

## Technical Tip

Date	28 July 2011
File Name	TT-DVR-Storage-003_Compatible HDD
Subject	Compatibility Test of SATA HDD
Model	All Models of H.264 DVR
Remarks	

### A. All CIF DVR Models except for KE-9000D1 Series

#### 1. Test DVR

Model No	S/W Version	MCU Version	Video	Remarks
KE-7004MX3	v6.1.1.0	v5.3.0	4 Ch	4 Week Aging Test
KE-7008MX3	v6.1.1.0	v5.3.0	8 Ch	4 Week Aging Test
KE-7016MX3	v6.1.1.0	v5.3.0	16 Ch	4 Week Aging Test
KE-7016SX3	v1.1.1.0	v5.3.0	16 Ch	4 Week Aging Test
KE-8004MX3	v6.1.1.0	v5.3.0	4 Ch	4 Week Aging Test
KE-8008MX3	v6.1.1.0	v5.3.0	8 Ch	4 Week Aging Test
KE-8016MX3	v6.1.1.0	v5.3.0	16 Ch	4 Week Aging Test
KE-8016SX3	v1.1.1.0	v5.3.0	16 Ch	4 Week Aging Test

#### 2. Test Function

- 1) Live Display
- 2) Playback of Recorded Image (Local & Remote Playback)
- 3) Network Transmission
- 4) Backup (Local & Remote Backup)

#### 3. List of Compatible SATA HDD

Maker	Model No	Capacity	Result
Seagate	SV35.3 ST3250310SV	250 GB	Passed
Seagate	SV35.3 ST3500320SV	500 GB	Passed
Seagate	SV35.3 ST3750330SV	750 GB	Passed
Seagate	SV35.3 ST3500320SV	1000 GB	Passed
Seagate	SV35.3 ST3250310SV	2000 GB	Passed
Seagate	Barracuda XT ST32000641AS	2000 GB	<b>Caution #1</b>
Seagate	Barracuda 7200.12 ST3500413AS	500 GB	Passed
Seagate	Barracuda 7200.12 ST31000524AS	1000 GB	Passed
Seagate	Barracuda Green ST1500DL003	1500 GB	<b>Caution #2</b>
Seagate	Barracuda Green ST2000DL003	2000 GB	<b>Caution #2</b>
W.D.	Caviar Green WD20EARX	2000 GB	<b>Caution #2</b>

W.D.	Caviar Blue WD5000AAKX	500 GB	Passed
W.D.	Caviar Blue WD10EALX	1000 GB	Passed
W.D.	Caviar Black WD1002FAEX	1000 GB	Passed
W.D.	Caviar Black WD2002FAEX	2000 GB	<b>Caution #1</b>

- 1) Caution #1 : HDD temperature can be reached up to 66 °C at 27°C of room temperature.
- 2) Caution #2 : System operation may be slower down.

**[Important Notice on Seagate HDD] =====**

There may be unexpected problems during data writing for following SATA HDD model.

- Seagate Barracuda 7200.11
- Seagate Barracuda 7200.12
- DiamondMax 22
- Barracuda ES.2 SATA HDD

1) **Details of Occasional Problem**

- > HDD can not be recognized during writing process.
- > Sometimes, there occurs data missing (partially or wholly).

2) **How to Settle**

This problem is caused by firmware bug of specific HDD. In case that firmware version is "SD 15~19", there is high possibility to encounter this problem. Seagate recommend user to download new firmware and upgrade the HDD.

Reference Site (Download Site of Seagate Homepage)

<http://seagate.custkb.com/seagate/crm/selfservice/search.jsp?DocId=207931>

3) **Remarks**

- 1) We do not recommend normal user to upgrade HDD firmware.
- 2) User may contact HDD authorized dealer and request to replace HDD with updated firmware.
- 3) We have recently got this information from authorized dealer of Seagate HDD in Korea.



4) **Reference Site**

<http://seagate.custkb.com/seagate/crm/selfservice/search.jsp?DocId=207931>

#### 4. Recommendable HDD

- 1) Western Digital
  - > Caviar Black series
  - > Caviar Blue Series
- 2) Seagate
  - > Barracuda 7200.11 series
  - > Barracuda 7200.12 series
  - > Barracuda XT (SATA-III) series
  - > SV series

#### 5. Non-Recommendable HDD

- 1) Samsung  
It might be possible to have a problem on the data due to the contamination or durability.
- 2) Hitachi  
There was a problem with detection failure in our DVR.  
In some cases, it was detected at the beginning but the detection failure was found during operation.
- 3) Western Digital Caviar Green series  
It causes DVR operation speed down.

### B. KE-9000D1 Series (D1 DVR)

#### 1. Test DVR

Model No	S/W Version	MCU Version	Video	Remarks
KE-9004D1	v1.1.0.0	v5.3.0	4 Ch	4 Week Aging Test
KE-9008D1	v1.1.0.0	v5.3.0	8 Ch	4 Week Aging Test
KE-9016D1	v1.1.0.0	v5.3.0	16 Ch	4 Week Aging Test

#### 2. List of Compatible SATA HDD

Maker	Model No	Capacity	Result
Seagate	SV35.3 ST3250310SV	250 GB	Passed
Seagate	SV35.3 ST3500320SV	500 GB	Passed
Seagate	SV35.3 ST3750330SV	750 GB	Passed
Seagate	SV35.3 ST3500320SV	1000 GB	Passed
Seagate	SV35.3 ST3250310SV	2000 GB	Passed
Seagate	Barracuda XT ST32000641AS	2000 GB	<b>Caution #1</b>
Seagate	Barracuda 7200.12 ST3500413AS	500 GB	Passed
Seagate	Barracuda 7200.12 ST31000524AS	1000 GB	Passed
Seagate	Barracuda Green ST1500DL003	1500 GB	<b>Caution #2</b>
Seagate	Barracuda Green ST2000DL003	2000 GB	<b>Caution #2</b>
W.D.	Caviar Green WD20EARX	2000 GB	<b>Caution #2</b>
W.D.	Caviar Blue WD5000AAKX	500 GB	Passed
W.D.	Caviar Blue WD10EALX	1000 GB	Passed
W.D.	Caviar Black WD1002FAEX	1000 GB	Passed

W.D.	Caviar Black WD2002FAEX	2000 GB	<b>Caution #1</b>
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**[Remarks]**

- 1) 4 x Internal SATA HDDs can be installed at KE-9000D1 with [each HDD up to 3 TB.](#)
- 2) We recommend user to use [Enterprise Class SATA HDD](#) rather than Desktop Class HDD since it supports TLER, higher MTBF and higher Duty Cycles. It is NOT recommended to use 5,400 rpm model such as “Seagate Barracuda LP” with a bit lower cost since it may lead to system slow-down and instability.

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