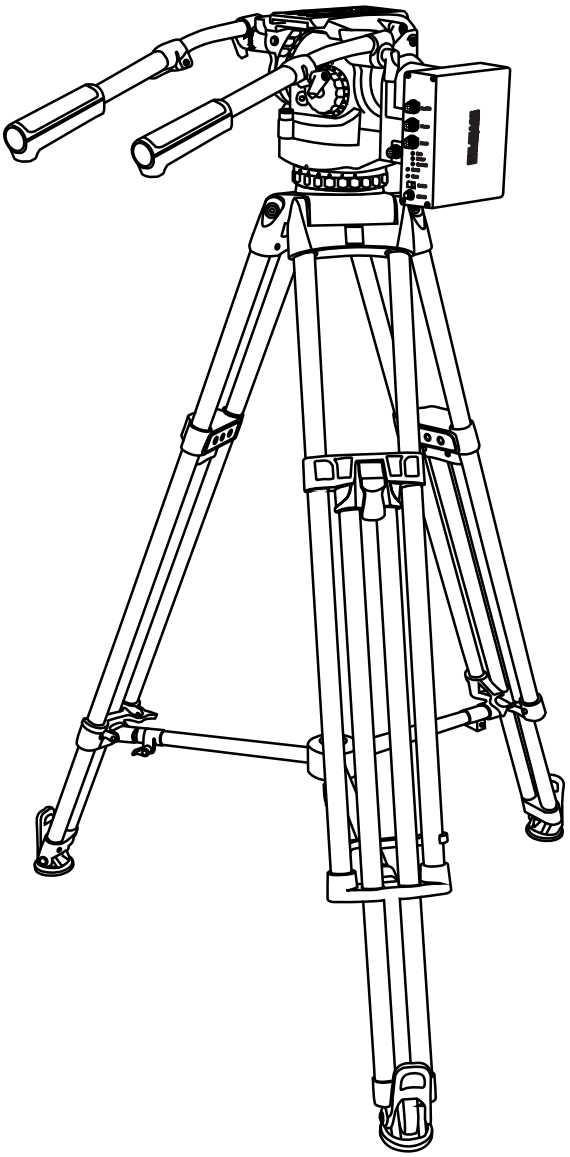
E-IMAGE

EG25XR-PRO - Quick Start Guide

Virtual Tracking System with Tripod



Instructions to Setup and Connect the Data Box

1. Mounting the Data Box to the Tripod Head

- Attach the data box to the tripod head using the V-mount adapter. Slide the data box into the adapter until you hear a **click**, indicating it is securely in place.
- Verify the attachment by gently lifting the data box. If it does not move, it is properly mounted and locked.

2. Connecting the Encoder Cable to the Data Box

- Locate the **pan/tilt** port on the data box.
- Connect the encoder cable from the tripod head to this port. Ensure the connection is secure.

3. Connecting the Focus and Zoom Encoders

- Plug the focus and zoom encoders into their respective ports on the data box.

4. Connecting the Data Box to the Local Network

- Plug the Ethernet cable from the LAN port of the data box to the network switch or router on your local network.

How to Plug in a Sync Generator to the EG25XR Data Box

Connecting a **sync generator** to a **the EG25XR** typically involves synchronizing the timing signals to ensure proper operation between the devices. Follow these steps:

1. Check Compatibility
- **Confirm connector types**: Ensure both devices use compatible ports, such as BNC connectors for video sync or specialized cables for other sync signals.

2. Prepare Your Equipment
- Power off both devices before connecting to avoid accidental damage.
- Gather the necessary cables:
- **BNC Cable**: If the sync generator uses BNC connectors for synchronization it should work with the EG25XR.

3. Locate the Sync Ports
- On the **sync generator**: Find the **sync output** port (often labeled as **Sync Out**, **Blackburst Out**, or **Tri-Level Out**).
- On the **encoded tripod**: Locate the **sync input** port, often labeled as **Sync In** or something similar.

4. Connect the Devices
- Use the appropriate cable to connect the **Sync Out** port of the sync generator to the **Genlock** port on the EG25XR data box.

5. Power On and Configure
- Power on the sync generator and the encoded tripod.
- Configure the sync generator to output the required signal type:
- Use **Blackburst** for standard-definition (SD) signals.
- Use **Tri-Level Sync** for high-definition (HD) signals.
- Check the tripod encoder's settings to ensure it is set to receive external sync.

Tips
- **Cable Management**: Secure the cables to prevent accidental disconnections during operation.
- **Signal Stability**: For longer cable runs, ensure the sync signal doesn't degrade by using quality cables or a distribution amplifier.
- **Check Documentation**: Refer to the user manuals of both devices for specific configuration instructions or troubleshooting steps.

This connection provides precise synchronization, critical for setups requiring accurate timing, such as motion control or studio operations.

Instructions to Set a Static IPv4 Address in Windows

Follow these steps to set your Windows computer's IPv4 address to **192.168.1.100** with a subnet mask of **255.255.255.0** and a default gateway of **192.168.1.1**:

1. Open the Network Connections Window:
- Press **Win** + **R** to open the **Run** dialog box.
- Type `ncpa.cpl` and press **Enter**. This will open the **Network Connections** window.

2. Access the Properties of Your Network Adapter:
- Locate the network adapter you want to configure. It might be labeled as **Ethernet** (for wired connections) or **Wi-Fi** (for wireless connections).
- Right-click on the network adapter and select **Properties**.

3. Open the IPv4 Settings:
- In the list of items used by the connection, find and select **Internet Protocol Version 4 (TCP/IPv4)**.
- Click the **Properties** button.

4. Configure the Static IP Address:
- In the **General** tab, select the option **Use the following IP address**.
- Enter the following values:
- **IP address**: `192.168.1.100`
- **Subnet mask**: `255.255.255.0` (this should auto-fill when you click the field after entering the IP address)
- **Default gateway**: `192.168.1.1`

5. Set the Preferred DNS Server (Optional):
- Under **Use the following DNS server addresses**, you can enter DNS server addresses:
- **Preferred DNS server**: `8.8.8.8` (Google's DNS, as an example)
- **Alternate DNS server**: `8.8.4.4` (Optional, Google's secondary DNS)

6. Save the Changes:
- Click **OK** to close the **Internet Protocol Version 4 (TCP/IPv4) Properties** window.
- Click **Close** or **OK** in the **Network Connection Properties** window.

7. Verify the Configuration:
- Open a Command Prompt (press **Win** + **R**, type `cmd`, and press **Enter**).
- Type the command `ipconfig` and press **Enter**. Look for your network adapter in the output and confirm the IP address, subnet mask, and gateway are correctly set.

Your Windows computer's IPv4 address is now set to **192.168.1.100**!

How to Use CMD to Ping an IP Address on Windows

The **ping** command is a simple way to test connectivity to another device or network address using the Command Prompt (CMD). Here's how you can do it to test the connection with the EG25XR data box:

1. Open Command Prompt

- Press **Win** + **R** to open the **Run** dialog box.
- Type `cmd` and press **Enter**. This will open the Command Prompt.

2. Ping an IP Address

- In the Command Prompt window, type the following command and press **Enter**:

```
ping <IP_Address>
```

Replace `<IP_Address>` with the IP address you want to ping. For example, to ping the EG25XR, type `192.168.1.123`:

```
ping 192.168.1.123
```

3. Understand the Output

- The output will display information about the packets sent and received:
- **Reply from [IP Address]: bytes=... time=... TTL=...**: Indicates a successful connection.
- **Request timed out**: Indicates no response from the destination, possibly due to network issues or firewall restrictions.
- **Destination Host Unreachable**: Suggests a routing issue between your computer and the target device.

Example output for a successful ping:

```
Pinging 192.168.1.123 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64
Reply from 192.168.1.1: bytes=32 time=1ms TTL=64

Ping statistics for 192.168.1.123:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 1ms, Average = 1ms
```

4. Optional: Use Additional Parameters

- To customize the ping command, you can use additional options. Common ones include:
- `ping -t <IP_Address>`: Pings the address continuously until you stop it by pressing **Ctrl** + **C**.
- `ping -n <Count> <IP_Address>`: Specifies the number of echo requests to send. For example, to send 10 pings:

```
ping -n 10 192.168.1.123
```

- `ping -l <Size> <IP_Address>`: Specifies the size of the packet to send (in bytes). For example, to send 64-byte packets:

```
ping -l 64 192.168.1.123
```

5. Exit Command Prompt

- Type `exit` and press **Enter** to close the Command Prompt.

Using the **ping** command is an easy way to troubleshoot network connectivity issues or verify that a specific device or server is reachable.

Professional Instructions for Verifying and Testing Free-D Data

Ensure the data box is operational and transmitting data correctly.

1. **Use the TCP/UDP Net Assistant**

- Download the "TCP/UDP Net Assistant" software from the EG25XR Product Page.
- Launch the program and configure the following settings:
- **Protocol**: Set to "UDP".
- **Local Host**: Set to "192.168.1.100".
- **Local Host Port**: Set to "6301".
- Click the **Open** button to establish the connection.
- Check the box for **Receive as Hex**.

If data appears in the "Data Receive" window, the system is successfully receiving Free-D protocol data.

2. **Integrate with Virtual Production Software**

- Consult your virtual production software provider (e.g., Brainstorm, Vizrt) to confirm the proper method for receiving Free-D protocol data in their platform.
- Once Free-D data is received, the virtual production software should visualize the data as pan, tilt, zoom, and focus values.

3. **Configure Lens Files**

- Follow your virtual production software's instructions to create and configure lens files that match your specific camera and lens setup.
- Contact your virtual production software provider for guidance on:
- Creating lens files.
- Configuring camera and movement settings after confirming Free-D data reception from the tripod.

If you have additional questions or encounter issues, please reach out to your virtual production software provider for support.