

**SYSTEM/MODEL:** NEM

**MODIFICATION:** External amplifier for louder All Call volume

**DIFFICULTY LEVEL:** 2 - Easy/moderate - Component connection to external points.

**COMPONENTS REQUIRED:** 1. Transformer: OT-32A-18V (Aiphone part #280190)

2. Amplifier: Requires auxiliary (10K ohm) input and 25V output. 15W for every 10 stations within system.

3. NB-U: BGM adapter. (Used if background music is required)

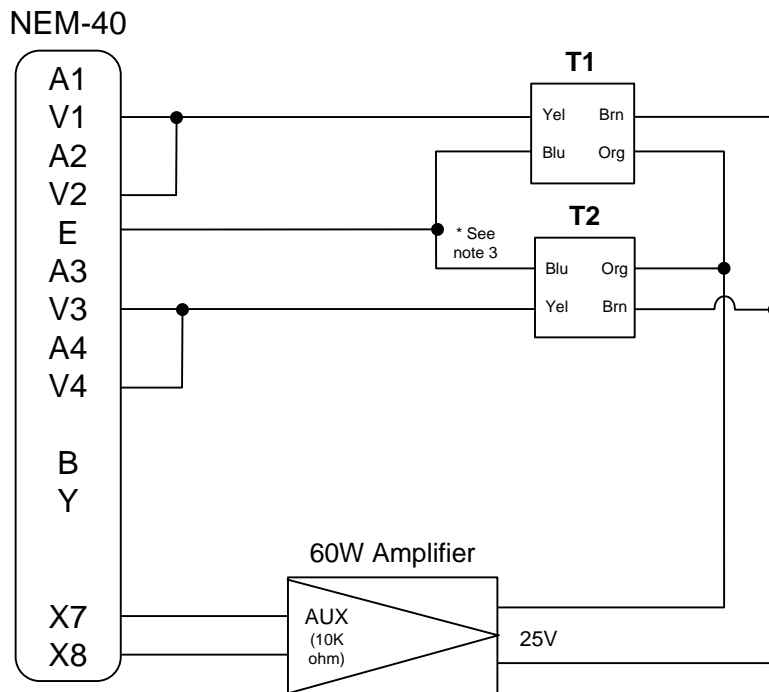
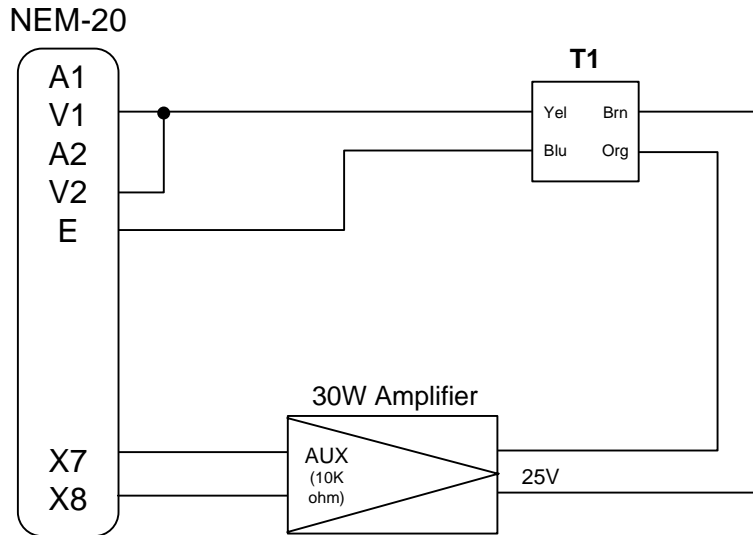
**INSTR/OPERATIONS:** Connect components as shown in the following diagram.

**REFERENCE DRAWING #:** 0998-628A, 0998-628B

Aiphone's product warranty applies to products properly modified using these instructions.  
However, if a unit is damaged as a result of improper modification, the warranty does not apply.

**MODIFICATION DIAGRAM**

**NEM SYSTEM WITH EXTERNAL ALL CALL AMPLIFIER**

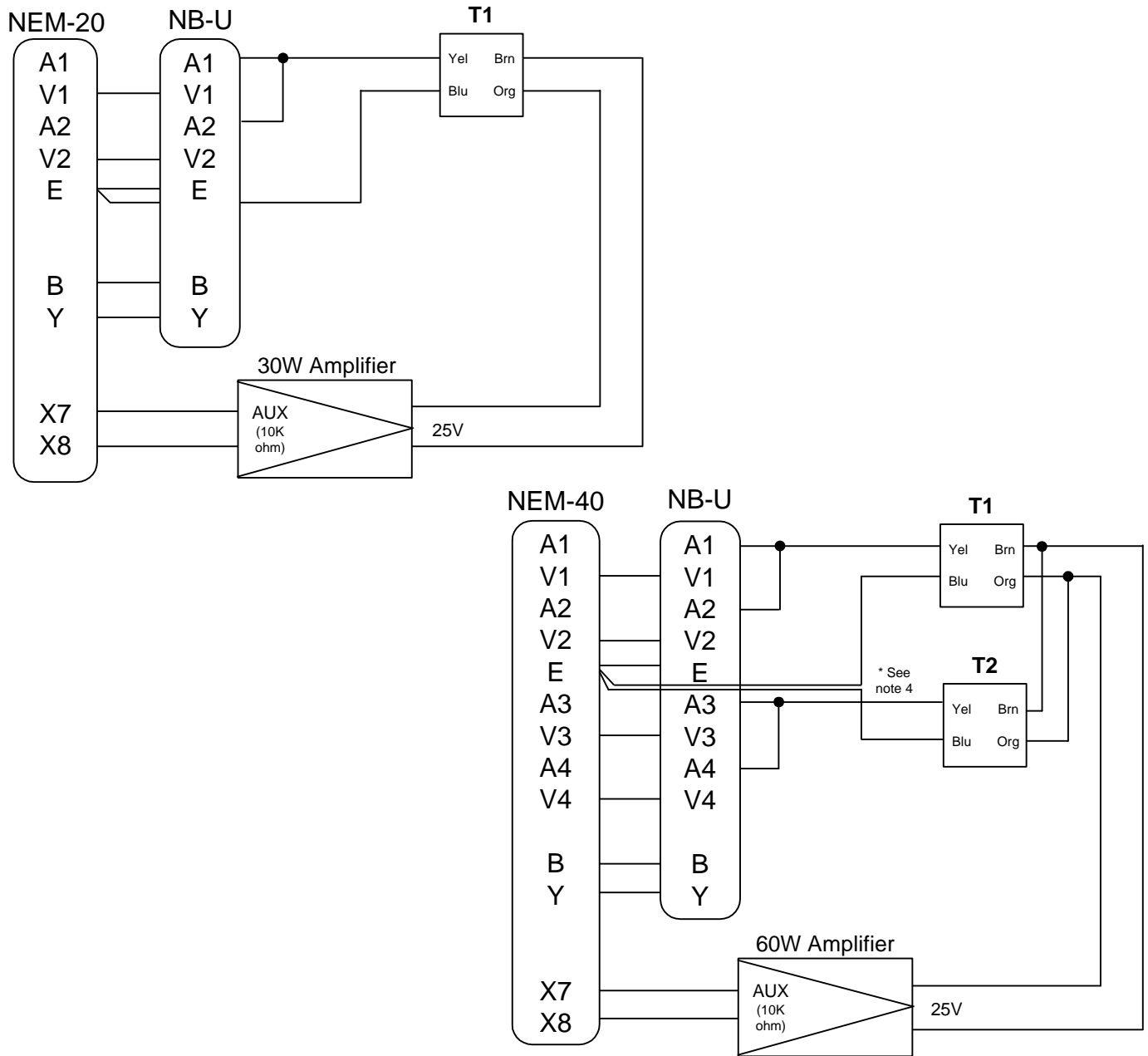


**NOTES:**

1. Transformer T1: Aiphone #280190, OT-32A-18V.
2. Use 18AWG wire from amplifier output to transformers.
3. If using an NEM-10/10A, A2 and V2 connections do not apply.
4. Only wiring concerning the external All Call amplifier is shown here.  
For complete wiring instructions, see the NEM system Installation Manual.

## MODIFICATION DIAGRAM

### NEM SYSTEM WITH EXTERNAL ALL CALL AMPLIFIER AND NB-U (for Background Music)



#### NOTES:

1. Transformer T1 and T2: Aiphone #280190, OT-32A-18V.
2. Do not connect A1, A2, A3, A4 from NEM Master to NB-U.
3. Use 18AWG wire from amplifier output to transformers.
4. \* Connect BLUE wires of transformers directly to E terminal of NEM first, then run wire from E of NEM to E of NB-U.
5. If using an NEM-30/30A, A4 and V4 connections do not apply.
6. Only wiring concerning the external All Call amplifier is shown here.  
For complete wiring instructions, see the NEM system Installation Manual.