I Digital Pan and Tilt Camera System Instruction manual





Product Features

2.4G Digital Wireless Image Communication
2 Way Wireless Sound Communication
Volume Adjustable at Receiver
System can expand to 4 cameras, including Door Camera
Wireless Digital Zoom Function on Camera
Wireless Pan and Tilt Function on Camera
Built-in PIR Motion Sensor on Camera
LEDs on Camera to Allow Night Viewing
Receiver and Camera powered by 9.5V adaptor

Completed Kit contents

1 x 2.4G Wireless Receiver with 1GB SD card and SCART connection to TV 1 x 2.4G Wireless Pan/Tilt Camera 2 x Fixing kits and 1 x instruction manual 2 x 9.5V 500mA BS adaptor

Optional Accessories

Additional Pan and Tilt Cameras Additional Door Camera

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 I Digital Wireless System please take these things into consideration. Position the receiver close to a 13 Amp socket, for the plug-in adapter Keep the camera and receiver out of reach of small children. Choose a position for the receiver, so you can have a clear run with all the power cable.

How to install the Receiver

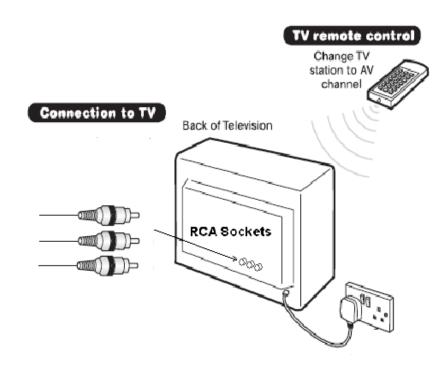
Place the Receiver close to a power socket. Connect the RCA Plugs to the RCA sockets on a TV.The connectors are color coded, so please make sure the cable connections match on both ends.

Insert the adaptor jack plug to the socket on the Receiver.

How to install the Camera: 1. Planning your system layout

Try not to position the camera so that it is facing directly at the sun as this will affect the picture quality.

Remember the changing positions of the sun during the year. We recommend that you install an outside incandescent 100W lamp or a small PIR halogen security floodlight to improve the ambient light and view seen by the camera. We suggest you install the CCTV system first and see if the end result is sufficient to your needs / expectations.



2. Mounting and cameras system installation

- 1. Use the bracket of the camera to mark out the screw locations.
- 2. Drill four holes on the wall and install the screw with bracket on the wall.

Also, plan the route the power cable will take from the Camera to the mains socket. Insert the adaptor jack plug to the socket on the Camera.

System Operation

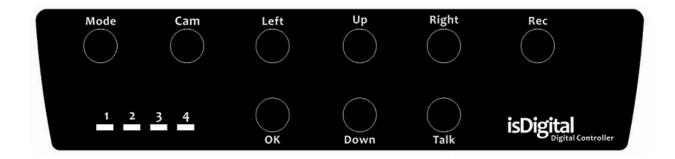
The system is very easy to operate. When powered on the wireless Camera, the camera view will appear on the Television screen (If you have a multi-camera system installed, you may need to press the CAM SELECT button on the Receiver to bring up the Camera view).

If you need to change the camera view, move the camera Up or Down or Right or Left by using the camera's Pan/Tilt control buttons. You will hear audio from the Camera in view. If you wish to talk to a person in the Camera's view, press the Receiver's TALK button. To listen to the visitor speak, release the TALK button (make sure the volume level is correct). If you don't wish to hear sound, adjust the audio level to zero

The 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

The Camera also has built-in PIR motion detection to activate the picture and sound recording.

Buttons on the Receiver



1. Mode Button

<u>SD Card Inserted</u>: 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. Cam

In View mode, this selects the camera to view

3. Up

In **View mode**, this button is tilt-up button.

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 tilt-down button.

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.

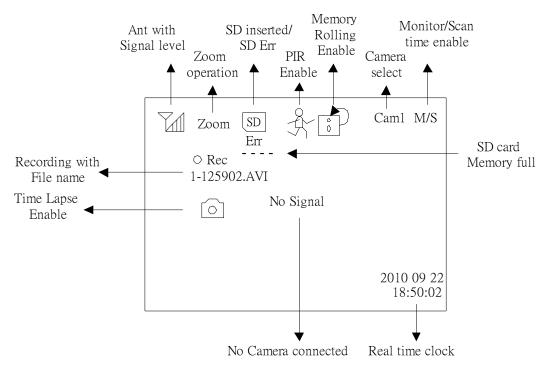
10. Open

In **view mode**, press once to activate the Door Lock Release (if fitted).

Receiver Unit Operation

Connect the Receiver unit to TV. When you first power up the Receiver unit, this will show the **IS DIGITAL** Logo on the screen and then go directly 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.



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

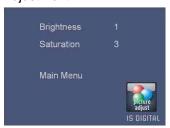


In view mode, please press and hold the mode key for 3 seconds and this will take you into the Setup Mode. You will see the Setup Menu as above.

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 Adjustment



Resolution Adjustment

Picture Quality





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.

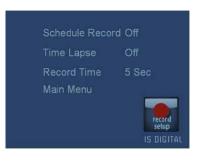
Picture Quality Adjustment - You can select between High or Low picture quality for both images and video files by pressing the up/down buttons. Default is High picture quality. Note that Resolution and Picture Quality Adjustment settings will determine the size of the saved files. Press OK to save and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

 PIR Detection - 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 <u>pir triggered camera</u>. Whilst the DVR is recording, the PIR trigger on all other cameras will be disabled.

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 overwrite 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 to record automatically from a camera daily at a scheduled time or b), the Receiver 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 will record for after a PIR camera has detected motion (Default Time: 10 seconds)

Scan Time

Scan Time 2 Sec
Quad View No

Main Menu

Audio Volume 1
TX SPK Volume 3
Two Way Audio Yes
Main Menu

Main Menu

Main Menu

Main Menu

Main Menu

Time Date Set

Date / Time

Date / Time

Audio Volume 1
TX SPK Volume 3
Two Way Audio Yes
Main Menu

Main Menu

Am

Main Menu

Ma

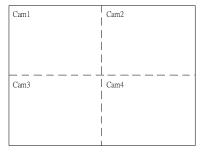
Time Date Sub Menu

Scan Time – If you enter a value in this section, it means that, in a multiple camera system, the Receiver 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



Audio Adjust – This adjusts both the Receiver and Camera Audio Settings

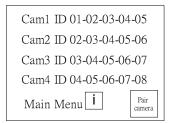
Audio Volume - Press left/right key to choose between 0 to 10 volume level at the Receiver (Default is level 5) TX SPK Volume - Press left/right key to choose between 0 to 10 volume level at the Camera (Default is level 5)

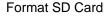
Two Way Audio - Press left/right key to select two way sound communication. (Default is On). Remember that you need to press the "Talk" Button on the Receiver to talk to the Camera Time Date Set - Press left/right key to enter time/date setting sub menu.

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.

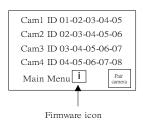
Pair Camera

Firmware Version









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 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 is that all camera IDs are 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.

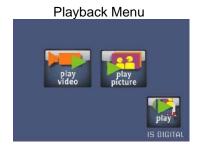
Format SD Card - You can format the SD card on the Receiver. This will clear the card's memory. Press left/right key to select yes and press OK key to confirm SD format.

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 Receiver and all your connected cameras firmware versions.

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





Video/Still picture play back

Folder directory

<--- Back

--- 20100105

--- 224530

--- 1-224545

year month date

File directory

--- Back

--- Back

--- Back

--- 1-224530

--- 1-224545

--- 1-224545

Record file name

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.