

CDP-801 WIRELESS DOORPHONE

INSTRUCTION MANUAL



ZA-654 Four Button Gatestation

Overview:

Thank you for purchasing this Digital Wireless Doorphone System. Your system has been manufactured and checked under the strictest possible quality control to ensure that each system leaves the factory in perfect condition. In the unlikely event you find any defect or experience any problem, please contact our service center or dealer, do not attempt to repair by yourself.

Please read this manual carefully to obtain optimum performance and extended service life from the system.

The Zartek Digital Wireless Intercom is fully approved by ICASA. Applications for this system include houses, offices, small complexes, security access points. This system is well suited for self installation. The gatestation is 4 button which can be linked to as many handsets as needed per button. Handsets are sold separately. Communication is simplex so only one person can speak at a time.

A visitor presses the button and the handset rings. The resident accepts the call and then the channel is open. The gatestation's microphone is always active so the visitor does not have to press to speak. The resident can enter into the conversation at any time by pressing a PTT button on the handset.

Gate opening and closing is triggered from the handset for a motorized gate or striker lock.

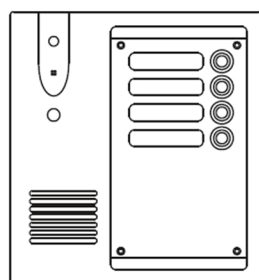
Range is terrain dependant and is 50-70m in built-up areas and more in open areas.

For more information please check our website www.zartek.co.za

FEATURES

- Hands-free Use for Visitor & PTT for Resident
- Gate Triggering (relay included)
- Powered by 12V DC from power supply / gate motor (not included)
- Audio Battery Back-up with 4 AA batteries (not included)
- Manual Programming (see manual for details)
- Mount on standard gooseneck or against wall
- External Antenna for Improving Audio (optional)
- Low risk of lightning damage
- Additional Gatestations (ZA-652 optional extra 1 btn gatestation)
- Regulated 12V DC power supply available (optional)
- Add Multiple Portable Handsets (sold separately)
- 1 Year limited warranty (see manual for details)
- Fully approved by ICASA

Included Items:
Gatestation
Special Tool
Mounting Screws
Relay Board



Doorphone / Caller Unit



Add Handsets ZA-651 to suit your requirements

- Each Button Calls Separate Handset (*purchased individually*)
- Multiple Handsets are Possible on Each Button
- Intercommunication Between Handsets Linked on Same Button



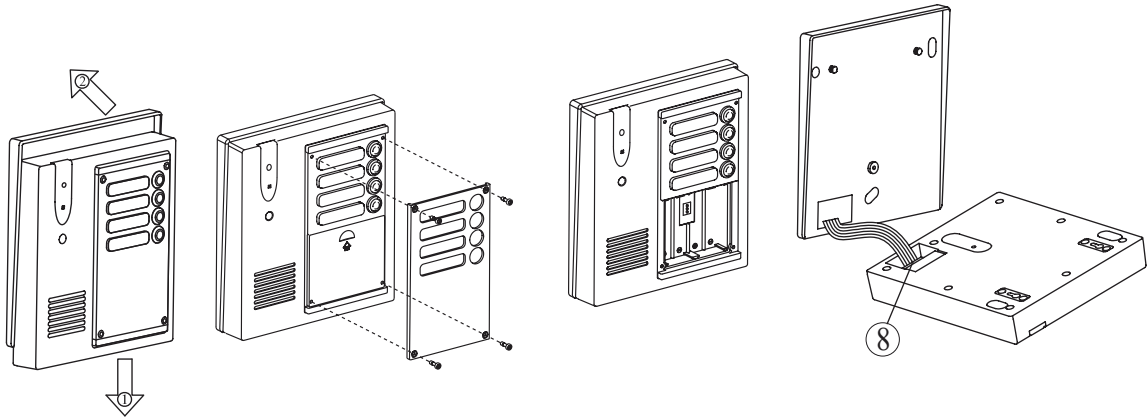
It is also possible to add secondary gatestations for side or back gates. These are called ZA-652 and are only single button stations.



Getting Started

A. Power Supply

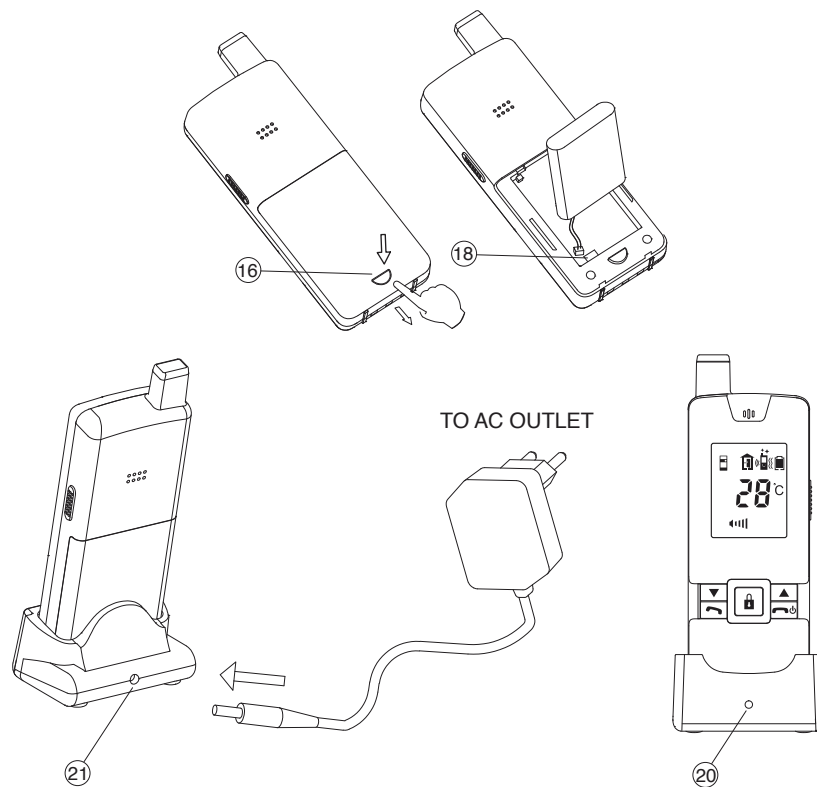
Caller unit






1. With the supplied tool, loosen the screw that hold the front aluminum plate. The screws are made special for anti-theft purpose, it is necessary to keep the tool in safe place as you need it later when pairing new handsets.
2. The caller unit operate with 12V DC supply. Connect the DC supply to the terminals ⑧ at the back marked with $\begin{matrix} \square & 12V_{DC} & \square \\ & 1.5A & \end{matrix}$.

Once the environment gets dark the name plate will be automatically illuminated if a DC supply is connected.

Handset



1. The supplied Li polymer battery pack is already installed in the handset. To replace, press down the lock button (16) and slide open the battery door, take out the battery pack and disconnect from socket (18).
2. With the handset switched on, place it into the charger stand.
3. Plug in the supplied AC switching power supply into an AC outlet and connect its output plug to the DC jack (21) located at the back of charger stand.
4. The charging indicator (20) should light up red during charging process. Adjust the position of handset in charger stand in case this indicator does not light up. During charging, the segments inside battery level icon P  will flash in turn.
5. The battery pack should be fully charged up within 4 hours when used for the first time. All segments inside the icon P  will shown up and remain steady.
6. Now the unit is ready for operation. Either take out the unit or keep placing it in the charger stand will cause no damage to the battery. In the latter case, when the battery is being consumed and voltage falls to a certain level, the charger stand will automatically charge up the battery. The segments inside the icon P  will flash in turn whenever the unit is under charging.



CAUTION : BESURE THE BATTERY IN HANDSET IS RECHARGEABLE TYPE BEFORE YOU PLACE IT IN THE CHARGER STAND, OTHERWISE EXPLOSION MAY RESULT.

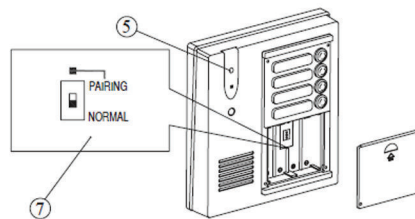
B. Pairing the Handset and Caller unit




This process is to match the caller unit with handset so that they can communicate with each other while no other devices (even doorphone of identical model) can interfere with you or receiving your signal.

Obtain all the handsets as per your system requirements and charge them.
All handsets linked to a specific button must be paired at the same time.

To perform pairing process, it is necessary to connect 12V DC supply to caller unit.

1. Place the caller unit and handset close to each other within a distance of 1m.
2. With the handset in switch off mode, press and hold Power ON/OFF button ⑫  and door lock open button ⑬  together for around 3 sec to enter pairing mode. The LCD will become backlighted and show a flashing letter “P”.
3. Set the pairing switch ⑦ located inside the battery compartment of caller unit to PAIRING position. The call indicator ⑤ will start flashing, showing that the caller unit has entered pairing mode.

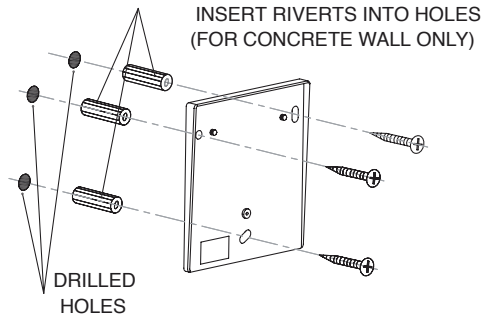


4. Press call button ① on caller unit. Two “Di Di” sound will be heard and at the same time, the letter “P” and  will show steady in LCD of handset once pairing is successful.
 5. Long press the Power ON/OFF button ⑫  to switch off handset.
 6. Repeat above steps 2 & 4 for handset that is to be paired to call button ② , ③ & ④ accordingly.
-  It is important that all other handsets which are not intended to be paired to a particular call button should be switched off and NOT set into pairing mode when performing pairing for that call button.
7. Set the pairing switch ⑦ to normal position.
 8. The doorphone is now ready for operation.

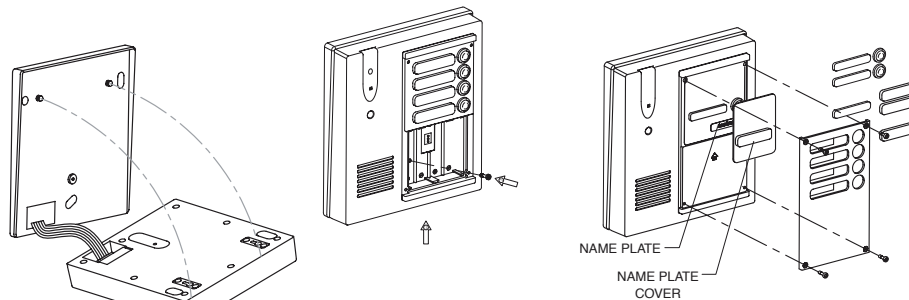
If the pairing process is not successful (the “P” continues to flash in LCD of handset), repeat the procedures from step 1 again.

Remember every time you add on new handsets to the system, it is necessary to perform the pairing process all over again with all the handsets together or otherwise the new handsets will not work with your original system.

C. Mounting of Caller Unit





1. The caller unit has been designed to be splash and rain proof. Ensure that the rubber seals and battery cover are not removed.
2. Select a location near your door entrance where the surface is not rough. Some polishing may be needed to get a smooth surface or otherwise the unit may not be able to be mounted securely.
3. It is advised that the mounting bracket is not installed on metal screening surfaces or in the vicinity of other electronic devices that may reduce the operating range such as electric fences, cameras.
4. If it is unavoidable to mount against a metal surface ensure that the sides, top and front of the caller unit are not shielded in any way. Wireless transmission will be affected and range reduced if there is metal in close proximity.
5. Use the supplied self tap screws to fix the mounting bracket onto the wall. The supplied paper mask at the end of this manual can be helpful in drilling the correct position of holes.
6. The 12V DC supply should be connected to the terminals marked $\begin{matrix} \text{+} \\ \text{12V DC} \\ \text{1.5A} \end{matrix}$ at the back of caller unit. In addition, there are also terminals marked $\begin{matrix} \text{A} \\ \text{B} \end{matrix}$ and $\begin{matrix} \text{A} \\ \text{C} \end{matrix}$ for connection to an electric door latch which can be remotely opened by the handset. Where DC supply is available, the call button (1)(2)(3)(4) will be automatically illuminated once the environment gets dark.
 CAUTION : When using DC supply, in case the electric door latch does not function, reverse the polarity connected to $\begin{matrix} \text{+} \\ \text{12V DC} \\ \text{1.5A} \end{matrix}$ and try again.
7. Align the two rivets on the mounting bracket with the holes of the metal hangers on the back of the caller unit, make contact and slide the unit upward. Screw in the supplied machine screw to fix the caller unit in position. Be sure the pairing switch (7) is set to NORMAL position.
8. Before you install back the aluminium alloy cover, you can print your name on the supplied translucent PVC name plate and then cover by the name plate cover.




The caller unit is housed in a high impact ABS/PC cabinet strengthened by an aluminium alloy front cover to achieve professional grade ruggedness required in most outdoor application. Rubber gaskets seals around all joints and terminals keep out dust, rain, snow and spray, assuring years of reliable operation even in harsh environment. The unit meets to IP-54 standard and can operate from -30°C to 55°C

The operation of two most common types of electric door latch on the market are either “always close” or “always open”.


Always close 

These two terminals normally closed. During communication, once the door lock opening button (13)  is pressed, this two terminals will be opened temporarily for 2 seconds.

Always open 

These two terminals normally opened. During communication, once the door lock opening button (13)  is pressed, the terminals will be closed temporarily for 2 seconds.

Under no circumstances should AC mains Voltage be directly connected to the terminal blocks (8)

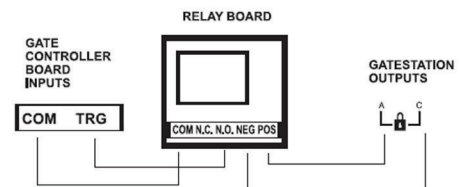
Auxiliary terminal 

These two terminals act like a switch and will be short circuited as long as the call button (1) (2) (3) or (4) is pressed, however, there is no voltage supply from the terminals. They can be used to trigger a conventional door chime or a courtesy light at the entrance.

Note: The relay board must be used for all gate triggering to avoid high current passing through the intercom.

Connecting Gatestation to a Gate Motor

Two wires from the gatestations LOCK outputs A and C will provide low power 12V for 2 seconds to switch on the relay at NEG and POS inputs. The Relay outputs (COM and NO) will provide a dry contact which is needed by the Gate Controllers COM and TRG inputs.



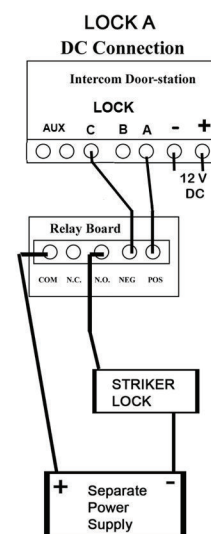
Connecting Gatestation to a Striker Lock

The built-in relay inside the gatestation is not rated for operating a striker directly. A separate relay must therefore be used.

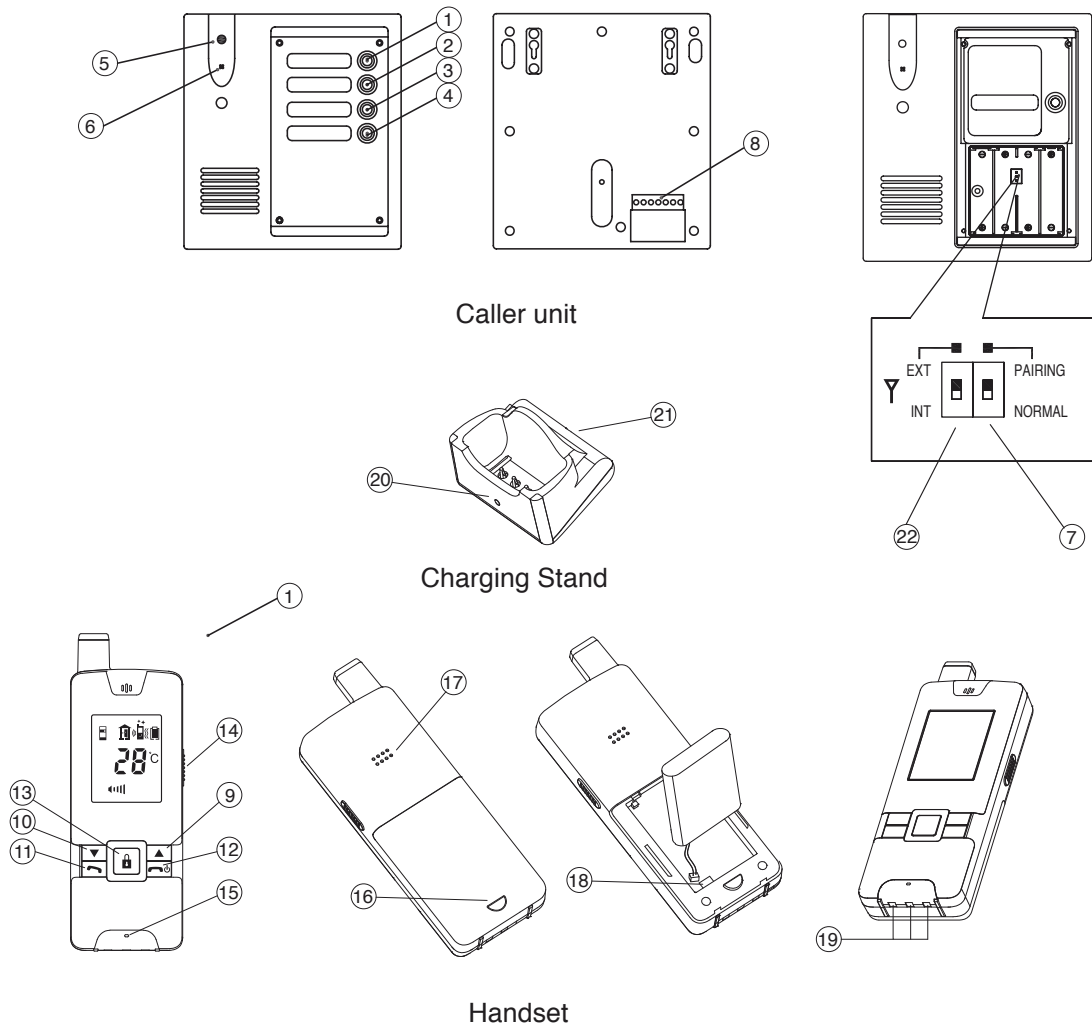
- There will need to be 2 power supplies:
- 1 for powering the gatestation and
- 1 for powering the striker lock

One of the wires from the power supply of the striker lock must be connected to an external relay outputs (COM and NO). This relay is energized (NEG and POS) from the gatestations LOCK outputs A and C (will provide low power 12V for 3 seconds)

Use a timer relay if a longer pulse is required

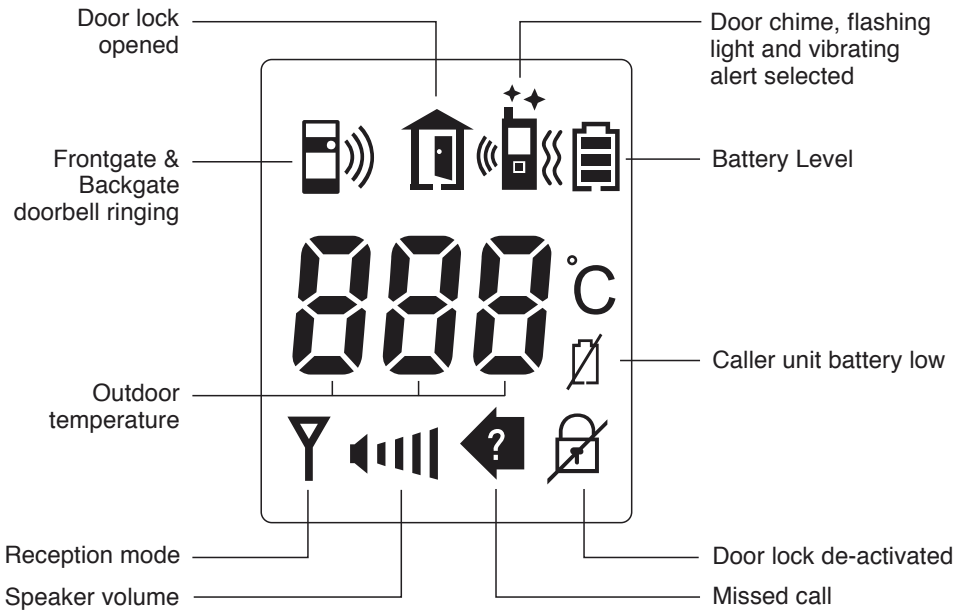


Controls Layout



- | | |
|------------------------|--|
| 1. Call button ① | 12. Hang up and power ON/OFF button |
| 2. Call button ② | 13. Door lock open button |
| 3. Call button ③ | 14. Press-to-talk (PTT) button |
| 4. Call button ④ | 15. Microphone |
| 5. Call indicator | 16. Battery door lock button |
| 6. Microphone | 17. Speaker |
| 7. Pairing button | 18. Li battery socket |
| 8. Terminal block | 19. Charging contacts |
| 9. Volume up button | 20. Charging indicator |
| 10. Volume down button | 21. DC jack |
| 11. Answer button | 22. Internal / External antenna selection switch |

LCD












■ Flashing









■ Steady light up

- | | | | | | |
|---|--|--|---|--|---|
| A | | Caller unit doorbell ringing | J | | Door chime and vibrating alert selected |
| B | | Door lock de-activated | K | | Flashing light and vibrating alert selected |
| C | | Missed call | L | | Door chime, flashing light and vibrating alert selected |
| D | | Reception mode | M | | Door lock opened |
| E | | Out of range alert | N | | Caller unit battery low |
| F | | Door chime alert selected | O | | Self battery low |
| G | | Flashing light alert selected | P | | Battery level |
| H | | Vibrating alert selected | Q | | Speaker volume |
| I | | Door chime and flashing light alert selected | | | |






OPERATION







1. Switch on the handset by a long press (over 3 seconds) of the Power ON/OFF button  ⑫. Press the same button again in case you want to switch off the unit.
2. The LCD screen will show up. In case the self battery low icon  appears and an alarm heard, the battery has run down and need to be recharged by placing the unit into the charger stand. During charging, the segments inside the battery level icon  will flash in turn irrespective the unit is switched on or off. To protect battery, if the unit is not being re-charged when the icon  shown up, it will be switched off automatically after 10 minutes.
3. To select the different methods of incoming call alert, press and hold the Volume Up/Down buttons  ⑨ &  ⑩ simultaneously for 2 sec to enter the selection mode. Use the Volume Up  ⑨ or Down button  ⑩ to choose one of the seven alert methods, shortly press the Hang up button  ⑫ to confirm your selection and return to normal operation mode.



Depending on your selection, either one of the icons F to L will be shown on the screen. Note that in case you select a combination with vibrating alert, the battery will run down more easily.





5. During conversation, the sound volume heard through the speaker  ⑰ can also be adjusted using buttons  ⑨ &  ⑩ and the speaker volume icon  Q will change correspondingly. Please note the loudness of door chime is fixed and cannot be adjusted.
7. Make sure there is 12V DC power supply to the caller unit. Now press the Call button  ①, a ding-dong tone will be heard and the Call indicator  ⑤ starts flashing. Until a handset answers the call, the ding-dong tone will be heard periodically, reminding the visitor to keep waiting. In case there is no answer after 20 seconds, the caller unit ends the call by itself and the Call indicator  ⑤ goes off. Press the Call button  ① to initiate the call again.


N.B. When either a call button (1 2 3 or 4) is pressed, pending for reply from a handset or during communication, pressing the other 3 call buttons will not be recognised by the caller unit to avoid interfering the existing call.


8. Once the call is being answered, the Call indicator  ⑤ will light up steady and the ding-dong tone stops ringing. Conversation can now be conducted by speaking into the Microphone  ②.
9. Upon receiving a call, icon  appears on the screen. The handset can answer the call by pressing the Answer button  ⑪ and the reception mode icon  D will show up in LCD.

Now conversation is possible and the voice of visitor can be heard from speaker (17). To talk back to visitor, press and hold the  button (14) and speak towards the Microphone (15), reception mode icon D  goes off. Release  button (14) after finish speaking to listen to visitor, reception mode icon D  show up again. It should be worth noted that the voice of visitor will not be heard while pressing the  button (14). Upon finish of conversation, press the Hang up button (12)  to end the call.




This system has an automatic end call feature. In case the resident does not talk back to visitor (i.e. press the  button (14)) for over 90 sec, the call will be ended automatically. Such feature is useful to protect your privacy in case you forget to end the call by pressing the Hang up button (12) .

10. Once a call has been answered, you can use the Door lock open button (13)  to remotely open the electric door latch for visitor (this function only available if there is 12V DC supply to the caller unit and your door is equipped with an electric latch). Press the button (13)  shortly, wait for 4-5 seconds and the icon M  appears on the screen, showing the door latch is opened. The icon M  will disappear after 3 sec.


Under standby mode (i.e. when no call is set up between handset and caller unit), the electric door latch can also be opened by long press of button (13)  for over 2 sec. The Call indicator (5) on caller unit also light up for 2 sec.


To avoid misuse by children, this door lock opening function can be activated or deactivated. When deactivated, pressing the button (13)  will have no effect.








Deactivate door lock opening feature

Under normal operating mode, press shortly the button (10) , then within a period of 2 sec, press shortly the button (13) . The Door lock de-activated icon B  will show up on LCD screen.

Activate door lock opening feature




Perform same procedure as above, the Door lock de-activated icon B  will disappear from the LCD screen.

11. For system equipped with several handsets, all the handsets will be alerted with an incoming call. However, only the handset which first press the Answer button (11)  can set up conversation with caller unit. The remaining handsets will return to standby mode and their buttons become de-activated until the conversation ends, making them impossible to interfere with the conversation.


12. Under the circumstances of an unanswered call from a visitor (e.g. you are away from home or located at a place which is out of range from the caller unit), the icon C  will appear on the screen. This icon is useful to remind you somebody has called. Press any button momentarily to remove this icon.
13. Whenever handset is located at a spot which is outside the communication range of the caller unit, an alarm will be heard and the icon E  will appear on the screen. Such alarm cannot be immediate and will alert you only when you are out of range for over 2 minutes (when 12V DC supply is available or 20 minutes if battery is used). Press any button momentarily can stop the alarm but the icon E  still remains. Once handset falls back in range, the alarm will stop and the icon E  disappears.
14. In case the DC supply to caller unit is cut off, the out of range icon E  is shown and its alarm will be heard.
15. The outdoor temperature indication provides you with an idea about the weather which is useful if you plan to go outside of your home. When the system is first installed, the LCD will show the default setting of - °C. Once the caller unit senses the outdoor temperature, the correct reading will be shown on the LCD of handset. To obtain a correct reading of outdoor temperature, the ventilation to temperature sensor  should not be blocked.
16. Whenever the buttons (except PTT button ) on handset are pressed, a tone will be heard to validate your entry.
17. Once the Light sensor detects a low light intensity, the Call button on caller unit will become automatically backlit.

Intercom

This function is applicable only if you have two or more handsets in same apartment. Please note all units must be paired together.

- a. Under standby mode, momentarily press Answer button (11) , a “do – do” sound will be heard.
- b. The called handset will show the selected incoming call alert. Press Answer button (11)  to answer the call. The “do-do” sound on the calling handset will stop.
- c. Now both handsets can converse with each other using the PTT button (14).
- d. Either party can press the Hang up button (12)  to end the conversation.
- e. The call will also be ended automatically if the PTT buttons (14) on either party is not pressed for over 60 sec.

For system with more than two handsets, the incoming call alert on remaining handsets will stop once the call is being answered. In case nobody answer the call, the alert will stop 20 seconds later.

N.B. Selective call of a particular handset is not possible. Whenever an handset initiates a call, all the remaining units will be alerted and can answer to the call. However, only the unit who first press the Answer button (11)  can reply to the call, all others will be excluded from the intercom.

CAUTION : The two handsets under intercom may not be able to detect a call from the caller unit. So it is advisable to keep the intercom conversation short.

PRECAUTION

- Use only the supplied AC switching power supply. Use of other supply may cause damage to the handset.
- Do not mix using old and new alkaline batteries in caller unit.
- When not using the doorphone for a long period of time, remove all batteries from handset and caller unit to avoid battery leakage.
- Do not leave the handset expose to strong sunlight for a long period of time or near any heat source, moisture and excessive dusty environment.
- Do not open the cabinet, no serviceable parts inside.
- When using for the first time, switch off the handset and charge up the supplied battery pack for 4 – 5 hours using the charger stand.

TROUBLE SHOOTING GUIDE

Problem	Possible Causes	Solution
Handset and Caller unit cannot communicate	Handset and Caller unit has different ID code Battery has run down	Perform pairing process Recharge battery in Handset using charger stand.
Communication distance become short	Many steel structures between Handset and Caller unit Battery has run down	Relocate the position of Handset Recharge battery in Handset using charger stand.
Out-of-range alert always on	No power supply to Caller unit Distance between caller unit and handset has exceeded the range	Check DC supply to Caller unit. Move handset & caller unit closer together
Self battery low icon always on	Battery pack is damaged and cannot be recharged.	Replace new battery pack
Door latch cannot be remotely opened by handset	Door lock opening button ⑬ is deactivated No DC supply to Caller unit Wrong connection at terminal block	Activate door lock opening button ⑬ Check if DC supply is available Make proper connection
Cannot perform intercom between Handsets	The unit are not properly paired Battery has run down	Perform pairing process Recharge battery using charger stand

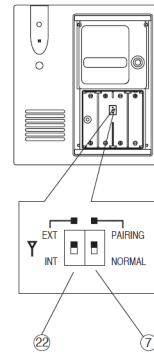
EXTERNAL ANTENNA (optional)

The caller unit is fitted with an external antenna connector cable at the back. An optional external antenna can be fitted to improve clarity and audio. Low reception may result from the caller unit being covered by metal or enclosed as the standard antenna is built into the unit. There may also be walls, buildings and trees which block the radio signal from the gate.

It is essential to mount the antenna on a pole as high as possible in open space and not against walls so good propagation is achieved.

Maximum cable length 8m

There is a dip switch inside battery compartment to select internal or external antenna



Warranty:

This product is warranted by Zartek against manufacturing defects in materials and workmanship under normal use for a 12 month period from date of purchase via our authorized appointed dealers.

For further information or any queries, please email us: info@zartek.co.za

MASK FOR HOLES DRILLING

