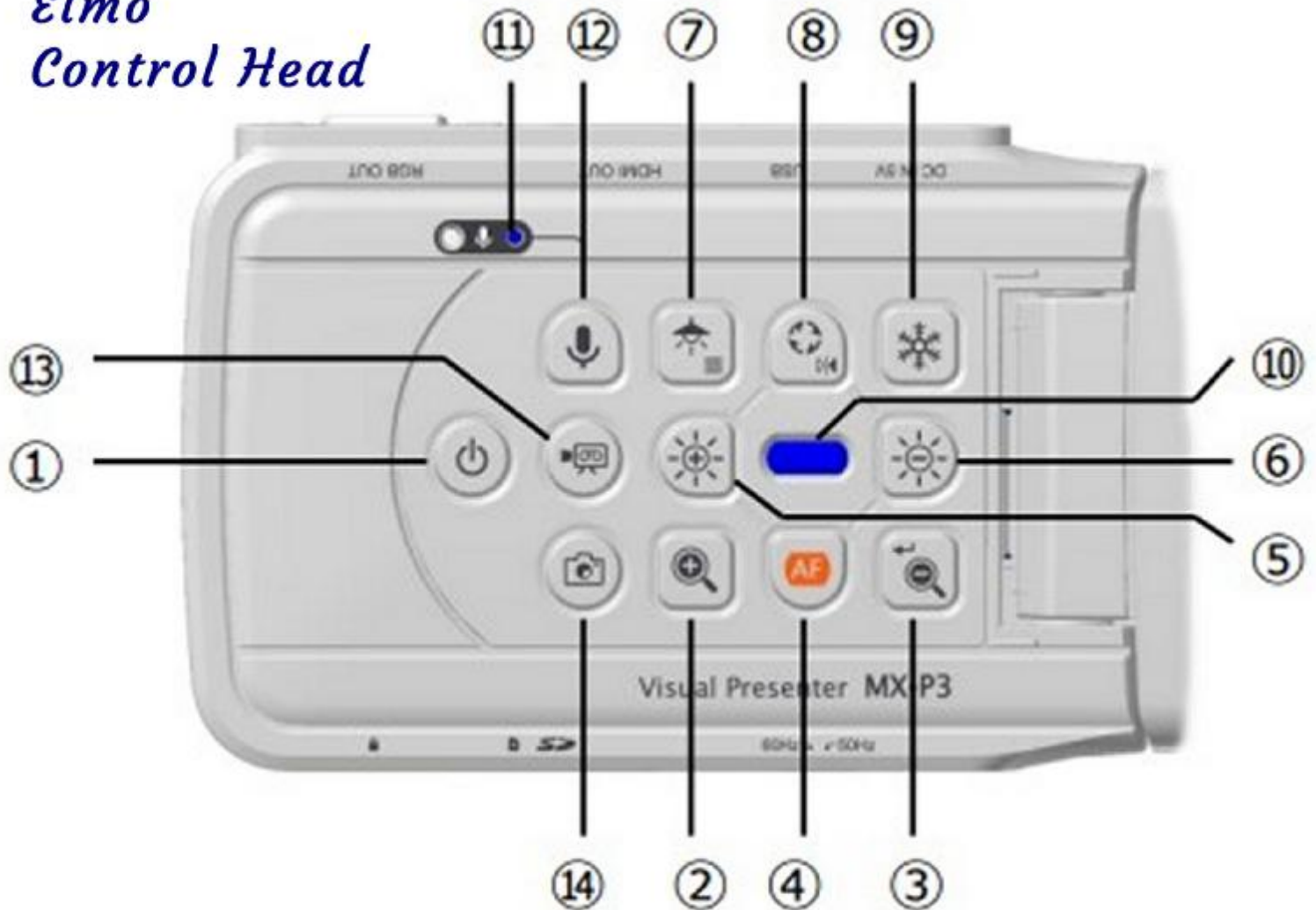# Elmo Control Head

1. on/off
2. zoom in
3. zoom out
4. Auto Focus
5. Brightness +
6. Brightness -
7. Light on/off

8. Rotate Image
9. Freeze image
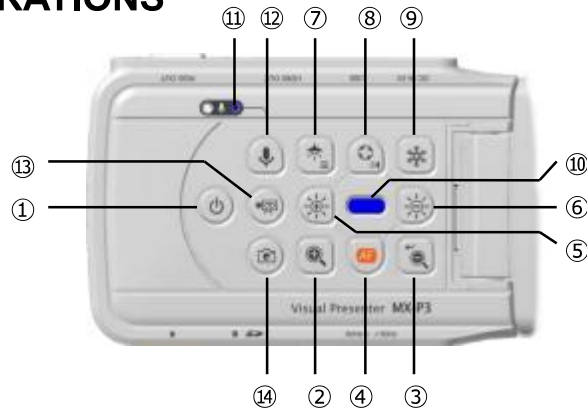10. Status led
11. Audio status led
12. Audio on/off
13. record to SD on/off
14. Capture Still to SD

3 + 6 = HDMI Resolution (auto/4k/2k)
4 + 8 = Interactive Whiteboard R1 mode

◆CAMERA OPERATIONS

	Function	Description
①	Power	**Power ON** The product enters the standby status in 5 – 10 seconds after the DC power cord is connected to the product.（Status LED：Red） To turn on the product, press the Power button. The Status LED turns blue or green and the product starts to output images from HDMI Out port or RGB Out port. **Power OFF** To turn off the product, press the Power button again. The Status LED turns red and the product returns to the standby status. ※The Power button is disabled when the power is supplied through the USB cable only.
②	ZOOM-IN	To enlarge the image.
③	ZOOM-OUT	To shrink the image.
④	One-push AF	To focus automatically.
⑤	Brightness＋	To brighten the image.
⑥	Brightness-	To darken the image.
⑤+⑥	Initialization of the brightness	To initialize the brightness level by pressing ⑤ and ⑥ together.
⑦	Lighting/MENU	To turn on or off the LED lighting. Long-press this button to display the OSD menu.
⑧	Image rotation/ Mirror inversion	To rotate the image.（0°/180°） ※The image will be flipped horizontally when this button is long pressed (about 3 seconds).
⑨	Freeze	To pause or restart the image.
⑩	Status LED	To indicate the status of the product. For details, refer to "◆Status LED"(⇒P.13).

⑪	Audio status LED	To indicate the status of the audio output. This LED turns blue when the audio output is on.
⑫	Audio ON/OFF	To turn on or off the audio. ※ This function is available only when outputting images to a computer via the USB cable or recording images to an SD card. (Default setting: OFF)
⑬	Record	To record videos to an SD card.
⑭	Capture	To save still images to an SD card.
③+⑥	HDMI resolution switching	To switch the resolution of the HDMI output. (Auto/4K/2K)
④+⑧	Interactive Whiteboard R1 mode	If you press and hold ④ and ⑧ at the same time, it will be the best mode for displaying on our Interactive Whiteboard (model number EL55R1, EL65R1, EL75R1, EL86R1) via USB.
⑦+⑨	Initialization	The Status LED flashes blue when the power is supplied to the product with the USB cable or DC power cord while pressing ⑦ and ⑨ at the same time. The product will be reset to factory default settings after the USB cable or DC power cord is disconnected.

◆MENU OPERATIONS

	Function	Description
①	MENU	To display or hide the OSD menu on the image (HDMI/RGB/USB) by long-pressing this button.
②	Move upward	To move the cursor upward.
③	Move downward	To move the cursor downward.
④	Enter	To confirm the menu item.

◆STATUS LED

The connection status of the AC adapter and USB cable, power supply status, or image output status can be checked with the Status LED.

Status LED		Power supply			Interactive Whiteboard R1 mode	Power Button	Image output		
Freeze OFF	Freeze ON	AC adapter	USB	Power supply			USB	HDMI	RGB
Off	Off	Off	Off	Off	――――	Disabled	×	×	×
Blue	Flash Yellow	Off	On	USB	×	Disabled	○	×	×
Green	Flash Yellow	Off	On	USB	○	Disabled	○	×	×
Red	――	On	Off	AC adapter	――――	OFF	×	×	×
Blue	Flash Yellow	On	Off	AC adapter	×	ON	×	○	○
Green	Flash Yellow	On	Off	AC adapter	○	ON	×	○	○
Red	Flash Yellow	On	On	AC adapter	――――	OFF	○	×	×
Blue	Flash Yellow	On	On	AC adapter	×	ON	○	○	○
Green	Flash Yellow	On	On	AC adapter	○	ON	○	○	○

※The Status LED stays off until the product starts up after the power is on.

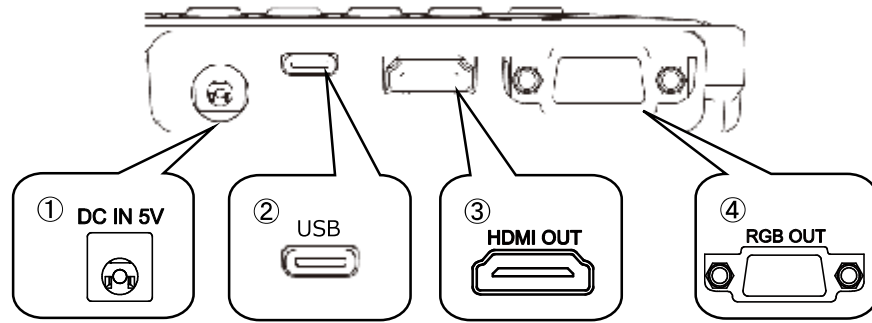| SD card	Status LED
During recording process	Flash Red

FW update	Status LED
During updating process	Purple
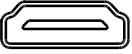
Initialize	Status LED
During initialization process	Flash Blue

◆AUDIO STATUS LED

Audio	Audio status LED
Audio ON	Blue
Audio OFF	Off

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◆CABLE CONNECTION

Mark		Description
①	DC IN 5V	To connect the supplied DC power cord.
②	USB	To connect to a computer to save images. Max. resolution:　4：3＝4160×3120　　16：9＝3840×2160
③	HDMI OUT	To output digital images by connecting to a monitor via the HDMI cable. (The HDMI cable is not included.) Max. resolution:　3840x2160
④	RGB OUT	To output RGB images by connecting to a monitor via the RGB cable. (The RGB cable is not included.) Max. resolution:　1920x1080

◆SETTING SWITCH
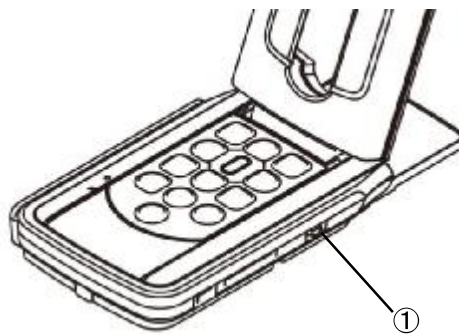
Mark		Description
①	60 ← → 50	To correct flickers. Select the same value as used for the power supply frequency. (50Hz / 60Hz)

　※The change made by the Setting switch will be reflected after the product is turned off and
　　on again.

◆RESOLUTION／FRAME RATE
(WHEN DISPLAYING ON A COMPUTER VIA USB)

The following table shows the output resolution and frame rate when connecting with the USB cable.

If a low-spec computer is used, the actual frame rate may be slower than what is specified in the table.

Resolution	USB	
	MJPEG[fps]	YUY2[fps]
4160x3120	10	-
3840x2160	30	-
2048x1536	30	-
1920x1080	60/30/15*	-
1280x960	30	-
1280x720	60/30/15*	-
1024x768	30	-
640x480	30	20

*Interactive Whiteboard R1 mode only.