Blender motion capture plug-in documentation

Blender plug-in enablement process.

```
┌─────────────┐                    ┌─────────────┐
│  Installi   │                    │  Importin   │
│  ng plug-   │ ─────────────────▶ │  g Models   │
│  ins        │                    │             │
└─────────────┘                    └─────────────┘
                                          │
                                          ▼
┌─────────────┐                    ┌─────────────┐
│ Select the  │                    │ Open        │
│ drive       │ ◀───────────────── │ VDMocapStudio│
│ object and  │                    │ Broadcast   │
│ click       │                    │             │
│ Connections │                    │             │
└─────────────┘                    └─────────────┘
```
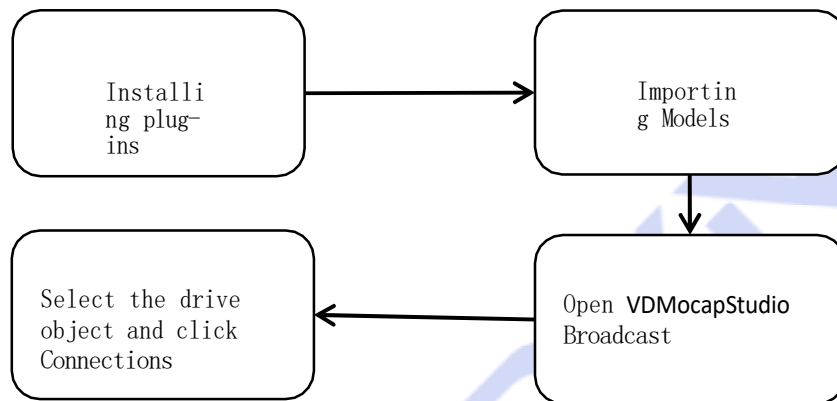
A, Blender motion capture plug-in installation

1, download the plug-in, remember the path where the plug-in file is located.
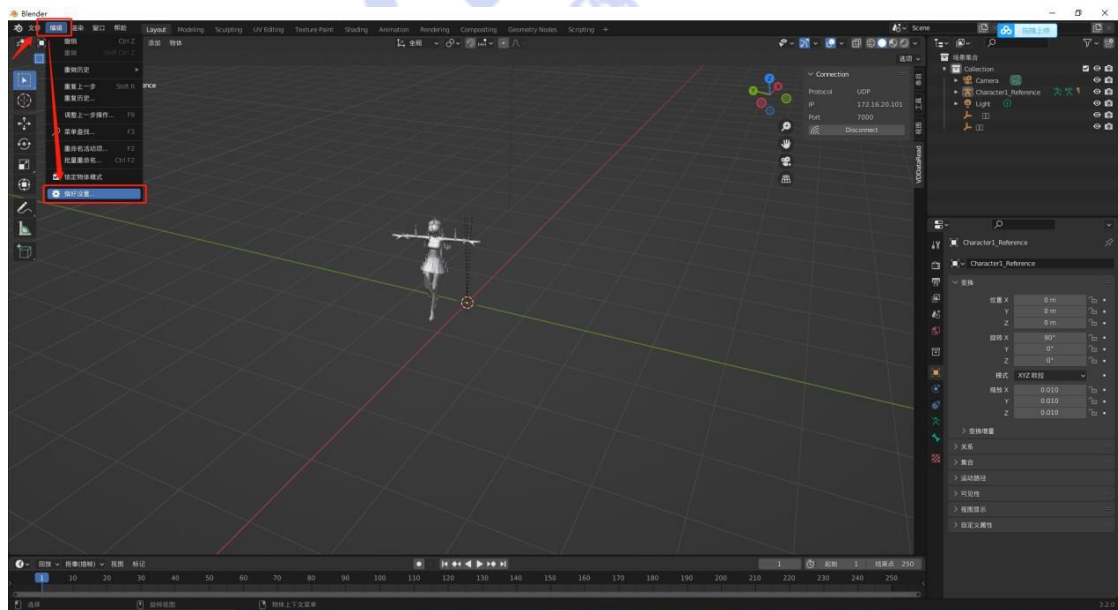2. Open **blender**, click Edit, and select Preferences. As shown in Figure **1-1**

Figure 1-1

3, enter the preferences interface, select the plug-in, click to install the plug-in. As shown in Figure **1-2**
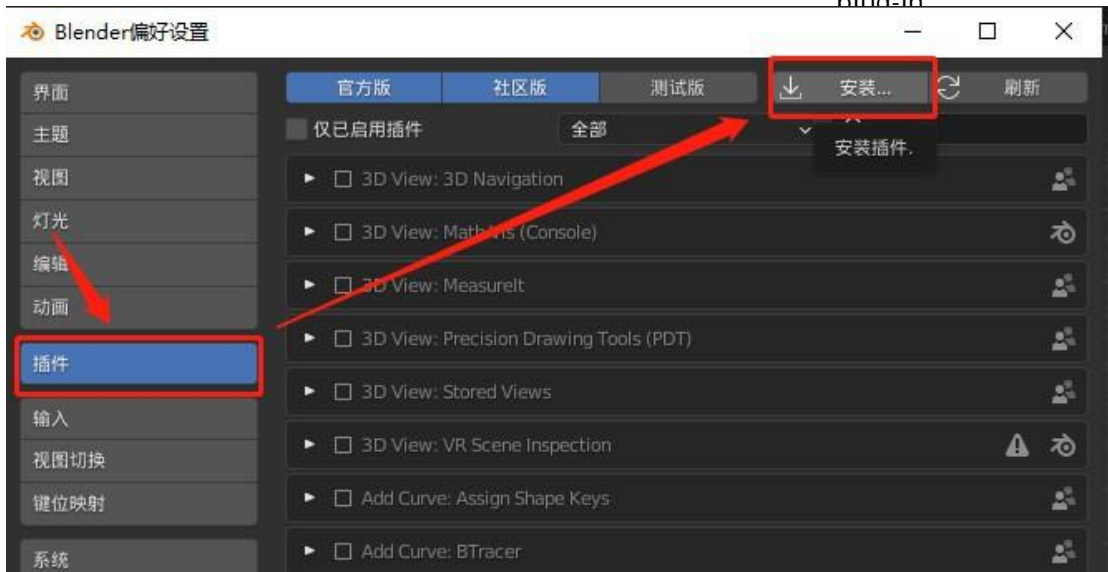
Figure 1-2

4, from the left column into the path where the plug-in files, select the zip file named VirdynMocap, click install plug-in. As shown in the figure
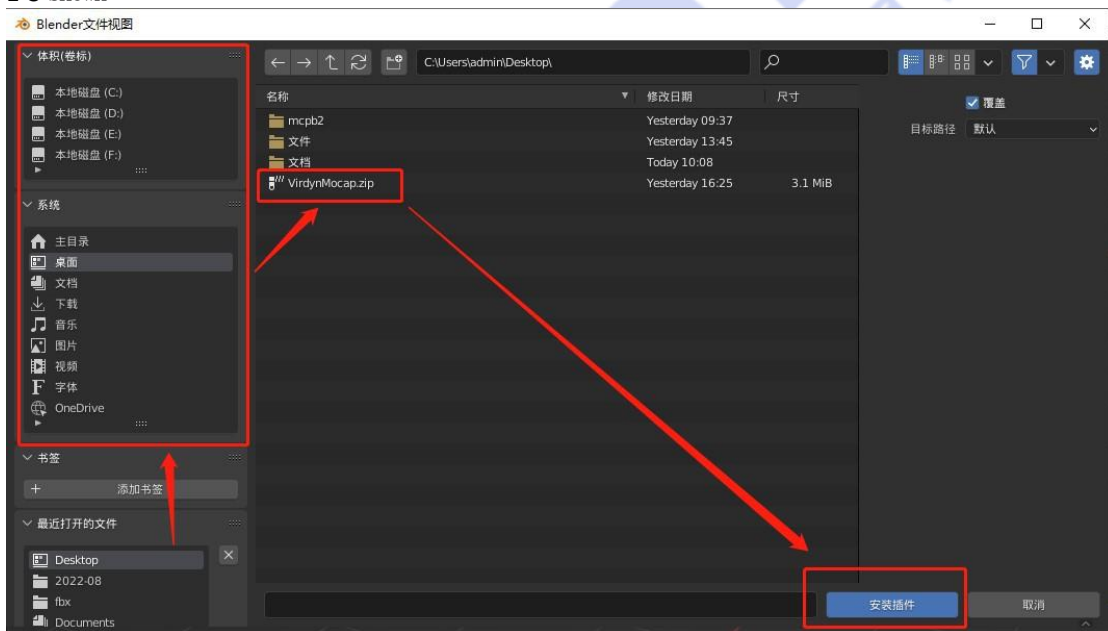1-3 shown

Figure 1-3

5, blender will jump to the plug-in check interface, click the box in the upper left corner to check, plug-in enabled successfully. As Figure 1-4

Figure 1-4

II. **Blender** model import

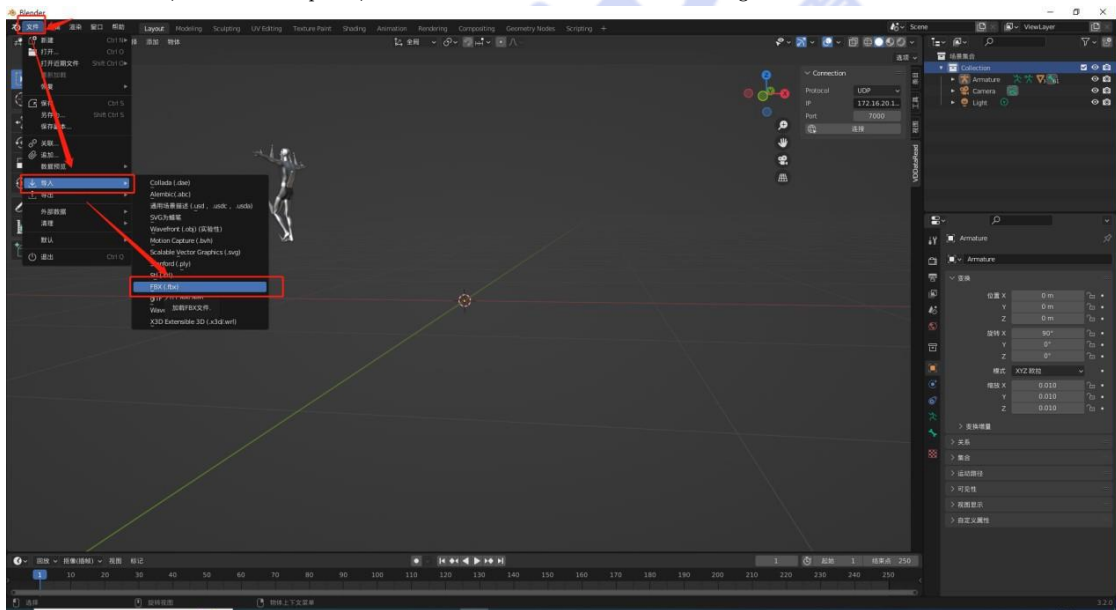**1.** Click File, select Import, and choose fbx file. As in Figure 2-1

Figure 2-1

2. Select the file path in the left column, click the fbx file you want to import, and check the automatic skeleton coordinate system. The model skeleton needs to refer to the standard (see note for details). Click "Import FBX". As in Figure 2-2
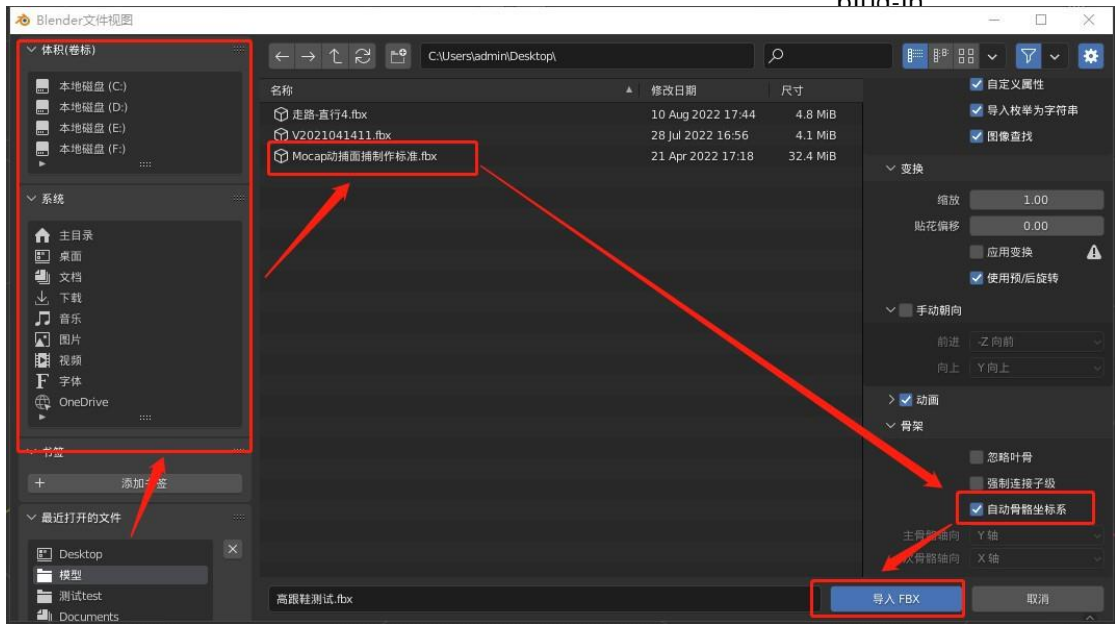
Figure 2-2

3、After importing the model, select the model skin and press "H" to hide it to expose the model skeleton. Select the skeleton and enter editing mode. And refer to the "Mocap Action Capture Face Capture Production Standard.fbx", modify the properties of the skeleton so that the skeleton remains vertical or horizontal, and the orientation and twist (roll) angle are the same as the "Mocap Standard.fbx". As shown in Figure 2-3, Figure 2-4
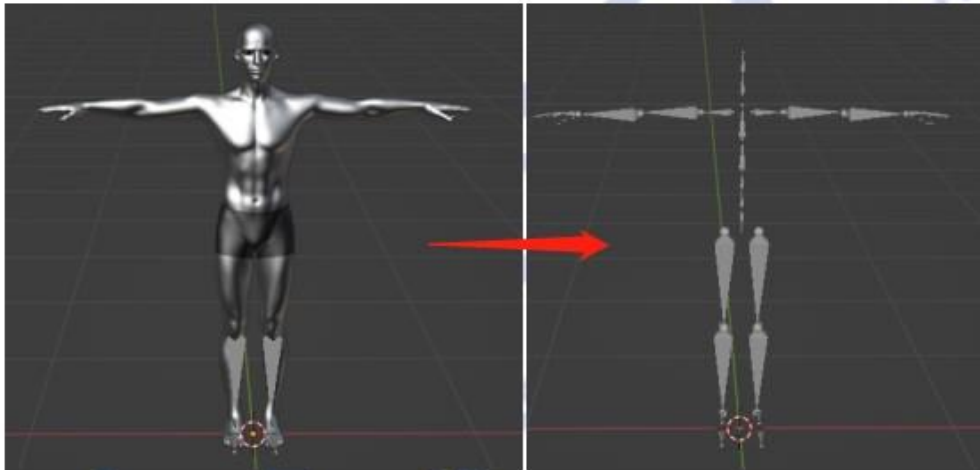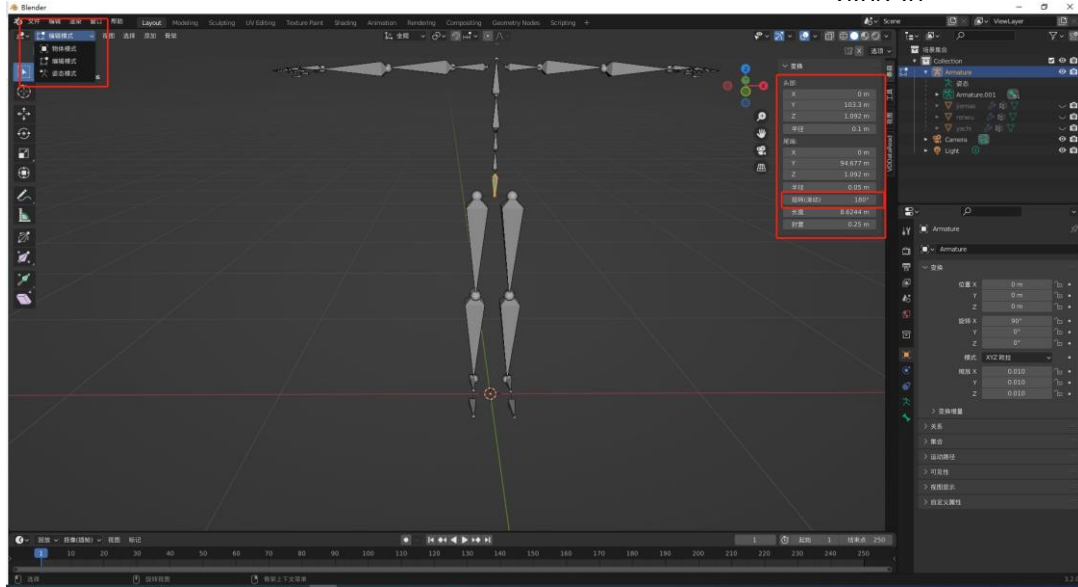

Figure 2-3

Figure 2-4

Third, the use of **Blender** motion capture plug-in

1, the plug-in successfully checked, click the small arrow on the sidebar, call out the plug-in menu, such as Figure 3-1, 3-2
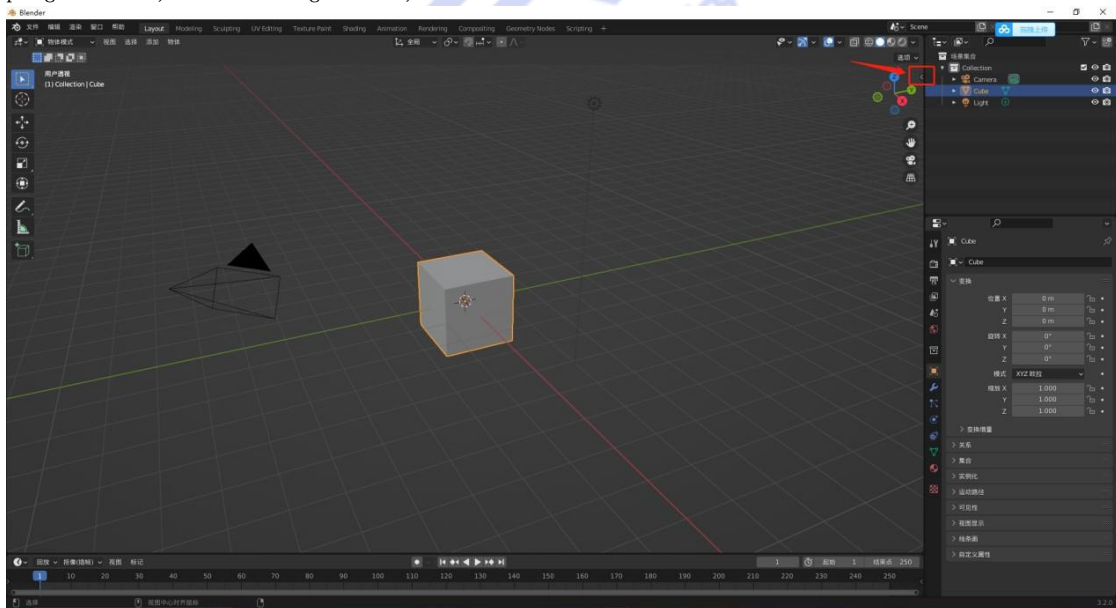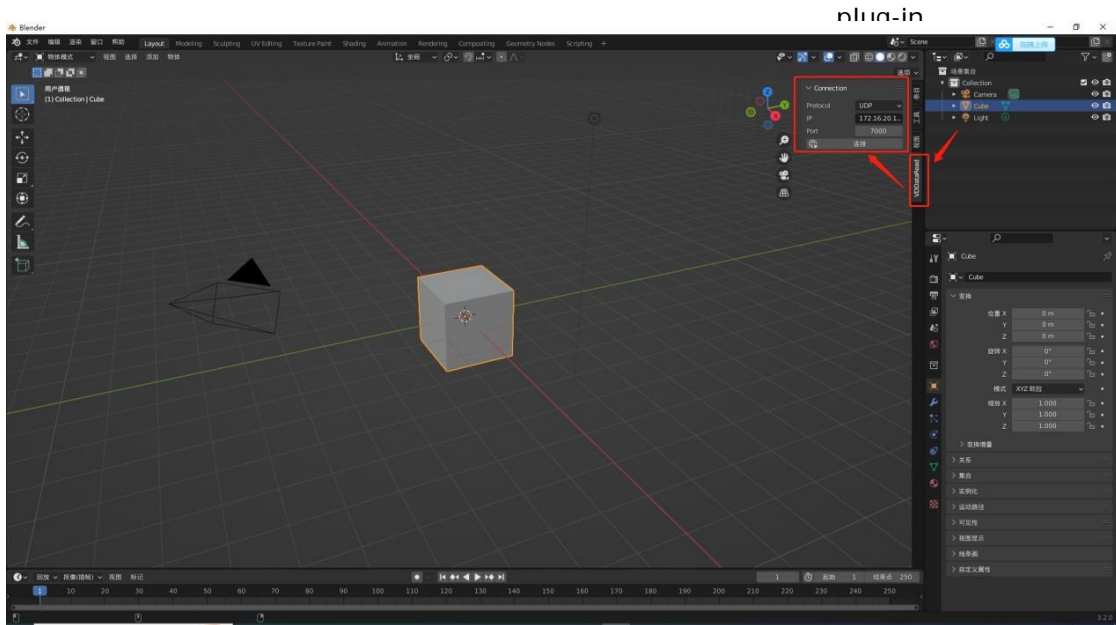

Figure 3-1

Figure 3-2

2. Click the object you want to drive, the type of the object must be "ARMATURE". Turn on the broadcast option of **VDMocapStudio**
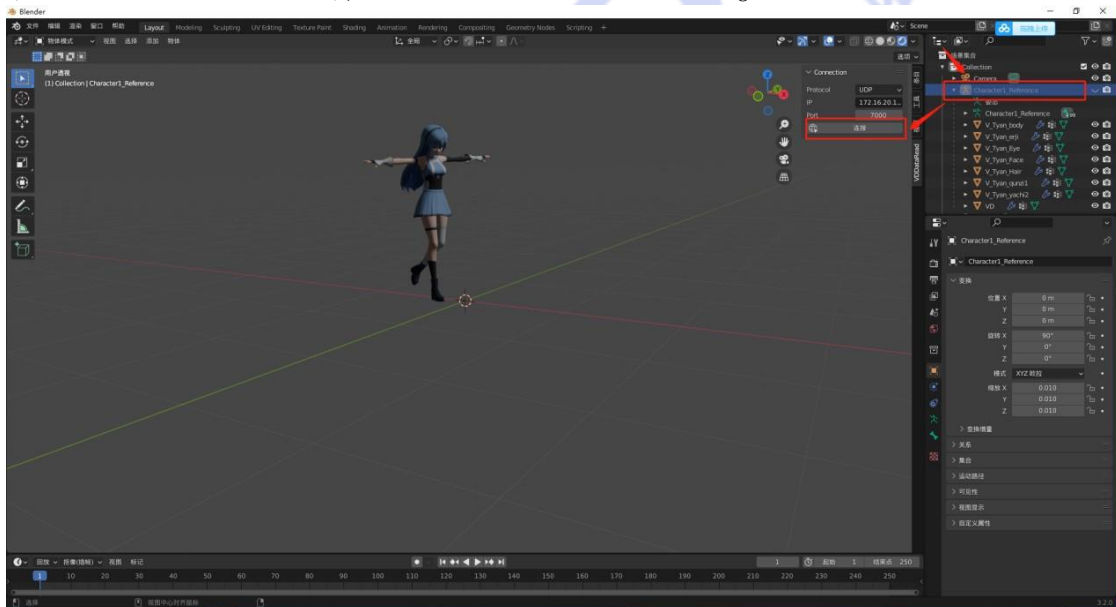(see Section 4 for details), click Connect. As shown in Figure 3-3

Figure 3-3（**IP** and port are default values,
do not modify unless necessary.）

IV. Setting of **VDMocapStudio**

1、Import the motion capture data file: Enter the editing interface, click "+" at the bottom left to add files according to the file path. Double-click the motion capture data file to play. As shown in Figure 4-1
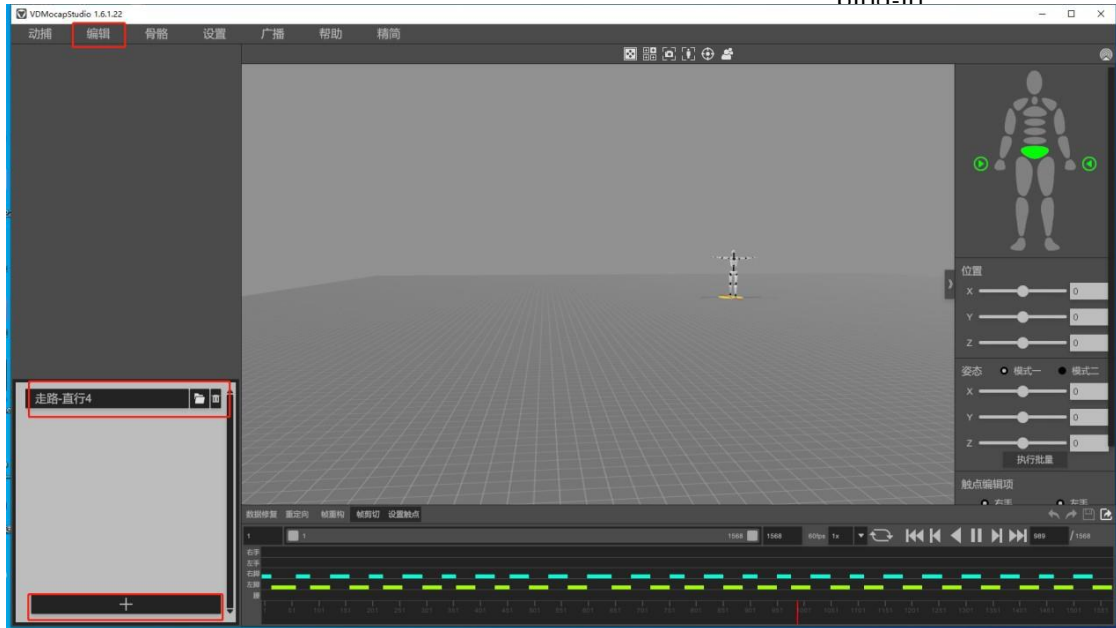
Figure 4-1

2、Open broadcast

Go to the Broadcast screen and click on Enable Broadcast. Then click Connect on **blender** to
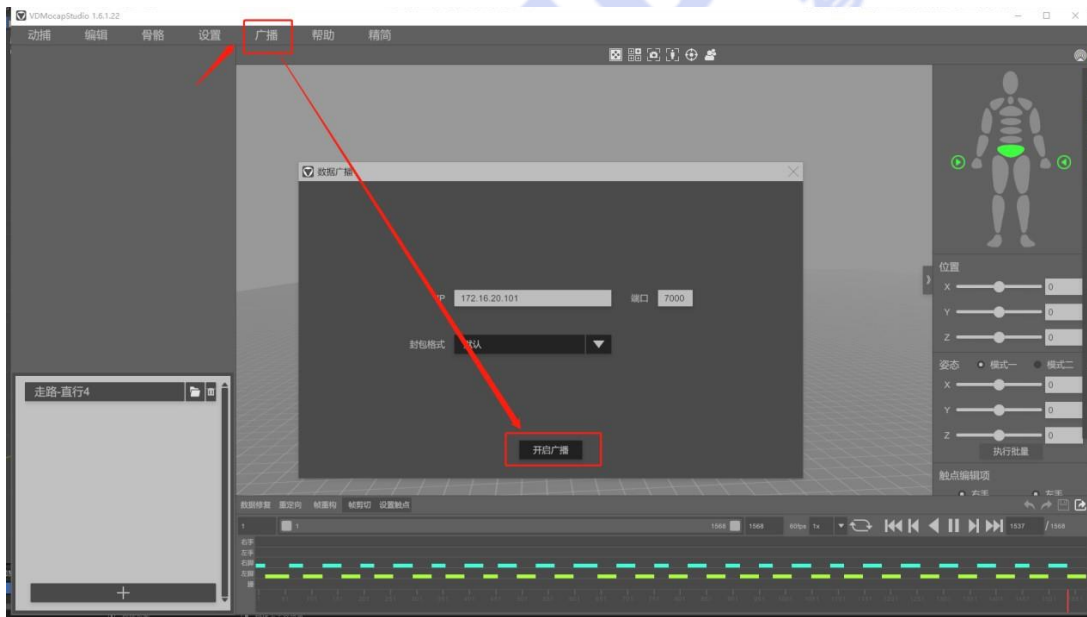enable motion capture data dissemination. As shown in the figure
4-2

Figure 4-2 (IP and port are default values,
do not modify unless necessary.)

Remark.

1. Bone name criteria.

The plug-in supports two bone name standards, the first set **has 61 bone nodes** and the second set has **53** bone nodes. Make sure the skeleton node names of the model are the same when making the model, otherwise the model will not be driven. For details, please refer to "Virtual Dynamics Model Specification".