TERADEK Serv 4K 4K HDR Monitoring Encoder User Guide

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PHYSICAL PROPERTIES

A: MAe:nuObLuEtDtondisplay
B: OBLE: DHdDiMspIIainyput/output
C: SeCle: c6t/-E18ntVerDbCutptoown er input
D: RPD-:STMyApec-oCnnUeSctBorpsort
E: MEic:/LBinlueestoteortehobTuRtRtoSninput
F: F:HeOand/pOhfof nsewTitRchRS output
G: Ethernet port
H: HDMI input
I: Dual USB ports
J: SD card slot
K: SDI output

L: SDI input
M: Power switch
N: Power input

4K HDR MONITORING ENCODER

Serv 4K lets you securely stream live camera feeds and instant recordings to anyone, anywhere, on or off set. See what the camera, editor, and colorist see–from production through final color. Serv 4K can encode up to 4Kp60 video with stunning 10-bit 4:2:2 image fidelity, can stream to up to 20 local viewers, and can be connected to Teradek's Core Cloud Platform for even more flexibility.

WHAT'S INCLUDED

- 1x Serv 4K Encoder
- 1x 2pin Conn. to PowerTap (D-Tap) – 18in cable
- 1x SDI – BNC to BNC Cable – 10in cable
- 1x PSU 2pin Conn. to 30W AC Adapter (Int) – 6ft cable
- 2x 2dBi WiFi 2.4/5.8 GHz Antenna

POWER AND CONNECT

1. Connect power (N) to Serv 4K using the included A/C adapter or D-Tap cable to a battery.
2. Attach the two Wi-Fi antennas to the RP-SMA connectors (D).
3. Connect the HDMI or SDI output from your video source to Serv 4K's input connector (H or L).
4. Turn the Power switch on the back (M) to the ON position.

BUTTON OPERATION
Use Serv 4K's Menu and Select/Enter buttons to navigate the status screens and configurable settings.

MENU BUTTON (A): Cycle through the status screens
SELECT/ENTER BUTTON (C):
Short Press (Select) – Cycle through the settings/info within a screen
Long Press (Enter) – Confirm changes, switch modes, etc.

- WiFi screen – Switch from AP to Client mode
- Ethernet screen – Switch from DHCP to Static mode
- Live Streaming – Select a video bitrate value (300kbps to 85Mbps)
- Audio Input screen – Switch to Embedded, Analog, or Mixed
- Codec Resolution – Switch to Auto, HD, or 4K

SERV APP

The Serv App allows you to remotely configure all of Serv 4K's settings while monitoring your stream's destination, bitrate, bonding status, and resolution to ensure you maintain a stable stream. The Serv App is available for iOS devices.

MAIN DISPLAY

- **Main Screen (1)-** Displays the preview, streaming destination, audio and video bitrates, and resolution of your stream.
- **Link/Unlink iOS Device (2)**– Tap the Link/Unlink iOS 1 button to use of your cellphone's data as an Internet connection for streaming to Core.
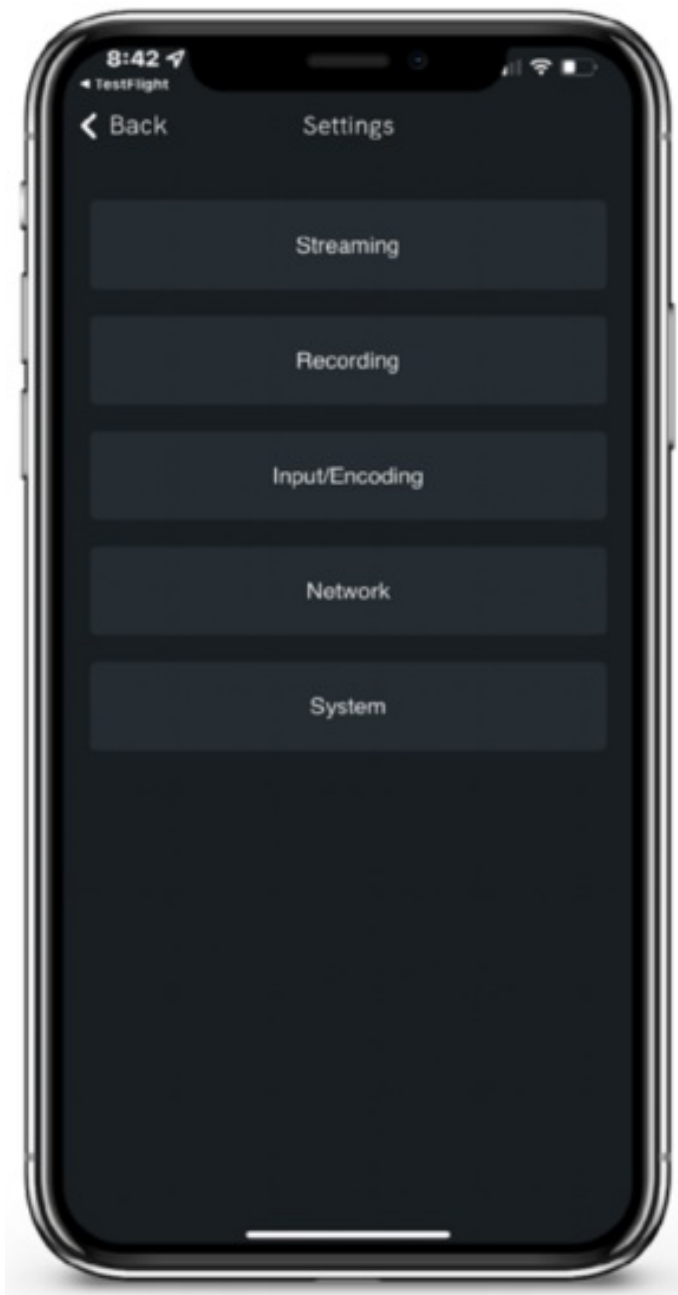
  STATS

  Tap the Stats button (3) at the top of the screen to display Serv 4K's serial number, current audio and video bitrates, 2 runtime, recording status, IP address, and network.

SETTINGS

Tap the **Settings (4)** button to configure the following options:

- **Streaming** – Configure your streaming method and destination
- **Recording** – Enable recording and select a media storage option
- **Input**/**Encoding** – Adjust the Video and Audio input settings
- **Network –** Choose a method of connecting to the Internet
- **System –** View the model and serial number of your device, or rename your Serv 4K.

GET ONLINE

You can use the front panel interface, web UI, or Serv App to connect Serv 4K to a network.

CONNECT TO A WIFI NETWORK

Serv 4K supports two wireless modes: **Access Point (AP) Mode** (for connecting directly to Serv 4K using WiFi) and **Client Mode** (for normal Wi-Fi operating and connecting to your local router).

1. Connect your phone or laptop to Serv 4K's access point, **Serv-4K-XXXXX (XXXXX** represents the last five digits of your Serv 4K's serial number), then enter the default IP address **172.16.1.1** in your web browser.
2. **To switch to Client Mode:** From the Serv App or web UI, navigate to the **Network** settings, select **WiFi/Wireless,** then switch to **Client Mode.** From the front panel, press the **Menu** button to navigate to the WiFi screen. Press the **Select/Enter** button to navigate to the WiFi Mode screen, then hold down the **Select/Enter** button to switch to **Client Mode.**
3. From the Serv App or web UI, tap the WiFi scan or Saved Networks tab to connect to an available network, then enter the password. Once connected, the display will list the network Serv 4K is connected to.

CONNECT VIA ETHERNET

1. Connect Serv 4K's Ethernet port (G) to an Ethernet switch or router.
2. To confirm Serv 4K is connected, press the **Menu** button to navigate to the Ethernet screen and confirm the front panel status reads **Ethernet: Connected** along with the IP address. From the Serv App or web UI, navigate to the **Network>Wired** settings and confirm the status reads **Connected** along with the IP address.
3. Enter the IP address in your web browser's navigation bar to access the web UI.

CONNECT VIA NODE II OR USB MODEM

1. Attach a Node II or USB modem to one or both to Serv 4K's USB-C ports (I), then press the **Menu** button on the front panel to navigate to the Modem screen and verify that the modem has been detected and connected.
2. If the modem is not detected, connect your computer to Serv 4K's AP network (see page 6), then enter the default IP address 172.16.1.1 in the navigation bar to access the web UI and manually configure the modem from the **Network** menu.

MOUNTING

Serv 4K encoders have a 1/4″-20 threaded hole on the bottom for mounting. Additionally, you can install dual mount pro battery plates on your Serv 4K, allowing you to attach your unit to either the back of a camera, monitor, or Array Antenna.

- Mount the Serv 4K onto the back of your camera keeping the antennas clear of any obstructions.
- For best results, orient the encoder so it has clear line-of-sight

Serv 4K encoders
can be mounted
on a compatible
camera

RECORDING

Record to SD card:

1. Insert a compatible SD card into the corresponding slot.
2. From the Serv App or the web UI, enter the **Recording** menu, and select **Enabled.**
3. Create a name for the recording, select a format, then enable **Auto-Record** (optional).

Record to NFS drive:

1. Click **Mount Network Share.**
2. Enter the **Host** and **Share** address, then click **Mount.**

RECORDING CONSIDERATIONS

- Recordings are triggered manually or automatically. If **Auto-Record** is enabled in the **Recording Settings**, a new recording is automatically created when a streaming or camera event starts.
- For best results, use Class 6 or higher SD cards.
- Media should be formatted using FAT32 or exFAT. · If a broadcast is interrupted for connectivity reasons, recording will continue.
- New recordings are automatically started after the file size limit is reached (FAT32).

CORE

Serv 4K can be remotely accessed, configured, and controlled using Teradek's Core Cloud management and routing service. With Core, you can bond multiple Internet connections, remotely control Teradek encoders and decoders from anywhere, and stream to multiple destinations.

CORE
For more information or to sign up for a

Connect Serv 4K to Core

1. From the web UI, select **Cloud Services** then click the **Link this Device** tab.
2. Log in to Core: Enter your credentials to link Serv 4K to your Core account, then click **Next.**

   Link with Code: Copy the authorization code generated for your Serv 4K, then follow the instructions.
3. Once a connection is established, you can configure Serv 4K from either the web UI or Core dashboard (Fig.1).
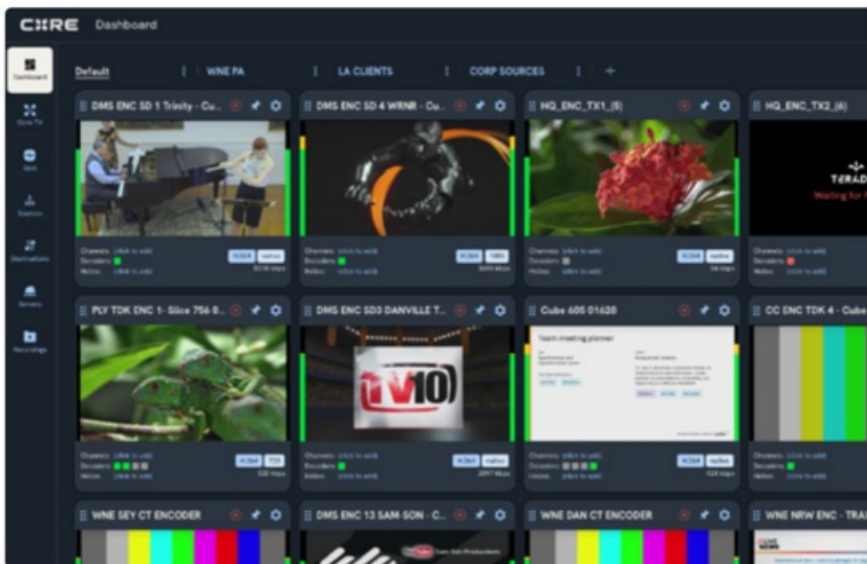

Fig.1

MONITOR WITH VUER

Teradek's VUER is a free app that allows you to monitor and analyze up to four live video feeds simultaneously, each with its own set of tools to help you and your crew gain insights into your footage.

DOWNLOAD CORE
To download VUER, scan either QR code.

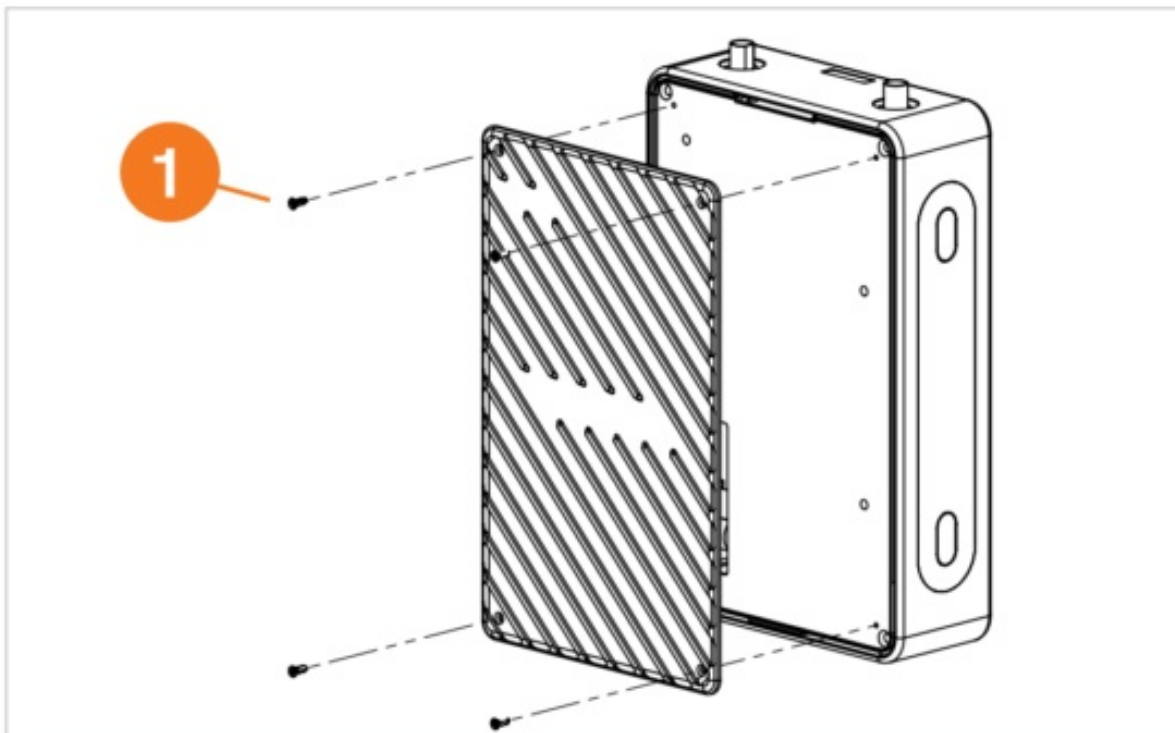|	
VUER	VUER HDR

1. Connect your device to the same network as Serv 4K (Ethernet or WiFi), then launch VUER.

2. From the VUER app, tap **CAMERA** on the upper, left-hand corner, choose your device(s), then tap **Done.**

3. To adjust the stream resolution and bitrate, long-press **VIDEO** on the Tool bar to display the full menu. Make your selection, then tap **APPLY.**

PRO BATTERY PLATE INSTALLATION

Teradek's Pro Battery Plates allow users to mount a Serv 4K unit to the back of a camera or monitor (Male), and/or attach a compatible battery for pass-through power (Female).

1. Remove the front and back cover plates from the Serv 4K by removing the four corner screws (1).
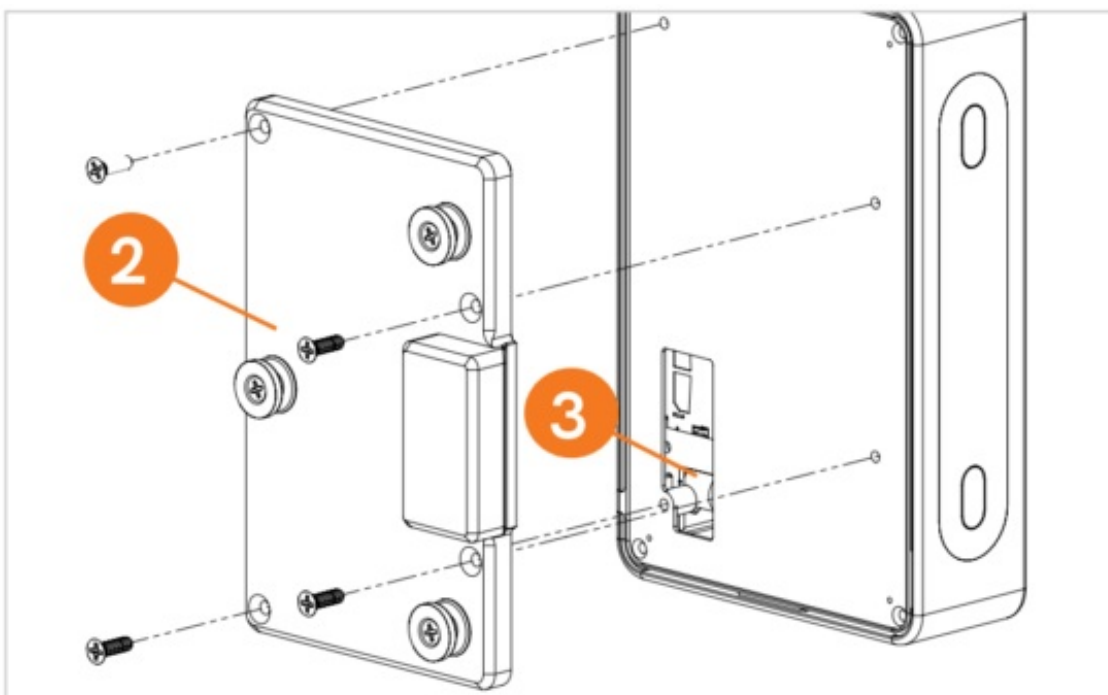
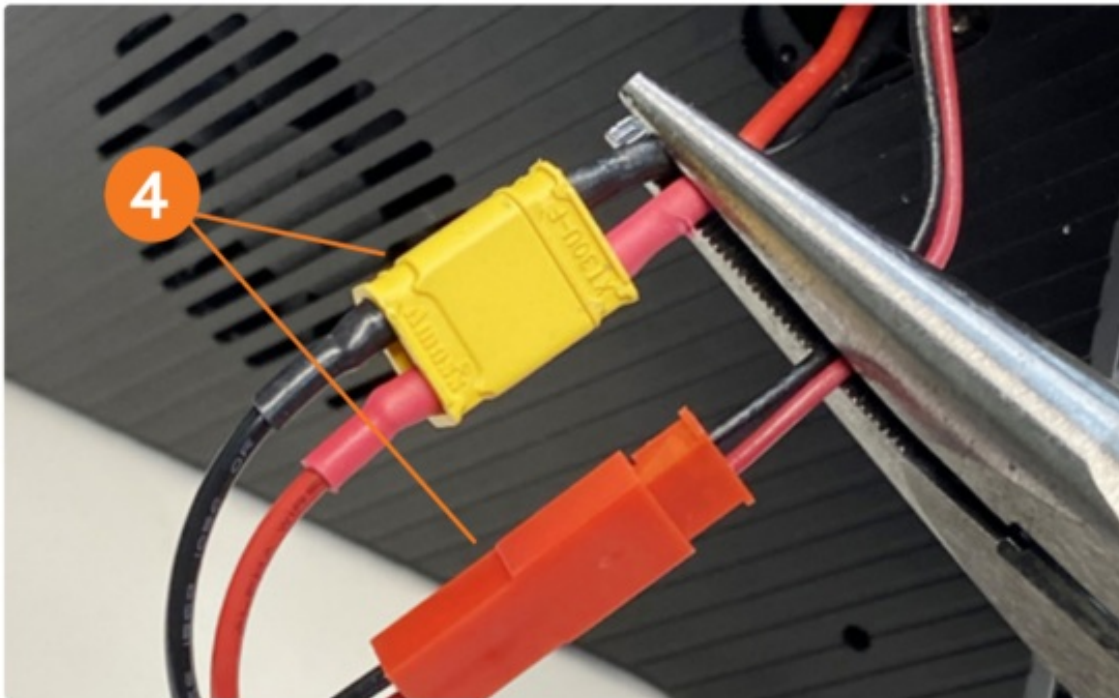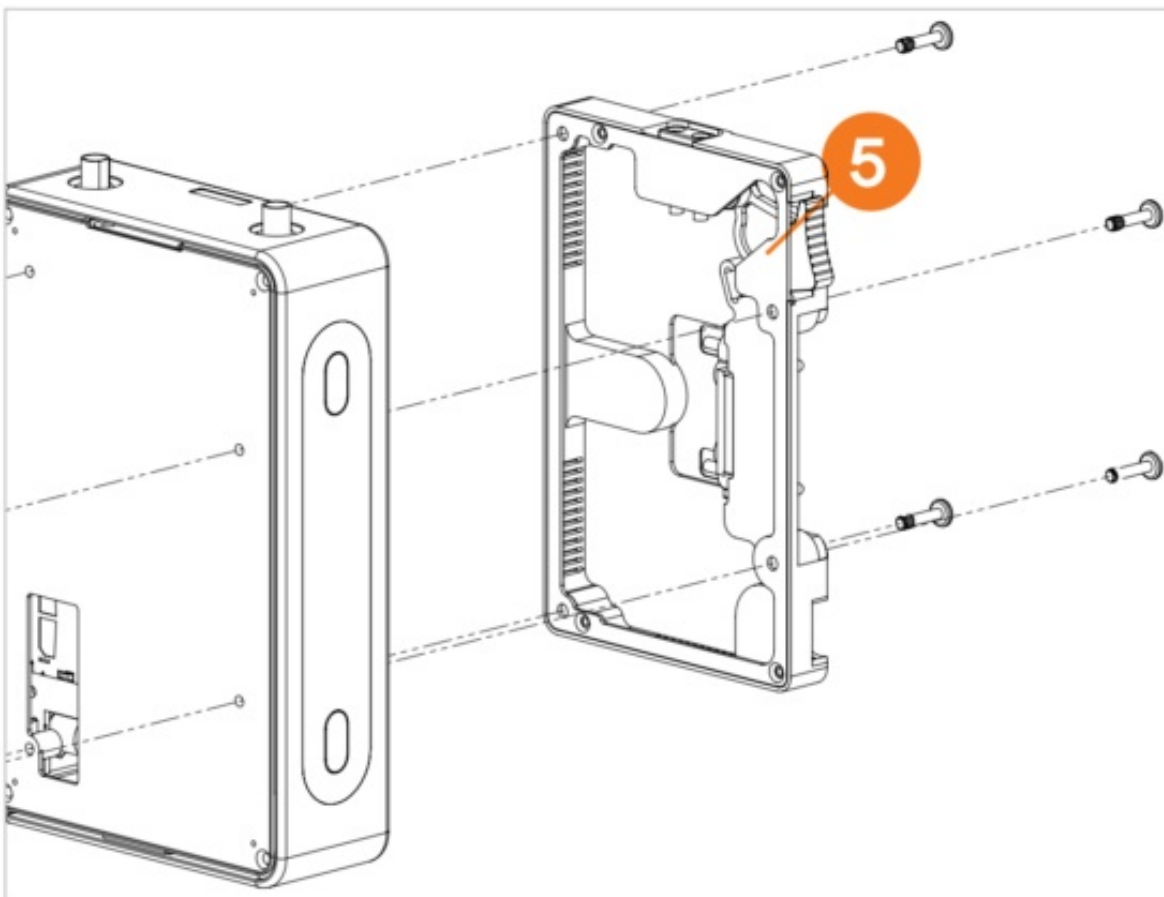| JST connector:	XT60 connector:
Provides power to the Teradek device	Provides power to camera or monitor

2. Position the male/camera-side plate (2) on the front of the unit, then insert the male plate's XT60 connector through the hole (3) so that it passes through and exits on the same side of the unit's JST connector.

3. Insert the socket/Phillips head screws through the plate and into the unit, then tighten

4. Connect both the JST and XT60 connectors (4) on the opposite side to the female/battery-side plate's matching connectors

5. Position the female/battery-side plate (5) on the opposite side of the unit so that the screw holes on the plate align with the holes on the unit

6. Insert the Phillips head screws through the plate and into the unit, then tighten.

Teradek regularly releases new firmware versions to improve performance, add features, or fix vulnerabilities.
teradek.com/pages/downloads contains all the latest firmware and software updates. Visit t**eradek.com/contact**

for tips, information, and to submit help requests to Teradek's support team.

Documents / Resources

TERADEK Serv 4K 4K HDR Monitoring Encoder [pdf] User Guide
Serv 4K, 4K HDR Monitoring Encoder, Serv 4K 4K HDR Monitoring Encoder

References

- ✧ **Contact Us – Teradek**
- ✧ **Downloads – Teradek**