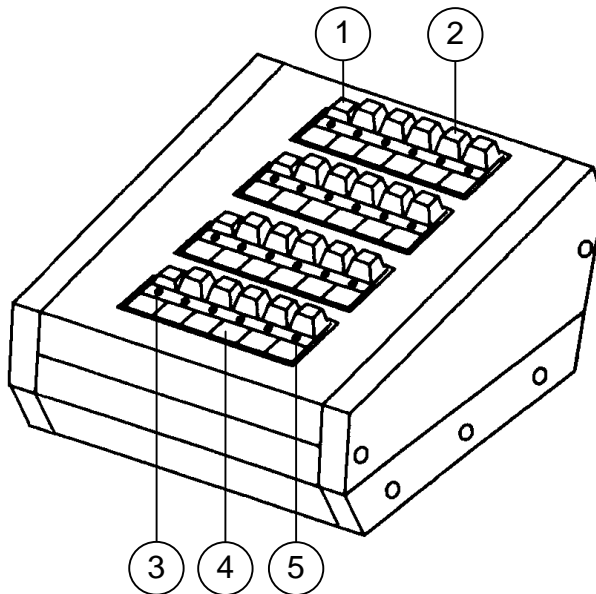# AIPHONE

N-*n*AS

Add-on Selectors for the NEM Lamp Memory System
N-20AS, 20-call   N-40AS, 40-call

- INSTRUCTIONS -

The N-20AS and N-40AS add-on selectors are designed to function with NEM Lamp Memory System, Type "C" or later. Multiple add-on selectors can be added to a master station along with a variety of sub stations to create a communication system tailored to a user's needs. All standard NEM system accessories can be used in conjunction with the add-on selectors.

NAMES & FUNCTIONS:
1. OFF button
2. Selector button
3. OFF LED
4. Directory card
5. Station selector LED

N-*n*AS TERMINAL DEFINITIONS:
+   Positive 24V DC
-          Negative
1~40   Station number
E   Common communication

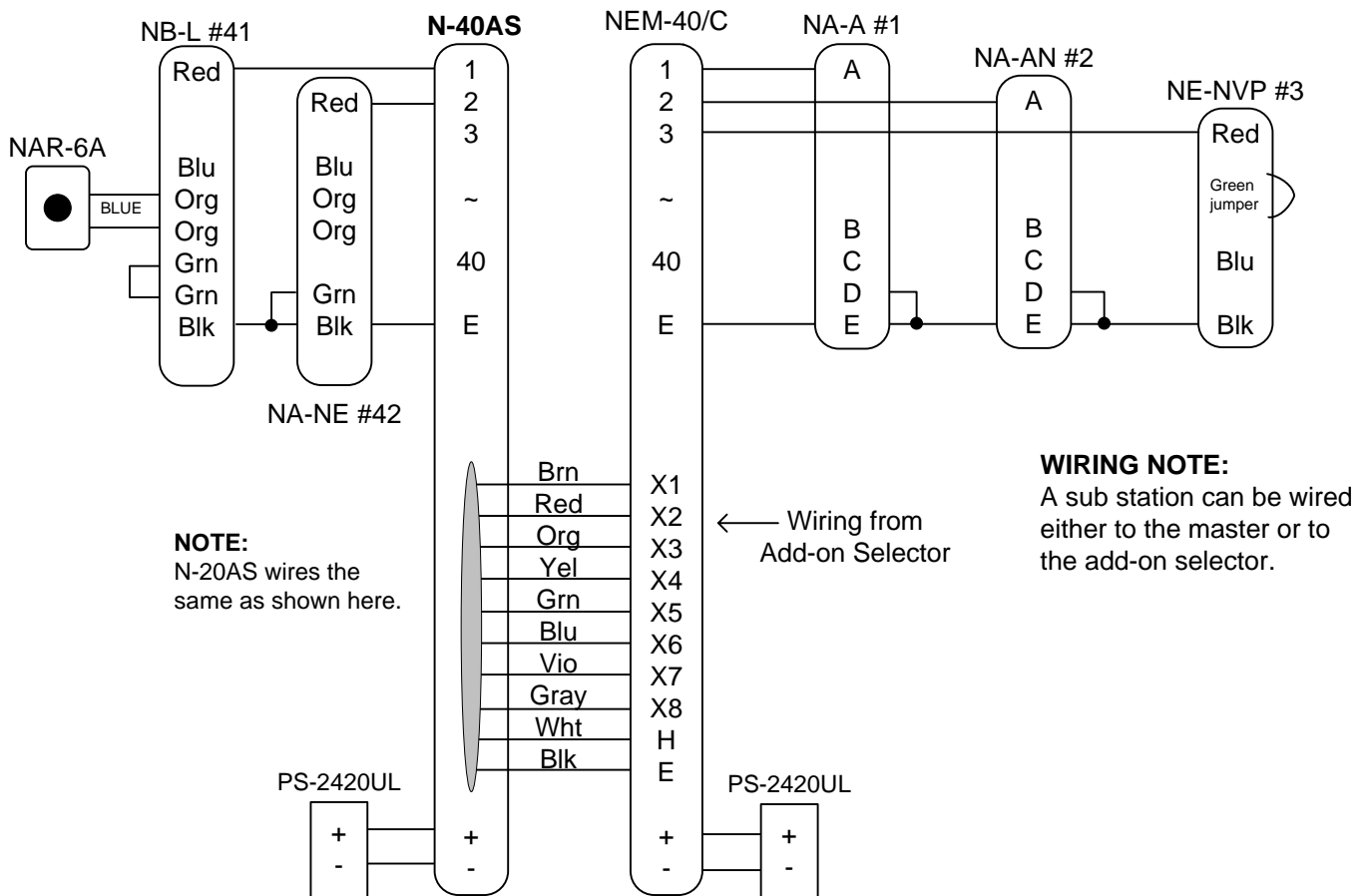**Individual Components for System:**
NEM-*n*   Master station (10, 20, 30, 40-call sizes)
NEM-*nA*   Master station with handset (10, 20, 30, 40-call sizes)
NA-series   Any sub station with NA, NB, or NE model number prefix
PS-2420UL   24V DC, 2A Power Supply
Other Accessory items listed in catalog or price list as compatible with the NEM series.

SPECIFICATIONS:
Power Source: 24V DC. Use PS-2420UL.
Communication Output: 500mW at 20 ohms
Communication: Push-to-talk, release-to-listen (TALK button) or VOX handset at master. (Handset models only.)
                              Hands free at sub station.
All call output: 6W in a system of up to 20 sub stations
                              12W in a system between 21 and 40 stations.
Calling: Master to sub: By voice only after pretone.
                              Sub to master: Call button on sub activates tone and LED, remaining activated until answered.
Wiring: 2 conductors homerun to sub station, or loop multi-conductor cable with 1 common wire
                              plus 1 individual wire per sub station on the wire run.
                              Shielded cable is recommended. Use Aiphone #822202 (22AWG) or #821802 (18AWG) 2 cond.
                                   Multiconductor: Aiphone #822210 (10 cond.), #822215 (15 cond.), #822220 (20 cond.)
Wiring Distance: 420' with 22AWG; 1,000' with 18AWG.

WIRING DIAGRAM:

NB-L #41   **N-40AS**   NEM-40/C   NA-A #1   NA-AN #2   NE-NVP #3

NAR-6A   BLUE

Red — 1 2 3 ~ 40 E

Red — Blu Org Org Grn Blk

Blu Org Org Grn Grn Blk

NA-NE #42

NOTE:
N-20AS wires the same as shown here.

NEM-40/C: 1 2 3 ~ 40 E

NA-A #1: A B C D E

NA-AN #2: A B C D E

NE-NVP #3: Red — Green jumper — Blu — Blk

WIRING NOTE:
A sub station can be wired either to the master or to the add-on selector.

Brn — X1
Red — X2
Org — X3
Yel — X4
Grn — X5
Blu — X6
Vio — X7
Gray — X8
Wht — H
Blk — E

← Wiring from Add-on Selector

PS-2420UL   +   -

PS-2420UL   +   -

OPERATION:

* POWER SWITCH ON MASTER MUST BE ON FOR SYSTEM TO BE OPERABLE.
1. When a station calls in, press the selector button corresponding to the lit LED. Station will continue to ring and station LED will remain illuminated until the call is answered at the master or reset at the sub.
2. To speak to the person at the remote station, press the TALK button on the master, and release TALK button to hear reply. If the master is equipped with a handset, communication can be with the handset or push-to-talk. Communication via the handset is VOX (voice actuated).
3. When the conversation is completed, press the OFF button to the left of the station button that is selected. Hang up handset.

CAUTION
* Do not connect any AC wires to any terminal on any unit, as damage may occur. Connect only specified power source to + and - terminals.
* Do not install more or different power sources than specified for the system.
* Do not attempt to install or connect wires on the NEM system while the system's power supply is plugged in.
* NEM masters and related equipment, unless specified as "weather resistant", are designed for indoor use only. Door stations (NE-DA, NE-JA, NE-NVP) may be installed outdoors in a protected area. Do not expose any equipment directly to rain or extreme weather conditions.

IMPORTANT
* Any other manufacturer's products installed with the system (power supply, external device, etc.) are not covered under Aiphone's warranty.
* Do not mount NEM equipment in the following places, as it may cause the system to malfunction:
    - High or extreme cold temperature areas: under direct sunlight, near equipment that varies in temperature, in front of air conditioner, inside a refrigerated area, etc.
    - Places subject to moisture or humidity extremes.
    - Places subject to environmental conditions, such as dust, oil, chemicals, salt, etc.
* NEM units are electronic devices, which must not be subjected to water or any other liquid.
* Severe weather conditions, such as lightning storms, may cause damage to NEM equipment. We recommend that power surge protection be installed to minimize potential component level damage.
    - Install the SA-1 surge arrestor to protect the power supply from a surge.
    - Additional SA-1 surge arrestors should be installed on all communication lines (one SA-1 for every two connected to master.).