

### Call / Connect 3 Digital Storage Playback System

A Public Address system may be connected to the site telephone system, which then allows speech from the telephone system subscribers to address the Public Address loudspeaker networks. This is effected by a CCU (Call Connect Unit) interface.



When the CCU is used with ACE 100 it is possible to address individual broadcast zones by using the buttons on the telephone keypad. The interface is included to obviate acoustic feedback normally associated with live telephone handset receivers co-located with public address paging loudspeakers.

#### Connection to PABX

This is by either a "MUSIC ON HOLD" interface [which is a dry contact which CLOSES when the PAGA CCU3 extension is called, this contact is routed to the "key" terminals in the CCU3 box] or by industry standard 2 wire E & M port. In the latter instance the PABX puts an earth on the E line which is sensed by the CCU3, the CCU3 responds by handshaking an earth on to the M line. [Note that the CCU must be referenced to PABX earth to facilitate correct operation.] The PABX must also extend an audio pair which with either music on hold or 2 wire E & M gives an analogue base band audio signal of between minus 15dBm and plus 3dBm. Note that the sensitivity of CCU3 can be dampened by placing a resistor across the audio pair value between 22 Ohms & 100 Ohms.

#### Operation

- User calls up PABX number for PAGA system.
- PABX addresses CCU3 and puts CCU3 into "record".
- CCU3 responds by issuing prompt tone to user's
- ACE 100 only: User can select discrete PAGA zone, via telephone keypad.
- After two seconds have elapsed, without key presses being detected on the telephone keypad a second prompt tone is issued.
- User records message.
- User hangs up 'phone receiver'.
- CCU3 keys PAGA host.
- CCU3 retrieves stored message and injects into host PAGA input.
- CCU3 clears down upon message expiration.

**Note:** Maximum duration of message is 45 seconds. If this limit is exceeded then a 1kHz/500Hz two-tone warning is

played continuously to the user, via the telephone handset, until the handset is replaced, upon which the CCU3 resets and no message is issued.

Real time monitor L/S - when access to CCU3 is seized by the PABX the user enters a spoken message. This message can be monitored real time via a monitor L/S output. The output is capable of driving any L/S with impedance 4-20 ohms up to 100mW. Should undesirable messages be recorded into the CCU memory then these can be prevented from being played back over the L/S networks by momentary closure of the 'Abort' CCU input to 0V. The action resets the voice processor disabling playback for that message but leaving the CCU3 available to record the next message.

#### Key Features

- ✓ Access to the public address system via any site telephone
- ✓ No acoustic feedback by delaying the broadcast message
- ✓ Monitor loudspeaker output
- ✓ Abort facility to cancel undesirable calls
- ✓ Dual isolated outputs for duplicated public address systems
- ✓ Message broadcast upon the telephone handset being returned to the cradle

#### Electrical Specification

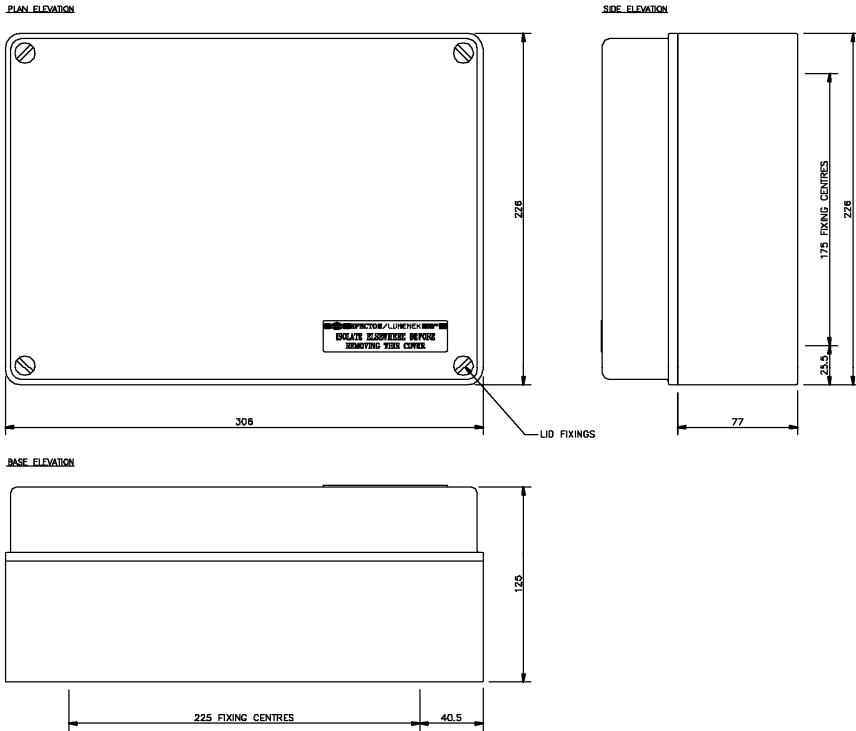
Storage Time (Factory Set)	45 Seconds
Input	Contact and Audio
Input Level Control	VR4 (Record Level)
Output Monitor Level Control	VR3 (Set monitor L/S Level)
Output Level Control	VR2 (Set playback level)
Storage Time (Factory set to Optimum 45s)	VR1 (Set Clock)
Memory	2M bits RAM
Frequency Range	300Hz to 3 Hz
Protection	a) AC Mains supply fuse FS2 1A b) DC Mains supply fuse FS1 1A
Interface Volt Free Contact	2 x 0.25A @ 24VDC
Audio Interface	2 x 0dBm



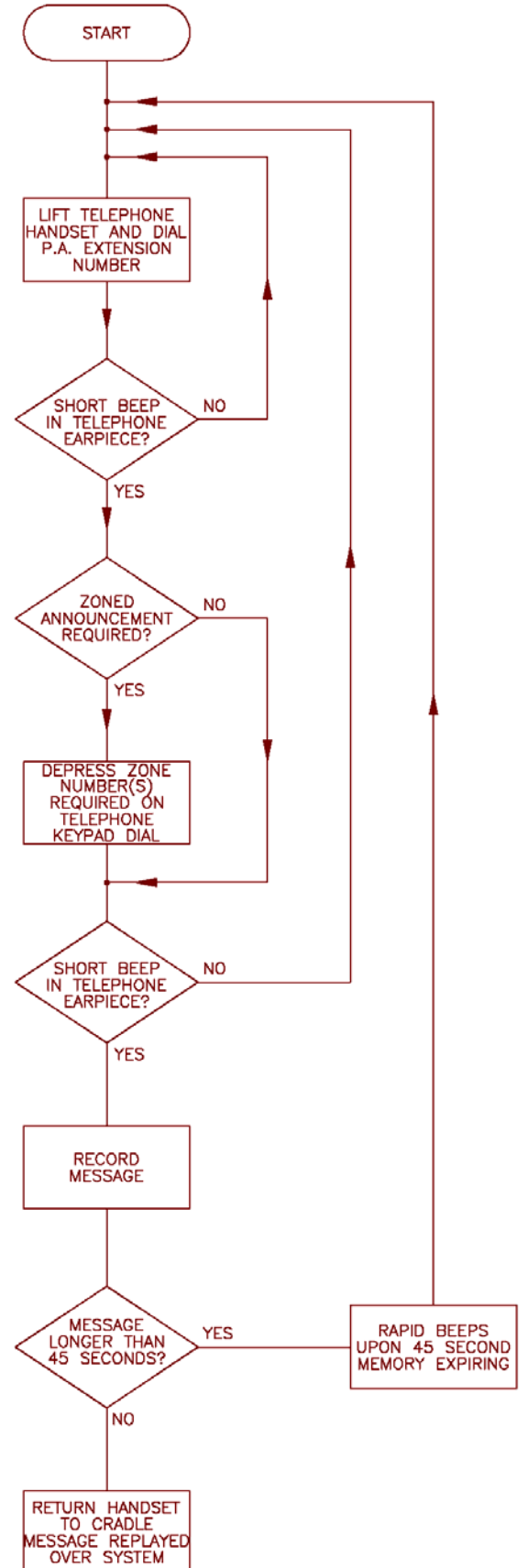
## Electrical Specifications

Model No	Call Connect Type	Power Output in Watts (8W Monitor L/S)	Primary Supply	Power Output to the Public Address System	Primary Supply Consumption
CCU/3/24	Wall Mounted	0.1 W	24V DC $\pm$ 10%	2 x 0dBm 600W	500mA
CCU/3/120	Wall Mounted	0.1 W	120V AC $\pm$ 10% 50/60 Hz	2 x 0dBm 600W	100mA
CCU/3/240	Wall Mounted	0.1 W	240V DC $\pm$ 10% 50/60 Hz	2 x 0dBm 600W	100mA

## Call Connect Unit Enclosure Detail



## CCU3 Operation Flow Diagram



## Call Connect Unit Interconnection

