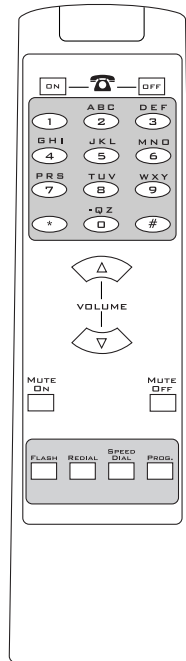# Table of Contents

1Introduction

Congratulations!

The AP IR Remote Control System is designed to allow easy operation of all your Audio Perfect products from your desk or conference table, rather than from the front panel of your Gentner audio conferencing products.

It is made up of two components, the handheld infrared transmitter (remote control) and the base station infrared receiver. The transmitter is used to operate or customize the many features of the Audio Perfect system, such as: connect, disconnect, dial a telephone number, redial, store speed dial numbers, activate speed dial, hook flash, adjust volume, and mute the microphones.
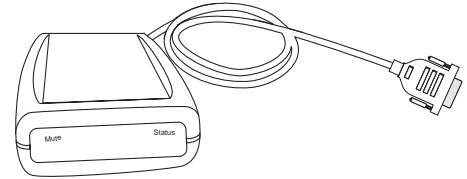
The AP IR Remote functions with an AP400 stand-alone system, an AP400/AP800 combination, or it may be used with an AP800/AP10 combination. The default programming may be easily customized to fit your needs by simply pressing certain key sequences on the transmitter unit. In the event of a power outage, the new programming will be stored in the receiver's memory and will not be lost or altered.

Unpacking

Please check that the following was received with your shipment.

Infrared Remote Receiver

Batteries

Infrared Remote Transmitter

Manual

Gentner Communications is not responsible for product damage incurred during shipment. You must make claims directly with the carrier. Inspect your shipment carefully for obvious signs of damage. If the shipment appears to be damaged, retain the original boxes and packing material for inspection by the carrier. Contact your carrier immediately.

Warranty Instructions

Please register your Audio Perfect Infrared Remote System online by visiting Gentner Technical Support on the World Wide Web at www.gentner.com.
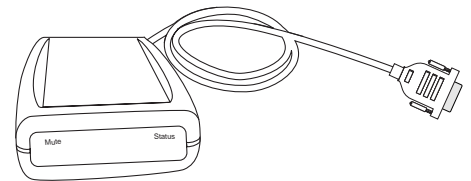
When your product is properly registered, Gentner Communications will be able to serve you better should you require technical assistance or desire to receive upgrades, new product information, etc.

2 Installation

Installation is simple, only requiring plugging the AP IR Remote Receiver into the RS232 connector located on the back of the AP400 or AP800 unit.

Located on the AP IR Remote Receiver are two LEDs—STATUS and MUTE. The STATUS LED will glow red when the receiver is connected to the AP product indicating the system is ready for a valid command. When a button is pressed, the STATUS LED flashes rapidly indicating a command has been received.

When the MUTE ON button is pressed, the MUTE LED will blink on and off indicating the system is in a muted state.

AP IR Remote Control Receiver

= Microphone

5 W, 4 to 16 Ohm
Speaker Connection

Telephone
Set

External Power Amp
(Optional)

1   2   3   4

Analog
Telephone
Line

AP400

Video
CODEC

VCR

Tape Player
(Optional)

AP IR Receiver

GENTNER
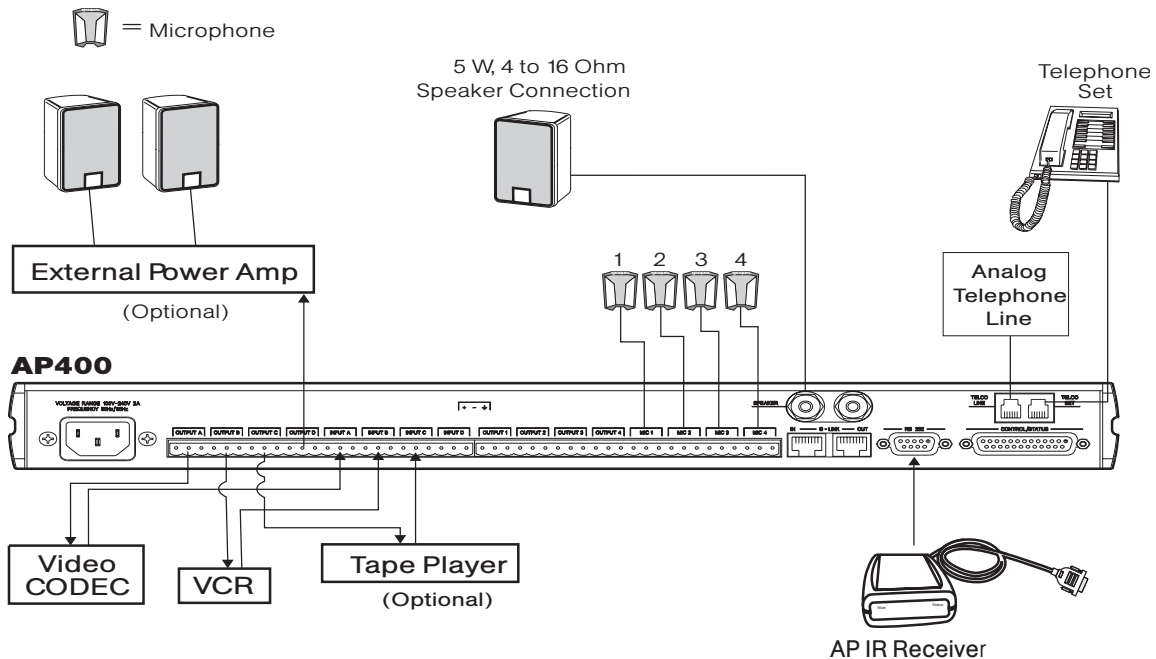
3 Operation

Getting Started

Once your remote is connected to your Audio Perfect system and the STATUS LED is lit, it is time to start using your remote control. Operation is easy and straight forward. Please consult the diagram on the following page to understand how each button on your remote works.

If you push a button and there is no response from the system, check to ensure that both the AP device and the receiver are connected at the same baud rate. See page 13 for instructions on how to program the baud rate.

**TELEPHONE ON
(green) button**
Press to get a dial tone.

**TELEPHONE OFF
(red) button**
Press to end a call.

NUMBER buttons
Use these buttons to dial telephone numbers and to program functions.

VOLUME UP button
Press to raise the volume in the room.

VOLUME DOWN button
Press to lower the volume in the room.

MUTE ON button
Press to mute all microphones in the room (default). May be programmed to mute specific microphones in the room.

MUTE OFF button
Press to turn mute function off.

FLASH button
Provides a hook flash for accessing features on your PBX. Please consult your PBX owner's manual for specific instructions regarding your individual telephone system.

PROGRAM button
Press for two seconds to enter PROGRAM mode. See Programming section, page 13.

REDIAL button
Press to dial the last telephone number.

SPEED DIAL button
Press to dial telephone numbers that have been programmed into the SPEED DIAL function. See Programming section, page 14.
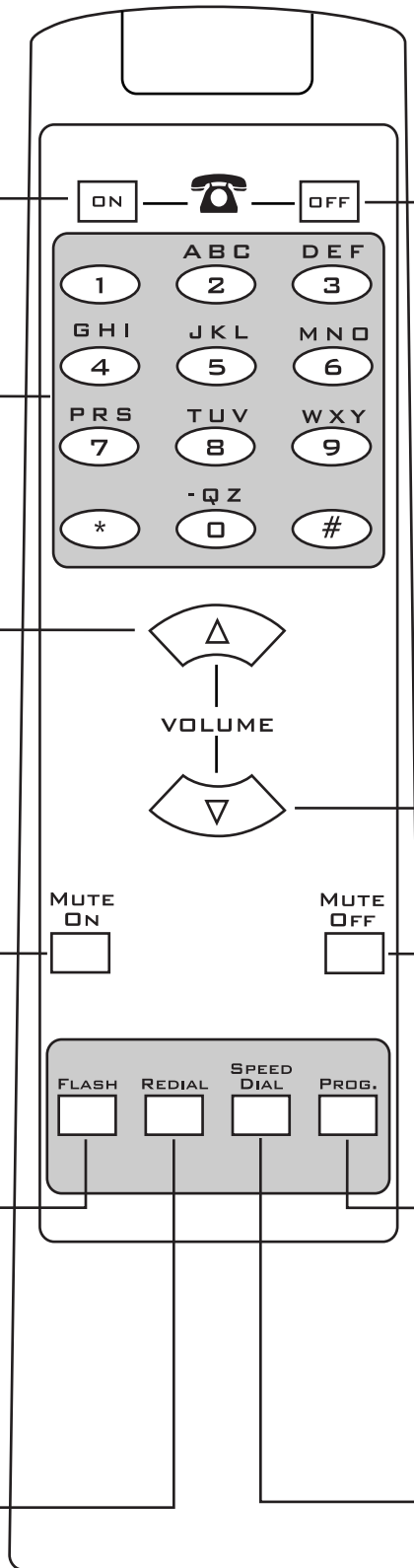
Remote Control Buttons

While within 25-40 feet of the receiver, point the remote control toward the receiver and press the buttons to operate.

·To Place a Call

Press TELEPHONE ON (green) button.

Wait to hear dial tone.

Dial telephone number using dial pad. Or, press SPEED DIAL and the location of the speed dial number.
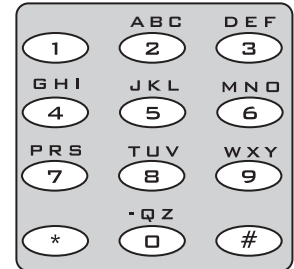
·To End a Call

Press TELEPHONE OFF (red) button.

·To Adjust the Volume in the Room

Press VOLUME UP button to raise the volume.

Press VOLUME DOWN button to lower the volume.

·To Mute Microphones

Press MUTE ON button.

MUTE LED will flash on receiver when the MUTE function is active. This function mutes all microphones in the room. To customize mute feature, see Programming section, page 15.

·To Turn off Mute

Press MUTE OFF button.

MUTE LED on receiver will turn off when mute function is off.

·To Access Features from a PBX

Press FLASH button.

Please consult your PBX owner's manual for specific requirements of your individual phone system.

REDIAL

·To Redial the Last Telephone Number Dialed

Press REDIAL button.

SPEED
DIAL

·To Dial a Number Stored in Speed Dial

Press SPEED DIAL button. Select location (0-9) of speed dial number.

Note: In order for the Speed Dial function to work, a telephone number must be programmed into the Number buttons. Please see Programming section, page 14.

PROG.

·To Customize your AP IR Remote Control System

Follow instructions beginning on page 13 to customize your AP IR Remote Control System to fit your specific conferencing needs.

4 Programming

Your AP Infrared Remote Control is defaulted to operate right out of the box; however, it is easy to program should you require different specifications. Select from the options below and follow the instructions for the desired function you wish to customize.

To Program Baud Rate

Press and hold the PROG button until both LEDs in the receiver flash.

Enter 22831 for 9600 bps (default)

Enter 22832 for 19200bps

Enter 22833 for 38400bps

Example:
To change the baud rate of the receiver to communicate at a rate of 19200 bps.

PROG. 2 2 8 3 2

If you push a button and there is no response from the system, check to ensure that both the AP device and the receiver are connected at the same baud rate.

To Program Speed Dial

Press and hold the PROG. button until both LEDs in the receiver flash.

Press SPEED DIAL button.
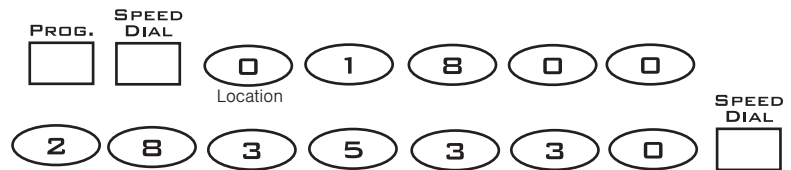
Select a location (0-9) on the dial pad.

Enter the telephone number (use the VOLUME UP button for a 2

second pause).

Press SPEED DIAL button to store number.

To erase a preprogrammed location, press PROG., SPEED DIAL,

location (0-9), SPEED DIAL.

Example:
To store Gentner's Technical Service number (1-800-283-5330) in
speed dial 0:

To Program Telephone Device

This sets the device that all telephone commands are sent to.

The default dial command begins with ** which dials any AP telephone
device. If more than one telephone device is connected to the system
this must be changed to address a specific device.

Press and hold the PROG. button until both LEDs in the receiver flash.

Press the ON button.

Enter Device Type (0=device connected to, 2=AP10, 3=AP400, *=all

telephone devices).

Enter Device ID (0-7, *=all units).

Example:
I want to control AP400 unit 2:

To Program Mute

There are ten locations for storing mute commands. All mute commands stored are performed when the MUTE ON or MUTE OFF button is pressed.

Press and hold the PROG. button until both LEDs in the receiver flash.

Press the MUTE ON button

Select a location for muting (0-9).

Select the device type (0=device connected to, 1=AP800, 2=AP10,

3=AP400, *=all devices).
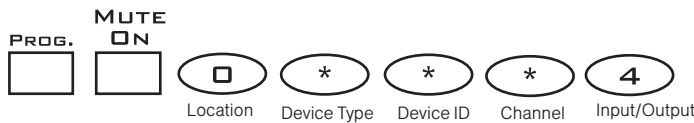
Select the device ID (0-7, *=all units).

Select channel for muting (*, 01-08, 11-15). See table to the right.

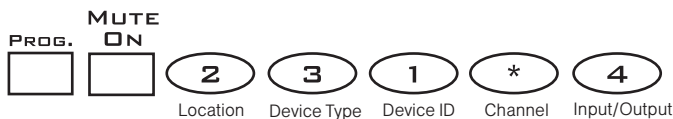Select 4 for input or 6 for output.

To erase a programmed location press PROG., MUTE ON, location (0-9), MUTE OFF.

Examples:
Mute all mics on all units and store it in location 0 (default).

*	All Mics
01	Channel 1
02	Channel 2
03	Channel 3
04	Channel 4
05	Channel 5
06	Channel 6
07	Channel 7
08	Channel 8
11	Channel A
12	Channel B
13	Channel C
14	Channel D
15	Channel T

PROG.	MUTE ON	0	*	*	*	4
		Location	Device Type	Device ID	Channel	Input/Output

Mute all mics on AP400 #1 and store it in location 2.

PROG.	MUTE ON	2	3	1	*	4
		Location	Device Type	Device ID	Channel	Input/Output

Mute output D on AP400 # 0 and store it in location 3.
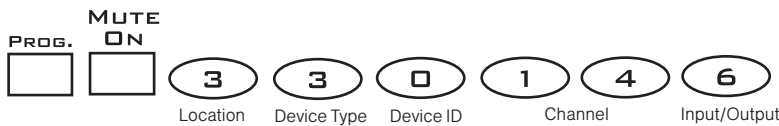
PROG.	MUTE ON	3	3	0	1	4	6
		Location	Device Type	Device ID	Channel		Input/Output

To Program Volume

There are ten locations for storing volume control commands. All volume control commands stored are performed when the VOLUME UP or VOLUME DOWN button is pressed. To change the nominal level to negative, enter an asterisk before the value.

Example: (*10) = -10 and (10) = +10.

Press and hold the PROG. button until both LEDs in the receiver flash.

Press the VOLUME UP button

Select a location for volume control (0-9).

Select the device type (0=device connected to, 1=AP800, 2=AP10,

3=AP400, *=all devices).

Select the device ID (0-7, *=all units).

Select channel for volume control (*, 01-08, 11-15) See table to the left:

Select 4 for input or 6 for output.

Select nominal level (*=negative nominal level, 00-20)

*	All Mics
01	Channel 1
02	Channel 2
03	Channel 3
04	Channel 4
05	Channel 5
06	Channel 6
07	Channel 7
08	Channel 8
11	Channel A
12	Channel B
13	Channel C
14	Channel D
15	Channel T

To erase a preprogrammed location, press PROG., VOLUME UP, location (0-9), VOLUME DOWN.

Examples:
Adjust volume of all output D with nominal level of 0 on all units and store it in location 0 (default).

PROG. △ | 0 (Location) * (Device Type) * (Device ID) 1 (Channel) 4 (Input/Output) 4 | 0 0 (Nominal Level)
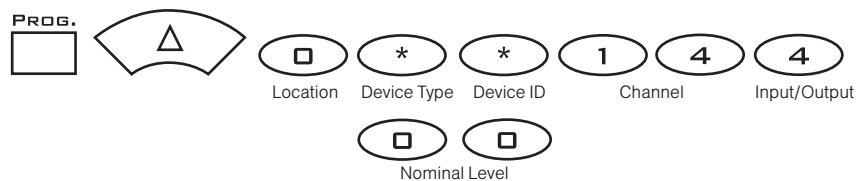
Adjust volume of Mic 1 with nominal level of -12 on AP400 # 1 and store it in location 2.

PROG. △ | 2 (Location) 3 (Device Type) 1 (Device ID) 0 (Channel) 1 4 (Input/Output) | * 1 2 (Nominal Level)
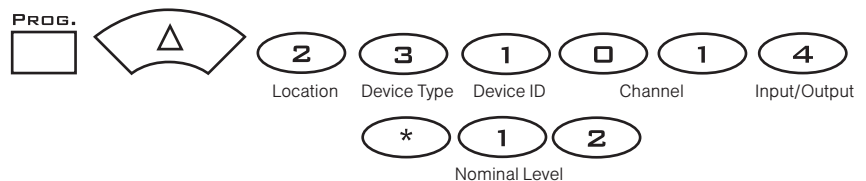
To Program Volume Range/Step Size

This is a global volume setting so all volume adjustments will have the same range and step increment.

Press and hold the PROG. button until both LEDs in the receiver flash.

Press the VOLUME DOWN button.

Enter the 2 digit range of the volume (00-20).

Enter the step size of each volume press (0-9).

A range of 00 disables the adjustment of the volume from the remote control buttons.

Examples:
If you want to change the volume range to ± 6 dB with 1 dB step increments (default).

If you want to change the volume range to ± 10 dB with 2 dB step increments.

To Program Hook Flash (AP400 only)

Press and hold the PROG. button until both LEDs in the receiver flash.

Press the FLASH button.

Press 1 (for 50 msec) or 2 (for 500 msec).

This is stored in the AP400 and not in the AP IR Remote.

Example:
If you want to change the hook flash duration from default (500 msec) to 50 msec

PROG.   FLASH

☐ ☐ (1)
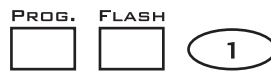
To Reset the AP IR Remote back to Default

Press and hold the PROG. button until both LEDs in the receiver flash. Press ****.

Example:
If you want to reset the AP IR Remote back to default.

PROG.

☐ (*) (*) (*) (*)

5 Appendices

Specifications

Transmitter

Dimensions: 7 $\frac{5}{8}$"L x 2 $\frac{3}{16}$" W x $\frac{1}{2}$" H

Battery Type: 2 AAA

Battery Life: Approximately 1 year

Receiver

Dimensions: 5"L x 2 $\frac{3}{4}$"W x 1"H

Power: Powered by the AP system

Cable Length: 6'

System

Range: 25-40 feet from transmitter to receiver

Angle of

Acceptance: 90˚- 120˚

Operating

Temperature: 0˚ - 50˚ C, 32˚ - 122˚F

Gentner®

Warranty

Gentner Communications Corporation (Manufacturer) warrants that this product is free of defects in both materials and workmanship. Should any part of this equipment be defective, the Manufacturer agrees, at its option, to:

A. Repair or replace any defective part free of charge (except transportation charges) for a period of one year from the date of the original purchase, provided the owner returns the equipment to the Manufacturer at the address set forth below. No charge will be made for parts or labor during this period;

B. Furnish replacement for any defective parts in the equipment for a period of one year from the date of original purchase. Replacement parts shall be furnished without charge, except labor and transportation.

This Warranty excludes assembled products not manufactured by the Manufacturer whether or not they are incorporated in a Manufacturer product or sold under a Manufacturer part or model number.

THIS WARRANTY IS VOID IF:

A. The equipment has been damaged by negligence, accident, act of God, or mishandling, or has not been operated in accordance with the procedures described in the operating and technical instructions; or,

B. The equipment has been altered or repaired by other than the Manufacturer or an authorized service representative of the Manufacturer; or,
C. Adaptations or accessories other than those manufactured or provided by the Manufacturer have been made or attached to the equipment which, in the determination of the Manufacturer, shall have affected the performance, safety or reliability of the equipment; or,

D. The equipment's original serial number has been modified or removed.

NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE, APPLIES TO THE EQUIPMENT, nor is any person or company authorized to assume any warranty for the Manufacturer or any other liability in connection with the sale of the Manufacturer's products.

Manufacturer does not assume any responsibility for consequential damages, expenses, or loss of revenue or property, inconvenience, or

interruption in operation experienced by the customer due to a malfunction in the purchased equipment. No warranty service performed on any product shall extend the applicable warranty period.

In case of unsatisfactory operation, the purchaser shall promptly notify the Manufacturer at the address set forth below in writing, giving full particulars as to the defects or unsatisfactory operation. Upon receipt of such notice, the Manufacturer will give instructions respecting the shipment of the equipment, or such other matters as it elects to honor this warranty as above provided. This warranty does not cover damage to the equipment during shipping and the Manufacturer assumes no responsibility for such damage. All shipping costs shall be paid by the customer.

This warranty extends only to the original purchaser and is not assignable or transferable.

**Gentner Communications Corporation
1825 Research Way, Salt Lake City, Utah 84119**

FCC Compliance

FCC Part 15 Compliance
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

Changes or modifications not expressly approved by Gentner Communications Corporation could void the user's authority to operate the equipment.