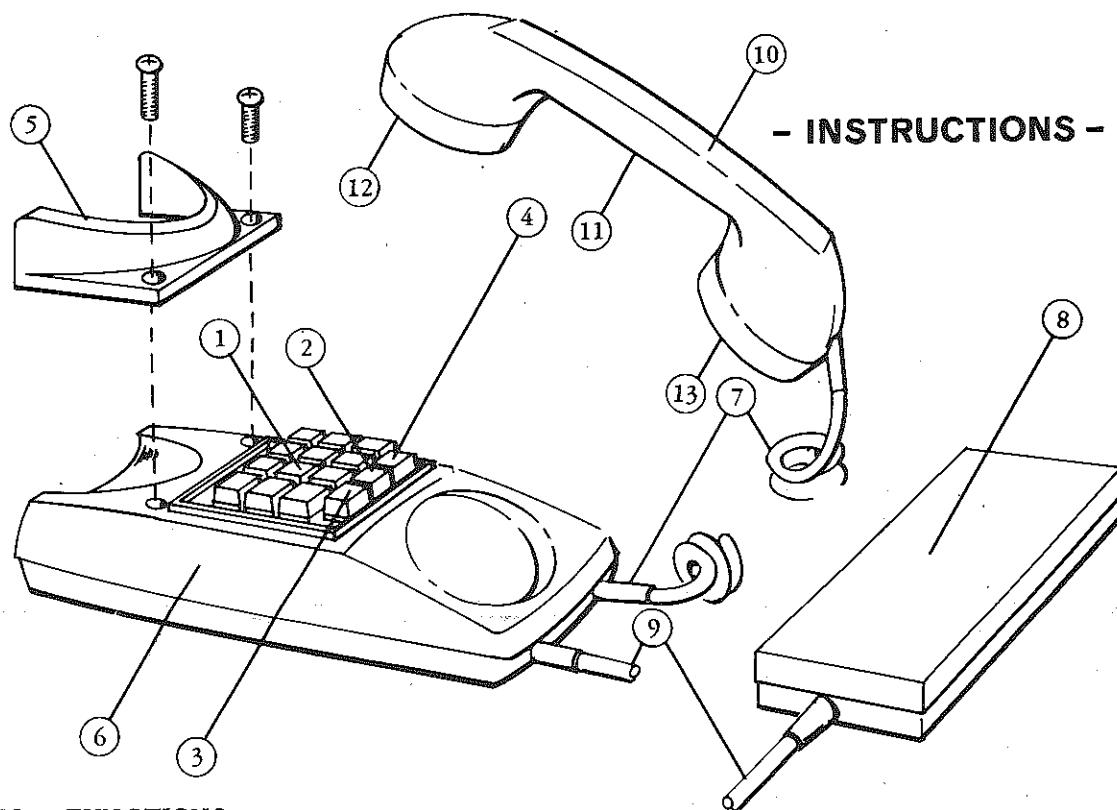


TELEPHONE TYPE INTERCOM COMPLETE PRIVACY SYSTEM MODELS

TA-6Y (six call master)

TA-12Y (twelve call master)

TA-24Y (twenty-four call master)



NAMES & FUNCTIONS.

- | | | |
|---|-----------------|------------------|
| ① Station selector buttons | ⑥ Case | ⑩ Handset |
| ② Paging button | ⑦ Coil cord | ⑪ Directory card |
| ③ Call button | ⑧ Terminal box | ⑫ Receiver |
| ④ Change-over switch button
(only in TA-24Y) | ⑨ Terminal cord | ⑬ Microphone |
| ⑤ Receiver cradle for wall-mounting,
included, | | |

SPECIFICATIONS:

- * Power source: DC 12 volt. Use PS-12S (CS-12A in North America) power supply AC adaptor.
- * Current consumption: 95 MA at calling station, 80 MA at receiving station per channel.
- * Calling: Push station selection button, then call button. Electronic tone is heard at called station.
- * Wiring: Up to 30 conductors may be required. Please refer to wiring diagram showing system that meets your requirements.
- * Paging: Use PG-U paging adaptor in conjunction with standard paging amplifier.
- * Central terminal: Select suitable terminal board from the following:
 - For TA-6Y stations - CT-77Y
 - For TA-12Y stations - CT-221Y
 - For TA-24Y stations - CT-725Y

AS EACH UNIT

FEATURES

- * 100% communication capacity (example: 12 station system handles 6 simultaneous conversations).
- * Complete communication privacy.
- * Exceptional voice fidelity.
- * 'Touch dial' type push buttons.
- * Station directory for easy lettering inside each handset, protected by plastic window.
- * Telephones are universal for either desk use or wall mounting.
- * Wiring is straight forward and follows standard central exchange layout. Each station connects to central terminal board using standard non-shielded communication cable.
- * Any station can page through connected conventional paging or background music system using adaptor PG-U.
- * Talkback paging and/or block paging available using adapter PA-B.

INSTALLATION

Do not attempt to install your intercom system until you have read and thoroughly understood the installation procedure. Aiphone's warranty is void if system is installed in a manner other than described in this manual.

WIRING

Lay out your system in advance. Determine the exact location of each station. We recommend a full complement of wire be installed, even though you may not initially be installing the maximum number of stations available to your system. This way, should you decide to add a station later, you can avoid running additional cables to existing stations.

Do not connect wire to terminal P3 on your TA-Y phone. Use of this special purpose terminal is described later in this manual. TA-Y system will not function properly if P3 terminal is connected parallel through system.

A maximum of 30 conductors is required for the TA-24Y.

A maximum of 18 conductors is required for the TA-12Y.

A maximum of 12 conductors is required for the TA-6Y.

Refer to the chart below and select the proper wire gauge to meet your requirements.

AWG WIRE SIZE	24 AWG	22 AWG	20 AWG
MAXIMUM COMMUNICATION DISTANCE FROM EACH PHONE TO CENTRAL TERMINAL BOARD	370'	600'	1,000'
TOTAL LENGTH OF ALL COMMUNICATION CABLE INSTALLED PER SYSTEM SHOULD NOT EXCEED	16,400'	16,400'	16,400'
DIAMETER OF WIRE	0.5 mm	0.65 mm	0.8 mm
MAXIMUM COMMUNICATION DISTANCE FROM EACH PHONE TO CENTRAL TERMINAL BOARD	110 m	200 m	300 m
TOTAL LENGTH OF ALL COMMUNICATION CABLE INSTALLED PER SYSTEM SHOULD NOT EXCEED	5 km	5 km	5 km

Begin your installation by mounting the central terminal board in a location as near as possible to the center of the system and also convenient to an electrical source required to supply electricity to your PS-12S or CS-12A power supply. Refer again to the wiring chart to be sure the furthest phone does not exceed the recommended maximum communications distance to the central terminal board.

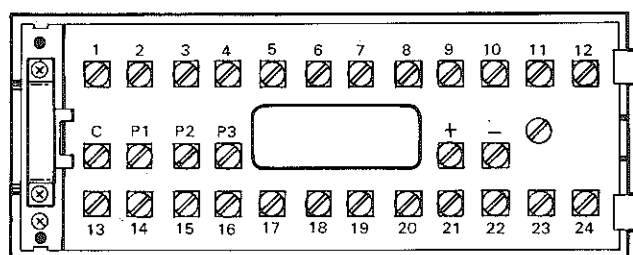
On page 4 of this manual you will find a convenient simulated terminal block for the system you are installing and a space for writing your color code. Proceed by making wiring connections to station #1, writing in your color code in the provided space as you make each connection.

After making connections at station #1, proceed to the central terminal board and connect wires from station #1 to the first horizontal row of terminals on the central terminal board as illustrated on page 4 and 5 of this manual. Following the color code established when making connections at station #1 phone, connect terminal 1 to terminal 1, terminal 2 to terminal 2, etc.

You are now ready to install station #2. Connect wires to station #2 following color code used in station #1. Then proceed to the central terminal board and connect wires from station #2 to the second horizontal row of terminals on the central terminal board. You are now ready to install station #3.

After installing your second station we recommend that the appropriate power supply be connected to the + and - terminals at the central terminal board and that a test be made for calling and talking between each station. As each additional station is installed re-test between each station. NOTE: Unplug power supply during wiring.

ACTUAL TA-24Y TERMINAL LOCATIONS



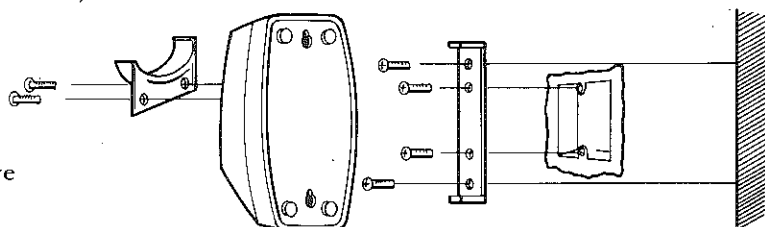
INSTALLATION OF TA-24Y TERMINAL BOX

(Can be mounted easily to wall or 1-gang box.)

- 1) Remove screws and cover as shown.
- 2) Remove terminal board (can be removed by lifting middle terminals off the plate).
- 3) Attach bottom case to wall or 1-gang box.
- 4) Wire terminal plate and remount it to bottom case, then replace cover.

PHONE WALL MOUNTING INSTALLATION

- 1) Attach the mounting bracket to wall or single gang plaster ring.
- 2) To attach the handset cradle included, remove 2 screws above selector buttons, set cradle in place, and replace screws.



EQUIPMENT AVAILABLE FOR USE WITH YOUR TA-Y TELEPHONE INTERCOM SYSTEM



TA-6Y: 6 call master. Up to 7 stations may be connected.



TA-12Y: 12 call master. Up to 13 stations may be connected.



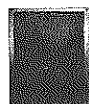
TA-24Y: 24 call master. Up to 25 stations may be connected.



CT-77Y: Central terminal board required for TA-6Y system.



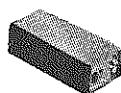
CT-221Y: Central terminal board required for TA-12Y system.



CT-725Y: Central terminal board required for TA-24Y system.



CS-12A: CSA & UL approved power supply (available only in North America).



PS-12S: Power supply for system. Standard everywhere except in North America.

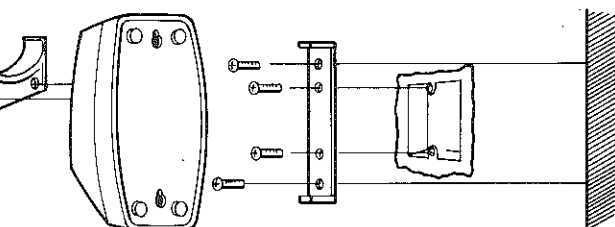
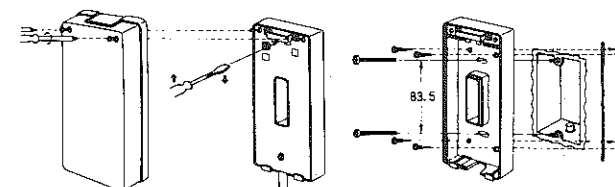


NCH-1: Noise cancelling handset especially designed to allow Aiphone TA-Y phone systems to operate in extremely noisy areas. Field installed only. (For the full information, please refer to NCH-1 instruction sheet)



PA-B: Talkback paging and/or block paging adaptor.

- 1 - 6 : for connecting relative stations on TA-6Y
- 1 - 12 : for connecting relative stations on TA-12Y
- 1 - 24 : for connecting relative stations on TA-24Y
- C : for receiving calls and talking
- + - - : for power supply
- P1 - P2 : for paging connection
- P3 : for connecting local speaker cutout relay



SP-3: Paging speaker. Complete and ready to install including round flush mounting frame. Transformer installed for 70V line operation. (Not available in North America)



N-S: Square frame for SP-3 speaker.



N-E: Round surface frame for SP-3 speaker.



RY-P: Relay for local speaker cut out. Local speaker cut out eliminates the chance of feed back if a paging speaker is located near station initiating paging call.



PG-U TYPE A; Paging adaptor for connecting any amplifier and background music source to your TA-Y system. Features separate volume, treble & bass controls for paging and background music. Includes automatic background music cutout.

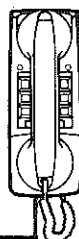


RY-AC TYPE A; Relay only for operating external device such as additional calling buzzer or bell, door release, etc.

A-Y ALL MASTER SYSTEMS

TA-24Y

STATION
1



CONNECT TERMINAL #1 ON STATION 1
PHONE TO TERMINAL #1 ON CENTRAL
TERMINAL BOARD AS SHOWN. (SEE
"INSTALLATION" ON PAGE 2).

WRITE
WIRING
COLOUR
CODE
HERE

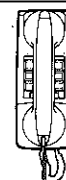
DO NOT CONNECT P3

NEVER CONNECT P3 AT PHONE WHEN CONNECTING
PHONE TO CENTRAL TERMINAL BOARD.

THIS EXAMPLE SHOWS A FULL
MENT OF 7 TA-6Y PHONES CO
TO A CT-77Y CENTRAL TERMINAL

TO CT-725Y
CENTRAL TERMINAL BOARD

TA-12Y



WRITE
WIRING
COLOUR
CODE
HERE

DO NOT CONNECT P3

TO CT-221Y
CENTRAL
TERMINAL
BOARD

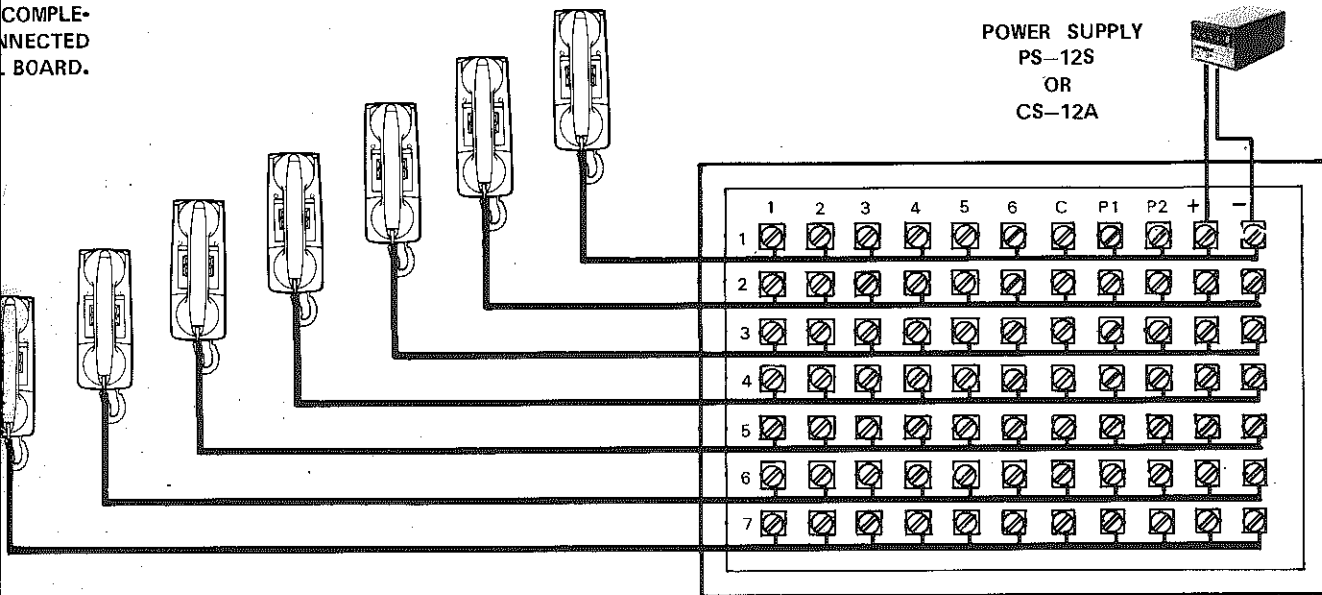
TA-6Y

WRITE
WIRING
COLOUR
CODE
HERE

DO NOT

COMPLE-
NNECTED
BOARD.

POWER SUPPLY
PS-12S
OR
CS-12A



TO STATION 1

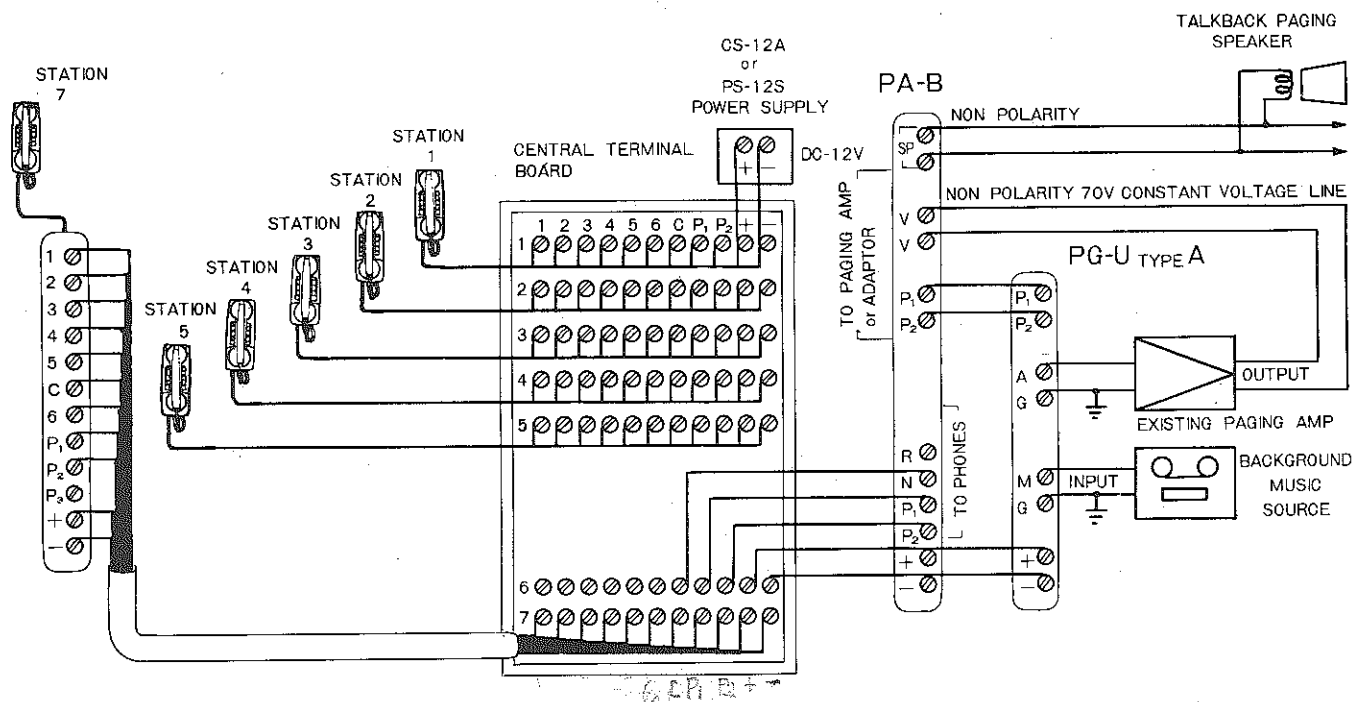
TO STATION 2

TO CT-77Y
CENTRAL
TERMINAL
BOARD

CONNECT P3

TO STATION 25

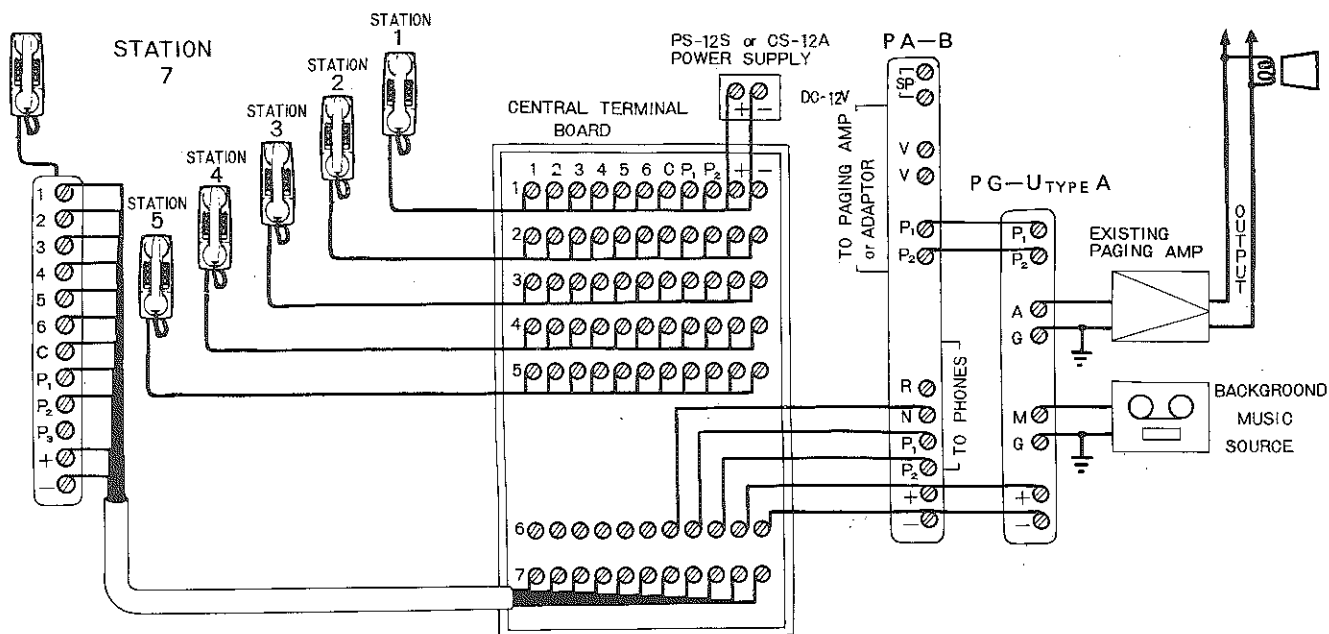
EXAMPLE OF TA-6Y PHONE SYSTEM WITH TALKBACK PAGING ADAPTOR PA-B USING EXISTING PAGING AMPLIFIER AND PG-U



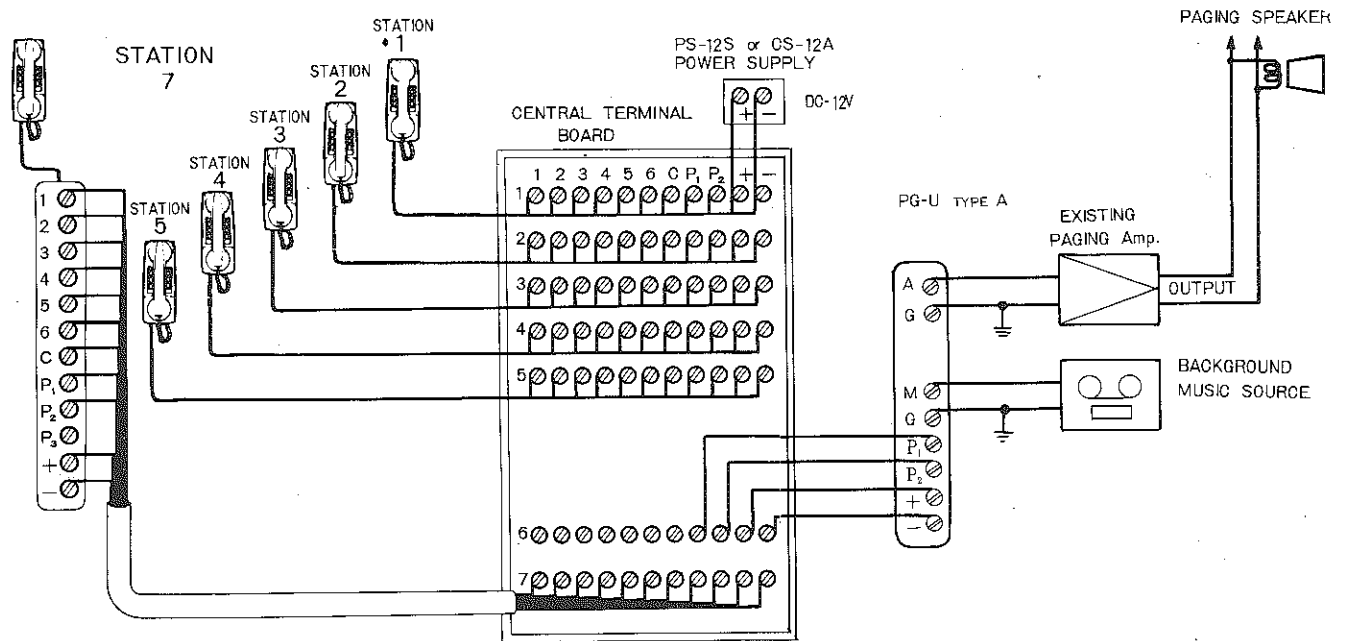
Block paging and/or talkback block paging is available for up to a maximum of five areas. One phone must be deducted from the system for each block. Each block requires 1 PG-U, 1 PA-B, and one paging amplifier. Only one background music source, if used, is required for entire system. All page is available by deducting one additional phone from system. For complete instructions refer to the comprehensive instruction sheet supplied with the PA-B adaptor.

TA-6Y PHONE SYSTEM WITH STRAIGHT PAGING

This example illustrates connection if block paging is desired but without talkback. One amplifier, one PA-B and one PG-U per block is still required even though talkback is not required.

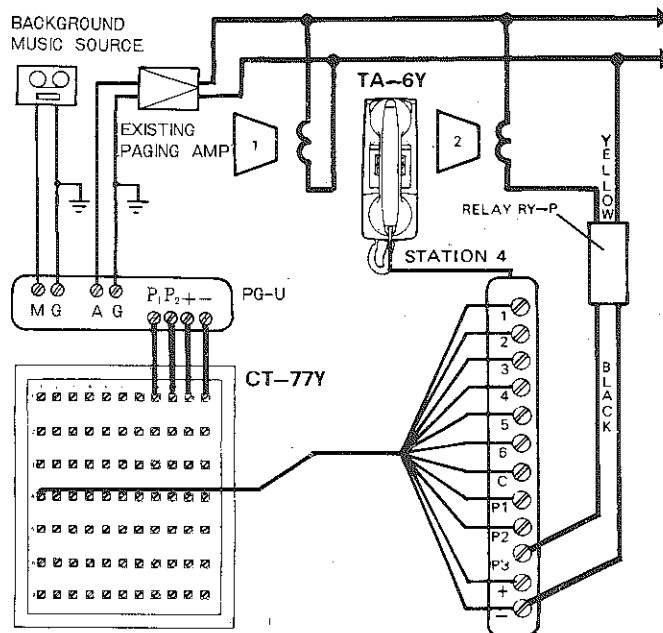


TA-Y ALL MASTER SYSTEM TIED TO AN EXISTING PAGING AND BACKGROUND MUSIC SYSTEM USING ADAPTOR PG-U TYPE A



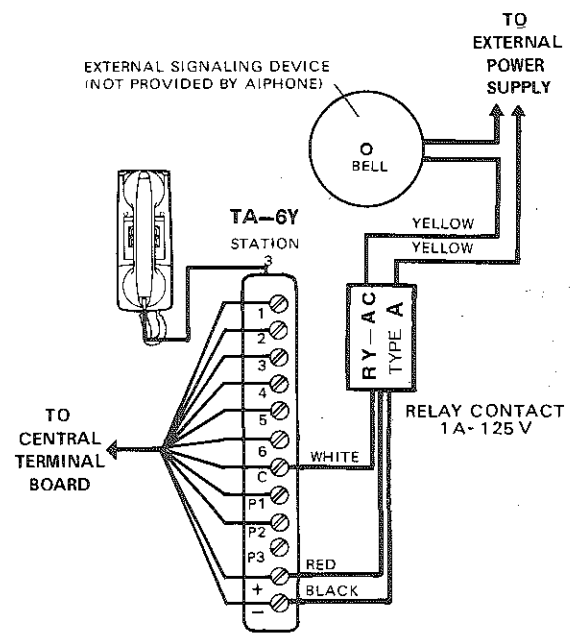
INSTALLATION OF LOCAL SPEAKER CUTOUT RELAY RY-P

In this example, all speakers except speaker #2 would function normally when station #4 initiates a page. If any phone other than station #4 were to initiate a page, speaker #2 would function normally.

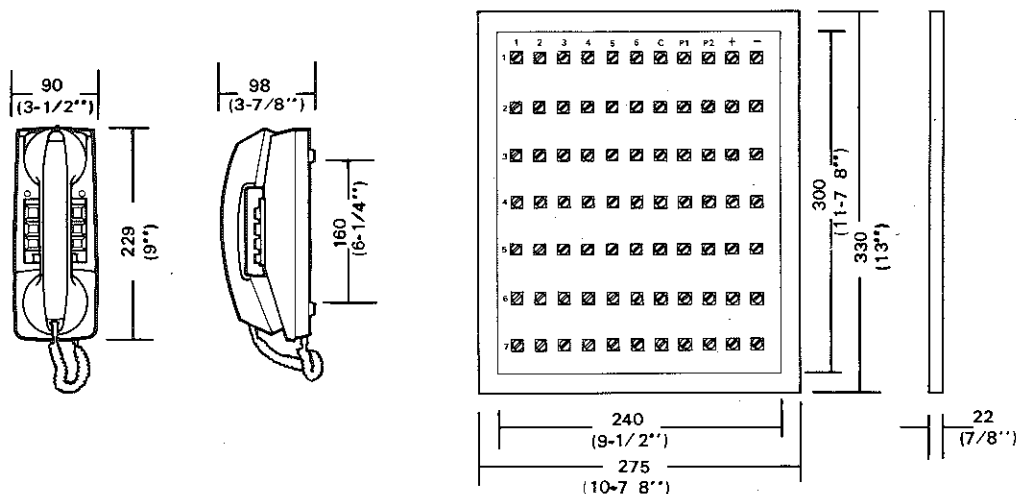


INSTALLATION OF EXTERNAL SIGNALING DEVICE USING RELAY RY-AC TYPE A

Connect RY-AC to C, +, and - as shown. In this example, when station #3 is called by any other station, the bell will sound in addition to the standard call tone produced by the phone.



DIMENSIONS TA-6Y, TA-12Y & TA-24Y



CT-77Y

EXCEPT FOR TERMINAL LOCATION, DIMENSIONS SAME ON CT-221Y AND CT-725Y.

OPERATION

* Calling:

Pick up the handset and depress the selector button of desired station, then depress call button. (On TA-24Y station 13 becomes A-1, station 14 becomes A-2, etc. To call stations above 12 first depress 'A' button, then selector button, then call button.)

* Receiving:

An incoming call is announced by electronic call tone. Answer just as you would a standard telephone.

STANDARD PAGING OPERATION

- * Pick up the handset and make announcement by pushing and holding the paging button. Background music will automatically cut out during paging operation.

CLEANING YOUR INTERCOM STATIONS

- * Your Aiphone intercom stations may be cleaned with a soft cloth dampened with household cleanser, such as Mr. Clean or Fantastik.

We at AIPHONE are proud of our products. Our designers and engineers strive to bring you the finest in communication equipment. Each item has been carefully tested and inspected before leaving our factory. Properly installed and used, your Aiphone intercom system should give years of trouble-free service.

We are pleased to offer the following warranty:

WARRANTY

Aiphone warrants its products to be free from defects of material and workmanship under normal use and service for a period of one year after delivery to the ultimate user and will repair free of charge or replace at no charge, should it become defective upon which examination shall disclose to be defective and under warranty. Aiphone reserves unto itself the sole right to make the final decision whether there is a defect in materials and/or workmanship; and whether or not the product is within the warranty.

This warranty shall not apply to any Aiphone product which has been subject to misuse, neglect, accident, or to use in violation of instructions furnished, nor extended to units which have been repaired or altered outside of the factory.

This warranty does not cover batteries or damage caused by batteries used in connection with the product.

This warranty covers bench repairs only, and any repairs must be made at the shop or place designated in writing by Aiphone. Aiphone will not be responsible for any costs incurred involving on site service calls.