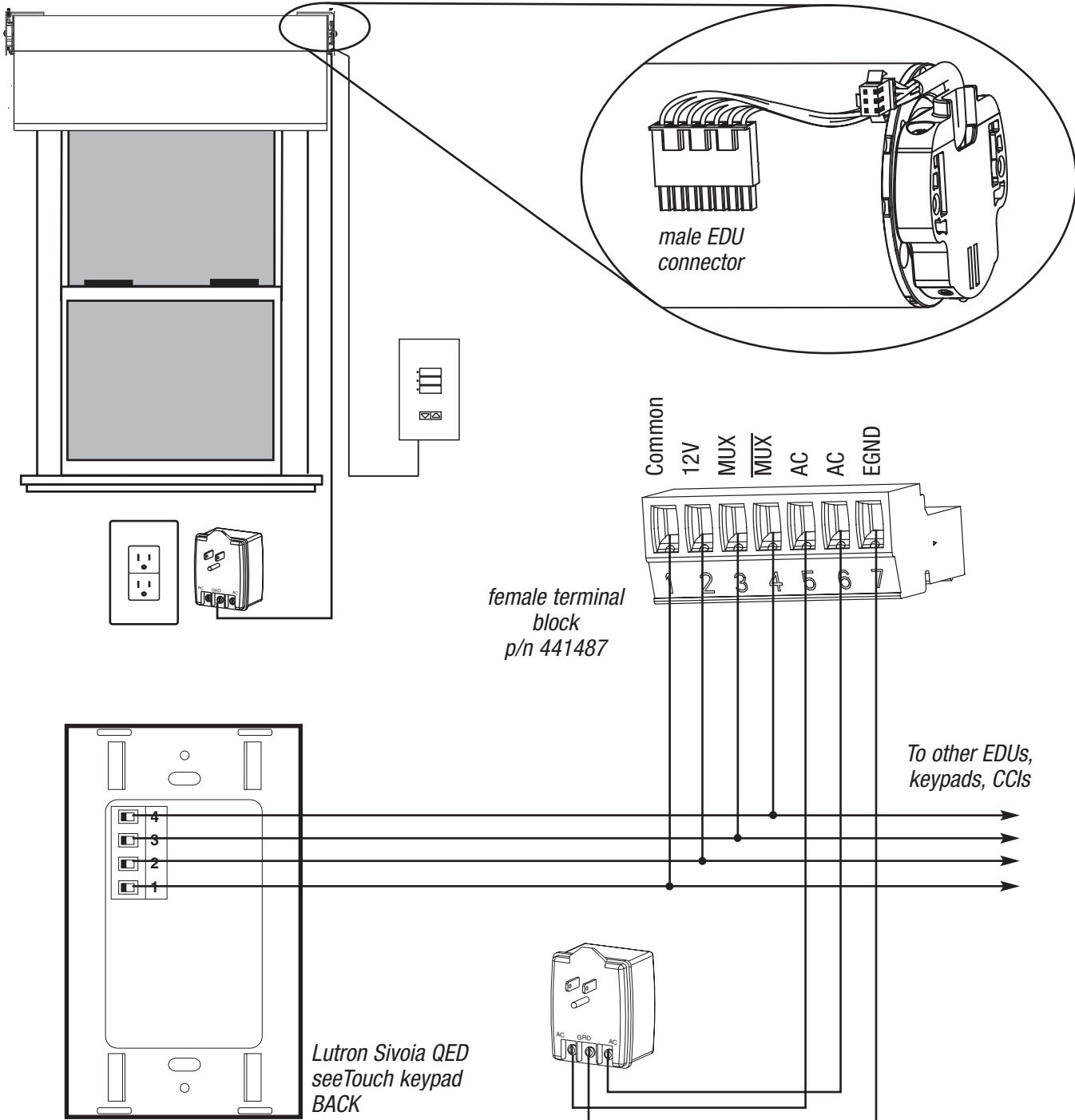


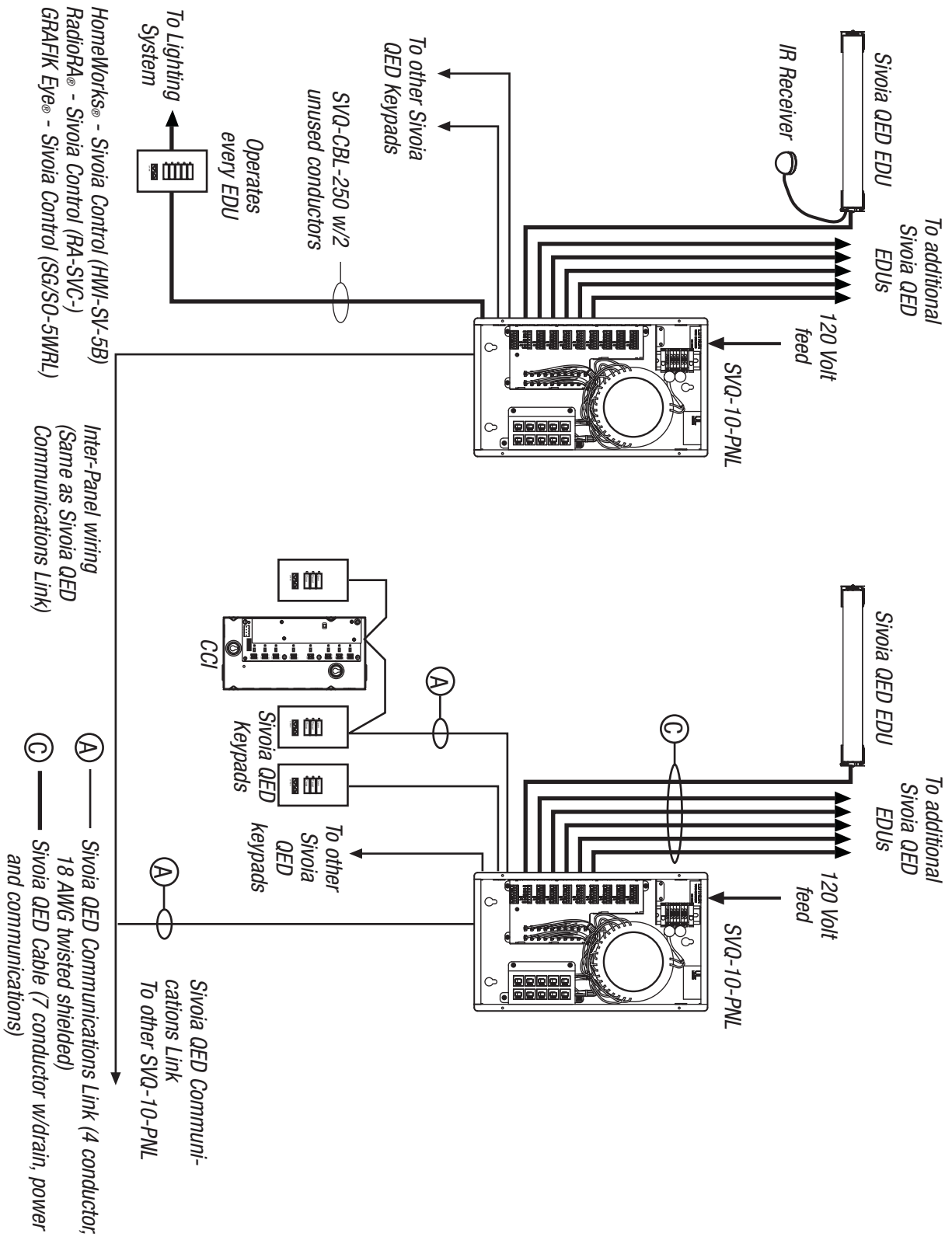
Sivoia QED™ | Single EDU Wiring

Basic Installation (Plug-In Transformer or Junction Box, not shown)

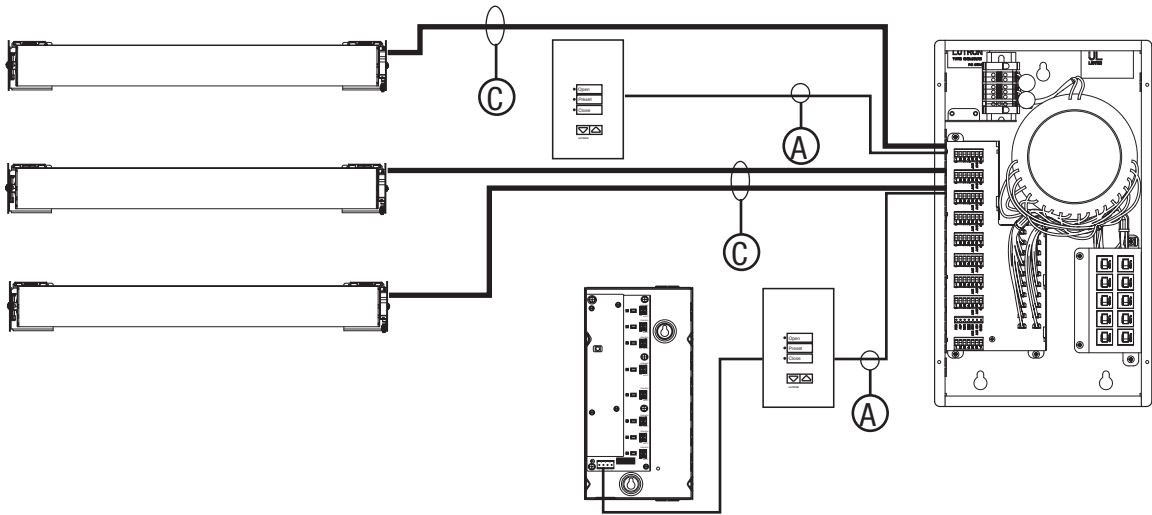


Sivoia QED™

Wiring Using Power Panels



Sivoia QED™ | Wiring Using Power Panels



- Number of keypads or CCI's per power panel not to exceed number of EDUs per panel
- Maximum of four keypads or CCI's per home run wire to terminal block
- One CCI counts as one keypad

WIRE TYPES

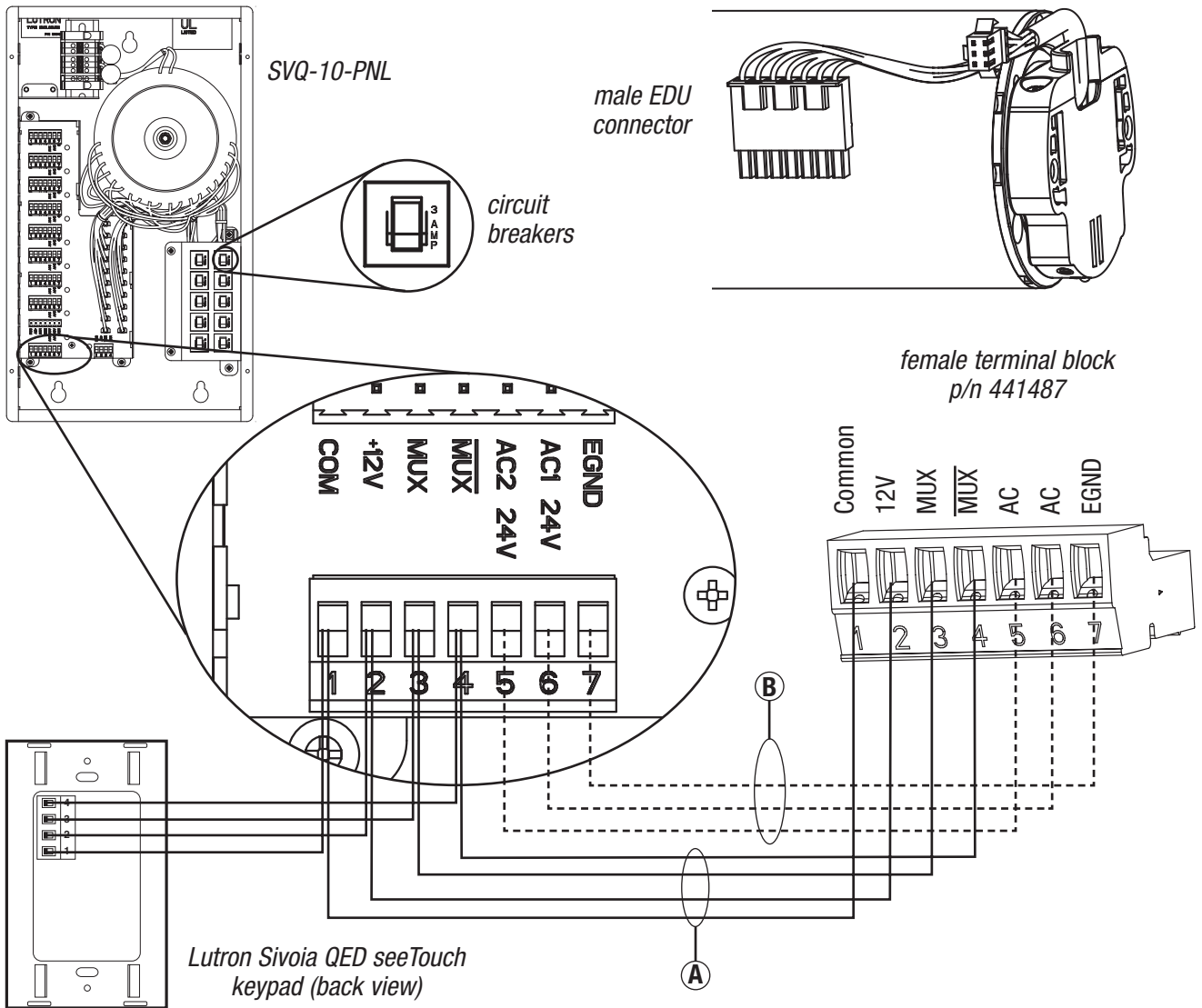
MAXIMUM WIRE LENGTH

<p>(A) Communications Link 4 Conductor #18AWG (twisted and shielded) Maximum comm Link - 4000 feet <i>GRX-CBL-346S-500 may be used for the Communication Link as long as the 18 AWG conductors are used for the +12V and Common</i></p>	<p>Keypad to Power Panel</p> <p>1 keypad - 1000 feet 2 keypads - 500 feet 3 keypads - 300 feet 4 keypads - 200 feet</p>	<p>—————</p>
<p>(B) Power Supply 3 Conductor #16–20AWG</p>	<p>EDU to Panel</p> <p>#16AWG - 200 feet #18AWG - 150 feet #20AWG - 100 feet</p>	<p>-----</p>
<p>(C) SVQ-CBL-250 ((A) and (B) combined) 7 Conductor, being: 2- #16AWG Power Supply (red, red/white) 1- #18AWG Earth Ground (green/yellow) 4- #18AWG Comm Link (blue, yellow, violet, gray, twisted and shielded)</p>	<p>EDU to Power Panel - 200 feet</p> <p>1 keypad to Power Panel - 1000 feet 2 keypads to Power Panel - 500 feet 3 keypads to Power Panel - 300 feet 4 keypads to Power Panel - 200 feet</p>	<p>—————</p>

Note: If Sivoia QED cable is used for keypad wiring, not all of the conductors will be used.

Sivoia QED™ | Providing Power

Sivoia QED power panel terminal block wiring

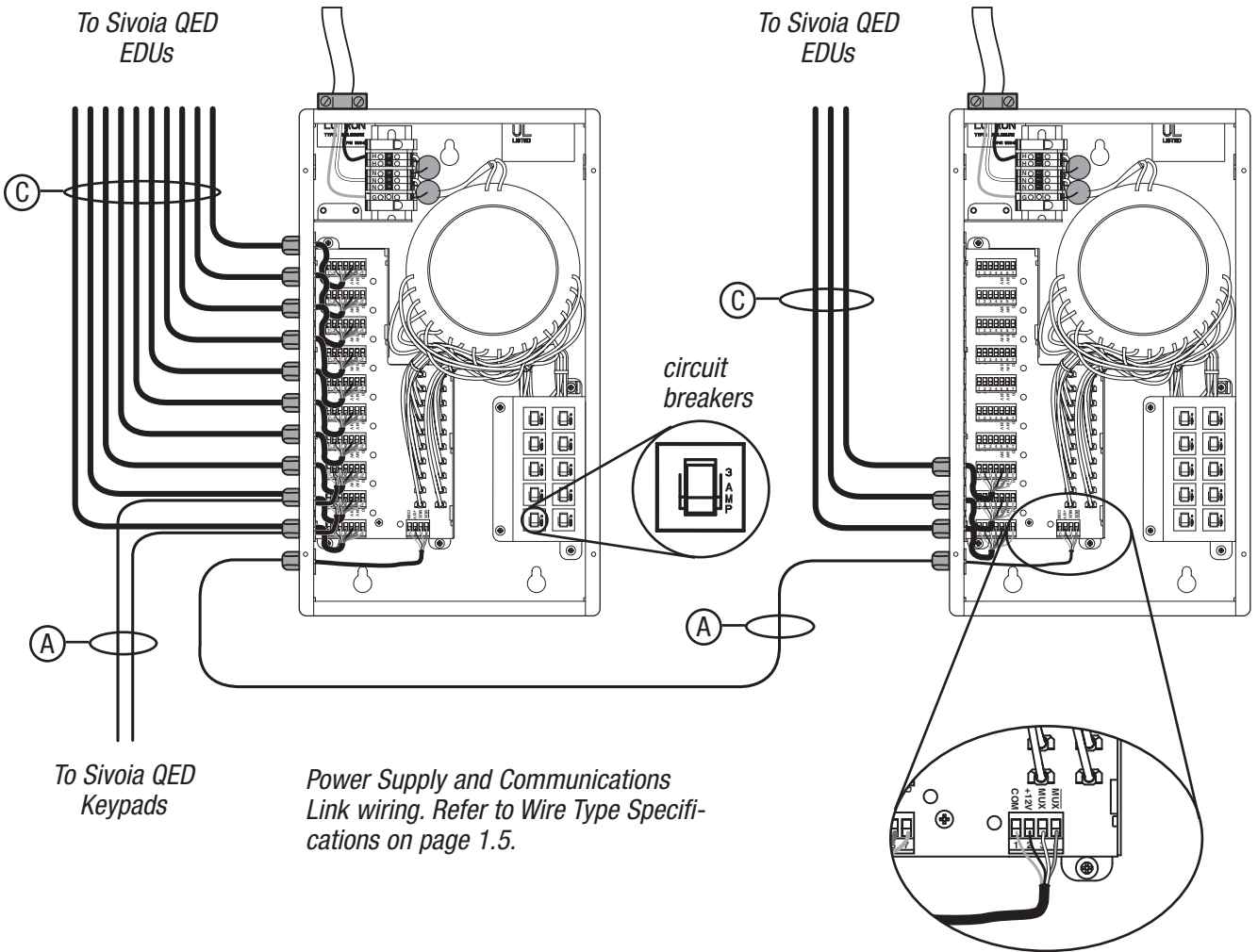


EDU to Power Panel:

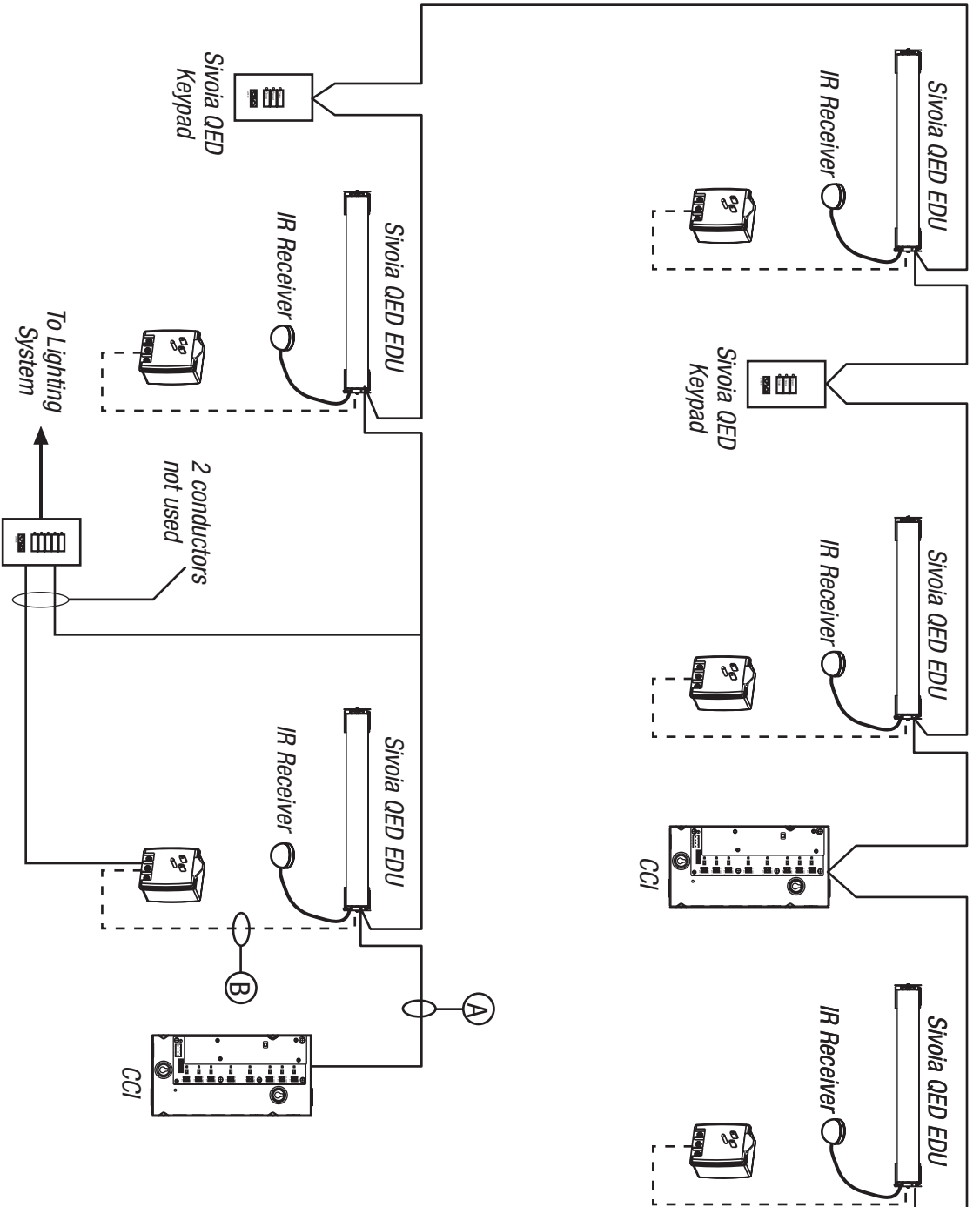
- 4 conductors (A) twisted/shielded with drain (see p.1.5) for communication between multiple EDUs.
- 3 conductors (see p.1.5) for (B) power and ground from transformer to EDU. - OR -
- C Custom seven-conductor combination communications/power cable (SVQ-CBL-250), can be used to simplify wiring.

Keypad to Power Panel:

- 4 conductor twisted shielded.
- The Sivoia QED power panel connects the communications link for each EDU.
- Each Sivoia QED power panel holds ten 100VA transformers which each power one EDU.



- Each panel contains ten 100 VA transformer outputs and ten resettable fuses, which can power a total of ten EDUs, and up to one keypad or CCI per EDU.
- Each panel has ten 7 pin connectors for EDUs. Each connector is supplied with power for one EDU.
- The panel contains a bus that connects the four communication link wires from each EDU together.



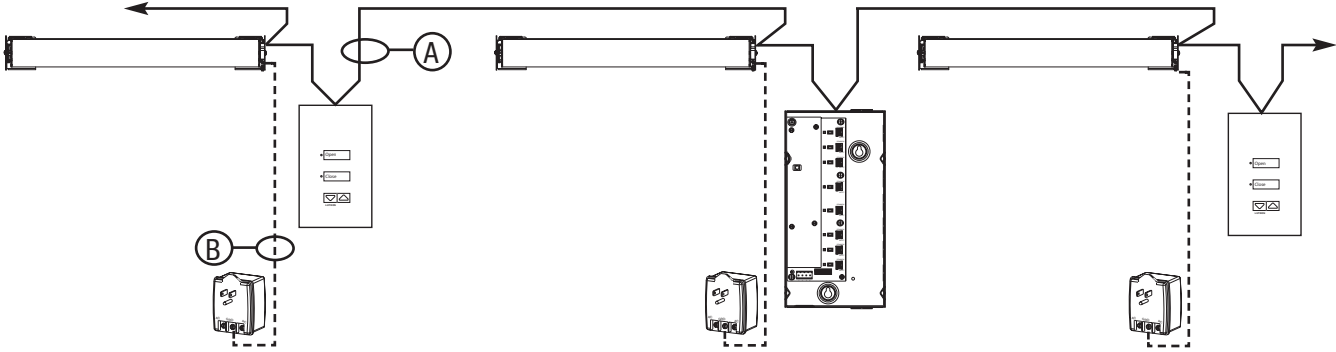
HomeWorks® - Sivoia Control (HWI-SV-5B)
 RadioRA® - Sivoia Control (RA-SVC-)
 GRAFIK Eye® - Sivoia Control (SG/SO-5W/RL)

(A) — Sivoia QED Communications Link
 (4 conductor, 18 AWG twisted shielded)
 (B) - - - - - Power Cable (3 conductor)

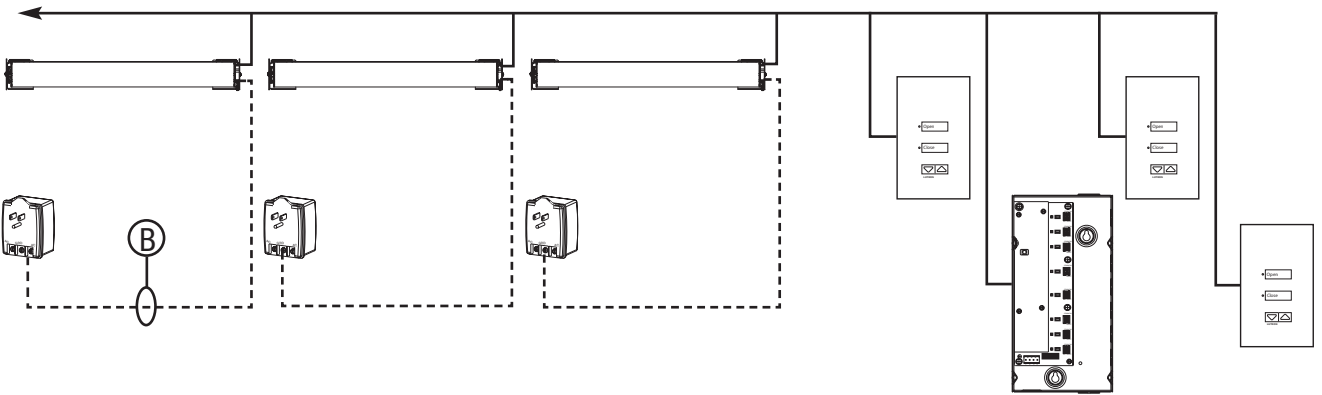
Sivoia QED™ | Wiring Using Individual Transformers

- One CCI counts as one keypad
- Number of keypads and CCIs not to exceed number of EDUs

For systems with more than four keypads, distribute keypads evenly on link - maximum one keypad between EDUs.



Up to four keypads and 400 total feet of communications wire, no requirement for even distribution.



WIRE TYPES

- (A)** Communications Link
4 Conductor #18AWG (twisted and shielded)

- (B)** Power Supply
3 Conductor #16-20AWG

MAXIMUM WIRE LENGTH

EDU to EDU - 500 feet
Maximum total communications link - 4000 feet

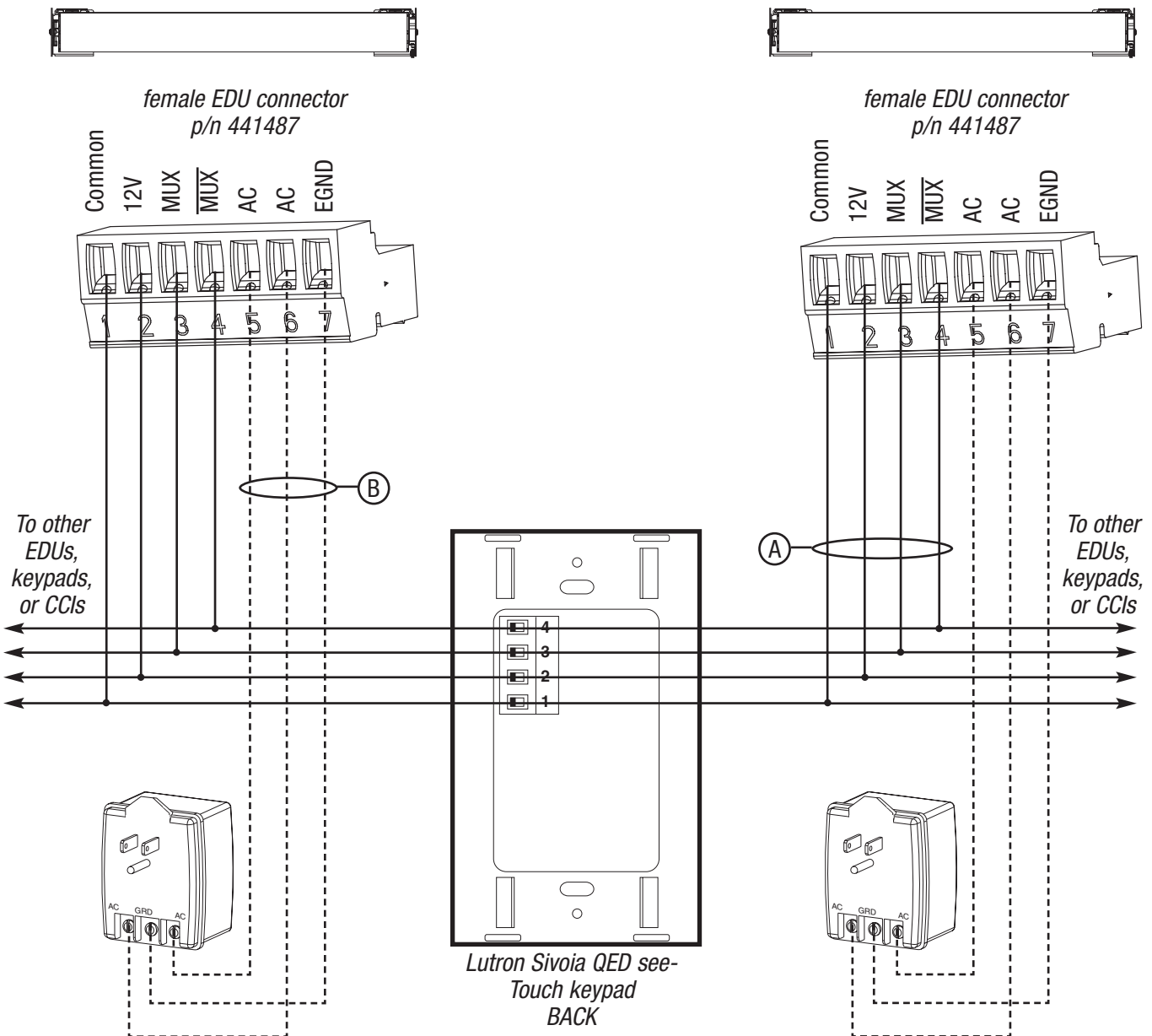
Transformer to EDU
#16AWG - 200 feet
#18AWG - 150 feet
#20AWG - 100 feet

Sivoia QED™ | Multiple EDU Wiring

- Every keypad, CCI, and EDU is connected by the *Sivoia QED™* Communication Link.
- Wire each EDU to a *Sivoia QED* plug-in transformer, junction-box-mount transformer, or a *Sivoia QED* power panel.
- Each EDU must be EARTH grounded.
- Each transformer, of any type, can power ONLY ONE EDU, regardless of shade size.

Ⓐ Communications Link	4 Conductors
Ⓑ Power Wires	3 Conductors
Ⓒ Comm/Power Combination	7 Conductors
SVQ-CBL-250	

Please refer to Tables on pages. 1.4 and 1.5 for details on these wires.



Sivoia QED™ | SV-CCI-8 Wiring Detail

Input channel will accept dry contact closures and open collector outputs ($V_{ce} \leq 0.3V$).

- LEDs provide feedback on contact closure state.
- Terminal blocks accommodate 14–22 AWG wire.



Do not apply voltage to any input channel.

- By default all contact closures on a CCI operate the same group of EDUs.
- By default the CCI has Open, Close, Preset 1, Preset 2, Preset 3, Stop, Raise, and Lower inputs.

