# ALI-TVR7032H 32-Channel IP/HD-TVI/Analog Network Digital Video Recorder Quick Setup Guide

This quick setup guide provides instructions to initially setup and use the ALI-TVR7032H digital video recorder (DVR). This device can record video from IP, HD-TVI and analog (CCTV) cameras. For information about using your recorder and its extensive capabilities, refer to the *Alibi Embedded Network Video Recorder Firmware V3.4.x User Manual* provided at *www.alibisecurity.com/resources*.

For more information, refer to these documents - available from your equipment vendor:
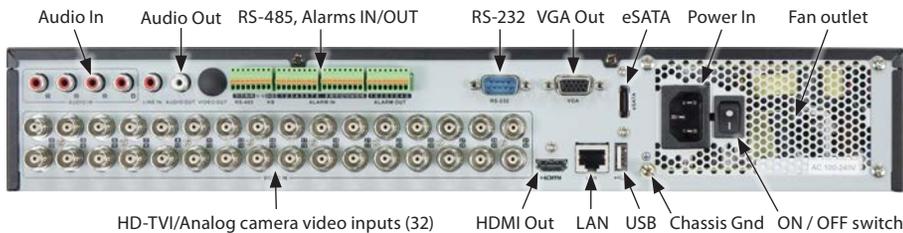
- *ALIBI™ Tools Utility Installation and User Manual*
- *ALIBI™ Witness Smartphone App for Android - Quick Start Guide*

Front Panel

Status indicators   USB ports (2)
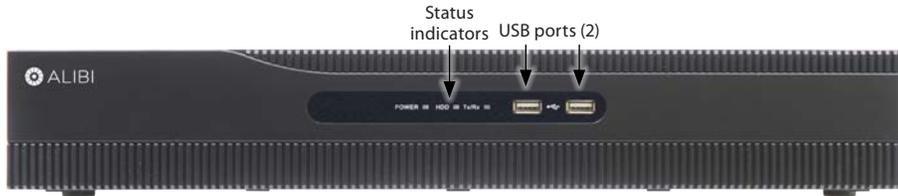
Name		Function / Description
Status Indicators	POWER	Indicator is green when the unit is powered on. When the unit is off, the LED is red if power is available.
	HDD	HDD indicator blinks red when data is being read from or written to an HDD.
	TX/RX	Blinks green when the network connection is functioning normally.
USB Interfaces		Universal Serial Bus (USB) ports for additional USB devices such as a mouse or Hard Disk Drive (HDD).

Backpanel

Audio In   Audio Out   RS-485, Alarms IN/OUT   RS-232   VGA Out   eSATA   Power In   Fan outlet

HD-TVI/Analog camera video inputs (32)   HDMI Out   LAN   USB   Chassis Gnd   ON / OFF switch

Item	Description
AUDIO IN	RCA connector for audio channel input (1 .. 4)
AUDIO OUT	BNC connector for audio line output. This connector is synchronized with VGA video output
Chassis Gnd	Terminal for chassis ground. Connect to earth ground before powering on the recorder.
eSATA	Connects external SATA HDD, CD/DVD-RW
HD-TVI/Analog video inputs	HD-TVI interface for video input (32)
LAN Interface	10/100/1000BASE-T Ethernet network interface

Item	Description
ON / OFF Switch	Switch for powering the device on or off
Power In	AC 100V ~ 240V power supply.
RS-232	DB9 (male) connector for RS-232 devices
RS-485, ALARMS IN/OUT	See below, next topic
VGA, HDMI Out	VGA - DB15 connector for VGA compatible monitor. Supports 1920 × 1080 @ 60 Hz, 1280 × 1024 @ 60 Hz, 1280 × 720 @ 60 Hz/, 1024 × 768 @ 60 Hz HDMI – HDMI connector for an HDMI compatible monitor. Supports 1920 × 1080 @ 60 Hz, 1280 × 1024 @ 60 Hz, 1280 × 720 @ 60 Hz/, 1024 × 768 @ 60 HzH
USB interface	Universal Serial Bus (USB) ports for additional devices such as USB mouse and USB Hard Disk Drive (HDD).

RS-485, ALARMS IN/OUT

Item	Description
RS-485 (T+, T-, R+. R-)	T+ and T- pins connect to R+ and R- pins of PTZ receiver respectively.
KB	Controller port: D+, D- pin connects to Ta, Tb pin of controller. For cascading devices, the first recorder D+, D- pin should be connected with the D+, D- pin of the next recorder
ALARM IN (1 through 16)	Alarm inputs 1 - 16. Alarm input is tied to ground through the alarm sensor. See "Step 1. Connecting alarm devices to the recorder" on page 2.
ALARM OUT (1-G through 4-G)	Alarm outputs 1 - 4 with ground terminations. See "Step 1. Connecting alarm devices to the recorder" on page 2.

Mouse control

A standard 3-button (left/right/scroll-wheel) USB mouse can also be used with this recorder. To use a USB mouse:

1. Plug USB mouse into the either a front panel or backpanel USB connector of the recorder.

2. The mouse will be automatically detected. If the mouse is not detected, the mouse may not be compatible with the recorder. Please refer to the recommended device list from your provider.

The operation of the mouse:

Action	Effect
Left click	**Single click**: Live view: Select channel and show the quick set menu. **Menu**: Select and enter.
	Double click: Live view: Switch between single-screen and multi-screen.
	Click and drag: PTZ control: pan, tilt and zoom. Tamper-proof, privacy mask and motion detection: Select target area. **Digital zoom-in**: Drag and select target area. **Live view**: Drag channel/time bar
Right click	**Live view**: Show menu. **Menu**: Exit current menu to upper level menu.
Scroll wheel	**Scroll up**: Live view: Previous screen. **Menu**: Previous item.
	Scroll down: Live view: Next screen. **Menu**: Next item.

Soft keyboard

One of two on-screen keyboards appears when you click in a field that accepts a entry, such as a password or name or a numerical value. The QWERTY keyboard, for alphanumeric entries, is shown in the following picture. Some control keys toggle their function when they are clicked. A numerical keyboard, shown beneath, appears for numerical entries such as an IP address.

Symbols / Numbers · Backspace
Uppercase /Lowercase · Escape / Exit

*Soft keyboard - alphanumeric*
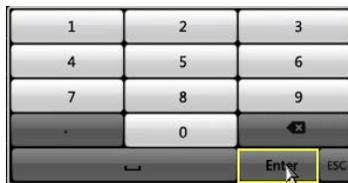
Soft keyboard - numeric

Step 1. HDD installation

If you purchased your recorder without a HDD, or you want to replace the HDD installed in your recorder, use the procedure in "APPENDIX A HDD Installation" on page 5 as a guideline.

Step 2. Connecting alarm devices to the recorder

Wiring alarm inputs to the recorder

You can wire up to 16 alarm inputs to the recorder. Alarm input wiring connects to the RS-485, Alarm IN/OUT connector blocks on the back of the recorder.
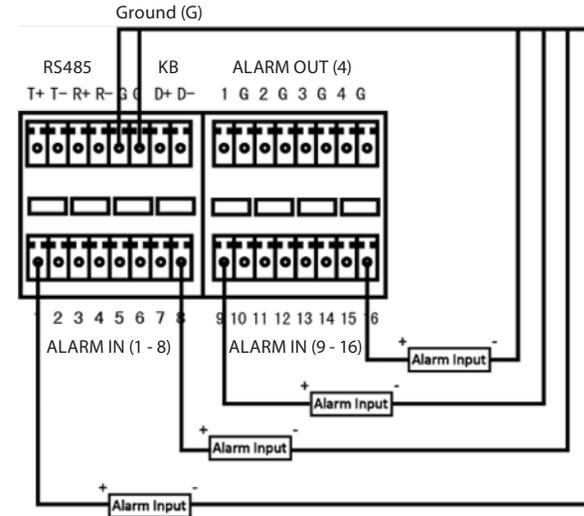
RS485, Alarm terminations

Wiring alarm outputs to the recorder

The recorder provides 4 alarm output terminations. These terminations for each output are on the ALARM OUT connector block on the back of the recorder, and are labeled 1 - G, 2 - G, 3 - G, 4 - G (G = ground termination).

There are 4 jumpers (JP1, JP2, JP3, and JP4) inside the chassis on the alarm termination PC board, associated with ALARM OUT pins 1, 2, 3 and 4 respectively. Initially, these jumpers are in place. If connecting an alarm output to a DC loaded alarm out circuit, the jumper must be in place. If connecting the alarm output to an AC loaded alarm, the corresponding jumper must be removed. Example: If you connect an AC load to the alarm output 3 of the recorder, then you must remove the JP 3.

To remove a jumper for AC load alarm circuits:

1. Disconnect all cabling from the recorder.

2. Remove the recorder top cover. For more information, refer to "APPENDIX A HDD Installation" on page 5.

3. Locate the jumper associated with the alarm output you are using for an AC load alarm, then remove it. Save the jumper for use later, if needed.

4. Reinstall the Recorder top cover.

DC load alarm output circuits

DC loads must operate within the limitation of 12V/1A. To connect to a DC alarm output, use the following diagram:
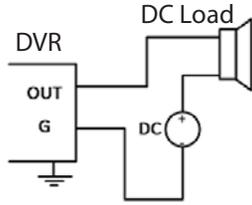
AC load alarm output circuits

To connect an AC load to an alarm output, a jumper, associated with the output on the alarm termination PC board, (within the chassis), must be removed. These jumpers shunt pin pairs J1, J2, J3, and J4 for alarm outputs 1, 2, 3, 4 respectively. Use an external relay for safety.
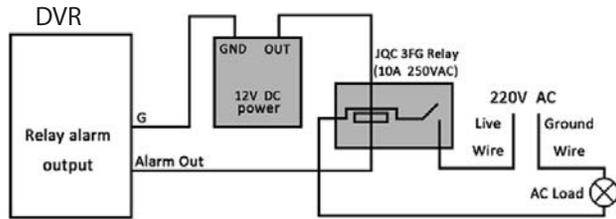
Step 3. Install a monitor, mouse, power

For the following steps, refer to the back panel photo above for the location of connectors.

1. Install and setup your monitor in accordance with the instructions provided with the monitor. Do not power it on at this time.

2. Cable the HDMI or VGA connector to your monitor's VGA or HDMI input. The HDMI interface provides the best performance.

3. Plug the mouse into the USB connector on the front or back of the recorder.

4. If you plan to access your recorder remotely, or configure your recorder to transmit alerts, email, etc. to external servers, plug a drop cable from your local area network (LAN) into the RJ45 LAN connector on the back of the recorder.

5. Connect the power cord to the power connector on the back panel of the recorder, and then into a UPS (preferred) or surge protector.

> **NOTE**   *Do not power on the recorder at this time.*

Step 4. Connecting it together – initial system setup

1. Plug the coaxial cables from the cameras into the BNC camera input connectors on the back of the recorder.

2. Power on the monitor. Some monitors have multiple inputs such including VGA ,HDMI, BNC, etc. If you are using this kind of monitor, configure your monitor to display the input connected to your recorder (HDMI or VGA).

3. Power on the recorder using the power on / off (I / O) switch on the back panel.

4. Power on your cameras.

Step 5. Using the Wizard for basic configuration setup

1. Power on the recorder. Normally, an Alibi logo splash screen appears within 2 minutes. A secondary flash screen may appear showing the status of the HDDs installed in the recorder.

By default, the Setup Wizard will open automatically. Refer to the *Alibi Embedded Network Video Recorder Firmware V3.4.x User Manual* for incomplete instructions for using the Wizard and configuring and using your recorder.

Important Notes for using the Wizard:

- **Password**: When logging into the recorder for the first time, create a "**Strong**" administrator user password. Follow the on-screen instructions, and save this password and the GUID file created by the firmware in a secure location. **NOTE**: There is no factory default password for this device.
- **Date and Time**: Set the time zone, date and time correctly. All recorded video and capture (photo) files are time stamped.
- **Storage - HDD**: In the HDD Management wizard, if a new recorder is shipped with a pre-configured HDD, nothing needs to be done with it in this window. If you installed an HDD or replaced the HDD, that HDD needs to be initialized by the recorder before it can be used to record data. Select (check the box for) that HDD, then click **Init** to initialize the disk. **NOTE**: **Init** will erase all data from the disk and can take several minutes to complete. When the initialization is complete, click **Next** to continue.
- **Network Settings**: By default, the recorder acquires it's network settings using DHCP (dynamic network settings). Depending on the configuration of the network, these settings may change. To improve remote access to the recorder, Observint recommends that you configure the recorder with fixed network settings. To easily change the DHCP acquired network settings to fixed network settings, un-check the **Enable DHCP** option in the network setup menu, and then click **Apply**.

Step 6. Access the Menu system

After the initial setup of your recorder using the Wizard, the Menus interface enables you to refine your configuration settings and expand the functionality of the system. To use most menus, the user must log into the recorder system, either locally or remotely, with administrative privileges.

To open the Menu system from the Live View screen, right click anywhere in the screen, then select **Menu**.
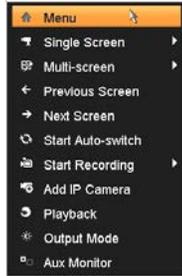
If ID Authentication is not disabled (see the **Menu | Configuration | General** settings), a login window will open. In the Login window, select a User Name with administrative privileges, enter its password, then click **OK**.
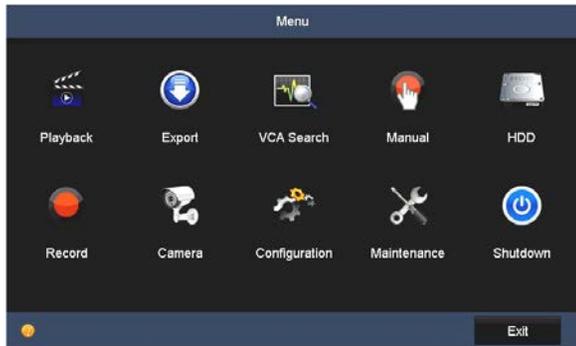
For more information, refer to the *Alibi Embedded Network Video Recorder Firmware V3.4.x User Manual*.

Specifications

	Video compression	H.264
	Analog and HD-TVI video input	32 channels
		BNC interface (1.0 Vp-p, 75 Ω)
	Supported camera types	720P/30, 720P/60, 1080P/30, CVBS
Video/ Audio input	IP video input	8 channels (up to 32 channels)
		Up to 1080P resolution
	Audio compression	G.711u
	Audio input	4 channels, RCA (2.0 Vp-p, 1 KΩ)
	Two-way audio in	1 channel, RCA (2.0 Vp-p, 1 KΩ)

	HDMI / VGA output	1920 × 1080/60 Hz ,1280 × 1024/60 Hz, 1280 × 720/60 Hz, 1024 × 768/60 Hz
	Encoding resolution	Main stream: 1080P (non-real-time) / 720P / WD1 / VGA / 4CIF / CIF
		Sub-stream: WD1 (non-real-time)/ 4CIF (non-real-time) / CIF / QCIF / QVGA
	Frame rate	Main stream: 1/16 fps ~ Real time frame rate
		Sub-stream: 1/16 fps ~ Real time frame rate
	Video bitrate	32 Kbps-6 Mbps
Video/Audio output	Audio output	1 channel, RCA (Linear, 1 KΩ)
	Audio bitrate	64 Kbps
	Dual-stream	Support
	Stream type	Video, Video & Audio
	Synchronous playback	32 channels
	Playback resolution	1080P / 720P / VGA / WD1 / 4CIF / CIF / QVGA / QCIF
Network management	Remote connection	128
	Network protocols	TCP/IP, PPPoE, DHCP, EZVIZ Cloud P2P, DNS, DDNS, NTP, SADP, SMTP, SNMP, NFS, iSCSI, UPnP™, HTTPS
Hard disk	Type	4 SATA interfaces for 4 HDDs; 1 eSATA interface
	Capacity	Up to 6TB capacity for each disk
External interface	Network interface	1: 10M / 100M / 1000M self-adaptive Ethernet interface
	Serial interface	RS-232, RS-485, Keyboard
	USB port	3 × USB2.0
	Alarm in / out	16 / 4
General	Power supply	100 ~ 240 Vac, 47 ~ 63 HZ
	Consumption (without hard disks)	≤ 65 W
	Working temperature	14 ºF ~ 131 ºF (-10 ºC ~+55 ºC)
	Working humidity	10% ~ 90%
	Chassis	19-inch rack-mounted 1.5U chassis
	Dimensions (W × D × H)	17.5 × 15.3 × 2.7 inch (445 × 390 × 70 mm)
	Weight (without hard disks)	≤ 11.0 lb (5 Kg)

HDD Installation

The following procedures illustrate hard disk drive (HDD) installation in a recorder without an HDD, and installation of additional HDD(s). If you purchased your recorder without a HDD, or you want to replace the HDD installed in your recorder, use this procedure as a guideline.

A.1 Recorder compatible HDDs

For the best performance of your system, install only a high-reliability security grade HDDs in your recorder. Security grade HDDs are designed to stream video efficiently and have extended life. The recorder can accommodate up to four HDDs, each with a capacity of up to 8TB.

A.2 HDD Installation

The HDDs attach to the chassis with four screws inserted up through the underside of the chassis. Cables and screws needed to install the HDDs are provided with the recorder.
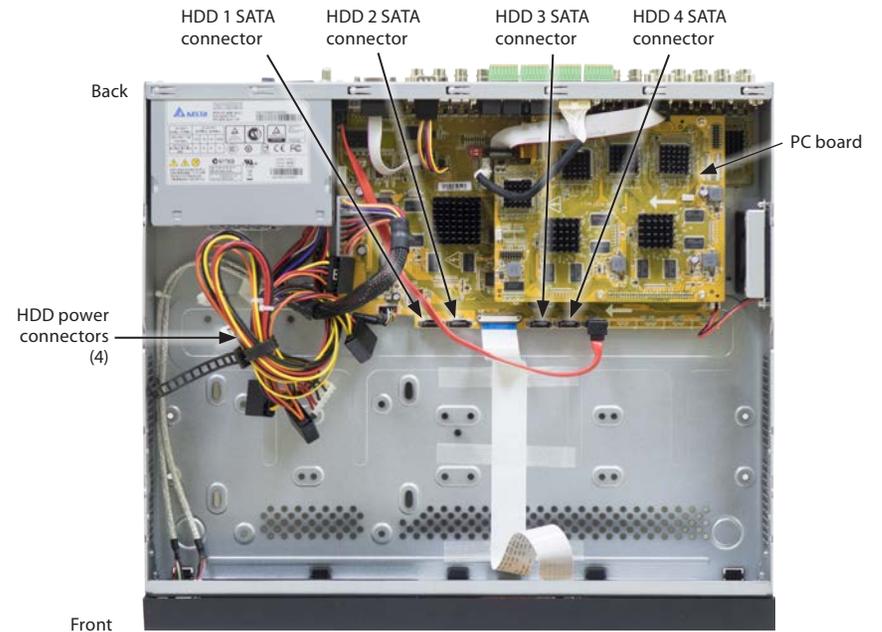
⚠ **CAUTION**

Follow recommended electrostatic discharge (ESD) guidelines while performing this procedure. Install the HDD in a static-free environment, wearing a certified ESD wrist strap. If a static free environment and ESD wrist strap is not available, touch the bare metal of the recorder chassis frequently when installing the drive to dissipate the static charge naturally generated on your skin and clothing and avoid touching electronic components.

1. Power off the recorder, if necessary, then disconnect all cables from the recorder.

2. To remove the top cover from the recorder, remove the two cover screws on the back of the chassis and three screws on both the left and right sides, slide the cover toward the back of the chassis, then lift it off.
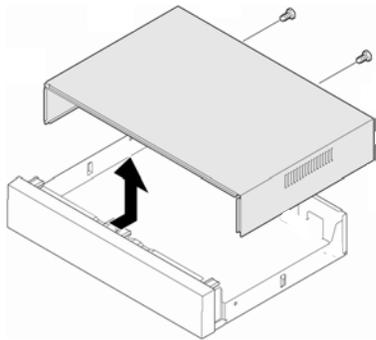
3. Orient the chassis and HDD as shown in the picture below. Become familiar with the locations of the items identified in the picture.

4. Remove the four screws holding the shelf in place, and then lift the shelf out of the chassis.

Shown are the HDD mounting screw locations and the SATA and power cable connectors on the HDD.
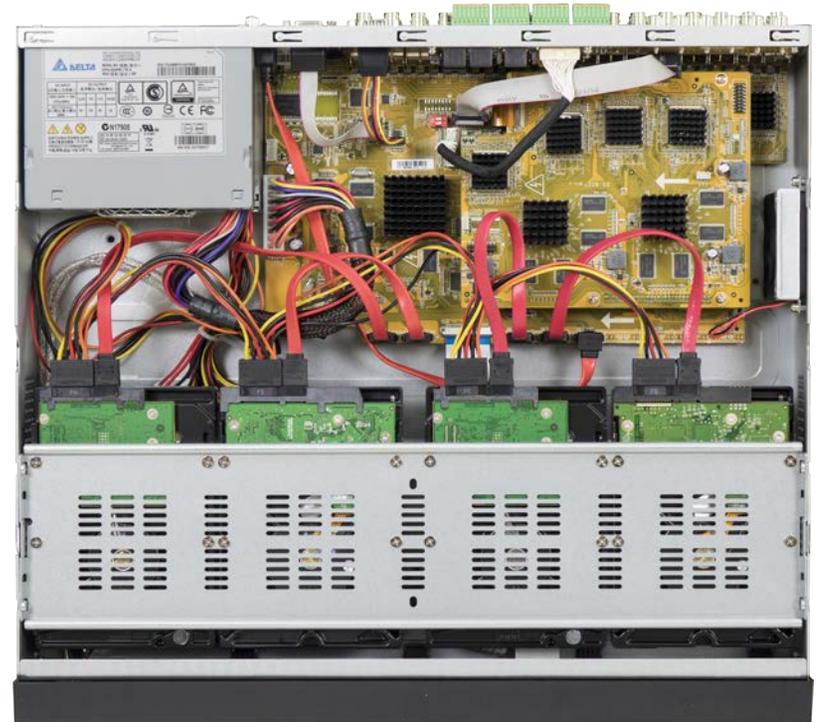
Power cable connector   SATA cable connector

HDD mounting
screw holes

5. Align the HDDs top down as shown in the photo below on a clean, static free workspace. Attach each HDD to the shelf using four screws (provided). You can attach up to 4 HDDs to the shelf.
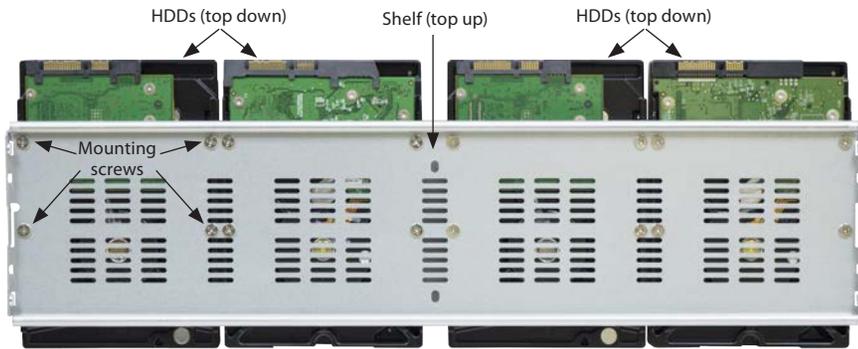
HDDs (top down)   Shelf (top up)   HDDs (top down)

Mounting
screws

⚠ **CAUTION**   *Follow recommended electrostatic discharge (ESD) guidelines while performing this procedure. Install the HDD in a static-free environment, wearing a certified ESD wrist strap. If a static free environment and ESD wrist strap is not available, touch the bare metal of the recorder chassis frequently when installing the drive to dissipate the static charge naturally generated on your skin and clothing and avoid touching electronic components.*

6. Reinstall the shelf with the HDDs in the chassis using the 4 screws removed earlier.

Recorder with 4 HDDs

7. Connect a power cable connector to each HDD power connector (see above).

8. Connect a SATA cable to each HDD SATA connector, and then plug the cable into a SATA connector on the PC board. See the illustrated photo above for the location of SATA connectors on the PC board.

9. Reinstall the recorder cover.

10. After you power on the recorder with newly installed HDDs, they must be initialized before they can be used.