L Digital Door Entry System Instructions manual
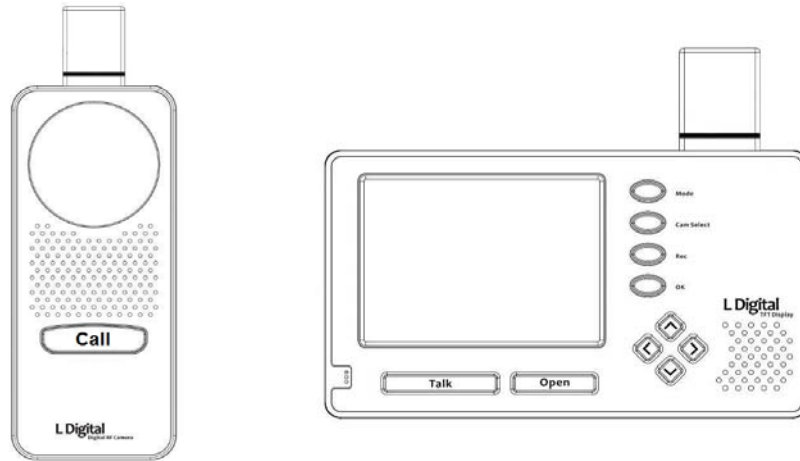
Product Features
2.4G Digital Wireless Image Communication
2 Way Wireless Sound Communication
Volume Adjustable on Monitor
Wireless Door Lock Release Control on Monitor Unit (accessory)
Wireless Door Bell Push Button on Door Entry Camera Unit
Wireless Digital Zoom Function on Door Entry Camera Unit
Wireless Door Camera Motorized Panning Function on Monitor Unit
LEDs on Door Entry Camera to Allow Night Viewing
Battery Operated Door Camera (optional 6V power adaptor as accessory)

Completed Kit contents
1 x 2.4G Wireless TFT Monitor Unit with 1GB SD card
1 x 2.4G Wireless Door Camera Unit
2 x Fixing kits and 1 x instruction manual

Optional Accessories
Wired or Wireless Door Lock Release Kit

Tools required:
Small cross head screw driver
T-10 Star screw driver
Number 6 masonry drill bit
A large masonry drill bit (for the Door Entry Camera)
Hammer drill
Small hammer
Pencil, ruler and spirit level

Important: before you install the L Digital Door Entry System please take these things into consideration.
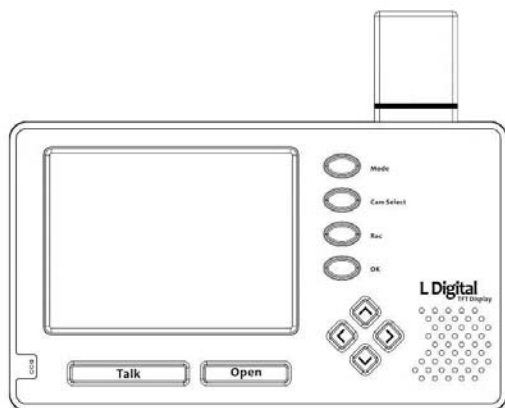Position the TFT Screen close to a 13 Amp socket, for the plug-in adapter
Keep the TFT out of reach of small children.
Choose a position for the TFT, so you can have a clear run with all the power cable.
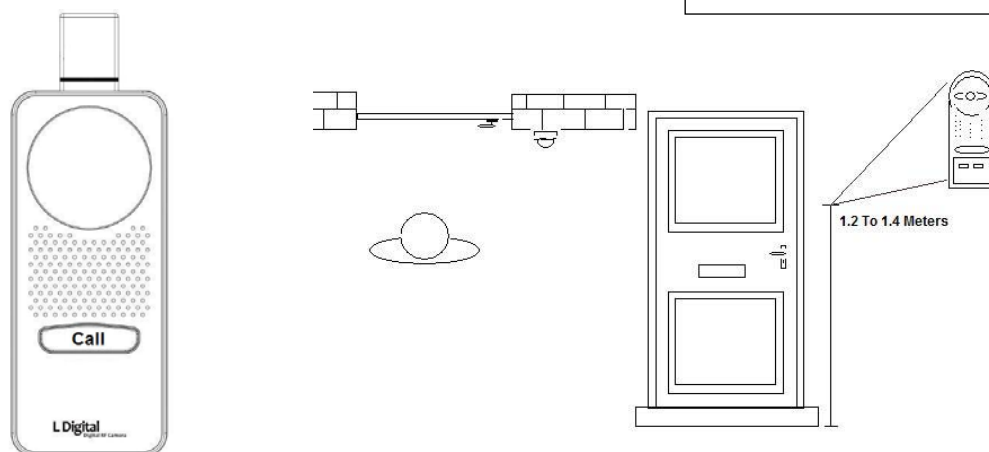
How to install the TFT

Using a spirit level and rule, mark and drill 2 holes 7 cm apart using a No. 6 drill bit, then using the wall plugs and screws provided, insert the masonry plugs. Screw the fixing screws into the plugs leaving 2 mm protruding. Attach the TFT on the wall.

How to install the Door Entry Camera:
When fitting the Door Camera please take into account the position of the sun throughout the year, as the camera view may be affected by direct bright sunlight. Also, if powered by an adaptor, plan the route the power cable will take from the Camera to the mains socket.

Please use the diagram below as a guide

Using a T-10 star screw driver unscrew the wall mount bracket from the Door Entry Camera. Using the back as a template, mark and drill the 2 mounting holes on the wall. The bottom of the Camera housing should be between 1.2 and 1.4 meters from the ground.

If powering the Door Camera by batteries, remove the battery door cover on the rear housing and insert 4 x AA size Batteries. Please replace the battery door on rear housing and mount the Door entry camera unit to the bracket. Using a T-10 star screw driver screw the Door Entry Camera to the wall mount bracket.   In normal use, the batteries will last approximately 6 to 9 months.

If powering the Door Camera by the 6V adaptor, insert the jack plug to the socket on the Door Camera. Using a T-10 star screw driver screw the Door Entry Camera to the wall mount bracket.

IMPORTANT: The Door Camera has a built-in power save mode whereby, if powered by Batteries only, it will shut down into sleep mode one minute after the "Call Button" is pressed.   This sleep mode will not be activated if the Camera is powered by the 6V adaptor, which means that the Door Camera will be in View Mode at all times after power-up.   Note that Alkaline batteries will power the Door Camera for approx 50 days (based on 5 activations a day) whereas Lithium batteries will last for approx 90 days.
How to install the wired or wireless door release (optional accessory)

Please consult the I/M that comes with these items.

System Operation
The system is very easy to operate. When a visitor presses the CALL button on the wireless Door Camera, the electronic door bell will sound at the TFT monitor unit. Please press any buttons on the monitor and the camera view will appear on that monitor's TFT screen (If you have a multi-camera system installed, you may need to press the CAM SELECT button on the Monitor to bring up the Door Camera view). Note that if the Door Camera is being powered by batteries only, then, after 60 seconds, the image will disappear and the Door Camera will automatically revert to its power saving sleep mode.   Press the CALL button again at the Door Camera to re-establish an image on the TFT screen.
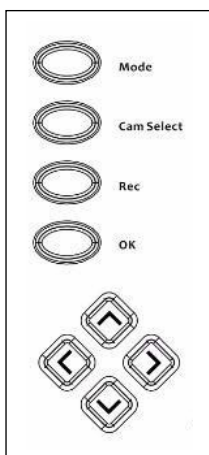
If the visitor is not within the camera view, move the camera Right or Left by using the camera's Panning control buttons. You can talk to the visitor by pressing the Monitor's TALK button.   To listen to the visitor speak, release the TALK button (make sure the volume level is correct). There is no need for the visitor to press the CALL button again to speak to you (unless the Door Camera has reverted to its power saving sleep mode, in which case the visitor should press the CALL button again).

The Door Camera has built-in night view LEDs so you can see your visitor at night, although, because CCTV cameras have limited picture visibility in the dark, even with infra-red LEDs, there is a limited range of view at night.   Therefore, if the image is still dark, you may want to add a separate PIR activated light above the camera to give additional background light

If you have a Door Lock Release added to the system, you can let your visitor in by pressing the OPEN button on the monitor unit.

Note: The TFT Monitor will also revert to its power saving mode 2 minutes after any button was last pressed.
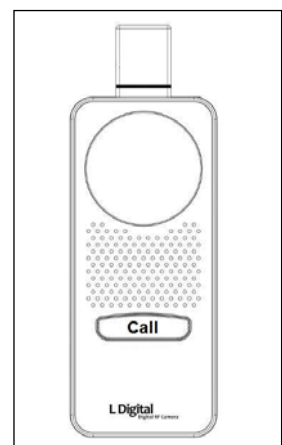
Push Button Functionality

On the TFT Monitor Unit
If Monitor Power Down has been selected, Press any of the buttons as shown in the image on the left to take the TFT Monitor from power save mode (no image displayed) to View Mode.   The Monitor will revert to Power Down Mode 2 minutes after a button is last pressed
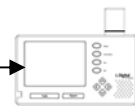
On the Door Camera
Press the Call Button once to wake up the Door Camera (if powered by batteries only) and trigger the door bell.   This will also automatically activate the two way sound communication with the TFT Monitor and start to transmit the image at the Door Camera to the Monitor

Individual Buttons on the TFT Monitor

On the Side of the Monitor, there is a small switch that selects Monitor Off, Power Down On or Off.   If Power Down has been selected, it means the unit will power down 2 minutes after a button has last been pressed.   If Power Down has not been selected, it means that the Monitor will remain constantly in **View Mode**, including audio from the camera in view.

1. Mode Button
SD Card Inserted: In **View mode**, press the Mode button once to change to **Playback mode** or press the MODE button and hold for 3 seconds to change to **Setup mode**.   In either case, press once again to change back to View mode
No SD Card Inserted: In **View mode**, press the Mode button once to change to **Setup mode**, press once again to change back to View mode

2. Camera Select

In **View mode**, this selects the camera to view

3. Up
In **View mode**, this button is not operational
In **Playback mode**, whilst playing a file, this button is not operational
In **Setup mode**, this is an "Up" navigation button.

4. Down
In **View mode**, this button is not operational
In **Playback mode**, whilst playing a file, this is a "Stop" button
In **Setup mode**, this is a "Down" navigation button.

5. Left
In **View mode**, this is pan-left button.
In **Playback mode**, whilst playing a file, this is a "Reverse play" button (you can select the fast reverse video playing speed time from x 1, x 2, x 4 or x 8)
In **Setup mode**, this is a "Left" navigation button.

6. Right
In **View mode**, this is pan-right button.
In **Playback mode**, whilst playing a file, this is a "Fast forward button" (you can select the fast forward video playing speed time from x 2, x 4, x 8, x 16, x 32 or x 64)
In **Setup mode**, this is a right navigation button.

7. OK / Zoom
In **View mode**, press this key to Zoom x 2 (the panning function is now automatically disabled, although you can use the Up/Down/Left/Right buttons to adjust the centre of the Zoomed image), press this button again to revert back to non-Zoom mode and to re-enable the panning function
In **Playback mode**, press this button to play the selected file. During playing, press this key to pause, press again continue to play.
In **Setup mode**, press once to exit the menu and save the settings

8. Talk
In **view mode**, press and hold this key to start a two way sound communication with the door camera, release this button to stop audio communication with the door camera (this means you can continue to hear your visitor, but they cannot hear you).

9. Rec
In **view mode**, and if an SD card is inserted, press once to start video recording, press again to stop the recording and save.
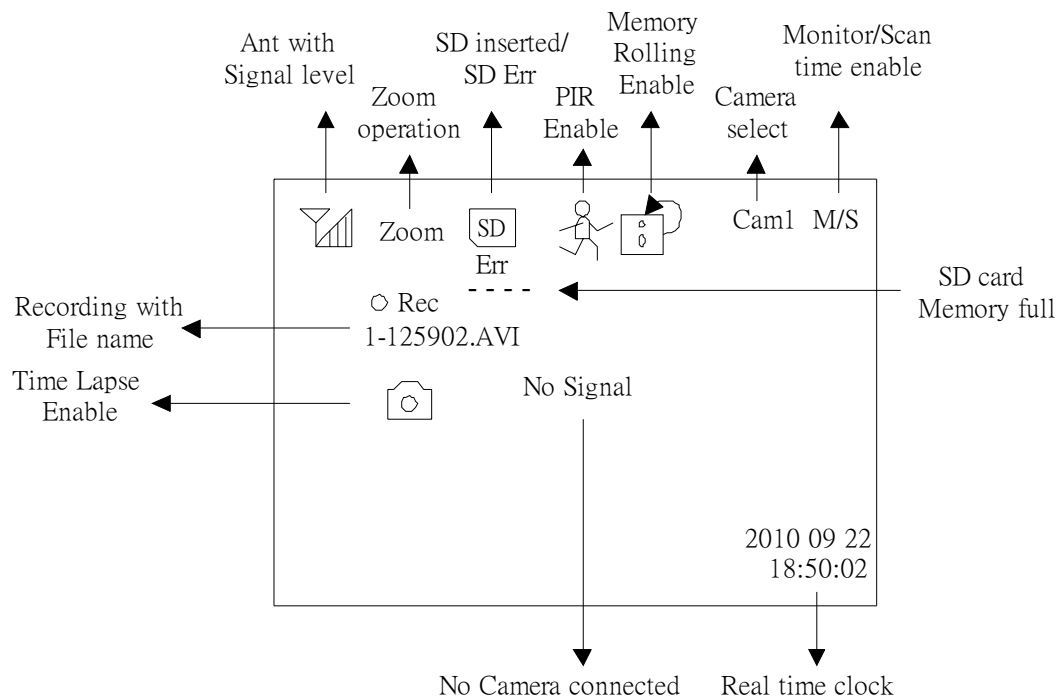
10. Open
In **view mode**, press once to activate the Door Lock Release (if fitted).

TFT Monitor Unit Operation

When you first power up the TFT monitor, this will show the **IS DIGITAL** Logo on the screen and then go directly to **view mode**.   If no button is then pressed for 2 minutes, the monitor will automatically revert back to **power down mode**.   Press any buttons to go back to **view mode**.

In View mode, press the Cam Select Button to select the camera you wish to view.   You will then see the image viewed by that camera together with various function icons as below.

If you wish to view recorded files from the TFT monitor or the Monitor is in Camera Scan Mode (see below), then we recommend that you select Monitor Power Down as OFF

Icon Descriptors:

- Antenna with Signal level – This shows you the RF signal level
- Rec (in Red) – This icon is displayed when the REC button is pressed, to indicate recording
- Zoom – This icon is displayed when the ZOOM feature has been enabled
- Time Lapse – This icon is displayed if Time Lapse has been enabled
- SD/Err – The SD icon is displayed when a good SD card is inserted correctly.   The Err icon is displayed either when a faulty SD card is inserted or when the memory of the SD card is full
- PIR – This icon is displayed if the PIR Trigger has been enabled
- Memory Rolling – This icon is displayed when SD card's automatic memory over-write is enabled (when a card is full, old files are automatically over written)
- Camera selected – Shows which camera image is being displayed on the screen
- M/S – M is displayed when you need to manually selecting the particular camera to view by pressing the Cam Select Button – default setting.   S is selected where you have multiple cameras in the system and you have programming the unit to automatically scan through the multiple camera views
- No Signal – Displayed if the Camera is not connected or out of range
- Time/Date – shows real time clock on screen
- Camera Icon – This icon is displayed when Time Lapse has been selected.   In this mode, the unit will continuously take a single JPEG image, in turn from each camera on the system

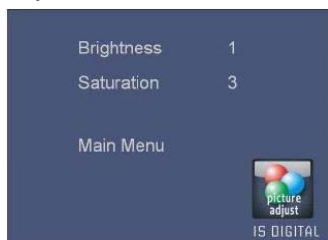## How to Enter the Setup or Programming Mode

In view mode, please press and hold the mode key for 3 seconds and this will take you into the Setup Mode. You will see the Setup Menu as above.   If no button is pressed for 60 seconds, the unit will automatically exit Setup Mode
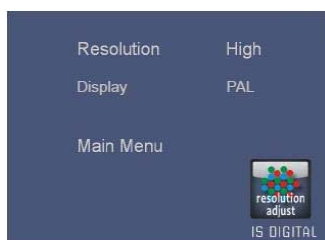
How to select a function from the Setup Menu

Press the up, down, left, right and ok buttons to select the appropriate function menu. When the cursor stays on one of the icons, the icon will be highlighted in yellow and you can press ok to enter that function menu

Picture Adjustment   Resolution Adjustment   Picture Quality Adjustment

Picture Adjustment - You can select the brightness level from 0 to 5 by pressing the left/right buttons.   You can select the saturation level from 0 to 5 by pressing the down/up buttons.   Press OK to save and go back to the Setup Menu.   Press Mode button to go back to the camera viewing mode.
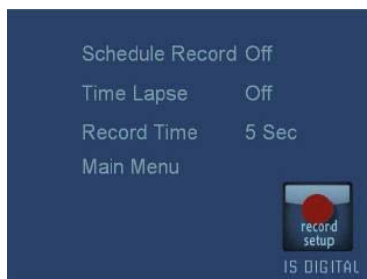
Resolution Adjustment - You can select between NTSC and PAL as the operating system by pressing the left/right buttons.   Default is PAL. You can select between High (640x480) or Low (320 x 240) resolution quality for the picture by pressing the up/down buttons.   Default is High resolution. Press OK to save and go back to the Setup Menu.   Press Mode button to go back to the camera viewing mode.

Picture Quality Adjustment - You can select between High or Low picture quality for both images and video files by pressing the up/down buttons.   Default is High picture quality.   Note that Resolution and Picture Quality Adjustment settings will determine the size of the saved files.   Press OK to save and go back to the Setup Menu.   Press Mode button to go back to the camera viewing mode

Record Setup   Record Time (Sub Menu)   Schedule Record Time

Record Setup
1.   PIR Detection (only applicable if your cameras have a built-in PIR motion sensor) - You can select between the PIR motion sensor being On/Off by pressing the left/right button. Default is Off.   Press the Down button to enter the next programming option in this section or press OK to save and go back to the Setup Menu.   Press Mode button to go back to the camera viewing mode.
        Note: If you have two or more cameras connected in Quad mode, then recording will start from the pir triggered camera.   Whilst the DVR is recording, the PIR trigger on all other cameras will be disabled.

2.   Memory Rolling - You can select whether Memory Rolling is On/Of by pressing the left/right buttons. Default is On. Press the Down button to enter the next programming option in this section or press OK to save and go back to the Setup Menu.   Press Mode button to go back to the camera viewing mode.
        Note: If Memory Rolling is enabled and the SD card is full, then any new recording will automatically over write the first folder saved on the SD card.

3.   Record Time - Press the OK key to enter the Record Time sub menu.   Here, you can program a) the Monitor to record automatically from a camera daily at a scheduled time or b) , the Monitor to continuously take single pictures from all cameras in the system or c) simply to program the length of time you wish to record after a camera has automatically triggered after PIR motion detect (PIR Detection must be enabled – see above)

        Record Time Sub Menu

A) Schedule Record - Press the left/right button to choose Schedule Record Yes/No.   Schedule Record Yes   means that a recording will take place automatically, as scheduled, at the Camera which   on view.   If On is selected, then press the OK button to enter the Schedule Record Time setting sub menu

Schedule Record Time - This sets the time that a recording will start and end every day.   Press the up/down button to select between Start and End and the Right button to select the times.

B) Time Lapse - You can select Time Lapse On/Off together with a time lapse interval of between 1~15 Sec. Time Lapse is used when multiple cameras are on the same system.   If enabled, the first camera will take a shot and then, after the selected time lapse interval, a subsequent shot will be taken from the second camera in the system and so on continuously. (Default Time Lapse Interval: 4 seconds)

You can only select one of Time Lapse or Scheduled Recording

C) Record Time – You can select between Off, 5, 10, 15 or 20 seconds.   This will be the time the Monitor will record for after a PIR camera has detected motion (Default Time: 10 seconds)

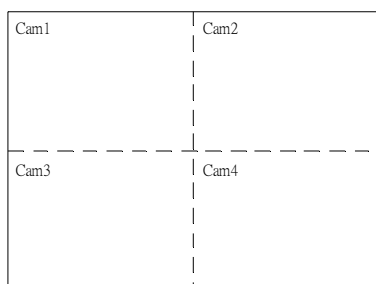|	Scan Time	Audio Adjust	Time Date Set

Time Date Sub Menu

Scan Time – If you enter a value in this section, it means that, in a multiple camera system, the monitor will automatically scan through all the cameras in the system, remaining on each camera view for the period you have selected - 2, 5, 8 or 10 seconds (Default is OFF).

Quad View – If you select as ON, it means you can see, in Quad View, all those cameras connected to the system.

Note: Audio will be disabled in Quad View

Quad View

Note that if you wish to put the Monitor into Scan Mode or Quad Mode, then you should also select Monitor Power Down Mode as OFF

Audio Adjust – This adjusts both the Monitor and Camera Audio Settings
Audio Volume - Press left/right key to choose between 0 to 10 volume level at the TFT monitor (Default is level 5)
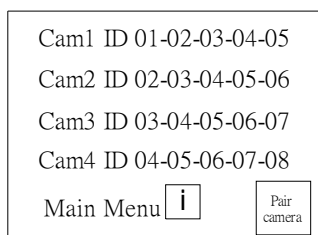TX SPK Volume - Press left/right key to choose between 0 to 10 volume level at the Camera (Default is level 5)
Two Way Audio - Press left/right key to select two way sound communication. (Default is On).   Remember that you need to press the "Talk" Button on the Monitor to talk to the Camera
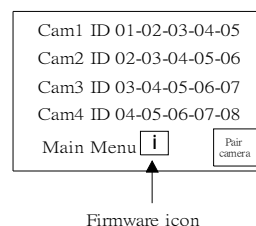
Time Date Set - Press left/right key to enter time/date setting sub menu.

Time Date Sub Menu -Press left/right key to select Yes. Press OK to enter the sub-menu. Change values by pressing up/down key. Press left/right key to move to date/time setting position.

Pair Camera   Format SD Card
Firmware Version

```
Cam1 ID 01-02-03-04-05
Cam2 ID 02-03-04-05-06
Cam3 ID 03-04-05-06-07
Cam4 ID 04-05-06-07-08
Main Menu  i      Pair
                  camera
```

```
Format SD Card   Yes


Main Menu

                    SD
                    format
                    SD card
                    IS DIGITAL
```

```
Cam1 ID 01-02-03-04-05
Cam2 ID 02-03-04-05-06
Cam3 ID 03-04-05-06-07
Cam4 ID 04-05-06-07-08
Main Menu  i      Pair
                  camera
```
            Firmware icon

Pair Camera: Each system will support a maximum of 4 cameras.   Each Camera has a unique identify code which can be found on a label on the back of the camera. The Monitor RF Receiver needs to know which cameras are in the system. Please enter the fixed pairing code of each camera. All codes are 10 digits long (0~F). Default Setting in the Monitor is that all camera IDs are FF.FF.FF.FF.FF.

How to set the camera ID code using the example of Camera 1 having the Code - 01.02.03.04.05:
Press once on the up key to change the first address bit to 01, then press the right key to move to the second address bit.   Press the up key to change to 02, then press the right key again to move to the third address. Press the up key three times to change to 03 and continue in this manner for the fourth and fifth address bits.   Press OK key to save and go back to the main menu or press mode to exit setup menu.

Format SD Card - You can format the SD card on the TFT monitor.   This will clear the card's memory. Press left/right key to select yes and press OK key to confirm SD format.

Firmware Version - In the Pair camera menu, press the right key to move to the **i** icon, press OK to enter and the screen will show your Monitor and all your connected cameras firmware versions.

```
      Version
    RX : v0.0.5
  Cam1 : v0.0.3
  Cam2 : v0.0.3
  Cam3 : v0.0.3
  Cam4 : v0.0.3
```

How to playback recorded files whilst in view mode

In camera view mode, please press the mode key to enter playback menu

Playback Menu   Date of Record   Record file name

```
                          Video/Still picture  play back
    play    play
    video   picture       Folder directory      File directory

            play          < --- Back             < --- Back
            IS DIGITAL      20100105               1-224530
                            20100106               1-224545

                          year month date        hrs min sec
```

Playback Menu - When in playback mode, you can press left/right key to select   VIDEO or PICTURE on the menu to get into the related directory for playback video or single picture (single pictures are recorded in Time Lapse Mode only). Press the OK key to enter the picture or video file directory.

Date of Recording –Press Up/Down key to select the date of the file folder record you want to see. Press the OK key to select.   The last item in each file is the lastest recording on that date saved on the SD card.

Record file name - You can also select which file you want to see by "recording time".   Press Up/Down key to select the time record file and OK to select. The last item file is the lastest record file saved in SD card.

FCC warning statement
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
 ・ Reorient or relocate the receiving antenna.
 ・ Increase the separation between the equipment and receiver.
 ・ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
 ・ Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

 RF Exposure Statement:

 To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum distance between 20cm the radiator your body: Use only the supplied antenna.