

# PRO|ANNOUNCE SYSTEM<sup>®</sup>

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## APPLICATIONS GUIDE & GETTING STARTED MANUAL

 **DYNACORD<sup>®</sup>**

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# Introduction

This guide is intended as a supplement to the already existing documentation on the ProAnnounce™ system. This guide covers the common questions and problems encountered by the average system designer or installer. Given the incredible flexibility within the ProAnnounce™ system, not all possible solutions to a given problem will be presented. If a unique problem presents itself, and you are unable to come to a solution, or you just want someone “from the manufacturer” to look over your system, please feel free to contact the technical and design support portion of the Telex Communications’ ProAudio Group. The design and support services are free.

Please keep in mind that this application guide is a work in progress. The manuals that come with the ProAnnounce™ system components and the help file included with ProAnnounce™ Designer are a valuable resource of information.

## ProAnnounce™ – An Overview

### DPM 4000 Paging Processor



The heart of the system is the DPM 4000 central processor. This is essentially a 4 x 4 digital matrix with added DSP capabilities. Actually, when you factor in the internal alarm/chime functions, message stacking, and pre-recorded message functions it is more like a 7 x 4 matrix. Processing in the form of level and EQ is provided on each of the four external inputs to the system. In addition, level and optional delay is provided on each of the four outputs in the system. Analog compression is also available on certain input cards, as well as, the paging stations.

The DPM 4000 can be configured to perform tasks based on a variety of control inputs. Likewise the DPM 4000 can provide a variety of control outputs. Examples of these inputs and outputs might be: a contact closure from a fire alarm results in an alarm and voice message automatically sent to the loudspeaker system, pressing a button on a paging station or wall control raises or lowers a video screen and turns on or off the video projector, a maintenance worker uses his cell phone to turn the lights on or off in a given area of a building, an amplifier failure is detected, a backup amplifier is switched into operation and maintenance personnel are notified of the failure. The possibilities are only limited by one’s imagination and ingenuity.

The DPM 4000 can be configured for a variety of audio routing tasks in addition to the normal paging applications. The unit is especially suited for background music applications in such venues as restaurants, shopping centers, and specialty stores. The DPM 4000 can even be used for very small room combining applications (up to four rooms).

## DRM 4000 Mixer



Another often-useful unit in the ProAnnounce™ line of products is the DRM 4000 mixer. It can be used either in a stand-alone mode or in conjunction with the DPM 4000. The DRM 4000 can be used to enhance the DPM 4000's input and output capabilities. The DRM 4000 features eight stereo RCA inputs, four XLR mic/line inputs, eight GPI control inputs, two XLR outputs capable of either independent or stereo operation, and two VCA level inputs. In addition, two of the XLR mic/line inputs can be configured for paging with adjustable ducking. The DRM 4000 can be programmed to change its configuration through presets assigned to the GPI inputs, PC control (RS-232), or DPM 4000 control (RS-485). A good example of using the DRM 4000 stand-alone is in a typical restaurant/bar application. There may be multiple sources such as TV, tuner, CD player, music server, etc... and you may want a different source in the bar area such as the TV for the big game, while in the restaurant you might want some jazz playing in the background. In addition, you may want the hostess to be able to selectively page in the bar area for customers that are waiting for tables in the restaurant.

The ProAnnounce system has a variety hardware that supports the DPM 4000 and DRM 4000.

These include:

- DPC 4xxx paging stations whose buttons can be programmed to do a variety of tasks and functions.
- DTI 2000 telephone interface. This interface provided the same functionality as the DPC 4xxx paging stations, but with a DTMF interface.
- DPP 400x power supplies. Three different power supplies to meet your ProAnnounce system power requirements.
- DMM 4650 message manager. This unit provides an easy to use and maintain interface for pre-recorded message functions. It can also be used stand-alone.
- DEM 3xx backup power supplies. These units can provide critical emergency power to the ProAnnounce™ system for redundant operation.
- DPA 4xxx power amplifiers. Wide ranges of output powers are available. These units when coupled with the control interface allow for remote control and monitoring of the whole amplifier/loudspeaker system.
- DCS 4xx control modules. These provided the capability of expanding the logic inputs, 100V and audio relay switching, level control, and A/D & D/A capabilities.
- DCS 400 card chassis. Provides a clean, compact installation of control cards in the form of DCS 4xxR control modules which are identical to their standard DCS 4xx cousins..
- DCS 420 monitor panel. Allows the system technician to monitor the inputs and outputs of the system including amplifier inputs and outputs.

## ProAnnounce™ Designer Software

The ProAnnounce™ Designer software is used to configure and program the DPM 4000.

The software has the following requirements:

PC computer system with Pentium processor (min. 90 MHz)  
Microsoft Windows® 95/98/ME/NT/2000/XP  
16 MB of RAM 95/98/ME, 128 MB of RAM NT/2000/XP

5 MB hard disk space

Mouse

CD-ROM drive

VGA Monitor capable of at least 800 x 600 pixels resolution, 256 colors

Free RS-232 serial (COM) port

Note: USB to Serial converters have been tested (on a limited basis) and appear to work.

## **DPM 4000 Audio Input Options**

The DPM 4000 can accept a variety of audio input cards. For a complete description of these cards including configuration information, consult the ProAnnounce™ User Handbook pages 5-8 through 5-22. The cards available are summarized below:

NRS 90215 (DPM – PCI) two input paging station card. Each input is capable of supporting any combination of up to four DPC 4xxx and DTI 2000 units.

NRS 90216 (DPM – MLA) mic/line and aux input card. Accepts either mic/line signals via XLR or two stereo consumer line sources via RCA.

NRS 90217 (DPM – MLI) dual mic/line input card. Accepts two mic/line signals via XLR.

NRS 90228 (DPM –AUX) dual aux input card. Accepts four stereo consumer line sources via RCA.

NRS 90234 (DPM – MLC) mic/line and paging input card. Accepts mic/line signal via XLR and supports any combination of up to four DPC 4xxx or DTI 2000 paging stations.

## **DPM 4000 Audio Output Options**

The DPM 4000 comes with one dual line level output card installed. A second NRS 90218 (DPM – OUT) card can be installed for a total of four line level outputs from the DPM 4000. Consult the ProAnnounce™ User Handbook pages 5-23 through 5-25 for details including configuration information.

## **DPM 4000 I/O Control**

The DPM 4000 comes with an NRS 90219 (DPM – LC8) control module installed. This module provides up to eight polarity blind logic inputs. These inputs are optically isolated and are capable of handling voltages between –31 VDC and +31 VDC. The voltage/logic levels are:

0 to |5| VDC = Logic Low

> |5| VDC but < |10| VDC Logic Undetermined

|10| VDC or higher Logic High

The module also provides seven outputs capable of switching voltages of either polarity at currents of up to 1 A. For details on this card see the ProAnnounce™ User Handbook pages 5-26 through 5-27.

Additional inputs can be obtained by using the DCS 412 or DCS 412R logic input card, which provides 12 additional logic inputs per card. Additional output can be obtained by using either DCS 408/409 or DCS 408R/409R relay card, which provides up to five DPDT closures per card.

## **Installing Cards in the DPM 4000**

The card slots (when viewed from the back or the DPM 4000) are numbered from right to left 1 through 5. The two most right slots (1 & 2) are for input cards. The next slots (3 & 4) are for output cards with slot 3 already containing a factory installed NRS 90218 card. The far left-most slot contains the NRS 90219 I/O control card.

To install a card, remove the two screws (top and bottom) securing the empty slot's cover. Carefully insert the card making sure that it aligns properly with the formed metal card guides until it seats on the backplane connector. This operation may require gentle pressure, but do not try to force the card. Once the card is inserted re-install the two screws that were used to hold the blank cover on the unit.

## Cabling

Most cabling used with the ProAnnounce™ system is standard CAT 5 terminating in RJ-45 connectors. The control cables carry audio, data, and 24 VDC. They use the same pinout as a standard networking straight through cable. This configuration holds true for paging station and remote control cables. The DPM – LC 8 module connectors use side-by-side twisted pairs instead of a network pinout. The maximum run length of the cable is normally limited by the ability to carry 24 VDC. Without a form of local power available the maximum total run length off a given output is around 1000 meters, however, it may be shorter depending on the actual load being supplied 24 VDC. See the ProAnnounce™ User Handbook for a detailed discussion of cable issues.

## Formatting Internal Message Recorder/Stacker Memory

The procedure for installing the message memory as outlined on page 5-28 of the ProAnnounce™ User Handbook is good until you reach step 4. While technically accurate, step four in the procedure leaves a lot to be desired in terms of guidance. While we are getting a little ahead of ourselves here is a better description of what must be done to format the memory:

The software block that must be accessed is the SYSTEM block. Go online with the DPM 4000 and then click on this block. Once it opens you will be confronted with a screen that shows fuses. Along the top of the screen will be a toolbar with various icons. Click on the icon that looks like the play/pause button on a CD player. The MESSAGE RECORDER screen should open. This screen has a block in the bottom right that indicates which of the four memory modules are installed. To the left of this block are a series of familiar record and playback buttons. The right-most button is labeled format. Clicking on this button will cause the memory to be formatted. The status of the formatting process will be displayed in the lower right-hand portion of the window. Once the formatting is complete, you can record a message. Recording messages is





covered in detail in the Pre-Recorded message section of this guide.

## Understanding DCS Cards

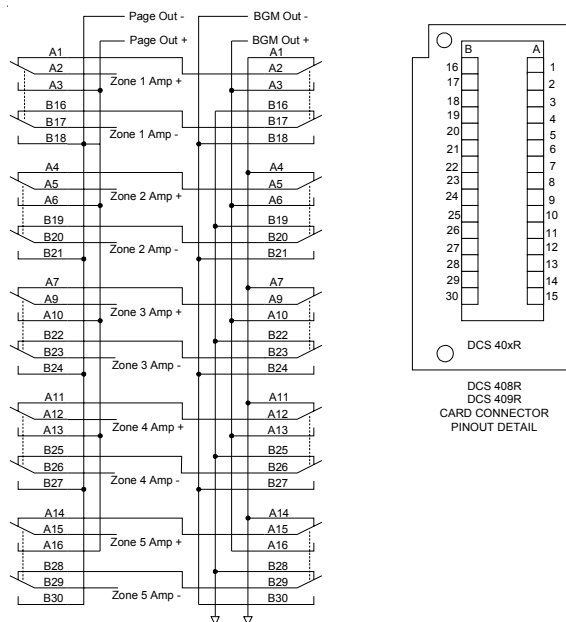
The ProAnnounce™ system uses a variety of cards for control, monitoring, and routing purposes. These cards are available in two versions. The standard DCS 4xx versions are circuit cards or modules that mount on standoffs and interconnect via flat ribbon cables. The DCS 4xxR cards are identical in function to the standard cards, but use a card cage with a backplane for interconnection. The ProAnnounce™ Designer software only refers to the standard DCS 4xx cards, however they are interchangeable. The DCS 4xx cards are outlined in the ProAnnounce™ User Handbook on pages 5-54 through 5-67. The DCS 4xxR cards are outlined in the DCS 4xxR EDS.

## Installing Cards in the DCS 400 Card Cage

The DCS 400 card cage uses essentially the same techniques for installing the cards/modules as is used when installing cards in the DPM 4000. The left-most card (as viewed from the rear) is always either a DCS 401R controller card, or a DCS 405R extension card. The DCS 405R cards are used to expand from one DCS 400 chassis to another. The way this works is that the DCS 405R is the last card in the first DCS 400 chassis (the one with a DCS 401R card in the left-most slot). The first card in the expansion DCS 400 chassis is a DCS 405R. Cables are attached between the two cards. While most installations do not require expansion chassis, there are times when the number of cards under the control of a single DCS 401R exceeds the ten card limit of a DCS 400 chassis.

## Relay Wiring

DCS 408/409 and DCS 408R/409R relay cards are used for a variety of applications in the ProAnnounce™ system. One of the primary uses for them is the control of line or speaker level audio. The DCS 409/409R is used for low voltage and line level audio signal switching. The DCS 408/408R is used for high voltage and speaker level audio signal switching. Both cards ship with a number of wire jumpers installed to create a common buss. Depending on your needs the cards may work without the need to remove any of the jumpers, however some applications will require that you do so. Complete isolation of the relays is possible if all of the buss jumpers associated with that relay are removed. Consult the ProAnnounce™ User Handbook pages 5-57 through 5-60 for details on DCS 408/409 cards and the DCS 4xx Card EDS sheet for details on the DCS 408R/409R cards.



# An Example Project

Let's start learning about ProAnnounce™ Designer and the ProAnnounce™ system by actually building an application.

## Loading the Software

Insert the ProAnnounce designer CD into your CD-ROM drive. Run the SETUP.EXE file located in the DISK 1 folder. Follow the on screen instructions to install the software.

## Launching ProAnnounce Designer

Go to the START menu

Select the PROGRAMS entry

Select the PROANNOUNCE entry

Click on the ProAnnounce Designer entry

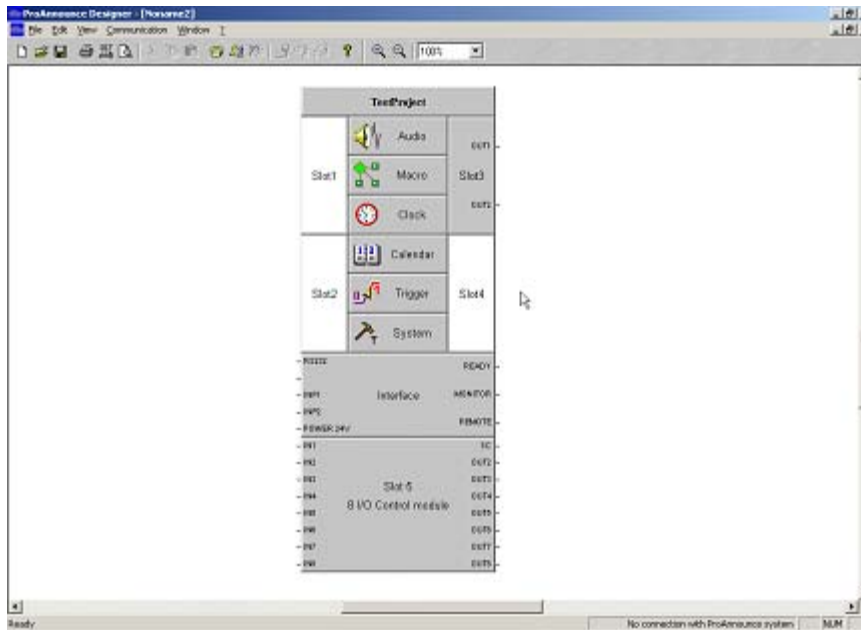
You should now see the opening screen for ProAnnounce.



## Starting a New Project

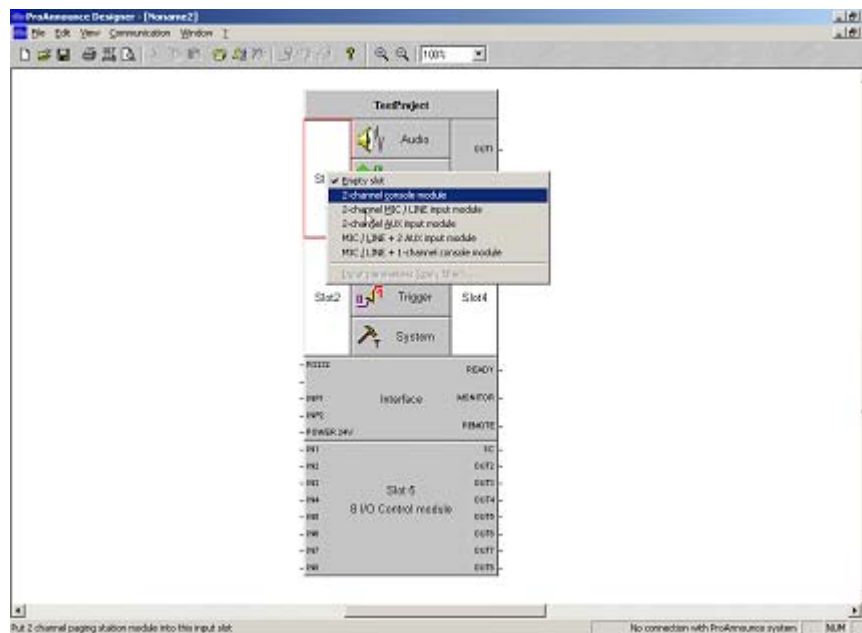
A screenshot of the "Common project data" dialog box. It contains several input fields: "Project name", "Project number", "Company", "Address", "System call number", "Author", "Date" (with the value "3/6/2003"), "Filename (without ext)" (with the value "Noaname2"), "Password" (with an unchecked checkbox), and "Project description" (a text area). "OK" and "Cancel" buttons are at the bottom.

To start a new project, select New Project from the File menu. A project data screen will appear. This is where you can personalize your project. The ability to password protect the project is also possible. For now simply give the project the name of TestProject and click on the OK button.



The basic project will then appear. A block representing a DPM 4000 as it ships from the factory will appear in the window. The block is comprised of elements that can be access via a variety of left or right mouse clicks. Notice that all of the slots on the DPM 4000 are empty with the exception of Slot 3 and 5. This is exactly how the DPM 4000 ships from the factory.

## Adding Cards

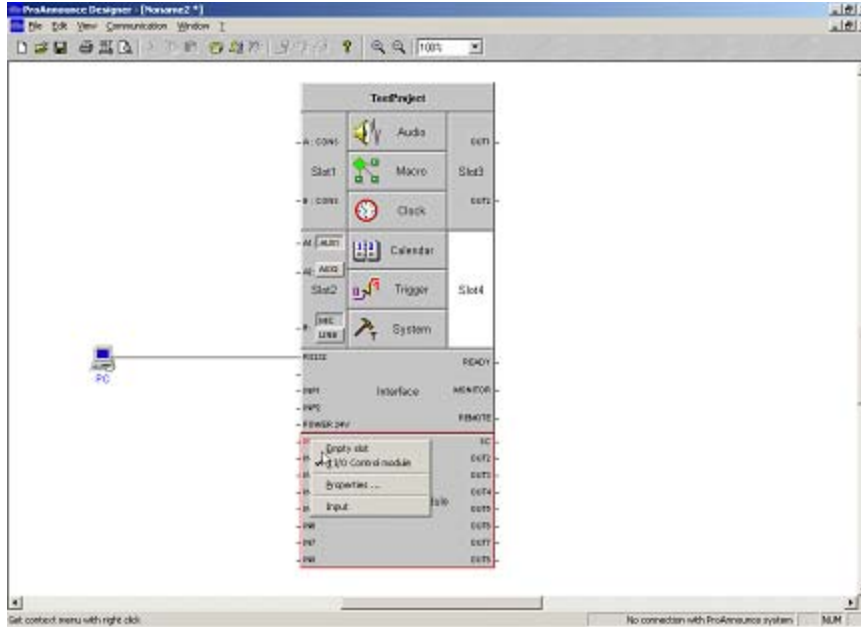


To add cards to the DPM 4000 you right mouse click on the desired slot and select from the pop-up menu. Right click on Slot 1 and select 2-channel console module. A 2-channel paging input module should appear in Slot 1. Right click on Slot 2 and select MIC/LINE + 2 AUX input module from the list.

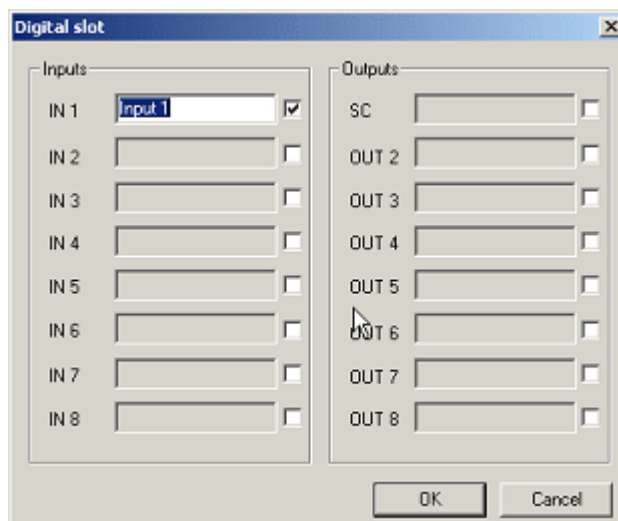
## Adding a Computer

If you right click on the RS232 entry on the interface you can select PC from the pop-up menu. This is actually more for looks than for function. The DPM 4000 does not have to be told via the block diagram that a PC is connected.

## Adding Inputs and Outputs



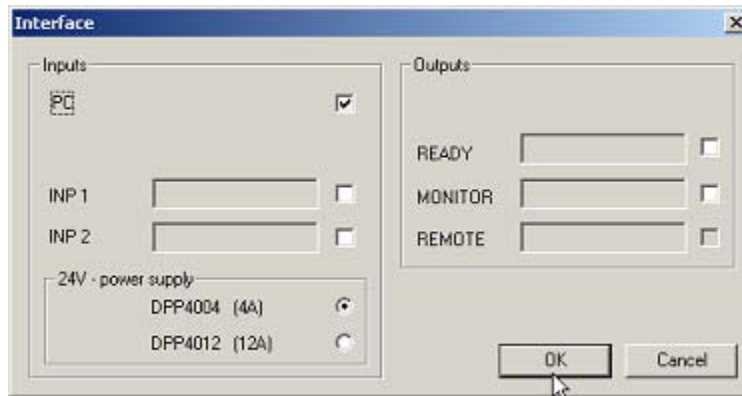
Right clicking on Slot 5 and selecting properties can add logical inputs and outputs. A window will pop-up with the inputs and outputs. Placing a check mark next to an input or output will cause it to be activated. You can also supply a custom label for the input or output in question, or you can just go with the generic name. The names can be changed later. For now place check marks next to input 1 and output 2. Click on the OK button.



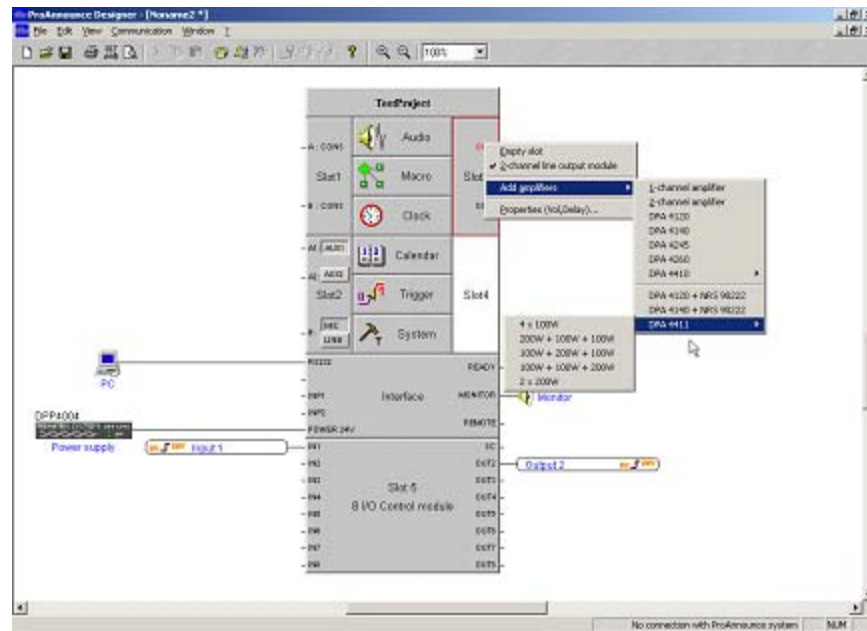
## Adding Other Items

Right click on the interface block and select properties from the pop-up menu. This will display the Interface window. Notice that the PC entry is already checked. Click on the entry next to the DPP4004. A black

dot should appear. Click on the check box next to the monitor entry. Click on the OK button. You have added a DPP4004 power supply and a DCS 420 monitor to the system. These items are like the PC. They are more for show than actual substance.

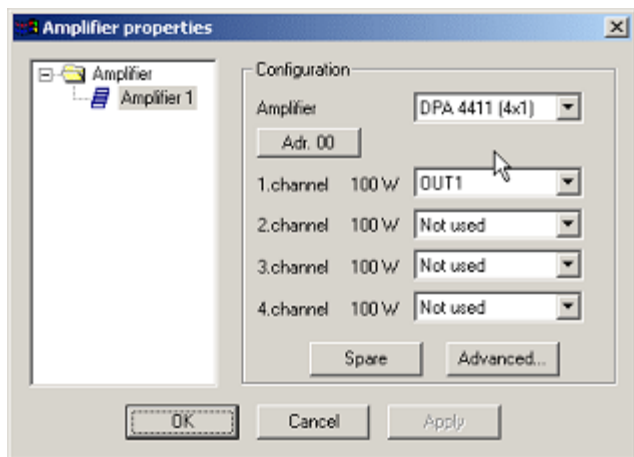


## Adding Amplifiers

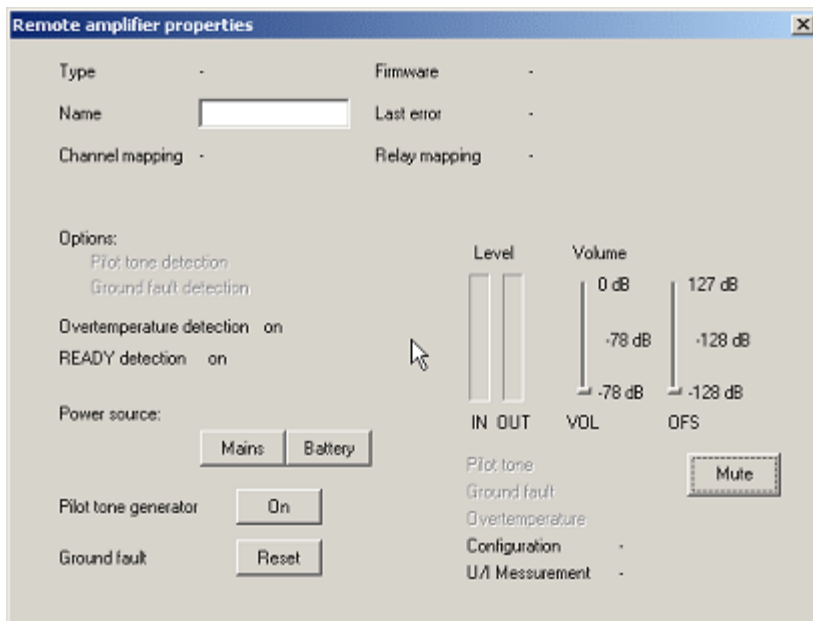


Right click on the OUT 1 entry for Slot 3. A pop-up menu will appear. Move your mouse pointer to the Add amplifiers entry and a fly-out menu of amplifier selections will appear. Move your mouse pointer to the DPA 4411 entry and another fly-out for selecting the amplifier configuration will appear. The DPA 4410 and DPA 4411 amplifiers are the only ones that require you to select the actual configuration. Click on the 4 x 100W entry.

# Configuring Amplifiers

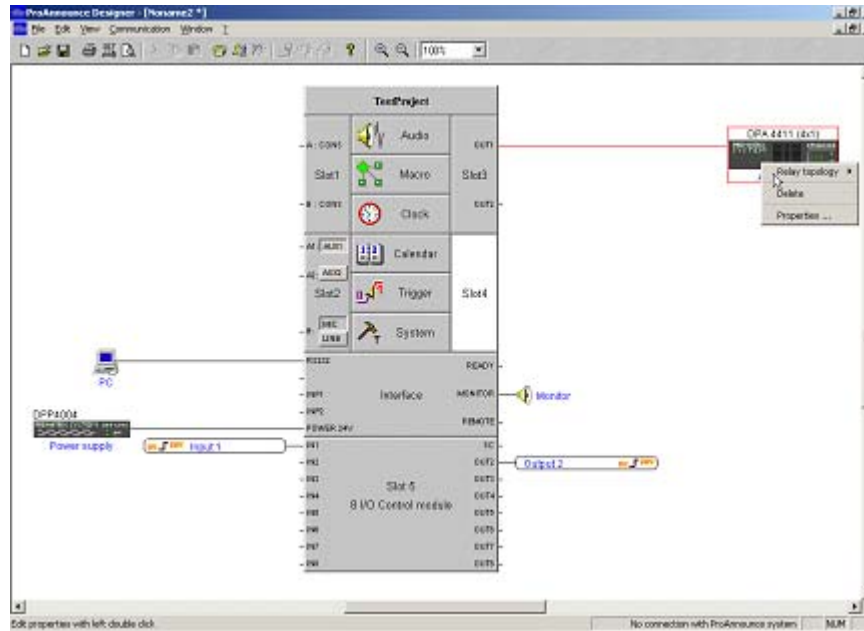


Double click on the DPA 4411 amplifier. The amplifier properties window will open. Here you can determine which DPM 4000 output feeds a particular DPA 4411 input. Click on the drop down list for the second channel and select OUT2. This tells the application that audio is to route from output channel two on the DPM 4000 to input channel two on the DPA 4411. Notice that channel one is already assigned. This is because you right clicked on the OUT 1 entry when you added the amplifier so the software automatically assigned OUT 1 on the DPM 4000 to channel 1 on the DPA 4411. Also of important note in this window is the drop down menu for changing the amplifier output configuration and the button indicating the amplifier's address. Clicking on the address button and selecting another unused amplifier address from the list provided will change the address for the amplifier.

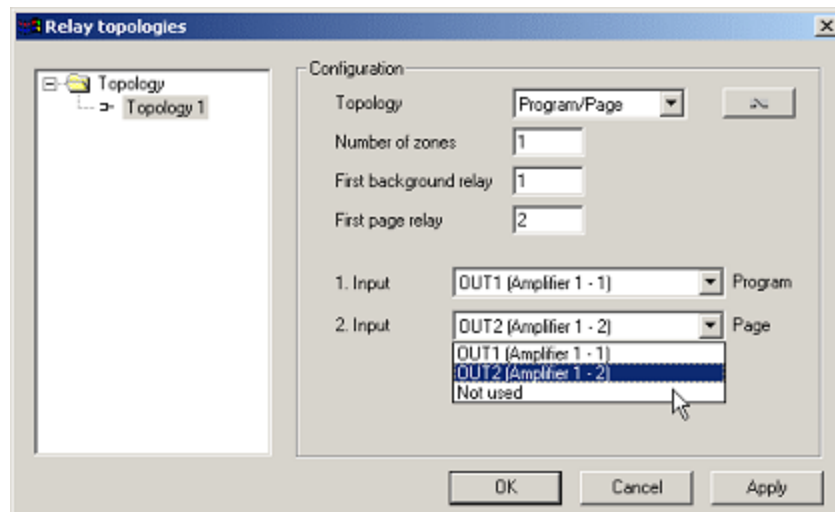


Click on the Advanced... button. This displays a screen for configuring the levels of the amplifier, audio metering, temperature information, etc... This screen is only available for remote controlled amplifiers such as the DPA 4411, or DPA 4120/4140 with remote cards. Close the remote amplifier properties window by clicking on the X button in the upper right corner of the window. Click on the Apply button on the amplifier properties window to apply the changes we have made to the audio routing. Click on the OK button. Your application should now look like that in Figure.

# Adding a Relay Topology

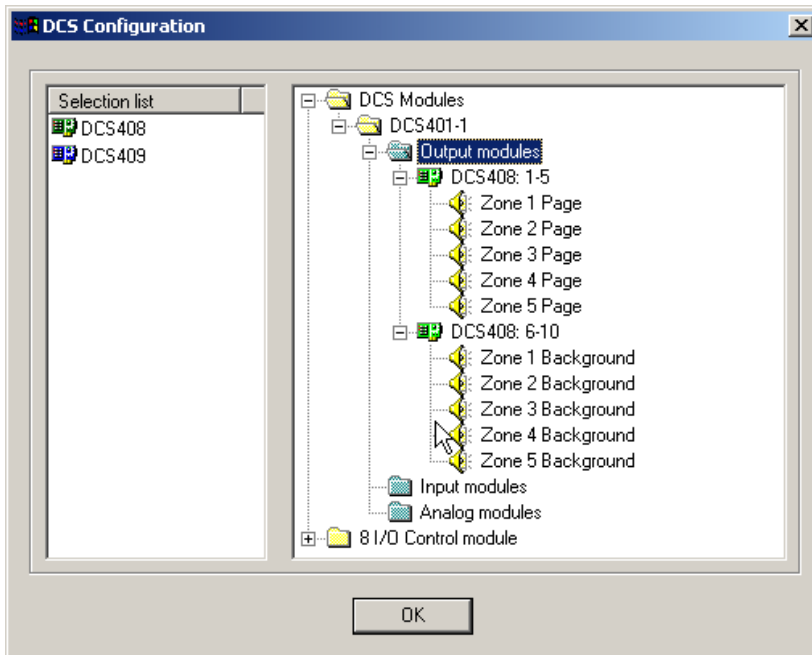


Right click on the DPA 4411 amplifier. A pop-up menu will appear. Move your mouse pointer to the Relay Topology entry and select Program/Page from the fly-out menu. This will cause the Relay Topologies window to open. Click into the box for number of zones and replace the 1 with the number 5. Click into the First page relay box and change the number to 6. In the ProAnnounce system Program is what most people would call background music or BGM. There are two outputs from the DPM 4000 that are required for a Program/Page configuration. By setting the first Input to OUT1 this tells the software to send the BGM material through amplifier 1, channel 1 (hence Amplifier 1 – 1). Click on the drop-down menu for the Page selection and select OUT2. This tells the software to route paging audio through amplifier 1, output 2 (hence Amplifier 1 – 2). Click on the Apply button to apply the changes.

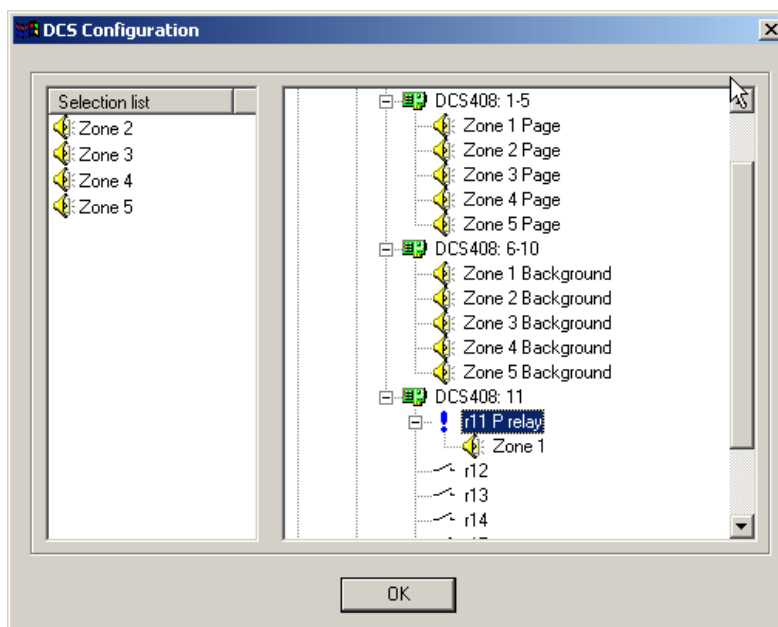




# DCS Module Programming



In the upper right corner of the Relay Topologies window is a button with a switch on it. Clicking on this button opens the DCS configuration window. This window functions much like you File Explorer in Windows®. Clicking on the + and – signs next to the entries will expand and collapse the entries. Expand out the entries until they look like those in Figure. Notice how the software has already added a DCS 401 and two DCS 408 modules to the application. These have already been assigned for Page and Background relay operation. By changing the way page and background relays were assigned we are able to supply one page output to a single DCS 408 module and rely on the jumpers on the card to carry the signal to the other four relays. Likewise, we only must supply one BGM source to the card labeled BGM and rely on the jumpers on the card to carry the signal to the other four relays. By clicking on the Output Modules, Input Modules, or Analog Modules entries you are presented with a list of modules on the left portion of the window that can be dragged to the right portion of the window. This is how cards are added to the system.





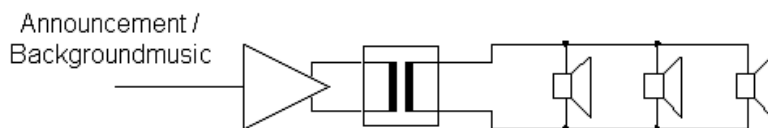
## Adding a DCS Module

Click on the Output modules entry. DCS 408 and DCS 409 modules will appear on the left portion of the screen. Place your mouse pointer over the DCS 408 module, hold down the left mouse button, and drag the module to the Output Module portion of the screen. Release the left mouse button. This will add a third DCS 408 to the current configuration. Click on the + symbol next to the module to expand the view of the module's relays. Notice that the contacts are empty except for their numbers. Click on the contact labeled R11. A selection list of functions will appear in the left portion of the window. Using the same left mouse click and drag technique, drag the ! P relay entry onto the r11 entry. Click on the r11 entry. Now a selection list of zones will appear. Use the click drag technique to add Zone 1 to the ! r11 P relay. ! P relays are used normally for bypassing 70V attenuators during paging announcements. The ! P relay will always close when a page is made into the zone or zones that are assigned to it. Click on the OK button and you will return to the Relay Topologies window. Click on the OK button and you will be returned to the main project window. Your project should now look like that in Figure.

## Understanding Output Topologies

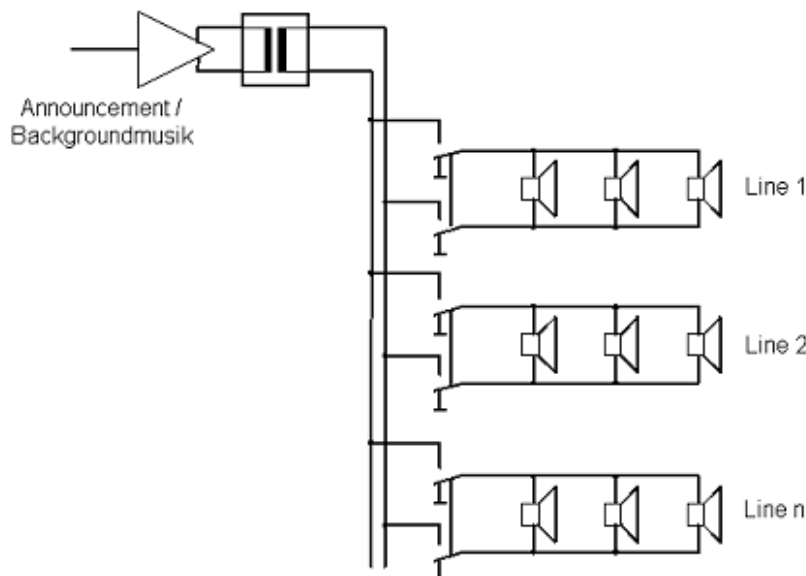
There are three output topologies available: Direct, 1 in N, and Program/Page. It is important to note that background music BGM (referred to in the software as Program) is available in all output configurations.

### Direct Topology



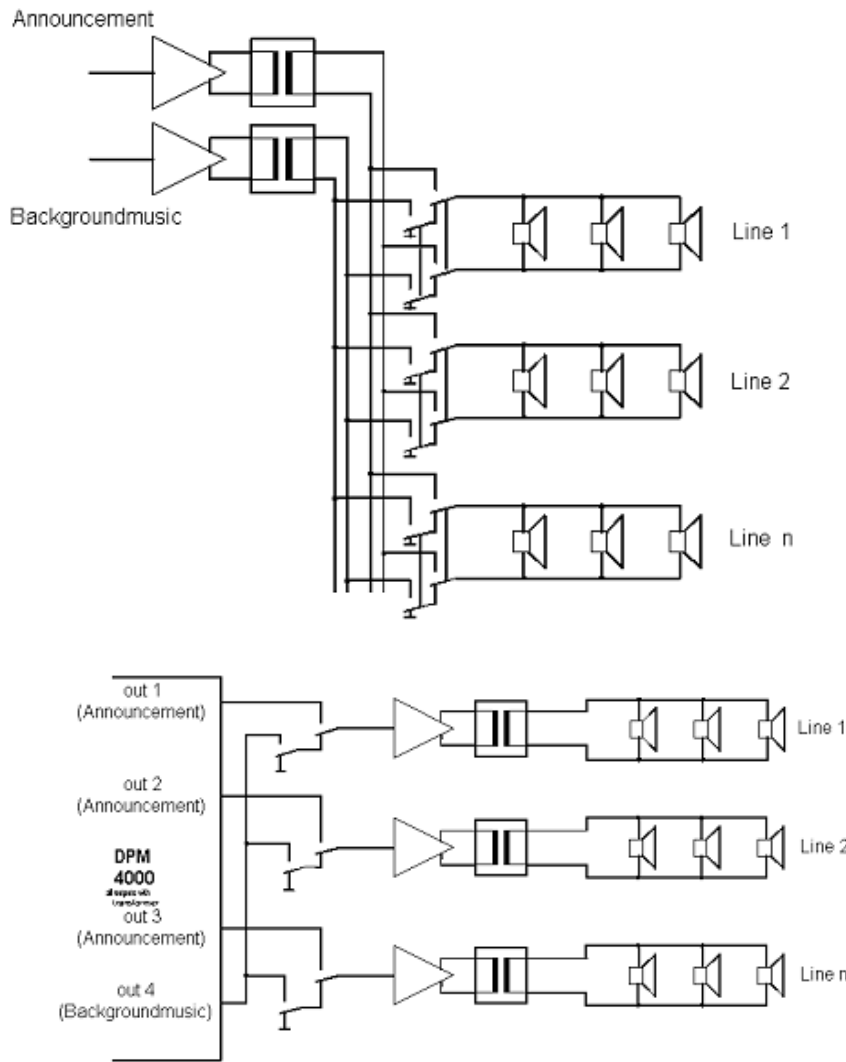
A Direct output topology is just that – direct. This is useful in systems where for one reason or another a dedicated output is needed for a zone. This might be the critical areas of a building that will always be paged into. The direct topology is also useful for systems that are not larger than four zones. Because the DPM 4000 can be loaded with up to two output cards providing a total of four line level feeds, we can address up to four independent zones without the need for any relay switching. Background music is possible in this scenario and will be either muted or ducked (depending on programming) when a page is made into the given zone(s). The Direct topology is also useful in other audio routing situations (beyond paging) such as multiple BGM sources to multiple zones, general audio routing, and room combining.

### 1 in N



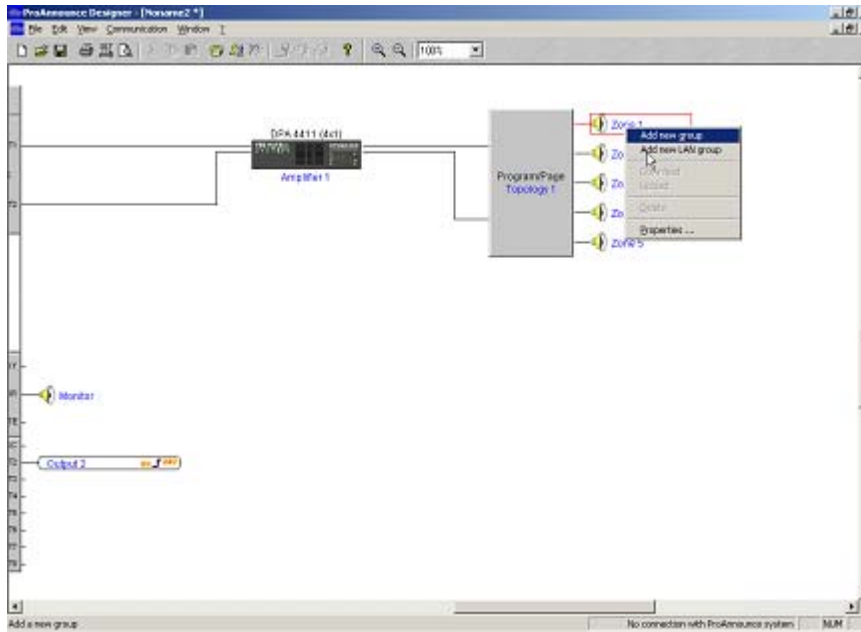
A 1 in N output topology uses one relay per zone to expand the output capabilities of the DPM 4000. In this scenario DCS 408/408R relays are used to connect the zones to the outputs of the amplifiers. Switching audio before the amplifiers is also possible using DCS 409/409R relays, however, this requires some additional programming. If background music is used, then the background music is sent over the same line that is used for paging. The zones selected for background music will have their relays switched on. When a page is made the background music will be removed from the line, page audio added, and the relays will release and then turn on only in the zones where the page is being made. When the page is completed the page audio will be removed, the background music will be restored, the relays will release and then turn on only in the zones where background music is desired.

### Program/Page

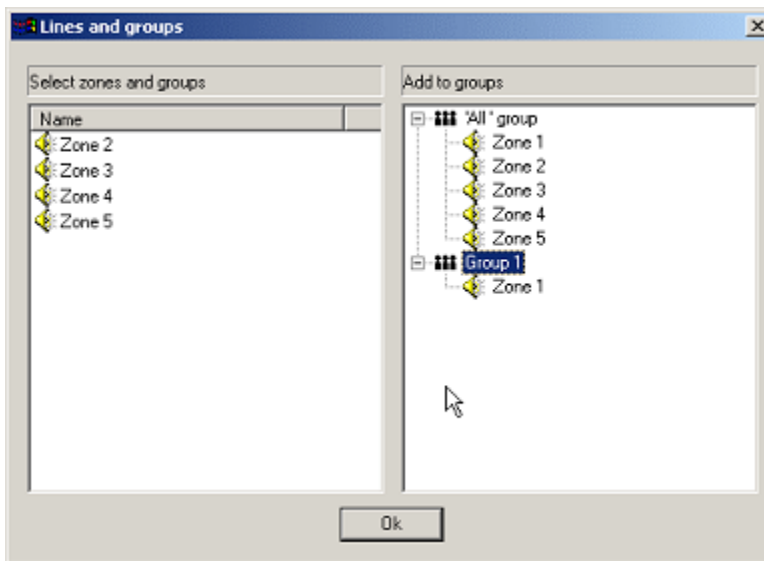


The Program/Page output topology is used when the interruption of background music in areas where paging is not currently taking place is undesirable. This topology uses two relays per zone. One is for page audio and the other is for BGM (program). This topology requires two line level outputs from the DPM 4000. The relays connect the speaker zones to one of three sources: ground, background music, and page. When background music is selected the background relay is energized and the zone is connected to the background music output. When a page occurs the background relay (if energized) is turned off and the page relay is energized. This method requires slightly more forethought, especially when considering wiring, but it is the most common method used for systems that are larger than four zones and require both BGM and paging.

# Adding a Group

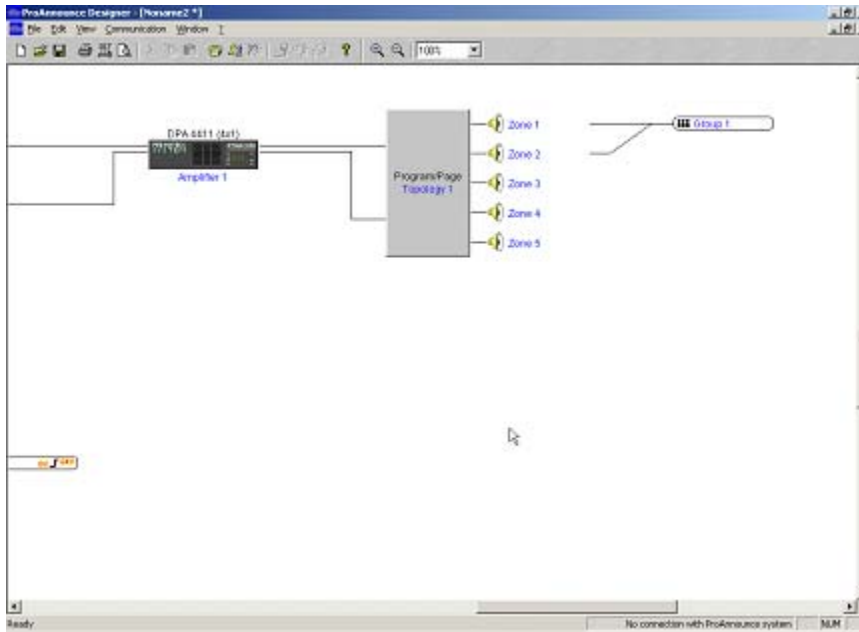


As the project is currently configured you have five zones. What you cannot see is that the software has also created an All Group which amounts to all five of the zones. This is the automatic All Call that most systems require. We will now add a custom group of just Zones 1 and 2. To create a custom group right click on a zone (in this case Zone 1) and select Add new group from the pop-up menu. A group tag will appear with a single line going to Zone 1. Right click on this group tag and select the Properties entry from the pop-up menu. The Lines and Groups window will appear. Lines (a.k.a. Zones) are displayed on the left portion of the window and Groups are displayed on the right. Click on the + symbol next the 'All' group to expand the group. Notice that the 'All' group has all five zones. If you wanted to modify the group you could simply drag other zones (if they existed) from the left side of the window into this group. To remove an assignment from a group click on the zone in the group and drag it back to the left portion of the window.



Note: Clicking on an item in most screens and layouts will select the item. Pressing the delete key after it is selected will delete the item. Sometimes you may be prevented from deleting and item until it is no longer

used by the application. In some cases such as the Lines and Groups you must drag an item back to where it originally resided.

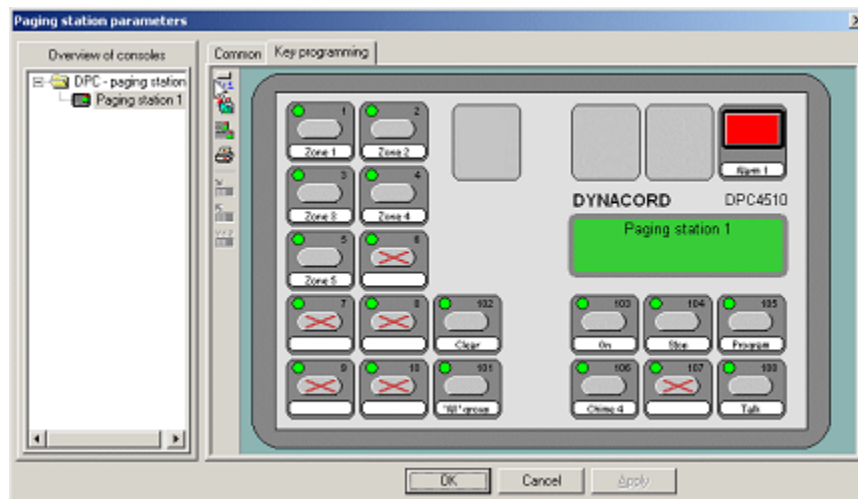


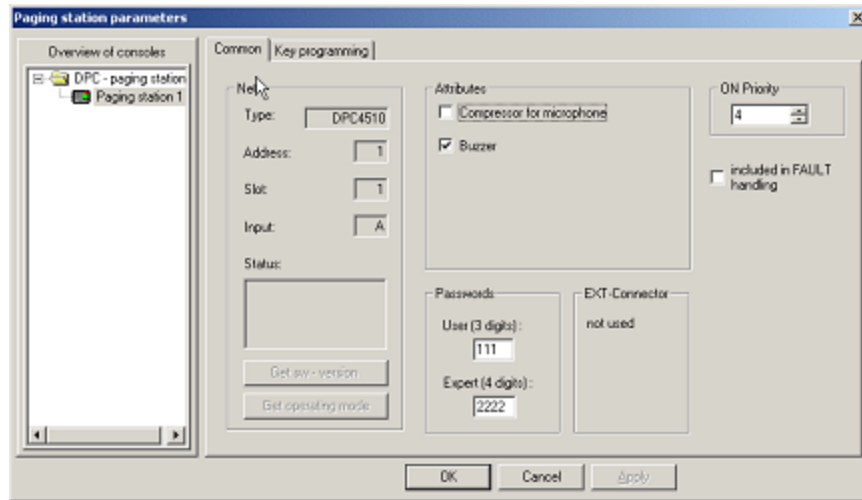
Drag Zone 1 and Zone 2 to the Group 1 entry. Click on the OK button. Your application should now look like that in Figure. Notice that we now have Group one with lines indicating which zones belong to it. You can create multiple Groups for any number of uses. The ‘All’ group however is not indicated in the drawing.

## Adding a Paging Station

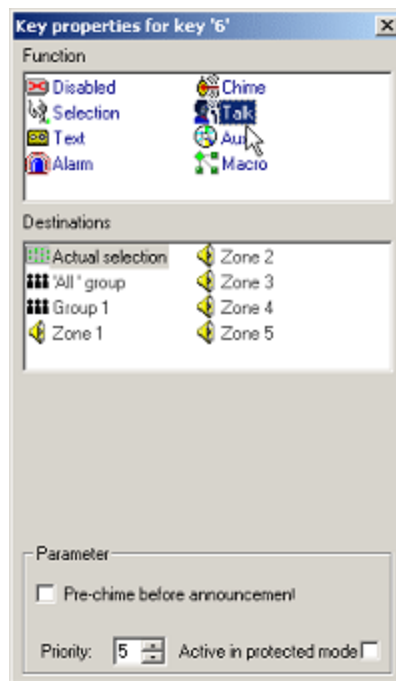
Right click on the A: CONS entry in Slot 1. This will cause a pop-up menu to appear. Move your mouse pointer to the Paging station list entry and select the DPC 4510 entry from the fly-out menu. A paging station will appear attached to the DPM 4000.

## Configuring a Paging Station

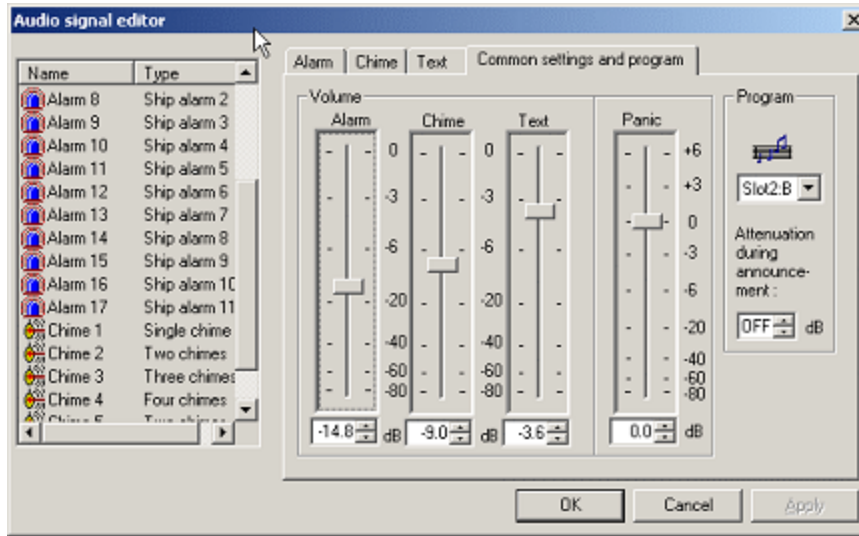




Double click on the paging station you just added. This will open the Paging station parameters window. There are two tabs available for viewing: Common and Key programming. Notice that the Key programming view already has added keys for Zones 1 through 5, as well as, the 'All' Group. Click on the Common tab to switch the view. This view shows common setup information for a paging console. Some of the information is, like the remote controlled amplifiers, only available when the PC is connected to the system and you are in online mode. Other information such as the consoles priority levels, compressor use, buzzer use, and passwords can be changed at any time. Click on the Key programming tab to switch the view back. Right click on the key number 6 and select properties from the pop-up menu. This will cause the Key properties window to open. This is where various functions and assignments can be made to a key. Click on the Selection entry and you will notice that the Destinations section will show a number of choices. Those that have a red strike through them have already been used on the console. Select Group 1 and then click on the X in the upper right corner of the Key properties window. Click on the Apply button for the console programming to be made permanent. This is important because if you simply click OK without hitting Apply first, your programming will be lost. Your paging station view should look like that in Figure. Once you have clicked on Apply, click on the OK button to close the window. You Should now have an application that looks like that in Figure.



# Setting up Background Music

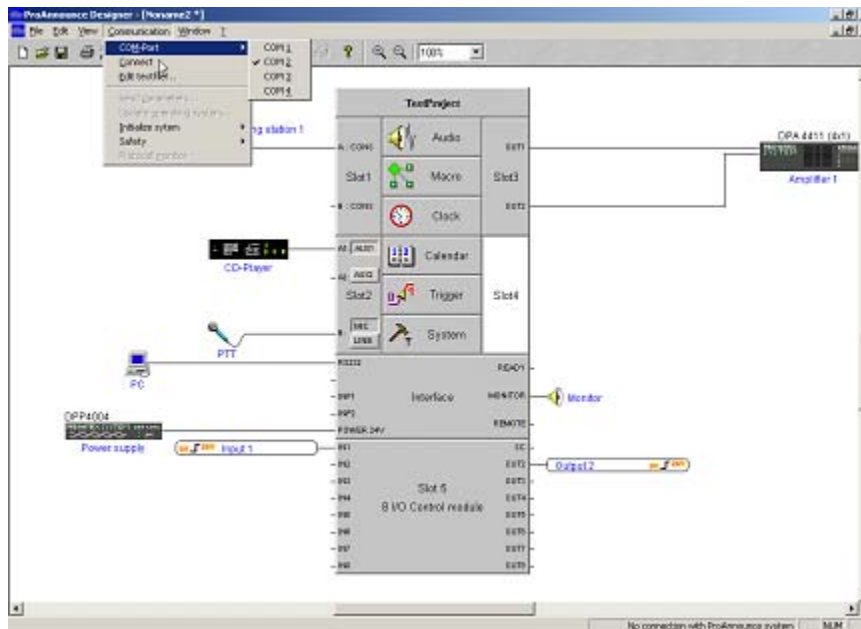


Double click on the Audio block on the DPM 4000. This will open the Audio and Signal Editor window. Click on the Common Settings and Program Tab. This is where you set the audio levels for Alarms, Chimes, pre-recorded messages (referred to as TEXT), and Panic (emergency). To the left of these settings is the Program (BGM or background music) source and ducking selection. Clicking on the selection box will allow you to select which DPM 4000 input will provide background music. You can also adjust the amount of ducking of the background music during page. You can adjust if from completely OFF to 0 dB. Once your selections have been made click on the Apply button followed by the OK button.

## Saving Your File

Click on the file menu and select Save. You will be prompted for a file name. All projects end with a .PMX extension.

## Programming the DPM 4000



To load the file into a DPM 4000 do the following:

1. From the Communication menu select the serial port you intend to use.
2. From the Communication menu select Connect. If you are successful you will get a connection screen like that in Figure. Also the Protocol monitor window will open. This window displays communications between the PC and the DPM 4000. If you desire to remove this window simply select Protocol Monitor from the Communications menu. You can always redisplay the window by reselecting Protocol Monitor from the Communications menu.
3. Under the Communications menu, move your mouse pointer to Initialize system and select Clear all parameters from the fly-out menu. This clears the DPM 4000 memory.
4. Under the Communications menu, move your mouse pointer to Initialize system and select Netscan from the fly-out menu. This causes the DPM 4000 to identify what hardware is connected to it.
5. To send your programming to the DPM 4000 select Send Parameters from the Communications menu. Check all of the items you wish to send. Usually all items are checked with the exception of Text File. The Text File is only sent when additional macro language programming (beyond the normal macros used within the GUI interface) is needed.
6. Make sure the PC to DPM 4000 is selected.
7. Click on the OK button.

If the programming is successful, the DPM 4000 will reset.

More to come....

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