

MODEL 621**AIRPORT ANNOUNCEMENT CONTROL SYSTEM SOFTWARE****FEATURES AND OPTIONS**

The IED Model 621 Airport Announcement Control System Software Package in combination with the IED Model 590 Microcomputer System constitutes a versatile yet economical announcement control system with a broad array of features which allow configuring a system for virtually any airport application, as well as for many other uses. Its capabilities and options are listed below.

• = Standard feature

+ = Optional feature

P = Included with PDRP

M = Included with Monitor System

- Supports up to 5 Model 500ACS Systems
- Supports up to 96 microphone stations per Model 500ACS System.
- 4 button or 12 button keypad type microphone stations, or telephone access.
- Supports up to 96 zones per Model 500ACS System.
- 30 zone groups for direct emergency announcements.
901 - 930
- 90 zone groups for terminal announcements.
10 - 99
- 99 zone groups for local announcements per Model 500ACS System.
101 - 199, 201 - 299, 301 - 399, 401 - 499, 501 - 599
- Up to 5 multi local zone groups per station for direct local announcements.
1 - 5
- + Digital recording and playback of announcements for queuing, distribution, and improved audio quality.
- + Permanent Digital Record/Playback (PDRP) with the following capabilities:
 - P Flight Schedules for up to 9,999 flights
 - P 20 types of assembled announcements
 - P PDRP editor for up to 254 takes
 - P Will edit takes in 13.33 millisecond increments
 - P Each of 29 controlled access messages can made up of up to 16 takes
- + Up to 29 messages with controlled access for play, stop play, or monitor from any assigned microphone station, according to the following table:

601 - 629	Play message to Multi Local Zone Group
651 - 679	Play message to any selectable Terminal Zone Group
701 - 729	Play message to assigned zones
751 - 779	Record message
801 - 829	Stop playback sequence
851 - 879	Monitor message



Manually initiated playback may be programmed for 1 to 14 repetitions, or continuous, at a selected interval of 1 to 60 minutes.

Real time scheduling allows one to four time slots to be programmed for each message. The start and stop time of each time slot may be set, as well as the interval between repeats.

- Announcement types have the following priority:

PRIORITY LEVEL	TYPE
1	Emergency Direct Announcement
2	Emergency Message
3	Local Multi Local Zone Group Announcement Multi Local Zone Group Message Local Zone Group Announcement Local Zone Group Message
4	Terminal Terminal Zone Group Announcement Terminal Zone Group Message

- Automatic ON/OFF of microphone stations on a real time clock for security.
- + Model 540 Ambient Analysis System senses noise and adjusts signal levels accordingly.
- Individual password security protection of system assignment changes.
- Accurate quartz crystal controlled system clock for real time based functions.
- Advanced, non-volatile memory for program and data.
- + Monitor System provides:
 - M Monitoring and/or testing of up to 1600 points throughout the system. Test point capacity added in groups of 64.
 - M Tests audio signal points at levels of 20 mV to 70 V, as well as DC power supplies, and presence of AC power.
 - M Testing of all microphone stations.
 - M Testing of each microphone station to each of the 8 audio busses in each Model 500ACS.
 - M Testing of each of the 8 audio busses to each zone output in each Model 500ACS.
 - M Visual and audible monitoring using program signal or single frequency.
 - M Programmed automatic once-a-day testing using single audible frequency.
 - M Choice of five internal audible frequencies programmable separately for each test point.
 - M An internal pink noise source is provided for system testing and 540 Ambient Analysis System calibration. These tests are performed under manual control from the keyboard.
 - M Once-a-minute 20 kHz automatic testing performed during normal operation without interrupting the program.

*Innovative Electronic Designs, Inc. • 9701 Taylorsville Road • Louisville, Kentucky 40299 • USA
Phone: (502) 267-7436 • Fax: (502) 267-9070 • Internet: <http://www.iedaudio.com>*

- Ⓜ Each test point may be individually programmed for any combination of monitoring, once-a-day audible frequency test, and once-a-minute 20 kHz test. The program may be manually overridden to perform any test or monitoring of which the system is capable, at any time, on any test point.
- Ⓜ Test levels may be set between -30 and +24dB.
- Ⓜ Allowable deviation may be set between 1 and 10dB.
- Ⓜ Listening levels are set to allow each circuit to be monitored at the same level.
- Ⓜ Visual monitoring of program or single frequencies using accurate, on-screen, -35dB to +20dB VU meter.
- + ON/OFF control of the 540 Ambient Analysis System on a real time clock schedule. The schedule includes selection of days over a 1 week period. Four scenes (schedules) are provided for. Each is associated with a 540 group. With this arrangement, each scene can have its own attenuation and ambient noise compensation setup, if desired.
- + Printer provides a hard copy record of the following:
 - Microphone Station Assignments
 - Terminal Zone Assignments
 - Local Zone Assignments
 - Emergency Zone Assignments
 - PDRP Message Playback Assignments
 - Flight Information Data
 - Flight Vocabulary
 - Test Data
 - Fault Data
 - Background Music (540) Scenes
 - Password Program Log
 - 540 Configuration
 - 596 Data

DEFINITION OF TERMS

ACS - Announcement Control System. The equipment and software designed and used for the purpose of initiating, controlling, and routing announcements through a sound reinforcement system. The capability of digitally recording and playing back some or all of the announcements (DRP), with or without permanent storage (PDRP), may also be included.

ANNOUNCEMENT - Spoken information entered into a microphone station at the time at which it is intended to be heard. See message.

DIRECT ANNOUNCEMENT - A direct announcement is an announcement which plays through the system in real time, as it is spoken.



DRP - Digital Record/Playback. A method and the equipment for recording an announcement digitally, storing it in temporary memory (RAM), then playing it back as soon as the required portions of the system, as defined for the particular announcement, are available.

EMERGENCY ANNOUNCEMENT - An emergency announcement is an announcement made for the purpose of advising all those in a given area of the existence of a hazardous or potentially hazardous condition, and of the action that they are required to take. Emergency announcements are direct, have the highest priority, and override all others. Only one emergency announcement may be made at a time.

EMERGENCY ZONE GROUP - An emergency zone group is a group of zones which may be accessed as a unit for the purpose of making an emergency announcement. There are 30 emergency zone groups numbered from 901 to 930. When emergency is enabled for a 508 Series microphone stations, all 30 zone groups are enabled as a unit for that microphone station, although they are addressed one at a time. For 500 Series microphone stations, emergency zone groups are assigned one to a button.

LOCAL - Local is a relative term referring to a small portion or area of a facility in which people might be grouped, such as a gate area or a baggage claim carousel, or a ticket counter.

LOCAL ANNOUNCEMENT - A local announcement is an announcement made to a local zone group which is usually, but not necessarily, close to the originating microphone station. Up to 8 local announcements per Model 500ACS System may be made simultaneously, as long as there is no zone overlap. Local announcements are live or recorded. In case of zone overlap, local announcements have priority access to the overlapped zones over a terminal zone group announcement, although they do not inhibit the playback of the terminal zone group announcement in other zones.

LOCAL ZONE GROUP - A local zone group is a zone or group of zones which are accessed as a unit for the purpose of making a local announcement. In single ACS systems, local zone groups have numbers between 101 and 199. When 100 ENABLE is turned ON for a 508 Series microphone station, a local announcement may be made to any local zone group between 101 and 199 from that microphone station. For 500 Series microphone stations, local zone groups are assigned to buttons, one at a time. If the system includes a second ACS, its local zone groups would be numbered from 201 to 299, and its enable function would be called 200 ENABLE. Similarly, the third, fourth, and fifth ACSs, if used, would have 300, 400, and 500 series numbers, respectively.

MESSAGE - Spoken information which is prerecorded and stored in non-volatile digital memory for playback at any desired future time. See announcement.

MULTI LOCAL ZONE GROUP - A multi local zone group is one of 5 multiple local zone groups, usually in close proximity to each other, set up for convenience of access, usually because of frequent usage. The 5 possible multi local zone groups have a fixed relationship with each other which is defined by the following table.

*Innovative Electronic Designs, Inc. • 9701 Taylorsville Road • Louisville, Kentucky 40299 • USA
Phone: (502) 267-7436 • Fax: (502) 267-9070 • Internet: <http://www.iedaudio.com>*

MULTI LOCAL ZONE GROUP CALLED	LOCAL ZONE GROUPS ASSIGNED (EXAMPLE)	MULTI LOCAL ZONE GROUPS RESPONDING	LOCAL ZONE GROUPS RESPONDING (EXAMPLE)
1	101	1	101
2	102	1 + 2	101+102
3	103	1 + 3	101+103
4	(none allowed)	1 + 2 + 3	101+102+103
5	104	1 + 2 + 3 + 5	101+102+103+104

See Assignment Suggestions in installation instructions, 9 21B, for typical usage.

MULTI LOCAL ZONE GROUP ANNOUNCEMENT - A multi local zone group announcement is an announcement made to one of 5 multiple local zone groups, usually set up in proximity with each other. Multi local zone group announcements are direct. See multi local zone group.

PDRP - Permanent Digital Record/Playback. A method and the equipment used to pre-record messages and store them in permanent (non-volatile) memory, so that they may be played back, when desired, through the DRP.

PDRP (PRERECORDED) MESSAGE - A PDRP (prerecorded) message is a message which is recorded digitally and stored in non-volatile memory in the ACS for playback at any desired future time. It may be programmed to be played back on a manually initiated schedule, or automatically on a real time schedule.

RECORDED ANNOUNCEMENT - A recorded announcement is an announcement which is digitized, then stored in temporary memory as it is spoken, then played back when the required zone group is available.

BACKGROUND MUSIC SCENE - A scene is a schedule segment used in background music ON/OFF control. It consists of an ON time, an OFF time, the day(s) of the week on which it is to be effective, and the zones to which the background music is to be routed during the ON portion of its cycle.

TERMINAL ANNOUNCEMENT - A terminal announcement is an announcement made to a terminal zone group. All terminal announcements are recorded. Up to 8 may be recorded simultaneously per Model 500ACS, but only 1 may be played back at a time, even if there is no zone overlap. Terminal announcements have the lowest priority level.

TERMINAL AREA - Terminal area is a term referring to a relatively large portion of a facility such as an entire concourse, the entire ticketing area, a large number of gates, or the entire facility.

TERMINAL ZONE GROUP - A terminal zone group is a zone group intended for announcement to terminal areas as defined above. Terminal zone groups are numbered from 10 to 99. Access to terminal zone groups for 508 Series microphone stations is assigned on an individual basis. Any 508 Series station may have access to any combination of, or all, terminal zone groups. For 500 Series microphone stations, any single terminal zone group may be assigned to any button.



ZONE - A zone is an area covered by one or more loudspeakers or horns permanently connected to the same source.

ZONE GROUP - A zone group is a group of one or more zones, mapped or assigned to be addressed as a unit. Each zone group, whatever the type, may be assigned any of the possible zones. Each zone group may be assigned as desired, having a unique combination of zones, or a combination which is similar to another zone group. The type of announcement for which the zone group is intended is usually indicated by the adjective which precedes it, such as local zone group, emergency zone group, or terminal zone group.

*Innovative Electronic Designs, Inc. • 9701 Taylorsville Road • Louisville, Kentucky 40299 • USA
Phone: (502) 267-7436 • Fax: (502) 267-9070 • Internet: <http://www.iedaudio.com>*