

**MetaStudio**

# **Video Shooting Guide**

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# 1 Shooting a Human Video

Thanks for using Huawei Cloud MetaStudio. This guide will help you produce virtual avatar images.

## CAUTION

Please note that the quality of virtual avatar image modeling is closely related to your recordings. To create better virtual avatars, please read the following virtual avatar video shooting standards carefully.

### Overview of virtual avatar video shooting standards:

#### 1. Shooting Specifications

The total video duration is 5 minutes, the resolution and frame rate are 4K/25 FPS or higher, and the format is MP4/MOV.

#### 2. Site Layout

- **Background:** Use a green-screen background with even color and without damage or wrinkles.
- **Lighting:** Use even and stable illumination and standard daylight color temperature. Ensure that the model is well-lighted and there is no shadow on his/her face, and the light does not change significantly during recording.
- **Camera position:** The camera is aligned with the person's eyes and focuses on the face area to ensure that the face is clear. **A vertical video is recommended.**
- **Voice pickup:** Keep the recording environment quiet and free from noise interference.

#### 3. Model Image

- **Face:** Avoid light reflection caused by excessive oil on the face. **Ensure that there is no scattered hair on the face. To avoid light reflection, do not wear glasses.** Ensure that the facial outline is clear and the model is enthusiastic.
- **Dress code:** Do not wear clothes in a color similar to green, or clothes with green patterns. Do not wear metal earrings, bracelets, or watches that may reflect light.

4. **Shooting Process**

The model should smile and act naturally (including the head). After the action is complete, hands should be put back to the initial position. **The model should keep the mouth closed when he or she is not speaking.**

5. **Video Submission**

The **original voice** of the video for training **must be retained**, and the audio and video must be in sync. Do not clip the video. **Ensure that the narration, silence, and gestures of the video are retained in the same video.**

**Shooting guide and script examples**

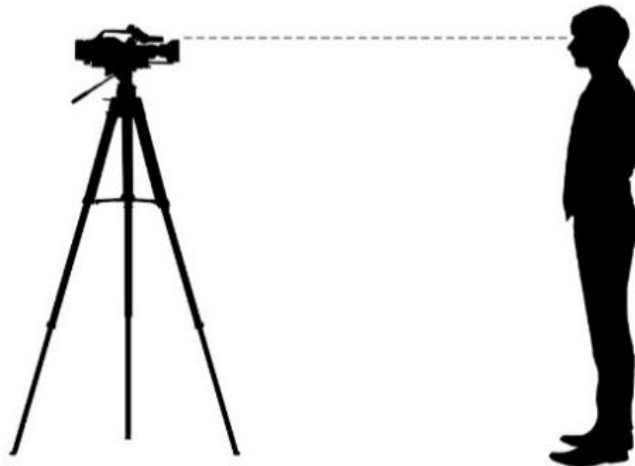
- [Appendix 1: Check Items](#)
- [Appendix 2: Guide to Choreography Customization](#)
- [Appendix 3: Script Examples](#)

## Camera Installation & Shooting Specifications

**Notes:**

- You are advised to use a lens with an equivalent focal length of 40 mm to 85 mm. Do not use an ultra wide angle lens.
- Vertically secure the camera to the tripod at a proper height. **The camera is aligned with the person's eyes and focuses on the face area** (see [Figure 1-1](#)) to ensure that the face is clear. **If you record the whole body, ensure that there is a green-screen gap at the bottom of the model's feet.**

**Figure 1-1** Camera position



- **A vertical video is recommended.** The model is in the middle of the frame. Keep the margin to ensure that **the model is within the frame when he or she is making a gesture.** See [Figure 1-2](#).

**Figure 1-2** Shooting example



**Full coverage of green screen**



**Gesture within the frame**

- Avoid overexposure and underexposure.
- The model should be at least 1.5 meters away from the green-screen background to avoid shadows.
- See [Table 1-1](#).

**Table 1-1** Recommended camera shooting specifications

Shooting Specifications	Standard
Resolution and frame rate	4K/25 FPS or higher
Aperture	Less than F4 to avoid significant blurring due to a shallow depth of field
ISO	100–800 to avoid noise caused by excessive ISO
White balance	3,500–5,500 K, fixed white balance throughout the process
Recording format	H.264/H.265 encoding
Bitrate	> 60 Mbit/s
Color bit depth	10 bits or 8 bits

Shooting Specifications	Standard
Shutter speed	$\leq 1/(\text{Frame rate} \times 4)$ Example: When the frame rate is 60 FPS, the shutter speed must be $\leq 1/(60 \times 4 = 240)$ .

**FAQs:**

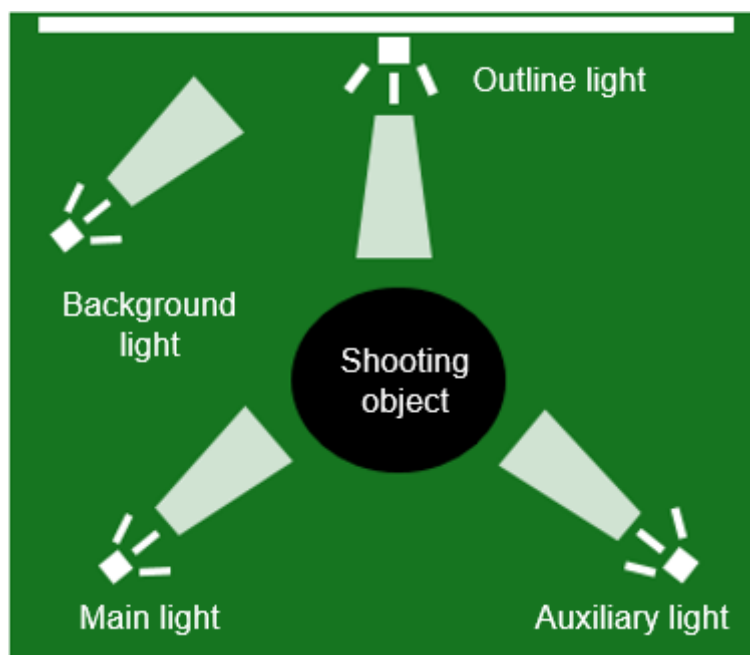
- 1. What if my device can shoot 1080p videos only?**  
 If the device cannot shoot 4K videos, try 1080p (1080 x 1920) half-body shooting to capture face details.
- 2. Can I use my mobile phone for shooting if I do not have a camera?**  
 Mobile phones are not recommended for photo taking. If necessary, adjust the recording specifications of your phone to 4K/30 FPS or 4K/60 FPS and use a stabilizer to ensure video stability. Other shooting requirements, such as lighting and green screen, are the same as those in [Camera Installation & Shooting Specifications](#).

**Lighting**

**A proper lighting environment will significantly improve the shooting.** We recommend that:

- Use three or four professional photography lights for lighting, including the main light, auxiliary light, product light (for the shooting of desktop products), background light, and outline light (optional). For details, see [Figure 1-3](#).

**Figure 1-3** Site lighting



- Ensure that the light does not change significantly during recording.
- The green-screen background is even and bright to avoid shadows or uneven brightness. Ensure that there is no shadow or reflection between the model/object and the green-screen background.

#### FAQs:

##### 1. What if I do not have so many lighting devices?

There is no need to worry about this. You only need to ensure that the person is evenly and stably illuminated and can be clearly distinguished from the green-screen background. **Ensure that there is no significant shadow on the face or body of the person.** If the number of lighting devices is limited, **light the subject to be photographed first**, and then fill light on the green screen.

## Voice Pickup

MetaStudio will **synchronize the voice in the video with the lip movement of the person to improve lip sync training. The training result will go through technical review by experts.**

For voice pickup:

- The **audio and video** must be **in sync**.
- The environment is quiet and free from noise interference, and the voice of the model is clear. **Minimize the background noise of the video.**
- Use a loudspeaker or other professional microphones with the camera, which will greatly reduce the background noise and other environmental noise. **Avoid including the microphone in the frame** so that the microphone will not appear in the image of the virtual avatar.

#### FAQs:

##### 1. If someone intrudes or there is unexpected sound, such as thunder or car horn, during my shooting, do I need to shoot the video again?

According to our experience, a sound intrusion shorter than three seconds does not significantly affect the training. You only need to minimize the occurrences of similar burst sounds.

##### 2. If I do not have a professional microphone or loudspeaker, can I use the built-in microphone of the camera for recording?

Most cameras' built-in microphones can also meet our voice recording requirements. MetaStudio can make a moderate compromise on the clarity of the voice, but **ensure that the background noise is not too loud and there is no other sound, especially when the model is speaking.**

## Model Image

Virtual avatars do not support replacement of clothes, so **the wearing of the model during recording will be the wearing of the virtual avatar.**

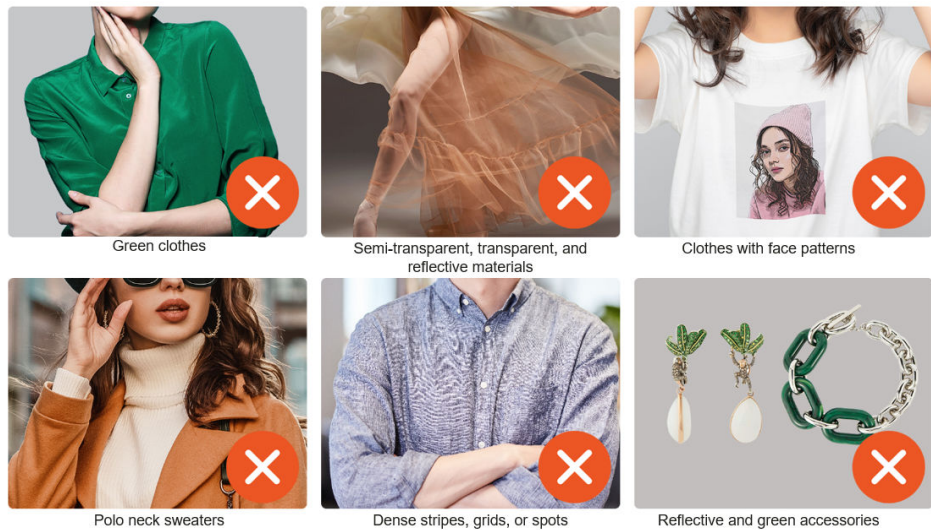
Before shooting, check the following items of the image:

- **Dress code**



- Avoid any color that is similar to that of the background. For example, **do not wear green clothes or clothes with any green pattern when a green screen is used.**
- Avoid using semi-transparent, transparent, and reflective materials, or wearing clothes with face patterns or excessive wrinkles.
- Avoid wearing clothes with dense stripes, grids, or spots because clothes of these types may cause moire patterns on the image.
- Avoid wearing **reflective and green watches, ear nails, necklaces, or bracelets.**

Figure 1-4 Dress code



- Facial requirements
  - Keep a light and clean makeup to **avoid reflection caused by excessive oil on the face.**
  - **Do not** wear glasses, sunglasses, or hats that will **block your forehead and eyebrows.**
  - **There is no scattered hair on the face and the background cannot be seen through the hair gap.**
  - There is no long scattered beard on the face.

Figure 1-5 Incorrect examples

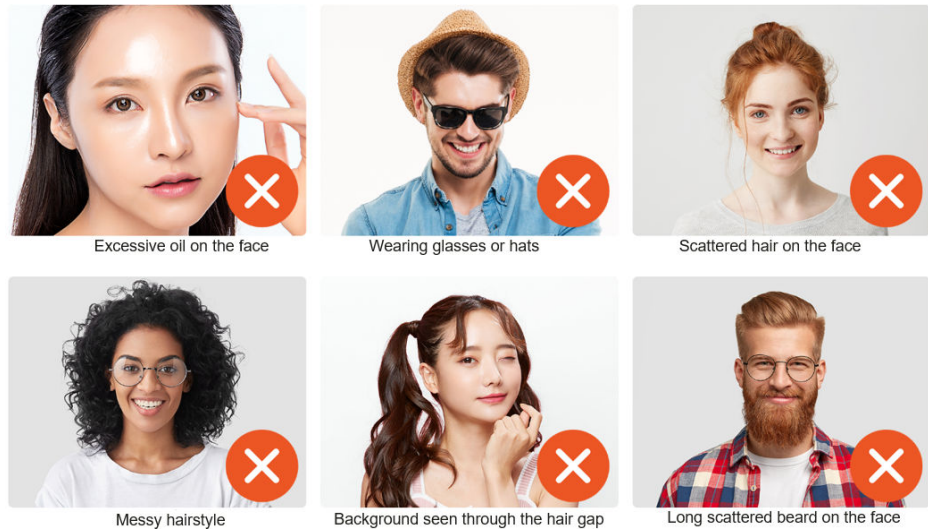
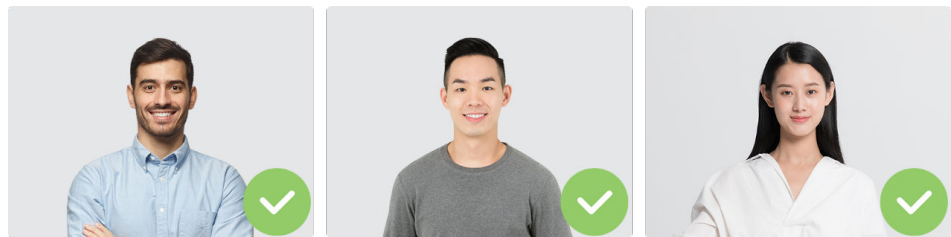


Figure 1-6 Correct examples



## Requirements for Green-Screen Virtual Avatar Video Shooting

The hand movements, facial expressions, and postures of the model determine the postures and actions of the virtual avatar. Therefore, models should act and speak as naturally as possible during video shooting.

Record the video as instructed and evaluate the recording process based on the actual requirements.

- **Interaction not required:** 15–20 seconds of silence + 4–5 minutes of natural expression
- **Interaction required:** 15–20 seconds of silence + non-semantic action + 4–5 minutes of natural expression (For details, see [Requirements for Interactive Virtual Avatar Video Shooting](#).)
- **Choreography:** 15–20 seconds of silence + 4–5 minutes of natural expression + shooting of video clips with choreography (Keep the camera position and person position unchanged. For details, see [Appendix 2: Guide to Choreography Customization](#).)

Details:

- **Silent period: Record the person in silence for about 15–20 seconds.**  
The model looks at the camera, smiles with his or her mouth closed, and remains silent. **The model puts the hands at the initial position, as shown in the following figure.**  
Keep a proper proportion of the model.

Figure 1-7 Silent period



- **Natural expression period: The lip movement, action, posture, and facial expression of the model speaking naturally are recorded for about four and half minutes.**
  - The model reads the script paragraph by paragraph at a natural speaking speed and acts slightly. The head can move naturally.

Figure 1-8 Demo



Examples of gestures

- The model's **mouth should be fully closed** and hands should be put back to the **initial position** during pauses. (Practice is recommended before shooting.)

Figure 1-9 Incorrect examples

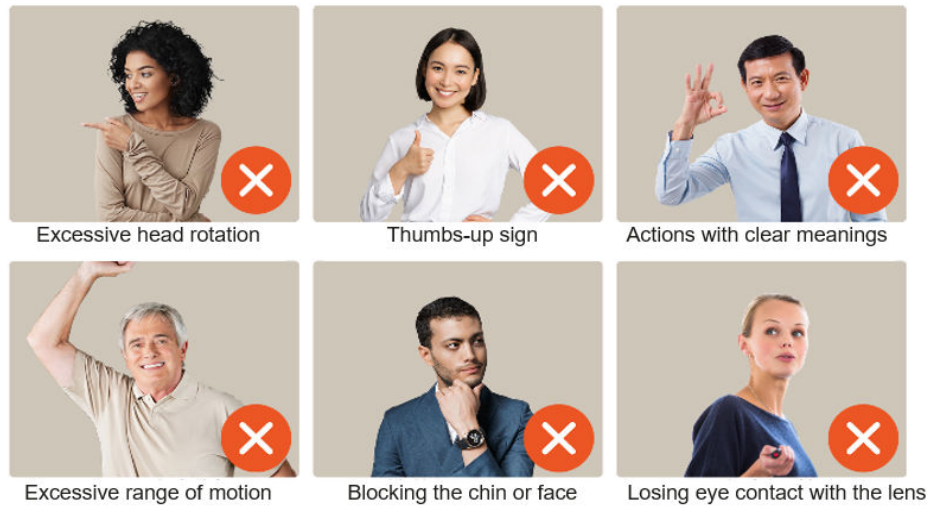
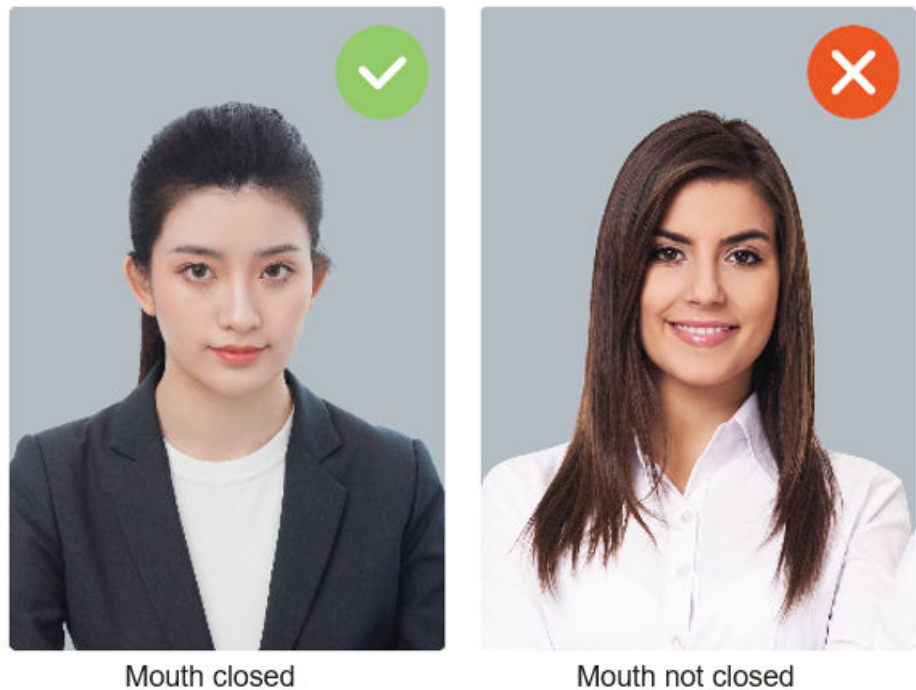


Figure 1-10 Correct and incorrect examples



**Recording precautions:**

- If a speech error occurs, skip it or continue the speech **without interrupting the shooting**.
- Rotate or move the head within 15 degrees.
- Avoid actions with clear meanings, such as thumbs-up signs and number.
- Avoid actions that may block the face, such as resting the cheek on hands and scratching the head.
- Move within the frame and do not block the face (such as hands above the chin).

- Keep eye contact with the lens.
- Avoid wrong pronunciation. Do not speak too fast, too slow, or abruptly.

## Requirements for Interactive Virtual Avatar Video Shooting




- **Recording requirements**
  - **Keep the body still:** Record all actions at a time. During the shooting, the model remains at the same position and does not shake. When the shooting starts, the model should keep the silent action for more than ten seconds.
  - **Keep silent during the five-second interval of actions:** There are four actions. When speaking, act as naturally as possible. Keep silent during the silent period.

For details, see the example figure. Act as naturally as possible based on the action habits of the model.




- **Recording examples**

When acting, the model can **remain silent or read related text**. According to our experience, **speaking while acting makes the action more natural**. The reference text is as follows.

**Table 1-2** Recording examples

Step	1	2	3
Text and action (Perform an action marked in <> while reading the text in the same line.)	<Keep the silent action for ten seconds.>	Welcome to the virtual human forum. Now, let's learn about the main application scenarios of virtual humans and related cutting-edge technologies.	5, 4, 3, 2, 1. <Count the number without speaking.> As mentioned above: <Stretch hands and then perform the silent action.>
Examples			

**Table 1-3** Recording examples

Step	4	5	6
Text and action (Perform an action marked in <> while reading the text in the same line.)	5, 4, 3, 2, 1. <Count the number without speaking.> Next, let's look at product A. <Move the left hand past the chest and then perform the silent action.>	5, 4, 3, 2, 1. <Count the number without speaking.> Next, let's look at product B. <Move the right hand past the chest and then perform the silent action.>	5, 4, 3, 2, 1. <Count the number without speaking.> That is all for today's interaction recording. <Perform the silent action after lying down hands.>
Examples			

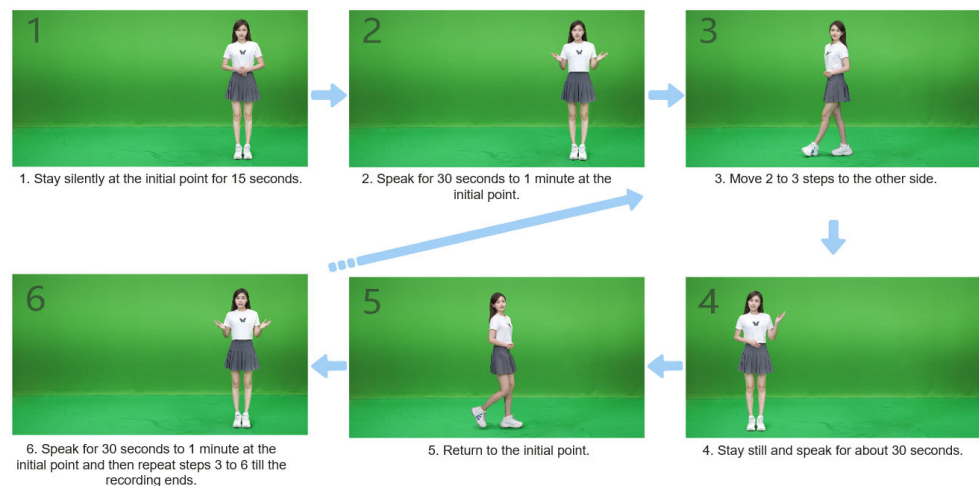
Then, let's shoot a video with natural expression of four to five minutes.

## Requirements for Walking Virtual Avatar Video Shooting

If you need to record the image of a walking virtual avatar, the model should:

1. face the camera (kept still) and look at the lens when walking
2. walk in one direction for up to three steps.

**Figure 1-11** Shooting example



## Requirements for Real-Scene Virtual Avatar Video Shooting

If you want to create a real-scene virtual avatar image, **ensure that the background is static and does not change regularly or significantly.**

Real-scene virtual avatar videos do not need to be cropped. Therefore, green or transparent clothes is allowed.

## Video Submission

See [Table 1-4](#).

**Table 1-4** Video submission requirements

Item	Description
Deliverable	After the shooting is complete, upload a video for training: <ul style="list-style-type: none"><li>• MP4 (recommended)</li><li>• Less than 5 GB</li><li>• Original voice retained</li><li>• Same frame rate for the exported video and the source video when the video is post-processed</li></ul>
Duration	Five to six minutes. Do not clip the video. Ensure that the narration, silence, and gestures of the video are retained in the same video.
Filter	If you need to add filters to the video, check the filter effect and ensure that the video is not distorted, blurred, or shaken. Then you can upload the video for training.
Cropping	Within a specified period of time, the streamer's entire body must be included in the frame, and other unnecessary elements around the portrait, such as the edge of the green screen and shooting devices, must be eliminated.
Naming	Naming rule: <i>Company name_Model name_Shooting time (YYYYMMDD)</i> Example: Huawei Cloud_Yunling_20230925.mp4

## Appendix 1: Check Items

After the shooting is complete, check whether the video meets the requirement of each check item in the table.

**Table 1-5** Check items

Item	Satisfied (Yes/No)
The model keeps the mouth closed when he or she is not speaking.	
There is no significant shadow on the green screen.	
There is no broken or scattered hair on the model's face and head.	
The model remains at the same position throughout the shooting.	
The model does not stare at the teleprompter.	
The video duration is at least five minutes.	
The model does not wear green clothes or clothes with green patterns.	
The model does not wear reflective metal watches, ear nails, or bracelets.	
The model does not wear semi-transparent, transparent, or reflective clothes.	
The model does not wear glasses, sunglasses, or a hat.	
The model is within the frame when making gestures.	
The model keeps the microphone unseen.	
The video does not contain actions with clear meanings, such as thumbs-up sign and number.	
The model acts appropriately without blocking the face.	

## Appendix 2: Guide to Choreography Customization

Due to the complexity of the choreography algorithm, the following requirements are added:

- After the 5-minute video of natural expression is recorded, **keep the camera and model positions unchanged** when recording the video of choreography.
- **Keep the body still** for more than 10 seconds.
- **Putting hands back to the initial position** each time an action is completed, and ensure that the hand movements are consistent, including the positions of two hands (for example, keeping the left hand above the right hand) and finger shapes. Wait for three to four seconds before starting the next action.
- To ensure natural facial expressions of the virtual avatar, the model needs to **speak while acting**.

**Details:**



- **Reference actions:**

**Number:** 1, 2, 3



**Common actions:** greeting, saying goodbye/OK, giving likes, spreading hands leftward/rightward, lifting the left/right hand, and clenching a fist, etc.

**Basic actions:** stretching to the left or right, slightly/fully stretching to both sides, pointing to the upper left or upper right, and spreading forwards with one hand

**Other actions:** You can record any action you need. The number of actions is not limited, as long as the initial positions before and after recording the action are the same.

**Note that the result of choreography depends on the consistency between the initial positions of the hand and body during recording. If the recording result is poor, choreography cannot be performed. Record videos as instructed by the guide. You are advised to record an action twice or three times and select the best one from them.**

- **Reference action examples:**

		
Initial position	Stretching the left hand to the left	Stretching the right hand to the left
		
Waving to say hello	Spreading both hands forward	Number gestures

- **Script examples of choreography:**

When acting, **the model can remain silent or read related text.** According to our experience, **speaking while acting makes the action more natural.**

**Reference process and text:**

Start recording the atomic actions as arranged.

*<Speak without acting.>*



5, 4, 3, 2, 1. *<Count the number without speaking.>*

Give the gesture of the number 1.

*<Return to the silent action after making the gesture of the number 1 with either the left or right hand.>*



5, 4, 3, 2, 1. *<Count the number without speaking.>*  
Give the gesture of the number 2.  
*<Return to the silent action after making the gesture of the number 2 with either the left or right hand.>*



5, 4, 3, 2, 1. *<Count the number without speaking.>*  
Give the gesture of the number 3.  
*<Return to the silent action after making the gesture of the number 3 with either the left or right hand.>*



5, 4, 3, 2, 1. *<Count the number without speaking.>*

Please make a gesture of greeting or saying goodbye.

*<Return to the silent action after making the gesture of greeting with either the left or right hand.>*

The model can perform different directional actions, as long as their hands can be put back to the initial position between each action and wait for four to five seconds before performing the next action.



#### Other actions:

- Let's make an *<OK gesture>*.
- Let's make a gesture of *<giving likes>*.
- Let's make a gesture of *<clenching a fist>*.
- Let's take a look at the right screen. *<Point to the right with the right hand and then perform the silent action>*.
- Let's take a look at the left screen. *<Point to the left with the left hand and then perform the silent action>*.
- Let's review. *<Point forwards with both hands and then perform the silent action>*.
- As mentioned above: *<Point forwards slightly with both hands and then perform the silent action>*.
- Let's go on. *<Point forwards with the right hand and then perform the silent action>*.
- That's all for today's choreography. *<Silence>*

**The text in black is the recommended text to read. Text in <> indicates actions. The interval between two actions is three to four seconds.**

### Appendix 3: Script Examples

You can select any of the following examples to read. Errors and stuttering do not affect the video recording. **The same content can be repeated twice at most.** These examples are for reference only. You are advised to **read a piece of script that you are familiar with or improvise without script.** A natural speech can improve the virtual avatar performance.

- [Script 1: Introduction to Huawei Cloud MetaStudio](#)

- [Script 2: Virtual Avatar Video Production Guide](#)
- [Script 3: A Deep Dive into West Lake](#)

# 2 Script Examples

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## 2.1 Script 1: Introduction to Huawei Cloud MetaStudio

Based on the Pangu virtual human model, Huawei Cloud MetaStudio, a digital content production pipeline, provides a one-stop and full-process virtual avatar livestreaming service. With efficient training and inference, the service reshapes live commerce.

**Virtual avatar model generation and control:** A virtual avatar model can be generated from just one photo or a three- to five-minute video, which is three times more efficient than the industry average. After the virtual avatar model is generated, the model control and inference service can create lifelike voices, facial expressions, lip movements, and body languages, with a lip sync accuracy higher than 95%.

**Intelligent generation of livestreaming script:** Based on the pre-training of 100,000 pieces of high-quality livestreaming script, professional script is automatically generated to control virtual avatars so that they can accurately and fluently introduce products.

**Intelligent interactive Q&A:** Virtual streamers powered by the Pangu foundation model can interact with viewers during livestreams, which helps convert more viewers into buyers.

The virtual avatar livestreaming service built on Huawei Cloud MetaStudio has been widely used across industries. AI helps virtual avatars become professional streamers. Here are some industry cases:

1. Huawei Cloud works with the Accessibility Research Association to build virtual avatars for hearing-impaired people to make their voice heard and enjoy better life powered by advanced technologies. The virtual avatar of Shi Xiaohui, a hearing-impaired painter, tells the story behind her works to make her voice heard by more people.
2. 491 million people in rural areas in China engage in the production of agricultural products, and there are more than 100,000 rural industry segments with local characteristics. Livestreaming makes these local products known by more people and is unleashing huge market potential for rural areas. However, livestreaming is still too new for many rural citizens, who are

camera-shy and need to spend a long time practicing what they will say during livestreams. In addition, it is time- and labor-consuming to set up livestreaming rooms near their houses. This is exactly where virtual avatars come into play. Unlike human streamers, virtual avatars on the cloud can stream for a whole day anytime and anywhere, while farmers can mind their own work. Professional messages are automatically generated and fluently presented by virtual streamers to sell agricultural products to more areas worldwide.

3. Wondershare joins hands with Huawei Cloud to develop Wondershare Virbo, an AI video app for international livestreaming by virtual avatars. Based on Huawei Cloud MetaStudio, the app supports end-to-end AIGC creation from scripting, virtual avatar presentation, to automatic video generation. This solution solves many pain points of marketing videos outside China, such as the unavailability of professional promoters, difficult multilingual adaptation, long production period and the consequent high video shooting and livestreaming costs.
4. To stay relevant in the snack industry, Xu Fuji embraces new online marketing techniques. Xu Fuji leverages Huawei Cloud MetaStudio to build a virtual assistant, which can stream 24 hours a day anytime and anywhere for over 3,500 suppliers and 300,000 store owners nationwide. Virtual streamers focus on consumers' preference and enable immersive scenario-specific marketing to bring brands closer to their consumers.

Finally, I'd like to introduce Sara, a virtual co-host growing on Huawei Cloud MetaStudio. Virtual humans are qualified for many roles, such as host, idol, live commerce streamer, lecturer, and financial customer service personnel. Traditionally, it takes several months to produce such a 3D realistic virtual human. The multi-modal intelligent modeling and cloud rendering functions of Huawei Cloud MetaStudio shorten the production period to just one week.

## 2.2 Script 2: Virtual Avatar Video Production Guide

Hello, everyone. Today, I will show you how to create a virtual avatar image and voice. Now let's take a look at the shooting requirements of virtual avatar image creation.

First, let's check our clothes before shooting. For green-screen shooting, do not wear green or transparent clothes, or clothes with dense stripes. Ensure that there is no scattered hair on the face. Do not wear glasses or jewelry such as necklaces, earrings, and watches, because silver or mirror jewelry may cause reflection that affects the final background segmentation.

Second, you need to shoot a five-minute 4K green-screen video. Within 15 to 20 seconds at the beginning of the video, you need to find a comfortable posture and keep silent, with your mouth closed. After the silent period ends, you can start speaking. You can read the script example provided by Huawei, or improvise without looking at the teleprompter. Generally, improvising is a better option for video shooting. When speaking, you can move your hands naturally, but actions with clear meanings are not allowed, such as number, waving, and holding fists. Significant gestures are also not allowed, such as moving your hands over your shoulders or blocking your face with your hands. After each action is complete, you need to put your hands back to the initial position before performing the next action. When speaking, avoid shaking or turning significantly. During the

recording, focus on the camera. If you stutter or forget words, do not stop and just continue the recording.

After completing the four- to five- minute speech, upload the entire video to MetaStudio. You can add filters and adjust the color of the video before uploading it. However, do not change the video duration.

Well, these are the precautions for video shooting. If the photographer has not stopped recording, you can read the script again or read the next one.

## 2.3 Script 3: A Deep Dive into West Lake

West Lake of Hangzhou, boasting dainty landscape of lakes and mountains as well as many places of historic interests, is considered A Paradise on Earth. As part of the World Heritage List, the West Lake not only has natural beauty, but also is a symbol of the Chinese garden art and historical culture.

### **Dainty landscape of lakes and mountains**

The beauty of the West Lake lies in the harmonious co-existence of mountains and waters. The lake is rippling and the mountains are mysterious, with different sceneries in four seasons. In spring, peach blossoms and willows thrive. In summer, the fragrance of lotus flowers is everywhere and lotus leaves are so dense that they look like piling up to the sky. In autumn, the peaceful lake reflects the soft moonlight and the fragrance of cinnamon flowers is everywhere. In winter, bridges covered by snow give a different kind of feeling.

### **Long history**

The West Lake has such a long history that it was recognized as one of the ten most beautiful places in China as early as in the Southern Song Dynasty. The scenic spots are natural and historical, such as Leifeng Pagoda, Baochu Pagoda, Yuewang Temple, and Lingyin Temple. These monuments have witnessed Hangzhou's long history and diverse culture.

### **Culture and art**

The West Lake is not only a scenic spot of natural beauty, but also of magnificent culture and art. It inspired many famous poets, such as Su Dongpo and Bai Juyi, who created literary works that would be remembered by the future generations. In particular, the poem of Su Dongpo perfectly describes the charm of the West Lake.

### **Garden buildings**

The garden buildings of the West Lake are also amazing. Sudi and Baidi are two major causeways of the West Lake. They not only separate the lake, but also connect the small islands in the lake and the scenic spots along the lake. In spring, peach blossoms and willows make the causeway a must-go place. In addition, there are many pavilions around the West Lake, such as the Huxin Pavilion and Wanghu Pavilion, where you can enjoy a perfect view of the lake.

### **Modernized scenic spot**

The West Lake has also been better protected and developed in the modern times. Public facilities, such as walkways and bicycle lanes around the lake, make the



travel easier and more comfortable. The intelligent lighting project also offers a brand-new visual experience in the evening.

### **Positive impacts**

The West Lake is not only a symbol of Hangzhou, but also an important part of the global culture. It has huge impact on many aspects.

- The West Lake serves as a bridge that connects the Chinese culture with other cultures. International cultural festivals, art exhibitions, and cultural exchange activities are held at the West Lake, where artists, scholars, and tourists around the world gather together to get inspired from each other.
- The West Lake plays a significant role in the tourism and economy of Hangzhou and the whole Zhejiang province. Hotels, restaurants, and transportation benefit from the arrival of tourists, and a large number of jobs have been created for local communities.
- The beautiful scenery and culture of the West Lake make Hangzhou more attractive, not only to tourists, but also to businesses and investors worldwide.

### **Protection and inheritance**

Protecting the natural beauty and cultural heritage of the West Lake is one of the priorities of Hangzhou.

- The government has taken a series of measures, including limiting industrial emissions, controlling water pollution, and restoring and protecting wetlands.
- Historic buildings, monuments, and gardens around the West Lake have been renewed and protected.
- Laws and regulations have been formulated for the protected areas of the West Lake to crack down on activities that may damage the environment and cultural heritage.
- People are encouraged to contribute to the protection of the West Lake. The government has made effort to raise the public's awareness of environmental protection and cultural inheritance.
- Technologies such as the geographic information system (GIS) and drone have been used to monitor and analyze the natural environment and cultural heritage of the West Lake in real time.
- Educational and promotional activities enable more people to understand the value of the West Lake. In doing so, the young generation becomes more interested in traditional culture and its protection.

### **Summary**

West Lake of Hangzhou, with its unique natural scenery, brilliant culture, and perfect convergence of the ancient and modern worlds, has become a treasure of the global culture. A trip to the West Lake not only means a visual feast, but also a good chance to dive deeper into the Chinese civilization. The doubled effort of protection and development will make the West Lake a better place, attracting more tourists from all over the world with its unique beauty.