

FULL WIRING SHEET 2 of 5 — FRONT COMPUTER FUSE / RELAY BOX, PIN-LEVEL (rev 3.32 — Option B)

△ This is the FRONT box. The combiner relays (RLY-O5 contactor, RLY-PC pre-charge) + the 3 bed/tent CAMP light relays live in a BED relay box driven by the BED board (sheets 6-7), NOT here.
 Every Bosch ISO mini relay, all pins: 86 = coil + (from fused panel 12V trigger rail) · 85 = coil - (sunk by a controller DO — Waveshare DOs have built-in flyback diodes, no extra diode needed)
 30 = main feed (from the box fuse block, fused per circuit) · 87 = switched output to the load. Relays = True MODS 60/80A 5-pin kit (rev 3.23): leave 87a EMPTY; if coils are diode-suppressed, 85/86 polarity is STRICT (86=+rail, 85=DO).
 Coil draw ~150mA — DO sink limit 500mA is fine. Trigger wires (85/86) = 20-22 AWG or solid Cat5 (one Cat5 = 8 triggers; secure every 12in, strain-relieve ends).
 LEGEND: red = fused 12V feed · dark-red = switched load out · green = trigger rail (86) · purple dashed = DO sink (85) · black = ground

