV Audio Analyzer.                                     *
*   Remove all external USB stick or hard drive devices.           *
*   The firmware and backup/recovery partitions will be            *
*   entirely new formatted.                                        *
*   All data on these partitions will be erased.                   *
*   The data partition D:\ is not affected.                        *
*                                                                  *
*   To save any data on C:\                                        *
*   =======================                                        *
*   Press C to abort re-installation of Windows XP.                *
*   Reboot the instrument from hard disk and copy all              *
*   your personal data to a backup medium.                         *
*   When finished, start the re-installation of                    *
*   Windows XP again.                                              *
*                                                                  *
********************************************************************

   [ 1 ] = Start re-installation of Windows XP now
   [ C ] = Cancel
```

- Press 1 on the external keyboard to start re-installation.
  Re-installation may take up to 10 minutes.
  Do not interrupt this process.
- When finished the following message box will be displayed

```
********************************************************
*                                                      *
*   Re-installation of Windows XP is finished.         *
*   =============================================      *
*                                                      *
*   Next steps:                                        *
*    - Reboot the RS UPV Audio Analyzer                *
*    - Enter BIOS-SETUP select "Load Optimized Defaults" *
*      and exit the BIOS-SETUP with F10                *
*                                                      *
*   Continue installation according to                 *
*   RS UPV Firmware 2.0.0 Installation Manual          *
*                                                      *
*   Press any key to continue                          *
*   (The RS UPV Audio Analyzer automatically restarts) *
*                                                      *
*                                                      *
********************************************************

Press any key to continue . . .
```

- Press any key to reboot the UPV
- Press the **Del** key on the external keyboard in order to access the BIOS.
- Select **Load Optimized Defaults**, confirm with **Y**.
- Press the **F10** key to exit the BIOS with **Save & Exit**, confirm with **Y**.
  The UPV automatically reboots from HDD.
- Remove the CD.

First start of Windows XP

The first start may take up to 4 minutes

The next message "Found New Hardware Wizard" is displayed on screen because the Software Platform and the UPV Firmware is not yet installed on the UPV. This message pops up during every restart, until UPV firmware has been installed.
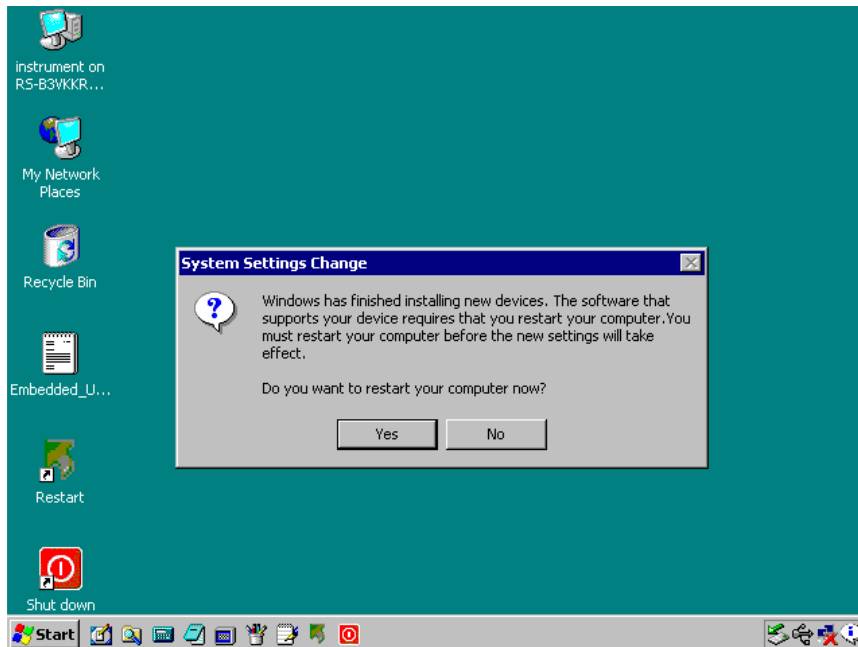

Continue with **Cancel**

In some cases (due to the version of the processor board installed in the UPV) the automatically installed graphics driver is not yet correctly initialized. Screen resolution is set to 640 by 480 pixels and Color quality is set to Lowest (4 bit). After next restart these settings will be correct.
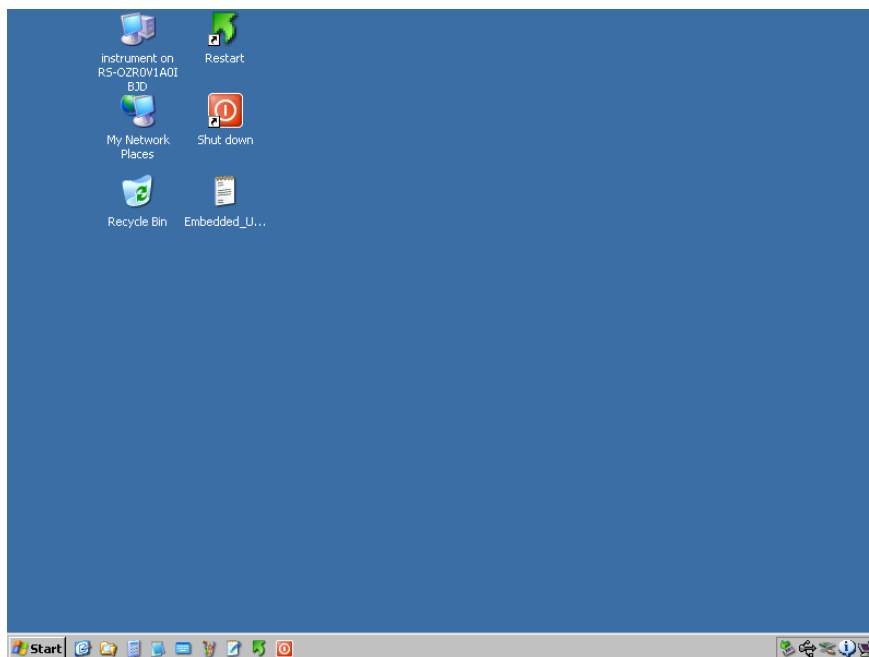
Hardware initialization is still in progress, do not shut down.

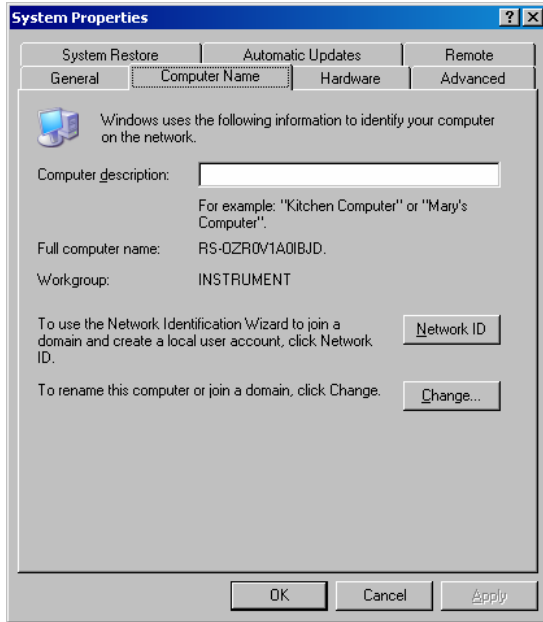When finished after some minutes, this message is displayed on screen.

Continue with **Yes**

After restart Screen resolution and Color quality is now correct

Set Computer Name

- Enter control panel via Start – Settings – Control Panel
- Click to **Performance and Maintenance**
- Click to **System** and select **Computer Name**

- Continue with **Change…**

- In the entry field type in RSUPVxxxxxx, where xxxxxx denotes the serial number of the instrument. The serial number is located on the rear panel of the instrument.

- Quit the messages with **OK** and close the System Properties window.
  Do not restart the instrument.

UPV Firmware Upgrade 2.0.0

Run the file "UPVCheckPreconditions.exe" in the folder "D:\R&S_Software\Miscellaneous" to prepare the instrument for the installation of the new R&S Softwareplatform and the new UPV firmware version. Quit the dialogue box with **OK**.

Quit the warning with **OK**.

Install R&S Softwareplatform by running the file "UPVCompass_2.1.14.0(Release).msi" in the folder "D:\R&S_Software\Softwareplatform".
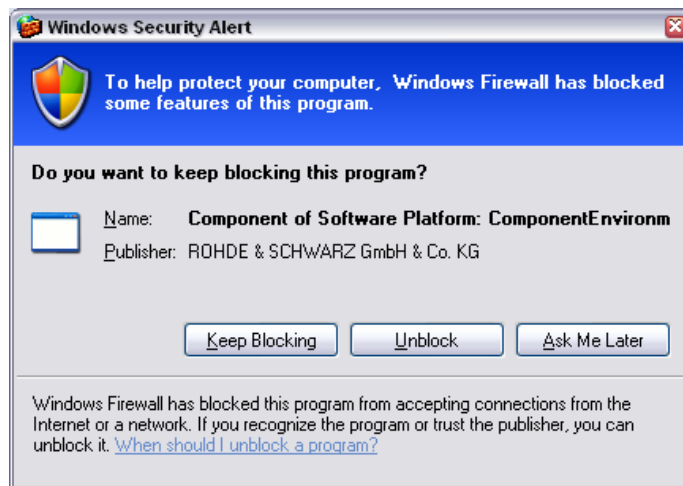
Follow the instructions on screen.

Install UPV firmware by running the file "setup_200226Release.msi" in the folder "D:\R&S_Software\Firmware".

Follow the instructions on screen.

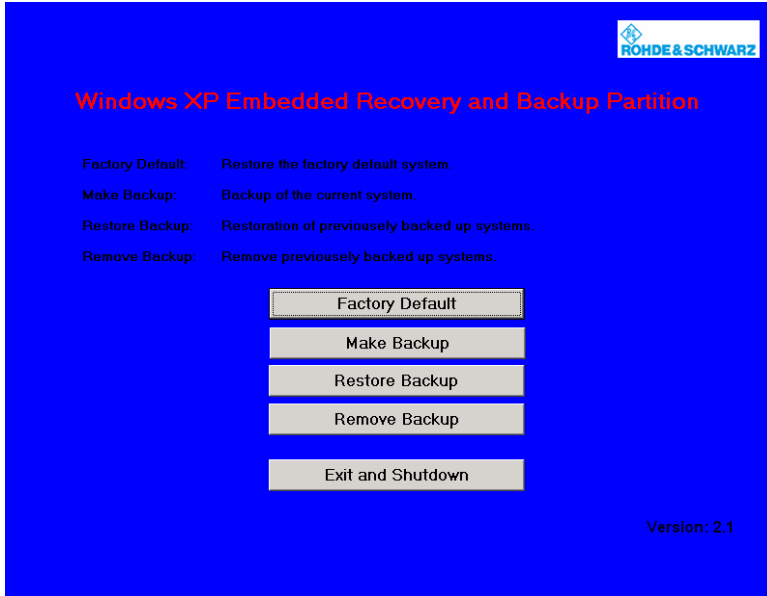The instrument automatically reboots.

During reboot a message from Windows Firewall is displayed on screen

Select **Unblock** to add the Software Platform to the Windows Firewall exceptions
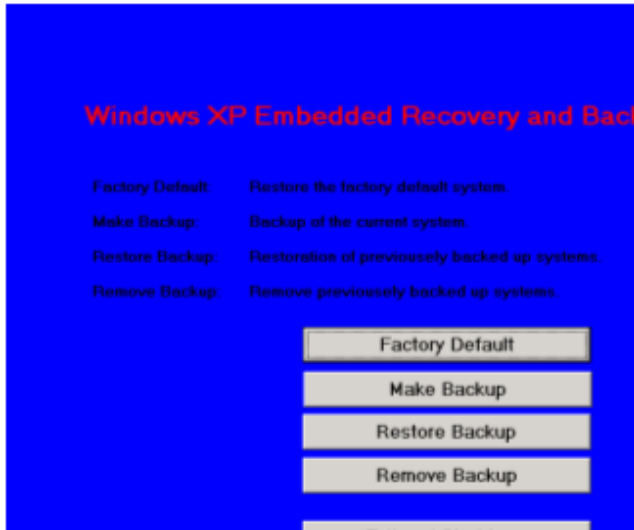
Make Factory Default Backup

- Shut down and reboot UPV
- Select **Backup/Recovery** in the bootmanager.
- Windows XP backup/recovery starts and automatically generates the factory default backup (this may take up to 5 minutes).
- When finished, the following dialogue is displayed on screen

- Leave the dialogue with **Exit and Shutdown**

In some cases (due to the version of the processor board installed in the UPV) the screen resolution is reduced to 640 by 480 pixels and the dialogue is not completely displayed.

You can reach the upper edge of the "Exit and Shutdown" button at the bottom of the dialogue.

After restart Screen resolution will be correct.