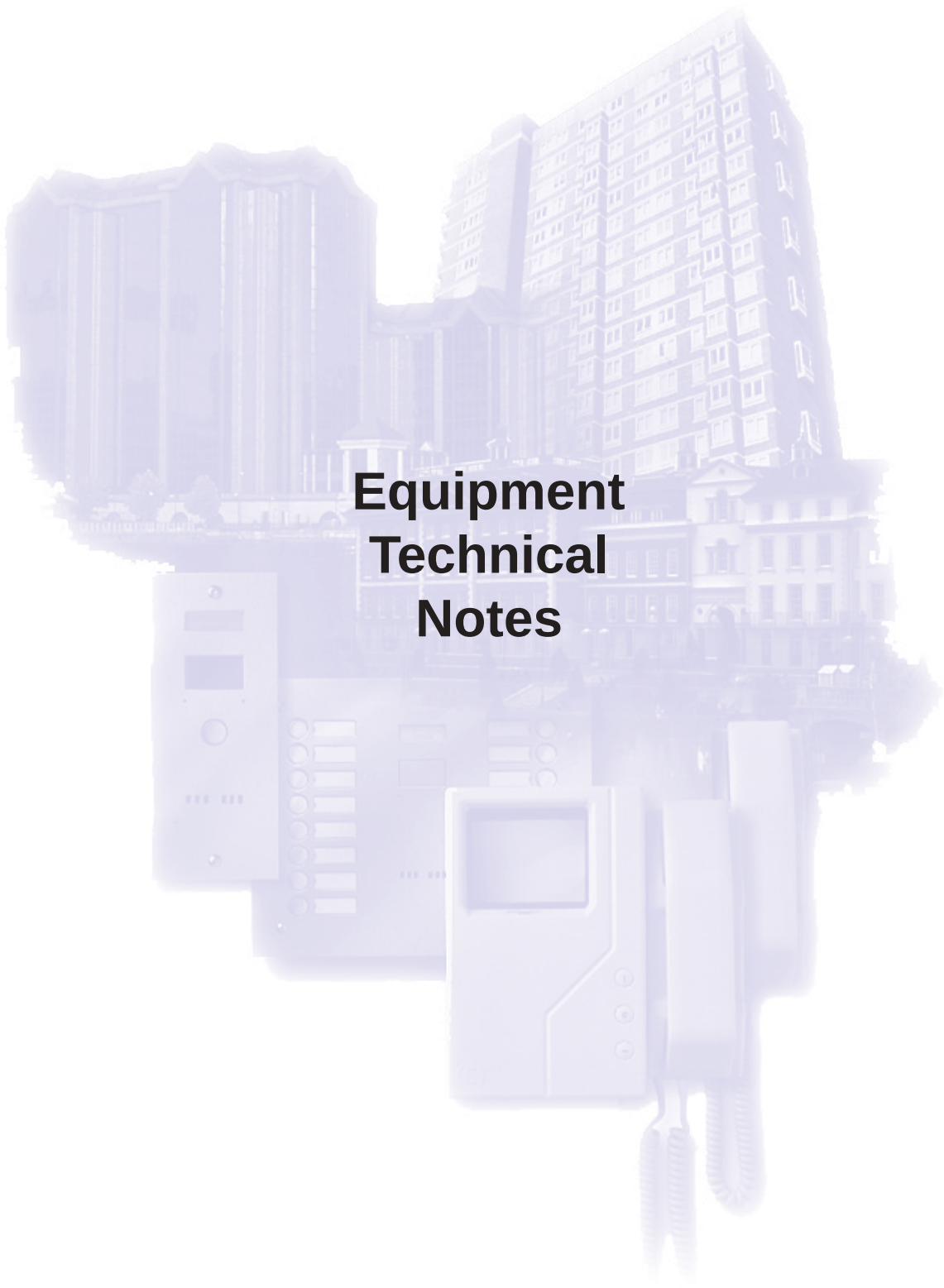
Entryphone®



Equipment Technical Notes

The Company

The Entryphone Company Ltd. was established in 1958. Since the company's inception it has remained as a specialist manufacturer and supplier of door telephone apparatus, avoiding the temptation to diversify. The company has a strong commitment to standardisation and consistency of supply. By keeping all products compatible we avoid problems of premature obsolescence, ensuring customers can be sure that they will get many years of excellent service from all our products.

Entryphone is a Trade Mark

The word ENTRYPHONE is a trade mark registered in Britain No. B1037141. The registration gives protection both visually and orally for the word or words resembling the same. Thus, for example, splitting the word into two, hyphenating or pluralising does not avoid infringement. Entryphone® is **not** a generic term. The terms, door telephone, entrance telephone and door entry system are. We consider that our trademark is a very valuable asset, please help us to protect it.

Training

We believe that good training is essential to the success of any company and we have established, at our factory, a purpose built training centre and showroom. We run both formal and informal training sessions for our own staff, our registered trade customers and for anyone that just wants to see what we do and how we do it.

Technical Support

Detailed technical information is available for all our products. Should any additional technical information be required our technical department is always happy to deal with personal callers or telephone enquiries. Please do not hesitate to contact us.

Our technical department is open
Monday - Friday 9.30am - 4.30pm
0181-870 8635

Guarantees

All apparatus purchased on a supply-only basis is covered by a one-year back-to-base guarantee, dated from the date of delivery. The sales invoice or delivery note should be kept as proof of purchase.

If any item of equipment has been installed and does not appear to be functioning please do not return it without first contacting our technical department. Whenever possible the installer should call from the site where the equipment has been installed.

Returned Goods

Any apparatus returned in perfect condition will be credited in full. Damaged or installed equipment cannot be accepted.

Pricing Advice

If at any time you wish to know the approximate price of an Entryphone® system, including installation costs, please ring us and ask for an installation **guide price.**

Trade Counter

Personal callers are welcome at our trade counter. If you want to buy equipment please telephone through your order, to ensure all items are in stock, and so that it can be prepared in advance; this will avoid delays when you call.

The trade counter is open
Monday - Friday 9.30am - 4.30pm

Despatch

Goods are despatched by Parceline or ordinary post at whichever is the lower cost unless otherwise requested. Postal charges are charged at cost price.

Payment

Pro-forma for all non account customers, goods despatched on receipt of payment. Account terms available on satisfactory references (bank and two trade). Please ask for an application form. Visa or Mastercard also accepted.

Parceline *NEXT DAY* Royal Mail VISA MasterCard

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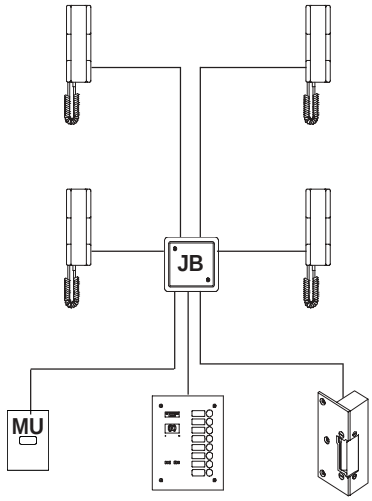
4 Schematics

Plan 1 (Door)



The most common form of system. Plan 1 provides communication between an entrance and any number of occupants, plus the convenience of remote control door opening. Apparatus Required:

1. **Entrance Panel** with appropriate number of bell pushes
2. Appropriate number of **Telephones**
3. **Electric Release**
4. **Power Supply**
5. **Cable** requirements
   To entrance panel 5 + 1 per telephone.
   To telephones 4 + 1 per main phone on that cable

Audio

The basic concept of an Entryphone® system is to provide a communication system between an entrance and an occupier, providing the convenience and security of controlled entry.

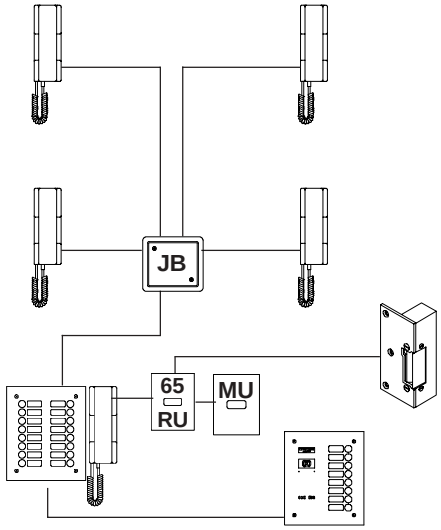
We have devised a number of plan types. These cover configurations of apparatus to suit applications that would be appropriate to Entryphone® equipment.

Below, to help specify the correct equipment for a particular application, we describe each plan type together with a schematic diagram and a list of apparatus that would be required to enable such a system to be installed.

The schematic shows a typical wiring layout for each plan type based on a 4 telephone system in each case. These schematics are for guidance only and actual system layouts will be influenced by site conditions.

Should you require any technical or costing information please do not hesitate to contact our sales or technical departments.

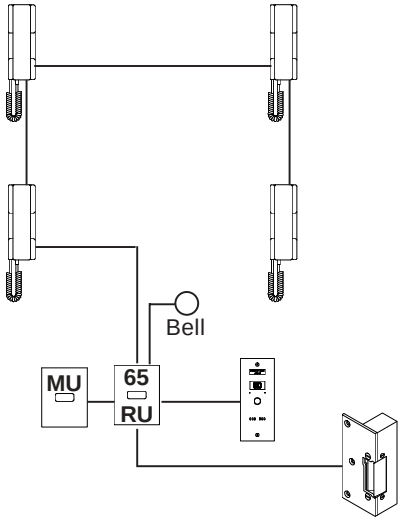
Plan 2 (Door & Porter)



Giving all the facilities described for Plan 1 but with the added feature of both party calling and intercommunication with a porter or caretaker.
Apparatus Required:

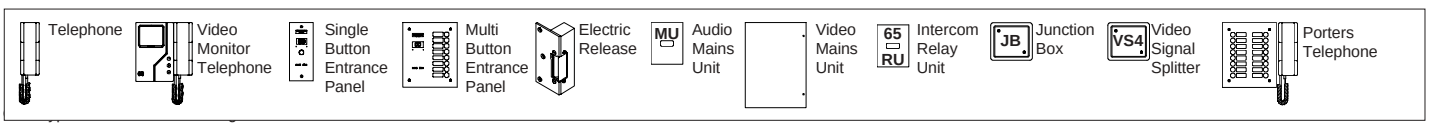
1. **Entrance Panel** with appropriate number of bell pushes including one to call the porter
2. Appropriate number of two-button **Telephones**
3. **Electric Release**
4. **Power Supply**
5. Intercom switching **Relay Unit**
6. **Porter's Telephone** with appropriate number of bell pushes
7. **Cable** requirements
   To entrance panel 6 + 1 per telephone.
   To telephones 6 + 1 per main phone on that cable

Plan 3 (Door & Intercom)

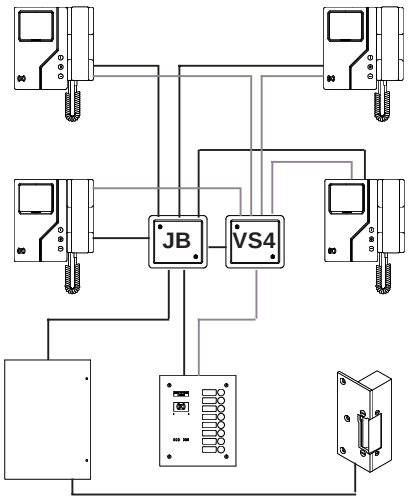


An application for Entryphone® usually found in private houses. As well as providing the door-answering and releasing facility, full calling and intercommunication between up to 9 telephones is provided.
Apparatus Required:

1. **Entrance Panel** with appropriate number of bell pushes (usually one)
2. Appropriate number of multi-button **Telephones**
3. **Electric Release**
4. **Power Supply**
5. Intercom switching **Relay Unit**
6. **Cable** requirements
   To entrance panel 6 + 1 per telephone.
   To telephones 5 + 1 per telephone



Video Plan 1 (Door)



Provides audio and video communication between an entrance and any number of occupants, plus the convenience of remote control door opening. Apparatus Required:

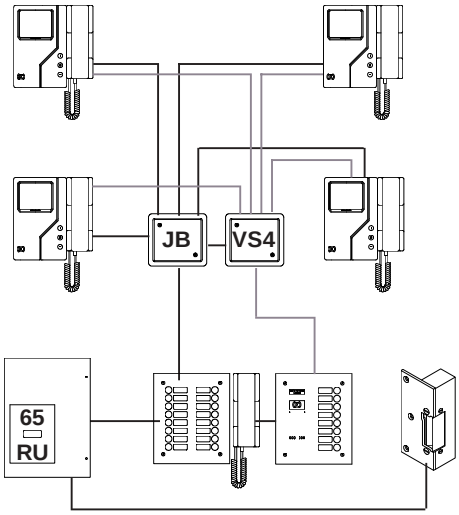
1. **Entrance Panel plus Video Conversion** with appropriate number of bell pushes.
2. Appropriate number of **Video Monitor Telephones**
3. **Electric Release**
4. **Video Power Supply**
5. **Video Signal Splitter** 1 per 4 monitors
6. **Cable** requirements
   To entrance panel 7 + 1 per telephone plus co-ax
   To telephones 7 + 1 per telephone plus co-ax

Video

Video systems work in the same way as audio systems but have the added facility of video. We have effectively added cctv circuitry to work alongside the audio circuits.

Video systems are slightly more difficult to plan as it is essential to distrubute the video signal evenly to all parts of the system. This is done via a video signal amplifier distributor, each distributor will split the signal to four points. Ideally the video cables should be wired in individual runs from the splitter to each monitor as shown on these schematics.

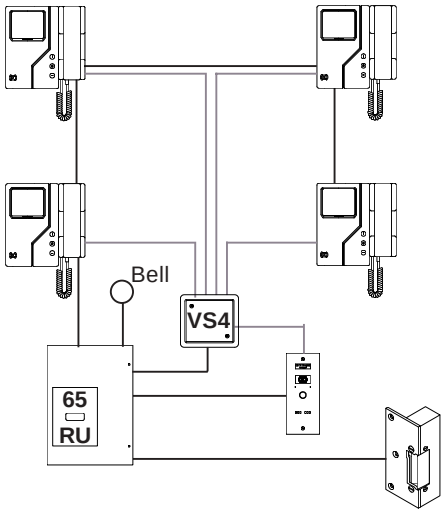
Plan 2 (Door & Porter)



Giving all the facilities described for Plan 1 but with the added feature of both party calling and intercommunication with a porter or caretaker. The diagram above shows system without video for the porter. Apparatus required:

1. **Entrance Panel plus Video Conversion** with appropriate number of bell pushes including one to call the porter
2. Appropriate number of two-button **Video Monitor Telephones**
3. **Electric Release**
4. **Video Power Supply**
5. Intercom switching **Relay Unit**
6. **Porter's Telephone** with appropriate number of bell pushes
7. **Video Signal Splitter** 1 per 4 monitors
8. **Cable** requirements
   To entrance panel 8 + 1 per telephone plus co-ax
   To telephones 9 + 1 per telephone plus co-ax

Plan 3 (Door & Intercom)



An application for Entryphone® usually found in private houses. As well as providing the door-answering and releasing facility, full calling and intercommunication between up to 9 telephones is provided.
Apparatus Required:

1. **Entrance Panel plus Video Conversion** with appropriate number of bell pushes (usually one)
2. Appropriate number of multi-button **Telephones**
3. **Electric Release**
4. **Power Supply**
5. Intercom switching **Relay Unit**
6. **Cable** requirements
   To entrance panel 8 + 1 per telephone plus co-ax
   To telephones 8 + 1 per telephone plus co-ax

Entrance Panels

9200/1

- Video compatible
- Flush metal capped button
- Choice of finishes
- Tamper proof fixings
- 5900 interchangeable

The Entryphone 9200/1 single button panel presents a very compact unit for where only a single ringing line is needed; available ex-stock in stainless steel and polished brass*. All units are supplied with weather-resistant speech module, a flush metal button and tamper-proof hex-key fixings. The 9200/1 differs slightly to the rest of the 9200 range firstly it does not have a name insert although if labelling is required, the logo insert can be changed but only from inside the unit; secondly the unit is supplied either with a surface frame **or** with a back box for flush fitting.

Units can be ordered either as audio or video versions or if required be updated to video at a later date.

Dimensions (mm)

	Height	Width	Depth
9200/1	216	89	
Surface Frame			
Audio	216	89	38
Video	216	89	50
Back Box			
Audio	203	76	32
Video	203	76	50

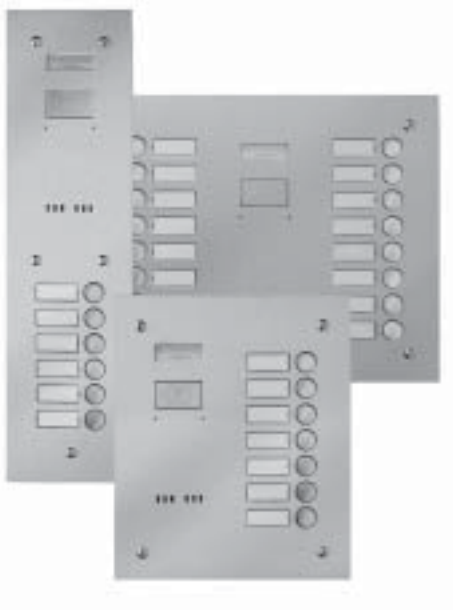
9200 Multi-button

The Entryphone 9200 multi-button entrance panels are available ex-stock in sizes from a two button up to a thirty button unit. All units incorporate weather-resistant speech module, flush metal buttons, flush name inserts and tamper-proof hex-key fixings. Available in stainless steel or textured bronze as standard finishes, or un-laquered polished brass to special order

Units can be ordered either as audio or video versions or if required be updated to video at a later date.

Where older systems fitted with the 5900 range need updating all 9200 door panels are compatible and can be exchanged size for size*.

** 5900 used BA fixings 9200 uses metric fixings*



Dimensions (mm)

	Plate		Back Box		
Type	**H**	**W**	**H**	**W**	**D**
9200/A2	355	115	317	77	38
9200/A3	355	115	317	77	38
9200/A4	406	115	368	77	38
9200/A5	406	115	368	77	38
9200/A6	406	115	368	77	38
9200/A9	483	115	445	77	38
9200/A12	540	115	502	77	38
9200/A15	606	115	568	77	38
9200/B2	241	203	203	165	38
9200/B3	241	203	203	165	38
9200/B4	241	203	203	165	38
9200/B5	241	203	203	165	38
9200/B6	241	203	203	165	38
9200/B7	241	203	203	165	38
9200/B8	241	203	203	165	38
9200/C10	241	292	203	254	38
9200/C12	241	292	203	254	38
9200/C14	241	292	203	254	38
9200/C16	241	292	203	254	38
9200/C18	264	292	226	254	38
9200/C20	330	292	292	254	38
9200/C22	330	292	292	254	38
9200/C24	330	292	292	254	38
9200/C27	330	292	292	254	38
9200/C30	352	292	314	254	38

CCK
Video Conversion Kit

All 9200 and VR panels can be ordered as video versions or updated to video when required. The 92CCK module, incorporating miniature high resolution solid state CCD camera, is designed to be fitted behind the speech module; updating to video could not be simpler.

Polished Brass

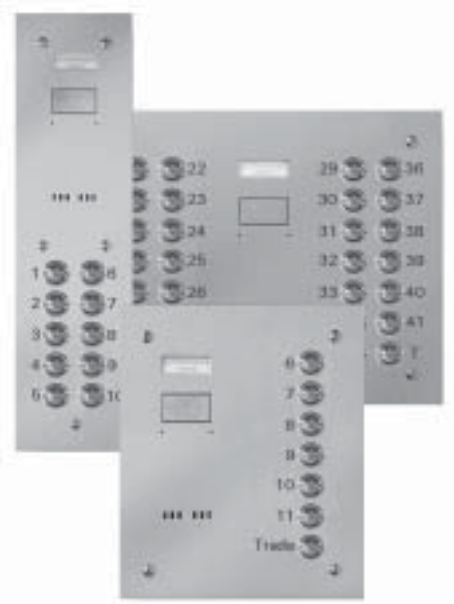
All Entryphone entrance panels are available to **special order** in mirror finish polished brass. These panels are supplied un-laquered and therefore it is necessary to protect and maintain their finish with the regular use of brass polish.

VR Range

- Video compatible
- Solid stainless steel buttons
- Stainless steel
- Tamper proof fixings

The Entryphone VR panels are made to special order for where it is considered that the units are particularly prone to undesirable attention. Although similar in shape to the standard panels instead of interchangeable name inserts numerals are engraved into the panel alongside each button; the buttons themselves are shrouded and extremely robust. All units are supplied with weather-resistant speech module, and tamper-proof hex-key fixings.

Units can be ordered either as audio or video versions or if required be updated to video at a later date.



Dimensions (mm)

	Plate		Back Box		
Type	**H**	**W**	**H**	**W**	**D**
VRS/A2	355	115	317	77	38
VRS/A3	355	115	317	77	38
VRS/A4	406	115	368	77	38
VRS/A5	406	115	368	77	38
VRS/A6	406	115	368	77	38
VRD/A4	355	115	317	77	38
VRD/A6	355	115	317	77	38
VRD/A8	406	115	368	77	38
VRD/A10	406	115	368	77	38
VRD/A12	406	115	368	77	38
VRS/B2	241	203	203	165	38
VRS/B3	241	203	203	165	38
VRS/B4	241	203	203	165	38
VRS/B5	241	203	203	165	38
VRS/B6	241	203	203	165	38
VRS/B7	241	203	203	165	38
VRD/B4	241	203	203	165	38
VRD/B6	241	203	203	165	38
VRD/B8	241	203	203	165	38
VRD/B10	241	203	203	165	38
VRD/B12	241	203	203	165	38
VRD/B14	241	203	203	165	38
VRS/C10	241	292	203	254	38
VRS/C12	241	292	203	254	38
VRS/C14	241	292	203	254	38
VRS/C16	330	292	292	254	38
VRS/C18	330	292	292	254	38
VRS/C20	330	292	292	254	38
VRD/C20	241	292	203	254	38
VRD/C24	241	292	203	254	38
VRD/C28	241	292	203	254	38
VRD/C32	330	292	292	254	38
VRD/C36	330	292	292	254	38
VRD/C40	330	292	292	254	38

Back boxes

All multi-button panels are supplied complete with 22swg zintec back box for flush fitting. These allow the plate to overlap by 19mm all round to cover the inaccuracies when cutting into the wall.

Surface frames

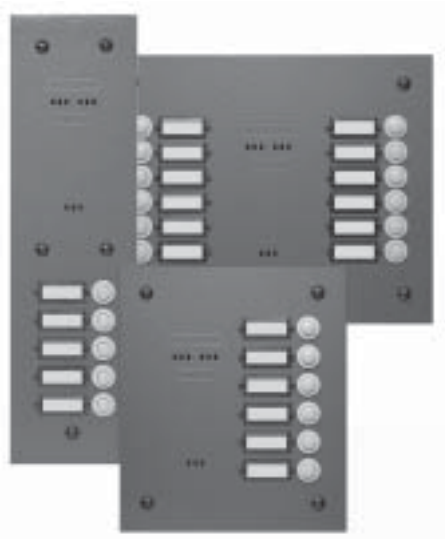
Where it is impracticable to flush a door panel into a wall, surface frames are available. There are two types either solid oak frames supplied unfinished or, for stainless steel panels, a stainless steel hood-style frame.

Porter's Telephones

For porter systems (plan 2) with up to nine flats a multi-button telephone should be used for the porter's telephone. Larger systems require porter's panels which are effectively entrance panels with a telephone in place of the loudspeaking module. These units can be mounted, flush or surface, on a wall or into a fixed desk.
Caller line indication can be provided upon request.

5900 Range

The Entryphone 5900 range with its familiar hammer bronze finish was the standard range of entrance panels available from 1960 through to 1992. In accordance with our policy of continued supply all the standard sizes up to the 30 button plate are available, as well as all spare parts.



5900/1

The 5900/1 panel retains a unique position and style in the 5900 range of door panels. Rather than a flat plate this unit takes the form of a robust but neat alloy casting finished in stove enamel hammer bronze with louvres covering the speaker and microphone holes.

8802

The 8802 is the Entryphone standard telephone suitable to work with plan types 1 and 2. It is a small unobtrusive wall mounted unit made in ABS plastic and is available in light ivory only. It contains an integral AC buzzer, two buttons (e.g. release & porter call), a sealed micro-gravity-switch, circuit connectors and receiver and transmitter components.
It is also available with multiple buttons for intercom calling with 6 (8806), and 10 (8810) buttons.

Dimensions (mm)

	Height	Width	Depth
8802	200	70	57

5901

The 5901 was the standard Entryphone telephone from 1958 to 1988. This popular classic is still available as well as all spare parts. It is also available with multiple buttons for intercom calling with 2 (5902), 5 (5905), and 10 (5910) buttons.

Dimensions (mm)

	Height	Width	Depth
5901	240	89	89

900-VMT

Suitable for installation with all Entryphone plan types the Entryphone video monitor telephone is a compact high resolution monitor featuring a very clear 4" CRT black and white screen with quick start-up; a caller can be viewed within one second of the unit being turned on. Flat screen technology enables the unit to be very slim at under 50mm (2") deep.

Operation of the monitor is simple; three buttons provide on, off and release switching. Internal ringing detection allows the option for the unit to switch on automatically when called (plan 1 only).
The monitor is also available without the telephone (900-VM).

Dimensions (mm)

	Height	Width	Depth
900-VMT	216	210	50
900-VM	216	137	50

Accessories

Desk Conversion Kits

On occasions freestanding telephones are required. Desk conversion kits are available for the 5901 and 8802 audio telephones and for the 900-VMT video monitor telephone. The kits provide a 3 metre flexible lead and junction box together with the rubber feet or mounting board (video) so that a standard wall mounting telephone can be converted.
We suggest that free standing telephones are discouraged as they are more likely to be damaged.

Desk conversion kits are not available for multi-button telephones.

Types

DK-8802	Desk conversion kit for 8802 telephone
DK-5902	Desk conversion kit for 5901/2 telephone
DK-VMT	Desk conversion kit for Video telephone

88-59 Cover Plate

The 88 series telephones are smaller than the 59 series telephones. Where the 88 phone is to replace the 59 phone the 88-59 cover plate will cover the area hiding any unsightly un-decorated wall.

Additional bell/buzzer

Generally the integral buzzer in the telephone is adequate for most applications where there is no more than one door between the phone and the occupant. If an additional bell or buzzer is required any device suitable to work on a 12 volt AC supply can be connected in parallel or instead of the integral buzzer.

Note 1 The current limitations on a ringing circuit is about 2 amps. This will generally limit the number of phones that can ring simultaneously to 4 integral buzzers or two extension type bells or buzzers.

Note 2 Phones, bells or buzzers should not be mounted on party walls as often the device will be heard equally as loudly on both sides of the wall.

Suitable Devices

The items listed below are available from us or generally available from electrical wholesalers.

3" Bell	Friedland 792
Mini-Buzzer	Friedland 182

Switches

In certain circumstances switches may be required either to switch the ringing off or to transfer the ringing to another phone. Miniature toggle switches can be fitted to the cover of the telephones to interrupt or change-over the ringing line.

Types

88CHOS	Changeover switch for 8802
59COS	Cut-out switch for 5901
59CHOS	Changeover switch for 5901

900-VS4 Video Signal Distributor

For systems which have more than one monitor fitted it is necessary for the video signal to be balanced at each point in the system to maintain a clear picture at every monitor. The 900-VS4 is a junction box containing a connection circuit that enables 75Ω coaxial cable to be distributed to each monitor correctly.

Dimensions (mm)

	Height	Width	Depth
900-VS4	140	160	50

Power Supplies

DA2H

The DA2H is the Entryphone standard mains rectifier unit providing operating voltages for all speech systems. It transforms 230 volts AC to a smooth adjustable DC supply for the speech circuits and a separate winding provides AC to power the ringing, panel illumination and electric release circuits.

Dimensions (mm)

	Height	Width	Depth
DA2H	150	127	100

Technical Specification

Input	**230v AC fused 1Amp**
D.C. Output	4,6,**10**,13,17or 20 **Volts fused at 800ma**.
A.C. Output	8 **or 12 Volts fused at 2 amps**

900-PSU

The 900-PSU is a combined power supply and relay board to provide voltages, switching and timer circuitry for all Entryphone video systems. Two transformers and the main relay board are housed in a hinged lid white stove enamelled steel box.

Dimensions (mm)

	Height	Width	Depth
900-PSU	305	230	80

Technical Specification

	Voltage	Fuse
Input	230v AC	1 amp
Ringing & Release	AC 8/12v	1.25" 2 amp
Speech	DC 6v-22v	20mm 800ma
To camera	DC 12v	1.25" 2 amp
To Monitors	DC 20v	1.25" 2 amp

The power supply has current limit circuitry to prevent more than 3 monitors operating at once.

Relay Units

65RU Intercom Relay

Housed in the same case type as the DA2H, this unit provides the switching required in porter or intercom systems. It senses the voltage of an internal ringing current and cuts off the speech circuits to the door unit, so that an internal conversation cannot be overheard at the door.
Used for Entryphone Plans 2 & 3.

95RU Two Door Relay

The 95RU relay is for use where it is required for two doors to be answered by the same telephone(s). E.g. where a building has a front and a rear entrance. The 95RU operates by detecting the ringing from either door and then switches the speech and release lines to that door and disconnects them from the other door.

The video version of this relay, the **95VRU**, works in the same way but also switches the video as well.

Dimensions

Both the 65RU and the 95RU are housed in the same case as the DA2H. If installing with a video system the PCB can be fiited into the 900-PSU unit.

LCRU General Purpose Relay

The LCRU relay is a general purpose interface relay that can be wired in circuit on any switch line. Commonly used for switching third party locking or ringing devices.

Dimensions (mm)

	Height	Width	Depth
LCRU	57	20	28

TS24 Time-switch

For provision of a tradesmens facility using an additional button on the entrance panel, this timeswitch can be set for 10 minute intervals as required and is simple to adjust. It has separate clock motor and switch terminals suitable for low voltage switching and has 72 hour clock motor battery reserve.

Dimensions (mm)

	Height	Width	Depth
TS24	45	45	22

Cable

CW1308

All systems should be installed using telephone cable type CW1308 or similar. This is multi-core solid conductor (1/0.5mm) cable, available with various numbers of conductors. The size of the cables is specified in pairs as each conductor is lightly twisted with another. This cable uses an identification system where the base colour of one core (core A) is the band colour of its matching core (core B). On older installations, the cable does not have any band identification. Although the pairs are lightly twisted, and should have been more tightly twisted by the original installer, care must be taken not to get the pairs confused when carrying out work on older systems.

CW1308 has a Terylene stripping thread inside that is designed to cut through the outer sheath when pulled.

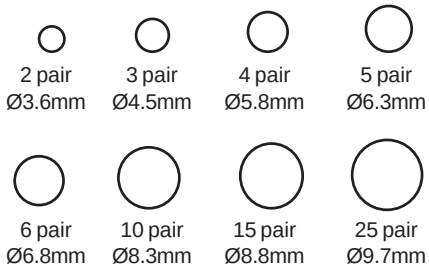
Please note it is good practice when installing telephone cable to:

1. Leave plenty of cable at termination points so the installer or maintenance engineer has enough cable to work with.

2. Allow spare conductors to run throughout the system, connected through at junction boxes, for possible future use.

The colours of the pairs on cable type CW1308 are:

Pair No.	Core A	Core B
	Base colour/ ring colour	Base colour/ ring colour
1.	White/Blue	Blue/White
2.	White/Orange	Orange/White
3.	White/Green	Green/White
4.	White/Brown	Brown/White
5.	White/Grey	Grey/White
6.	Red/Blue	Blue/Red
7.	Red/Orange	Orange/Red
8.	Red/Green	Green/Red
9.	Red/Brown	Brown/Red
10.	Red/Grey	Grey/Red
11.	Black/Blue	Blue/Black
12.	Black/Orange	Orange/Black
13.	Black/Green	Green/Black
14.	Black/Brown	Brown/Black
15.	Black/Grey	Grey/Black
16.	Yellow/Blue	Blue/Yellow
17.	Yellow/Orange	Orange/Yellow
18.	Yellow/Green	Green/Yellow
19.	Yellow/Brown	Brown/Yellow
20.	Yellow/Grey	Grey/Yellow
21.	Violet/Blue	Blue/Violet
22.	Violet/Orange	Orange/Violet
23.	Violet/Green	Green/Violet
24.	Violet/Brown	Brown/Violet
25.	Violet/Grey	Grey/Violet



Approximate diameters of various sizes of telephone cable.

Polythene Cable

Polythene cable is specified for exterior use. Contains 0.6mm solid conductors within a heavy gauge black polythene outer sheath.

Available in

		Approx. Diameter(mm)
CAB-P5PR	5 Pair	15
CAB-P8PR	8 Pair	20

Junction Boxes

With terminals

JB16 A small white junction box with 16 screw terminals suitable to split a 3 or 4 pair cable for, for example, a parallel telephone.

JB20 A medium size junction box with 20 dual screw terminals and a clip on lid. Suitable as a main or sub junction box serving up to 16 telephones.

Dimensions (mm)

	Height	Width	Depth
JB16	75	35	20
JB20	140	80	27

Without terminals

"Fan twist" is a very common and effective method of connecting through solid conductor multi-core telephone cables; the conductors are simply twisted together and protected with a suitable diameter sleeving.

JB-FT A medium size grey plastic junction box with a plastic hinge lid. Suitable as a main or sub junction box where aesthetics are not important.

JB-BTS A small white junction box with a screw on lid of a type used by BT as a single line termination. Suitable to split a 3 or 4 pair cable e.g., for a parallel telephone.

JB-BTL A medium grey/white junction box with a screw on lid identical to the 900-VS4 video splitter. Suitable as a main or sub junction box.

Dimensions (mm)

	Height	Width	Depth
JB-FT	153	115	37
JB-BTS	65	65	30
JB-BTL	140	155	45

Door Loops

DL-W(B) A pair of small junction boxes and a flexible 4 core loop suitable for fitting between the door and the frame where a release is fitted to double doors.
Available in white(DL-W) or brown(DL-B)

IF YOU NEED TECHNICAL HELP CALL 0181 870 8635

Electric Release

DL-141

Entryphone® releases have the same basic form of operation but vary in their physical dimensions and method of fixing.

Operation

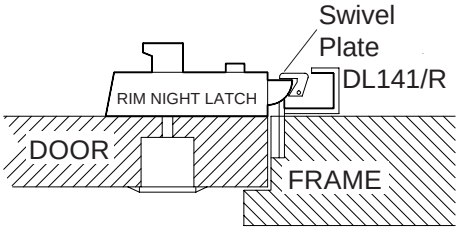
A tempered steel swivel plate replaces the keep or box staple of a standard night latch (Yale, Union etc.) and in its static condition acts as a normal keep. When a current is applied to its solenoid, a system of linkages removes a stay pin from this swivel plate, and allows the door to be pushed open, and the tongue of the latch lock to ride past the swivel plate. As soon as the lock has passed the swivel plate, the spring resets it to its normal condition and the system is re-locked. While the current is applied to the solenoid, the linkage provides a small amount of buzzing and this gives an indication to the visitor that the door is ready to be opened.

An electric release does not interfere with the normal operation of a mechanical lock in any way, thus the door can be opened by the lever or knob on the inside and by usual key on the outside.

To allow a latch lock to work, the door must be single action (inward or outward) and in the case of double doors one leaf must be fixed firmly, using good quality bolts at both the top and bottom of the fixed door. The fixing of locks, bolts, door closers etc. should be entrusted to a competent locksmith or carpenter.

NB. Electric release will only operate with night latch type locks.

Operating voltage 8v-12v A.C. Current 1/2 amp.



Fitting arrangement for rim night latch & rim electric release to a single inward opening door.

Security and Electric Releases

The addition of an electric door opener to a conventional night latch does, to a minor extent, reduce the security of the lock, as by the very principle of operation of electric openers, the distance which the main tongue is allowed to shoot into the keep is restricted. However, this is not usually the main point of concern. The primary point is that electric openers will only work with night latch type locks and the security of these devices is never as efficient as mortice dead locks.

In many cases the very existence of an electric release is blamed for a lack of security, when in fact the door or frame may be in such poor condition that even a more sophisticated lock would make the door no more secure. It is important that any door and frame should be constructed of good quality materials, fit well and be properly maintained. If this is the case an electric release, together with a night latch, provides an adequate level of security for most applications.

Generally we view security in the following manner.

If the building is occupied, and people are moving around the premises, then it is fine for the street door to be locked with a latch. If the building is to be left empty at any time, it is wise that separate dead locks are fitted and they should be set whenever the building is empty.

The **Fire Regulations** dictate that any lock fitted to a common entrance door must provide a manual means of opening (not with a key) at a normal height to effect escape in the case of a fire. **Dead locks should not be used.** It is advisable, therefore, as security is restricted on a common entrance door that security arrangements should be concentrated on the individual flat doors (e.g. fit dead locks etc.). A common entrance should not be relied upon to provide complete security.

Security versus Convenience

The convenience of an electric release has certain security implications. If an occupant is not careful, he or she can admit a caller without even knowing who it is. It is essential that everyone in a building is aware that they should only admit a caller when they are certain that the caller is genuine. If it is likely that a system is going to be **misused** in this way, we recommend that **no electric release should be fitted** and the lock used in the normal way. The dilemma that exists is whether the convenience of an electric release compromises the security desired.

It is always wise to bear in mind this aspect of security/convenience if you are considering investing in a sophisticated high security device. It will not, no matter how good, overcome the problem described above.

Automatic Dead Locking Night Latch

There are on the market several different types of what is known as an Automatic Dead Locking Night Latch. The various lock companies have tried to bridge the gap between the security of a dead lock, the simplicity and convenience of a night latch, and (on some types) the requirements of Fire Regulations. These locks have become very popular. However, in the majority of cases these locks are **not compatible** with electric releases. Even if it is possible to get one to work with an electric release the dead-locking facility is usually rendered unusable.

There are two locks on the market, the **Chubb 3R35X** and **Ingersoll SC73**, which have the automatic dead-locking facility and are suitable to work with some of the releases listed. Both of these locks are available in versions designed to comply with the **Fire Regulations** and cannot be fully dead locked by a second turn of the key. They also give an advantage over conventional night latches, that in their closed position their tongues are dead locked, thus preventing someone from pushing back the tongue with a knife or piece of celluloid.

Other Types of Electric Lock Devices

There are available on the market very many different types of electric lock devices. Often these are very expensive and designed for high security applications, it is rare that these would be directly compatible with an Entryphone® system. If one of these devices is to be used in conjunction with an Entryphone® system, it should be fitted with its own independent power supply and it should be operated via our relay (LC relay) which would be fitted in our circuitry in place of our electric release. Our technical department is always happy to advise as to the problems or suitability of any particular device.

Releases and Outward Opening Doors

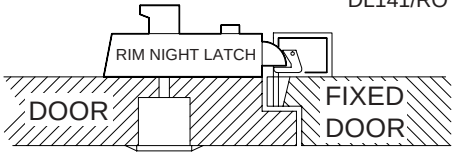
On unrebated outward opening doors certain problems arise:-

1. A screwdriver or a piece of celluloid can be put in the gap between the door and the frame (or between double doors), and the bolt of the lock pushed back.

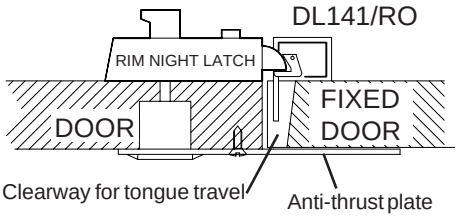
2. In the case of double doors, the doors can be pushed through the centre line so that the bolt of the latch locks on the far side of the door itself.

3. Where an electric release is fitted, it is necessary to clear away the material in front of the swivel plate, so that the tongue of the lock may travel freely after having been electrically released. This further increases the gap and makes it even easier to insert a screwdriver, or the like, and thus effect entry.

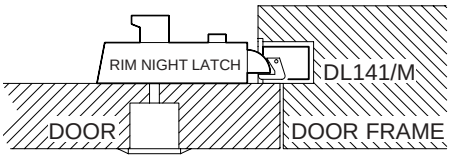
DL141/RO



Fitting arrangement for rim night latch & rim outward opening release to a double outward opening fully rebated door.



Fitting arrangement for rim night latch & rim outward opening release to a double outward opening unrebated door with anti-thrust plate fitted.



Fitting arrangement for rim night latch & mortice release to a single outward opening door.

It is best to have a fully rebated door so that the face of the bolt is concealed behind the rebate. The rebate should be deep enough to cover the exit hole necessary for the swivel plate, and the consequent travel out of the bolt. However, if this is not practical the next best thing would be to have a full height cover fillet, fixed on the moving door, overlapping and concealing the gap between the doors. Lastly, it is possible to have a short section of cover fillet, sometimes called by locksmiths an **"anti-thrust plate"**. This would be 6" or 9" in length and fitted onto the moving door, covering the gap between the door and the clearway necessary for the electric opener.

Heavy Doors

When a door slams it can deliver very high shock loads to the door frame, and as the door bounces it subjects the plate of the electric release to unreasonable loads. This recoil effect will cause the failure of an electric opener very prematurely. It is essential that heavy doors (especially metal gates) are fitted with efficient methods of damping. Conventional overhead door or floor closing springs generally are reasonably efficient damping devices if correctly set. If they are insufficient to give adequate damping, we would strongly recommend that some other form of shock absorber be introduced.

Door Closers

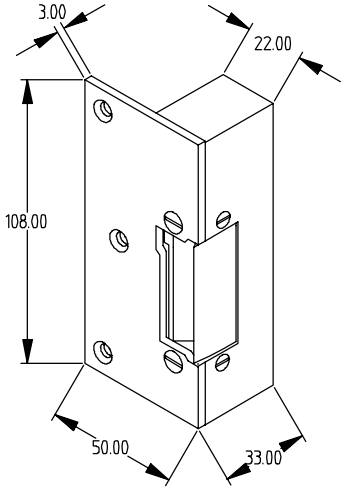
It is not always necessary to fit a door closer, especially if the caller can be relied upon to close the door after entry. However, in some cases it may be felt that a closer is an advantage. We would like to stress that, unless a closer is properly adjusted and maintained, it is possible that it will actually prevent the door from closing. Even changes in the weather can have an effect on their action. Please consult a competent locksmith to advise on which device is most suitable for your application.

Metal Doors and Gates

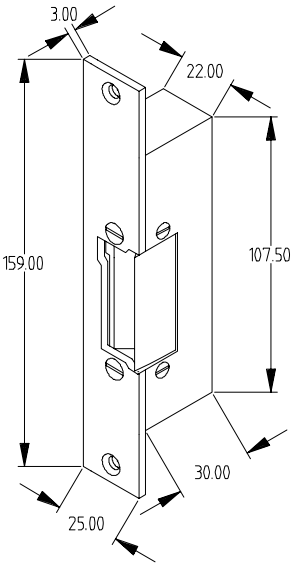
It is sometimes required to fit electric releases to metal doors or gates but this often presents particular problems. It is essential in these cases to have this work done by a specialist locksmith who is experienced in fitting locks and releases to metal doors. Please also note the section above on “Heavy Doors”.

If possible both the lock and release should be fitted to metal doors or gates at manufacture.

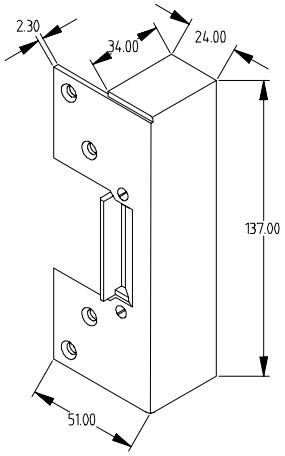
When fitting locks and releases to metal gates, e.g. wrought iron gates, it is often possible to reach through and turn the knob, thus defeating the object of the lock. Therefore in these cases some sort of meshing has to be provided. This may not, however, be aesthetically acceptable.



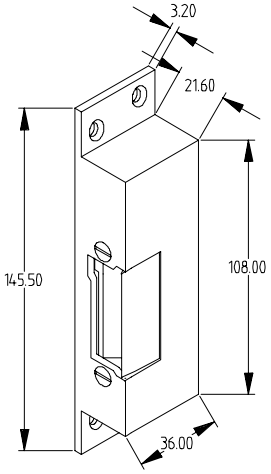
DL141/R Standard electric release: works with most types of rim night latches.
Finish: GREY or POLISHED BRASS



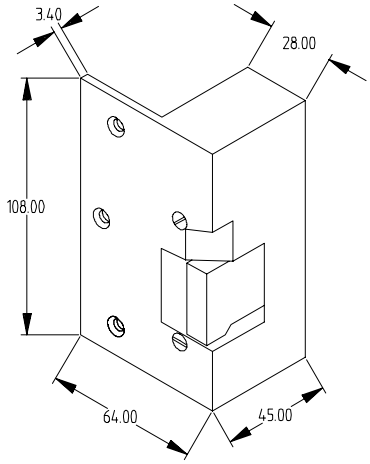
DL141/M Standard electric release: works with most types of ordinary mortice night latches.
Finish: GREY or POLISHED BRASS



DL141/RO Standard electric release: mounted in special box for use on outward opening double doors.
Finish: GREY



DL141/FF Electric release to work with rim night latches where side fixings are impractical. Supplied with spacers for adjustment.
Finish: CHROME or POLISHED BRASS



DL/ING/BRS or CHR Electric release specifically designed to work with Ingersoll SC71 & SC73 automatic dead-locking night latches.
Finish: POLISHED BRASS or CHROME

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