

DSBN REGIONAL ELECTRICAL WIRING CHALLENGE 2019

Circuitry Legend:

BD – Back door pushbutton (single chime)

Chime – Door bell chime

FD – Front door pushbutton (double chime)

L1, L2, L3 – plastic lamp holder

PC – photo cell

R1 – receptacle 20Amp TGFCI

R2 – receptacle 20Amp T-slot

R3 – split duplex receptacle

S1 – 3-way switch or 4-way switch

S2 – 3-way switch or 4-way switch

S3 – 3-way switch or 4-way switch

S4 – 3-way switch

SD – smoke detector (interconnected)

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Circuit #1: breaker slot # 3,5

- One split receptacle (R3)

Circuit #2: breaker slot # 2

- 20 Amp Receptacle (TGFCI - R1) and 20 Amp receptacle (R2)

Circuit #3: breaker slot # 4

- Lights (L1 and L2) controlled from 3 switch locations (S1, S2, S3)
- Two smoke detectors which are interconnected
 - The smoke detectors are mounted overhead as indicated on the drawing.

Circuit #4: breaker slot # 9

- Door bell circuit
 - Mount the transformer in an octagon box on the plywood
 - Mount the door chime and Front and Back pushbuttons as indicated
- One photo cell (PC) controlling light (L3)
 - The photo cell is mounted in a separate octagon box
 - The photo cell has an auto/manual switch (S4)
- Use armoured cable (BX) to feed Switch (S4), and then romex cable to feed the transformer and photocell