



## AI Avatar Filming Tips 数字人形象拍摄技巧

### Camera Quality 相机质量:

Use professional cameras for the best results. Mobile phones or webcams with HD resolution can also work  
使用专业相机可获得最佳效果。高清 (1080p) 分辨率的手机或网络摄像头也可以使用。

### Environment 环境:

Choose a space with good lighting.  
选择光线充足的空间。

### Video Length 视频时长:

Record at least one 45s-60s long video with face facing the camera  
录制至少一段 45 秒至 60 秒的视频，面部需正对镜头。

### Resolution 像素:

1080p for higher avatar quality. 4K at 60FPS is even better.  
1080p 可获得更高的头像质量。4K 60FPS 效果更佳。

### Continuous Shot 连拍:

Do not edit or cut the footage in the middle. It should be a continuous shot.  
请勿在视频中间进行剪辑或剪切。视频应为连拍。

### Posture & Gesture 身体姿势:

Stand still and avoid sudden head motions or unnatural body movements. Be natural, confident and calm.  
保持站立姿势，避免头部突然晃动或身体做出不自然的动作。保持自然、自信和冷静。

### Eye Contact 眼神交流:

Maintain direct eye contact with the camera at all times. Avoid looking around or up and down during the recording.  
始终与镜头保持眼神交流。录制过程中避免四处张望或上下移动视线。

### Hand Movements 手部动作:

Keep hand movements below chest level and avoid raising them above your chest.  
手部动作应保持在胸部以下，避免举过头顶。

### Pauses:

Take pauses with your lips closed between sentences while maintaining eye contact with the camera. Start the video with a 2-3 second pause. Insert a 1-2 second pause in between.  
停顿时，请闭上嘴唇，保持与镜头的眼神交流，并在每句话之间稍作停顿。视频开始时停顿 2-3 秒，每句话之间再停顿 1-2 秒。



## 1. 数字人克隆规范标准

### Digital Human Cloning Standards

数字人克隆规范标准包括相机拍摄、人物构图、灯光调整等要求。相机焦距推荐 35mm-50mm，光圈大于 F4.0，ISO 600-1000，快门速度大于帧速率。人物离绿幕大于 1 米，避免绿物品。拍摄时关闭 LUT/滤镜，使用 4K 30p。人物动作幅度小，避免遮挡嘴型。灯光需均匀照亮人物。后期剪映可调整美颜、美体参数，如匀肤、瘦脸等，但避免过度调整。

The digital human cloning standard includes requirements for camera shooting, subject composition, and lighting adjustment.

Recommended camera focal length is 35mm-50mm, aperture larger than F4.0, ISO 600-1000, and shutter speed greater than the frame rate.

The subject should be at least 1 meter away from the green screen and avoid green objects.

When shooting, turn off LUT/filters and use 4K 30p.

Subject motion should be limited.

Avoid blocking the mouth.

Lighting should evenly illuminate the subject.

In post-production editing, beautification and body enhancement parameters can be adjusted, such as skin smoothing and face slimming, but excessive adjustments should be avoided.

## 2. 相机拍摄注意事项

### Camera Shooting Notes

镜头焦距设置：35mm-50mm 区间（根据空间调整，空间足够推荐使用 50mm）

1. 准镜头（50mm）：视角接近人眼视角，不会产生明显的透视失真，人物形象较为真实。适合拍摄半身人像或街头人像，特别是在光线不足的环境中使用较大的光圈值。人物安全范围值（35mm-85mm）

2. 镜头高度对准镜头，遇到人物微胖的话镜头可以俯视一点点，以免双下巴出现。

Camera focal length settings: 35mm-50mm range (adjust according to space; if space permits, 50mm is recommended).

1. Standard lens (50mm): Angle of view close to human eye perspective, minimizing obvious perspective distortion and giving a more realistic subject appearance. Suitable for shooting half-body portraits or street portraits, especially in low-light conditions with a larger aperture. Safe focal range for subjects is 35mm-85mm.

2. Align the lens height with the subject's face. If the subject is slightly chubby, the camera can be tilted slightly downward to avoid double chin appearance.

## 3. 人物构图拍摄注意规范

### Composition Guidelines

人物拍摄时相机内下边沿不要截取人体关节部位。



When composing subjects, avoid cropping through body joints at the bottom edge of the frame.

## 4. 人物离绿幕距离

### Distance from Green Screen

人物靠近绿幕距离建议大于 1 米距离且前方及两侧尽量不要放大面积绿色反光物品，太靠近绿幕衣服的边缘会映射绿色，人物被抠图的时候就显得很假。

It is recommended that the subject keep a distance greater than 1 meter from the green screen and avoid placing large green reflective objects in front or on either side. If clothing edges are too close to the green screen, green spill may occur, making the subject look unrealistic during chroma keying.

## 5. 相机参数调整

### Camera Settings

1. 光圈值：F4 或 F4.5（数字人不需要景深，以免衣服边缘头发、背景等虚化，所以光圈值最好大于 4.0）注意：光圈数值越小光圈越大，进光量越多照片视频越亮，人物背景越虚化。如拍摄风景一般设置 4.5 以上，拍摄特写可设置 F2.8、F3.2 等。
2. ISO 值：由于室内拍摄灯光光线有限，光圈值也调小了进光量少了，默认 ISO 是 100，在人物面部还黑暗时，可以往上活动调数值。办公室拍摄正常在 600-1000。注意：ISO 越高照片视频越亮，但画质也会出现噪点、像素小颗粒。
3. 快门速度：推荐设置帧速率 50p 画面（后期输出 50p、30p、24p 都可以），所以快门速度要大于 50，一般设置在 100 或者 125。有高需求拍摄 100p 的时候，就不需要特意麻烦去调快门速度了。注意：快门速度小于帧速率值画面会出现掉帧卡顿现象。
4. LUT/滤镜：LUT 滤镜等关闭掉。相机拍摄高清视频照片时，尽量前期不要带有 LUT/滤镜，拍摄原片即可。带有 LUT/滤镜等会破坏绿幕背景影响后期抠图等。可在后期剪映适当调整人物（磨皮、瘦脸、美白等）。
5. 画面参数：4K 30p
  1. Aperture: F4 or F4.5 (Digital humans do not require shallow depth of field to avoid blurring clothing edges, hair, and background—so aperture should preferably be greater than 4.0). Note: Lower f-number = larger aperture; more light enters and images/videos appear brighter with more background blur. For landscapes, set above F4.5; for close-ups, F2.8 or F3.2 can be used.
  2. ISO: Because indoor lighting is limited and aperture is smaller, less light enters. Default ISO is 100; if the subject's face is still dark, raise the ISO. Normal office shooting ISO is 600-1000. Note: Higher ISO brightens the image but increases noise and grain.
  3. Shutter speed: Recommended frame rate is 50p (post-production can output 50p, 30p, or 24p). Therefore shutter speed should be greater than 50; generally set at 100 or 125. If shooting at 100p, there is no need to



adjust shutter speed further. Note: Shutter speed lower than the frame rate may cause dropped frames or stuttering.

4. LUT/Filters: Turn off LUTs/filters during shooting. For high-definition video/photos, capture the original footage without LUT/filters, as filters may interfere with green screen keying. Beautification (skin smoothing, face slimming, whitening, etc.) can be applied in post-production.
5. Resolution: 4K 30p

## 6. 数字人拍摄人物规范标准

### Subject Requirements for Digital Human Capture

人物装配饰品不要带有绿色（前景物品不要和绿幕同色系）：

1. 戴眼镜的人物镜片大小会影响人物头左右扭动的幅度，头左右摇摆的太大，眼镜镜框会穿透到绿幕，对后期抠像不友好。
2. 眼镜镜片反光，对灯光位置摆放要求较高。
3. 人物衣物、首饰以及桌上商品不要放绿色物品，后期抠图连带一起都扣掉了。

Subjects should not wear green accessories (foreground objects should not be the same color as the green screen):

1. Large eyeglass lenses affect the range of head rotation; excessive left-right head movement may cause the frames to penetrate the green screen, which is unfavorable for keying.
2. Reflections on eyeglass lenses require precise lighting placement.
3. Clothing, jewelry, and table items should not include green objects, as they may be keyed out during post-production.

## 7. 说话台词规范要求

### Speech / Script Guidelines

人物念台词时，可以随便随机一些，可以自我介绍、介绍产品等，可以念 123456789（读 123456789 时可以打乱节奏，如：123 45678 32 45 6789）不要有节奏行读 123456789，这样人体肢体语言会跟着自己语言节奏做出的动作就很僵硬有节奏。

When speaking lines, the subject can speak casually—self-introductions, product introductions, etc. They may read sequences like 123456789 (read in a varied rhythm such as 123 45678 32 45 6789). Avoid reading 123456789 in strict rhythm, as this may cause rigid body language motions.



## 8. 人物动作拍摄规范要求

### Movement Guidelines

1. 头部动作规范：人物头部尽量上下松动、左右晃动。（注意不要大幅度的晃动，嘴巴要保持全面，相机在中心情况下，上下左右幅度控制在 30 度内）
2. 面部动作规范：说话时眉毛可以上挑、眨眨眼，抿嘴微笑，给数字人增加丰富的面部表情。
3. 肢体语言规范：
  - (1) 手势尽量不要出境（后期不做人物满屏效果时，手势等会被屏幕截取）
  - (2) 手势动作不要挡住嘴型，数字人拍摄要求最基础也是严格的注意项。
4. 站立拍摄规范：人物可以适当的小幅度晃动，可以向前向后挪碎步（注意：前后左右幅度太大，定向拍摄的人物容易漏出镜头外）
5. 发型造型规范：头发边缘尽量不要漏出凌乱毛发。
  1. Head movement: Subjects should move their heads slightly up and down, and slightly side to side. (Avoid large movements. Keep the mouth fully in frame; within  $\pm 30^\circ$  in all directions when the camera is centered.)
  2. Facial movement: While speaking, eyebrows may raise, blink, or smile slightly to add expressive facial detail.
  3. Body language:
    - 1) Avoid large gestures extending out of frame (unless full-screen subject effect is intended; gestures may be cut off).
    - 2) Gestures should not block the mouth; this is a fundamental and strict requirement.
  4. Standing movement: Subjects may make small body motions or tiny steps forward/backward (but avoid excessive movement that causes them to exit the frame).
  5. Hair/appearance: Avoid stray hair visible at edges.

## 9. 灯光位置摆放调整

### Lighting Setup

主灯照亮人物，侧光灯 1 照亮人物另外一面，侧光灯 2 照亮人物衣物边缘。顶灯一定要大，如碰到人物额头比较油，有高光。可以把人物尽量往前移动。注意：如碰到面部比较油或者亮光较强时，可再后期剪映调整画面-美颜美体-匀肤参数值。



Key light should illuminate the subject. Side light 1 should illuminate one side of the subject; side light 2 should illuminate the clothing edges. The top light should be strong. If the subject's forehead is shiny, causing highlights, the subject can be placed slightly forward. If the face is oily or highlights are strong, adjust skin smoothing and related parameters in post-production editing.

## 10. 人物克隆之前—剪映美化（重要）

### Before Cloning — CapCut Beautification (Important)

1. 可调整参数-画面-美颜美体属性：

- 1) 美颜（匀肤、亮眼）
- 2) 美型（瘦脸微调、窄脸、下颌骨、颧骨）
- 3) 美体（磨皮、美白）

注意：①不要在美颜里面调整磨皮、美白，不然手肤不会进入该参数，美体的话有皮肤的地方此参数都会生效。

②上面第二点瘦脸调的太厉害，可适当调整瘦身和肩膀。

2. 如拍摄画面总体偏暗可调整参数：调节-基础

(1) 亮度（可微调 1-2 数值，根据原片实际情况再新增）

注意：剪映参数根据原片情况随机调整，没有固定数值，例如：脸颊较大，可多调一下瘦脸和下颌骨。

1. Adjustable parameters — Editing → Beautification & Body:

- 1) Beautification (skin smoothing, bright eyes)
- 2) Facial shaping (slight face slimming, narrow face, jawline, cheekbones)
- 3) Body shaping (skin retouch, whitening)

Note: (i) Do not apply skin retouching/whitening in the Beautification section, otherwise hand/arm skin may not be affected. Use Body shaping so all skin areas are included. (ii) If face slimming is too strong, adjust body and shoulder parameters accordingly.

2. If the overall footage is too dark, adjust: Adjustments → Basic → Brightness (increase slightly by 1-2 based on the original footage).

Note: There are no fixed values. Adjust according to the original footage. For example, if cheeks appear large, increase face slimming and jawline adjustments.