

# **Merit LILIN Application Note**

How to use WaterMarkChecker to check forged LILIN backup footages of NAV/NVR/DVR products

Document Number: A00321 Date: 2022/06/06 Dept: Technical Support, Taipei

Subject: How to use WaterMarkChecker to verified LILIN's video backup files are not forged.

**Description:** LILIN NAV and NVR/DVR are now support digital watermark feature to ensure the backup footage is not got forged and modified. A user can use the tool WaterMarkCheecker.exe to verify if the backup footage gets forged or not.

#### **Requirement:**

- 1. NVR5832/5416E (FW V 4.0.26.5470 or above)
- 2. NAV V3.0.0.76 or above
- 3. PC (Win10)
- 4. WaterMarkChecker.exe (V1.0.0.1)

WatherMarkChecker can be found after installing NAV 3.0 or NAV 3.1.



#### For NVR/DVR 5 & 6 series Step #1. Backup video footage to the USB flash drive.

- a. Insert an USB flash drive into the NVR5832/5416E.
- b. Click the Playback button.





c. Click playback button.



d. Click USB button.



e. Select the date, time and file format, and then click Backup button.



Recor													
SUN													
30													
6		8											
13													
20				24	25	26	20						
27	28	29	30					28					
4													
[	14 Ho	▲ ▼ purs	50	Sec	16			14 Ho	urs	50	Seco	16	
Back	up Peric	od 20		8 14:50						9/08 14			
	.01	.02	.03		.04	.05		6	.07	.08			
H	.17	.10	.19		.12	.13	.2	2	.15	.16			
	.25	.26	.27		.28	.29		0	.31	.32		NLL.	
File Fo	HD MP4 Estimate File Size												
				-			8	ackup			Can	cel	

### Step #2. To verify each backup footage by the tool WaterMarkCheecker.exe

- a. Insert the USB flash drive into PC.
- b. Execute WaterMarkCheecker.exe
- c. Click Select File to verify button



d. Select backup folder from the USB flash drive, file format, and choose one file.



	:N (l:) > backup			✓ Ö Search	n backup	
rganize 🔻 🛛 New fold	er					
backup ^	Name	Date modified	Туре	Size		
Lilin_Plus	2020	9/8/2020 1:48 AM	File folder			
Temp	🛓 20200908083400_CAM01	9/8/2020 1:47 AM	VLC media file (.m	9,988 KB		
Xprotect VMS 20	📥 20200908083600_CAM01	9/8/2020 3:00 AM	VLC media file (.m	12,662 KB		
OneDrive	🛓 20200908083700_CAM01	9/8/2020 3:01 AM	VLC media file (.m	6,952 KB		
This PC						
Desktop						
Documents						
🖶 Downloads						
Music						
Music Pictures						
<ul> <li>Music</li> <li>Pictures</li> <li>Videos</li> </ul>						
Music <ul> <li>Pictures</li> <li>Videos</li> <li>Local Disk (C:)</li> </ul>						
Music  Pictures  Videos  Local Disk (C:)  Local Disk (D:)						

Note: Flie format supports mp4 and AVI only.

e. The verifty status will show OK if the backup footage is not modified.

<b>A</b>	Х
Select File to verify I:\backup\20200908083400_CAM01.mp4	]
2020/09/08 01:47:31 Verify Status: OK! Model:8193, last checksum:50	
ОК	

#### For NAV

Step #1. Backup footage to any storage drive.

a. Click Playback button, and select Playback or Multiple Playback.



•LiLiPa	_						? -	- 🗆 🗙
6	LILINI	*001 P3T6522E2					2020 01 1 E. S CPU REC MUT adm R.D	N99/03 9:46 9% 1: 21% 2: PTZ OFF TE in AY: 0.14
		Cam 006	Cam 007	Cam 108	Cam 003	Cam 010	P	<b>■</b> ))
	LILIN		GLILIN	0LILINI	<i><b><i><b>6LILIN</b></i></b></i>	GLILINI	¶.∾	OFF
							*	Applications
							Ð	Groupings
			Cam 012	Cem 013	Cam 014	Cam 015		Windows
						Playback	⊳	Playback
.0	LILIN		6LILIN	GLILIN	6LILINI	🛉 🗎 Multiple Playback	*	(19)
						Remote Playback	Ø	•
		Cem 016	Cam 017	Cem 618	Cam 019	Cam 020	Ţ	0
			61 11 101	61 // 151	61 11 151	61 // 101	SEC	
	L 11_11 VI		VLILING.	V 1. (1. 13 VA	9 <i>1.11.11</i> U	VLILIN A		

## b. Click Backup button.

	_					×
***	X01 P31052282	4002 IWR3410E	+003 M	R5410E	#004 IPC01/02/03 Series	Nain Grouping 🗸 🗸
olilini		0LILINI	6LILINI	<u> 6LILIN</u>		2020/07/01         Calendar           September          2820           Son Mon Tare Was Thur Ed. Sat            6         7         0         9         10         11           13         14         15         16         17         10         19           20         21         22         23         24         25         26           7         20         30
#205	5 587022_1234	Cam 006		iam 007	Cem 008	
<u>olilini</u>		Check. Osannel     Check. Osannel     Check. Osannel     Check. Status     Chec	Calcular Noti 5 1 Noti 5 2 4 45 2 4 15 2 4 5 2 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4	×		Sant Time:         00 : 00         00           End Time:         01 : 19         00           Select mode:         Recard         V           Scatch mode:         Search         Search
<u> ¢LILINI</u>	Cam 009	F         Cran (th)         T	1         7         10         1           2         1         10         1         1           2         1         1         1         1         1           2         1         1         1         1         1         1           3         1	File Soc         25046         V           He fumat         IP4         V           It Stable Add COD         Inspir Size         ISO           Stable Add COD         Inspir Size         ISO           Stable Add COD         Inspir Size         ISO	Carn 612	2010/09449 09/02/03 2010/09449 09/02/03 2010/09449 09/05/03 2010/09449 09/05/03 2010/09449 09/05/03 2010/09449 09/05/03 2010/09449 09/05/03 2010/09449 09/05/03 2010/09449 09/05/03 2010/09449 09/05/03 2010/09490 09/03 2010/09490 09/03 2010/09490 09/03 2010/09490 09/03 2010/09490 09/03 2010/09490 09/03 2010/09490 05/03 2010/09490 05/03 2010/09490 05/03 2010/09490 05/03 2010/09490 05/03 2010/09490 05/03 2010/09490 05/03 2010/09490 05/03 2010/0940 05/03 2010/0000000000000000000000000000000000
				ENIT	C== #1	2020/09/08 001 18:00 2020/09/08 001 19:00 2020/09/08 001 20:00 2020/09/08 001 20:00
6L.ILINI	Carn 013	ØLILINI	ol il ilm	<i>øLILINI</i>	Can the Activat	3000,000 at 0.250 2000,000 at 0
100000 H	00				B1: 19: 59	
	00		Speed IX			

c. Select channels, date, time, destination directory and file format, and then click Start Convert button.



Check Channel      Select All / Sele      #001 P3765221      #002 NVR5416      #003 NVR5416      #004 IPC01/021	E E E E Z Z Z Z Z Z Z	Sun	2020/09/ eptember Mon Tue	07 ▶ Wen 2	Thu 3	Cale 2020 Fri 4	dar Sat	Destination Directory C:\Users\WAV3025\De	sktop (MP4)			
#005 SR7022 Cam 006	123	ь 13 20	7 8 14 15 21 22	9 16 23	10 17 24	11 18 25	12 19 26	Copy MPlayer		File Size	250MB	
Cam 008 Cam 008 Cam 009 Cam 010		27	28 29	30	22 .			OS Version	64-bit 🗸 🗸	File Format Enable Add OSD Image Size	MP4 MP4 AVI 1920*1080	
Cam 011	~	End Time		Ľ	23 :	57	•	Start Backup	Stop	Start Convert	Stop	
Backup Status						_		 0 %				

### Step #2. To verify each backup footage by the tool WaterMarkCheecker.exe

- a. Execute WaterMarkCheecker.exe
- b. Click Select File to verify button

4	×
Select File to verify	
	]
ОК	

c. Select backup folder from the USB flash drive, file format, and choose one file.



Open								;
→ * ↑ - Th	is PC > Desktop > AVI				νÖ	Search AVI		٩
rganize 👻 New folde	er							?
This PC	Name	Date	Туре	Size	Length			
Desktop	🛓 ch002_20200908011	9/8/2020 1:12 AM	VLC media file (.avi)	24,602 KB	00:01:59			
Documents	🛓 ch003_20200908011	9/8/2020 1:12 AM	VLC media file (.avi)	10,459 KB	00:01:59			
Downloads	🛓 ch004_20200908011	9/8/2020 1:12 AM	VLC media file (.avi)	25,581 KB	00:02:00			
Music	🛓 ch005_20200908011	9/8/2020 1:12 AM	VLC media file (.avi)	10,460 KB	00:01:59			
Pictures								
🚆 Videos								
Local Disk (C:)								
Local Disk (D:)								
Local Disk (E:)								
Local Disk (F:)								
Local Disk (G:)								
Local Disk (H:)								
🞐 Network 🗸 🗸								
File n	ame: ch002 20200908011302				~	avi files (*.avi	)	
						mp4 files (*.m	np4)	
						avi files (*.avi)	Î.	

Note: Flie format supports mp4 and avi only.

d. The veriftying status will show OK if the backup footage is not modified.

A.	×
Select File to verify	
C: Users (NAV3025 (Desktop (AV1 cn002_20200908011251.av)	
2020/09/08 01:12:51 Verify Status: OK! Model:4097, last checksum:100	
	ОК

Contact <u>lilin.zendesk.com</u> for technical support.