Microphone Paging Solution For Waiting Areas

In this tech blog, we look at a simple solution which allows up to four paging microphones to call public areas within a building. We get asked for this type of solution for hospital, retail and court buildings.

The system below is based around the 160w RCF AM2160 mixer amplifier. This amplifier has four balanced microphone inputs with Interlocked paging control, and it can be set that if a microphone is using the system it will lock out the other paging microphones. This is known as first come first served priority and prevents users from talking over each other.

In the schematic below we have shown the AM2160 being used with the TOA PM660U single zone microphone, although many other paging microphones could be used.

A close up view of the input connectors is shown below. The phoenix inputs allow for a balanced connection GND/+/- and CMD which is the control input from the paging microphone's push button. The amplifier also has a paging relay output, shown to the left-hand side, and this will provide a closing contact which is activated when any control input is activated. This paging relay could be used to power busy lights on the system if required (Please note that this is dependant on the type of paging microphone used and is not available on the TOA PM660U as shown above).

In this example, we've looked at the RCF AM2160 mixer amplifier, but if more power is needed then the AM2320 320w model is also available.