G B F
Four Wire Intercom System

User Manual

Holes in the wall

Plastic Wall Plug

Screws

Allen wrench

GBF™

WELCOME

Congratulations on purchasing the GBF Smart Four Wire Intercom System. Our factory engineers were the first to enable multiple security cameras being monitored through a smart mobile device and they have used that expertise to bring you a full-featured Smart Four Wire Intercom System which allows you to monitor and interact with visitors at your door, wherever your mobile device has a Wi-Fi or data connection. Please read these instructions carefully and follow all the required steps during setup to ensure your enjoyment of a fully functional Smart System in minutes. You may connect the System through your LAN (Ethernet Cable) or through a Wireless (Wi-Fi) connection. As any video and audio streaming device, wired connections are preferred over Wi-Fi, but the convenience of not requiring wires from your Outdoor Station's location to your router may be the determining factor in your installation.

For customer support or any inquiries, please visit our web site at www.gbfelectronics.com or contact us at info@gbfelectronics.com

Inside the Box

GBF Smart Four Wire Intercom System:
(1) GBF PL960C4
(1) Rain cover
(1) GBF indoor monitor
(1) GBF SKYBOX
(3) Power Supply 12 V_{DC}
(4) Screws with Anchors
(1) Allen Key
(1) Hex-Head Screws
(1) Wiring Harness Accessories
(1) User Manual

Indoor Monitor

SOS
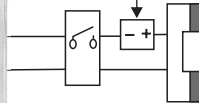
Skybox

Power supply for lock

Door lock

Outdoor station

1. Installation

* For your convenience, perform the initial configuration of the Outdoor Station connecting it to a power supply nearby your home internet router. From this way, it is possible to check the full operational function before place the parts of the product.

- **Placing the outdoor station:** Place the outdoor station beside your gate, considering field of vision, shadows and background light (for the camera). You should also consider proximity of AC power and the ability to wire for additional accessories. The recommended mount height is 60" (150cm) above the surface where the caller is standing on. At the chosen place must have at least a 1 ¼" hole on the wall to allow the wired connection.
- **Placing the indoor monitor:** Place the indoor monitor inside the building, in a convenient place for you. Remember about the necessary power supply.
- **Placing the Skybox:** Place the Skybox in a local with good wi-fi connection with your router or in a local with access of a ethernet cable from your router. Remember about the necessary power supply. It is strongly recommended to place the skybox nearby indoor monitor, to simplify the wired connection.
- **Connecting the system:** Using the four wires connectors (come jointly the kit), connect the outdoor station with the indoor monitor, and parallel to it (deriving from the same four wires) connect to the skybox. Notice that there is only one 4 pin connector inside the outdoor station and two behind indoor monitor and skybox, the main outdoor station must be connected at the CN1 port of indoor monitor and skybox (in case of two outdoor stations, the secondary one will must be connected to CN2). Notice that the connectors already come prepared to be extended, only make sure to match the wires post extension by the color code.
- **Connecting an electric lock:** The outdoor station possesses a SPDT relay that allows the use of an electric lock with a push-button to release the gate. Use the red and black wires from the 5-pins connector (CN3 behind the outdoor station) to connect a push-bottom. Use the green and blue wires for normal opened

contact, or blue and brown for the normal closed contact, to connect the electric lock.

- **Powering the system:** Connect the power supplies to the 2-pins connectors on each system's part (outdoor station, indoor monitor and skybox).
- **Assembling the outdoor station:** Gently place the excess wire inside the hole behind the outdoor station. Assemble the outdoor station inside the rain cover mount, placing the top first. Then fix the two screws on the bottom of the rain cover mount using the Allen key.
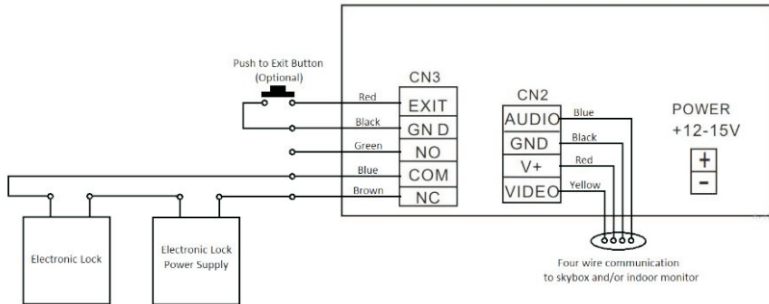
Notes:
- The system allows up 4 indoor monitors and 2 outdoor stations (or 1 outdoor station and an extra camera), remembering that each one needs to be powered separately.
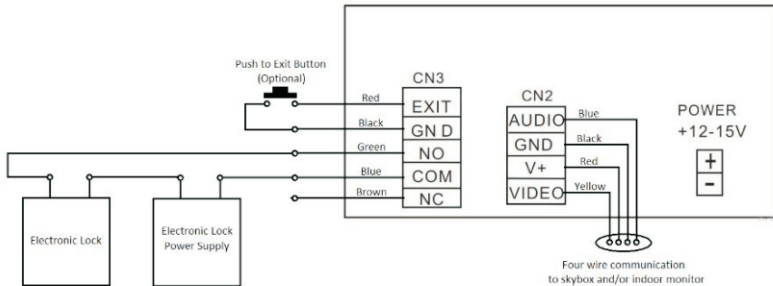- Each indoor monitor can monitor two outdoor stations or cameras.
- The maximum distance between the outdoor station and the farthest monitor must be 70m.

Wiring Diagram for Normally Closed Lock
(e.g. Electronic Magnetic Lock)

Push to Exit Button
(Optional)

CN3

Color	Terminal
Red	EXIT
Black	GN D
Green	NO
Blue	COM
Brown	NC

CN2

Terminal	Color
AUDIO	Blue
GND	Black
V+	Red
VIDEO	Yellow

POWER
+12-15V

+
−

Electronic Lock

Electronic Lock
Power Supply

Four wire communication
to skybox and/or indoor monitor

Wiring Diagram for Normally Opened Lock
(e.g. Electronic Door Striker or Gate Opener)

Push to Exit Button
(Optional)

CN3

Color	Terminal
Red	EXIT
Black	GN D
Green	NO
Blue	COM
Brown	NC

CN2

Terminal	Color
AUDIO	Blue
GND	Black
V+	Red
VIDEO	Yellow

POWER
+12-15V

+
−

Electronic Lock

Electronic Lock
Power Supply

Four wire communication
to skybox and/or indoor monitor

2. Skybox configuration

Downloading the App

To configure and receive calls from the Outdoor Station you need to download the ControlCam2 Application. Available on Play Store (Android) and App Store (iOS).

ControlCam2

Notes:

- The ControlCam2 app is free to use.
- Keep the ControlCam2 app updated.
- The application is subject to changes whit no prior notification.

Preparing the App to be used

1. Make sure your smartphone cellular data is turn off and your phone is connected to your 2.4G Wi-Fi network.
2. Open the app.
3. Click on the 'Sign up' button.
4. Enter a username, password, password confirmation, custom question and answer the custom question.
5. Read the terms and privacy, then click on the checkbox, agreeing with.
6. Click on 'Sign up' button. If the provided information is ok, a popup message will appear on the screen with 'Registration Success', then click on 'OK'.
7. You will be redirected to the login screen.
8. Click on 'Login'. Now you are logged into your account and can see your home screen.

2.1 Adding devices to your ControlCam2 account

Configuring a new device

Before configuring a new device (Skybox), it is necessary to perform the factory reset.

1. With the device powered on, 'reset' button on Skyboxes for 1 minute.

2. After, a long beep can listen.

3. the factory reset was performed successfully.

Then, you can continue configuring your device, using the smartphone.

2.1.1 Configuring a new device using Android

1. Wait 2 minutes after the factory reset, allowing the device to restart properly.

2. Make sure your smartphone cellular data is turn off and your phone is connected to the 2.4G Wi-Fi network in which the device (Skybox) will work on.

3. Inside the app, click on the "add" button.

4. Choose the "Doorbell1" option, then choose the 'Hotspot Connection' option.

5. Click 'Next' to start searching automatically the new device on the network. When found, a popup window will appear showing the Wi-Fi network and asking its password. (If the search finds more than one new device, a popup screen will appear showing the identification of each one. Choose the desired one, looking on the GID label placed on the device).

6. Enter the Wi-Fi password, and press 'OK'.

7. A popup message will appear, showing the device was configured successfully, press 'OK' to confirm.

8. In the device's details screen, insert the default password '1234', change the device's name to the desired name, and press 'Save'. (Do not change the GID identification).

9. Now you can see the device's image on the 'Home screen'. To access it, click on its image or its identification.

Once the Device has been added to the app, you will be able to access it by Wi-Fi or mobile data (3G/4G).

3.1.2 Configuring a new device using iOS

1. Wait 2 minutes after the factory reset, allowing the device to restart properly.
2. Make sure your smartphone cellular data is turn off and your phone is connected to the Wi-Fi network in which the device (Skybox) will work on.
3. Inside the app, click on the "add" button.
4. Choose the "Doorbell1" option, then choose the 'Hotspot Connection' option.
5. Press on 'Next'.
6. The name of the Wi-Fi network will appear, and the app will ask its password to continue.
7. Enter the Wi-Fi password. (Do not press 'Next' yet)
8. Go to the Smartphone's Wi-Fi configuration (outside the ControlCam2 app), and look for the device identification (It will appear as 'LID + GID identification'. The identification can be consulted looking on the GID label placed on the device).
9. Go back to the ControlCam2 application and click on 'Next'.
10. In the device's details screen, insert the default password '1234', change the device's name to the desired name, and press 'Save'. (Do not change the GID identification).
11. Now you can see the device's image on the 'Home screen'. To access it, click on its image or its identification.
Once the Device has been added to the app, you will be able to access it by Wi-Fi or mobile data (3G/4G).

3.2 Adding a previously configured or wired device

You can add a previously configured or wired device through three methods: LAN search, QR code scan and manually.

1. Connect to the Wi-Fi network which contains the device.
2. Inside the app, click on the "add" button.
3. Choose the "Doorbell1" option, then choose the 'Add Manually'

option.
4. On the 'Add Device' screen, choose one of the following methods.

LAN Search

5. The "Add Manually" option will start automatically a search trough the currently network.
6. A list of all devices in the network will appear, click on the desired one.
7. On the 'Add Device screen' will appear the information from that device.
8. insert the password (default password is '1234'), change the device's name to the desired name, and press 'Save'. (Do not change the GID identification).
9. Now you can see the device's image on the 'Home screen'. To access it, click on its image or its identification.

QR Code Scan

5. Press the 'QR CodeScan' button.
6. Accept the popup message to allow the app to access your camera.
7. Using the camera, look on the QR code placed on the device.
8. On the 'Add Device screen' will appear the information from that device.
9. insert the password (default password is '1234'), change the device's name to the desired name, and press 'Save'. (Do not change the GID identification).
10. Now you can see the device's image on the 'Home screen'. To access it, click on its image or its identification.

Manually

5. Manually insert the device's GID. The identification can be consulted looking on the GID label placed on the device
6. Enter the default password '1234'.
7. insert the password (default password is '1234'), change the device's name to the desired name, and press 'Save'. (Do not change the GID identification).
8. Now you can see the device's image on the 'Home screen'. To

access it, click on its image or its identification.
NOTES:
• It is possible to add an unlimited number of devices to your app.
• Each device will support up to 4 concurrent connections.

3. Operating the Indoor Monitor
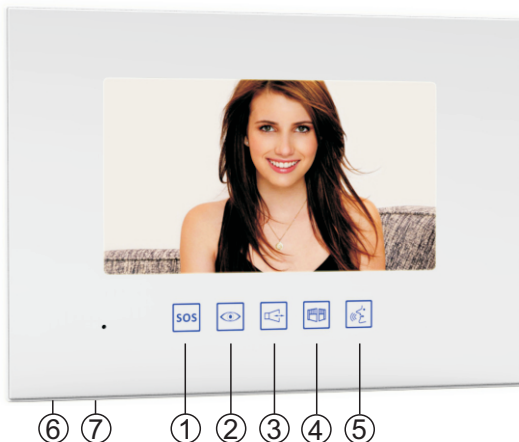
①	SOS	Sos alarm	⑤	📞	Talk
②	👁	Monitor	⑥	☎	Talk volume
③	📢	Transfer	⑦	🔊	Ringer volume
④	🔓	Unlock			

Note: In case of the system has more than one Indoor Monitor: the connector J2 must be connected only in the farthest Indoor Monitor (in relation to the Outdoor Station) and disconnected in the others; and the connector J1 must be connected in the Indoor Monitor closest to the Outdoor Station and disconnected in the others.

- Receiving a Call from the Outdoor Station:

1.When a visitor presses the "Bell" button on the outdoor station, your indoor monitor(s) will turn on the screen with the outdoor station image and will ring.

2.Press the 'Talk' button to answer the call and start a conversation with the visitor.

3.Press the 'Talk' button to hang up.

- Monitoring the Outdoor Station(s):

1.At any time, press the 'Monitor' button to watch the image from the outdoor station (once for the outdoor station 1 and twice for the outdoor station 2).

2.Press the 'Monitor' button once more to turn off the screen.

- It is possible to start a conversation from the monitoring mode only pressing the 'Talk' button, and pressing again to hang up.

- Unlocking the electronic lock:

During a conversation, monitoring mode or receiving a call, press the 'Unlock' button to activate the unlock contact relative to that outdoor station.

- Transferring an Outdoor Station's call:

1. During a conversation with the outdoor station, press the 'transfer' button to transfer the call.

2. The ControlCam App will ring, as well as the others monitors in the system. All of them will be enabled to answer the call.

- Calling from the indoor monitor:

While in standby mode, press 'Transfer' button to call others indoor monitor.

- Managing images:

When the indoor monitor receives a call, it saves automatically a screenshot. Follow the steps to access and delete these files.

1. While in standby mode, press 'Talk' button to access the storage of images.

2. Scroll through the images using 'Unlock' and 'Transfer' buttons.

3. Delete an image pressing 'Monitor' button and pressing again to confirm.

4. Exit this mode pressing the 'Talk' button.

- Using SOS alarm function:

Under monitoring or talking mode, you can press SOS button on the monitor to alarm, press "monitor"button or "unlock" button or "transfer" button to stop it.

- Setting unlocking time delay:

Press and hold "transfer" button for 3 seconds, until "dingdong" sound is heard.
Press unlocking button to set 1-99 seconds time delay.
Press twice means 2 seconds delay;
Press five times means 5 seconds delay; et.cetera
Press "transfer" button to confirm. When "dingdong" sound is heard, it means unlocking delay set successfully.

Note: Factory default unlocking time: 1 second

- Adjusting ringer and talk volumes:

At any time, use the volume scrolls to adjust the ringer and talk volumes to the desired level.

- Adjusting indoor monitor's screen settings:

1. During any mode, press 'Talk' button and hold for three seconds to access the configuration menu.

2. Pressing the 'Talk' button, scroll over the 'Brightness', 'Contrast' and 'Chroma' options.

3. Use the 'Transfer' button to increase and the 'Unlock' button to decrease the options levels.

4. Exit the menu pressing the 'Monitor' button.

- Adjusting date and time:

1. During any mode, press 'Talk' button and hold for three seconds to access the configuration menu.

2. Pressing the 'Talk' button, scroll over the 'Date' and 'Time' options.

3. Press the 'Unlock' button to access the option.

4. Use the 'Talk' button to change among 'Year', 'Month' and 'Day' or 'Hours', 'Minutes' and 'Seconds'.

5. Use the 'Transfer' button to increase and the 'Unlock' button to decrease the options.

6. Press the 'Talk' button until pass through all the options to go back to the main menu.

7. Exit the menu pressing the 'Monitor' button.

- Clearing the indoor monitor's storage:

1. During any mode, press 'Talk' button and hold for three seconds to access the configuration menu.

2. Pressing the 'Talk' button, scroll over the menu until the 'Delete All' option.

3. Press the 'Unlock' button to access the option.

4. Use the 'Unlock' and 'Transfer' buttons to select between 'Video' and 'Photo' options.

5. Press the 'Talk' button to confirm and clear all the selected files.

6. At the end of the process, the configuration menu will be quitted automatically.

4. Outdoor Station's Keypad Configuration

The PL960C4 keypad can be customized with up to 40 different access codes, and will trigger the same relay which is triggered through the ControlCam App. The master password and unlock delay in the keypad settings are exclusive to the Outdoor Station.

- Modify the Programming Password:

1. Disconnect the outdoor station from the power.

2. Restore the outdoor station's power. Two short beeps will be listened.

3. Within 3 seconds press '*' button.

4. Enter the new password (default length is four digits), a long beep will be listened, indicating the new password has been successfully stored.

5. Press'*' to exit the programming mode.

- Enter Programming Mode:

1. Press the '*' button, a beep will be listened.

2. Enter the programming password (the default is 1234). A long beep will be listened, indicating the Outdoor Station is now in programming mode.

The Outdoor Station will automatically exit programming mode if there is no input at the keypad for over 30 seconds or pressing '*' to exit programming mode.

- Set Unlock Duration Time:

1. Enter in programming mode.

2. Press "00", a long beep will be listened.

3. Enter two digits (01 – 99) representing the new unlock duration time, in seconds, a long beep will be listened confirming the change.

4. Press '*' to exit the programming mode.

- Add User Access Codes:

1. Enter in programming mode.

2. Enter two digits (01 – 40) representing the slot in which the user code will reside, a long beep will be listened.

3. Enter the new user code (length determined through "Setting the length of the access codes" step), another long beep will indicate the new code was stored successfully.

4. Press '*' to exit the programming mode.

Note: Slots 31 – 40 will not be affected by the programmed unlock duration time, these access codes will activate the relay and keep the relay working for any period until you put the access code again to release the relay.

- Delete User Access Codes:

1. Enter in programming mode.

2. Enter two digits (01 – 40) representing the slot which contains the access code you want to delete; a long beep will be listened.

3. Press the '#' button, another long beep will be listened confirming the access code was deleted.

4. Press '*' to exit the programming mode.

- Delete User Access Codes Directly:

1. Enter in programming mode.

2. Press the '#' button, two short beeps will be listened.

3. Enter the access code you want to be deleted; a long beep will be listened, confirming the deletion of the access code.

4. Press '*' to exit the programming mode.

- Setting the Length of the Access Codes and Programming Password:

1. Enter in programming mode.

2. Press '99', a long beep will be listened.

3. Enter a single digit (from 2 to 6) representing the desired length for the access codes and programming password, a long beep will be listened confirming the change.

4. Press '*' to exit the programming mode.

- Delete All Settings (Maintains Programming Password):

1. Enter in programming mode.

2. Press the '#' button, two short beeps will be listened.

3. Press the '#' button again, a long beep will be listened.

4. Press the '#' button seven more times, after three seconds another long beep will be listened confirming deletion of all User codes and resetting the unlock duration back to 1 second. Programming password and length will remain unchanged.

5. Press '*' to exit the programming mode.

- Factory Reset (Custom Keypad Settings Only):

1. Disconnect the Outdoor Station from the power.

2. Restore the Outdoor Station's power.

3. Within 3 seconds, press the '#' button.

4. A long beep will be listened in 5 seconds, indicating the keypad programming has been restored to factory default settings.

5. Advanced Settings

Many other advanced features can be configured in your Outdoor Station. To access these features, use the outdoor station Web Server through Internet Explorer web browser (IE) with ActiveX controls enabled (Some features will not be visible or configurable with other web browsers). Tutorial videos and instructions for these advanced features can be accessed from our website at **www.gbfelectronics.com**.

6. Using the ControlCam2 App

6.1. Device's Settings

From the device's setting screen is possible to adjust some settings to the device.

Access the 'Device's setting screen' by clicking on the 'engine' button on the device's image.

Changing device's name, username and password

When desired you can change the device's username and password, or after another user has changed, it is necessary to change on the other users.
1. In the 'Device's setting screen' enter the new information (username and/or password, and name if desired).
2. Press 'Save'.
3. The app will go back to the 'Home screen' and the device will be actualized with the new information.

Unlock Time

It is possible to change the time which the auxiliary contact for gate opener will be activated.
1. In the 'Device's setting screen' enter the new unlock time (1 -100 seconds, where the default is 1 second), and press 'OK'.
2. Press 'Save'.
3. The app will go back to the 'Home screen' and the device will be actualized with the new unlock time.

One-Key Unlock

To activate the device's auxiliary contact (gate opener) from the app without the necessity to enter the 'unlock password', it is necessary to activate the 'One-Key Unlock' option.
1. In the 'Device's setting screen' click on the 'One-Key Unlock' button.
2. Press 'Save'.
3. The app will go back to the 'Home screen' and the device will be

actualized with the new unlock time.

6.2. Advanced Device's Settings

On the 'Device's setting screen' click on the 'Advanced Settings' button.

Modify Device Password

It is possible to change the access password (which the device request to the app each time it is accessed).
1. In the 'Advanced Settings screen' click on 'Modify Device Password'.
2. Enter the 'device password' (current), then insert the 'new password' and the 'password confirmation'.
3. Press 'Save'.
4. Exit the 'Device's Settings Screen'.

Note: It is a good feature for building managers. During a change of tenants, there is only the necessity to change the device password and offer the device's GID and new password for the new tenant, blocking the access to the old tenant.

6.3. Deleting a device from the app

1. Click on the 'delete' button. From the 'Home screen' click on the 'trash bin' button on the device.
2. A popup notification will appear, asking you to confirm. Click on 'OK'
3. The device will be removed from the account in use, but it will still be configured and connected to the local network and other ControlCam2 accounts which have this device.

6.4. ControlCam2 Operations

Answering a call

When the visitor presses the call button on the outdoor station, your smartphone will receive a ring notification. (Make sure to enable notifications from the app to your smartphone). You can 'Accept' or 'Decline' on the pop-up call alert of the app.
If accept, use the following steps to have a conversation with the visitor

1. Press on the microphone icon and the audio from the outdoor station and the 'Push to talk' microphone will be enabled.
2. Press and hold the 'Press to Talk' button to talk with the visitor.

Unlocking the Door

During a call or monitoring mode, click on the 'locker' button to activate the gate opener
1. Press the 'locker' button on 'device's home screen' to unlock the door.
2. If the 'One-Key Unlock' is not turned on, a popup message will ask you to enter the unlock password (default is '1111').
3. The door will unlock during the configured unlock time.

Monitoring the Outdoor Station

At any time, from the 'Home screen' click on a device's image to access the live stream from the outdoor station. The monitor mode allows you to access all the option than during a call (take a snapshot, record video, listen the outdoor station sound and talk through the outdoor station microphone.

Image Capture

During a call or monitoring mode, click on 📷 to take a snapshot of the outdoor station's image. It can be accessed from the home screen's menu, in 'Media'.

Video record

During a call or monitoring mode, click on 🎥 icon to start recording a video from the outdoor station's image. Click again to finish the record. It can be accessed from the home screen's menu, in 'Media'.

Accessing recorded videos/images

1. From the device home screen, click on the main menu icon.

2. Select the 'Media' option.
3. The first tab shows the recent files (images and videos), the second shows only videos and the third only images.
4. To delete a file, press and hold on the image then confirm the popup message.

App Mode

The second tab of the ControlCam2 'Home Screen' shows the app modes which you can choose the best option for you.
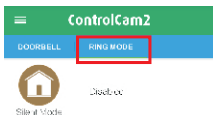
Silent Mode – does not show any notification on the smartphone screen. However, the app continues storing the device's alarms.

Global Ring-in Mode – allows all the devices listed in the user account to notify the smartphone.

Selective Ring-in Mode – allows you to choose which device can or can not notify you with ring and notifications.

1. From the device home screen, click on the second tab which shows your current mode.
2. Select the desired mode. If this is not the current one, a popup message will appear asking you to confirm the change.

Note: If you change to **Selective Mode,** you will be able to click on the mode and select which devices can notify you.

6.5. User Account Configuration

Access the user account's settings by clicking on the 'menu' button from the 'home screen', then click on your profile image or your username.

Change User Account Password

1. From the device 'Account screen', click on 'Change Password'.
2. Enter your 'password' (current), then insert the 'new password' and the 'password confirmation'.
3. Click on the 'Done' button.
4. You will be redirected to the login screen and will need to insert username and the new password.

Change Verification Question and Answer

1. From the device 'Account screen', click on 'Reset Verification'.
2. Enter your 'password' (current), then insert the 'new custom question' and the 'new custom answer'.
3. Click on 'Save'.

Log Out the App

1. From the device 'Account screen', click on 'Logout'.
2. You will be redirected to the login
screen and will need to insert username
and password to reconnect.

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