

## IDS sherpa functions

The following list contains the most important API functions of the IDS Software Suite implemented with IDS sherpa. The list serves as a reference book for porting an IDS Software Suite application.

Currently, about 50% of all functions of the IDS Software Suite are implemented. The other 50% are functions that are either not or currently not available in the GenICam standard or in IDS peak and there are also very special Windows or MFC functions that are no longer needed today and are solved differently.

If you still have questions about a specific IDS Software Suite function, please contact our system consulting.

IDS Software Suite Function	IDS sherpa Function
INT is_AddToSequence (HIDS hCam, char* pClmgMem, INT nID)	int AddToSequence (char* buffer, int id)
INT is_AllocImageMem (HIDS hCam, INT width, INT height, INT bitspixel, char** ppClmgMem, INT* pid)	int AllocImageMem (int width, int height, int bitsPerPixel, char*& buffer, int& id)
INT is_AOI (HIDS hCam, UINT nCommand, void* pParam, UINT nSizeOfParam)	int GetImageAoiMin (int& x, int& y, int& width, int& height); int GetImageAoiMax (int& x, int& y, int& width, int& height); int GetImageAoi (int& x, int& y, int& width, int& height); int SetImageAoi (int x, int y, int width, int height);
INT is_CaptureVideo (HIDS hCam, INT Wait)	int CaptureVideo() int IsCapturing()
INT is_ClearSequence (HIDS hCam)	int ClearSequence()
INT is_DisableEvent (HIDS hCam, INT which)	int DisableFrameEvent()
INT is_EnableEvent (HIDS hCam, INT which)	int EnableFrameEvent(HANDLE& frameEvent)
INT is_EnableMessage (HIDS hCam, INT which, HWND hWnd)	int EnableFrameMessage(HWND hWnd) int DisableFrameMessage()
INT is_ExitCamera (HIDS hCam)	int ExitCamera()
INT is_ExitEvent (HIDS hCam, INT which)	int DisableFrameEvent()
INT is_Exposure (HIDS hCam, UINT nCommand, void* pParam, UINT cbSizeOfParam)	int GetExposureTimeMin_ms(double& min)

IDS Software Suite Function	IDS sherpa Function
	int GetExposureTimeMax_ms(double& max)
	int GetExposureTime_ms(double& exposure)
	int SetExposureTime_ms(double exposure)
INT is_ForceTrigger (HIDS hCam)	int ForceTrigger()
INT is_FreelImageMem (HIDS hCam, char* pClmgMem, INT id)	int FreelImageMem(char* buffer, int id)
INT is_FreezeVideo (HIDS hCam, INT Wait)	int FreezeVideo(int wait)
INT is_Gamma(HIDS hCam, UINT nCommand, void* pParam, UINT cbSizeOfParam)	int GetGamma(double& gamma)
	int SetGamma(double gamma)
INT is_GetActiveImageMem (HIDS hCam, char** ppcMem, INT* pnID)	int GetActiveImageMem(char*& buffer, int& id)
INT is_GetActSeqBuf (HIDS hCam, INT* pnNum, char** ppcMem, char** ppcMemLast)	int GetActSeqBuf(int& number, char*& bufferCurrent, char*& bufferLast)
INT is_GetCameraInfo (HIDS hCam, CAMINFO* pInfo)	int GetCameraInfo(CAMINFO& info)
INT is_GetCameraList (UEYE_CAMERA_LIST* pucl)	int GetCameraList(std::vector<UEYE_CAMERA_INFO>& cameraList)
INT is_GetColorConverter (HIDS hCam, INT ColorMode, INT* pCurrentConvertMode, INT* pDefaultConvertMode, INT* pSupportedConvertModes)	int GetColorConverter(int& conversionMode)
	<div style="border: 1px solid blue; border-radius: 15px; padding: 10px; background-color: #e6f2ff;">                     Implemented are the two modes FAST and HIGH_QUALITY, which correspond to 3x3 and 5x5 in the IDS Software Suite.                 </div>
INT is_GetFrameTimeRange (HIDS hCam, double* min, double* max, double* intervall)	int GetFramerateMin(double& min)
	int GetFramerateMax(double& max)
INT is_GetImageMem (HIDS hCam, VOID** pMem)	int GetImageMem(char*& buffer, int& id)
INT is_GetImageMemPitch (HIDS hCam, INT* pPitch)	int GetImageMemPitch(int& pitch)
INT is_GetNumberOfCameras (INT* pnNumCams)	int GetNumberOfCameras(int& number)
INT is_GetSensorInfo (HIDS hCam, SENSORINFO* pInfo)	int GetSensorInfo(SENSORINFO& info)
INT is_GetTimeout (HIDS hCam, UINT nMode, UINT* pTimeout)	int GetTriggerTimeout_ms(int& timeout)
INT is_InitCamera (HIDS* pHCam, HWND hWnd)	int InitCamera(std::string serialNumber = "")
INT is_InitEvent (HIDS hCam, HANDLE hEv, INT which)	int EnableFrameEvent(HANDLE& frameEvent)

IDS Software Suite Function	IDS sherpa Function
INT is_InquireImageMem (HIDS hCam, char* pcMem, int nID, int* pnX, int* pnY, int* pnBits, int* pnPitch);	int InquireImageMem(char* buffer, int id, int& width, int& height, int& bitsPerPixel, int& pitch)
INT is_ParameterSet(HIDS hCam, UINT nCommand, void* pParam, UINT cbSizeOfParam)	int SaveParametersToCameraMemory(int userSet = USER_SET_0)
	int LoadParametersFromCameraMemory(int userSet = USER_SET_0)
	int SaveParametersToFile(wchar_t* filepath)
	int LoadParametersFromFile(wchar_t* filepath)
INT is_RenderBitmap (HIDS hCam, INT nMemID, HWND hwnd, INT nMode)	int RenderBitmap(int id, HWND hwnd, int renderMode)
INT is_ResetToDefault(HIDS hCam)	int ResetToDefault()
INT is_SetAutoParameter (HIDS hCam, INT param, double* pval1, double* pval2)	int GetAutoExposure(int& autoExposure)
	<div style="border: 1px solid yellow; border-radius: 15px; padding: 10px; background-color: #ffffcc;"> <p>There are many possible AutoParameter settings, which cannot all be implemented. In the first step only the AutoExposure and the AutoGain can be activated or deactivated. Additional parameters cannot be generalized via the interface because the features differ greatly between IDS Software Suite and IDS Vision.</p> </div>
	int SetAutoExposure(int autoExposure)
	int GetAutoGain(int& autoGain)
	int SetAutoGain(int autoGain)
INT is_SetColorConverter (HIDS hCam, INT ColorMode, INT ConvertMode)	int SetColorConverter(int conversionMode)
	<div style="border: 1px solid blue; border-radius: 15px; padding: 10px; background-color: #cce5ff;"> <p>Implemented are the two modes FAST and HIGH_QUALITY, which correspond to 3x3 and 5x5 in the IDS Software Suite.</p> </div>
INT is_GetColorConverter (HIDS hCam, INT ColorMode, INT* pCurrentConvertMode, INT* pDefaultConvertMode, INT* pSupportedConvertModes)	int GetColorConverter(int& conversionMode)
INT is_SetColorMode (HIDS hCam, INT Mode)	int SetColorMode(int colorMode)
	int GetColorMode(int& colorMode)
Keine analoge Funktion	int GetBitsPerPixel(int colorMode, int& bitsPerPixel)
INT is_SetExternalTrigger (HIDS hCam, INT	int GetTriggerMode(int& mode)

IDS Software Suite Function	IDS sherpa Function
nTriggerMode)	
	int SetTriggerMode(int mode)
INT is_SetFrameRate (HIDS hCam, double FPS, double* newFPS)	int GetFramerate(double& framerate)
	int SetFramerate(double framerate)
INT is_SetHWGainFactor (HIDS hCam, INT nMode, INT nFactor)	int GetMasterGainMin(double& min)
	int GetMasterGainMax(double& max)
	int GetMasterGain(double& gain)
	int SetMasterGain(double gain)
	int GetRedGainMin(double& min)
	int GetRedGainMax(double& max)
	int GetRedGain(double& gain)
	int SetRedGain(double gain)
	int GetGreenGainMin(double& min)
	int GetGreenGainMax(double& max)
	int GetGreenGain(double& gain)
	int SetGreenGain(double gain)
	int GetBlueGainMin(double& min)
	int GetBlueGainMax(double& max)
	int GetBlueGain(double& gain)
	int SetBlueGain(double gain)
INT is_SetImageMem (HIDS hCam, char* pClmgMem, INT id)	int SetImageMem(char* buffer, int id)
INT is_SetRopEffect (HIDS hCam, INT effect, INT param, INT reserved)	int GetRopEffect(int ropEffect, int& state)
	int SetRopEffect(int ropEffect, int state)
INT is_SetSubSampling (HIDS hCam, INT mode)	int GetSubsamplingFactor(int& x, int& y)
	int SetSubsamplingFactor(int x, int y)
INT is_SetTimeout (HIDS hCam, UINT nMode, UINT Timeout)	int SetTriggerTimeout_ms(int timeout)
INT is_SetTriggerDelay (HIDS hCam, INT nTriggerDelay)	int GetTriggerDelayMin_us(int& min)
	int GetTriggerDelayMax_us(int& max)

IDS Software Suite Function	IDS sherpa Function
	int GetTriggerDelayInc_us(int& inc)
	int GetTriggerDelay_us(int& delay)
	int SetTriggerDelay_us(int delay)
INT is_StopLiveVideo (HIDS hCam, INT Wait)	int StopCapture()
INT is_Trigger (HIDS hCam, UINT nCommand, void* pParam, UINT cbSizeOfParam)	int GetTriggerPrescaler(int& value)
	int SetTriggerPrescaler(int value)

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