1. General Overview

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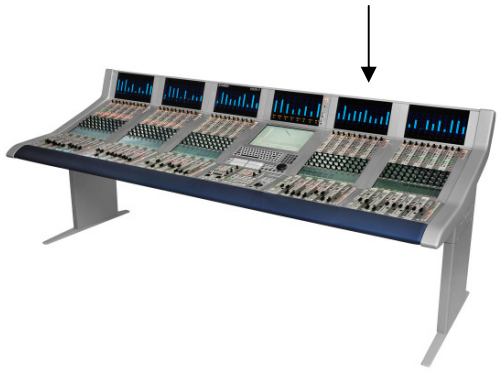
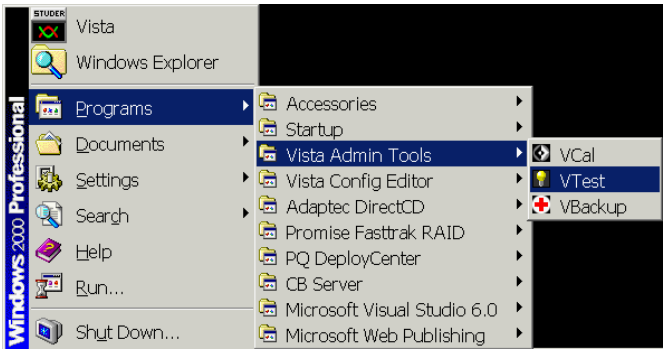
2. Fader Bay 1.949.020.81 (Vista 7) 1.949.021.00 (Vista 6) 1.949.022.00 (Vista 8)

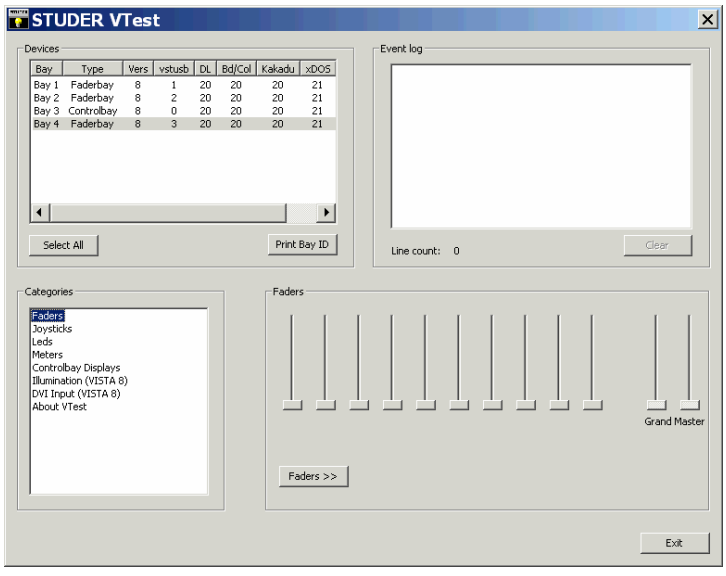


	Vista 6	Vista 7	Vista 8
TFT Interface	1.949.085.00	1.949.085.00	1.949.070.82
Control Board Fader Bay	1.949.120.21	1.949.120.21	1.949.122.20
Fader Driver	1.949.130.81	1.949.130.81	1.949.130.81
Fader Front Board Vista	1.949.134.00	1.949.135.00	1.949.139.00
I/O Front Board Vista	1.949.137.00	1.949.138.00	1.949.137.00
Bargraph Fader Bay	1.949.140.00	1.949.140.00	1.949.040.00

Fader Calibration

Start Vtest Utility





1. Select bay to calibrate (or mark 'Select all' for calibrating all bays) and choose category 'Faders'.

2. Start process with 'Clear Calibration' in "Faders >>" menu.
   All faders of the selected bay will automatically start calibration of the bottom fader position, indicated by up-down movements. When properly finished, each fader will be placed on the '-10dB' position.

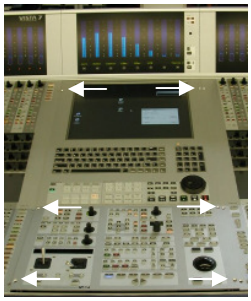
3. Wait until all faders are waiting on the -10dB position, and carefully adjust each of them at the exact -10dB mark.
   Confirm by pressing any of the nearby keys.
   All faders will then proceed with calibration movements below and above the -10dB position.

4. The calibration is finished when all faders reverted to their initial position.

Please note : on a Vista 8 Control Bay, fader and joystick calibration are always combined - when performing a fader calibration the joysticks need to by adjusted as well as a second step.
If a calibration process gets stuck it can be interrupted anytime by pressing 5 keys on the corresponding bay simultaneously.

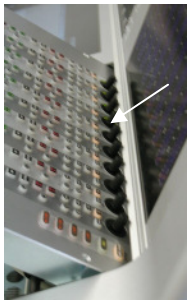
Replacement of Motor Faders

Vista Motor Faders are available with Studer Spare Part No 1.950.044.00-V.

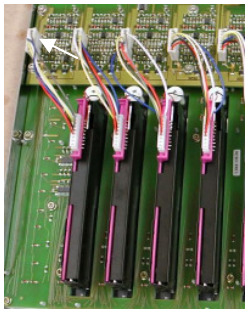


1. Switch Off Desk Supply and remove the 6 fastening screws.

2. Swing the bay up into service position and lock it with the support leg.



3. Take care not to touch the potentiometers in the uppermost position !



4. Remove the connector at the fader driver board

5. Remove fader knob the 2 attachment screws. The fader is now ready to be replaced

6. Insert a new fader and proceed in reverse order.

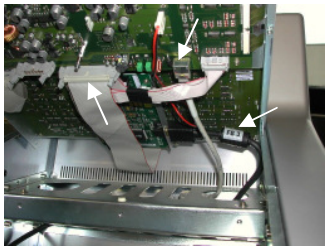
Note !

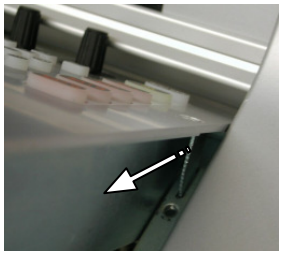
Always perform a fader calibration after a fader replacement

Replacement of Fader Bay

Replacing a fader bay is easy and straight forward. There are 3 single cables which provide power supply and USB control signal (RJ45 connector), video signal for the TFT display (D-Type video connector) and control signals to the meter panel (flat ribbon cable).
The bay can be locked in a service position, after removing the cables it can be completely removed.

Open the Bay and lock the support leg





Note !
Always store the bay to a flat ESD safe place. Always ship the bay in the original transport box.

See step 1-3 above

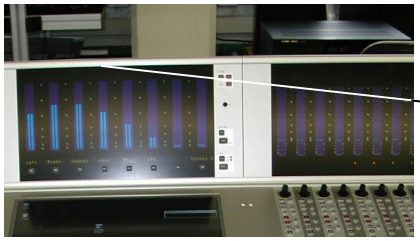
4. Disconnect supply, video and meter cable .

5. Mount the leg to the bay lock again and remove the bay carefully to the front.

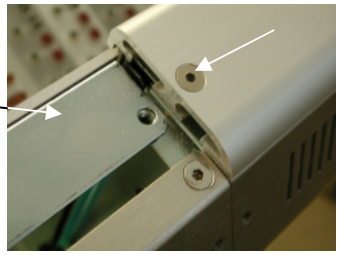
6. Install the bay in reverse order from step 5 to 1.

Replacement of Bargraph Meter

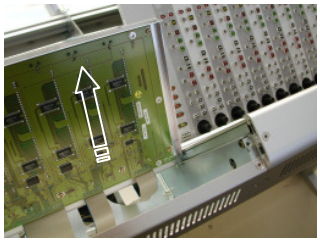
The bargraph module is connected to the corresponding bay with a single flat ribbon cable. A replacement is possible from the top of the desk :



1. Switch Off Desk Supply and remove the screws on the top of the meter frame

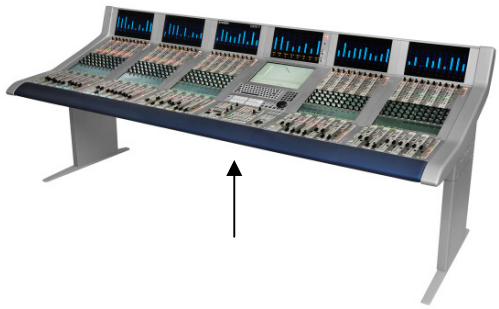


2. Lift of the cover profile



3. Carefully lift up the meter module and unplug the flat ribbon cable to the bay.

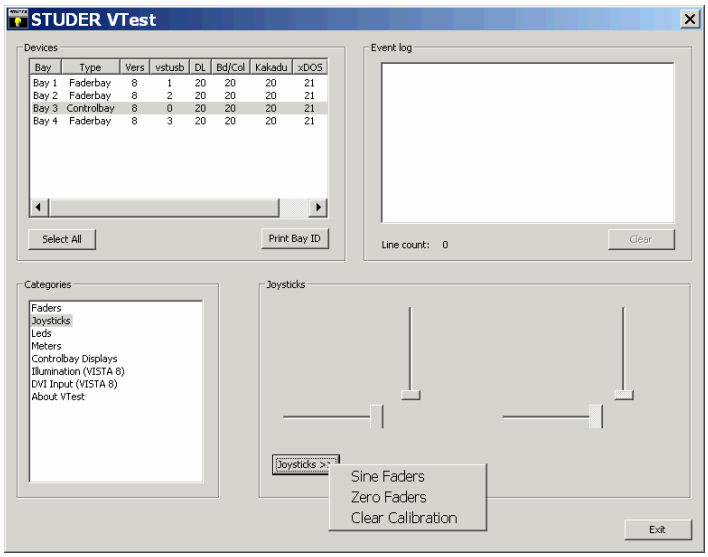
3. Control Bay 1.949.030.81 (Vista 7) 1.949.031.00 (Vista 6) 1.949.032.00 (Vista 8)



	Vista 6	Vista 7	Vista 8
Control Board Control Bay	1.949.121.21	1.949.121.21	1.949.122.20
Center Front Board bottom	1.949.125.00	1.949.125.00	1.949.136.00
Center Front Board top	1.949.129.00	1.949.128.81	1.949.127.00
TFT Module Control Bay	1.949.075.82	1.949.075.82	1.949.070.82
Fader Driver Board			1.949.130.81
Grand Master Driver Board			1.949.131.00
Grand Master Front Board			1.949.133.00
Trackball	89.20.1134	89.20.1134	89.20.1134
Bargraph Control Bay	1.949.143.00	1.949.143.00	1.949.142.00

Joystick Calibration

Start VTest Utility



Select control bay to calibrate, and choose 'Joystick' category.

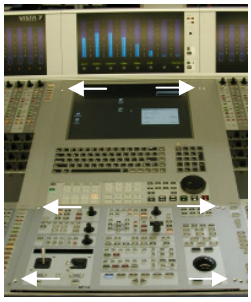
1. Start process with 'Clear Calibration' from "Joystick >>" menu.
2. Place the left joystick at the LEFT border and confirm with any key. The UP/DOWN key will start blinking.
3. Place the left joystick at the LOWER border and confirm with any key. The first calibration process starts, wait until the LEFT/RIGHT key is blinking.
4. Place the left joystick at the RIGHT border and confirm with any key. The UP/DOWN key will start blinking.
5. Place the left joystick at the UPPER border and confirm with any key. The second calibration process starts.
6. Wait until the UP/DOWN key of the right Joystick is blinking and proceed as described in step 2-5
7. When finished, both joysticks are placed in the lower left position again.

Please note : on a Vista 8 Control Bay, fader and joystick calibration are always combined - when performing a fader calibration the joysticks need to by adjusted as well as a second step.
If a calibration process gets stuck it can be interrupted anytime by pressing 5 keys on the corresponding bay simultaneously.

Replacement of Control Bay

Replacing the Control Bay is as easy as described for the fader bay. Switch off the desk, remove fastening screws, put bay into service position, remove cables, pull the bay out carefully and place it on a flat ESD safe surface.

Replacement of Control Bay TFT Module 1.949.075.82 (Vista 6 and 7)

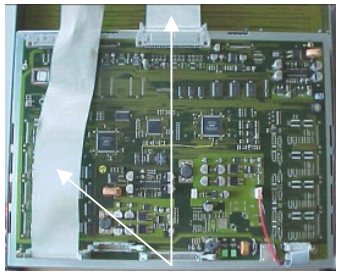


1. Switch Off Desk Supply and remove the 6 fastening screws.

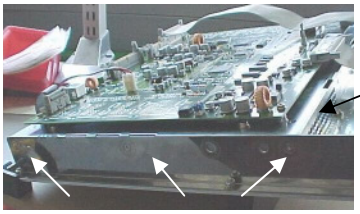
2. Swing the bay up into service position and lock it with the support leg.

3. Disconnect supply, video, trackball / keyboard and meter cable. Attach the leg to the bay again and pull the bay away from the desk.

Note !
Always store the bay on a flat ESD safe place.



4. Disconnect the flat ribbon cables on the control board. Remove the 5 screws and the bolt and take away the control board.



TFT Module 1.949.075.82

6. Remove 3 screws on each side of the panel and lift out TFT module carefully

7. Take care that glass surface is free of dirt and dust, insert new module and attach it with the 2 x 3 screws. Reconnect the control board and the flat ribbon cables.

8. Re-install the bay in reverse order.

3. Remote Fader Bay 1.949.700.00 (1.949.705.00 for Vista 6)

4. Desk & PC

	Vista 6	Vista 7	Vista 8	Red. PC
Power Distribution Board	1.949.150.81	1.949.150.81	1.949.150.81	1.949.152.00
TC Reader Module	1.949.010.21	1.949.010.21	1.949.010.21	
Power Supply 24V/20A		89.20.2014		
Power Supply 24V/12A	89.20.2017	89.20.2017	89.20.2017	89.20.2017
Mainboard (without CPU/RAM)	89.20.1122	89.20.1122	89.20.1122	89.20.1122
Harddisk	89.20.1130	89.20.1130	89.20.1130	89.20.1130
Video Graphic Board	89.20.1131	89.20.1131	89.20.1131	89.20.1131
Serial Interface Board	89.20.1132	89.20.1132	89.20.1132	89.20.1132
CD-Rewriter	89.20.1140*	89.20.1140*	89.20.1140*	89.20.1140*
Trackball	89.20.1144**	89.20.1144**	89.20.1144**	
IDE RAID Card FastTrak	89.20.1136	89.20.1136	89.20.1136	
PCI Memnet Card	1.950.450.20	1.950.450.20	1.950.450.20	1.950.450.20

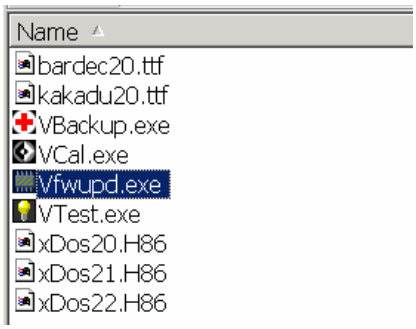
* the following models have been used before in Vista Desks: Philips PCRW 1208K (89.20.1134), Philips PCRW 5224 (89.20.1139), LiteOn LTR 52327 (89.20.1140). The current software (DirectCD 5.3.4) supports all models, when upgrading from the 1208 to the newer writers, an upgrade of the DirectCD software is required (See Vista Service Note 12/2003)

** The trackball 89.20.1134 has been used in Vista 6 and 7 desks. It is mechanically not compatible with the current 89.20.1144 (optical trackball) which is now installed in all desk. Please note that there were different versions of the optical trackball : a dark one for Vista 6/7/8, which was replaced by a first bright one, and finally a second bright one for all desks (incl the redundant Vista 8)

Software Installation

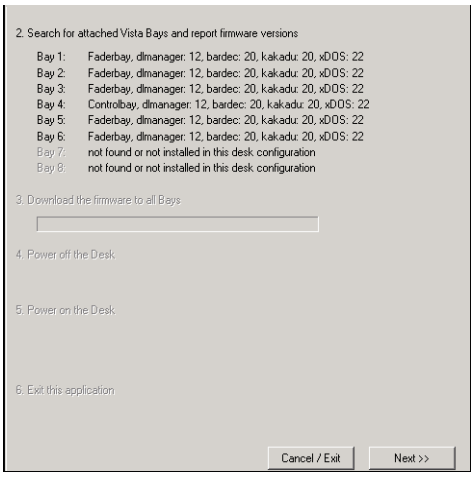
- Burn the installation .zip file onto a CD-R and insert the CD-R into Vista console
- Go to menu Start->Programs->Startup and click on the program „VistaMouseLoader“. This program makes sure that the windows cursor doesn't reach the area of Vistonics screens.
- If you have a folder called „C:\Vista_old“, delete this folder. Rename your existing folder "C:\Vista" into "C:\Vista_old"
- Extract the installation zip archive (Vista7_Vxxx.zip) on your CD-R to the internal C:\ drive. It will generate a new folder „C:\Vista“ containing the subfolders „C:\Vista\bin_release“, „ C:\Vista\system“ and „ C:\Vista\XML“
- *Registration is only required for upgrades before V3.3 - skip this step for V3.3 installation (or later) : Launch the program file „RegVista.Bat“ in the folder „ C:\Vista “.Confirm that each message ends with the word „successfully“.*
- Go to menu Start->Programs->Startup and click on the program „VistaMouseLoader“. This will make this program active again and you won't be able to move your mouse cursor outside the GC area of the console.

Firmware Installation



The VistaAdminTools menu includes all maintenance utilities as well as the firmware program files. For upgrading close the Vista application and start the Vista Firmware Upgrade Utility (Vfwupd.exe).

You will be guided through the firmware upgrade process step by step. Take care NOT to interrupt the sequence until the firmware upgrade is completed ! Switching off the desk's mains supply during the upgrade could leave the Vista desk in a non-working state.



1. First the status of the available firmware is indicated.
2. The second step searches for the installed firmware versions in the desk.

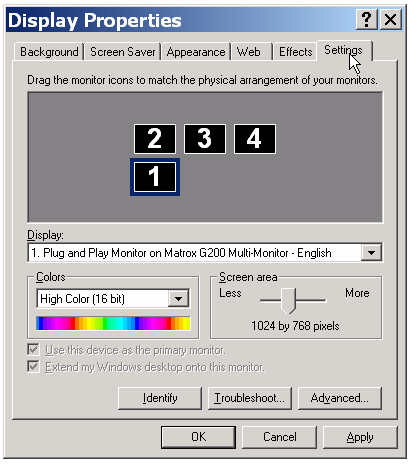
At this step it is possible to verify if a firmware upgrade is required (installed version is older than the current program files) or not. Exit the utility if no upgrade is necessary, proceed with 'Next' for the upgrade.

3. The program files are downloaded to the bays.
4. Switch of the desk hardware (single botttom power switch) and wait until the utility asks to
5. switch the desk on again.
6. Exit the application. The desk is now upgraded.

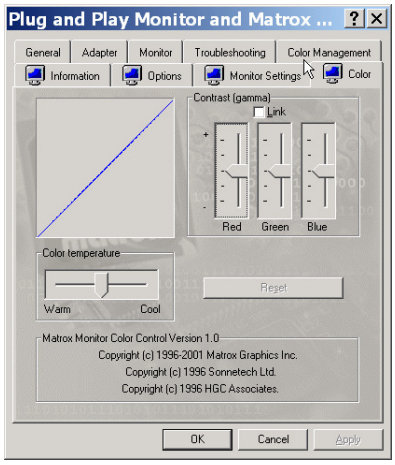
TFT Settings

Production Vista Desks are fitted with DVI controlled TFT monitors. The brightness my be adjusted in the Vista settings (introduced with V3.5, refer to the manual for details)

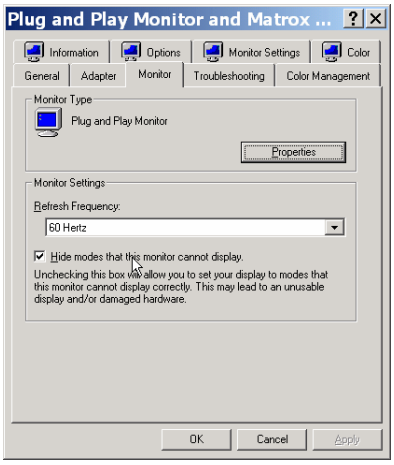
In the Display properties, the following settings are used as default values :



Open Display Properties, e.g. with right-clicking desktop .. choose the 'Settings' tab and select 'Advanced ..'



Go to the Color Tab. Link the 3 colors, press Reset, and increment the setting 4 steps (with UP key)



Check for 60 Hz frequency in the Monitor tab.

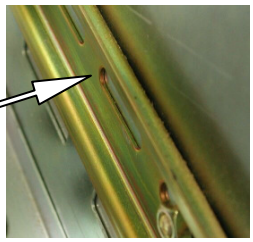
Since index-81 version of the control bay provides a second video input of the TFT, the F8 key allows to switch between internal (DVI, control bay) and external use (VGA, any 3rd party external device). If an adjustment of the analog VGA interface is required, please refer to the on-screen interface manual of the board manufacturer. The on-screen control keys are accessible in the enhanced Vtest utility (needs to be started in expert mode)

Power Supply 89.20.2014

The Vista 7 Power Supplies provide 24V / 20A for bays and internal components (see Distribution Board for details). No voltage adjustment is required.
The supplies are locked to mounting rails and can be replaced as follows :

1. Switch off desk and disconnect primary and secondary connectors

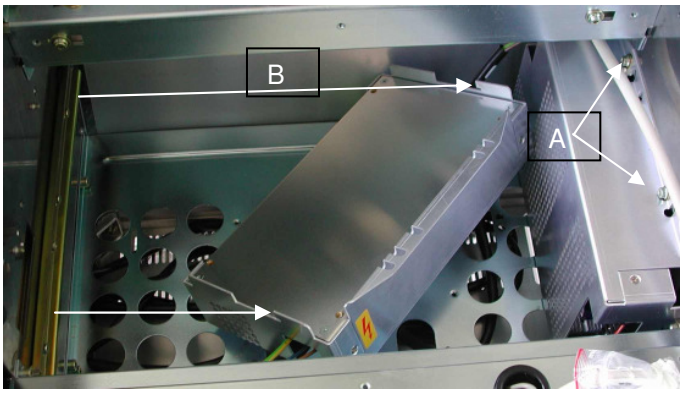
2. Press on lock bar and swing lower part of supply away from rail. The supply can then be lifted away from mounting rail.



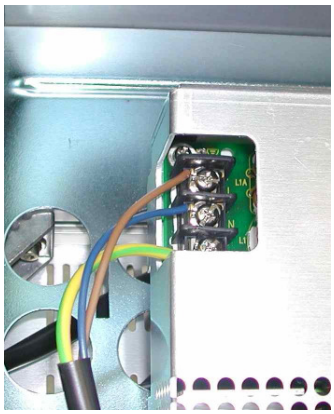
3. For mounting a supply, put it onto rail and firmly press lower part against rail until lock mechanism clicks in.

Power Supply 89.20.2017

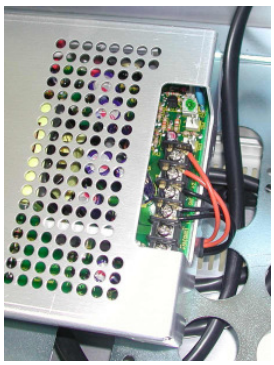
The 89.20.2014 Supply has been replaced with the 2017 version.



2017 supplies are unmounted by removing 2 screws (A) and lifting the supply from the mounting rail (B).



disconnect primary ....

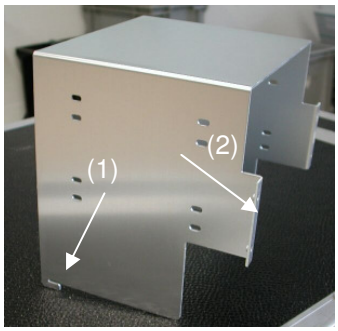


..... and secondary cable for replacing a power supply.

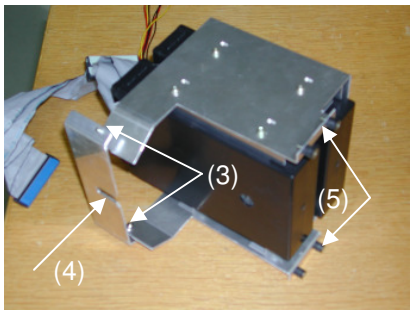
Spares are either available as single supply modules (89.20.2017) or with the mounting frame (89.20.2017-V) which is comptible to the previous 2014 model (to be mounted on rail mechanism)

Hard Disk / CD Writer

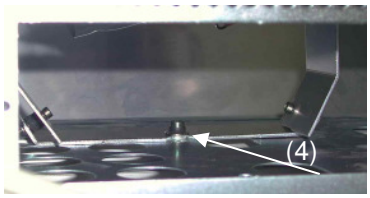
The 2 redundant hard disks are installed in separate SilentDrive enclosures and mounted in a common frame below one of the fader bays. There are 2 versions of the frame, the newer one has an additional suspension for improved noise suppression.
The CD writer is located below the hard disks and attached to the frontpanel.



Frame A is locked to the bottom frame with a mounting lug (1) and attached to the front panel with 4 screws (2)



Frame B with additional suspension (3) is secured to the bottom frame with a mounting screw (4) and attached to the front panel with 4 screws (5)



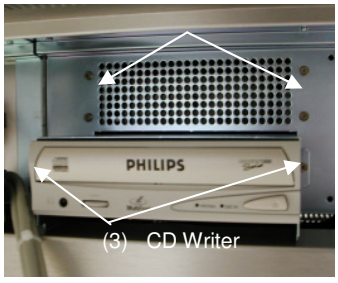
For deinstalling the hard disk frame type B, the CD writer needs to be removed first.

Replacing the CD Writer

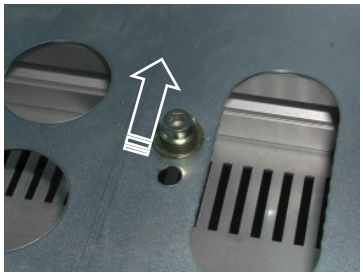
The CD Writer is located below the hard drives and attached to the frontpanel with 2 screws (3, see below). It can be replaced by removing these, disconnecting IDE and power cable at the writer's rear side (it might be necessary to remove HD frame for that purpose) and pulling it out to the front.

Replacing a Hard Disk

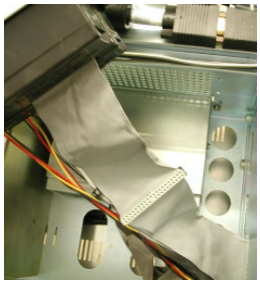
For replacing a disk proceed as decribed below in steps 1-4.



1. Switch off desk and unscrew the 4 front screw. You can then shift the frame back and lift it up



In case of frame type B, remove the CD writer first for loosening the bottom screw which holds the frame in place.

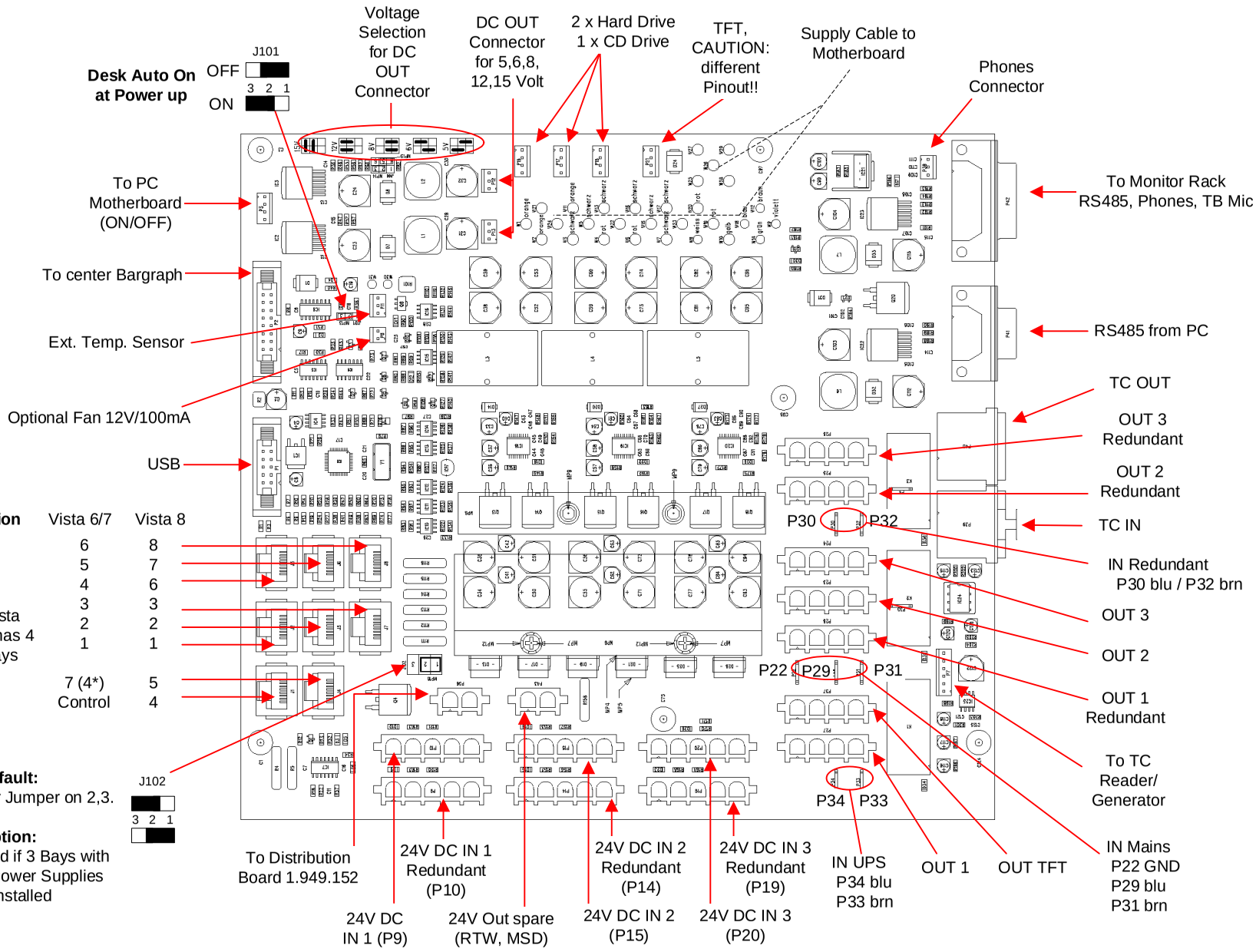


2. Disconnect IDE cables at mother-board and supply cable at distribution board. Carefully take cables back and remove frame with disk enclosures.

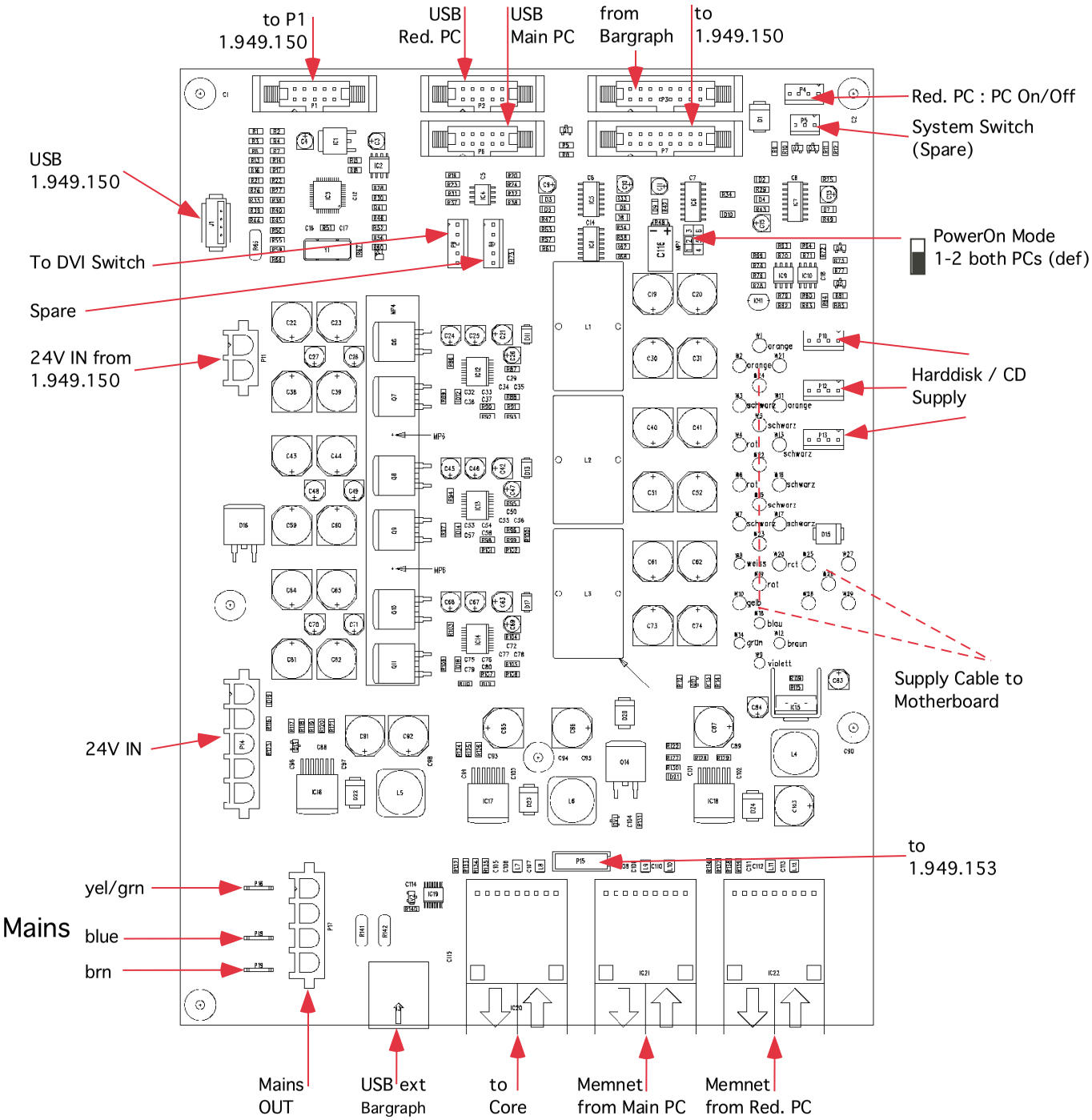
3 Refer to the SilentDrive Instructions for detailed information about hard disk replacement.

4. Re-install frame with disks and reattach IDE and supply cables.

Vista Distribution Board Connections
1.949.150.81



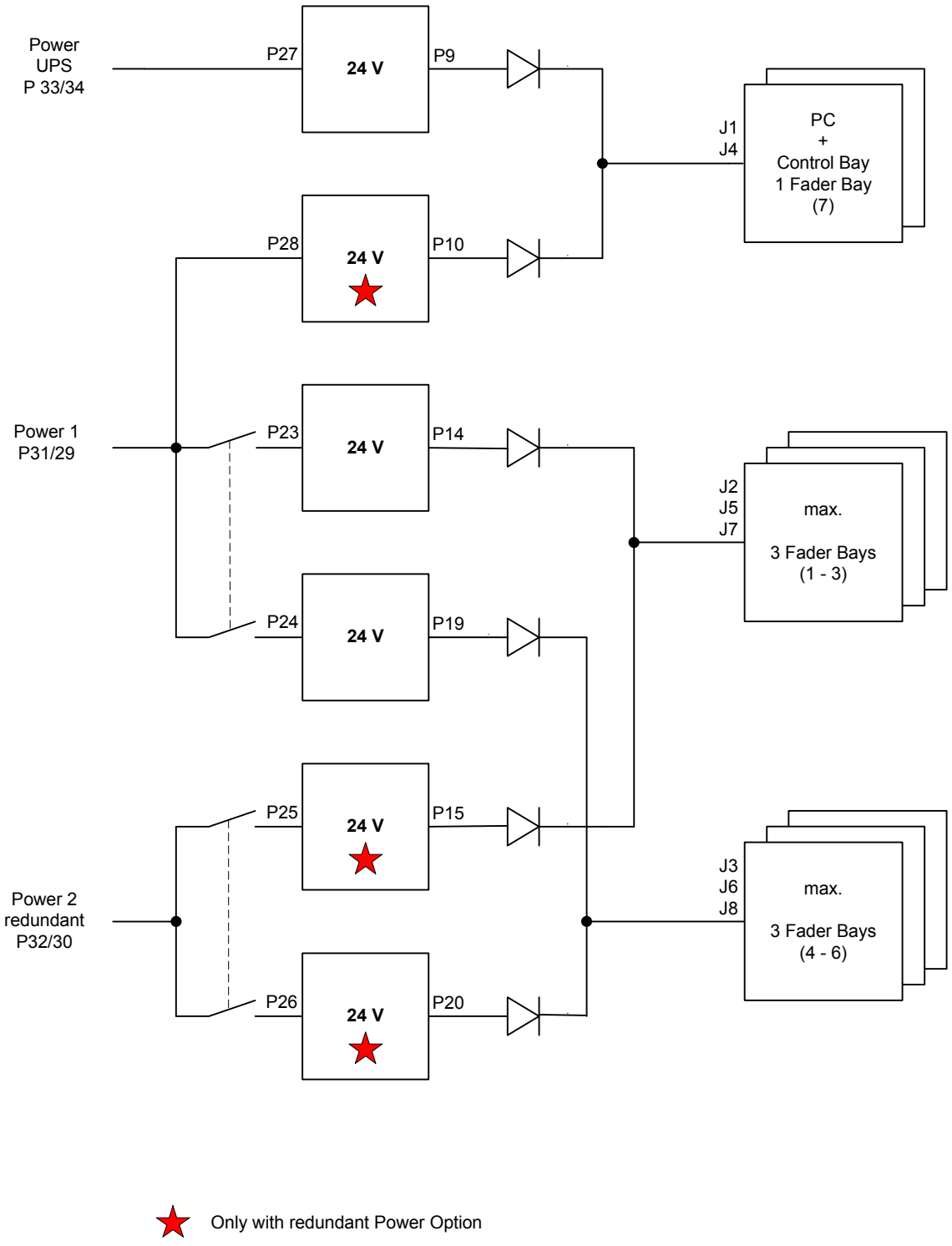
gr 14.12.2005



1.949.152
Vista 8 Redundant Distribution Board

Connections 11/2005 GR/KS

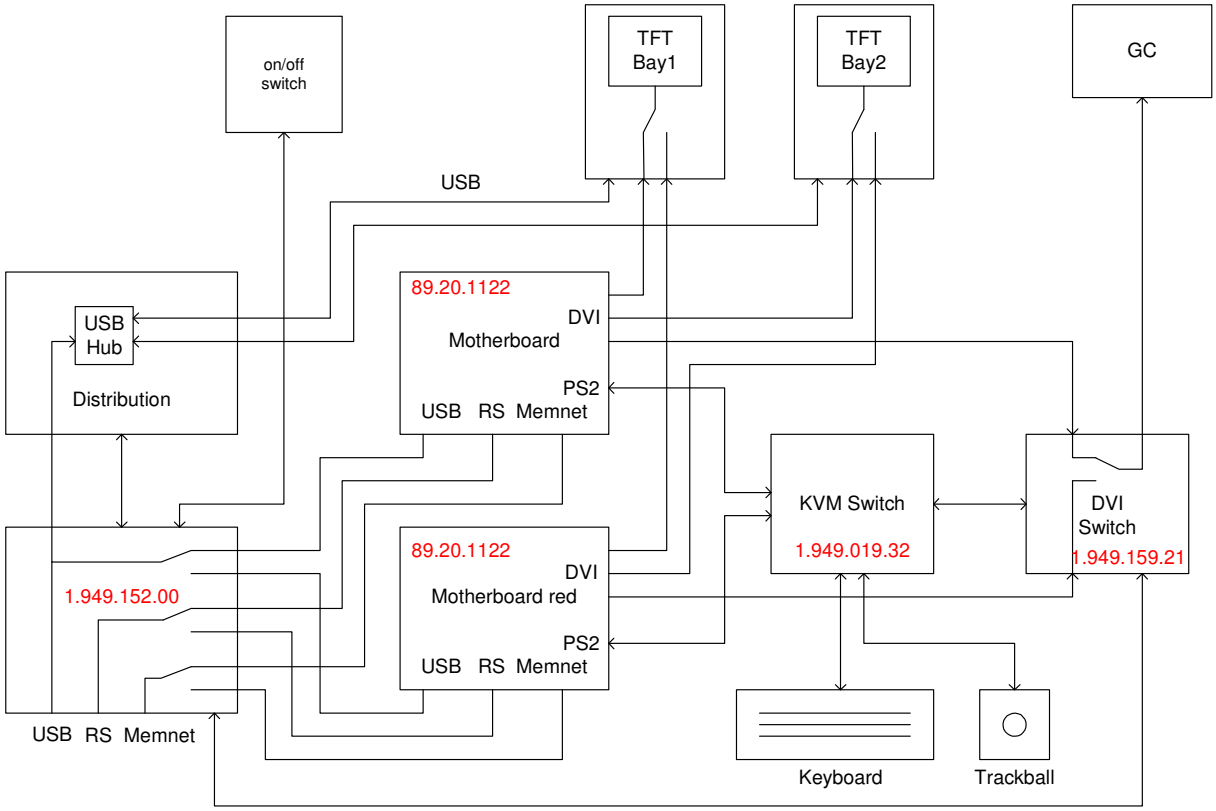
Power Supply Configuration Vista 6/7



Only with redundant Power Option

5. Redundant PC (Vista 8)

A second redundant PC System is available as option.



11. 1. 05 ML

Wiring Diagram red. Control System Vista

Emergency switching is done with the corresponding key on the desk surface (near to power switches). A "soft switching" (only keyboard / trackball / video) for control purposes is achieved with the key combination "SHFT -" and "SHFT +".

6. Core

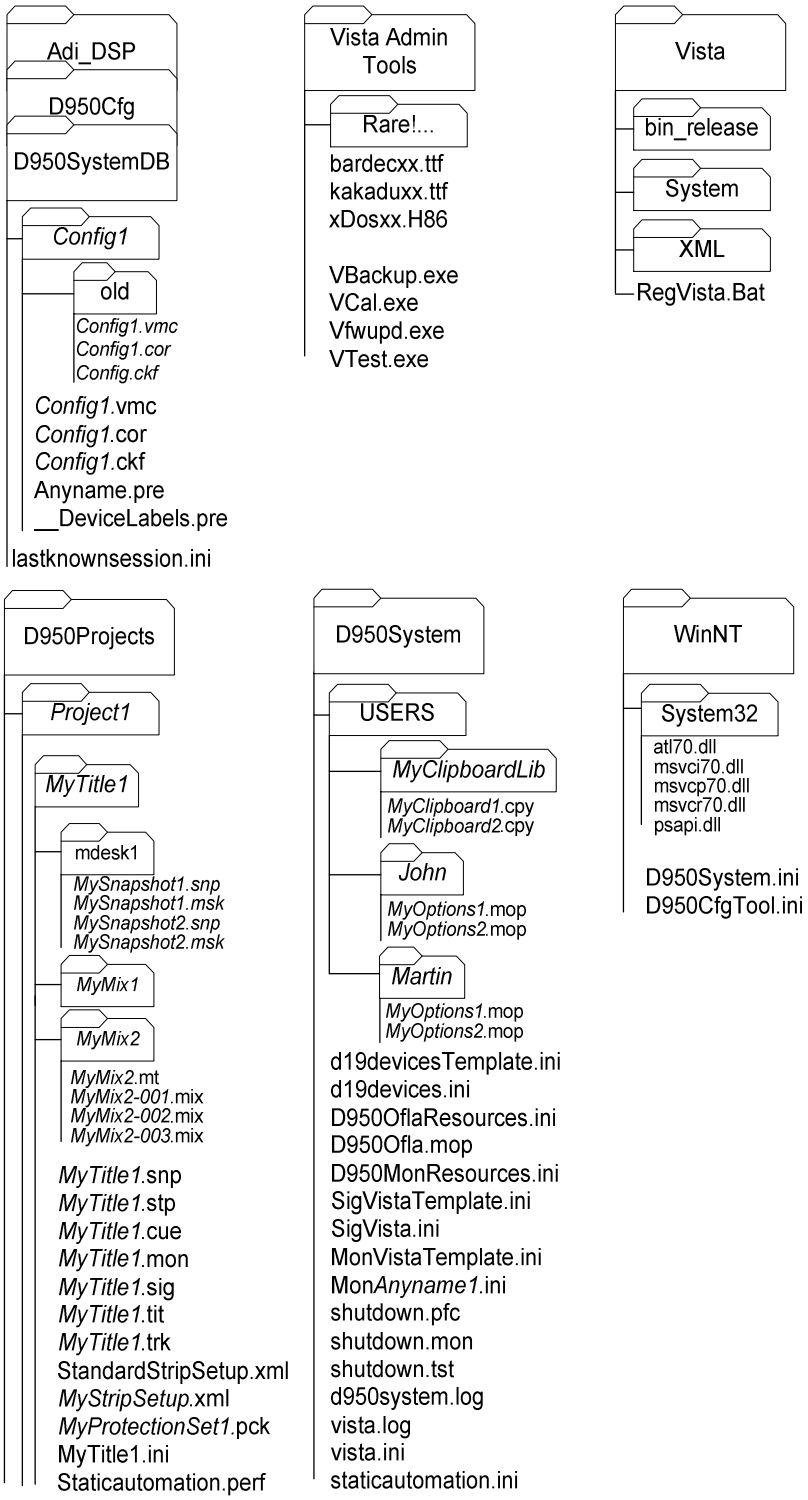
1.950.605.26	PEAES Board
1.950.606.22	PE21 Board
1.950.610.26	PE Board
1.950.616.20	MADI Board
1.950.621.20	Memnet Board

7. Monitoring

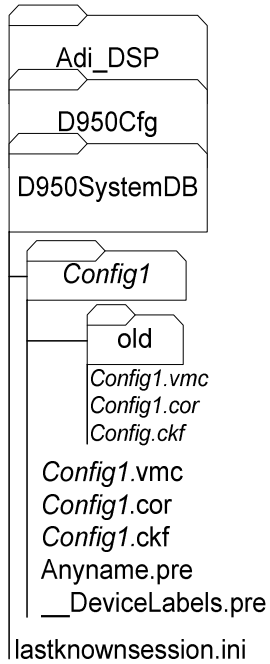
1.917.410.24	Monitor Group Selector
1.917.420.22	Talkback Selector
1.917.425.22	Signal Input Board
1.917.426.22	Signal Output Board
1.917.431.20	Headphone Amplifier Board
1.949.688.00	DA Board Monitoring

8. Vista File Structure

In here you will find a short description of the Vista file structure. Besides others, you will find the following files and folders on your harrdisk C:

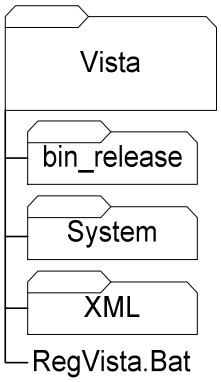


Configurations



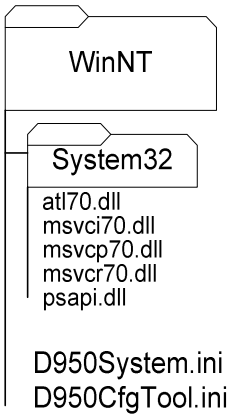
Adi_DSP:	No user access. Contains files in order to generate new configurations
D950Cfg:	Contains configuration editor and all its files. Includes a logfile.
D950SystemDB:	Contains all configurations.
Config1	This directory represents a configuration (named e.g. “Config1”), using a number of DSP cards to make a predefined console working. Two of the included files are needed in order to run the configuration on a real console: *.vmc and *.cor
Config1.vmc	This file describes the structure of the console and all its parameters
Config1.cor	This file contains the DSP code for the core.
Config1.ckf	This is a text file, which can be opened e.g. with the windows “notepad” application. It conains information, which parts of the console are actually running on which DSP card.
Anyname.pre	This is a preset file, which stores the same information as a snapshot file. The difference is that this file is only accessible for reading for the normal user and that it exists per configuration (therefore is available across all titles belonging to one configuration). The system administrator has the access rights for creating, deleting or modiying a preset file.
__DeviceLabels.pre	This is preset file with a reserved name. It has the format of a standard preset file and contains basically the same information. If the option “Use Device Labels” is switched on, this file gets read – with its patch USER labels interpreted as DEVICE LABELS. This happens whenever a title is opened. This means: When opening a title with the device label option activated the USER label of this file will overwrite the INHERITED labels (device labels) of the opened title.
Lastknownsession.ini	Stores information about last used configuration and title when closing the application software.

Vista



Bin_release:	No User Access!
System:	No User Access! Contains main application software and additional necessary files.
Xml:	No User Access!
RegVista.bat	run this file whenever one or more files have been replaced in the Vista directory! It registers all dll files within the system registry database.

WinNT



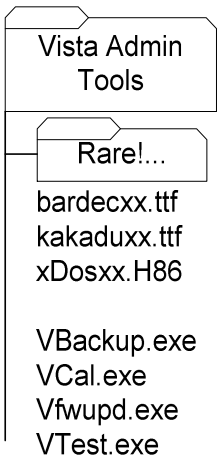
All listed .dll files must be in the „System32“ directory.

D950System.ini main .ini file. Stores:

- hardware configuratin (which components are present and which RS422 port is used for what)
- system administrator password
- maximum mix file size
- 9Pin settings:
  - Whether ADR commands should be done by the machine controller internally or whether the console does it (risk of not being too accurate)
  - Whether the machine should stop looping after recording with autorecord once.
  - Whether to send no record commands at all, Edit on/off or “crash record”
  - Whether it is allowed to cross time 0:00:00:00 when locating and working with offsets.

D950CfgTool.ini No user access!

Vista Admin Tools



Rare! For bays with VGA interfaces only!!! :
This directory contains two versions of Vcal.exe file, which are necessary, if the console is equipped with analog VGA screens. (Very early consoles and some remote bays.)

Bardecxx.ttf Downloadable firmware file (reserved name, xx specifies version number)

Kakaduxx.ttf Downloadable firmware file (reserved name, xx specifies version number)

xDosxx.H86 Downloadable firmware file (reserved name, xx specifies version number)

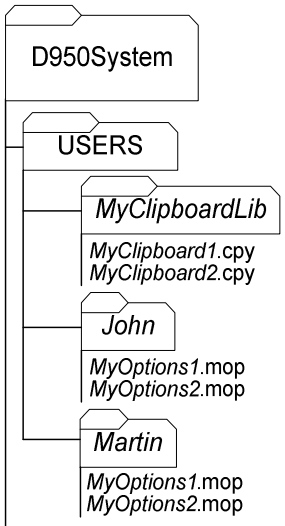
Vbackup.exe Backup script in order to make an image of the whole harddisk onto CDR

Vcal.exe Tool to adjust LED and TFT brightness.

Vfwupd.exe Tool downloading firmware into Vista desk. Checks for newest version of Bardecxx.ttf, Kakaduxx.ttf, xDosxx.H86 in the same directory, verifies currently loaded firmware and manages download.

VTest.exe Tool to check functionality of Vista desk hardware as well as calibrate faders and/or joysticks.

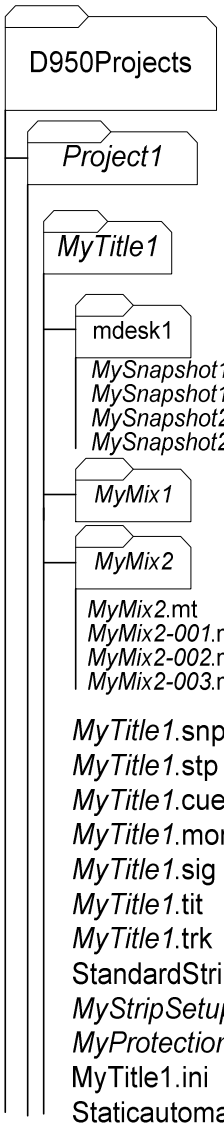
D950System



USERS:	Contains various subdirectories. Each directory represents one user and his option files and maybe his individual clipboard libraries.
MyClipboardLib	Contains multiple sets of clipboard settings for copying into channels. This directory may also be located within the directory of an individual user, depending on where the operator decided to store the library.
MyClipboard1.cpy	clipboard file storing clipboard data. The following data or combinations of them may be contained within one file: EQ, Filters, Dynamics, Pan, Delay or even a complete channel
John:	Contains various mix option files and can also contain clipboard libraries.
MyOptions1.mop	Mix option file, containing a set of mix options.
D19devicesTemplate.ini	template file for D19devices.ini file
D19devices.ini	contains definitions of studer microphone preamplifiers connected to a specific installation
D950OflaResources.ini	No User Access!
D950Ofla.mop	Contains current mix options. If deleted, factory default options will be applied!
D950MonResources.ini	No User Access!
SigVistaTemplaet.ini	template file for SigVista.ini file
SigVista.ini	signalling file, contains definitions of GPI/O, DIM logic and remote controllable TALK and MUTE keys.
MonVistaTemplate.ini	template file for MonAnyname1.ini
MonAnyname1.ini	monitoring file, defining CR monitoring format, Studio A/B, Digital Insert, software popup extension for source selectors as well as the definition of the source selectors and their sources. DIM level is also specified in this file. There can be various versions of this file. Each title remembers which file was loaded when it was closed last.
Shutdown.pfc	stores last preferences such as positions of windows, position of toolbar etc. This file also stores the names (!) of interface subclasses! Included are also: TC offsets and reader settings, setting of “Auto Select” in General Patch targets, device label option settings and (on D950 only) setting of GC multidesk group if present. This file may exist multiple times with user names and the ending .pfc. Since Shutdown.pfc gets overwritten everytime the application is quit, it is wise to keep a version of it with user preferences under a special name.
Shutdown.mon	stores the last settings of the monitoring when shutting down application software.
Shutdown.tst	stores last timecode related settings when shutting down application software
D950system.log	stores a log file with various information for studer service & support.
Vista.log	stores a log filewith various Vista related

	information for studer service & support
Vista.ini	hold information, which are specific to that desk, independent of titles etc. This file must not be edited manually. All information is stored by the application software (setup menus). Stored information: - Duration for detection of momentary key activation - Timeout for operations with multiple steps (e.g. copy/paste) - Jog and shuttle sensitivity - Headroom of meters. (Where does the headroom indication start.) - Peak hold state with threshold setting - Overload hold state - State of use of monitoring keys as PEC/DIR switching
StaticAutomation.ini	stores global static automation options. Stored information: - Crossfade switch position (beginning, during, afer crossfade) - Default snapshot mask - Trim mode active

D950Projects



mdesk1:	directory contains all snapshots of a specific title.
MySnapshot1.snp	stores all audio settings of a desk
MySnapshot1.snp.msk	stores a mask, dedicated to the snapshot, making the snapshot a “partial” snapshot. It also contains snapshot crossfade time of the corresponding snapshot.
MyMix2:	a mix directory contains one file with the ending “.mt”, which stored the structure of the mix tree, and many mix pass files. Each mix pass file contains ALL mix data up to that specific pass. It is therefore possible to use one .mix file and playback a whole mix.
MyTitle1.snp	stores a snapshot when leaving the title upon shudown or title change
MyTitle1.stp	historical file, no function
MyTitle1.cue	stores all cue points (timecode markers) which are generated in that tile
MyTitle1.mon	stores last monitoring settings when leaving this title upon title change or shutdown of system.
MyTitle1.sig	stores specific GPIO settings such as faderstart and redlight definition of that specific title. (Definitions are done the the GC application.)
MyTitle1.tit	Stores title memo text and which monitoring file will be loaded when opening this title.
MyTitle1.trk	no function (historical file)
StandardStripSetup.xml	stores strip setup. Standard name, if no other is given.
MyStripSetup.xml	stores strip setup with user defined name. The reference, which strip setup file was used with that specific title is stored in the title.ini file.
MyProtectionSet1.pck	Object picker file. When doing any set of objects with the object picker (e.g. for protecting certain objects from being dynamically automated), this set can be stored under any name with the ending “.pck”.
MyTitle1.ini	stores all kind of information regarding this title: - last active mix tree - last active strip setup - monitor meter assignments - whether red LED should indicate clipping or “entering headroom” - whether strip setup window shows interited labels - definition of channels which are save from muting when hitting “solo in place” - selected label type on second line of desk label display when leaving this title. - Selected mode PFL/SOLO/SIP when leaving this title.
Staticautomation.perf	stores current performance mask and protected patch points