

Dta Driver

Windows Device Driver Installation

1. Introduction

Dta is the Windows device driver for DekTec's line of digital-video PCI cards. The driver is generic to all DekTec PCI cards that have a type number starting with "DTA-". The Dta driver supports operation of multiple parallel PCI cards.

Installation of the **Dta** device driver is straight-forward: Running a set-up program will automatically install or upgrade the device driver.

1.1. PCI Cards Supported by the Dta Device Driver

The **Dta** device driver supports the following DekTec PCI/PCIe cards:

PCI Cards

DTA-100	DVB-ASI Output Adapter for PCI
DTA-102	DVB-SPI (LVDS) Output Adapter for PCI
DTA-105	Dual DVB-ASI Output Adapter for PCI
DTA-107	QPSK Modulator / L-Band Upconverter for PCI
DTA-110	Multi-Standard Modulator/UHF Upconverter for PCI
DTA-111	Multi-Standard Mod/VHF+UHF Upconv for PCI
DTA-115	Multi-Standard Mod/VHF+UHF Upconv for PCI
DTA-116	Modulator with 36MHz IF and Digital Output for PCI
DTA-117	Modulator with 44MHz IF and Digital Output for PCI
DTA-120	DVB-ASI Input Adapter for PCI
DTA-122	DVB-SPI (LVDS) Output Adapter for PCI
DTA-124	Quad ASI/SDI Input Adapter for PCI
DTA-140	DVB-ASI Input+Output Adapter for PCI
DTA-145	Low Profile ASI/SDI Input+Output Adapter for PCI
DTA-160	GigE TS-over-IP + 3 ASI Ports for PCI

PCI Express Cards

DTA-2107	QPSK Modulator / L-Band Upconverter for PCI Express
DTA-2111	Multi-Standard Mod/VHF+UHF Upconv for PCI Express
DTA-2115	Multi-Standard All-Band Modulator for PCI Express
DTA-2131	Multi-standard VHF/UHF Receiver for PCI Express
DTA-2135	Dual/Diversity DVB-T Receiver for PCI Express
DTA-2136	Dual QAM Receiver for PCI Express
DTA-2137	Dual DVB-S2 Receiver for PCI Express
DTA-2138	DVB C2/T2 Receiver for PCI Express
DTA-2139	Twelve-channel QAM Receiver for PCI Express
DTA-2142	Multi-mode serial and parallel port for PCI Express
DTA-2144	Quad ASI/SDI Adapter for PCI Express
DTA-2145	Low Profile ASI/SDI In+Out Adapter for PCI Express
DTA-2152	Dual HD-SDI In+Out Adapter for PCI Express
DTA-2154	Quad HD-SDI In+Out Adapter for PCI Express
DTA-2160	GigE TS-over-IP + 3 ASI Ports for PCI Express
DTA-2162	Dual GigE TS-over-IP
DTA-2174	Quad 3G/HD-SDI In+Out Adapter for PCI Express
DTA-2179	Twelve 3G/HD-SDI In+Out Adapter for PCI Express
DTA-2180	H.264 HD Contribution Encoder for PCI Express
DTA-2182	H.264 HD Dual contribution Encoder for PCI Express
DTA-2195	12G-SDI In+Out +HDMI 2.0 Adapter for PCI Express

1.2. Files

The **Dta.zip** archive contains the following files:

DtaInstall.exe	Setup program that installs the Dta device driver.
Dta Installation.pdf	This installation document.

The setup program copies two **Dta** device-driver files into a selectable directory, defaulting to **C:\Program Files\DekTec\Drivers**.

Dta##.sys	v4.28.15.294	Device driver 'system' file (executable).
Dta##.inf	v4.28.15.294	Device driver information file (".inf").
DtaNw##.sys	v3.5.16.47	DekTec NDIS device driver 'system' file (executable).
DtaNw##.inf	v3.5.16.47	DekTec NDIS device driver information file (".inf").
DtapiService32.exe	v5.2.9.142	DTAPI Service executable

Thereafter, setup instructs the Windows XP Plug'n Play manager to install the device driver files. A log file is created, to aid debugging in case of an install failure.

DtDrvInstall.log	Log of installation events.
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2. Installing the Software

The **Dta** setup program is self-contained. Installing the device driver is as simple as running the setup executable and pressing “Next” a few times.

NOTE

- A Windows device driver can only be installed by a user account with the privilege to *load and unload device drivers*, e.g. administrator.
- Please make sure that no application is currently running that uses a DekTec PCI card.
- Windows 7 and Windows Server 2008 requires updates to support SHA 256: <https://support.microsoft.com/en-us/help/4472027/2019-sha-2-code-signing-support-requirement-for-windows-and-wsus>

The device driver can be installed *after* the PCI card has been inserted into the system (§2.1), or *before* the hardware is inserted (Pre-Installation, §2.2). Both approaches are equally valid.

2.1. Hardware Inserted Prior To Device-Driver Installation

This scenario assumes that:

- The **Dta** device driver software has not been installed before on the PC, and
- A DekTec PCI card has been inserted into the PC and the PC is powered on.

Sometime after booting the PC, the **Found New Hardware Wizard** will show up. As no device-driver software has been installed yet, you should **CANCEL** the wizard.

You can now run the **Dta** setup program to automatically install the device driver. After the installation completes, the PCI card can be used immediately. No reboot is required.

2.2. Pre-Installation: Device Driver Installed without Hardware Present

This scenario assumes that:

- No previous version of the **Dta** device driver software has been installed on the PC, and
- No DekTec PCI cards are present in the PC.

You can pre-install the Dta device driver by running the **Dta** setup program.

Then, shut-down the computer and insert the DekTec PCI card in a free PCI slot. After powering up the computer again, the device driver should install itself just after booting. On Windows XP, the **Welcome to the Found New Hardware Wizard** shows up. Choose **Install the software automatically (Recommended)**. Press **Next** and **Finish**, and the driver installs.

2.3. Upgrading an Existing Driver

The setup program can also be used to upgrade an already installed Dta device driver to the latest version. Again, no reboot should be required.

3. Troubleshooting

3.1. Checking Device Status in the Device Manager

The Windows device manager can be used to check whether the Dta driver runs properly. To check the device status of a DTA-1XX PCI card:

1. Open the Windows device manager: right-click **My Computer**, select **Manage**, and go to **Device Manager** under **System Tools**.
2. Locate the DekTec device in category **Professional audio/video interfaces**.
3. Right-click the device, select **Properties**, and check the **Device status** pane.

The status should be: **This device is working properly**. If not, don't try the Windows Troubleshooter (it does not know anything about DekTec cards), but inspect the event log (§3.2) and the install log (§3.3). If the computer does not boot, please review §3.4.

3.2. Checking the Event Log

The System Event Log can be consulted to check whether the **Dta** device driver has been loaded and started properly. To open the System Event Log:

1. Right-click **My Computer**, select **Manage**, and open **Event Viewer** under **System Tools**.
2. Select the **System** log.
3. Driver messages from DekTec devices have **Dta** in the **Source** column.

If the driver loads successfully, the following event message is logged:

The Dta driver (Rev 4.28.15.294) has loaded successfully.

The device-driver version listed in this message should match the **Dta**-version number listed in the file overview in 1.2.

For each DekTec PCI card inserted in the system, a start-up message listing PCI-Card Type, Firmware Version and Slot Number should be logged, e.g.:

The DTA-102 (Firmware Version 8) in PCI Slot 3 has started successfully.

Obviously, if the Dta driver detects an error while trying to start the PCI-Card, the message above will not occur. Instead, an error message is logged, which may be helpful to find the source of the problem.

3.3. Checking the Install Log

The install log is a text file (**DtDrvInstall.log**) written into **C:\Program Files\DekTec\Drivers** (or a redirected path). In case of installation troubles, please contact DekTec at support@dektec.com, attaching the install log.

3.4. PC Does Not Boot

In some exceptional cases, inserting a DekTec PCI card into a PC may stop that PC from booting. The PC may already be suspended in the BIOS start-up sequence. Assuming that the PC does boot when the DekTec PCI card is not inserted, this may be caused (1) by a broken PCI card, or (2) by a bad contact on the PCI bus.

3.4.1. Broken PCI Card

Whether or not the PCI card is broken can be checked just after powering up the PC, by observing the LED on the PCI bracket of the card¹ (all cards except DTA-100 have a LED). If the LED stays blank (does not flash), the PCI card is probably broken and should be returned to DekTec for repair.

3.4.2. Bad Contact on PCI Bus

From practical experience it is known that the PCI Bus is quite sensitive to dust or grease on the PCI-connector fingers of a PCI card. A single bad contact may lead to system instabilities, including:

- Boot failure;
- Invisibility of a PCI card during installation;
- System crash at the moment that the Dta device driver starts.

If one of these symptoms occurs, DekTec recommends extracting the DekTec PCI card, checking/cleaning the connector fingers and re-inserting the card, if possible in a different PC or in a different PCI slot, and avoiding mechanical strain on the PCI connector. If the problem persists, please contact DekTec at support@dektec.com

¹ All DekTec PCI cards, except the DTA-100/105, have a LED on the PCI bracket. The DTA-100/105 cannot be checked easily.

4. Dta WDM Device Driver Revision History

Version	Date	Change Description
v4.28.15.294	2026.09.23	• New driver build for Sep2026 SDK. No functional changes
v4.28.14.293	2026.05.13	• New driver build for May2026 SDK. No functional changes
v4.28.13.291	2025.09.25	• New driver build for Sep2025 SDK. No functional changes
v4.28.12.290	2024.09.30	• New driver build for Sep2024 SDK. No functional changes
v4.28.11.289	2024.02.02	• DTA-2179: support for firmware v1; fix for potential fail on switching between two SD inputs
v4.28.10.288	2023.10.23	• Minor bugfix for debug logging
v4.28.9.286	2023.06.16	• Compile error fixes for certain kernel versions (Linux only)
v4.28.8.285	2023.03.17	• DtapHwFuncScan did not finish in some cases (Linux only)
v4.28.7.283	2022.11.24	• DTA-2160/62: Improvement for potential minor resource leak
v4.28.6.282	2022.06.08	• New driver build for Jun2022 SDK. No functional changes
v4.28.5.281	2022.02.16	• DTA-2179: Improved temperature regulation and reporting
v4.28.4.274	2021.07.05	• SDK July 2021 update; fixing Linux build issues
v4.28.2.273	2021.05.27	• DTA-2115B: Support for firmware version v3; bug fix for 8 channel variant firmware
v4.28.1.271	2020.11.18	• DTA-2160/62 Improved TS over IP (RTP) handling for streams that are not fully compliant with SMPTE spec 2022
v4.28.0.270	2020.07.08	• DTA-2115B: Support for Digital Radio Mondial (DRM/DRM+) • DTA-2152: bug fix for failing doubly buffered output for FW V6
v4.27.8.269	2020.05.06	• New driver build based on May2020 SDK
v4.27.7.266	2020.03.13	• RF demodulator cards improvement for potential tuning errors
v4.27.6.265	2020.02.25	• DTA-2174/79/95: bug fix 3G level B format reception was not working due to a Jan2020 SDK change
v4.27.5.264	2020.01.10	• DTA-2152: bug fix for possible lock problem
v4.27.4.262	2019.11.06	• DTA-2137C: Improved power level calibration • DTA-2152/74: SetLoConfig option to enable/disable automatic black frames insertion • DTA-2195: Firmware reboot support
v4.27.3.259	2019.07.26	• DTA-2136/2139: DtapService bug fix for tuner offset accidentally removed in SDK Jan2019 release
v4.27.2.258	2019.05.16	• DTA-2136/2139: bug fix for some frequency changes taking a long time to lock • DTA-2136/2139: bug fix for large bad packet count after a tune action • DTA-2152: bug fix for SMPTE-352 descriptor insertion disabling not working
v4.27.1.257	2019.02.20	• DtapService crash was seen on older PC's that did not support AVX instruction set
v4.27.0.256	2019.01.28	• DTA-2174/79: Quad Link capability to simplify configuration of 4K • DTA-2182: bug fix DtapService communication error resulting in no license points
v4.26.4.253	2018.07.13	• DTA-2160: bug fix for no data received for the 16th identical IP channel
v4.26.3.252	2018.05.25	• SHA256 driver signing fix for Win7,8 and Server2012
v4.26.2.251	2018.05.17	• SHA256 driver signing support • DTA-2136: bug fix for required tuning frequency offset in some cases • DTA-2162: bug fix for multicast without source specified in SSM IP range • DTA-2195: DtaVOutput supported HDR formats added in DtaHdmiTxStatus • DTA-2195: bug fix for 2160p24 display support not detected

		• DTA-2195: bug fix for HDMI initialisation failing after hot plug
v4.26.0.248	2018.02.12	• Initial support for DTA-2182 dual H.264 HD encoder • DTA-2154: robustness improvement for multiple video standard switches • DTA-2174: bug fix for potential initial incorrect ASI FIFO-load
v4.25.0.245	2017.11.28	• Windows10 Secureboot support • DTA-2180: bug fix for potential divide by zero crash • DTA-2195: Support for ancillary data VPID configuration per frame • DTA-2195: Support for DtAvOutput::SetHdmiAudioChannel
v4.24.0.242	2017.08.31	• DTA-2131: bug fix for NO_SUCH_DEVICE errors • DTA-2195: DtAvOutput::SetHdmiColorimetry function added • DTA-2195: driver was not updated when previous version was installed
v4.23.0.240	2017.06.30	• DTA-2195: Initial HDMI HDR support • DTA-2195: bugfix for potential I2C clock issue • Robustness improvement no more BSOD on initialisation error
v4.22.1.237	2017.06.07	• DTA-2195: Full support, bugfix for HDMI2.0 and cable driver configuration
v4.22.0.235	2017.04.25	• DTA-2180: Support for Dolby Digital Pro audio encoding (requires FW V2) • DTA-2160/2162: FEC reconstruction bugfix; status did change continuously for large matrices
v4.21.0.229	2017.02.20	• DTA-2136/37/39: bug fix for out of range constellation points • DTA-2152: bug fix for failing doubly buffered output for FW V3 • DTA-2162: bug fix for potential BSOD on loop-through and multicast • DTA-2195: initial support
v4.20.0.226	2016.12.20	• Bug fix for VLAN driver update failing when now VLAN was configured • DTA-2131: support for QAM-A/QAM-C demodulation • DTA-2138(B): bug fix for invalid DTAPI_E_INVALID_SYMRATE error • DTA-2138B: bug fix for RF level inaccuracy • DTA-2145/2160: support for ATSC 3.0 IQ over ASI
v4.18.0.222	2016.08.19	• Support for DT_EVENT_TYPE_IOCONFIG • Bug fix for memory leak on each SetIoConfig call • DTA-2139: bug fix for failing installer when multiple units installed • DTA-2162: bug fix for potential BSOD when using port 2 • DTA-2154/2174: bug fix for potential hang of DMA after call to detect video standard
v4.17.0.221	2016.06.01	• DTA-2135: bug fix for failing SetFrequency when both ports are in use • DTA-2160/2162: Support for multiple source IP address filtering • Bug fix for potential hang on DtEventWait while a SetIoConfig is in progress
v4.16.0.217	2016.03.15	• Support for DTA-2115B; 8CH modulation, GPS clock and Phase noise • Full support for DTA-2180 H.264 HD encoder • DTA-2162: bugfix for high CPU load when no data was received on inputs
v4.15.0.212	2016.01.29	• Initial support for DTA-2180 H.264 HD encoder • Bug fix for potential race condition on DMA abort (possible hang) • Bug fix for UDP packets not counted when ID field is zero
v4.14.7.207	2015.10.29	• DTA-2138(B): Support for extra DVB-C2 statistics • Bug fix for SetFailsafeConfig returning an invalid value on DTAPI_IOCONFIG_FAILSAFE
v4.14.6.205	2015.09.10	• Bug fix for possible crash on multiple IP channel detach at the same time • DTA-2137: bug fix for incorrect link margin statistic • DTA-2138B: bug fix for failing DVB-C2 rellock • DTA-2174: bug fix for 4K output failing caused by internal genlocking error
v4.14.4.203	2015.08.07	• DTA-2135: bug fix for possible crash seen with T2Xpert • DTA-2138B: bug fix for RFLevel offset • DTA-2152/2154/2174: bug fix for genref port configuration issue • DTA-2162: bug fix for missing SSM source port number configuration • DTA-2174: Genlock was not calibrated (a few lines offset)

v4.14.0.194	2015.06.04	• DTA-2131: bug fix for more than two DTA-2131 units in one PC failing • DTA-2174: Support for 3G level B (requires firmware version 3) • DTA-2154/DTA-2174: bug fix for not detected PSF input formats • DTA-2152/DTA-2154/DTA-2174: bug fix for no data received after fast input switches
v4.13.3.191	2015.05.01	• DTA-2154: bug fix for arrival timestamps were assigned to wrong frame (one frame to late)
v4.13.1.186	2015.04.21	• Bug fix for DTA-2154 FW version < V5 driver backwards compatibility issue
v4.13.0.180	2015.04.15	• ST2022-5/6 and ST2022-7 support for SD-SDI over IP • Bug fix for loConfig race condition when used from multiple applications • Bug fix for IP RTP receive delay on switch of input streams
v4.12.1.168	2015.02.18	• DTA-2154 Rev 4: Fine-tuned FAN control settings to make sure FAN does not run to faster than necessary for lower temperatures • DTA-160/2160/2162: fixed bug in FEC reconstruction logic not restoring all packets it could potentially repair
v4.12.0.165	2015.02.12	• Support for HD-SDI Progressive Segmented Frame (PSF) formats. NOTE: requires latest firmware versions for DTA-2152 (V2) and DTA-2154 (V5) • DTA-2152: Fixed genlock alignment, to ensure outputs are aligned within 1.5us of the genlock reference
v4.11.0.148	2014.11.26	• Support for DTA-2174 Quad 3G/HD-SDI /ASI In+Out PCIe adapter • Bug fix for failing receive mode IPRAW for non MPEG 192 bytes packets • Bug fix for DtlncChannel::RegisterDemodCallback failing for some slow PC's • DTA-160: bug fix for possible BSOD on Windows Sleep or Hibernate
v4.10.0.144	2014.10.30	• Support for SMPTE ST 2022-7 'Seamless Protection Switching' • Support for DTA-2138B includes ISDB-T and T2 lite (DVB-T2 v1.3.1) support • Support for DTA-2144B • Bug fix DTA-2137: Calling SetTunerFrequency() twice on same frequency in some cases stopped the receiver
v4.9.1.142	2014.09.05	• Bug fix for possible crash on application close • DTA-2152: fixed Genlock misaligned for several formats (720p50 does still have misalignment) • DTA160/2160: bug fix for multiple multicast addresses joins on octal '0'
v4.9.0.140	2014.06.24	• Initial support for DTA-2174 Quad 3G/HD-SDI /ASI In+Out PCIe adapter • Support for extra option to force link IP speed to 1Gbps • Bug Fix for DTAPI VLAN configuration not working for Windows 8.1 • DTA-2154: Reduced time needed to achieve genlock • DTE-3137: RF level statistic now using dBmV unit. Spectral Inversion, Link Margin, Es/NO and Eb/NO statistics are added
v4.8.0.121	2014.04.04	• DTA-2115 (All-Standard, All-Band Modulator) including DVB-S2x modulation • DTA-2136 spectrum inversion statistic added • DTA-2152/2154 bug fix for driver crash when IO Standard for GenRef port was set to SD-SDI • DTA-2154: bug fix analog genlock not working • DTA-2154: bug fix for occasional invalid value being returned when getting FIFO load for an port configured for ASI • DTA-2162: bug fix for high network transmit stalling non real-time packets
v4.7.4.107	2014.02.20	• DTA-2136: bug fix for packet los on port 2 when tuning port 1 and shared antenna mode is active • DTA-2137: VCM lock issue on low SNR, fixed using new mute mechanism • DTA-2154: bug fix for possible failing Auto detect for SD-SDI configuration • Bug fix for 64 bit applications possible problem with DeviceScan function • Bug fix for Windows 8.1 VLAN configuration failing
v4.7.1.104	2013.12.20	• DTA-2137: bug fix for possible failing re-attach • DTA-2154: bug fix for RS422 crash on simultaneously read/write

		• DTA-2154: bug fix for incorrect ASI on fractional SDI standard to ASI switch
v4.7.0.102	2013.11.13	• Added RS422 support for DTA-2154 • Bug fix for possible PCI performance issue seen on some PC's using combinations of DTA-107 and DTA-2111 • Bug fix for some DTA-2154 ASI problems • DTA-2138: bug fix for incorrect DVB-T2 L1 data modulation type
v4.6.1.94	2013.10.23	• Bug fix for possible crash on power up
v4.6.0.92	2013.10.11	• Bug fix for possible DMA invalid state after application restart • Bug fix for multi VLAN's on 1 port resulting in incomplete multicast list
v4.5.2.46	2013.08.12	• The number of DtDevice/DtChannel instances is no longer limited to 256 • DTA-2162 does now have port id included in device description strings • Bug fix for possible DTA-124 crash on 64 bit OS • Bug fix for DtaNw Promiscuous mode not working • Bug fix for DVB-S2 Multi Input Streams not always lock (due to invalid ModType)
v4.5.1.44	2013.06.26	• Bug fix for DTE not found for non-administrator user • Bug fix for DTE reported multiple times (in case of multi network adapters) • DTA-2139: bug fix for MER/SNR incorrect calculation
v4.5.0.43	2013.05.22	• Bug fix for possible crash on high amount of IP channels • DTA-2137: bug fix for 32-APSK performance decrease • DTA-2136: bug fix for MER/SNR incorrect calculation
v4.4.1.41	2013.04.05	• Bug fix for crash during a firmware upgrade of cards that do not support a warm reboot of the firmware • Bug fix for occasional crash when switching between IP sources with a DTA-2162 • Bug fix for not being able to reboot/shutdown the system while a DTA-2162 is in the system
v4.4.0.37	2013.03.28	• Support for DTA-2162 • Few minor bug fixes
v4.3.1.36	2013.02.18	• Support for firmware version V1 of DTA-2138 and DTA-2139
v4.3.0.35	2013.02.15	• Support for new DTAPI capability names introduced in DTAPI V5.2.0.21 • DTA-160/2160: support for IPv6 • Few small bug fixes
v4.2.0.33	2012.12.10	• Added support for subtype field in DtDeviceDesc • Added support for DTA-2137 firmware V7 • Bug fix for DTA-2144 missing double-buffered output support • Bug fix for large IPAT for RTP streams including FEC and lost packets • Bug fix for DTA-155 DMA performance problem seen on certain PC's caused OFDM modulation stop working
v4.1.2.31	2012.11.05	• Bug fix for driver crash when enabling a one of the ports of the DTA-2152 as genlock reference
v4.1.1.30	2012.10.31	• Support for DTA-2138 • Bug fix for potential crash with DTA-160/2160 on a system with more than 64GB of RAM • Few minor bug fixes
v4.1.0.29	2012.09.29	• DTA-2152: added missing support for 720p50 • Few minor bug fixes
v4.0.14.27	2012.08.17	• Support for DTA-2139 • DTA-2137: support for firmware version V6 • DTA-2137: support for C-version (with STV0900AAC)
v4.0.13.25	2012.07.02	• Bug fix for timeout error in WaitFrame for DTA-2152 • Bug fix for potential BSOD crash with DTA-2152 • Bug fix for missing loop-through capabilities for the DTA-2136

v4.0.12.23	2012.06.07	• Bug fix for missing DVB-T2MI capabilities • Bug fix for DVB-S2 capability missing for DTA-2137 • Bug fix for SetIoConfig failing when a fractional IOSTD is set • Bug fix for DtFrameBuffer::WriteSdiLines blocking with 1080i50
v4.0.11.20	2012.05.14	• First release based on new cross-platform driver architecture • NOTE: this version only supports DTAPI v5 or higher • Support for DTA-2107 and DTA-2131