



AlphaRefuLeTM

2400 Series

Installation & Operations Manual

Items Needed

Included

- Command Center Phone with phone line cable
- Distribution Module
- System wiring (pigtail cables, power cord, ethernet cable for programming if needed)
- Cabinet (wall mount) or Stand (desk mount)

Not Included

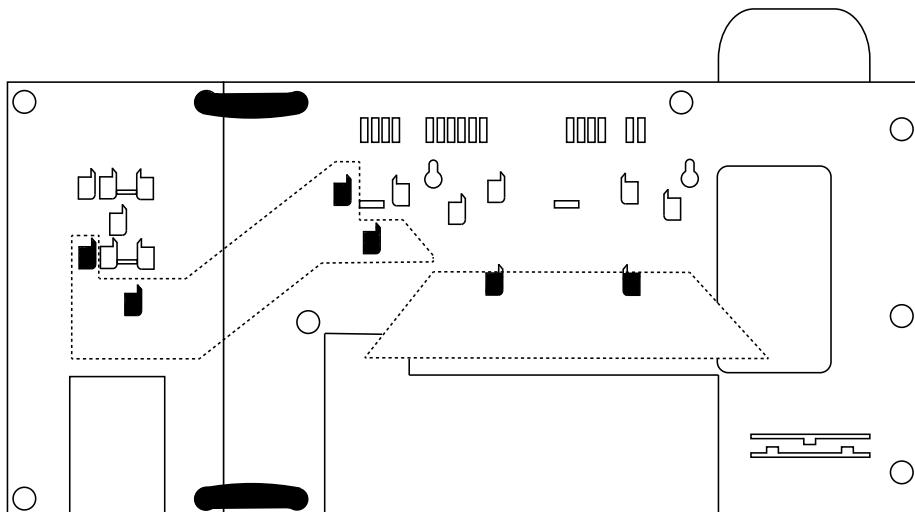
- 22 or 24 AWG twisted, shielded cable
- Multimeter
- Analog phone for troubleshooting
- Recommended: Biscuit jack for each phone (if needed; not applicable for elevator systems)

Installation

Step 1

Mount the Distribution Module and Power Supply with the battery backup in an appropriate location, installing the cabinet for wall mount units or the stand for desk mount units accordingly. Then remove the knock outs (if applicable). The recommended location to mount the Distribution Module and Power Supply is in a network closet or machine room. Mount the Command Center according to the owner's specifications.

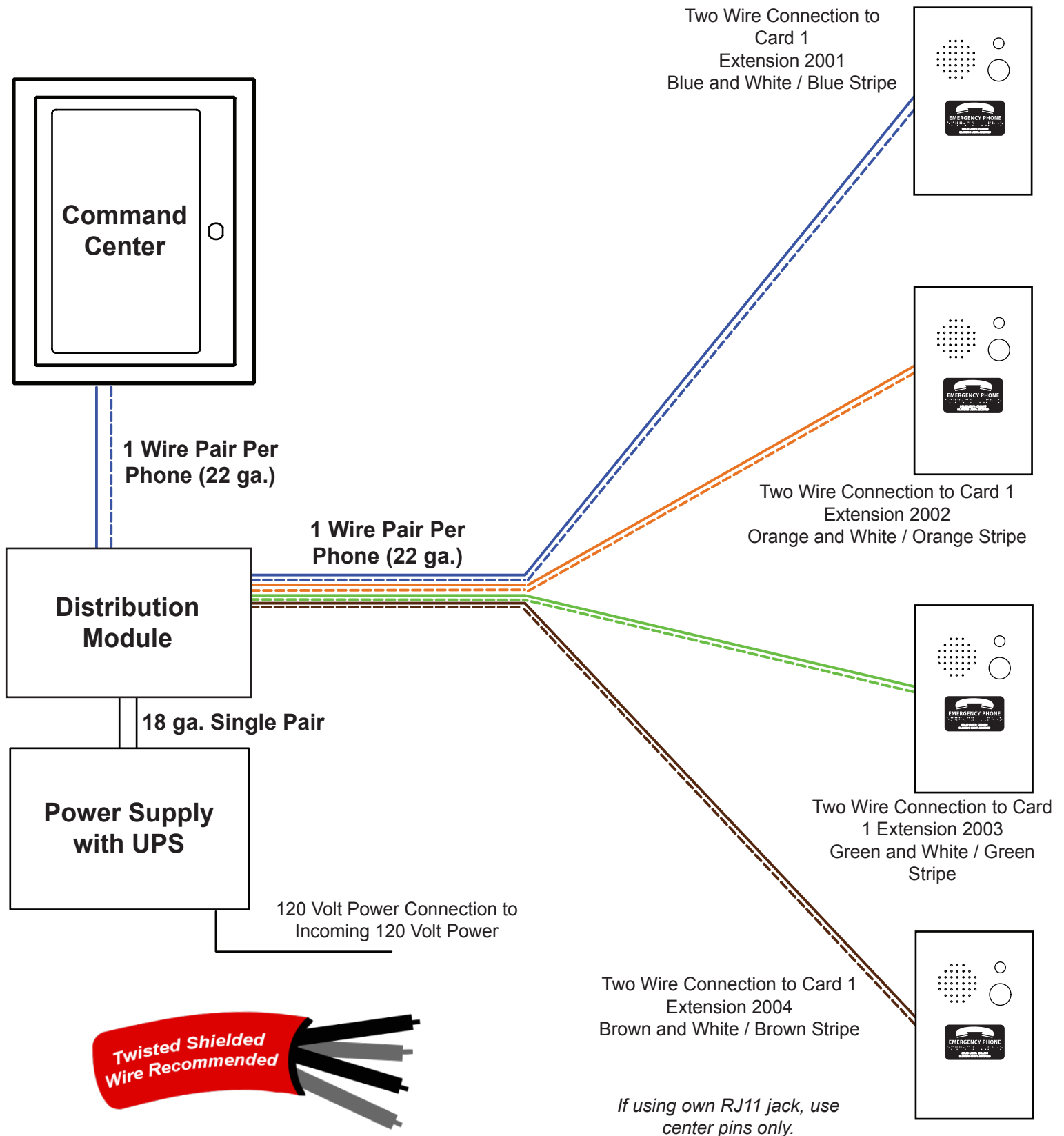
Follow the diagram below for attaching the extender and foot stand to the back of the Command Center phone as needed.



Step 2

For 12-36 zone systems, remove the screws on the back of the Distribution Module and remove the cover to expose the internal ports.

Typical System Layout



Distribution Module Wiring

Step 3

Card Wiring

- These instructions apply for connecting the Command Center to the Distribution Module as well as for connecting Emergency Phones to the Distribution Module.
- The maximum cable run to the Distribution Module from the base station phone is 6,200' for 22AWG and 3,900' for 24AWG cable.
- The maximum cable run to an Emergency Phone is 112,500' for 22AWG and 70,300' for 24AWG cable.
- When connecting Emergency Phones to the Distribution Module, EIA/TIA Standards MUST be followed for wiring the locations to single pair 22AWG or 24AWG UTP twisted, shielded cable.

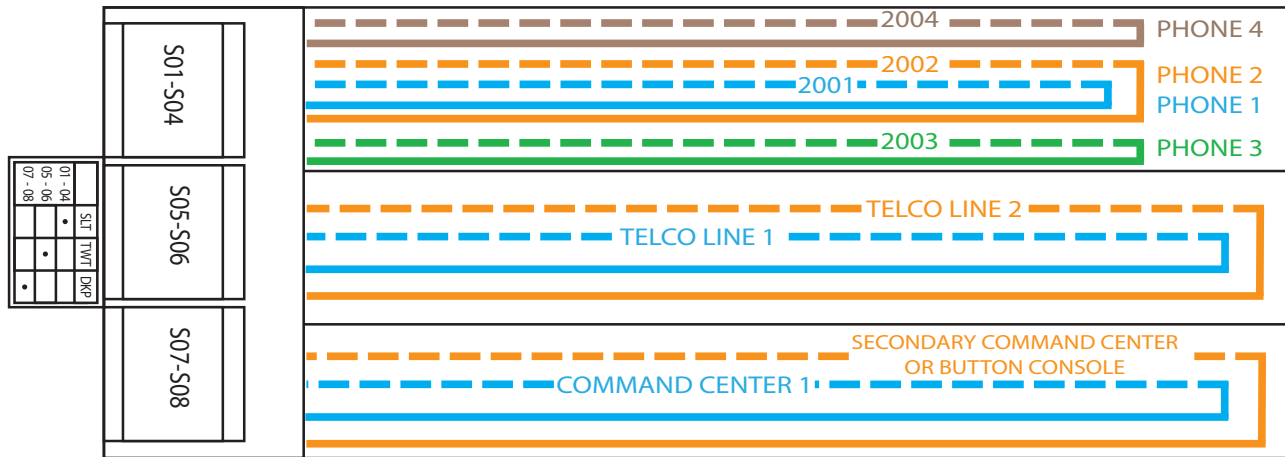
Note: When using the Command Center for non-elevator applications, it is recommended to use a biscuit jack for connecting each phone. The communication wire pair should be connected to the **red** and **green** screw terminals on the biscuit jack. This will prevent loose connections that can cause the system to malfunction.

Option 1

12-36 Zone System:

- On top of each port there is a label indicating connection:
 - SLT** is the port used for connecting emergency phones
 - DKP** is the port used for connecting Command Center phone(s)
 - TWT** is the port used for outside Telco line
- Plug the supplied RJ45 pigtail cables into the ports following the wiring chart and pin-out color scheme below
 - Refer to the top of the cards to see what type of port and number of extensions
 - The same pin-out color scheme should be used for the primary card and for all additional cards. The system uses T568-A for pin-out wiring.
- The first card installed will always be:
 - Port 1: (01-04) Connection for 4 Emergency Phones (SLT)
 - Port 2: (05-06) Connection for 2 Telco Lines (TWT)
 - Port 3: (07-08) Connection for up to 2 Command Center Phones (DKP)

Card 1 Example

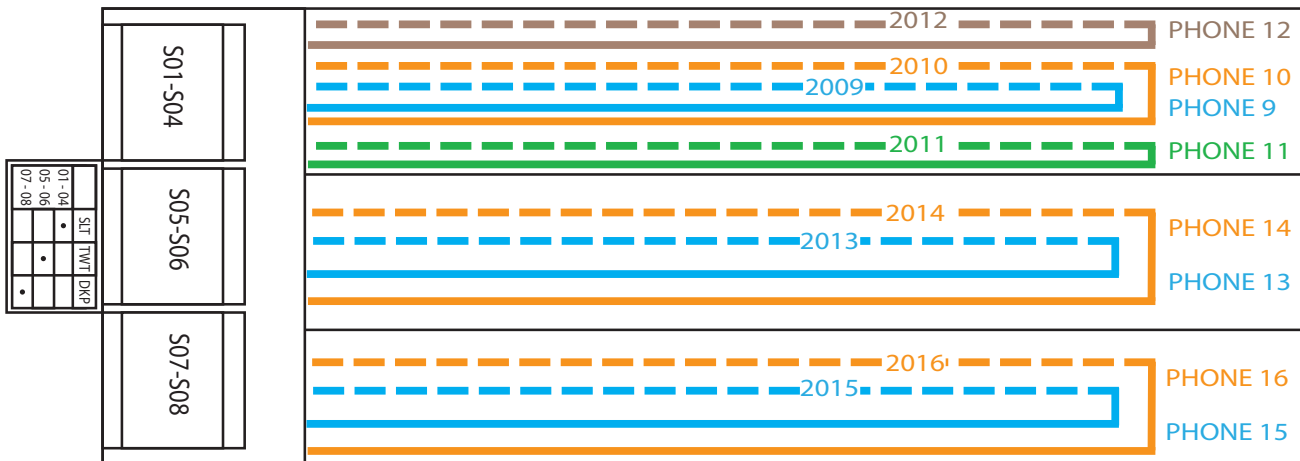


Note: Do not use the green and brown pairs

- The second through fifth card will always be used for connecting additional emergency phones. For Card 2:
 - Port 1: (01-04) Connection for 4 Emergency Phones
 - Port 2: (05-06) Connection for 2 Emergency Phones
 - Port 3: (07-08) Connection for 2 Emergency Phones

Note: The numbering pattern continues on cards 3 through 5. Card 6 will always be used for the Voicemail Card and will have no connections.

Card 2 Example



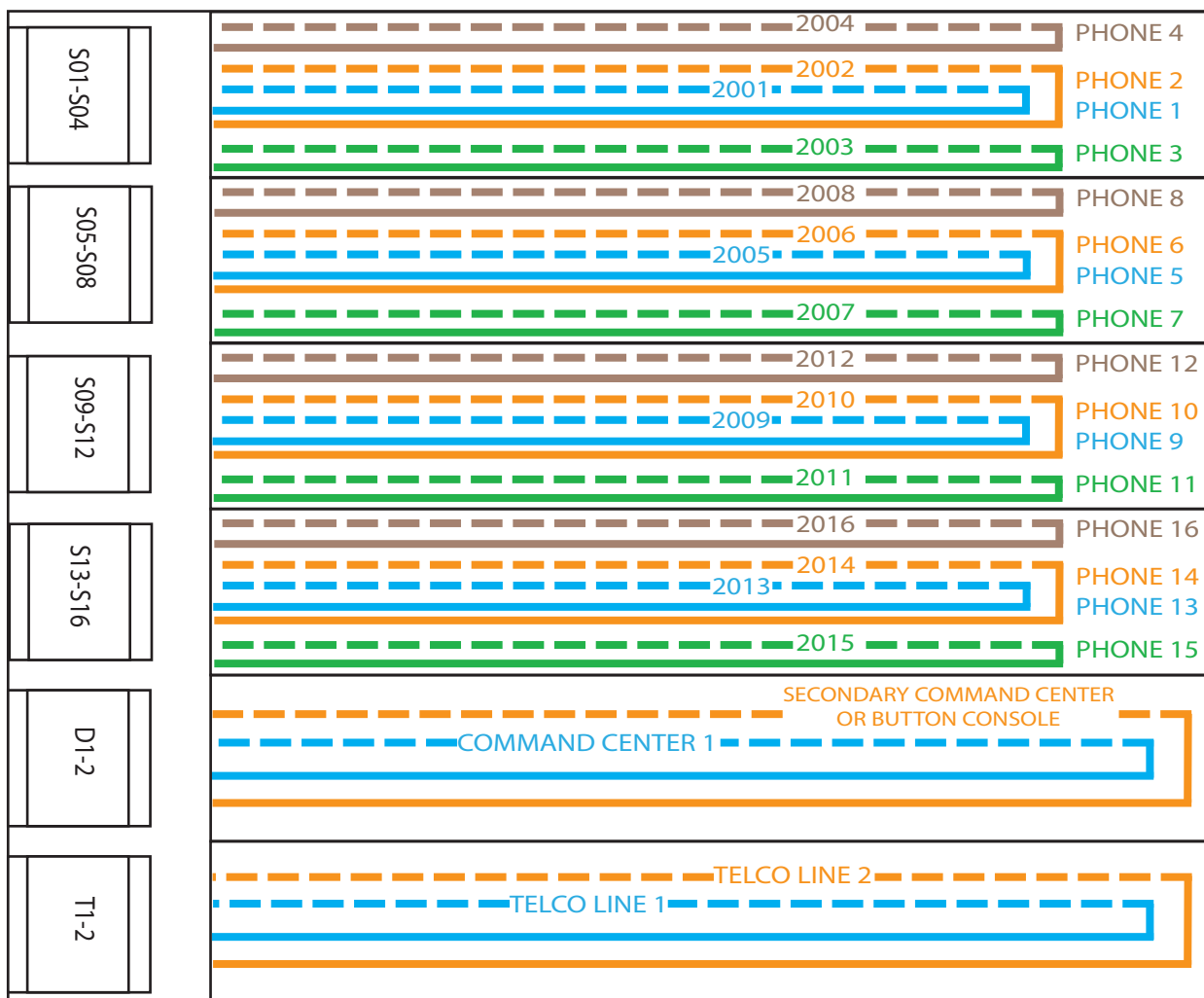
Note: Do not use the green and brown pairs

Option 2

56-92 Zone System:

- Each card installed will have 6 ports
- On top of each port there is a label indicating connection:
 - S01-S_** is the port used for connecting emergency phones
 - TD(1-2)(3-4) with a dot under the D** is the port used for connecting Command Center phone(s)
 - TD(1-2)(3-4) with a dot under the T** is the port used for outside Telco line
- Plug the supplied RJ45 pigtail cables into the ports following the wiring chart and pin-out color scheme below
 - Refer to the top of the cards to see what type of port and number of extensions
 - The same pin-out color scheme should be used for the primary card and for all additional cards. The system uses T568-A for pin-out wiring.
- The first card installed will always be:
 - Port 1: (S01-S04) Connection for 4 Emergency Phones
 - Port 2: (S05-S08) Connection for 4 Emergency Phones
 - Port 3: (S09-S12) Connection for 4 Emergency Phones
 - Port 4: (S13-S16) Connection for 4 Emergency Phones
 - Port 5: (D1-2) Connection for up to 2 Command Center Phones
 - Port 6: (T1-2) Connection for up to 2 outside Telco Lines

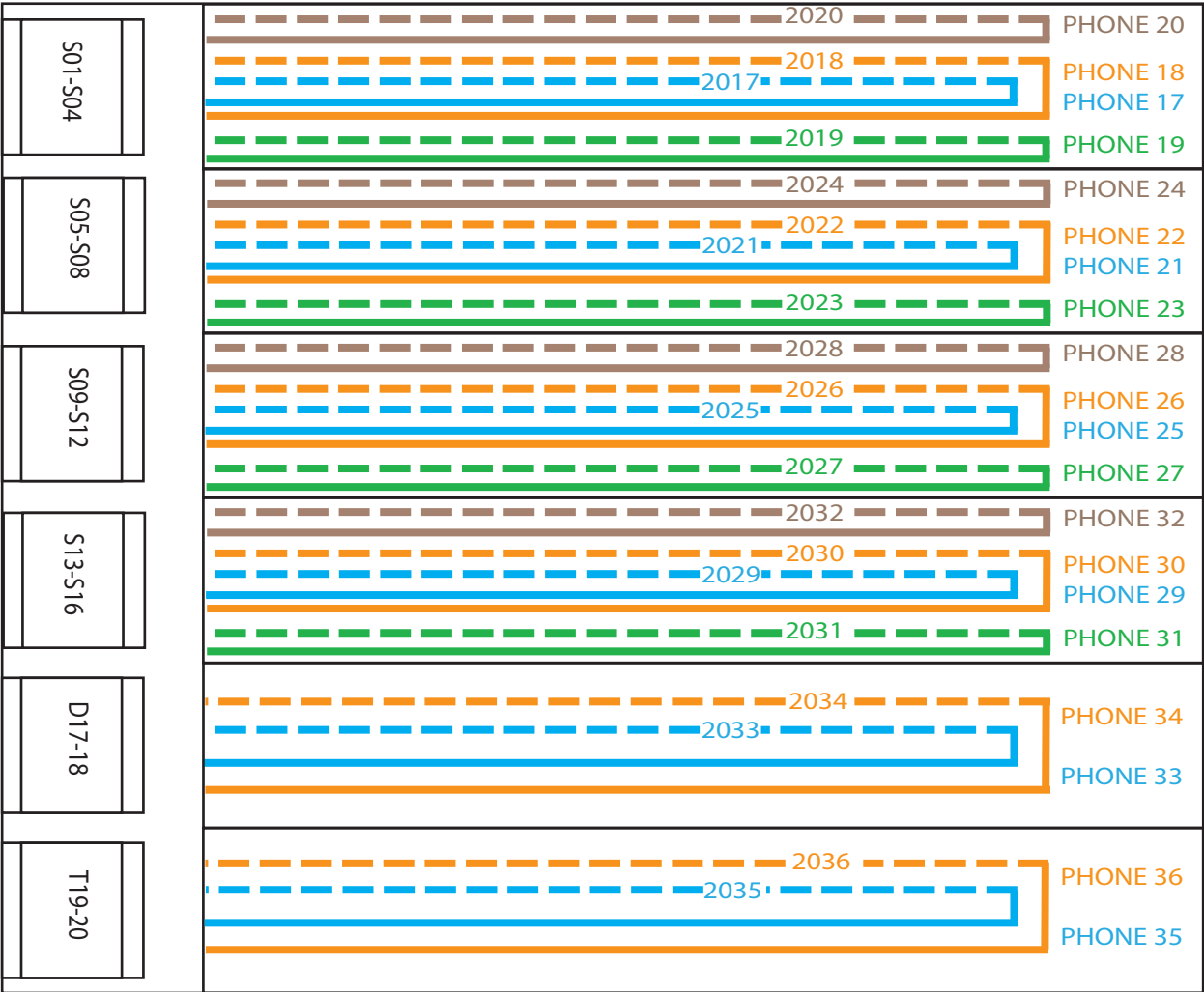
Card 1 Example



Note: Do not use the green and brown pairs

- The second through fifth card will always be used for connecting additional emergency phones. For Card 2:
 - Port 1: (01-04) Connection for 4 Emergency Phones
 - Port 2: (05-08) Connection for 4 Emergency Phones
 - Port 3: (09-12) Connection for 4 Emergency Phones
 - Port 4: (13-16) Connection for 4 Emergency Phones
 - Port 5: (17-18) Connection for 2 Emergency Phones
 - Port 6: (19-20) Connection for 2 Emergency Phones
- Note:** The numbering pattern continues on cards 3 through 5. Card 6 will always be used for the Voicemail Card and will have no connections.

Card 2 Example



Note: Do not use the green and brown pairs

Step 4

Plug one end of the Distribution Module Power Cable into the DC Adapter Port on the Distribution Module. Plug the other end into the Alpha Communications® model PWRAPC Series Power Supply.

Step 5

Turn on the Power Supply.

Step 6

Turn on the Distribution Module.

Setting the Date and Time

Step 7

Perform the following steps on the Command Center handset.

1. Enter Program Mode
 - a. Dial **1#91**
 - b. Enter Password: **7284**
2. Program Time Zone:
 - a. Dial **1002** followed by the appropriate time zone code:
Eastern Time Zone = **111**
Central Time Zone = **112**
Mountain Time Zone = **113**
Pacific Time Zone = **114**
 - b. Touch the **GREEN** button in the middle of the phone when finished
3. Program the Date (month-day-year format):
 - a. Dial **1001** followed by the date
Example: 1001 02152011 for February 15, 2011
 - b. Touch the **GREEN** button in the middle of the phone when finished
4. Program the time (military time including hour-minute-second):
 - a. Dial **1003** followed by the time
Example: 1003 143000 for 2:30pm
 - b. touch the **GREEN** button in the middle of the phone when finished
5. To exit Program Mode dial **00** followed by the **GREEN** button

Emergency Phone Programming

Step 8

Program the emergency phone for the desired calling pattern

Option 1

Emergency Phone Calls the Command Center

1. For the Emergency Phone to call the Command Center, follow the instructions that came with the phone to program Memory Location 1 to dial 3931

Option 2

Emergency Phone Calls the Command Center First, then a Number Outside the Building

1. The Emergency phone can be programmed to call the Command Center first, then if that call is not answered, call an outside number
2. Follow the directions that came with the phone to program Memory Location 1 to dial 3931
3. Follow the directions below to program the Command Center Phone to dial the external number
 - a. Press the speaker phone button
 - b. Dial **1, 3, 4**
 - c. Dial **9**, then the **external number**
 - d. To exit Program Mode dial **00** followed by the **GREEN** button

Step 9

Program the location message for the emergency phone. This is an optional feature. Skip this step if a location message is not desired.

Option 1

2100 Series Phone

1. Follow the instructions that came with the phone to set the message frequency to option 3
2. Record your message
 - a. At the end of the message add **“For two-way communication, press * at any time”**

Option 2

2400 Series Phone

1. Follow the instructions that came with the phone to set the message frequency to option 3
2. Record your message
 - a. At the end of the message add **“For two-way communication, press # four times after the beep”**

Operating Instructions

Indicator Status

1. Red LED Light - Incoming call or connected to outside party
2. Blue LED Light - Active call
3. Blue LED Flashing - Call on hold

Answering Call at Command Center

1. Lift the handset to answer the first incoming call
2. If multiple calls are coming in, press the red LED light next to the desired call (this will place the original call on hold)

Disconnecting Calls:

1. Select the desired flashing blue LED and press the *, # buttons
2. Each call must be disconnected individually

Note: If you hang up the handset before disconnecting each call, the LED(s) will remain illuminated. Lift the handset, press the illuminated LED, the number **5** button, then *, #. To disconnect, hang up the handset. Repeat for each illuminated LED.

Joining a Call Already in Progress

1. Pick up the handset, press the red LED, then the number **5** button
2. You will be in a 3-way conversation with the outside party and location

Calling a Location

1. Pick up the handset and press the button for the desired location

Troubleshooting

Problem	Possible Cause & Solutions
Command Center will not power on:	<ul style="list-style-type: none"> • Check wires for voltage. It should be 28vdc • If no voltage is detected, confirm you are connected to the DKP port on the Distribution Module • If you have 48vdc, you are incorrectly connected to an SLT port
Emergency Phones will not call out:	<ul style="list-style-type: none"> • Check wires for voltage. It should be 48vdc • If no voltage is detected, confirm you are connected to the SLT port on the Distribution Module. Note: some SLT ports only use the blue and orange pairs • If you have 28vdc, you are incorrectly connected to the DKP port • Make sure you dial any access digit that may be required to dial out of your building
Phone will make internal calls, but not external calls:	<ul style="list-style-type: none"> • Check the phone line is connected to the correct port on the Distribution Module • Verify the phone line by making sure it has 48-52vdc on the line and use an analog phone to verify you are able to call in and out
Insufficient volume on call boxes:	<ul style="list-style-type: none"> • To adjust the volume on SmartPhones, turn the VR1 port • To adjust the volume on 2400 Phones, use the VOL key
Lights continuously blink on button for call box:	<ul style="list-style-type: none"> • The phone is not properly hung up. Lift the Command Center handset, select the blinking light, then hang up the handset
Lights periodically blink on Command Center:	<ul style="list-style-type: none"> • This indicates the phone is doing a phone line check. This is a normal function of the system and no action is needed • To disable this function, refer to the SmartPhone Programming Guide