



FOCUS

FS-P250 Proxy Recorder

User Manual

September 2012 Ver. 2.2

LEGAL NOTICES

LEGAL

THIS DOCUMENT CONTAINS CONFIDENTIAL AND TRADE SECRET INFORMATION OF VITEC AND ITS RECEIPT OR POSSESSION DOES NOT CONVEY ANY RIGHTS TO REPRODUCE OR DISCLOSE ITS CONTENTS, OR TO MANUFACTURE, USE, OR SELL ANYTHING THAT IT MAY DESCRIBE. USE IN WHOLE OR IN PART WITHOUT THE SPECIFIC WRITTEN AUTHORIZATION OF VITEC IS STRICTLY FORBIDDEN.

EVERY EFFORT HAS BEEN MADE TO ENSURE THAT THE INFORMATION IN THIS DOCUMENT IS COMPLETE AND ACCURATE AT THE TIME OF PRINTING; HOWEVER, THE

INFORMATION CONTAINED IN THIS DOCUMENT IS SUBJECT TO CHANGE.

Copyright 2012 VITEC

All Rights Reserved.

Focus is a Vitec Brand.

The material contained in this document is also protected by copyright laws of the United States of America and other countries. It may not be reproduced or distributed in any form by any means, altered in any fashion, or stored in a database or retrieval system, without express written permission of VITEC.

VITEC cannot be responsible for unauthorized use of equipment and will not make allowance or credit for unauthorized use or access.

CONTACTING VITEC

USA	
Office Hours	Monday through Friday 7:30 AM to 4:00 PM (Pacific Time)
Email	http://www.focusinfo.com/support
Telephone	+1 650 230 2429
Fax	+1 408 739 1706
Address	VITEC Inc. Address931 Benecia Ave. Sunnyvale, CA. 94085
Web	www.vitecmm.com

EMEA (Europe, Middle East, Africa)						
Office Hours	9:00 AM to 5:00 PM					
Email	techsupport@como.com					
Telephone	+49 4307 8358 58					
Fax	+49 4307 8358 99					
Address	COMO GmbH Lise-Meitner-Str. 15 24223 Schwentinental/ Germany					
Web	www.vitecmm.com					

SERIAL NUMBER

The serial number for this equipment is located on the base of the unit. Please record this serial number and keep it in a secure area.

REGULATIONS AND SAFETY

FS-P250 complies with the following standards and country regulations:

USA

FCC Part 15 Class 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.

EUROPEAN UNION

EN 55024 EN 61000-3-2 Class A & EN 61000-3-3 EN 55022 Class A



RoHS 2

AUSTRALIA AND NEW ZEALAND



AS/NZS CISPR 22 Class A

JAPAN

VCCI Class A

```
この装置は,クラスA情報技術装置です。この装置を家庭環境で使用す
ると電波妨害を引き起こすことがあります。この場合には使用者が適切な
対策を講ずるよう要求されることがあります。
                             VCCI-A
```

CANADA

ICES-003 Class A

DOCUMENTATION

Read, Retain, and Follow Instructions

All the safety and operating instructions should be read before the product is operated.

1. Retain Documentation

Place documentation in a secure place for future reference on operating and safety instructions.

2. Follow All Operating and Safety Instructions

3. Pay Attention to All Warnings.

Warnings are provided to protect the operator, the equipment, and content.

PRECAUTIONS

Do Not Expose to Moisture

Do not use this product near water or in an environment where it is exposed to dampness or there is the possibility of it getting wet.

Do Not Remove Cover

There are No User Serviceable Parts inside this unit. Servicing should be done by qualified service personnel.

Operating Environment

Avoid moisture, dust, extreme heat or cold.

Power Sources

Use only the AC-DC power source provided with the unit. Use only Lithium Batteries provided with the unit or sold as an accessory by Focus.

Special care for Lithium battery use

Lithium batteries can explode, leak or cause burns if not handled appropriately. Please observe the following rules of thumb:

- Use only VITEC BATTERY PACK P/N 12286
- Use only FS-P250 unit to charge batteries
- Do not short battery or reverse polarity
- Do not open batteries
- Do not dispose in fire
- Do not heat above 60C (140F)
- Do not expose to water



ACCESSORIES AND REPLACEMENT PARTS

Use only attachments and accessories recommended by Focus. Unauthorized substitution of parts can result in loss of warranty.

LEGAL NOTICES	II
LEGAL	П
CONTACTING VITEC	ш
SERIAL NUMBER	
	 IV
	1
FEATURES	. 1
	1
UNPACKING	2
QUICK START	3
1. PHYSICAL DESCRIPTION	3
1.1 Front View - Controls	3
1.2 Top View - Connectors	3
1.3 Bottom View – Media and Battery	4
2. POWERING THE FS-P250	4
3. SETTING UP FOR FIRST USE	4
4. FS-P250 CONTROLS	6
4.1 Display Additional status information	6
4.2 Setting up the recording profile	7
4.2.1 PROXY clip frame rate	7
4.2.2 PROXY clip resolution	7
	0
5.1 DDE DEC	9 10
5.2 TC SUPER	10
5.3 DATE AND TIME	10
5.4 NETWORK SETTING	11
5.5 BACKLIGHT	12
5.6 FORMAT SD CARD	12
5.7 FIRMWARE	12
6. OPERATIONS	13
6.1 FS-P250 Recording	13
6.2 Adding metadata value while in record	13
6.3 Accessing FS-P250 web interface	14

	4.5
6.4 Shutting down the unit	15
6.5 Using Proxy files	15
6.5.1 Folder structure	15
6.5.2 Using FS-P250 proxy files in your workflow	15
7. TEOLINICAL OPEOLECATIONS	61 61
7. TECHNICAL SPECIFICATIONS	16
COMPLIANCE	16
ENVIRONMENT	16
PHYSICAL DESCRIPTION	16
Connections	16
Controls	16
Media Slot	16
Status Display	17
POWER	17
DIMENSIONS AND WEIGHT	17
SUPPORTED INPUT, OUTPUT AND RECORDING FORMATS	17
Supported Input Format (SD/HD-SDI)	17
Supported Output Format (SD/HD-SDI)	18
SUPPORTED RECORDING MODES	18
HD-SDI input	18
SD-SDI input	18
RECOMMENDED CAMERA	20
Panasonic AG-HPX250 Camcorder	20
RECOMMENDED ACCESSORIES	20
Panasonic AJ-WM30 Wireless Dongle	20
RECOMMENDED SOFTWARE	20
FS-PCS Software	20
8. TROUBLE SHOOTING	21
9. WARRANTY	22

INTRODUCTION

Thank you for purchasing the FOCUS FS-P250 Proxy recorder.

Specifically designed for video professionals, the Focus FS-P250 Proxy Recorder makes it easy to integrate proxy recording into your everyday workflow.

The FS-P250 is a camera-mount/portable H.264 recorder specifically designed for the Panasonic AG-HPX250/255 video camera (collectively called AG-HPX250 in this manual).

FEATURES

- Records P2 Compatible Proxy Formats (.MOV/H.264) to a Standard SDHC card
- HD-SDI/SD-SDI Input and Loop-through
- Small, Portable, Battery Powered Design

- Web Interface for Streaming and Metadata Input (PC, MAC, and iOS devices) - optional accessory needed

- Includes FS-PCS Proxy Companion Software for metadata management



UNPACKING

Verify that the FOCUS FS-P250 has the following items:

- 1. FS-P250 Unit
- 2. FS-P250 Camera Mount Cradle
- 3. VITEC battery pack (Lithium battery)
- 4. DC Power Adapter with an international plug kit
- 5. Installation CD containing:
 - a. FS-P250 User Manual
 - b. FS-PCS software application for Mac and Windows OS
 - c. FS-PCS User Manual
 - d. FS-P250 Web Interface User Manual

QUICK START

1. PHYSICAL DESCRIPTION

1.1 FRONT VIEW - CONTROLS



1.3 BOTTOM VIEW – MEDIA AND BATTERY Battery Lock Release Switch + Battery Charge Status Indicator Lithium-Ion Battery / Slot Compartment Door (Flip to open / close)

2. POWERING THE FS-P250

FS-P250 can be powered using the supplied battery or directly connected to its supplied DC power adapter.

Before first use in battery mode, it is recommended to fully recharge the battery:

- Open the bottom compartment door.
- Release the battery lock/release switch (up position).
- Insert the VITEC battery pack inside the unit.
- Secure the battery with battery lock/release switch (down position).
- Connect the supplied DC charger to the FS-P250 unit.

If not fully charged, the battery charge indicator remains RED.

Once fully charged, the battery charge indicator turns GREEN.

Typical charging time is about 3-4hours.

3. SETTING UP FOR FIRST USE

FS-P250 was designed as a companion recorder to the Panasonic AG-HPX250 camera When used with the AG-HPX250 camera, the FS-P250:

(1) Can be controlled from the camera (via SDI) with commands Start/Stop.

(2) Records (via SDI) Panasonic format proxy clips with audio, video and timecode that match the P2 clips recorded on the AG-HPX250. (refer to the table in the Technical Specification available in section 7)

Note: If the camera is set in PRE REC mode, the recorded proxy clip start/stop recording point will not match the P2 clip. Enabling the PRE REC mode onto the FS-P250 will minimize the differences between P2 and Proxy clips.

(3) Captures P2 metadata (via SDI) with important information regarding the P2 clips: the following metadata are automatically transferred during a record:

- a. Recording Clip Name
- b. Global Clip ID
- c. P2 Card Serial Number

Please ensure that AG-HPX250 firmware used is v10.59 or later (if AG-HPX255 v10.22 or later).

Firmware can be downloaded from Panasonic website: eww.pass.panasonic.co.jp

Visit Panasonic web site for detailed information regarding AG-HPX250 camera upgrade: http://pro-av.panasonic.net/en/

To enable P2 metadata capture mode and get the best result using your FS-P250, the following setting must be activated on the AG-HPX250 camera:

- Press **MODE** button on camera mode of AG-HPX250.
- Select OUTPUT SEL.
- Select **EXPANDED**.
- Select **UB MODE** option in the **RECORDING SETUP** menu and select **FRM RATE**.

The AG-HPX250 camera does NOT output P2 metadata (via SDI) when in the following modes:

- Playback mode (including REC PREVIEW/REC CHECK).
- When displaying GUI.
- PC mode.



- Use a preferred solution for mounting the FS-P250 cradle onto the AG-HPX250 camcorder. Several mounting options are available – the cradle mounts via a $\frac{1}{4}$ 20 threaded screw hole.

- Insert a SD HC card into the FS-P250 media slot. Ensure that it is not write protected.

- Insert FS-P250 unit inside its cradle.

- Connect a SDI cable from the SDI out of the camera to the SDI IN of FS-P250 unit.

- If needed, FS-P250 SDI Input can be looping through to a monitor or any SDI device.

- Power up the AG-HPX250 camera and FS-P250 unit.

- If using the optional Panasonic AJ-WM30 wireless module, please plug it to the USB connector before powering up the FS-P250.

- Wait for the FS-P250 to complete boot up, the following screen is displayed when the unit is ready:



4. FS-P250 CONTROLS

By default, the Home screen displays the following information:

- Proxy recording profile selected.
- Device status: Define the recording state of the FS-P250 unit:
 - STOP: FS-P250 has detected a SDI input and is ready for a recording.
 - RECORD: record is in progress.
 - NO SIGNAL: No SDI input signal detected.
 - NO SD CARD: No SDHC is inserted
 - UNLOCK SD CARD: The SDHC inserted card is write protected



4.1 DISPLAY ADDITIONAL STATUS INFORMATION

From the Home screen, press the OK button to circle through the following information:

- Battery Level:



Note: FS-P250 will display a warning when the remaining battery falls to 10%.

If the battery is so low that the unit must power down, the FS-P250 will stop the recording in progress (if any) before performing shut down. This process is designed to maintain proxy clip integrity. - Video Input: displays the detected SDI input resolution and frame rate.



4.2 SETTING UP THE RECORDING PROFILE

4.2.1 PROXY CLIP FRAME RATE

If properly set-up (please refer to section 4), FS-P250 is able to detect the P2 recording format selected on the AG-HPX250 camcorder and adjust its frame rate as well as its timecode calculation. This automatic configuration is important to ensure a PROXY to P2 clip match.

4.2.2 PROXY CLIP RESOLUTION

PROXY clip resolution can be modified:

- From the Home screen, to set up a specific recording profile, press the MODE button (short press) to circle through the available recording profile:

- SHQ

- HQ

- LOW

- Press OK to confirm the selected profile.

The following encoding profiles are available depending on the SDI input resolutions:

Туре	Wrapper	Resolution	Scanning Mode	FPS	Bit Rate	H.264 Profile	Audio	Audio Bite Rate	Туре
SHQ	MOV	960x540	Progressive	30/25/24	3-4 Mb/s	High	2 ch.	48 Khz	LPCM
HQ	MOV	640x360	Progressive	30/25/24	1.5 Mb/s	High	2 ch.	64 Kb/s 48Khz	AAC-LC
LOW	MOV	480x270 320x180*	Progressive	30/25/24	800 Kb/s	Baseline	2 ch.	64 Kb/s 48Khz	AAC-LC

• HD-SDI input:

*320x180 50/60 FPS is used only when 720p50/60 input signal is detected.

• SD-SDI input:

Туре	Wrapper	Resolution	Scanning Mode	FPS	Bit Rate	H.264 Profile	Audio	Audio Bite Rate	Туре
LOW NTSC	MOV	352x240	Progressive	30	800 Kb/s	Baseline	2 ch.	64 Kb/s 48Khz	AAC-LC
LOW PAL	MOV	352x288	Progressive	25	800 Kb/s	Baseline	2 ch.	64 Kb/s 48Khz	AAC-LC

4.3 ACCESSING MENUS

To access the configuration menus, press and hold the MODE button for 3 seconds (long press).

5. FS-P250 MENUS

The following menus are available:

- PRE REC
- TC SUPER
 - MODE
 - SIZE
 - POSITION
- DATE AND TIME
- NETWORK SETTINGS
 - MODE
 - SSID
 - ENCRYPTION
 - IP
 - MAC
 - RESET TO DEFAULT
- BACKLIGHT
 - LCD
 - BUTTONS
- FORMAT SD CARD
- FIRMWARE

To cycle through the menus, press the **MODE** button.

To exit, press and hold the **MODE** button for 3 seconds (long press) or press the REC button. Default setting values are indicated in bold in the description above.



5.1 PRE REC

PRE REC allows the user to store video before the recording is triggered. Once the recording is started, the stored video is added to the clip.

PRE REC:

- ON: PRE REC buffer is activated.

In this mode, the start record delay between the Panasonic AG-HPX250 recorded clip and the FS-P250 recorded clip can be up to one second.

PRE REC buffer is set to 3 seconds while the record on the AG-HPX250 happen in HD and 7 sec in SD.

- OFF: PRE REC buffer is turned off

5.2 TC SUPER

TC SUPER allows the user to configure the superimposed timecode (aka VITC) onto the PROXY clip. TC SUPER:

- MODE Setting:
 - OFF: TC SUPER is not activated
 - EXTERNAL: TC SUPER is activated and using the timecode from the SDI Input.
 - INTERNAL: TC SUPER is activated and using timecode from an internal counter.
- SIZE: Define TC SUPER size
 - NORMAL
 - LARGE
- POSITION: Define TC SUPER position in the PROXY video clip.
 - TOP
 - CENTER
 - BOTTOM

5.3 DATE AND TIME

Date and Time can be set up in this menu.

5.4 NETWORK SETTING

This menu displays the current Wi-FI setting while using the optional Panasonic AJ-WM30 wireless module:



NETWORK SETTING

- MODE: Display network mode (Ad-Hoc. Infrastructure or No Wi-Fi)
- ID: Display the SSID address of Wi-Fi network
 - This value can be modified while in AdHoc mode
- ENCRYPTION: Display if the Wi-Fi network is encrypted.
- IP: Display the IP address of the FS-P250 device.
- MAC: Display the MAC address.
- RESET TO DEFAULT: To reset to factory default network settings

Wi-Fi default setting are defined as:

MODE: Ad-Hoc SSID: FS-P250_xxxx ENCRYPTION: None IP: 10.0.0.1

5.5 BACKLIGHT

FS-P250 buttons and LCD backlight can be adjusted. BACKLIGHT:

- LCD: Configure LCD backlight
 - OFF
 - LOW
 - MEDIUM
 - HIGH
- BUTTONS: Configure buttons backlight
 - ٠ON
 - OFF

5.6 FORMAT SD CARD

The menu is to be used to format SD HC card inserted in the unit in FAT32 format. This format also creates the PROXY directory structure.

5.7 FIRMWARE

Displays the current firmware version loaded into the device.

This menu is to be used to upgrade FS-P250 system.

To upgrade the unit firmware:

- Download the FS-P250xxxx.pak file on VITEC website (www.vitecmm.com).
- Rename the file in FS-P250.pak
- Format a SD HC card using the FS-P250 unit and load the FS-P250 onto it.
- Boot the FS-P250 device

Before proceeding: ENSURE THE UNIT IS POWERED BY THE DC POWER SUPPLY. To prevent any power loss, inserting a charged battery is also recommended.

- Access the FIRMWARE menu and press the OK button to upgrade.

6. OPERATIONS

6.1 FS-P250 RECORDING

To manually start a recording:

- Use the **REC** button to start manually a record.
- To stop the recording, press **REC** again.

If using the AG-HPX250 camcorder, recording can be synchronized to the P2 recorded clip via the SDI signal. To activate this feature, ensure that AG-HPX250 camcorder is properly configured (refer to section 4).

While in record, the following display is shown in the main screen:



During a recording:

- Access to the MENUS is not available.
- **OK** button can be used to insert live metadata (Text Memo).

Note: When used in conjunction with AG-HPX250 camcorder set in ONE CLIP record mode, consecutive proxy clips recorded will not be continuous. Proxy clips duration are few frames shorter than corresponding AG-HPX250's P2 clips.

6.2 ADDING METADATA VALUE WHILE IN RECORD

It is possible to insert 'Text Memo' Metadata while recording proxy clips on the FS-P250. Text Memo metadata helps to index/organize clips with important information about the clip scene.

To insert a Text Memo either:

- Press the **OK** button on the FS-P250. The default inserted metadata value is OK (Text Memo).

This value can be modified using the FS-P250 web interface.

- or access the FS-P250 web interface to enter real time metadata.

Note: The web interface is accessible using the optional Panasonic AJ-WM30 wireless module.

Input T		during R		Proxy Movie		for Selected Clip
TMOT	THEFT	TMO	These		Duration	00-00-00-99
	_	_	_	<u> </u>	Start Tenecode	00.00.50.01
TMOS	TMOS	TM07	TMOR		Shooter	Richard
	_	_	_		User Clip Name	F5000003
				***	Program Name	Shutter
nput Te	at Memo I		ed Clip			
Mont	11402	TMO	These	A DES DES	0 00:00:50:32	OK
_		_	-		0 00 00 50 107	Fusee
TMOS	TM06	TM07	TMOS			
Free	Ието	config	uration	update		

6.3 ACCESSING FS-P250 WEB INTERFACE

FS-P250 used in conjunction with the Panasonic AJ-WM30 allows to wirelessly access the unit for:

- Playback of Live and FS-P250 recorded clips
- Add Metadata / Text Memo to the live recording or prerecorded clips
- Review Proxy Thumbnail Display

To access the web interface:

- Connect the Wi-Fi dongle to the USB port
- Power On the unit
- The Wi-Fi network setting can be retrieved in the NETWORK SETTING menu.
 - By default, it is configured as followed:
 - AdHoc mode
 - SSID: FS-P250_xxx
 - IP Address: 10.0.0.1
- Access the web interface using a Wi-Fi capable device.

Refer to the "FS-P250 Web Interface User Manual" for details about the web interface functionalities and guidance to modify the Wi-FI settings.

6.4 SHUTTING DOWN THE UNIT

To power down the FS-P250 press and hold (long press) the power button for three seconds.

6.5 USING PROXY FILES

6.5.1 FOLDER STRUCTURE

FS-P250 device creates several files and folder in order. Below is detailed this architecture:



6.5.2 USING FS-P250 PROXY FILES IN YOUR WORKFLOW

.MOV files created by the FS-P250 device can directly be used for playback and edit on computers.

6.5.3 USING FS-P250 PROXY FILES IN A PANASONIC WORKFLOW

The created CONTENTS folder and its subfolder/files are not directly compatible with Panasonic P2 structure.

Using the provided FS-PCS desktop application software organizes the SD HC card in order to obtain a P2 compatible structure. This software also allows merging P2 metadata and Proxy metadata to P2 card or SD HC card.

FS-PCS is provided with the FS-P250 unit.

Please refer to the "FS-PCS User Manual" for more information about its features.

7. TECHNICAL SPECIFICATIONS

COMPLIANCE

- CE
- FCC Part 15 ,Class A
- C-Tick
- RoHS

ENVIRONMENT

- Operating Temperature: +32 to 104° F (0 to 40° C)
- Storage Temperature: -4 to 140° F (-20 to 60° C)
 - Humidity: 10-90% (relative humidity)

CAUTION: FS-P250 can be used in hot environments. The unit's enclosure can be hot to the touch during operation in high temperatures.

PHYSICAL DESCRIPTION

CONNECTIONS

- SD/HD-SDI Input: BNC (x 1), 0.8Vp-p conforms to SMPTE 259M/292M
- SD/HD-SDI Output (Loop Through): BNC (x 1), 0.8Vp-p conforms to SMPTE 259M/292M

 \bullet Computer: USB 2.0 Type A (x 1) for Panasonic AJ-WM30 Wi-Fi dongle connection only

• DC Power Input: 2-pin DC Jack (x 1). 5-16V DC

CONTROLS

• Buttons – Mechanicals with backlight LED for: Power, Mode, OK, Record

MEDIA SLOT

• SD HC Card

Visit the VITEC website (www.vitecmm.com) to see the latest list of qualified cards.

STATUS DISPLAY

• 16x2 lines character monochrome LCD Display.

POWER

- External DC Input 12V DC
- Battery powered VITEC Battery Pack P/N 12286 (3.7V/4000mAh)
- Power Consumption 3.6W (4.2W with optional Panasonic AJ-WM30 Wireless Dongle)
- Autonomy about 4Hrs

DIMENSIONS AND WEIGHT

- Dimensions: LxWxH 135x84x34mm (5.3x3.3x1.3in) without cradle
- Weight:
 - Unit (without battery): 210grams/0.46lbs
 - Battery: 110grams/0.25lbs

SUPPORTED INPUT, OUTPUT AND RECORDING FORMATS

SUPPORTED INPUT FORMAT (SD/HD-SDI)

- 1080 60i/30PN/24PN/24PA/50i/25P
- 720 60P/30PN/24PN/50P/25PN/25P
- 480 60i/30P/24P/24PA, 576 50i/25P
- 4-channel SD/HD-SDI embedded audio, 2-channel recording
- Support proprietary ancillary data from Panasonic AG-HPX250 camera (REC/STOP/SPAN commands and proprietary P2 metadata)
- Any given supported input type (e.g. 1080 59.94i) will be automatically detected.
- Any given recording mode occurring on the AG-HPX250 camera will be automatically detected and set onto the FS-P250 Proxy recorder.
- SMPTE RP-188 timecode in the SD/HD-SDI stream

SUPPORTED OUTPUT FORMAT (SD/HD-SDI)

- Loop Through All SD/HD-SDI input resolutions are supported
- Audio and ancillary data path through from SD/HD-SDI-in

SUPPORTED RECORDING MODES

Туре	Wrapper	Resolution	Scanning Mode	FPS	Bit Rate	H.264 Profile	Audio	Audio Bite Rate	Туре
SHQ	MOV	960x540	Progressive	30/25/24	3-4 Mb/s	High	2 ch.	48 Khz	LPCM
HQ	MOV	640x360	Progressive	30/25/24	1.5 Mb/s	High	2 ch.	64 Kb/s 48Khz	AAC-LC
LOW	MOV	480x270 320x180*	Progressive	30/25/24	800 Kb/s	Baseline	2 ch.	64 Kb/s 48Khz	AAC-LC

HD-SDI INPUT

*320x180 50/60 FPS is used only when 720p50/60 input signal is detected.

SD-SDI INPUT

Туре	Wrapper	Resolution	Scanning Mode	FPS	Bit Rate	H.264 Profile	Audio	Audio Bite Rate	Туре
LOW NTSC	MOV	352x240	Progressive	30	800 Kb/s	Baseline	2 ch.	64 Kb/s 48Khz	AAC-LC
LOW PAL	MOV	352x288	Progressive	25	800 Kb/s	Baseline	2 ch.	64 Kb/s 48Khz	AAC-LC

- When connected to the AG-HPX250 camera, FS-P250 will automatically configured its recording mode based on this chart:

	AG-HP)	(250 Camera Recordin	FS-P250 Recording mode			
System	R	EC FORMAT	SD/HD-SDI out	Recording	J Format	
Mode	Codec	Recording Mode	Format	Proxy Mode Available	Frame Rate	
		60i	59.94i		29.97	
	AVC-I100 AVC-I50	30PN (native)	29.97P (2:2) over 60i		29.97	
		24PN (native)	23.976P (2:3) over 60i		23.976	
1080 - 59.94i		60i	59.94i	SHQ - 960 x 540	29.97	
		30P (2:2) over 60i	29.97P (2:2) over 60i		29.97	
	DVCPROHD	24P (2:3) over 60i	23.976P (2:3) over 60i	HQ - 640 x 360	23.976	
		24PA (2:3:3:2) over 60i	23.976P (2:3:3:2) over 60i	LOW - 480 x 270	29.97	
	AVC-I100	50i	50i		25.00	
1090 50;	AVC-150	25PN (native)	25P (2:2) over 50i		25.00	
1080 - 501	DVCPROHD	50i	50i		25.00	
		25P (2:2) over 50i	25P (2:2) over 50i		25.00	
	AVC-I100	60P	59.94P		29.97/ 59.94 in LOW	
		30PN (native)	29.97P (2:2) over 60P	SHO - 960 x 540	29.97	
	700100	24PN (native)	23.976P (2:3) over 60P		23.976	
720 - 59.94P	DVCPROHD	60P	59.94P	HQ - 640 x 360	29.97/ 59.94 in LOW	
		30PN (native)	29.97P (2:2) over 60P	LOW	29.97	
		24PN (native)	23.976P (2:3) over 60P	-in 720p24/25/30:	23.976	
	AVC-I100	50P	50P	-in 720p50/60:	25.00 / 50.00 in LOW	
720 500	AVC-150	25PN (native)	25P (2:2) over 50P	320x180	25.00	
720-506		50P	50P		25.00 / 50.00 in LOW	
	DVCPROND	25P (native)	25P (2:2) over 50P		25.00	
		60i	59.94i		29.97	
490 50 04;	DVCPRO50	30P (2:2) over 60i	29.97P (2:2) over 60i		29.97	
400 - 59.941	DVCPRO	24P (2:3) over 60i	23.976P (2:3) over 60i	LOW - 332 X 240	29.97	
		24PA (2:3:3:2) over 60i	23.976P (2:3:3:2) over 60i		29.97	
576 50	DVCPRO50	50i	50i		25.00	
576 - 501	DVCPRO	25P (2:2) over 50i	25P (2:2) over 50i	LUW - 352 X 288	25.00	

RECOMMENDED CAMERA

PANASONIC AG-HPX250 CAMCORDER

- P2 HD Handheld camera
- Record control over SDI
- Metadata transmission to FS-P250

RECOMMENDED ACCESSORIES

PANASONIC AJ-WM30 WIRELESS DONGLE

- Wi-Fi access to FS-P250 clips
- Live and recorded stream playback
- Metadata Input
- Text Memo Input
- Proxy Thumbnail Display

RECOMMENDED SOFTWARE

FS-PCS SOFTWARE

- Import or Merge metadata and text memo from/to P2/SDHC card
- Structure SDHC card in P2 compatible format

8. TROUBLE SHOOTING

• FS-P250 DOES NOT RECOGNIZE SD CARD

Supported SD card is SDHC only, up to 32GB. It does not work with SDXC card, 64GB or larger.

• FS-P250 DOES NOT FOLLOW RECORDING START/STOP FROM AG-HPX250

Make sure UB MODE option in the RECORDING SETUP is set to FRM.RATE in HPX250.

• IF SDI CABLE IS ACCIDENTALLY PULLED OUT, WHAT WILL HAPPEN TO MY RECORDINGS?

If you re-connect SDI cable, FS-P250 automatically restart recording and overwrite last clip in order to match high-res clip name.

If you want to keep last recorded clip, stop the recording on AG-HPX250. Re-connect SDI cable, then press REC button of AG-HPX250.

• WHEN RECORDING MORE THAN 5 MINUTES, PROXY CLIP IS DIVIDED IN TWO OR MORE FILES. WHY?

Due to FAT32 file system limitation, P2card needs to divide its clip when file size reaches 4GB.

To match file name and duration of high-res clip, Proxy clip is divided as well.

First 4 letters of file name are incremental numbers, so that previous/following clips can be easily retrieved.

To record long proxy clips without dividing, press REC button on FS-P250 unit manually.

• P2 AND PROXY CLIPS DOES NOT START AT SAME TIMECODE.

To minimize start frame difference, ensure that AG-HPX250 and FS-P250 Pre-REC mode configuration is identical (ON/OFF).

• FS-P250 DOES NOT WANT TO START ANYMORE AFTER AN UPGRADE.

It is possible that the upgrade didn't complete successfully. In this rare case scenario, FS-P250 needs to be started in failsafe mode. To activate this mode and recover the unit:

-Insert a SD card with a valid FS-P250 firmware (FS-P250.pak)

-Turn on the unit while pressing REC and MODE buttons.

-Wait for complete boot up and launch the upgrade/recovery process.

9. WARRANTY

VITEC LIMITED HARDWARE WARRANTY TERMS

Subject to the terms and conditions specified below your Focus product (the "Product") is warranted against defects in material and workmanship (the "Warranty") for a period of 12 (twelve) months following the Delivery Date (the "Warranty Period").

The Warranty provided to you hereunder supersedes any warranty which may be provided to you by the original manufacturer of the Product.

VITEC will repair or replace (at its option) any defective part during the Warranty Period, provided that (i) the Warranty remains in force.

Your dated sales receipt or invoice shall be considered as the delivery date of the Product form VITEC's premises to your designated address (the "Delivery Date"); (ii) your Product unit carries a serial number on its rear panel; (iii) you received from VITEC Customer Service department a Return Materials Authorization (RMA) number.

No Product unit will be accepted for repair without RMA number; and (iv) the entire Product unit is returned to the company by prepaid shipping in VITEC's original packaging.

VITEC will not be responsible for (i) any damages resulting from the use, maintenance or installation of any Product; or (ii) for the incorporation of any spare or replacement parts not approved by the company.

Without limiting the generality of the foregoing, The company reserves the right to refuse to provide any services under the Warranty for any Product that, in the company opinion, has been subjected to any abnormal electrical, mechanical, or environmental abuse, or shows signs of modification by an unauthorized person or company.

Call your local distributor or reseller for out-of-warranty repair charge estimates prior to returning a product.

