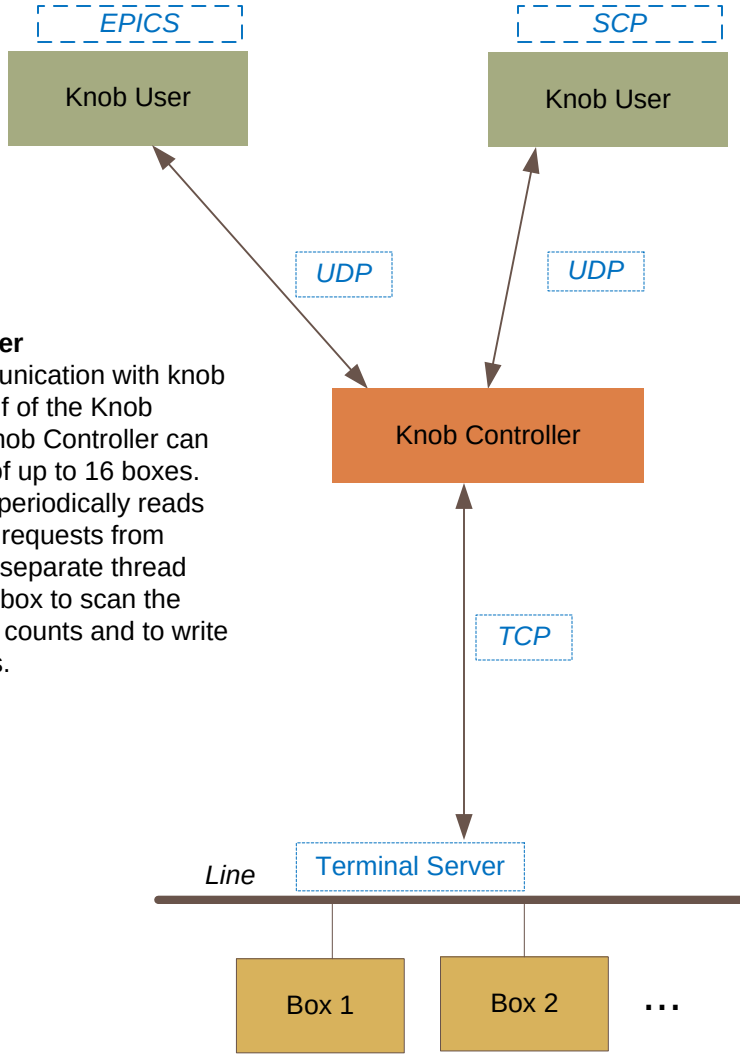
LEGEND

Text in this format describes the SLAC implementation



Knob User
Control-system specific user interface for controlling control-system devices with hardware knobs. Initiates communication with Knob Controller. Attaches and detaches devices to/from knobs per user requests. Updates device value due to knob turns; updates knob legend due to updated device value.

Knob Controller
Handles communication with knob boxes on behalf of the Knob Users. Each Knob Controller can support 1 line of up to 16 boxes. The Controller periodically reads and processes requests from Knob Users. A separate thread exists for each box to scan the knobs for turns counts and to write legend updates.

Line
A path for communication with knob boxes. Each line supports up to 16 boxes. A line may be a multi-drop serial line, a terminal server, or some other entity.

Box
A hardware knob box has 4 knobs, each of which can be assigned to a different device, and each of which can be 'owned' by a different control system. Within a single Knob Controller, a box is identified by line number and box number. (The software supports a Box 0, but thus far it is not used in practice.)