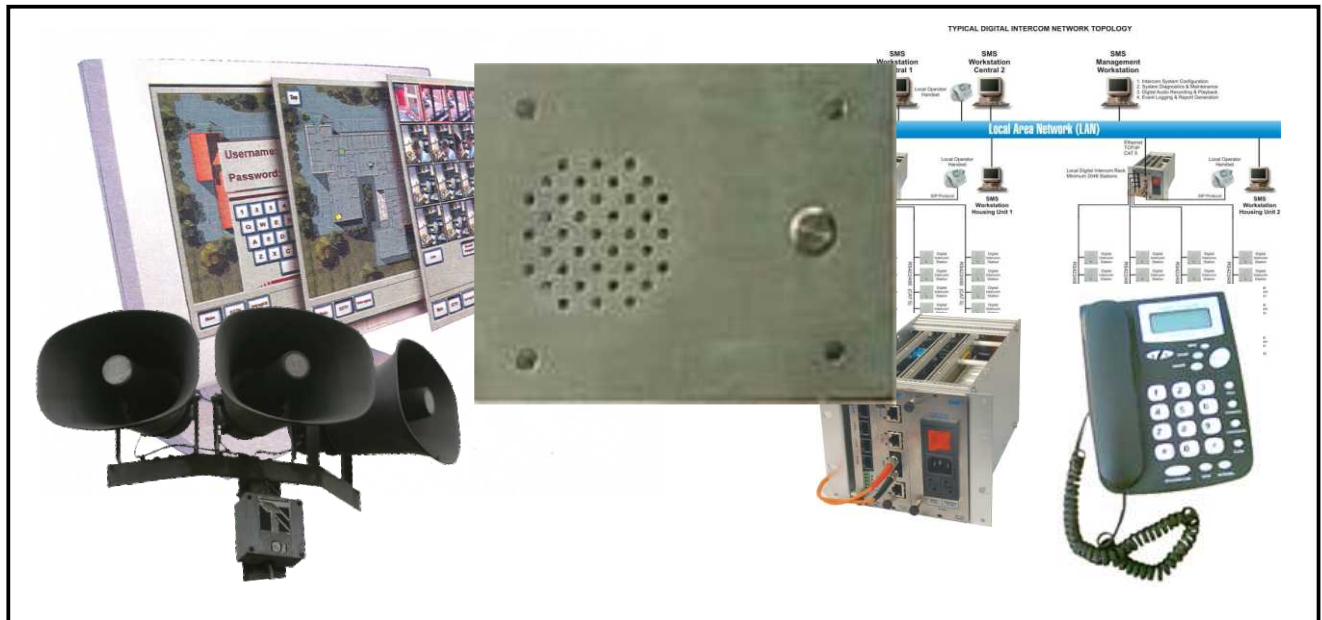


## Intercom and Public Address



JFE Security have selected world class audio products to form the basis of our Audio systems, and fully integrated these components into each sub-control area's control panel to form a robust and highly flexible solution. In an integrated system where Visual communication, Audio communication and the control of pedestrian traffic are so interdependent, it is essential that no one sub system be considered in isolation during the design phase.

The benefits arising from an effective control system design during the physical design stage cannot be overstated, and it is during this phase that experienced Systems design engineers can be made available to assist in the physical design. Intercom systems are primarily used for communication between control room operators and personnel situated throughout the complex.

In order for personnel to pass from one control area to another it is necessary for them to communicate with the local control room operator.

Each sub area has a dedicated Audio Bus, which is run through each door header in an area together with other essential services such as power, data and air lines.

Dedicated micro-Controllers situated in each door header are responsible for switching their own intercom stations onto the local Audio Bus by means of integrated Gold Flashed Relay contacts.

A micro-controller located in each local control room is responsible for selecting appropriate audio relays on its integrated audio control board, to enable a audio path between its local pre-amplifier and the external Audio Bus.

The same micro-controller is able to set up communication paths between the Local Control Room and its Unit Control Room, as well as to the Central Control Room.

Central Control Room operators are able to initiate and respond to audio requests initiated from any staff intercom station in the entire complex, and for this purpose is required to issue commands to multiple audio control boards throughout the installation.

The Public Address System is mainly used for public announcements or for paging of staff members.

Power Amplifiers are installed at strategic positions throughout the Audio system to enable broadcast messages to be relayed to multiple Public Address speakers and Horns simultaneously.

Two types of speakers are used for PA applications namely flush mounted wall or ceiling speakers and horn speakers.

Horn speakers are used primarily for external applications where greater amplification is required, whilst flush mounted speakers are used within the installation.

Flush mounted PA speakers are sensitive enough to be used as a part of a bi-directional audio system, and can be used to "listen in" for example in Inmate communal areas.

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