

# WDR Converter

Powered by original computing algorithm "DMNA" based on mathematical methods

## 1 Abstract

WDR (Wide Dynamic Range) is a technology to retouch correct images in high-contrast scenes, without generating overexposure and underexposure. Since the dynamic range of a standard camera is limited, it is hard for one to capture high-contrast scenes properly, usually resulting in overexposure or underexposure.

TMC developed an unique WDR technology to provide images that is easy to be detected even with a general "object recognition algorithm".

## 2 Features

This unique WDR engine improves the appearance of original images. This WDR engine uses a fast operating algorithm that does not interfere with the operation of other applications and therefore is ideal for a pre-process for object recognition by AI.

## 3 WDR Engine Configuration

### ● Local Tone Mapping

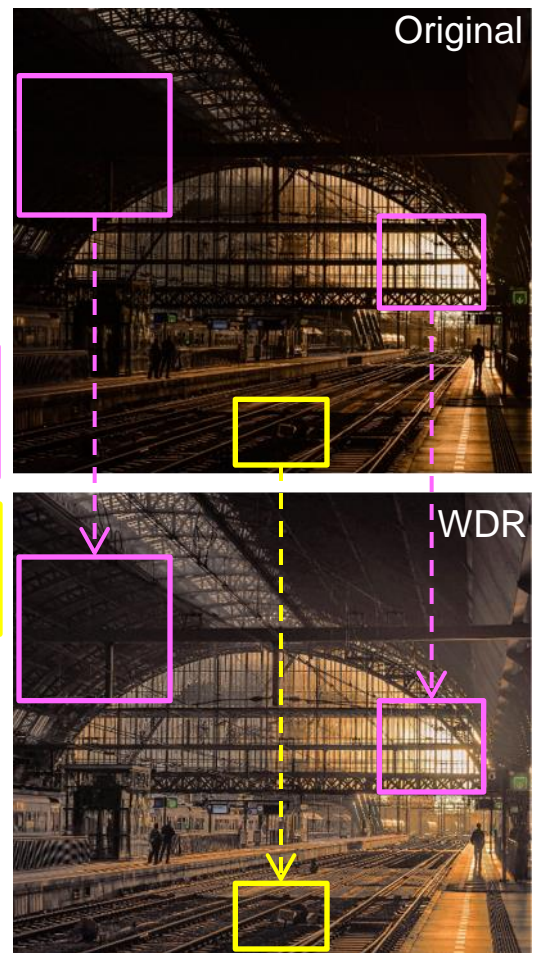
Local tone mapping makes the dark areas brighter without generating overexposure in originally bright areas.

### ● Detail Enhancement

Detail Enhancement improves the sharpness of the entire image.

## 4 WDR Product Lineup

- Hardware IP (FPGA)
  - x86\_64 (SIMD optimized)
  - ARM (NEON optimized)
- Software IP



### Contact Information

7F, Gotanda NN Bldg., 2-12-19, Nishi-gotanda, Shinagawa-ku, Tokyo 141-0031

**Techno Mathematical Co., Ltd.**

TEL: +81-3-3492-3633

Email: info-sales@tmath.co.jp

FAX: +81-3-3492-3631

URL: <https://www.tmath.co.jp/en/>