# USER GUIDE FOR NETmc MARINE 73fifty Harvester PC





Rev. 4 Firmware v.5.5.1 May 2015

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### 1. Introduction

The **73fifty Harvester PC** is an addition to the **73fifty** range of equipment, allowing the user to automatically upload files recorded on up to four **73fifty** recorders. Files can be automatically uploaded, prefixed and stored to any available network drive, or local storage device, or burned to a DVD, as required by the user.

The **73fifty Harvester PC** uses simple-to-use software, running on Windows 7 Pro and has 3 general USB ports for additional external storage.

There are two variants available for purchase:

### The 73fifty Harvester – D

Incorporates a 500GB disk drive and is fitted with a DVD burner.

### The 73fifty Harvester – S

Fitted with 2TB SATA storage (four externally presented 500GB drives, set up in RAID format), plus an internal 250GB drive for operating system and software.

### 2. Hardware Description and Connections

### 2.1 Front of the unit

### 73fifty Harvester-D – with DVD burner



#### LCD screen

Text on this screen indicates the status of the file transfer software – for example time & date, whether the unit is auto-harvesting or operating on a manual basis.

#### USB sockets

General purpose USB ports for the connection of portable storage drives for example.

#### <u>LEDs</u>

The top LED indicates whether the power is on. The bottom LED indicates disk drive activity.

### 2.2 Back of the unit



#### Input sockets

The back of the unit has sockets for connecting a monitor, keyboard, mouse and a further USB socket for connecting, for example an external storage device.

#### Connections for up to four **73fifty** recorders

USB sockets are provided for the connection of up to four 73fifty recorders.

#### Trigger connector sockets

Connect up to four **73fifty** recorders to these sockets via the trigger connector supplied, to allow remote starting of recording. (The connectors are 2-way COMBICON terminal block connectors, RS part 189-6486). One trigger connector is supplied with each **73fifty** recorder.

Remaining sockets are for future development use.

### It is important to plug in all video connections before switching on the 73fifty Harvester PC.

### 3. Set-up

- 1. Mount the 73fifty Harvester PC in a suitable rack mount system.
- 2. Connect the power supply. **Note: this unit must be earthed**. Note (2): we highly recommend connection to a UPS (uninterruptible power supply) to prevent data loss.
- 3. Connect keyboard / mouse / monitor
- 4. Connect USB links to up to four 73fifty recorders.
- 5. For Pipeline Inspections only: connect up to four **73fifty** recorders via the green trigger connector sockets to allow synchronised start of video recording through the **73fifty** *Harvester PC*.
- 6. Configure software settings as described below.
- 7. Start recording by pressing REC on each **73fifty** recorder, OR for pipeline inspections, click REC on the **73fifty Harvester** PC.
- 8. Click START to begin the auto-harvest.



### 4. Harvesting Software

Click on the shortcut on your desktop to open up the "**73fifty Quad**" software and you will see the screen below.

	DISK
NETmcMarine H7350 - 73Fifty Harvester V5.5.1	space
NETMC MARINE The Digital Video Specialists	indicators
Overview Automatic Manual Control Setup	
Auto Harvest Start Harvest Upload Limiter Stop	
O Video 0 Image     Auto Harvest OFF     N/A	
0 Video 0 Image N/A	-
CURRENT UPLOAD PROGRESS	
Upload Idle 0 Bytes Copied	

The disk space indicators indicate the space available in the target storage drive being used for the upload of files. As each **73fifty** recorder can save to a different location, each drive is shown separately.

### 4.1 <u>Settings</u>

In the "Settings" section of the software, the user can configure the settings of the **73fifty Harvester PC** to enable files from one, two, three or four **73fifty** recorders to be automatically harvested.

For each 73fifty recorder connected:

Enable: Select "Harvest Automatically" check box.

File Name: The indicated pull down box on the screen grab has different options for different types of file names as shown below.

<u>Decoder Filename only:</u> No text, only a source number <u>Default With Prefix:</u> Text with source number <u>Default with Suffix:</u> Source number with text <u>Default with Prefix and Suffix:</u> Text before and after source number <u>Prefix and Suffix With Date:</u> Text with time and date of file harvest

Path: The path is the required destination of the files (where they should be saved to.) This can be for example a local or a network drive or an external hard drive. The Harvester checks the validity of the path (e.g. if there is a network available.)

**Note:** The settings can be completely different for each recorder.

D:-1-

	The Digital Video Sp	necialists	1.2. 444
Overview Auto	omatic Manual Control Setup		
7350 # 1 : Au	to Harvest Enabled		
VideoPath:	D:N	FileName: ch1_	
	Harvest Automatically	Your video files will look like: ch1_130315122806.mpg	Default [Original Encoder]
StillPath:	D:N	FileName: ch1_	Default with Suffix
		Your image files will look like: ch1_130315122806.jpg	Prefix and Suffix with Dat
7350 # 2 : Au	to Harvest Enabled		
VideoPath:	D:N	FileName: ch2_	
	Harvest Automatically	Your video files will look like: ch2_130315122806.mpg	
StillPath:	D:N	FileName: ch2_	-
		Your image files will look like: ch2_130315122806.jpg	
7350 # 3 : Au	to Harvest Enabled		Ň
VideoPath:	D:\	FileName: ch3_	
	Harvest Automatically	Your video files will look like: ch3_130315122806.mpg	Pull down
StillPath:	D:N	FileName: ch3_	
		Your image files will look like: ch3_130315122806.jpg	name opu
7350 # 4 : Au	to Harvest Enabled		
VideoPath:	D:\	FileName: ch4_	
	Harvest Automatically	Your video files will look like: ch4_130315122806.mpg	
StillPath:	D:N	FileName: ch4_	
		Your image files will look like: ch4 130315122806 ing	

### 4.2 Auto Harvesting of Video Files

Once the settings have been entered, click on the "Automatic" tab and then press "Start" to start the automatic harvesting procedure.

NETmcMarine	H7350 - 73Fifty Harvester V5.5	.1	
IET		Specialists	
Overview Auto	matic Manual Control Setup		
- 7350 # 1 : Au	to Harvest Enabled		
VideoPath:	D:\test	FileName:	73fifty_test
	Harvest Automatically	Your video files will look like: 7	73fifty_test130315122806.mpg
StillPath:	D:\test	FileName:	73fifty_test
		Your image files will look like:	73fifty_test 130315122806.jpg
7350 # 2 : Ma	nual		
VideoPath:		FileName:	ENC2-\${src}
	Harvest Automatically	Your video files will look like: E	ENC2-130315122806.mpg
StillPath:		FileName:	ENC2-\${src}
		Your image files will look like: I	ENC2-130315122806.jpg
7350 # 3 : Ma	nual		
VideoPath:		FileName:	ENC3-\${src}
	Harvest Automatically	Your video files will look like: E	ENC3-130315122806.mpg
StillPath:		FileName:	ENC3-\${src}
		Your image files will look like: I	ENC3-130315122806.jpg
7350 # 4 : Ma	nual		
VideoPath:		FileName:	ENC4-\${src}
	Harvest Automatically	Your video files will look like: E	ENC4-130315122806.mpg
StillPath:		FileName:	ENC4-\${src}
		Your image files will look like: I	ENC4-130315122806.jpg
		SAVE	RESET
-			

The **73fifty Harvester PC** will begin to upload files from the selected recorders immediately regardless of whether the **73fifty** recorders are currently recording or idle. Any recording in progress will not be interrupted.

The *Harvester* has been hardware encoded to check every hour to see if there are new files. Any new complete files recorded since the last check will then be uploaded.

<u>73fifty - Connected</u> Shows the GUI when a 73fifty is connected and ready to harvest files. A connected 73 fifty is shown in blue. Greyed out icons, show no 73 fifty present.

NETmcMarine H7350 - 73Fifty Harvester V5.5.1	
NETMC MARINE The Digital Video Specialists	73 444
Auto Harvest           Start         Harvest Upload Limiter         Stop	
O Video 0 Image         O Video 0 Image	402GB free N/A N/A
CURRENT UPLOAD PROGRESS	0 Bytes Copied

#### 73fifty – Pending

When you click start to begin harvesting the GUI will change to yellow. This signifies that the harvester is searching for files on the connected 73fifty.

NETmcMarine H7350 - 73Fifty Harvester V5.5.1	
Overview Automatic Manual Control Setup	73 <i>litu</i>
Auto Harvest Start iHarvest Upload Limiteri Stop	
0 Video 0 Image Connecting 73fifty #1 [58]	402GB free
	N/A
0 Video 0 Image	NA
	N/A
Upload Idle	0 Bytes Copied

#### 73fifty – Uploading

The connected 73 fifty turns green in the GUI. This shows files are being successfully uploaded.

NETmcMarine H7350 - 73Fifty Harvester V5.5.1	
Overview Automatic Manual Control Setup	73 http
Auto Harvest           Start         Harvest Upload Limiter	
UploadFrom 73fifty #1 InProgress UploadFrom 73fifty #1 InProgress UploadFrom 73fifty #1 InProgress N/A File: 1/2 N/A	
UploadActive: VIDEO SRC=130515165244.mpg	110176174/136019968
	File upload progress bar

#### Connection – Error

A red 73 fifty in the GUI signifies that there is a connection error.

Please check that all cables are connected. If a 73fifty shows an "internal error please cycle power" message, power cycle the 73fifty and the harvester software will reconnect with the 73fifty on its next cycle.

NETmcMarine H7350 - 73Fifty Harvester V5.5.1	
NETMC MARINE The Digital Video Specialists	73 ktu
Auto Harvest Start Harvest Upload Limiter  Stop	
2 Video 0 Image Waiting 00:03:54	401GB free
	N/A
● 0 Video 0 Image	N/A
0 Video 0 Image	N/A
CURRENT UPLOAD PROGRESS	
Upload Idle	0/0

### 4.3 Manual Harvesting of Video Files

The manual section of the **73fifty Quad** software operates like the traditional **73fifty Upload** software.

Here the user can select and upload any single or block of files, or search through the files on a particular recorder.

This is also the only section where it is possible to delete files.

NETmcMarine H7350 - 73Fifty Harvester V5.5.1	
	73 6444
Overview         Automatic         Manual Control         Setup           Select ENC1         0         Images         0         N/A           Select ENC3         0         Images         0         N/A           Select ENC4         0         Images         N/A         0           Select ENC4         0         Images         N/A         0           Select ENC4         0         Images         N/A         0	DEVICE / ACTIONS Advanced
CTRLr Selected Port=0	
TYPE 7350 File	Recorded size/Duration

The user should click on the Channel relating to the particular recorder to be searched (selected channels change colour) – then a list of files will be shown.

Select the files to be uploaded and click on "Upload selected".

### 5. Deleting Files

When the hard drive of each **73fifty** recorder becomes full, files will need to be deleted to clear space.

Files should be deleted using the "Manual" section of the **73fifty Quad** harvesting software. (Any auto-harvesting process will need to be stopped before the "Manual" section can be opened.)

- 1. Select the channel relating to the **73 fifty** recorder which has the files to be deleted.
- 2. Select the files to be deleted by clicking the box next to the filename, or select "All".
- 3. Click on "Delete".

Important: To complete the deletion process, either power-cycle the *73fifty*, or select Option 5: "Renew File System" from the menu on the *73fifty* recorder.

## 6. Copying / Sharing Files

Minimise or close the **73fiftyQuad** software, and the **73fiftyHarvester PC** can be used like any other Windows PC to copy and paste files – e.g. to an external USB drive connected to the front of the unit. Files can also be shared over a network.

**Warning:** If additional tasks are run while file uploading is in progress, should these tasks fail or cause instability to the PC / Windows then this might jeopardise the upload process.

The **73fifty Harvester** – **D** variant is fitted with a DVD Burner. If required, files can be saved to a DVD through the pre-installed Nero software. Follow the on-screen instructions to create a Data DVD  $\setminus$  Make Your Own DVD-Video.

**Note**: DVD burning will be quicker and less prone to errors if file uploading is stopped before the burn process is started.





### 7. How to contact NETmc Marine Support

Should any problems occur with your **73fiftyHarvester PC** that are not addressed by this manual please contact our Support Team:

#### Email: <a href="mailto:support@netmcmarine.co.uk">support@netmcmarine.co.uk</a>.

### Tel: +44 1771 644001

Should your call be outside office hours, please leave a message on the answering machine, which will be forwarded to one of the support engineers. Although we cannot guarantee 24/7 availability, we endeavour to respond as quickly as possible to any query – regardless of when the support call is made.

#### Notes:

- 1. Whilst every effort has been made to ensure that the information contained in this manual is accurate, no liability can be accepted for errors and omissions.
- 2. Should this product be modified in any way by anyone other than a qualified NETmc Marine employee, then NETmc Marine cannot be held liable for any consequences.

### Appendix 1

### 1. Technical Specifications

Power Requirements	90-240 Vac, 50-60 Hz
Power Consumption	60 w
Operating Temperature	10 - 35 Degrees
Non-operating Temperature	-10 - 60 Degrees
Operating Humidity	5-95% RH non-condensing
Non-operating Humidity	5-95% RH non-condensing
Operating Shock	65G, 2ms
Non-operating Shock	250G, 2ms
Operating Altitude	-305m – 3,050m
Non-operating Altitude	-305m – 12.200m
Operating Vibration	Linear 20-300Hz, 0.75G (0 to peak) Random 10-300 Hz, 0.004g2/Hz
Non-operating Vibration	Low frequency 5-20 Hz, 0.195 inches (double amplitude) High frequency 10-300Hz, 5.0G (0 to peak)
Dimensions	482(W) x88.5(H) x 255(D) (2U case)
Weight	6kg
Network Support	10/100 & 10/100/1000 Base T

Storage and shipping: After overnight road freight the units should be left at room temperature for 24 hours before powering on.

After air freighting the units should be left at room temperature for 48 hours before powering on.

#### Note:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.