# OPERATION MANUAL (R2) FOR AVM-USB2

2024/11/01 Watec Co., Ltd.

# **REVISION HISTORY**

Revision	Date	Changed
1.0	2024.11.01	1 <sup>st</sup> Release

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## **INTRODUCTION**

#### Including

AVM-USB2 1pc



micro-B

Support camera

WAT-240E/FS model only (Serial No. : W176\*\*\*\*\*)

<u>\*WAT-240E/FS</u>, which serial number starts with W166\*\*\*\*\*, is not supported.

Equipment

PC REQUIREMENTS

OS : Windows 10, Windows 11 USB : USB standard 1.1, 2.0, 3.0

**USB CABLE REQUIREMENT** 

CABLE TYPE : A (PC side) - micro-B ([AVM-USB2] side) CABLE LENGTH : Less than 5m

#### **INSTALL**

Unzip AVM-USB2\_ControlSoftware\_(R2)\_E100.zip

- AVM-USB2\_ControlSoftware\_(R2)\_E100.exe ۲
- SLABHIDDevice.dll •
- SLABHIDtoSMBus.dll •
- ei\_agc\_max.csv •
- initial\_rom.csv
- shut\_agc\_max.csv
- initial\_N.txt
- initial\_P.txt •
- ···· WAT-240E/FS factory default file for NTSC
- ···· WAT-240E/FS factory default file for PAL

#### UNINSTALL

Delete unzipped files.

## **OPERATION PROCEDURE**

- 1. How to Connect the Camera
  - (1) Turn on the camera.
  - (2) Connect AVM-USB2 and the camera.
  - (3) Connect the PC and AVM-USB2.

2. How to Disconnect the Camera

- (1) Make sure the power supply to the camera is off.
- (2) Disconnect the camera from AVM-USB2.

# **DESCRIPTION OF THE APPLICATION**

W AVM-USB2_ControlSoftware_(R	2) Menu	×	
Connect to the board disconnect	ed	Connection Mode	]
AE BLC SETUP BRIGHT	NESS WB	ENHANCE MIRI	
SHUT. Max. 1/100000 🗸	SHUT.	OFF	Parameter setting
AGCMAX 42 🜩 dB	AGCMAX	[42 🛟 dB	
O SHUT. + MGC			
SHUT. OFF			

## **Connection Mode**

## **DISCONNECTED MODE**



Not connected to the camera. The software starts up in this mode. It will not be reflected in the camera if you change the parameters. You can use to create a parameter file without a camera connection. When you press the [disconnected] button, and then move to [connected] mode.

#### CONNECTED MODE



It connected to the camera.

It will be reflected in the camera if you change the parameters.

When you press the [connected] button, and then move to [disconnected] mode.

#### Menu

#### File

load			
Save	ard connecte	d	
Exit	ETUP BRIGHT	NESS WB	ENHANCE MIRF
DEL+AGC		O SHUT. +	AGC
SHUT. Max.	1/100000 ~	SHUT.	OFF
AGCMAX	42 🜲 dB	AGCMAX	42 🗘 dB
) SHUT. + M	1GC		
SHUT.	OFF V		
MGG	■ ▲		

#### Load

Load the parameter file.

In the case of the CONNECTED MODE, the parameter settings are sent to the camera and software window.

In the case of the DISCONNECTED MODE, the parameter settings are sent to the software window only.

#### Save

Save the parameters on the current software window to a file.

## Exit

Exit this software.

#### Tool

File To	l loc	Help		101			
	Init	ialize EEPR	MC	h			
onne	All	RO <mark>M</mark> write	6				
AE	All	ROM read		SS	WB	ENHANC	E MIRF
O EI ·	+ AGC			() SH	IUT. +	AGC	
SHUT.	Max.	1/100000	~	SHU	T,	OFF	~
AGCM	AX	42 🌻 d	B	AGC	МАХ	42 🗘	dB
() SHL	JT. + M	GC					
SHUT	į	OFF	~				
MGC		0 \$	1B				

#### Initialize EEPROM

Rewrite the parameters of the camera to the factory default settings.

#### All ROM write

Write the parameters on the current software window to the connected camera.

#### All ROM read

Read from the parameters on the connected camera to the current software window.

## Help

Y AVM-USB2_ControlSoftware_(R File Tool Help Version	2)		;
AE BLC SETUP BRIGHT	NESS WB	ENHANCE	MIRI
SHUT. Max. 1/100000 ↓ AGCMAX 42 🜻 dB	SHUT. AGCMAX	OFF 42 💠 c	IB
◯ SHUT. + MGC			
SHUT. OFF ↓ MGC 0 ♦ dB			

W Version	×
AVM-USB2_ControlSoftware_(R2)	
Watec co., Ltd.	
Version : 1.0.0	
ОК	

## Version

Show the version of this software.

Parameter Setting

#### AE

Set the exposure mode.



## E.I + AGC

Adjust the exposure with the electronic shutter and the automatic gain control. The maximum electronic shutter speed and the maximum gain can be selected.

#### SHUT + AGC

Adjust the exposure with fixed electronic shutter and the automatic gain control. The electronic shutter speed can be selected in OFF or FL. The range of the maximum gain can be selected.

## SHUT. + MGC

Fixed exposure mode.

The electronic shutter speed and the gain can be selected arbitrarily.

#### BLC

Select the backlight compensation mode.



## **BLC LEVEL**

Adjust a compensation level.

When the value is increased, the correction becomes stronger.

## SETUP

W AVM-USB2_	ControlSof	tware_(R2)			×
File Tool	Help				
Connect to the b	oard c	onnected			
AE BLC	SETUP	BRIGHTNESS	WB EN	HANCE	MIRF
0					7.5[IRE]
	a a 🔽	(k) (k) (a) (a)	b) b) b) (i)	(k. 1)	1.00

# BRIGHTNESS

	BLU 3	ETUP BF	<b>UGHTNES</b>	SIWB	ENHANCE	MIRF * *
() 100IF	RE	723775 Shama				- X 21 21
() 75IR	E					
O Manu	al					
50	60	70	80	90	100	110 [IRE]
1000	aracta actor	a kasata	10101 1010	a anan		

## 100IRE

Preset [100IRE]

75IRE

Preset [75IRE]

Manual

Select brightness level manually.

#### WB

Set the white balance mode and tuning the R and B gain.



## ATW

The RGAIN and the BGAIN will be controlled automatically by camera.

#### 3200K

Use for the Incandescent light bulb.

#### 4400K

Use for the reddish fluorescent lamp.

#### 5100K

Use for the bluish fluorescent lamp.

#### 8200K

Use for the extremely bluish lamp.

#### RGAIN/BGAIN

In the mode of non- ATW, you can fine-tune the RGAIN and BGAIN.

\*The message is displayed except when selecting ATW.



Please select All ROM write in Tool menu, and reboot the camera.

## ENHANCE

Setting for the edge enhancement of vertical and horizontal directions

W AV	M-USB2	ControlSo	oftware_(R2)		×
File	Tool	Help			
Connec	ct to the l	board	connected		
AE	BLC	SETUP	BRIGHTNESS	WB	ENHANCE MIRF + +
00	FF				
O Se	OFT (H∕\	0			
<b>O</b> N	ORMAL (	H/V)			
Он	ARD (H/^	N I			
6					

- OFF
- SOFT (H/V)
- NORMAL (H/V) : Default
- HARD (H/V)

# MIRROR

Set the mirror image mode

AVM-USB2_ControlSoftware_(R2)
File Tool Help
Connect to the board
BLC SETUP BRIGHTNESS WB ENHANCE MIRROR OF
O OFF
O Horizontal
🔿 Vertical
O Horizontal/Vertical

• OFF

: Default

- Horizontal
- Vertical
- Horizontal / Vertical

## COLOR/MONO

X AVM-USB2_Control	Software_(R2)	)		;
Connect to the board	connected			
BRIGHTNESS WB	ENHANCE	MIRROR	COLOR/	MONO G
O Color				
🔿 Monochrome 📓	Burst ON			

- Color
- Monochrome

## Burst ON

If checked, Output a monochrome video signal with the color burst.

# GAMMA

W AVI	M-USB2_Cont	rolSoftwar	e_(R2)		×
File	Tool Help				
Connec	t to the board	conne	ected		
WB	ENHANCE	MIRROR	COLOR/MONO	GAMMA	• •
0 0.	45				
0 0.	6				
01.	00				

## 0.45

Correct with a gamma of about 0.45 for CRT gamma 2.2.

## 0.6

Correct with a gamma of about 0.6.

# 1.0

No correction (linear)

# **ERROR MESSAGE**

MESSAGE	SOLUTION		
	AVM-USB2 was not detected.		
No connection !	Please check the connection of the USB cable.		
	Multiple AVM-USB2 have been detected.		
You can connect the one board.	Please connect only one.		
	Unable to connect to AVM-USB2 and the		
×	camera.		
Please check the connection of the camera.	Please re-check the connection between the camera and AVM-USB2.		
ОК			

Caution