

# TC Audio Interface Software

## - *Version history*

Important notes, Windows:

Note 1: If you install or have already installed an S800 1394b Firewire interface in your computer, you will need to apply a hotfix from Microsoft. <http://support.microsoft.com/kb/885222>

Note 2: If you had already installed an S800 1394b Firewire interface in your computer and applied the hotfix for Service Pack 2 (*see Note 1*), and then upgraded to Service Pack 3, you will need to apply a hotfix from Microsoft. <http://support.microsoft.com/kb/955408>

Note 3: When using a Mac with Boot Camp, users should try disabling the KbdMgr.exe process if their computer is experiencing high DPC system latency. The KbdMgr.exe process is known to cause high DPC system latency, leading to audio dropouts and in some cases BSOD's.

## **VERSION 2.4.1 FINAL (R6468) MAC & (6457) PC**

### **PC: Driver 3.5.0**

- Minor modifications of the installer

### **Mac: Driver 3.4.2**

- Issues when updating the driver from previous versions. FIXED

## **VERSION 2.4.1 RC 2 (R6426) MAC & (6411) PC**

### **PC: Driver 3.5.0**

- The link placed at the desktop was pointing to a wrong location if the user was installing at a non-default location
- There was no link to the control panel from Windows start menu
- An update alert was unintendedly shown at CPL startup if the user was installing at a non-default location
- The option to add a link to the Quick Launch bar has been re-enabled. Beware that this option does not work with Windows 7

### **Mac: Driver 3.4.2**

- Smaller adjustments to the installer

## VERSION 2.4.1 (R6376) MAC & PC

New driver for PC:

### Driver 3.5.0

- The driver's performance on a system with high DPC latencies has been improved
- On Windows 7 64-bit, Microsoft's new 1394 stack would sometimes fail to deallocate the isochronous bandwidth, requiring a system restart to restore the driver's functionality
- A BSOD could occur on multi-processor/core systems when the audio streaming configuration was changed or when it recovered from a dropout
- On Windows 7, the driver's minimum buffer size was not reported correctly
- An ASIO host application's audio could become distorted after a large DPC latency spike occurred on the system
- After putting a Windows 7 system to sleep, Microsoft's new 1394 stack was causing the driver to hang when the system was resumed
- When using stacked devices, the order of the ASIO input channels could be flipped depending on the order that the devices were attached
- ASIO streaming performance on Windows 7 has been improved
- WDM input routing now works as expected

### Firmware:

Impact Twin Firmware 1.07 included

- An unintended raise in level occurred when switching the Compressor/De-esser on/off, much more smooth now.

### Installer:

- In some occasions, updating from older versions would fail, resulting in the device not being recognized
- Impact Twin added to the installer
- New versions of M40 Reverb, ResFilter and Assimilator added to the installer. These versions will run with all TC Audio Interfaces

## VERSION 2.2.2 (R5358) MAC

Installer build 5358

### Driver 3.4.2

- Added support for MAC OS X 10.6 Snow Leopard
- At sample rates of 88.2kHz and higher, MIDI dropouts could occur when large amounts of MIDI data was output

**VERSION 2.2.1 (R5088) PC AND MAC**

Installer build 5088

**Driver 3.4.1**

- The driver's Buffer Size and Safety Buffer setting could not be changed when an ASIO host application was using the driver. It is now possible to change the Buffer Size and Safety Buffer setting when there is less than two ASIO / WDM host applications active (XP/Vista)
- If a device was removed while being used by an ASIO host application and then reattached, the device would not become available until the ASIO host application was quit (XP/Vista)
- WDM audio could glitch or become distorted after a large DPC latency spike occurred on the system (Vista)
- With a device that only publishes a single sample rate, the Control Panel's sample rate field would not refresh when the sample rate was changed on the device (XP/Vista)
- With a device that only publishes a single sample rate, the buffer size would not get set to the minimum when the sample rate was changed on the device (XP/Vista)
- If there was not enough firewire bandwidth available to allocate the channels required for two stacked devices at a particular sample rate the driver would disable the second device, but it would not attempt to re-enable the second device if the sample rate was changed (XP/Vista)
- A rare BSOD could occur when changing the sample rate with two stacked devices (XP/Vista)
- When using stacked devices, the driver could incorrectly report the lock status of a device after it was re-enabled by the driver (XP/Vista)
- A BSOD could occur after changing WDM channel mapping during playback (XP/Vista)
- Changing the WDM channel mapping could result in WDM playback stopping and requiring a reboot to restore WDM audio (XP/Vista)
- WDM audio could glitch or become distorted when using two stacked devices (XP/Vista)
- Attaching a second device could result in WDM audio stopping and requiring a reboot to restore WDM audio (XP/Vista)
- WDM audio would not stream when using two stacked devices if the WDM channels were only mapped to the second device (XP/Vista)
- It was not possible to map a WDM channel if the device's channel name was longer than 16 characters (XP/Vista)
- WDM audio would not stream if only one WDM channel was mapped to an output on Vista (Vista)

- If two stacked devices both had the same nickname, it was not possible to change which device was the Master (XP/Vista)
- The ASIO driver now returns the correct minimum allowed buffer size to ASIO host applications based on the current Safety buffer Mode (XP/Vista)
- The driver had a kernel memory leak that would occur whenever streaming was restarted (MAC OSX 10.4.11/10.5.x)
- In a rare situation, changing the sample rate in a Core Audio application could result in no audio being passed until the application's driver connection was reset (MAC OSX 10.4.11/10.5.x)
- The driver would not load on some PowerPC Macs running 10.4.11 (MAC OSX 10.4.11)

### **Control panel 2.2.1.2612**

#### Improved WDM routing (PC)

- WDM routing reset function: resets to default routing.
- WDM routing: it is now impossible for the user to set an invalid routing. In case the user tries to, a blank routing (---) is set.
- The speaker configuration (which can be set up using Windows Sounds and Audio Devices Control Panel) is now displayed.

#### Buffer settings (PC)

- Buffer sizes: the list of available buffer sizes now contains more choices.
- On top of that, users can now enter the buffer size manually: the user can now freely set a buffer size of choice. The buffer size must be a multiple of 8.
- Buffer sizes: the lowest available buffer size now corresponds to the lowest value actually available in the driver. If the user shifts between safety buffer settings or sample rates, the lowest possible buffer setting is automatically calculated, and the user selection is adjusted if needed.
- It is not possible to set an invalid buffer size
- It is now possible to change the buffer setting (and safety buffers) while an ASIO host is running.

#### System settings:

- The TC Near software package version is now displayed in the system settings page
- "Safety Buffer" setting is moved up to "Buffer Size"

## **VERSION 2.2.0 (R4988) PC AND MAC**

### **Installer build 4988.**

#### **PC:**

Driver 3.4 - New Driver for PC!

- The driver's WDM audio interface is now always presented as 8 in/out channels, regardless of the number of total audio channels available on a device or on a number of stacked devices.

- An 8 channel interface provides support for Mono to 7.1 Surround configurations for WDM audio applications. This resolves many issues since the WDM Audio model does not handle dynamic configuration changes very well.
- To improve stability, WDM applications are now limited in their ability to change the sample rate.
- WDM applications, like Skype, now work correctly at all sample rates when the device is the default audio device for recording and playback.
- In the Windows Vista Sound Control Panel, the Advanced tab would sometimes not be shown in the device's Properties window.
- On rare occasions, an ASIO host could sometimes fail when initializing or resetting its ASIO connection to the driver.
- A WDM application's audio would glitch or stop after remapping WDM output channels during playback on Vista.
- During device installation, a BSOD could occur if the driver's MIDI interface was accessed before the device installation was completed.
- The driver was not recovering from a large spike in the computer's DPC system latency, resulting in no audio.
- A BSOD could occur when opening a project in Cubase SX4 with two stacked devices.
- The driver could hang when a device was removed in a stacked configuration, requiring the PC to be restarted.
- The ASIO driver no longer returns an error code when an ASIO host application requests to set the sample rate to the same value as the current sample rate.
- When the operation mode is set to Normal, the driver now returns the correct minimum buffer size for the Control Panel's combo box display.
- Each device supported by the driver may now have unique MIDI port names.
- SONAR 8 would hang for 20 to 30 seconds at the start of recording when configured to use its new WASAPI driver mode.
- The Control Panel would crash if the speaker setup was set to "7.1 home theater speakers" in the Sound and Audio Control Panel.
- When a test tone was being played in the Sound and Audio Control Panel, the speaker configuration dialog could not be accessed.
- A WDM audio application could force the sample rate to change even though an ASIO application was already active. The driver's parameter locking logic was not correctly preventing this.
- After closing a WDM audio application, the driver's parameter locking logic could incorrectly leave the parameters in a locked state.

**Control Panel 2.2.0.2583:**

- In the Control Panel's WDM tab, the WDM enable/disable checkbox has been removed
- In the Control Panel's WDM tab, the Speaker Configuration has been removed. The speaker setup should now be configured using Window's Sound Control Panel
- To improve WDM stability, In/out count is always 8 channels

**MAC:****Driver 3.4 – new driver**

- The driver could fail to instantiate a device properly after attaching and detaching devices many times.
- The MIDI driver's input parser has been improved and its memory usage has been reduced.
- On rare occasions, the MIDI driver would not publish the device's MIDI port when the device was attached.
- The firmware file info fields were not correctly endian swapped on the Mac PowerPC platform.
- Each device supported by the driver may now have unique MIDI port names.
- A crash could occur when the Control Panel was quit.
- When attempting to change the Clock Source in the Audio MIDI Setup application, the Clock Source would revert back to Internal.
- The MIDI driver now dynamically enables or disables the MIDI ports when a device is attached or removed.
- A bus reset would occur when the Control Panel was quit, resulting in an interruption to the audio streaming.
- Optimized the streaming performance in the driver.
- In some cases the driver would return to safe mode 3 and sync source = INTERNAL after restart (Installer related bug)

**VERSION 2.1.3 - R4677, PC****Installer build 4677.****Driver 3.3.1 PC**

- The second MIDI port on an isochronous stream was not working at 176kHz and 192kHz.
- When the sample rate parameter is locked (more than one ASIO or WDM client is active) the ASIO driver now correctly reports that the only supported sample rate is the current sample rate.
- Added support to the ASIO driver's API so that an ASIO host can indicate that it will not attempt to change any parameters and therefore should not affect parameter locking.

- The control panel and driver now disable parameter changes when a parameter change request cannot be honored without disturbing ASIO or WDM applications. The control panel will dynamically grey-out parameters that cannot currently be changed.
- This has superseded the sample rate change permission feature which has been removed from the control panel and driver.
- The original XP SP2 problem with 1394b devices (KB885222) still persists with SP3. Microsoft has recognized this and they are working on an SP3 compatible hotfix for the problem.
- The installer now also copies the control panel customization file if there is an .defs file provided for this customization.
- A Windows catalog file has been added to the distribution and to the installer.
- Improved support for the WASAPI driver mode in Vista.
- A rare BSOD could occur when the device's MIDI port configuration changed.
- MIDI dropouts could occur when large amounts of MIDI data was output.
- ASIO clients are now allowed to change the buffer size using the ASIO API, but only if there are no other ASIO clients open.
- For devices that have multiple MIDI ports, some applications would show duplicate listings of the first MIDI port.
- A BSOD could occur when using the WDM/KS audio interface.
- If the buffer size is below the minimum value required for the selected operation mode, the buffer size will now be set to the minimum value required for the selected operation mode.
- There was a small, constant discrepancy to the latency reported by the ASIO driver.
- When using Sony Vegas with ASIO the WDM driver gets in the way when trying to change sample rates. Previously this could result in a BSOD but that has been fixed. The workaround is to either disable WDM in the Device control panel or use Vegas with WDM instead of ASIO.
- When the previous master device is removed, the new master device's sync source is now set to Internal.
- The Windows installer now displays the release notes.
- ASIO streaming performance on Vista has been improved.
- The ASIO driver could cause problems with multi-processing in host applications.
- The installer no longer copies its Uninstall.dll into the system folder. A previous installation will still be removed completely.

## **Control Panel 2.1.3.2509**

- Mutex around state attach/detach in Win. to avoid crash at P1-P2-P3 shifts
- Renaming Konneks to nothing (or spaces) could lead to misbehavior
- System Settings: handling gray-out of lock parameter incl. tooltips
- Tooltips clean up
- CPL was not updating PAD and phantom display when input was changed
- Updated Safety buffer handling
- Buffering handled more reasonably, especially when dealing with multiple Desktop Konneks.
- Studio Konnekt 48: Remote button text: "Remote Button" -> "Remote USER"
- Studio Konnekt 48: Trim and delay act as expected on text input (BUG 712)
- Preset handling on Mac (both mixer and output for SK48)
- File button menu now looks the right place for preset files
- Preset handling looks the right place for preset files
- Texts for firmware update and resetToDefault
- The user is now prompted to turn of device after reset to default and firmware upload

## **Konnekt 8 + 24D + LIVE + 6 firmware 2.02 - 2221:**

Program changes does not update sync source and sample rate in stand-alone mode - fixed  
Stacking of K24D,DK6 or SK48/DK6, DK6 is greyed out – fixed  
Support for DK32 as linked device - added

Mixer - improved task yield handling for better responsiveness to driver calls

**Konnekt 48 firmware 2.02 – 2221:**

Solves a bug with output setups with 7 or 8 active channels

- setup with 7 channels: 7th channel would be muted
- setup with 8 channels: 7th channel would in some cases output input from 8th channel

Talkback handling when switching from preset with talkback enabled to preset with talkback disabled

Improved task yield handling for better responsiveness to driver calls

When switching P1...P3 fast, a channel pair observer whose state has been destroyed may update => crash. – fixed

When adding ch. 3-4 and fiddling with channel settings in CPL, channels 3-4 disappears - fixed

Program changes does not update sync source and sample rate in stand-alone mode - fixed

Stacking of K24D,DK6 or SK48/DK6, DK6 is greyed out – fixed

Support for DK32 as linked device - added

Mixer - improved task yield handling for better responsiveness to driver calls

**VERSION 2.1.3 - R4663, MAC****Installer build 4663.****Driver 3.3.1.**

New driver for MAC with lots of improvements.

- In some situations, the displayed sample rate could differ between the Control Panel, a DAW, and Audio MIDI Setup.
- Changing the sample rate in Cubase could result in no audio being passed until Cubase's driver connection was reset.
- The second MIDI port on an isochronous stream was not working at 176kHz and 192kHz.
- Audio playback could become distorted after changing the sample rate in a DAW.
- The sync source names were not correctly endian swapped on PPC
- The permission of the persistent storage file generated by a PAL based control panel was user dependent and access could therefore fail when generated by another user
- Only the first MIDI port on a device would be available
- A Kernel Panic could occur when unplugging stacked devices
- When the previous master device is removed, the new master device's sync source is now set to Internal
- When changing a device's nickname, it would sometimes not be updated in the UI of the CPL
- The driver will now only send the interface ready notification to the client which is registering itself
- A bug in the application driver interface (PAL) has been fixed avoiding a kernel panic. This could occur after adding or removing devices many times while a control panel application was open.
- The safety buffer settings available on OS X have been updated to match the settings available on Windows.
- In rare conditions it was possible for an older driver to still be active after installation because the OS X kext cache was not rebuilt.
- A rare Kernel Panic could occur while changing the speaker configuration in the Audio MIDI Setup application.

- Ableton Live (demo) version 7 crash. After quitting Live with the sample rate set to either 176k or 192k, then opening the Dice Control Panel and/or the Audio MIDI Setup application and switching the sample rate to a lower/different sample rate, Ableton Live will crash when it is launched again. This has been reported to Ableton, and confirmed as an Ableton issue.
- Using multiple devices, removal of one device could result in iTunes no longer being able to play until all devices were removed or until the computer was restarted.
- Inconsistent latencies - the latencies will vary when disconnecting and reconnecting the device.
- Fixed rare micro alignment errors where multiple isoc streams exhibit different latency. Multiple streams will now be sample accurately aligned.
- The driver now defaults to slow safety buffers if the driver settings file does not exist (fresh installation).
- Persistent storage of driver settings such as operation mode and Nick Name will now be stored even when changed from control panel.

### Control Panel 2.1.3.2509

- Mutex around state attach/detach in Win. to avoid crash at P1-P2-P3 shifts
- Renaming Konneks to nothing (or spaces) could lead to misbehavior
- System Settings: handling gray-out of lock parameter incl. tooltips
- Tooltips clean up
- CPL was not updating PAD and phantom display when input was changed
- Updated Safety buffer handling
- Buffering handled more reasonably, especially when dealing with multiple Desktop Konneks.
- Studio Konnekt 48: Remote button text: "Remote Button" -> "Remote USER"
- Studio Konnekt 48: Trim and delay act as expected on text input (BUG 712)
- Preset handling on Mac (both mixer and output for SK48)
- File button menu now looks the right place for preset files
- Preset handling looks the right place for preset files
- Texts for firmware update and resetToDefault
- The user is now prompted to turn of device after reset to default and firmware upload

### Konnekt 8 + 24D + LIVE + 6 firmware 2.02 - 2221:

Program changes does not update sync source and sample rate in stand-alone mode - fixed

Stacking of K24D,DK6 or SK48/DK6, DK6 is greyed out – fixed

Support for DK32 as linked device - added

Mixer - improved task yield handling for better responsiveness to driver calls

### Konnekt 48 firmware 2.02 – 2221:

Solves a bug with output setups with 7 or 8 active channels

– setup with 7 channels: 7th channel would be muted

– setup with 8 channels: 7th channel would in some cases output input from 8th channel

Talkback handling when switching from preset with talkback enabled to preset with talkback disabled

Improved task yield handling for better responsiveness to driver calls

When switching P1...P3 fast, a channel pair observer whose state has been destroyed may update => crash. – fixed

When adding ch. 3-4 and fiddling with channel settings in CPL, channels 3-4 disappears - fixed

Program changes does not update sync source and sample rate in stand-alone mode - fixed

Stacking of K24D,DK6 or SK48/DK6, DK6 is greyed out – fixed

Support for DK32 as linked device - added

Mixer - improved task yield handling for better responsiveness to driver calls

**VERSION 2.1.0 - R3671, MAC****Control Panel 2.1.2.2380**

- \* New Firmware upload and RESET TO DEFAULTS mechanism. After upload user is prompted to power cycle (Power off – wait – then power on) the Konnekt unit. The blue FireWire LED will blink until the Konnekt unit has been power cycled. The control panel will be closed down deliberately
- \* Handling of new firmware 2.01
- \* Improved preset handling. Factory presets are now handled separately in the FILE menu like with our plug-ins

**Firmware 2.01 for all Konnekt units**

- \* New and better timing of communication between control panel/plug-in and device
- \* With certain systems, Fabrik plug-ins can be crashing, especially when toggling quickly between presets. Fixed
- \* SK48. MAIN LEVEL is part of PROGs, but should not be. Fixed. The main level is now independent of selected PROGRAM

**VERSION 2.1.0 - R3657, PC****Installer PC: build 3657****Driver 134 (3.1.0):**

Reverted to driver build 134 due to problems with certain multi processor systems

**Control Panel 2.1.2.2380**

- New Firmware upload and RESET TO DEFAULTS mechanism. After upload user is prompted to power cycle (Power off – wait – then power on) the Konnekt unit. The blue FireWire LED will blink until the Konnekt unit has been power cycled. The control panel will be closed down deliberately
- Handling of new firmware 2.01
- Improved preset handling. Factory presets are now handled separately in the FILE menu like with our plug-ins

**New Firmware 2.01 for all Konnekt units.**

- New and better timing of communication between control panel/plug-in and device
- With certain systems, Fabrik plug-ins can be crashing, especially when toggling quickly between presets. Fixed
- SK48. MAIN LEVEL is part of PROGs, but should not be. Fixed. The main level is now independent of selected PROGRAM

**VERSION 2.1.0 - R3555, PC****Installer PC: build 3555****Driver:**

New driver, version 3.1.2.

Change of driver versioning. Instead of naming with build numbers, drivers are now carrying real release numbers.

#### Issues resolved:

- A BSOD could occur when changing the driver configuration: sample rate, channel configuration, WDM speaker configuration, enabling/disabling WDM. XP/Vista
- Improved ASIO performance, particularly on multi-core systems. XP/Vista
- On rare occasions, ASIO streaming would not start. XP/Vista
- On Vista, a BSOD could occur when removing multiple stacked devices at the same time. Vista
- A BSOD could occur when assigning WDM channels with a stacked devices configuration. XP/Vista
- ASIO/WDM channel ordering could be presented incorrectly in a stacked devices configuration. XP/Vista
- A BSOD would occur while changing sample rates from the device using the development CLI (Command Line Interface). The BSOD could also occur during device removal. XP/Vista
- A BSOD could occur when changing channel configuration while iTunes was playing. XP/Vista
- On Vista, the audio input streams could remain unlocked after connecting a device. Vista
- Using multiple devices on Vista, the "Found New Hardware" dialog could incorrectly appear indicating a new WDM device when changing the master device. Vista
- The driver could hang when a device was removed in a stacked devices configuration. XP/Vista
- A BSOD could occur when disconnecting a device. XP/Vista
- The driver now defaults to using Safe Mode 1 and a buffer size of 512 if no driver settings are found in the registry (fresh installation). XP/Vista
- Selecting a small ASIO buffer size in Cubase may result in a BSOD. XP/Vista
- Fixed a problem with ASIO reset being sent in case of user mode CPU overload. Now the BufferSwitch call is skipped and SamplePosition incremented. XP/Vista
- The driver now reports consistent latencies for a given buffer setting and sample rate. There is still a small discrepancy to the reported latency but it is constant. XP/Vista
- Problem with WDM channel mapping with stacked devices fixed. In some cases the control panel would not allow changes. XP/Vista
- Phase alignment when locking to external clocks has been further improved. XP/Vista
- Rare micro alignment errors where multiple isoc streams exhibit different latency. Multiple streams will now be sample accurately aligned. This will also fix issues reported earlier when having multiple ASIO clients open in high channel count configurations (VST plugins). XP/Vista
- Improved phase alignment of output streams in relation to master stream. This will fix problems with locking to external sync where audio might become garbled. XP/Vista

#### **M40 reverb version 1.0.3:**

- Changed text size of algorithm text to match other text on UI
- Algorithm select: Button click area is now bigger
- Plug-in is disabled for unsupported sample rates
- Adjusted the scroll and drag range of UI Knobs
- Display value of the Decay Time is now shown correctly in seconds.
- Set default knob mode to linear to accommodate host that don't set the knob mode explicitly (e.g Logic).

## **VERSION 2.1.0 - R3456, MAC AND PC**

#### **Installer MAC: 3456 - PC: 3456**

PC: No TC Near control panel in the Windows control panel. Fixed

Mac: Link from preference pane to the TC Near Control Panel wrong. Fixed.

**Driver: build 134**

**Control Panel build 2282**

## **VERSION 2.1.0 - R3434, MAC AND PC**

**Installer MAC: 3434 - PC: 3434**

New graphics

**Driver: build 134**

**Control Panel build 2282**

- System Settings: When changing sample rate, UI components are disabled
- System Settings: Sample rate change - improved
- Internal improvements
- New icon

## **VERSION 2.1.0 - R3290, MAC AND PC**

**Installer MAC: 3290 - PC: 3290**

- Both: Desktop Konnekt 6 added
- MAC: Cleanup in wording of choices on custom install page
- MAC: The installer window accidentally jumps to the background. Fixed

**Driver build 134**

- PC: improved streaming
- PC: Problems with Fabriks/Integrator addressed
- PC: Enhanced WDM streaming
- MAC: Driver settings like Sync source, Sample rate and Safety buffer size are lost after power cycle. Fixed.
- MAC: Default driver settings are: Sync source: INTERNAL, Sample rate: 48kHz, Safety buffer size: Large
- PC: Default driver settings are: Sync source: INTERNAL, Sample rate: 48kHz, Buffer size: 512samples, Safety buffer: Level 1
- PC/MAC: improved time stamping (more stable firmware upload, Fabrik plug-ins etc.)
- When stacking devices, devices show up in random order. Fixed. Devices now have a fixed order, which is the order of when the model was developed: K24D, K8, K Live, DKx32, SK48, DK6.
- Wrong latency reports from the driver to the host. Fixed
- Problems when selecting low buffer sizes. Fixed.
- PC: Initialization problem with Fabriks / Integrator running in VST mode on some systems. Fixed.

**Control Panel build 2235/2234**

- SK48: Error when Talkback source points to non existing partner channel is corrected from CPL on detection
- MAC: Device removal (last device) no longer crashes CPL
- General: Graying out when window is inactive

- WDM: Fixed bug when configuration settings change
- WDM: Removed some configurations, that may be flawed in driver
- Startup: Splash screen added
- SK48: Tuner: tone gain setting from remote does not update the mixer continuously. fixed.
- All devices: Dynamic range for CustomMeters extended down to -72dB
- NoDeviceComponent: Uses the new check for update scheme
- WDM handling: Various bugfixes
- Mixer: Fabriks: Selecting channel 2 of a Fabrik will now be remembered when user has navigated away from Fabrik.
- SK48: Mixer: Selecting speaker set is now instantly reflected in the output section
- New preset handling: Two dimensional menu like plug-ins
- System Settings: Driver version added
- Automatic check for update: default value: monthly.
- New TCE logo for the no device component
- SK48: Additional security on remove channel procedure
- Konnekt 8/24D/Live: Initial digiOutput == 0 no longer causes missing channels on startup
- Konnekt 8/24D/Live: Bug 842: Setup-page, switching output setting no longer prohibits linking of analog channels
- New Firmware upload procedure: Mac does not reset device after upload, but prompts the user to do so. CPL will then correctly quit after the procedure

## SK48 firmware version 1.08

- MIDI bug: In some situations, MIDI would not go out of MIDI loop when attaching the device. Fixed.

## VERSION 2.0.1 - R1405, MAC AND R1360, PC

### Driver versions

PC: 3.0.0.105

MAC: 3.0.0.107

MAC installer build 1405

Control Panel build 2058:

- Fixed scaling problem when control panel is very big
- SK48: Fixed graphical problem with wrong spaces between DAW channels
- Sorting of devices in TABs-list is now consistent

Assimilator

- Fixed problem with preset curves
- Fixed problem when inserted on mono channels

PC installer build 1360

Control Panel build 2058

- Fixed scaling problem when control panel is very big
- Fixed crash-problem with Konnekt 8
- SK48: Fixed graphical problem with wrong spaces between DAW channels
- Sorting of devices in TABs-list is now consistent

Assimilator

- Fixed problem with preset curves

- Fixed problem when inserted on mono channels

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**KNOWN ISSUES:**

We've seen a few problems with the Fabrik plug-ins with Studio Konnekt 48 (not with other devices) and we're working on those.

**VERSION 2.0.0 - R1113, MAC AND R1135, MAC**

**Driver versions**

PC: 3.0.0.105

MAC: 3.0.0.107

MAC installer build 1113

PC installer build 1135.

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**KNOWN ISSUES:**

We've seen a few problems with the Fabrik plug-ins with Studio Konnekt 48 (not with other devices) and we're working on those.

**VERSION 2.0.0 - R 917, PC**

**Driver versions**

PC: 3.0.0.105

**NEW**

Driver version 3.1.0.105

- improved stability
- enhanced handling of WDM channels
- improved time stamping

**Control panel**

- Added automatic check for update for all Konnekt versions
- Added linked devices to SETUP page of 8, 24D and LIVE
- Lots of minor changes and bug fixes

**FIXED**

Control panel

- Crash when selecting various settings on SETUP page
- "Update firmware" is more stable

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KNOWN ISSUES:

We've seen a few problems with the Fabrik plug-ins with Studio Konnekt 48 (not with other devices) and we're working on those

## **VERSION 2.0.0 - R 907, MAC**

Driver version:  
MAC: 3.0.0.107

NEW

- Driver version 3.1.0.107
- improved stability
  - improved time stamping

Control panel

- Added automatic check for update for all Konnekt versions
- Added linked devices to SETUP page of 8, 24D and LIVE
- Lots of minor changes and bug fixes

FIXED

- Control panel
- crash when selecting various settings on SETUP page

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KNOWN ISSUES:

- UPDATE FIRMWARE - In some cases the control panel will crash when updating firmware. The crash occurs when on 100%, and this is AFTER the firmware has been uploaded correctly, while the device is resetting. Therefore, no harm can be done to the device. Doesn't happen with all configurations.

## **VERSION 2.0.0 - R852, MAC**

Driver version:  
MAC: 3.0.0.96

## New:

### New driver 96:

- General streaming is improved significantly on G4, G5 and Intel Mac, Tiger and Leopard.
  - garbled audio after a while
  - general streaming problems, audio drop outs, driver not being able to regenerate after a significant CPU spike
  - Most significant with slower computers.
- A new setting, safety buffers, has been introduced. This improves stability on slower machines.
- No MIDI with Leopard - fixed
- Problems with computers with more than 2.0 GB RAM - fixed
- Problems with computers with more than one FireWire bus - fixed
- General alignment of stacked channels - fixed
- Protocol issues - fixed

### New control panel based on a new communication strategy (version 1999).

- For Studio Konnekt 48, the same new stuff as with the PC version
  - New MASTER OUTPUT section in MIXER
  - General improvements to the OUTPUT section
  - New REMOTE section
- Linked devices are now shown correctly in SETUP/LINKED devices
- Fixed bug in OUTPUT settings

### Known issues:

- Shutdown of Control panel after updating firmware
- Shutdown after removing devices (disconnecting FW cable or turn off)
- Reset to defaults crashes CPL
- Safety buffers are not trimmed according to real world computers. This means that to most users, "normal" would be the only setting that works. "Normal" results in slightly too high latencies, trimming of this is being worked on.
- Audio stuttering with Fabrik R when host is in STOP mode

## VERSION 2.0.0 - R710, PC

### Driver versions

PC: 3.0.0.80

### Fixes:

- Wrong message when having updated firmware. FIXED
- Master volume control/MIXER page not sending information to the device. FIXED
- New Integrator plug-in, build2165. The previous was not able to find the device/ports. FIXED
- Improved stability

## VERSION 2.0.0 - R687, PC

### Driver versions

PC: 3.0.0.80

### **This is the release candidate for PC.**

Now included with the installer is the DPC spike checker tool.

The DPC Spike Checker Tool is able to show if the system has DPC Spikes and recommends a DPC safety buffer setting in the TC Near Control Panel.

Driver 80 is able to handle DPC spike much better than previous versions. If a spike occurs, the impact on the system is very limited.

Known issues:

There might be problems running at 96kHz with Studio Konnekt 48.

## VERSION 2.0.0 - R651, MAC AND PC

### Driver versions

PC: 3.0.0.76

MAC: 3.0.0.76

SK48: New REMOTE page

Fallback to master. With this you can let the remote fall back to MASTER level control after some seconds. Nice if you mainly use the remote as level control and want to be sure that it always acts like this. Setting this to NEVER will disable fallback.

LEVEL KNOB MIX PUSH MODE.

Normally, the control knob controls level and pan (when pushed). With this feature, you can also let the remote control level/AUX1 send, level/AUX2 send or level/reverb send.

EFFECT BUTTON.

The EFFECT button can now also send MIDI - either to MIDI out or to the DAW for midi control.

Things to be aware of with this beta version:

\* When you start the control panel the first time, you might be prompted to update the firmware. Please do so. When done, please reset to defaults. We recommend not to attach speakers before you've reset to defaults.

\* WDM. The first time you install this, beware that WDM might not be playing at first try. This is because the new driver handles WDM speaker configurations different compared to the old one. Simply go to the WDM page and select "Stereo". Then close down the control panel, restart the Konnekt, and it plays like a charm. This has to be done only once, and we'll look into a way to set them automatically for the final release. Beware that WDM routing is a cool cool feature that among other things lets you route the audio of your software DVD player to a surround speaker set!

\* If you do get a DPC spike, and have not set the proper DPC Safety buffer level, the spike will cause your player (for instance iTunes) to stop. If you experience this, simply go to the next DPC Safety buffer level. We are currently testing with an even newer version of the driver, that handles DPC spikes in a way that does not make the player stop.

\* Stacking of devices could cause issues.

\* 192 kHz. 192 kHz mode is still not as stable as we'd like it to be and should be avoided for this beta version.

## VERSION 2.0.0 - R627, MAC AND PC

### Driver versions

PC: 3.0.0.76

MAC: 3.0.0.76

Things to be aware of with this beta version:

\* When you start the control panel the first time, you might be prompted to update the firmware. Please do so. When done, please reset to defaults. We recommend not to attach speakers before you've reset to defaults.

\* You might experience that the MIXER page graphics looks very compressed when starting the first time. Simply restart the Control Panel.

\* WDM. The first time you install this, beware that WDM might not be playing at first try. This is because the new driver handles WDM speaker configurations different compared to the old one. Simply go to the WDM page and select "Stereo". Then close down the control panel, restart the Konnekt, and it plays like a charm. This has to be done only once, and we'll look into a way to set them automatically for the final release. Beware that WDM routing is a cool cool feature that among other things lets you route the audio of your software DVD player to a surround speaker set!

\* Setting the DPC safety buffers to something other than normal will introduce extra latency - that's the downside of introducing buffers.

\* If you do get a DPC spike, and have not set the proper DPC Safety buffer level, the spike will cause your player (for instance iTunes) to stop. If you experience this, simply go to the next DPC Safety buffer level. We are currently testing with an even newer version of the driver, that handles DPC spikes in a way that does not make the player stop.

\* Stacking of devices could cause issues.

\* 192 kHz. 192 kHz mode is still not as stable as we'd like it to be and should be avoided for this beta version.

## VERSION 1.4.0 - MAC AND PC

### Driver versions

PC: 3.0.0.35

MAC: 3.0.0.36

**PC and MAC**

Added support for Studio Konnekt 48

The control panel is now entirely based on PAL, which means more stability.

**VERSION 1.30 - MAC AND PC****Driver versions**

PC: 3.0.0.35

MAC: 3.0.0.36

**PC**

\* WDM configuration. A new menu item in the System Settings TAB will allow Windows users to set up WDM channels.

This means that users can now use the ADAT for streaming to stream 5.1 from for instance with PowerDVD or other standard non-ASIO Windows applications.

Also possible is now to record from a "wet" input channel with Konnekt 24D or Live for instance to use Fabrik C with the recording.

**PC & MAC**

\* Integrator plug-in is now included with all Konnekt audio interfaces

\* Added support for Digital Konnekt x32

**VERSION 1.22 - MAC AND PC****Driver versions**

PC: 3.0.0.35

MAC: 3.0.0.36

Fixes a problem between the control panel and older versions of the Firmware.

\* After install, please make sure to update your firmware, using the ABOUT TAB in the control panel.

**VERSION 1.21 - MAC AND PC****Driver versions**

PC: 3.0.0.35

MAC: 3.0.0.36

**Note!**

\* Assimilator Konnekt users should uninstall the Assimilator before installing this

\* Please make sure to update your firmware

\* Read the notes below carefully

## Known issues with this version

MAC: We encourage Konnekt Mac users to update to OSX 10.4.10, since this has proven to deal with audio drop out problems.

PC: We have seen some systems with audio drop outs. Disabling, for instance, the Ethernet network card or the CD-Rom drive solves the drop out problem.

We are currently working on a driver version this will fix this.

On some systems crackle occurs when opening the control panel at the same time as running audio.

## PC:

Software is now VISTA compatible!

## PC & Mac

Control Panel:

- \* Internal changes and updates for higher stability implemented
- \* Nickname moved from Setup page to About page
- \* Double line tooltips
- \* Fabrik plug-ins: "Muted output" problem fixed.
- \* Fabrik plug-ins: Metering problem fixed.

Installer

- \* Driver is now signed by Microsoft. This means that we now have a very nice installation process.
- \* Fixed problem with installing on Windows based systems with Korean language.

## VERSION 1.20 - MAD AND PC

### Driver versions

PC: 3.0.0.35

MAC: 3.0.0.36

### Known issues in this beta version

- \* After updating firmware. Wrong message "The firmware update failed. Please try again". You can ignore this - the firmware update went absolutely well
- \* Reset to defaults. Wrong message: Reset to default failed. Please ignore this
- \* Potential clicks and pops when the TC Near control panel and/or Fabrik plug-ins are open. Fixed before final
- \* 48 and 32 kb buffers settings will be added to the system settings of the Control panel.
- \* The user has to approve the installation of the driver 5 times. This is due to the fact that this public beta version is not yet signed, but it will be in the final release
- \* Device arrival/removal might crash the control panel
- \* Since this is a public beta and not a final release, the "Check for updates" function in the installer and control panel will prompt a wrong message saying that you don't have the latest version

### Firmware 1184

- \* tuner: tone generator gains are limited in order to avoid overloads
- \* tuner: bug at 96kHz detection of open string modes - fixed

- \* network led blinking indication in temporary disconnected state (5 sec)

## Windows

### Driver:

Version 3.0.0.35

Completely new driver.

- \* This new version uses a new way to handle buffers, and users might experience that they need to raise the buffer size when comparing to the old driver. This is due to a bug in the old driver reporting wrong latencies to the host, and the actual resulting latency with the new driver will be less compared to the old driver
- \* Much more efficient
- \* Less CPU load
- \* Fixed problem in playback in multi client ASIO
- \* Fixed problems in stacking
- \* Fixed problem in reporting latencies to ASIO
- \* Fixed problem in reporting transmitter lock status from kernel
- \* Fixed audio cycling problems with Sonar
- \* Fixed problem in playing MIDI data received from Microsoft Soft Synth

### Installer:

- \* Changed to Wise installer
- \* Assimilator Konnekt now part of the TC Near installer. Current Assimilator users should uninstall the old version before installing this
- \* Support for Konnekt Live

### Control panel:

- \* New update mechanism makes sure that CPL traffic does not affect audio streaming
- \* Fixed bug with Tab switching - no device-tab with out-of-range index can be chosen
- \* Support for Konnekt Live

### Plug-ins - Fabrik R and Fabrik C plug-ins

Added: a small bar for setting up ROUTING and 96kHz mode. The plug-ins will show "Disabled" if the ROUTING is set to internal

Lots of improvements on the VST integration technology.

### Plug-ins - Assimilator

Assimilator Konnekt now part of the TC Near installer instead of having its own installer.

Fixes problems with not being able to install on some systems.

Assimilator Konnekt now placed inside the Konnekt VST plug-in folder

Various fixes

## VERSION 1.10 - MAC AND PC

### **New firmware 1072:**

Make sure to go to the ABOUT page in the control panel and press "UPDATE FIRMWARE" - follow the instructions.

### **Windows and Mac OSX:**

#### **New stuff**

- A chromatic tuner has been added to the control panel. The tuner works in stand alone mode and can show note deviation in the control panel UI as well as using the light ring. Lots of other great stuff
- VST integration beta version added to this installer. With VST integration, effects from Konnekt will show up as regular VST plug-ins and all benefits from VST plug-ins can be used (session recall, automation, seamless audio routing). Installer will ask the user where to put the files. Users should be aware that some features are missing in this version (refer to update document), however, this is a major step in usability of the build in effects of Konnekt24D.
- Control panel: "Computer send/return" is now substituted by "Plug-in mode", which disables the Fabrik UI (because the UI is now controlled from the VST plug-in).

#### **Other improvements:**

- "check for update" is now the first step in the installer, instead of being the last - sort of makes more sense ... :-)
- System settings: Sync source values are now read from the driver
- System settings: Sample rate only present if external clock source is selected
- Rework of the meter-updates = CPU usage exceedingly light now, compared to the old system
- More graceful check on CPL <-> Firmware compatibility. No CPL restart is necessary after firmware upload
- Setup page updated (DSP effects settings moved to effects headers - where they belong)

#### **Bug fixes**

- A bug in Fabrik C has been solved.
- Key command CTRL-M (Direct monitoring on/off) now works as expected
- More stable and efficient Fabrik pages
- Bug concerning preset-shifting with different (un)link state on channel 1+2 fixed
- Fabrik pages resize optimized
- Mixer: plug-ins icons tooltips corrected

## VERSION 1.03 - MAC AND PC

### **New firmware 952:**

Make sure to go to the ABOUT page in the control panel and press "UPDATE FIRMWARE" - follow the instructions.

## Windows and Mac OSX:

### New stuff:

- Shortcut keys for TABS: Mixer = 'M' (or '1'), Setup = 'S' (or '2'), Fabrik C = C (or '3'), Fabrik R = R (or '4'), About = A (or '5'), System Settings = ctrl+'S'
- Tooltip texts now include shortcut keys
- Tooltips for device-tabs: <Nickname> '[ctrl-<number>]' - [This device is Clock Master]
- Shortcut ctrl-M for monitor mix on/off
- Auto check for new firmware. Checks if a new version of the firmware is present but not uploaded to the device. If so, the user is directed to the about-page
- Tooltips for analog stereo link buttons on setup-page
- Dynamic tooltip on System Settings::Clock - it changes with sample rate
- Analog state for channel 1+2 in setup-page: phantom-power and warning (press inst-button).
- Stereo-link for channel 3+4
- Stereo-link for digital channels - including channel names and icons
- Send-knob on DAW channel
- Naming and icons for channel 3+4 in mixer

### Other improvements:

- New driver for PC (revision 98), better performance: lower latency, lower CPU consumption
- Digital lock status on DAW/Linked updated
- More reliable feedback on (no)lock, no-ref and slip on Setup page
- More reliable implementation of master/no-sync indication on tabs
- More reliable feedback on Sync and current sample rate on System Settings page
- NoDevice message similar on mac and PC
- Sizing of window in AUTO SIZE mode, now also based on number of top level tabs as well as content components (needed when working with more devices)
- Edited colors of standard buttons (brighter background) and labels to match
- Edited texts for sync source, digital in, and shortcut tooltips.
- Nicer text formatting in the ResetToDefault dialogue
- Digital Audio Workstation acronym spelled with capital letters DAW in source menus (hi Mike!)
- Better UI performance on plug-ins. Memory status updated.
- Upload firmware progress bar widened and text changed: "Programming flash" -> "Do not turn off device!"
- To avoid version numbering confusion, the build number of package no longer sent to check-for-update server
- more improved tooltips on individual channel inputs, SETUP, digital inputs and System Settings Sync Source
- Massive optimization of the Fabrik-pages:
  - \* Faster response of the header of the page
  - \* A lot fewer page-updates => increased speed, and less flickering
  - \* No disturbing quick reordering of Fabrik content => less flickering
- Firmware-upload made more stable, when device offers firmware-uploader version 1.01>
  - \* Reporting of accepted size of binary
  - \* Checksum correctly calculated on-the-fly, even if some packages fails, and thus must be sent again
  - \* Exception handling based on the runtime errors regarding firmware-uploading. Exceptions are handled and communicated to user
- Minimizing AlwaysOnTop option enabled again
- Warning indicators on Master device tab and System Settings, when system has no lock
- CPL no longer switches to mixer page on preset-selection
- SampleSlipPoller completely reworked:
  - \* Time based instead of thread
  - \* SlipStatus communicated elegantly
  - \* Implemented as pseudo-state, communicating changes directly to relevant channels
  - \* Stopped and started according to need from ResetToDefault and FirmwareUpload
  - \* Great performance increase!

## Bug fixes:

- Graphical issues corrected
- Fabrik C reduction meter icon and Fabrik R icon in MIXER tab now work as expected
- Setup::Output UI no longer loops back and forth between formats
- Dashed line on channels between SEND and PAN/BALANCE are once again drawn
- MAC: AlwaysOnTop disabled due to disappearing Fabrik-windows
- Right-click+close in windows taskbar now closes CPL as expected
- Signal from linked device is no longer missing
- Fabriks set values in Konnekt, even when they are muted/bypassed
- Linked channels in mixer now shows the correct "mother-device" icons
- No monitoring on Konnekt8 ch1 and ch2, fixed
- Fabrik page no longer missing when switching Fabrik C channel
- Font for message "DirMon N/A in 192/176 kHz mode" edited to match small windows

## Installer:

- All files now in setup.exe. This means that the user can install directly from within the zip-file.
- WinXP: After Uninstall the user is prompted to reboot Windows
- smaller file size

## VERSION 1.02 - MAC AND PC

### New firmware version 861:

Make sure to go to the ABOUT page in the control panel and press "UPDATE FIRMWARE" - follow the instructions.

### Windows and Mac OSX:

- Only ONE instance of the Control Panel can now be opened
- Sample Slip indication in mixer and setup pages
- New header to the Fabrik windows: routing. For better user understanding of routing. These are copies of the ones found at the SETUP page
- Improved header of Fabrik Windows: selection and mute/bypass. - Mute/Bypass now work as expected
- New routing option for Fabrik C: Computer s/r dual mono. To be used if the user inserts the Fabrik C as a mono plug-in in the DAW
- Updated creation of mixer-icons
- More stable digital-in configuration selection
- Sensible indication of error concerning missing/outdated driver, or no attached device
- Hiding Fabrik R-relevant controls on mixer when Fabrik R is unavailable
- More stable sample rate switching
- More stable UI regarding SystemSettings
- Update of SYSTEM SETTINGS window more correct
- Corrected some minor graphical errors
- Improved speed in handling plug-ins
- Driver-ready events handled more sensible
- Fabrik C split vca filter lsb error - fixed
- Fabrik C no overload indication - fixed

- Fabrik C reduction meter static readout when no input source bug - fixed
- Monitor Mix mode always true in stand-alone mode
- FabrikR/reverb default decay setting adjusted: 2.4s (9.8s)
- analog1-2 channel un-muting when no input bug - fixed

## Mac OSX specific (10.4 and 10.3.9)

- More stable Firmware upload and ResetToDefault:
  - \* Added critical regions to MAC-specific implementation
  - \* More tolerant error-retry procedures for firmware packages
- Command-Q no longer crashes OS X control panel
- Graying out mixer and setup-controls when in 176 kHz (as well as 192)
- Firmware Upload and ResetToDefault more stable:
  - \* Added critical sectioning to UpdateClock access in Update()
  - \* Pausing the sampleslip-poller while resetting and updating
- MacIntel issues surrounding ResetToDefault and Firmware Upload resolved
- Device arrival/removal smoother
- OSX 10.3.9 compatible version added as separate installer

## Windows Specific

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## VERSION 1.01 - MAC AND PC

### Windows and Mac OSX :

- installer now recommends reboot
- installs version file for online update check
- new Fabrik Plug-ins
- Placement of firmware in separate folder: The installer automatically places the firmware file in the TC Electronic folder of the users harddisc. When the user presses "Update Firmware", the open-dialog is pointed to this specific folder - so that the user only has to select the file.

### Mac OSX specific (10.4 and 10.3.9)

- some CPL fixes
- updated uninstaller to uninstall KonnektDriver.kext
- all files Universal Binaries

### Windows Specific

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