

ImgPreProcess User Guide

Vzense

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Vzense

Release Record

Version	Instruction	Date
V1.0.0	First edition release	20201023

Vzense

1. Overview

The ImgPreProcess library provides pre-processing for Vzense TOF depth images, including time-domain filtering, distance correction, spatial filtering, and anti-distortion.

2. API Introduction

API	APIImgPreProcess * Get_APIImgPreProcess()
Description	Get a pointer to the preprocessing library instance

API	int PreProcSetIntrinsic(int type, double *IntrinsicData,int ImgWidth,int ImgHeight)
Description	<p>Setting the camera's internal parameters</p> <p>Type: 0 for TOF, 1 for RGB, other values are invalid</p> <p>IntrinsicData: the pointer of the Intrinsic Array</p> <p>ImgWidth: the width of image</p> <p>ImgHeight: the height of image</p>

API	int PreProcSetMeasuringRange(const ALG_DepthRange range, const unsigned int depthMax, const unsigned int depthMin)
Description	<p>Set the measuring range of the tof camera and the effective measurement range</p> <p>range: measuring range</p> <p>depthMax: maximum value of the measured distance in the depth image</p> <p>depthMin: minimum value of the measured distance in the depth image</p>

API	int PreProcSetUsedDepthFilter(bool isUsed)
Description	<p>Set whether the Depth image uses filtering (time filter, spatial filter)</p> <p>isUsed:</p> <p>false: Filtering is not used. The filtering does not work regardless of whether time or spatial filtering is enabled</p> <p>true: Filtering is not used. At this point time filtering and spatial filtering depend on whether filtering is on or not.</p>

API	int PreProcSetTimeFilterEnabled(bool enable)
Description	<p>Set the Depth image time filter switch function</p> <p>enable:</p> <p>false: disable</p> <p>true: enable</p>

API	int PreProcSetRealDepthCorrectionEnabled(bool enable)
Description	<p>Depth image correction switch setting function</p> <p>enable:</p> <p>false: disable</p> <p>true: enable</p>

API	int PreProcSetSpatialFilterEnabled(bool enable)
Description	<p>Set the Depth image spatial filter switch function</p> <p>enable:</p> <p>false: disable</p> <p>true: enable</p>

API	int PreProcSetDepthUnDistortionEnabled(bool enable)
Description	Depth image anti-distortion setting switch enable: false: disable true: enable

API	int PreProcDepth(ALG_Frame& depth)
Description	Depth image processing function depth: depth is depth image to be processed, and the pre-processed result is also returned with this parameter

3. API Call Sequence

