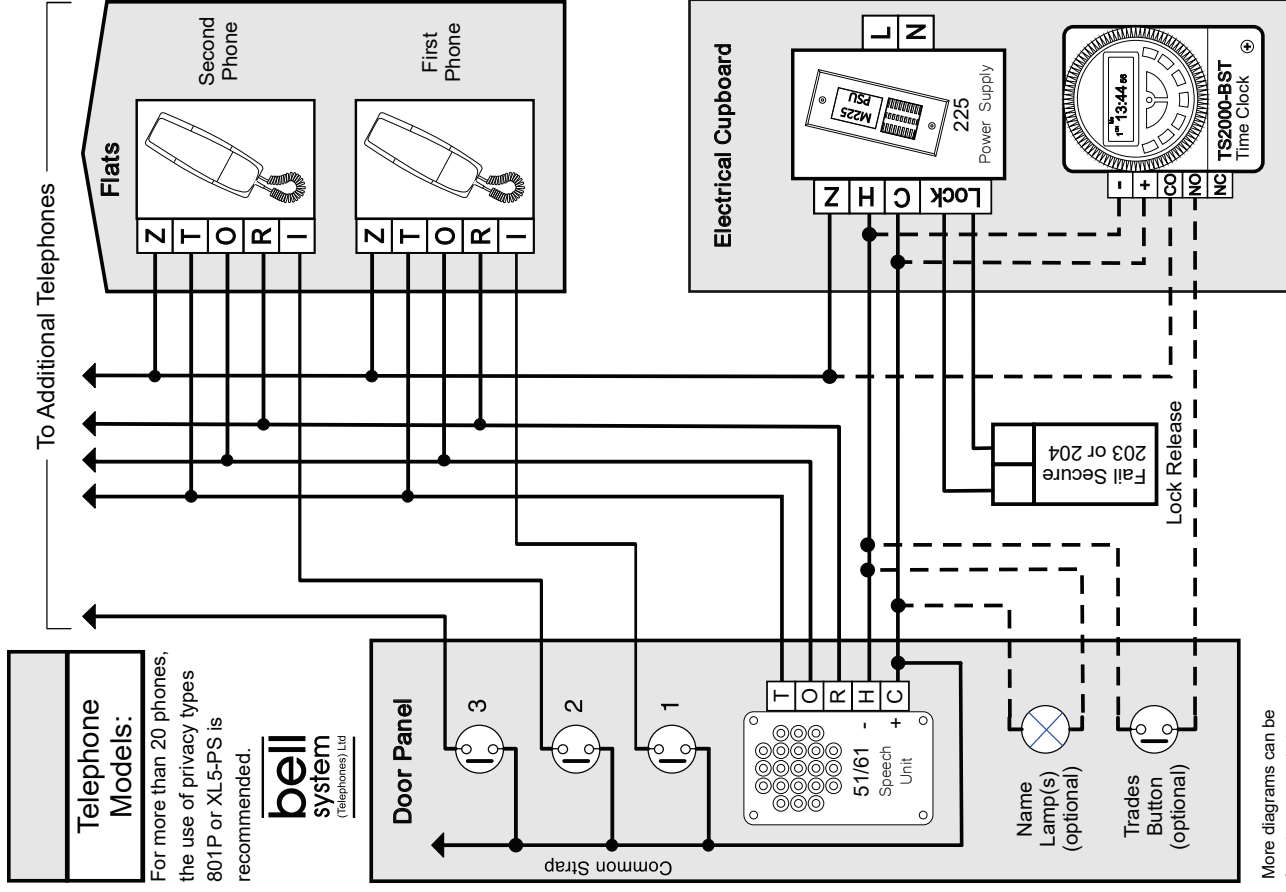


Wiring Diagram for AC Door Entry Systems above 10 Telephones



Model 225 Power Supply Installation and Use

WARNING:

- Connections to the 230 Vac supply must be carried out by a skilled person.
- The power supply is intended for use in a restricted access area
- Disconnect equipment from the mains before opening the enclosure
- This power supply is not suitable for use in locations where children are likely to be present.
- The enclosure should only be opened, or fuses replaced, by a skilled person.

Technical data:

Input: 230 Vac, 50 Hz, 0.125 A (fused by a T125mA, 250 V, 20 mm glass type)
Output: 12 Vac, 2 A (fused by a F2A, 250 V, 20 mm glass type)

It must be placed in a protected indoor environment such as an electrical cupboard, close to a 230 Vac electrical supply. It is intended for connection to telecommunications equipment. It must be wall mounted onto plasterboard, wood or a similar non-conductive material. Fix with metal screws using the dedicated holes and mount up to 2m from the support level or floor level.

Connect to the mains using cable to BS6004 or equivalent, within the following specified limits:

Conductor Diameter:	Min. 1.0 mm (0.8 mm ²)	Max. 2.25 mm (4 mm ²)
Cable Diameter:	Min. 4.0 mm	Max. 8.0 mm

When fitting the cables (both primary and secondary) ensure that the cable entry cut-outs in the enclosure lid are no larger than necessary for the cable diameter used and under no circumstances must they be taken beyond the outer cut-out zones. Avoid getting debris in the equipment, avoid drilling through the fixing holes, mark the fixing points or use a template instead. Only fix the equipment lid with the screws provided.

A two-pole switch, with contact separation of at least 3 mm, must be included to isolate both Live and Neutral during installation and maintenance. The circuit must be protected by a fuse or current limiting device, rated according to the capacity of the cable used, up to a maximum of 10 A.

The symbol of the crossed-out wheeled bin indicated on the equipment or on its packaging indicates that the product at the end of its useful life must be collected separately from other waste.

The separate collection of this equipment at the end of its life is organised and managed by the manufacturer. The user who wishes to dispose of this equipment must therefore contact the manufacturer and follow the system it has adopted to allow separate collection of the equipment at the end of life.

This Power Supply can be traced from the manufactured date (month and year) labelled on the PCB and the serial no. on the product label.

More diagrams can be found on our website:
www.bellsystem.co.uk/

Installation of 900/VRK series door entry systems above 10 way

The Door Entry Telephone is designed to be wall-mounted in a convenient indoor location.

It is recommended that each phone is wired back separately to a central point, before connecting to the entrance, which maybe at each floor level. Note this will require a junction box(s).

The Door panel, containing the speech unit, is available with either a surface or flush-mounting back box. Normally this would be mounted on an outside wall near the front door, and if possible in a sheltered location.

Model 203 Electric Lock Release is designed for use on an inward opening timber frame door fitted with a surface night-latch type lock. This should be installed with a small amount of play on the door as operation will be impaired if too tight.

Tradesman button (optional): This is used in conjunction with a time-clock to allow tradesmen access during restricted hours.

Cable requirements: For optimum speech clarity, it is strongly recommended that this system is installed using twisted-pair cable (e.g. type CW1308 Telephone or unshielded CAT5). Use the same pair for the R & O connections between the speech unit and the telephone, e.g. blue is R, O is blue/white. Wires must have a minimum solid copper core diameter of 0.5mm or equivalent.

Model 225 Power Supply Markings:



Attention: live parts inside



Separate collection obligation in conformity to the WEEE directive / regulation



Indicates the need to read this document including the safety and functionality requirements



CE mark



Class II equipment without functional earth connection



UKCA mark

Installation: Connect all items by following the diagram overleaf. It is strongly recommended that a single telephone be connected at a time and fully tested before proceeding to the next.

Speech adjustment: The speech unit has two controls at the rear for adjustment of speech levels:

Volume A: Speech level out of the Door Panel
Volume B: Speech level out of the Telephone handset

Troubleshooting:

Howl / Whistle (feedback)	Turn both controls to 'off' and then slowly adjust each up in turn until a satisfactory level of speech is attained. Check the 51 or 61 speech unit is flush against the front plate.
No speech / insufficient speech	Initially establish correct operation of the Speech Unit by disconnecting all telephones and re-connecting a single telephone with a short length of cable (I R O T only); Reconnect the telephones one at a time until the fault reappears. Note: speech will be impaired if one or more telephones are left off the hook, unless privacy models are used.
1 Way Speech	Check connection R (speech out of the Door Panel) or T (speech out of the phone) for an open circuit or short to another core. If only 1 phone is affected suspect an open circuit to that particular phone.
No ring	If affecting all phones check the connection is made between C on speech unit and 1 side of all call buttons. If 1 particular phone check for an open circuit on connection I or O to the phone.
No lock operation	Check the connection between the power supply "L lock" terminals and the electric lock. Check between terminal Z on the power supply and Z on an affected phone.