


**BOSCH**

Invented for life

From

ST-VS/EAP4-NL

Product Management

Eindhoven

Oct 3rd 2011

## Release Letter Divar 700 Series HD Release 3.43

<b>Release letter Version:</b> <b>4.0</b>
---

(c) Copyright 2011 Bosch Security Systems B.V.  
All Rights Reserved

### General

We are pleased to announce the availability of the Divar 700 Series recorders models capable of HD recording. This release letter provides details on the identification of these models and the capabilities of various combinations of hardware and software.

### Hardware Identification

Please note that the letter “B” in the Commercial codes is used to identify HD capable units.

Material	Commercial code	Material description
F.01U.241.244	DHR-732-08B000	730 SERIES DHR HD DVD 1GIGE 8CH 0GB
F.01U.241.245	DHR-730-08B000	730 SERIES DHR HD 1GIGE 8CH 0GB
F.01U.241.246	DHR-751-16B000	750 SERIES DHR HD 1GIGE 16CH 0GB
F.01U.241.247	DHR-753-16B000	750 SERIES DHR HD DVD 1GIGE 16CH 0GB
F.01U.241.248	DNR-732-08B000	730 SERIES DNR HD DVD 1GIGE 8CH 0GB
F.01U.241.249	DNR-753-16B000	750 SERIES DNR HD DVD 1GIGE 16CH 0GB
F.01U.241.250	DHR-754-16B000	750 SERIES DHR HD DVD 2GIGE 16CH 0GB
F.01U.241.251	DNR-754-16B000	750 SERIES DNR HD DVD 2GIGE 16CH 0GB
F.01U.245.621	DHR-730-08B050	730 SERIES DHR HD 1GIGE 8CH 500GB
F.01U.245.622	DHR-730-08B200	730 SERIES DHR HD 1GIGE 8CH 2TB
F.01U.245.623	DHR-730-08B400	730 SERIES DHR HD 1GIGE 8CH 4TB
F.01U.245.624	DHR-730-08B800	730 SERIES DHR HD 1GIGE 8CH 8TB
F.01U.245.625	DHR-751-16B050	750 SERIES DHR HD 1GIGE 16CH 500GB
F.01U.245.626	DHR-751-16B200	750 SERIES DHR HD 1GIGE 16CH 2TB
F.01U.245.627	DHR-751-16B400	750 SERIES DHR HD 1GIGE 16CH 4TB
F.01U.245.628	DHR-751-16B800	750 SERIES DHR HD 1GIGE 16CH 8TB
F.01U.245.629	DHR-732-08B050	730 SERIES DHR HD DVD 1GIGE 8CH 500GB
F.01U.245.630	DHR-732-08B200	730 SERIES DHR HD DVD 1GIGE 8CH 2TB
F.01U.245.631	DHR-732-08B400	730 SERIES DHR HD DVD 1GIGE 8CH 4TB
F.01U.245.632	DHR-732-08B800	730 SERIES DHR HD DVD 1GIGE 8CH 8TB

F.01U.245.633	DHR-753-16B050	750 SERIES DHR HD DVD 1GIGE 16CH 500GB
F.01U.245.634	DHR-753-16B200	750 SERIES DHR HD DVD 1GIGE 16CH 2TB
F.01U.245.635	DHR-753-16B400	750 SERIES DHR HD DVD 1GIGE 16CH 4TB
F.01U.245.636	DHR-753-16B800	750 SERIES DHR HD DVD 1GIGE 16CH 8TB
F.01U.245.637	DNR-732-08B050	730 SERIES DNR HD DVD 1GIGE 8CH 500GB
F.01U.245.638	DNR-732-08B200	730 SERIES DNR HD DVD 1GIGE 8CH 2TB
F.01U.245.639	DNR-732-08B400	730 SERIES DNR HD DVD 1GIGE 8CH 4TB
F.01U.245.640	DNR-732-08B800	730 SERIES DNR HD DVD 1GIGE 8CH 8TB
F.01U.245.641	DNR-753-16B050	750 SERIES DNR HD DVD 1GIGE 16CH 500GB
F.01U.245.642	DNR-753-16B200	750 SERIES DNR HD DVD 1GIGE 16CH 2TB
F.01U.245.643	DNR-753-16B400	750 SERIES DNR HD DVD 1GIGE 16CH 4TB
F.01U.245.644	DNR-753-16B800	750 SERIES DNR HD DVD 1GIGE 16CH 8TB
F.01U.245.645	DHR-754-16B050	750 SERIES DHR HD DVD 2GIGE 16CH 500GB
F.01U.245.646	DHR-754-16B200	750 SERIES DHR HD DVD 2GIGE 16CH 2TB
F.01U.245.647	DHR-754-16B400	750 SERIES DHR HD DVD 2GIGE 16CH 4TB
F.01U.245.648	DHR-754-16B800	750 SERIES DHR HD DVD 2GIGE 16CH 8TB
F.01U.245.649	DNR-754-16B050	750 SERIES DNR HD DVD 2GIGE 16CH 500GB
F.01U.245.650	DNR-754-16B200	750 SERIES DNR HD DVD 2GIGE 16CH 2TB
F.01U.245.651	DNR-754-16B400	750 SERIES DNR HD DVD 2GIGE 16CH 4TB
F.01U.245.652	DNR-754-16B800	750 SERIES DNR HD DVD 2GIGE 16CH 8TB

## Accessories

The existing hardware accessories like hard disk extension kits, IntuiKey keyboard and Text bridge work with the new models.

F.01U.089.392	DHR-XS050-A	700 Series Storage Expansion 500 GB
F.01U.089.393	DHR-XS100-A	700 Series Storage Expansion 1 TB
F.01U.162.997	DHR-XS200-A	700 Series Storage Expansion 2 TB
4.998.138.515	KBD-DIGITAL	KBD-Digital Keyboard IntuiKey Digital Keyboard for use with Divar Digital Video Recorders, System4 Multiplexers, Bosch VMS, and VIDOS
4.998.800.450	KBD-UNIVERSAL	IntuiKey Universal Keyboard for use with Allegiant, Divar, System4 Multiplexers, Bosch VMS, and VIDOS
F.01U.137.175	DVRXEAP01	ATM/POS bridge for Bosch recording systems
4.998.138.419	LTC 2604/50	LTC 2604/50 Keyboard Port Expander Unit System4, 230 V, 50 Hz
F.01U.503.305	LTC 2604/60	LTC 2604/60 Keyboard Port Expander Unit System4, 120 V, 60 Hz
4.998.138.422	LTC 2605/91	LTC 2605/91 Video Manager for use with Divar all Series 1 & 2 models and System4 Multiplexer, 120/230 VAC, 50/60 Hz

The licenses for IP channels (including HD cameras), Raid 4 and Text are the same as those used for the original Divar 700 Series revision-A models:

F.01U.172.919	DXS-ESIP01-A	DIVAR 700/XF E-LICENSE 1 IP
---------------	--------------	-----------------------------

F.01U.172.920	DXS-ESIP04-A	DIVAR 700/XF E-LICENSE 4 IP
F.01U.172.921	DXS-ESIP08-A	DIVAR 700/XF E-LICENSE 8 IP
F.01U.172.922	DXS-ESRAID-A	DIVAR 700/XF E-LICENSE RAID
F.01U.172.923	DXS-ETEXT-A	DIVAR 700/XF E-LICENSE TEXT

### New: Memory Upgrade Kit

A Field-installable Memory Upgrade Kit for upgrading revision A models to HD capability will be available by mid Oktober 2011:

F.01U.247.517	DXR-RAM-UPGRADE	DIVAR 700 HD FIELD INST. UPGRADE
---------------	-----------------	----------------------------------

Order one upgrade kit for each recorder you want to upgrade.

### HD recording and display capabilities and restrictions

The Divar 700 Series revision-B models, and revision-A models with the memory upgrade kit installed, have HD recording facilities, but no local HD display capabilities.

In order to view HD live streams and recordings please use BVC release 1.2 build 650.

The following combinations of Hardware and software make up a Divar 700 HD recording system:

1. Revision-B Divar 700 Series recorder, or alternatively a revision-A Divar 700 Series recorder with DXR-RAM-UPGRADE installed.
2. File Divar700HDWF343\_all\_T7973665291.zip, available on the Bosch catalog website in the software section of the Divar 700 Hybrid/Network recorder under the name Firmware V3.43.  
This zipfile contains:
  - Divar 700 Firmware 3.43 installed on the recorder: Filename in zip: Divar343.img
  - Divar CT 3.43 for configuration: Filename in zip: DivarXF-installer.exe
  - Divar Upgradetool 3.43: Filename in zip: Upgradetool.exe
3. File BVC-1-2-build650\_all\_T7268325387.zip, available on the Bosch catalog website in the software section of the Divar 700 Hybrid/Network recorder under the name Bosch Video Client V1.2 build 650, or in the section Bosch Video Client under Management Systems under Video under the name Bosch Video Client V1.2 build 650.  
This zipfile contains:
  - BVC 1.2 build 650 viewing client software: Filename: BVC-3212650-installer.exe

**Note:** Divar XF models can **not** be upgraded to HD capability.

**Note:** CC is not capable of showing HD camera content. You need to use BVC 1.2 build 650 for display of HD streams and recordings. CC can be used as viewing client with Divar 700 recorders that do not record HD streams, or when video of both DVR 400/600 and Divar 700 must be viewed simultaneously.

In case you intend to use CC make sure you have CC version 3.34. If you do not have this installed on your PC, you can download this from the Bosch catalog website in the software section of the Divar 700 Hybrid/Network recorder under the name CC app. v3.34. The name of the file is DivarCC-installerCC334\_all\_T7973668363.zip. The installer package inside the zipfile is called DivarCC-installer.exe.

## FIRMWARE

### A) Installation requirements

The Divar XF/700 Series PC applications, including BVC, CC and CT require the following minimum configuration:

- Processor:	Intel Pentium DualCore, 3.0 GHz or comparable
- RAM memory:	2048 MB
- Free hard disk space:	10 GB
- Graphics card:	NVIDIA GeForce 8600 or higher
- Network interface:	10/100/1000-BaseT
- Operating System	Windows XP (Service Pack 2 or higher) or Windows 7 (32 bits and 64 bits)

The Divar XF/700 Series Firmware version 3.43 can be installed on all Divar XF and 700 Series models.

Note that some features of the software will only work on recorder devices and networks supporting them:

iSCSI storage can be used reliably only on 1 GBit/s networks.

The Divar XF models support up to 8 IP expansion channels, the Divar 700 series support up to 16 IP expansion channels.

Recording of HD streams is only possible on Divar 700 revision-B models or on Divar 700 revision-A models having the memory upgrade kit DXR-RAM-UPGRADE installed.

Note that for some features an optional license must be installed:

IP expansion channels (Hybrid models for Japan have 8 IP channel installed as standard), Text feature (formerly called ATM/POS license), RAID-4 local disk protection feature.

Do not install pre-3.1 firmware on Bosch 700 Series recorders. Older firmware is incompatible with the Bosch 700 Series hardware.

### B) This release includes the following new features and improvements:

1. The number of concurrent remote users has been increased from 5 to 7.
2. Expanded support for iSCSI disk arrays for network storage. Divar 700 now also supports the DLA-AIOU0 1400 Series IP Video Storage arrays. Please note that the use of the DLA 1400 requires the use of a UPS.  
Please review the Application notes: "iSCSI configuration on Divar 700 Series recorders" and "iSCSI Target Configuration for Divar 700 Series Recorders".

NOTE: In order to minimize the risk of loosing video data stored on iSCSI disk arrays, customers are strongly advised to use suitable UPS equipment with all iSCSI disk arrays.

3. The viewer application BVC 1.2 build 650 can be started from a web browser as a zero install application in firmware release 3.43. After entering the IP address of the recorder in the browser, the viewer will show up in a separate window. All functionality of BVC is available, only the tree of Divar XF/700 Series recorder devices is of course missing. After closedown of the viewer, all intermediate files on the PC are removed. CT is not available as a zero install application. Users who want to continue using the CC as zero-install client should continue using the 3.42 firmware release. This is functionally equivalent to the 3.43 firmware release. The only difference is that BVC 1.2 is included as zero-install viewing software firmware 3.43, whereas CC3.34 is included in firmware 3.42 as zero-install viewing client software.
4. SNMP support is implemented and now has trap support. A Divar recorder MIB has been defined and can be downloaded from URL [http://<Divar\\_IP\\_address>/SNMP](http://<Divar_IP_address>/SNMP). Authentication V2c is supported.
5. ATM/POS Text display is now available in live as well as playback mode on the recorder.
6. It is possible to replay archive files (.dxa files) on the Divar XF/700 series recorder.
7. The Pelco-P and Pelco-D command for starting, stopping and defining tours, as well as the command for opening the menu can be called up using Bosch aux commands, and through the menu of the IntuiKey keyboard. In order to send RAW Pelco-P or Pelco-D messages to the dome, first send an Aux-On 500, followed by three Aux-on commands with the 3 protocol bytes followed by Aux-off 0.
8. When a dome was controlled through a biphas to bilinx converter LTC 8016, sometimes the dome would not stop moving. This has been resolved.
9. On some systems, the firmware upgrade would fail consistently. On some, upgrading over USB was not possible, but upgrade over Ethernet did work. This release resolves this problem.
10. When using the Divar 700 Series recorder to export video footage to USB sticks or DVD, the Divar 700 includes the export player instead of the archive player program.

In rare cases a cameo on Divar 700 or XF would go black when receiving an invalid IP video stream from NBC-255-P, NBC-225, NDC-225, NDC-255, NBC-265, NDC-265, NTC-255, Autodome easy II Junior, VG4 Autodome, Autodome Jr 800 HD, Autodome 800 HD, NBC-455, NBN-498, NDC-455, NDC-498 NBN-821, NDN-821 and NEI-30 IR cameras. The recorder only reverts back to normal operation after a reboot. This has been traced to a bug in the camera firmware. Please upgrade the camera firmware to 4.54.0024 or later to get the problem fixed.

**C) This release includes the following known limitations:**

1. Due to the highly graphical nature of the PC application suite, in particular Control Center and Export Player and BVC, a PC can run low on available (video) resources. This can hamper video/audio streaming and slow down (or stop) the response of the application. If

the application becomes unresponsive, start up the Windows Task Manager (press CTRL+ALT+DELETE) and close down the application.

2. (New from 3.3 onwards) When adding LUNs to the Divar Storage they should have a size of at least 10 GByte.
3. When using Bosch IP cameras with Bosch 700/DIVAR XF Series recorders you are advised not to use the 1 IPS frame rate setting. The pre-event recording time is severely shortened and you will lose video. This problem will be fixed in IP camera firmware version 5.50.
4. In rare cases, when complex scenes are in view, IP cameras at low frame rates (3.125/3.75 IPS or 6.25/7.5 IPS) you can occasionally get black video. In firmware release 5.50 for these cameras a permanent fix will be provided. For the time being, set the I-frame quality slider setting of these cameras to a high value. This decreases the size of the I-frames and makes the problem less likely to occur.
5. Ethernet port 1 ("Connection 1" in configuration tool) has slightly more features than the (optional) Ethernet port 2 ("Connection 2" in CT):  
For Ethernet port 1 the IP address, Subnet mask, Default gateway and DNS server address plus options for DHCP or Auto DNS address can be set.  
For Ethernet port 2 only the IP address, subnet mask and option for DHCP can be set.  
This means that on the second Ethernet port no routing to IP devices or workstations on other subnets through routers or gateways is supported.
6. iSCSI maximum LUN size has been increased to 480 Million Terabytes.
7. Due to design limitations, the playback of motion event recordings or alarm recordings will show the last picture of these recordings for a few seconds (as a static image) before blanking the camera.
8. When performing a store-set-recovery, make sure that all portals are online and in configuration mode before initiating the recovery. Video data that is on off-line disks will be lost after the recovery!  
Please review the Application note: iSCSI Configuration on Divar 700 Series recorders.
9. When using DHCP for giving IP addresses to network cameras, make sure that the server providing these addresses assigns a fixed IP address to the MAC addresses of the network cameras.
10. Due to design limitations of the text search feature, not all text messages will be shown when playing back video at any other speed than 1x.
11. Use of IP cameras with Divar XF/700 Series recorders has been tested with camera firmware version 4.54 for SD and 720P HD cameras and with firmware 5.0 for 1080P camera's.
12. Due to issues in the software (camera firmware 4.10 build 42) in NBC 255 cameras, Smart search does not work correctly with this type of camera. Some motion will go undetected. This issue will be addressed in a firmware update of the camera.

13. SNMP timestamps can be up to 20 seconds off.
14. The Divar XF/700 Series can not put Easydome IP cameras in DHCP mode when configuring IP addresses of this type of camera. This limitation is due to firmware constraints in Easydome IP cameras. Workaround is to use the camera web interface to enable DHCP in these cameras.
15. Motion detection in the recorder does not work with Autodome easy IP cameras.
16. Microsoft Internet Explorer 6.0 and 8.0 have been used to test the zero-install version of CC mentioned in the new features section. Firefox has not been tested.
17. It is sometimes not possible to recover (or import) an iSCSI LUN using configuration tool. It is always possible to do this using the configuration menu on the Divar XF/700 Series.
18. When configuring motion areas for 16:9 cameras on the Divar XF/700 series recorder, the motion grid may be unaligned with the video. CT will show the correct alignment.
19. Motion search might not work for network cameras configured for IVA 4.5 or later. Set the camera to Motion+ detection mode (using the camera's web interface) to enable motion search on the Divar XF/700 series recorder and Control Center for the camera.

#### **D) Installation procedure of the 3.43 Firmware**

##### 1. Upgrade procedure

The firmware on the Divar 700 recorders can be upgraded using a USB stick locally on the recorder or using the Upgrade Tool to update recorders across the network.

##### 1.A

When performing the upgrade with USB stick, please take the following steps.

- Copy the firmware img file onto a USB stick.
- Power down the Divar XF/700 Series recorder.
- Insert the USB stick in a free USB port.
- Power up the Divar XF/700 Series recorder and accept installation of the new firmware.

NOTE: If you do not power down before inserting the USB stick, the Divar XF/700 Series recorder may return a message "Invalid Code Image".

On rare occasions the Divar XF/700 Series recorder is not able to completely upgrade the firmware.

In this case proceed as follows:

- Power down the Divar XF/700 Series recorder.
- Insert the USB stick in a free USB port.
- Press and hold down the full screen button and the 3X3 multiscreen button.
- Power-up the Divar XF/700 Series recorder, while keeping the buttons pressed for 10 seconds.
- The monitor will show the message: "Please wait, loading image from USB"
- The monitor will show the question: "Do you want to install the new firmware?"
  - Click "Yes" button.

- Monitor shows the message:
  - "Updating firmware. This may take several minutes. Please wait."
- The Divar Xf/700 Series recorder will reboot and the monitor will display:
  - "No different image found on USB. Loading internal image"
- Now the new firmware is installed and running.

1.B Performing a firmware upgrade using the Upgrade Tool.

Please refer to the Application note: "Using the Firmware Upgrade Tool with Divar XF and 700 Series recorders". Note that the Divar XF/700 must have firmware release 3.20 or later installed for network based firmware upgrade.

Always use the Firmware upgrade tool coming with the latest Configuration Tool.

---