

# APPLICATION NOTE

## **EDIUS Integration with K2 Systems**

**K2 EDIUS Connect**

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With K2 EDIUS® Connect, EDIUS users can directly edit files stored on a Grass Valley™ K2 Summit™ standalone media server or SAN, without the need for file conversion.

# How to Integrate EDIUS with K2 Systems

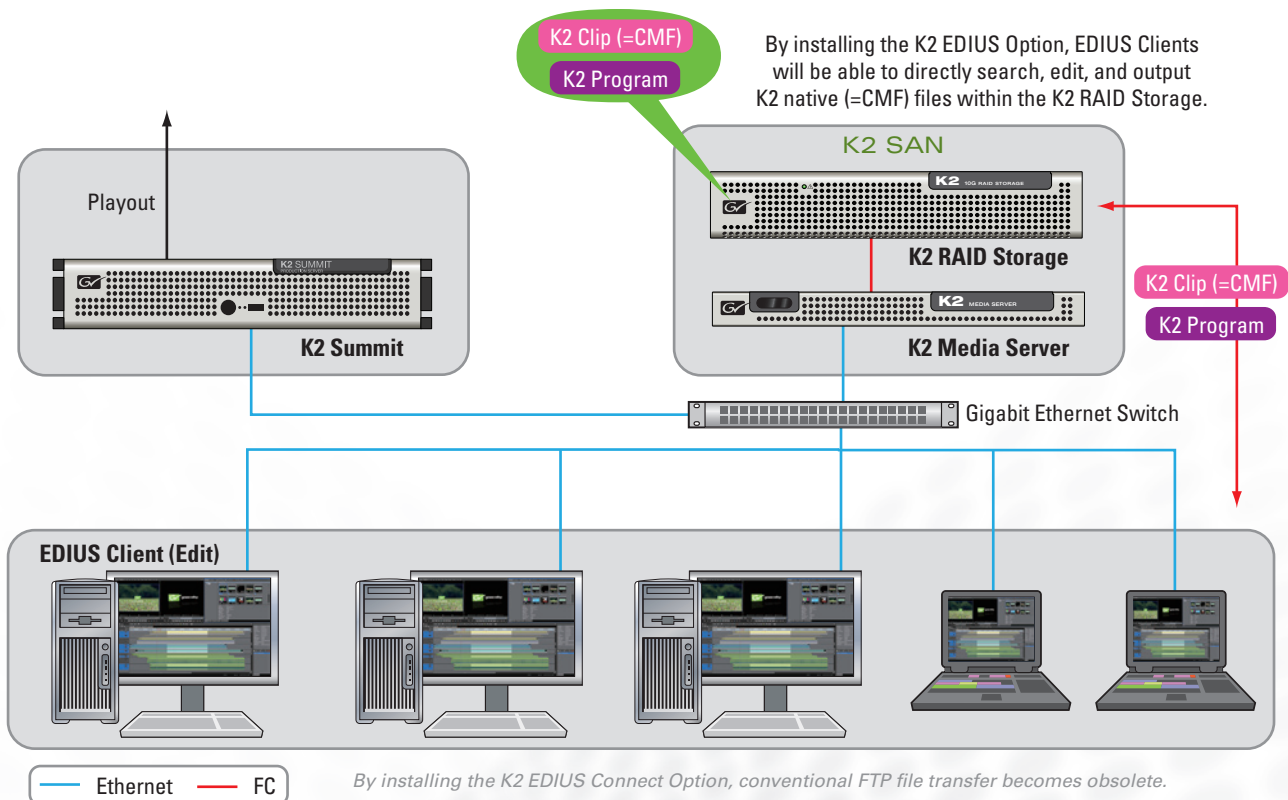
The native file system of Grass Valley K2 systems uses a container file format (CMF) to encapsulate elementary streams of video, audio, timecode, and ancillary data to provide direct access for operations like editing. Formerly, extra components, processes, and conversions were necessary for EDIUS to get direct access to the K2 file system. Files could be transferred via FTP, and that is still possible.

Now, with the K2 EDIUS Connect option, there is no longer any need for file conversion, thus permitting EDIUS users to access K2's internal files directly to facilitate editing in place.

K2 EDIUS Connect is a software option, requiring K2 system software v8.0+ and EDIUS version v6.05+.

## EDIUS Connect Option – Key Features

- Editing of K2 clips directly within EDIUS. This includes K2 program files, which consist of pointers to multiple K2 clips
- Support for segment encoding
- K2 clips can be searched directly from EDIUS clients, with associated metadata displayed in EDIUS's Source Browser
- Edit growing files being ingested into K2
- Export K2 clips and K2 programs from the timeline
- Supports K2 ChannelFlex™ clips (super slow-motion, key-fill, 3D)
- Capture clips (MPEG-2, AVC-Intra, DVCPRO, DV) to K2 via EDIUS, and store these clips on K2 storage



# EDIUS Connect Option – Key Benefits

## Improved efficiency in a network editing environment

Users can directly access K2 clips from the EDIUS client, saving time.

Users can perform editing just as they would in a stand-alone environment, but over a networked connection to shared storage.

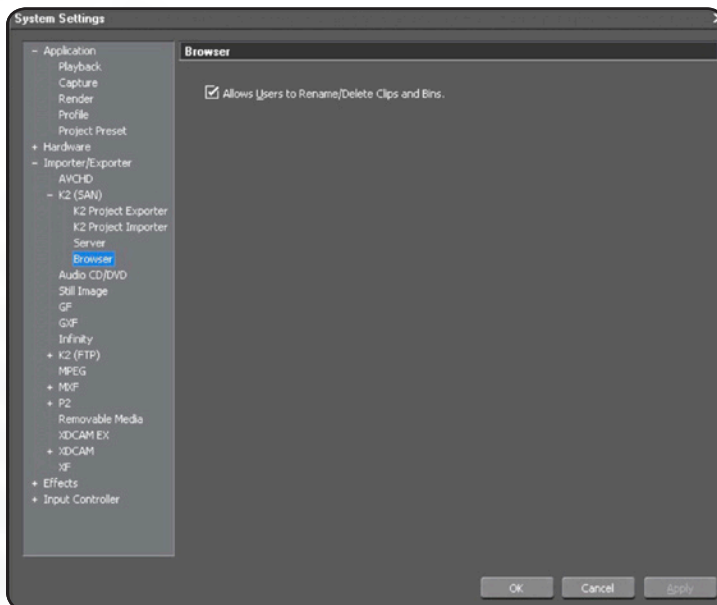
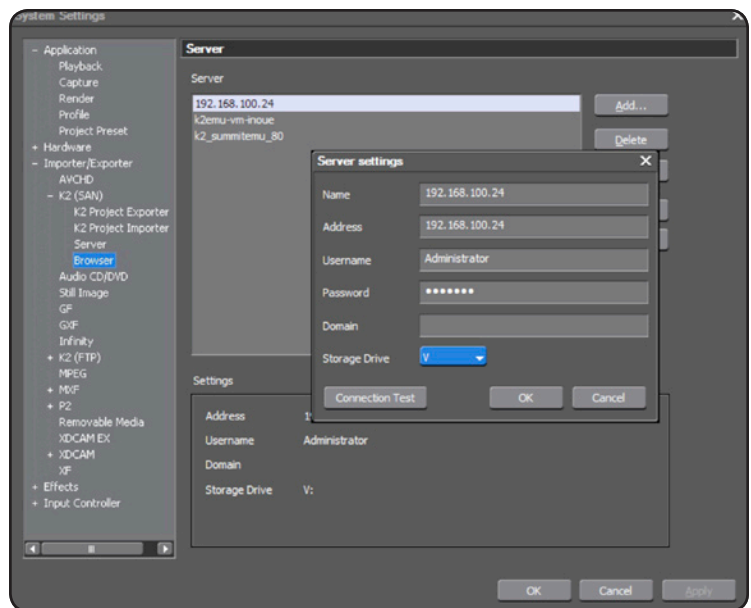
## Supports reading and export of K2 programs

A K2 program is a format used in the K2, similar to an EDL file. A K2 program only holds the reference data of the original K2 clip, thus file sizes are small and export time is minimized. The K2 EDIUS Connect option not only reads the K2 program, but also supports export from EDIUS, allowing for a major reduction in the time it takes to export and transfer files.

# K2 EDIUS Connect Settings

## EDIUS System Setting: Server Settings

The server can be either shared storage (K2 SAN) or a standalone K2 Summit client



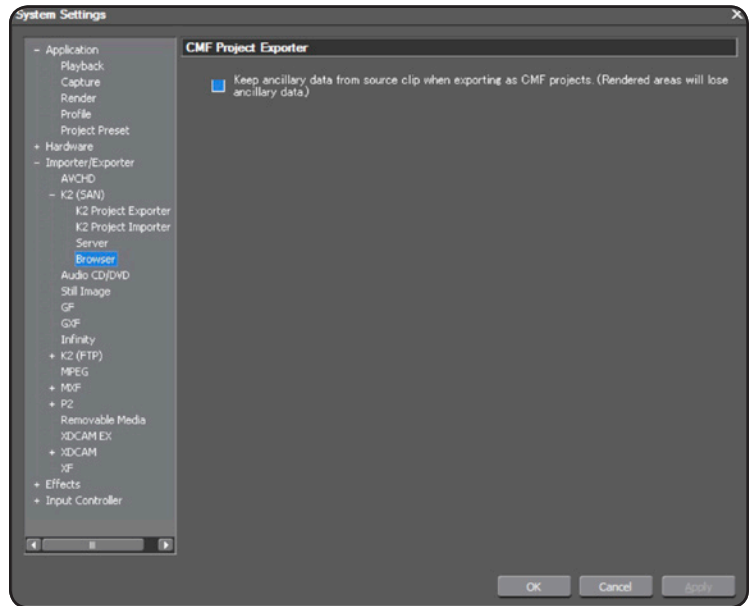
## EDIUS System Setting: Browser Settings

The EDIUS System Administrator can permit users to rename or delete K2 clips in the EDIUS Source Browser.

# K2 EDIUS Connect Settings (cont.)

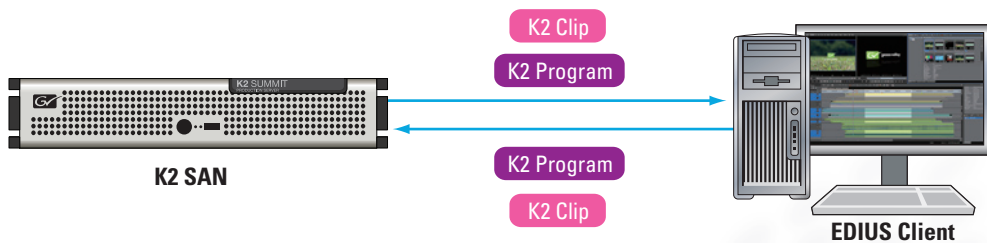
## EDIUS System Setting: Project Exporter Settings

When exporting as a K2 program, the ancillary data (closed caption data) can be kept in the original source K2 clip if the project is cuts-only. Any rendered areas (such as areas with titles, filters, or transitions) will lose ancillary data.



# K2 EDIUS Connect Option Workflow

Users can directly access files (K2 clips, K2 program, K2 playlist) on the K2 storage from EDIUS clients, and can search, edit, and export as K2 clips or K2 programs.



- Real-time Native Editing (DVC, MPEG-2, AVC-Intra)
  - No Transcode
  - Segment Encode

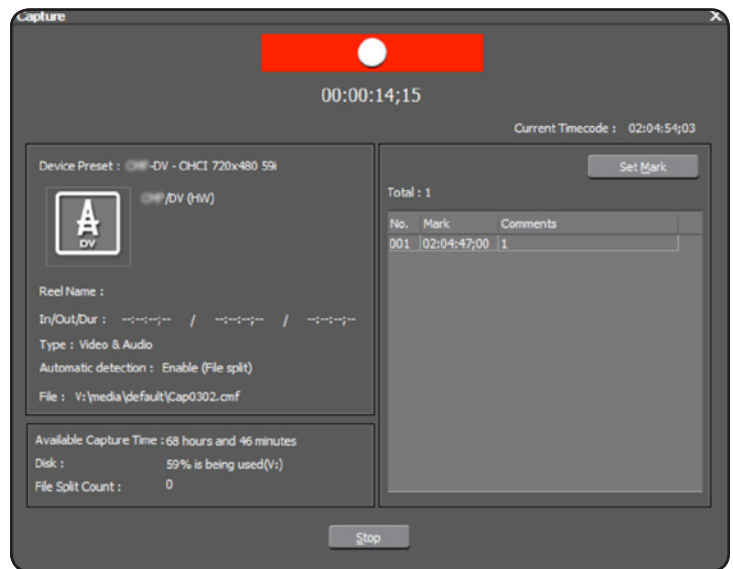
The K2 EDIUS Connect option workflow is as follows:

- 1) Ingest via K2 Summit or EDIUS client
- 2) Browse from EDIUS client
- 3) Edit in EDIUS client
- 4) Export as K2 clip or K2 program

# K2 EDIUS Connect Option Workflow (cont.)

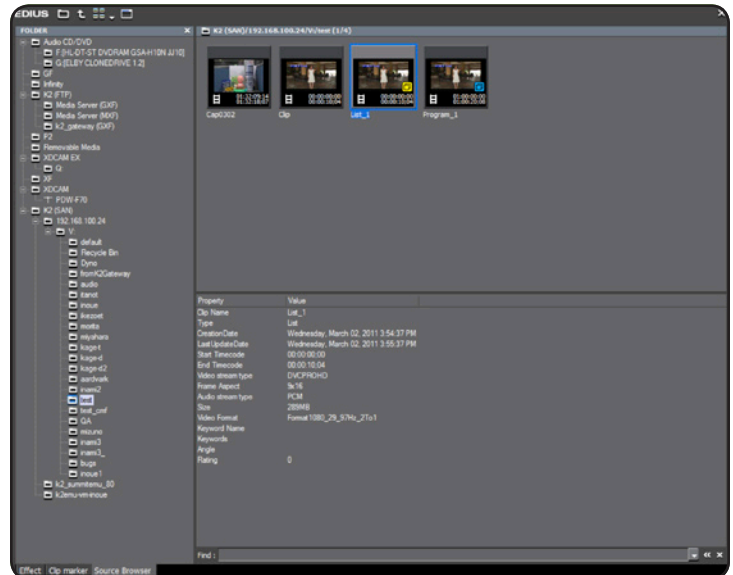
## 1. Ingest

- a) Ingest to K2 Summit in any of the following formats: AVC-Intra, MPEG-2, DVCPRO, and DV.
- b) On the K2 storage (local or shared storage), clips will be stored as native K2 clips.
- c) EDIUS clients can also capture in K2 format to K2 shared storage.
  - Capture K2 clip from any input
  - Capture directly to K2 storage
  - DV, DVCPRO, MPEG-2, AVC-Intra supported
  - During capture, markers and marker text can be added on the fly



## 2. Browse

- EDIUS client can browse data on K2 storage:
- K2 folder tree integrated in Source Browser
  - Direct SAN access to multiple K2 servers
  - K2 clip, program, and playlist support
  - Growing K2 clip files support
  - ChannelFlex clip support
  - Search and display metadata

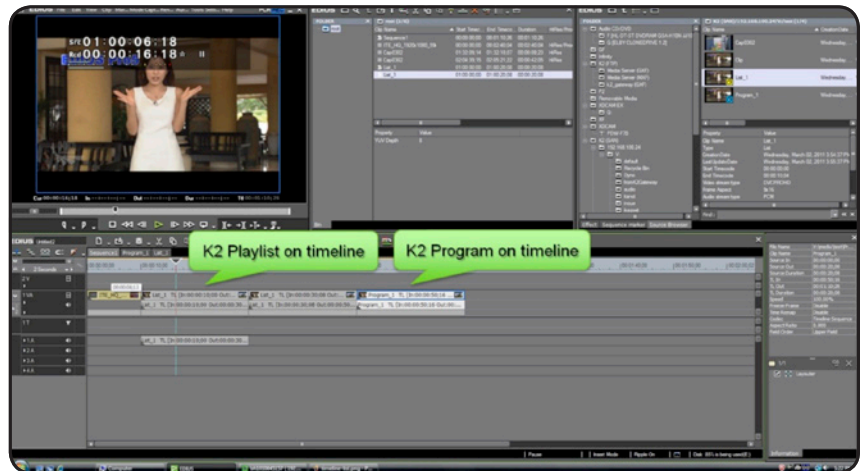


# K2 EDIUS Connect Option Workflow (cont.)

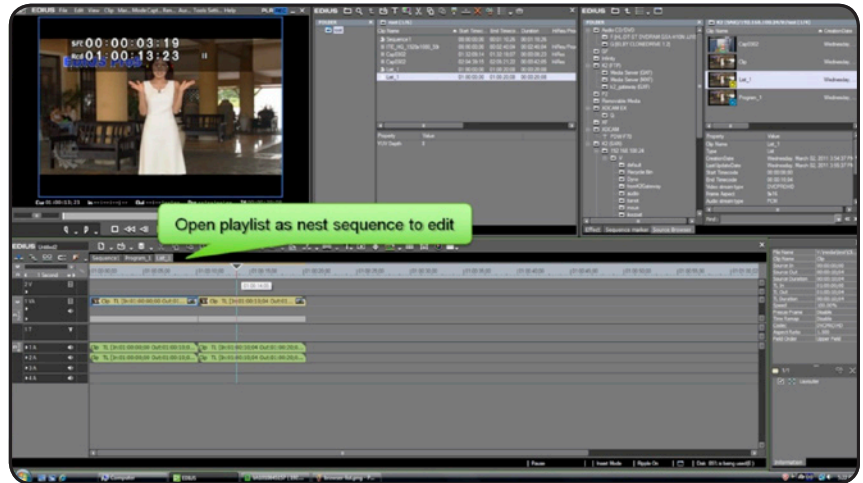
## 3. Editing

EDIUS clients can edit clips directly on K2 storage.

- Import as sequence (K2 program and K2 playlist)



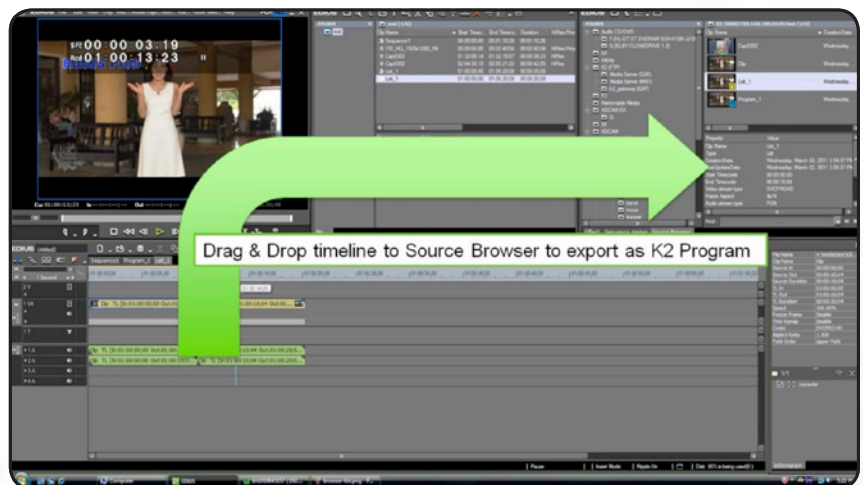
K2 programs and K2 playlists are imported as sequences into EDIUS.



The sequence can be shown as one clip, or if double-clicked on, the sequence can be opened and the K2 clips seen.

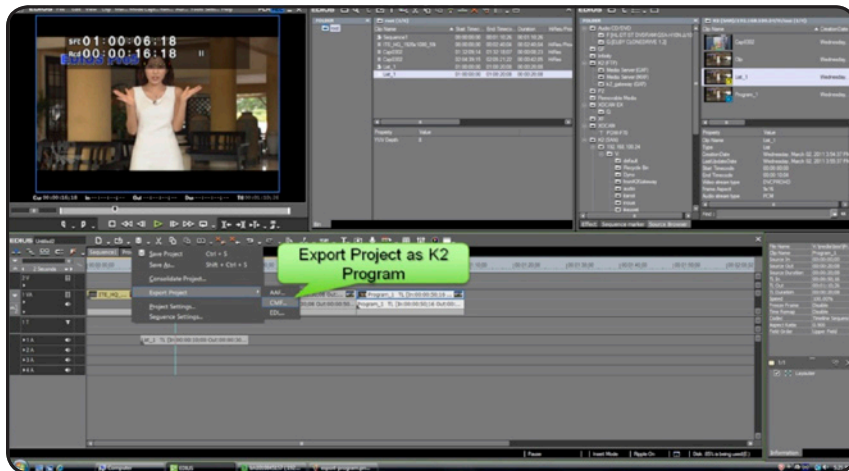
## 4. Export

- Export the timeline as a K2 program
- Export the timeline as one file (K2 clip)

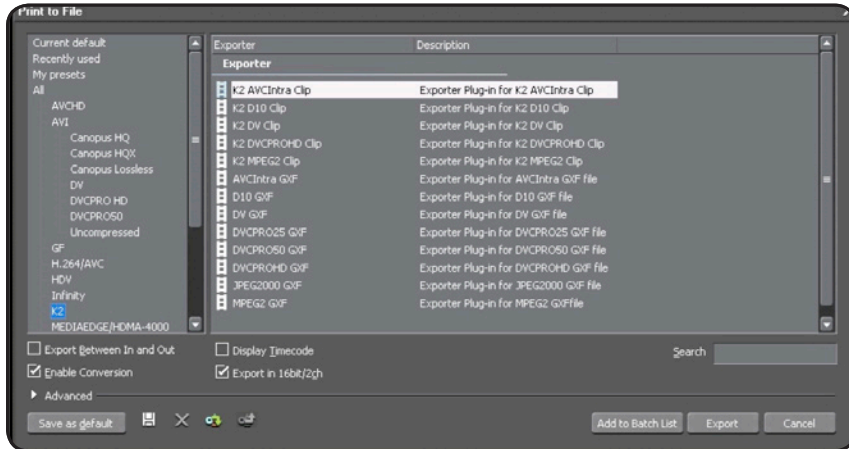


Drag the timeline to the Source Browser to export the timeline as a K2 program. If the timeline is cuts-only, no video will be rendered and export is very fast. If the edit is cuts-only, closed caption data will be preserved. Any areas with filters or titles will be rendered but only the necessary parts will be rendered as new clips. Audio will always be rendered as one file.

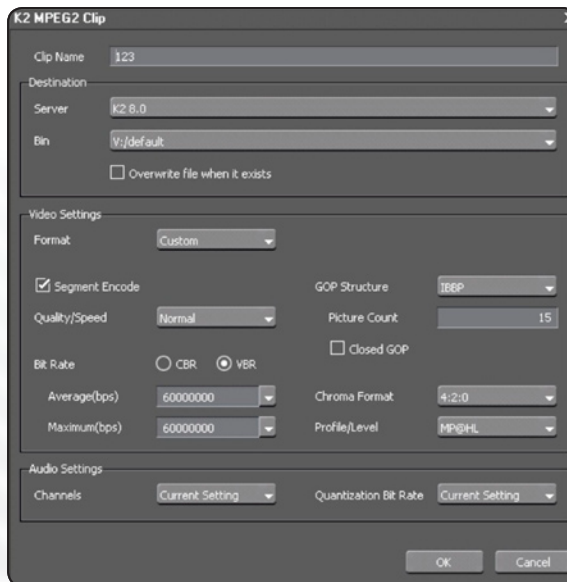
# K2 EDIUS Connect Option Workflow (cont.)



Export Project > K2 Program can also be selected to export as a K2 program



To export as a new K2 clip, go to [Print to File] and select [K2 Clip Exporter]



Smart rendering (segment encoding) is supported on K2 clip export

# K2 EDIUS Connect Option FAQ

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**Q: Can this software option only be used with a K2 SAN?**

A: K2 EDIUS Connect is typically used with a K2 SAN, because the connection is faster (iSCSI or Fiber Channel) and permits real-time editing with multiple EDIUS clients. It can also run on a standalone K2 Summit, but real-time editing performance will be limited to one client editing in HD because the connection will be via CIFS and therefore slower.

**Q: Does the K2 EDIUS Connect Option also support K2 proxy?**

A: Currently the plug-in does not support K2 proxy. This feature is planned for a future release.

**Q: Can users search for metadata?**

A: The EDIUS Source Browser supports quick searching using K2 metadata such as file names.

**Q: Is metadata from STRATUS™, K2 Dyno™, and K2 Dyno Production Assistant (PA) supported?**

A: Metadata from STRATUS is supported in the Source Browser. Support for K2 Dyno and Dyno PA are planned for a future release.

**Q. Where can I go to for more detailed set-up information?**

A: Please refer to the K2 EDIUS Connect User Guide.

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