Batteries Not Included

i.) Column E has no - terminals, so there cannot be a battery in the slot E2/E3. Mark it as empty.



ii.) Row 6 has 3 - terminals and 3x + terminals, so there must be a battery in every slot in that row. We don't know their orientation, but since row 5 only has 4x - terminals and 4x + terminals, the slot in D5/E5 must be empty.



iii.) For Column C to have 3x + terminals, the slot in C3/C4 must contain a battery.
And since Row 4 contains only one of each sort of terminal, slots A4/B4 and E4/F4 must both be empty.



iv.) Column A needs 3x + terminals. That means there must be a battery in A1/B1, with its positive terminal in A1. There must then also be battery in A2/A3 and, since like terminals cannot touch, it must have its negative terminal in A2.



v.) Column F needs 3x - terminals. That means there must be a battery in E1/F1, with its negative terminal in F1. There must then also be a battery in F2/F3 and, since like terminals cannot touch, it must have its positive terminal in F2.



v.) Column E needs 2x + terminals. Therefore the battery in D6/E6 must have its positive terminal in E6. Following the rule that like terminals cannot touch, that allows all batteries in rows 5/6 to be placed. This should also complete column A.



vi.) Column B now has the required terminals, so slot B2/B3 can be marked empty. Row 1 also has all the required terminals, so C1/D1 can be marked empty.



vii.) The remaining slots must all be filled, and there is only one way to do so respecting the rule that like terminals cannot touch.



Solution: FREE OF CHARGE