

PIXAPRO® ST-IV

PIXAPRO® LTD.
Unit5 Sterling Park

Pedmore Road,
Brierley Hill,
West Midlands,
DY5 1TB

Tel: 0121 552 3113
Web: www.essentialphoto.co.uk
E-mail: info@essentialphoto.co.uk

705-XPRZZ0-00

Made In China

FC CE RoHS  

Instruction Manual



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Foreword

Thanks for your purchase of this ST-IV O wireless flash trigger.

This wireless flash trigger is suitable for using Olympus & Panasonic cameras to control PIXAPRO flashes with ONE System e.g. camera flash, outdoor flash, and studio flash. Featuring multi-channel triggering, stable signal transmission, and sensitive reaction, it gives photographers unparalleled flexibility and control over their strobist setups. The flash trigger applies to hotshoe-mounted Olympus & Panasonic series cameras, as well as the cameras which have PC sync sockets.

With ST-IV O wireless flash trigger, high speed synchronization is available for most of camera flashes in the market which support TTL. The max flash synchronization speed is up to 1/8000s*.

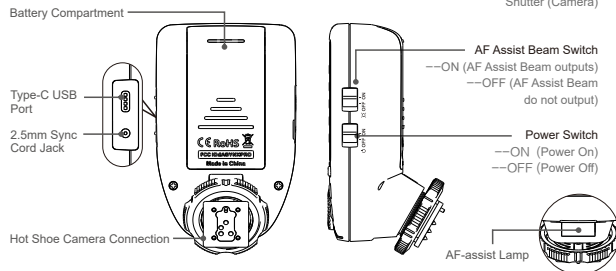
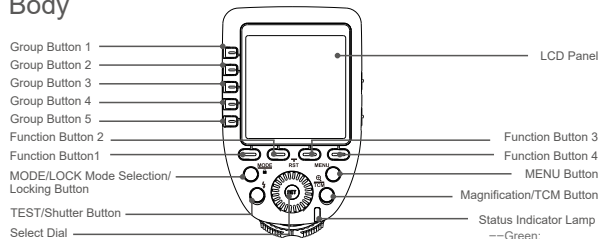
*: 1/8000s is achievable when the camera has a max camera shutter speed of 1/8000s.

⚠ Warning

- ⚠ Do not disassemble. Should repairs become necessary, this product must be sent to an authorized maintenance center.
- ⚠ Always keep this product dry. Do not use in rain or in damp conditions.
- ⚠ Keep out of reach of children.
- ⚠ Do not use the flash unit in the presence of flammable gas. In certain circumstance, please pay attention to the relevant warnings.
- ⚠ Do not leave or store the product if the ambient temperature reads over 50°C.
- ⚠ Turn off the flash trigger immediately in the event of malfunction.
- ⚠ Observe precautions when handling batteries
 - Use only batteries listed in this manual. Do not use old and new batteries or batteries of different types at the same time.
 - Read and follow all warnings and instructions provided by the manufacturer.
 - Batteries cannot be short-circuited or disassembled.
 - Do not put batteries into a fire or apply direct heat to them.
 - Do not attempt to insert batteries upside down or backwards.
 - Batteries are prone to leakage when fully discharged. To avoid damage to the product, be sure to remove batteries when the product is not used for a long time or when batteries run out of charge.
 - Should liquid from the batteries come into contact with skin or clothing, rinse immediately with fresh water.

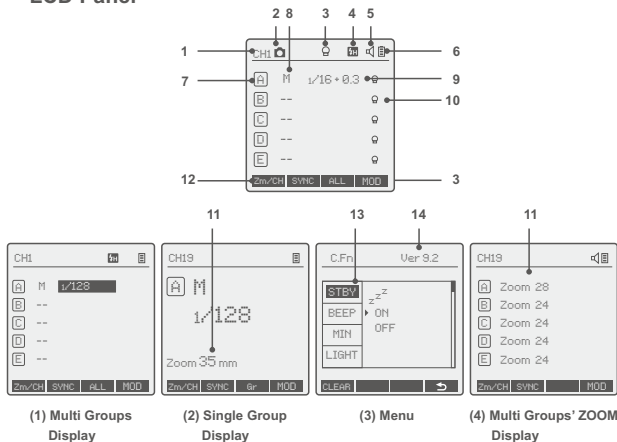
Names of Parts

• Body



Names of Parts

• LCD Panel



1. Channel (32)
2. Camera Connection
3. Modeling Lamp Master Control
4. High-Speed
5. Sound
6. Battery Level Indication
7. Group
8. Mode
9. Power
10. Group's Modeling Lamp
11. ZOOM Value
12. Icons of Function Button
13. C.Fn Menu
14. Version

Battery

AA alkaline batteries are recommended.

• Installing Batteries

As shown in the illustration, slide the battery compartment lid of the flash trigger and insert two AA batteries separately.

• Battery Level Indication

Check the battery level indication on the LCD panel to see the remaining battery level during the usage.



Battery Level Indication	Meaning
3 grids	Full
2 grids	Middle
1 grid	Low
Blank grid	Low battery, please replace it.
Blinking	< 2.5V The battery level is going to be used out immediately (please replace new batteries, as low power leads to no flash or flash missing in case of long distance).

The battery indication only refers to AA alkaline batteries. As the voltage of NI-MH battery tends to be low, please do not refer to this chart.

Using the Flash Trigger

1. As a Wireless Camera Flash Trigger

Take Li-ion580 II as an example:

- 1.1 Turn off the camera and mount the transmitter on camera hotshoe. Then, power on the flash trigger and the camera.

Using the Flash Trigger

- 1.2 Long press the <Zm/CH> button to set channel, group, mode and parameters (refers to the contents of "Setting the Flash Trigger").
- 1.3 Turn on the camera flash, press the <Z> wireless setting button and the <(P)> wireless icon and <SLAVE> slave unit icon will be displayed on the LCD panel. Press the <CH> button to set the same channel to the flash trigger, and press the <Gr> button to set the same group to the flash trigger (Note: please refer to the relevant instruction manual when setting the camera flashes of other models).
- 1.4 Press the camera shutter to trigger and the status lamp of the flash trigger turns red synchronously.



2. As a Wireless Outdoor Flash Trigger

Take CITI1600 as an example:

- 2.1 Turn off the camera and mount the transmitter on camera hotshoe. Then, power on the flash trigger and the camera.
- 2.2 Long press the <Zm/CH> button to set channel, group, mode and parameters (refers to the contents of "Setting the Flash Trigger").
- 2.3 Power on the outdoor flash and press the <Z> wireless setting button and the <(P)> wireless icon will be displayed on the LCD panel. Long press the



Using the Flash Trigger

- <GR/CH> button to set the same channel to the flash trigger, and short press the <GR/CH> button to set the same group to the flash trigger (Note: please refer to the relevant instruction manual when setting the outdoor flashes of other models).
- 2.4 Press the camera shutter to trigger and the status lamp of the flash trigger turns red synchronously.

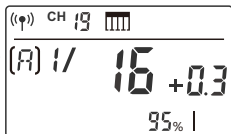
Using the Flash Trigger

3. As a Wireless Studio Flash Trigger

Take LUMI II 400 as an example:

- 3.1 Turn off the camera and mount the transmitter on camera hotshoe. Then, power on the flash trigger and the camera.
- 3.2 Long press the <Zm/CH> button to set channel, group, mode and parameters (refers to the contents of "Setting the Flash Trigger").
- 3.3 Connect the studio flash to power source and power it on. Synchronously press down the <GR/CH> button and <S1/S2> button and the <((P))> wireless icon will be displayed on the LCD panel. Long press the <GR/CH> button to set the same channel to the flash trigger, and short press the <GR/CH> button to set the same group to the flash trigger (Note: please refer to the relevant instruction manual when setting the studio flashes of other models).
- 3.4 Press the camera shutter to trigger. And the status lamp of the camera flash and the flash trigger both turn red synchronously.

Note: As the studio flash's minimum output value is 1/32, the output value of the flash trigger should be set to or over 1/32. As the studio flash do not have TTL and stroboscopic functions, the flash trigger should be set to M mode in triggering.



Using the Flash Trigger

4. As a Flash Trigger with 2.5mm Sync Cord Jack

Operation method:

- 4.1 The connection method please refers to the contents of "As a Wireless Studio Flash Trigger" and "As a Wireless Shutter Release".
- 4.2 Press the shutter normally and the flashes will be controlled by sync cord jack's signal.



Setting the Flash Trigger

• Power Switch

Slide the Power Switch to ON, and the device is on and status indicator lamp will not reveal.

Note: In order to avoid power consumption, turn off the transmitter when not in use.

• Automatically Enter Power Saving Mode

1. The system will automatically enter standby mode after stop operating the transmitter over 90 seconds. And the displays on the LCD panel disappear now.

2. Press any button to wake up. If the flash trigger is attached to the hot shoe of Nikon camera, half press the camera shutter can also wake the system up.

Note: If do not want to enter power saving mode, press the <MENU> button to enter C.Fn custom settings and set STBY to OFF.

• Power Switch of AF Assist Beam

Slide the AF assist beam switch to ON, and the AF lighting is allowed to output.

When the camera cannot focus, the AF assist beam will turn on; when the camera can focus, the AF assist beam will turn off.

• Channel Setting

1. Long press the <Zm/CH> button and the channel value will be chosen.

2. Turn the select dial to choose the appropriate channel. Press the <SET> button again to confirm the setting.

3. This flash trigger contains 32 channels which can be changed from 1 to 32. Set the transmitter and the receiver to the same channel before usage.

Setting the Flash Trigger

• Wireless ID Settings

Change the wireless channels and wireless ID to avoid interference for it can only be triggered after the wireless IDs and channels of the master unit and the slave unit are set to the same.

Press the <MENU> button to enter C.Fn ID. Press the <SET> button to choose OFF channel expansion shutdown, and choose any figure from 01 to 99.

Note: As the current PIXAPRO flashes do not have wireless ID setting functions, please set ID to OFF.

• Mode Setting

1. Short press the <MODE> button, and the mode of the current group will change.

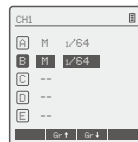
2. Set the groups to five groups (A-E)

2.1 When displaying multiple groups, press the <MODE> button to switch the multi-group mode to MULTI mode. Press the group selection button can set the MULTI mode to ON or OFF.

2.2 When displaying multiple groups, press the group selection button or <MODE> button in one-group mode, and A, B and C group's mode will be changed by the order of TTL/M/-- while D and E group will be changed in or M/-- mode.

3. When setting the group to 16 groups (0-F), there is only manual mode M.

4. Long press the <MODE> button for 2 seconds until "LOCKED" is displayed on the bottom of the LCD panel, which means the screen is locked and no parameters can be set. Long press the <MODE> button again to unlock.



Setting the Flash Trigger

• Magnification Function

Switch between multi-group and one-group mode: choose a group in multi-group mode and press the <TCM> button to magnify it to one-group mode. Then, press the <TCM> button to back to multi-group.

• Output Value Settings

1. Multi-group displays in the M mode

1.1 Press the group button to choose the group, turn the select dial, and the power output value will change from Min to 1/1 in 0.3 stop increments. Press the <SET> button to confirm the setting.

1.2 Press <ALL> button to choose all groups' power output value, turn the select dial, and all groups' power output value will change from Min to 1/1 in 0.3 stop increments. Press <ALL> button again to confirm the setting.

2. One-group displays in the M mode

Turn the select dial and the group's power output value will change from Min to 1/1 in 0.3 stop increments.

Note: Min. refers to the minimum value that can be set in M or Multi mode. The minimum value can be set to 1/128 or 1/256 according to C.Fn-Min. For most of camera flashes, the minimum output value is 1/128 and cannot be set to 1/256. However, the value can change to 1/256 when using in combination with Godox strong power flashes e.g. AD600, etc.

Setting the Flash Trigger

• Flash Exposure Compensation Settings

1. Multi-group displays in the TTL mode

1.1 Press the group button to choose the group, turn the select dial, and the FEC value will change from -3 to ~3 in 0.3 stop increments. Press the <SET> button to confirm the setting.

1.2 Press <ALL> button to choose all groups' FEC value, turn the select dial, and all groups' FEC value will change from -3 to ~3 in 0.3 stop increments. Press <ALL> button again to confirm the setting.

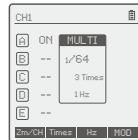
2. One-group displays in the TTL mode

Turn the select dial and the group's power output value will change from -3 to ~3 in 0.3 stop increments.

Note: The FEC value displayed on the ST-IV O will not be displayed on the flash under its control. As the FEC values of ST-IV O and flash are two different value, the output value are the total FEC value of ST-IV O and flash (for example, if ST-IV O's FEC value is -2 while the flash's FEC value is +3, then the flash output is +1.).

• Multi Flash Settings (Output Value, Times and Frequency)

1. In the multi flash (TTL and M icon are not displayed).
2. The three lines are separately displayed as power output value, Times (flash times) and Hz (flash frequency).
3. Turn the Select Dial to change the power output value from Min. to 1/4 in integer stops.
4. Short press the Times button can change flash times. Turn the select dial to change the setting value.
5. Short press the Hz button can change flash frequency. Turn the select dial to change the setting value.



Setting the Flash Trigger

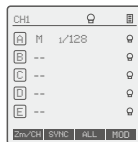
- Until all the amounts are set. Or during any value setting, short press the <MODE> button to exit the setting status. No values will blink.
- In the multi flash setting submenu, short press the <MODE> button to return to main menu when no values are blinking.

Note: As flash times are restricted by flash output value and flash frequency, the flash times cannot surpass the upper value that permitted by the system.

The times that transported to the receiver end are a real flash time, which is also related to the camera's shutter setting.

Modeling Lamp Settings

- When displaying multiple groups, press the <MOD> button to control the ON/OFF of the modeling lamp.
- Press the group button to choose the group when displaying multiple groups or when displaying one-group, press the <MOD> button to control the ON/OFF of the modeling lamp (note: The models that can use one-group to ON/OFF the modeling lamp are as follows: CITI600 Pro, LUMI II, KINO II+, STORM II, series, etc. The outdoor flash PIKA200 and CITI600 can use this function after upgrade. The new arrivals with modeling lamps can also use this function.).

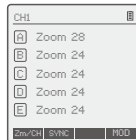


Setting the Flash Trigger

ZOOM Value Settings

Short press the <Zm/CH> button and the ZOOM value will be displayed on the LCD panel. Choose the group and turn the select dial, and the ZOOM value will change from AUTO/24 to 200. Choose the desired value and press the <Zm/CH> button again to back to the main menu.

Note: The flash's ZOOM should be set to Auto (A) mode before responding.



Shutter Sync Settings

- High-speed sync:** press the <SYNC> button and is displayed **HS** on the LCD panel. Press the OK button on OLYMPUS or MENU button on PANASONIC camera to enter Flash Mode and choose Fill-flash **⚡**. Then, set the camera shutter.
- Press OK button on Olympus camera or MENU button on Panasonic camera to set second-curtain mode. And set camera shutter after **⚡_{2nd-C}** mode is displayed.



Buzz Settings

Press the <MENU> button to enter C.Fn BEEP and press the <SET> button. Choose ON to turn on the BEEP while OFF to turn off it. Press the <MENU> button again to back to the main menu.



Setting the Flash Trigger

• Sync Socket Settings

1. Press the <MENU> button to enter C.Fn SYNC and press the <SET> button to choose IN or OUT. Press the <MENU> button again to back to the main menu.

1.1 When choosing IN, this sync socket will enable ST-IV O to trigger flash.

1.2 When choosing OUT, this sync socket will send trigger signals to trigger other remote control and flash.



• TCM Function

TCM transform function is a particular function that owned by PIXAPRO: 1/128

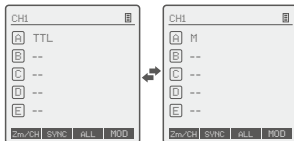
TTL flash value transform into power output value in M mode.

1.1 Set the flash trigger to TTL mode and attach it to the camera. Press the shutter for shooting.

1.2 Long press the <TCM> button, and the flash value in TTL mode will transform into power output value in M mode (The displayed minimum value is the set Min. value).

1.3 Please refer to the C.Fn setting custom functions to see the flash models which are compatible with TCM functions.

Note: Please choose the relevant models in TCM function in C.Fn custom settings according to your own flash.



Setting the Flash Trigger

• SHOOT Function Settings

Press the <MENU> button to enter C.Fn SHOOT.

Press the <SET> button to choose one-shoot or multi-shoots, and press the <MENU> button again to back to the main menu.

One-shoot: When shooting, choose one-shoot. In the M and Multi mode, the master unit only sends triggering signals to the slave unit, which is suitable for one person photography for the advantage of power saving.

Multi-shoots: When shooting, choose multi-shoots, and the master unit will send parameters and triggering signals to the slave unit, which is suitable for multi person photography. However, this function consumes power quickly.

APP: Only send triggering signal when camera is shooting (control the flash's parameters by smartphone APP).





Setting the Flash Trigger

• C.Fn: Setting Custom Functions

The following table lists the available and unavailable custom functions of this flash.

Custom Function	Function	Setting Signs	Settings and Description
STBY	Sleep	ON	ON
		OFF	OFF
BEEP	Beeper	ON	ON
		OFF	OFF
MIN	Power output value	1/128	The minimum output is 1/128
		1/256	The minimum output is 1/256
LIGHT	Backlighting time	12sec	Off in 12 seconds
		OFF	Always off
		ON	Always lighting
SYNC	Sync cord jack	IN	Enable ST-IV O to trigger flash
		OUT	Export triggering signal to trigger other remote control and flash
GROUP	Group	5 (A-E)	5 groups (A-E)
		16 (O-F)	16 groups (O-F); 16 groups when the receiver end is studio flash, which can only be set to M mode in this state
LCD	Contrast ratio of LCD panel	-3--+3	The contrast ration can be set as integral number from -3 to +3

Setting the Flash Trigger

Custom Function	Function	Setting Signs	Settings and Description		
SHOOT		One-shoot	Only send triggering signals in the M & Multi mode when camera is shooting		
		APP	Full-shoot	Send parameters and triggering signal when camera is shooting (suitable for multi person photography)	
			APP	Only send triggering signal when camera is shooting (control the flash's parameters by smartphone APP)	
DIST	Triggering distance	0-30m	0-30m triggering		
		1-100m	1-100m triggering		
ID	Wireless ID	OFF	Off		
		01-99	Choose any figure from 01-99 (the current flashes cannot use this function temporarily)		
TCM	TCM transform function		Li-ion580 II Series	The power output values in the M mode which are transformed from TTL mode, being subjected to the master flash when mixing	
			200j		PIKA 200
			360j		HyBRID 360 TTL
			600j		CITI600 Series

Compatible Flash Models

















• Compatible Flash Models

Transmitter	Receiver	Flash	Note
ST-IV O	--	CITI 600Pro/CITI 600 series HyBRID 360 TTL series/ PIKA200/ Li-ion580II series/ STORM II series/ LUMI II Series/ KINO II+ Series	
	PRO AC 2.4GHz	HyBRID360 Manual / RIKO 400 LUMI Series, Storm 400, Kino 800 KINO II 600	The flashes with PIXAPRO wireless USB port Can only be triggered
	ST-I 2.4G	Li-ion580 E TTL / ITTL / Manual	

Note: The range of support functions: the functions that are both owned by ST-IV O and flash.

Compatible Flash Models

• The relationship of PRO AC 2.4 wireless system and ST-IV wireless system:

PRO AC 2.4 (Code Switch)								
ST-III/ST-IV (Display Screen)	CH01	CH02	CH03	CH04	CH05	CH06	CH07	CH08
PROAC 2.4 (Code Switch)								
ST-III/ST-IV (Display Screen)	CH09	CH10	CH11	CH12	CH13	CH14	CH15	CH16

Compatible Camera Models

This flash trigger can be used on the following Olympus/Panasonic series camera models:

Olympus: PEN-F, E-P3, E-P5, E-PL5, E-PL6, E-PL7, E-PL8, E-M1, E-M10II

Panasonic: DMC-G85, DMC-GH4, DMC-GF1, DMC-GX85, DMC-LX100, DMC-FX2500GK

1. This table only lists the tested camera models, not all Olympus/Panasonic series cameras. For the compatibility of other camera models, a self-test is recommended.
2. Rights to modify this table are retained.

Technical Data

Model	ST-IV O
Compatible cameras	Olympus/Panasonic cameras (TTL autoflash) Support for the cameras that have PC sync socket.
Power supply	2*AA batteries
Flash Exposure Control	
TTL autoflash	TTL
Manual flash	Yes
Stroboscopic flash	Yes
Function	
High-speed sync	Yes
Second-curtain sync	Yes
Flash exposure compensation	Yes, ± 3 stops in 1/3 stop increments
Flash exposure lock	Yes
Focus assist	Yes
Modeling lamp	Control the modeling lamp by the flash trigger
Beeper	Control the beeper by the flash trigger
Wireless setting	The receiver end can control the camera shooting through the 2.5mm sync cord jack
ZOOM setting	Adjust the ZOOM value by the transmitter
TCM function	Transform the TTL shooting value into the output value in the M mode

Technical Data

Model	ST-IV O
Firmware upgrade	Upgrade through the Type-C USB port
Memory function	Settings will be stored 2 seconds after last operation and recover after a restart
Wireless Flash	
Transmission range (approx.)	0-100m
Built-in wireless	2.4G
Modulation mode	MSK
Channel	32
Wireless ID	01-99
Group	16
Other	
Display	Large LCD panel, backlighting ON or OFF
Dimension/Weight	90x58x50mm/80g
2.4G Wireless Frequency Range	2413.0MHz-2464.5MHz
Max. Transmitting Power of 2.4G Wireless	5dbm

• Restore Factory Settings

Synchronously press the two function button in the middle, and the restore factory settings are finished until the "RESET" is displayed on the LCD panel.

• Firmware Upgrade

This flash trigger supports firmware upgrade through the Type-C USB port. Update information will be released on our official website.

- USB connection line is not included in this product. As the USB port is a Type-C USB socket, please use Type-C USB connection line.
- As the firmware upgrade needs the support of PIXAPRO G2 software, please download and install the "PIXAPRO G2 firmware upgrade software" before upgrading. Then, choose the related firmware file.

Attentions

- As the products needs to do firmware upgrade, please refer to instruction manual of the newest electric version as final.
1. Unable to trigger flash or camera shutter. Make sure batteries are installed correctly and Power Switch is turned on. Check if the transmitter and the receiver are set to the same channel, if the hotshoe mount or connection cable is well connected, or if the flash triggers are set to the correct mode.
 2. Camera shoots but does not focus. Check if the focus mode of the camera or lens is set to MF. If so, set it to AF.
 3. Signal disturbance or shooting interference. Change a different channel on the device.



The Reason & Solution of Not Triggering in PIXAPRO 2.4G Wireless

1. **Disturbed by the 2.4G signal in outer environment (e.g. wireless base station, 2.4G wifi router, Bluetooth, etc.)**
 - To adjust the channel CH setting on the flash trigger (add 10+ channels) and use the channel which is not disturbed. Or turn off the other 2.4G equipment in working.
2. **Please make sure that whether the flash has finished its recycle or caught up with the continuous shooting speed or not(the flash ready indicator is lighten) and the flash is not under the state of over-heat protection or other abnormal situation.**
 - Please downgrade the flash power output. If the flash is in TTL mode, please try to change it to M mode(a preflash is needed in TTL mode).

3. **Whether the distance between the flash trigger and the flash is too close or not**
 - Please turn on the "close distance wireless mode" on the flash trigger (< 0.5m):
 - Please set the C.Fn-DIST to 0-30m.
4. **Whether the flash trigger and the receiver end equipment are in the low battery states or not**
 - Please replace the battery(the flash trigger is recommended to use 1.5V disposable alkaline battery).

Caring for Flash Trigger

- **Avoid sudden drops.** The device may fail to work after strong shocks, impacts, or excess stress.
- **Keep dry.** The product isn't water-proof. Malfunction, rust, and corrosion may occur and go beyond repair if soaked in water or exposed to high humidity.
- **Avoid sudden temperature changes.** Condensation happens if sudden temperature changes such as the circumstance when taking the transceiver out of a building with higher temperature to outside in winter. Please put the transceiver in a handbag or plastic bag beforehand.
- **Keep away from strong magnetic field.** The strong static or magnetic field produced by devices such as radio transmitters leads to malfunction.

Statement

- A.** 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.
- B. Warning:** Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.
- C. NOTE:** 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.