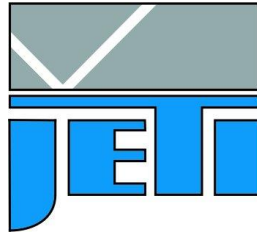


Application Note



JETI Technische Instrumente GmbH
Tatzendpromenade 2
D - 07745 Jena
Germany
Tel. : +49 3641 225 680
Fax : +49 3641 225 681
e-mail : sales@jeti.com
Internet : www.jeti.com

Differences between SDK V3.2.x and V4.x.x

Introduction

The new JETI SDK V4.x.x was designed to additionally support new JETI devices such as spectraval 1501/1511, JETI BlueSpecCube and SDCM3 electronics. Due to firmware changes which comes with these devices it was necessary to redesign some of the DLL functions to fully support new features of the firmware.

If the SDK V3.2.x is already used for an own project and one will add support for new devices by using SDK V4.x.x, this document will give important information about the changes.

Please refer also the SDK documentation for detailed function and argument descriptions.

Overall Changes

The data format of the device handle (dwDevice) used by several functions was changed from DWORD to DWORD_PTR.

This is an 32bit unsigned integer when using the 32bit DLLs within a pure 32bit application (same as DWORD), but an 64bit unsigned integer when using the 64bit DLLs within a 64bit application.

If the application is 32bit no changes are necessary. If using 64bit application and DLLs one has to ensure the used variable is a 64bit unsigned integer.

Changes in jeti_radio

- JETI_GetSerialRadio → three serial numbers instead of two and returned as strings instead of integer numbers
- JETI_CCT → data format of CCT changed from DWORD to FLOAT
- JETI_CRI15 → removed and replaced by JETI_CRI

Changes in jeti_radio_ex

- JETI_GetSerialRadioEx → three serial numbers instead of two and returned as strings instead of integer numbers
- JETI_MeasureEx, JETI_PrepareMeasureEx → data format of integration time changed from DWORD to FLOAT

- JETI_PhotoEx, JETI_ChromxyEx, JETI_ChromuvEx, JETI_DWLPEEx, JETI_CCTEx → arguments for start- and end-wavelength removed, calculation will always be performed between 380...780nm
- JETI_CCTEx → data format of CCT changed from DWORD to FLOAT
- JETI_CRI15Ex → removed and replaced by JETI_CRIEx

Changes in `jeti_spectro`

- JETI_GetSerialSpectro → three serial numbers instead of two and returned as strings instead of integer numbers
- JETI_DarkSpec, JETI_LightSpec, JETI_ReferSpec, JETI_TransRefISpec, JETI_SpectroTint → data format of integration time changed from DWORD to FLOAT

Changes in `jeti_spectro_ex`

- JETI_GetSerialSpectroEx → three serial numbers instead of two and returned as strings instead of integer numbers
- data format of integration time changed from DWORD to FLOAT for the following functions:
 - o JETI_StartDarkEx
 - o JETI_StartLightEx
 - o JETI_PrepareLightEx
 - o JETI_StartReferEx
 - o JETI_PrepareReferEx
 - o JETI_StartTransRefIEx
 - o JETI_PrepareTransRefIEx
 - o JETI_SpectroTintEx
- data format of spectral data changed from DWORD to INT32 for the following functions:
 - o JETI_DarkPixEx
 - o JETI_LightPixEx
 - o JETI_ReferPixEx
 - o JETI_TransRefIPixEx

Changes in `jeti_core`

- JETI_GetSerialDevice → three serial numbers instead of two and returned as strings instead of integer numbers
- JETI_GetDeviceInfo → addressed by device number instead of device handle, expects more arguments
- data format of integration time changed from DWORD to FLOAT for the following functions:
 - o JETI_GetTint
 - o JETI_GetTintConf

- JETI_SetTintConf
- JETI_GetMaxTintConf
- JETI_SetMaxTintConf
- JETI_GetMinTintConf
- JETI_StartAdaption and JETI_CheckAdaptionStat → expects more arguments
- JETI_GetInputVoltage, JETI_GetChargeCurrent and JETI_GetBatteryCapacity are removed and replaced by JETI_GetBatteryStat
- JETI_GetCycTime and JETI_GetCycTimeEx removed and replaced by JETI_GetFlickerFreq
- JETI_GetCycModeConf and JETI_SetCycModeConf removed and replaced by JETI_GetSyncMode and JETI_SetSyncMode
- JETI_GetCycTimeConf and JETI_SetCycTimeConf removed and replaced by JETI_GetSyncFreq and JETI_SetSyncFreq
- JETI_GetCycDivConf and JETI_SetCycDivConf removed
- JETI_GetAverConf → expects more arguments
- JETI_FetchDark, JETI_FetchLight, JETI_FetchRefer and JETI_FetchTransRefl → data format of spectral data changed from DWORD to INT32
- JETI_FetchCCT → data format of CCT changed from DWORD to FLOAT
- JETI_FetchCRI → array for CRI-values must be bigger (17 instead 16 values)
- JETI_CalcPhoto, JETI_CalcChromxy, JETI_CalcChromuv, JETI_CalcDWLPE, JETI_CalcCCT, JETI_CalcXYZ → arguments for start- and end-wavelength removed, calculation will always be performed between 380...780nm
- JETI_CalcCRI → data format of CCT changed from DWORD to FLOAT, array for CRI-values must be bigger (17 instead 16 values)