

**SYAC·TB**



# DIGIEYE 3A

## Quick setup

EN-UM-DGI.3A2.A  
V1.5 09-2016

## 1. List of components



1 Digieye unit



1 AC 110-230V –  
DC 12V 10A  
Adapter



1 Power  
supply  
cable



Documentation  
Warranty



2 CDROM:  
  
CD1:  
Manuals +  
Software PC  
  
CD2: Digieye  
installation



1 terminal block  
9-pin (I/O)

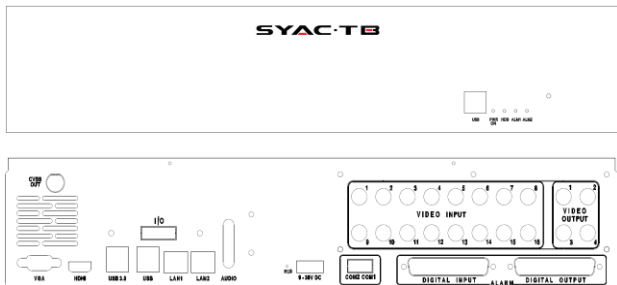
(only for NVR)



1 mouse USB

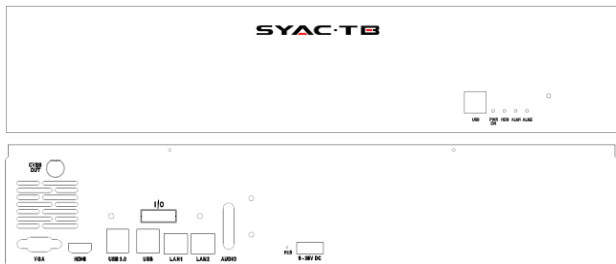
## 2. System description (HVR/DVR)

### Mod. 3A-DVR / 3A-HVR



<b>HDD</b>	Hard disk status LED	<b>LAN1</b>	Primary network port RJ45
<b>PWR ON</b>	Power LED	<b>LAN2</b>	Secondary network RJ45
<b>ALM1</b>	Recording LED	<b>AUDIO</b>	Mic/Line=inputs, Spk=output
<b>ALM2</b>	LED for backup status	<b>VIDEO IN 1-16</b>	Video inputs BNC (CVBS)
<b>VGA</b>	VGA video output	<b>VIDEO OUT 1-16</b>	Video loopback BNC (CVBS)
<b>HDMI</b>	HDMI video output	<b>MON 1-4</b>	Video outputs BNC (CVBS)
<b>CVBS OUT</b>	CVBS video output (optional)	<b>ALARM / DIGITAL OUTPUT</b>	Relay outputs (DB37-F)
<b>USB</b>	USB 2.0 Ports (2 front, 2 rear, white connector)	<b>ALARM / DIGITAL INPUT</b>	Opto coupled inputs (DB37-F)
<b>USB 3.0</b>	USB 3.0 Ports (2 rear, blu color)	<b>RES</b>	Software reset button (only in case of emergency)
<b>COM1/COM2</b>	Serial ports (optional)	<b>DC</b>	Power connector 9-30Vdc

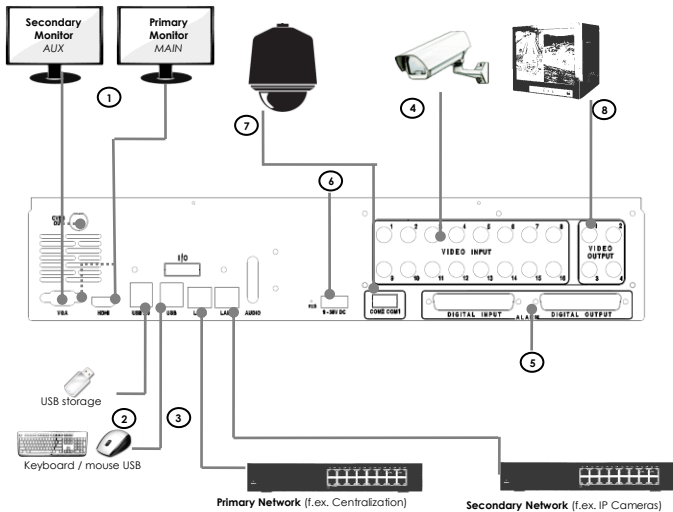
## Mod. 3A-NVR



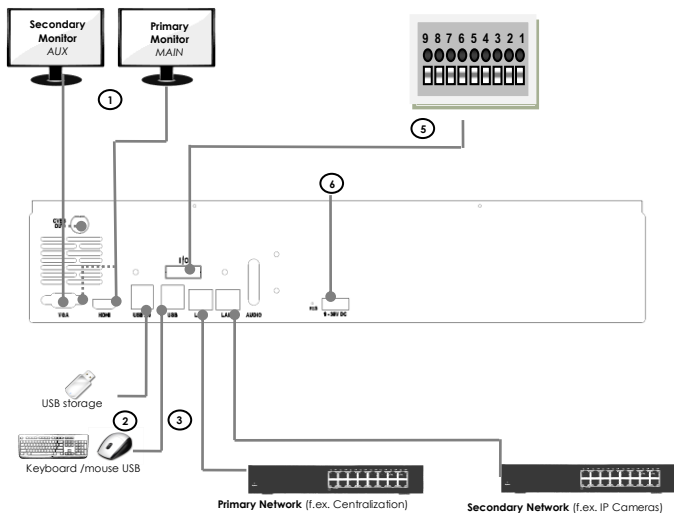
<b>HDD</b>	Hard disk status LED	<b>LAN1</b>	Primary network port RJ45
<b>PWR ON</b>	Power LED	<b>LAN2</b>	Secondary network RJ45
<b>ALM1</b>	Recording LED	<b>AUDIO</b>	Mic/Line=inputs, Spk=output
<b>ALM2</b>	LED for backup status	<b>USB</b>	USB 2.0 Ports (2 front, 2 rear, white connector)
<b>VGA</b>	VGA video output	<b>USB 3.0</b>	USB 3.0 Ports (2 rear, blu color)
<b>HDMI</b>	HDMI video output	<b>RES</b>	Software reset button (only in case of emergency)
<b>CVBS OUT</b>	CVBS video output (optional)	<b>DC</b>	Power connector 9-30Vdc
<b>I/O</b>	Input Contacts / Relay Outputs		

### 3. Installation

#### Mod. 3A-DVR / 3A-HVR



## Mod. 3A-NVR



### 1. Primary Monitor (MAIN) / Secondary (AUX)

DigiEye is able to control up to 2 outputs video monitor simultaneously.

Monitor	Function
Primary (main)	Configuration/Maintenance, Video Monitoring and alarms
Aux (secondary)	Video display live/playback (multi-split)

The unit is provided with 1 digital HDMI video output, 1 VGA analog video output and optionally 1 CVBS output. Optional video adapters are available to connect different types of monitor interfaces using video adapters.

Please refer to the below chart to configure the connections, depending on the number of monitors to be connected to the DigiEye:

Configuration	Interface	Monitor 1	Monitor 2
A. 1 monitor (VGA)	VGA	Main/Aux <sup>(1)</sup>	---
B. 1 monitor (DP)	DP1	Main	---
C. 1 monitor (CVBS)	CVBS		Aux <sup>(1)</sup>
D. 2 monitors <sup>(2)</sup> (HDMI+VGA)	HDMI	Main	
	VGA		Aux
E. 2 monitor <sup>(2)</sup> (HDMI+CVBS)	HDMI	Main	
	CVBS		Aux
<sup>(1)</sup> It's possible to force Aux in the system reinitialization program <sup>(2)</sup> The monitors must be connected and switched on BEFORE powering up DigiEye. If DigiEye restarts and does not find the connected monitor (eg. The monitor is turned off) this will not be detected by DigiEye, consequently disabling the Main / Aux output. You will need to restart the DigiEye system to detect the monitor.			

DigiEye automatically detects the monitors connected to the system at boot and sets the MAIN/AUX video interfaces resolution to optimal values.

We recommend to use monitors with the following technical characteristics:

Type of DigiEye	Optimal video Resolution	A/R
DVR	1024 x 768	4:3
	1280 x 1024	5:4
	1600 x 1200	4:3
HVR / NVR	1440 x 900	16:10
	1920 x 1080 (Full-HD or 1080p) (*)	16:9
(*) The new DigiEye user interface (dark gray color) activates only when a primary monitor is being used (MAIN) in Full-HD resolution (1920x1080).		

If no monitor is connected to the system at boot, it will activate the MAIN or AUX interface anyway (depending on the configuration) that will be displayed once a monitor will be connected on one of video interfaces.

When you change a monitor or a video port, we suggest to reboot the system (shutdown/restart).

## 2. Connection of USB devices

Connect the USB devices using the below chart:

USB Ports	Supported Devices
<b>USB</b> (2 on the front and 2 on the rear, white)	Mouse/ USB Keyboard
	USB Storage (backup)
	CONV.USB-485 (opt.) – COM3
<b>USB 3.0</b> (2 on the rear, blue)	Mouse/ USB Keyboard
	USB Storage (backup)
	CONV.USB-485 (opt.) – COM4

## 3. LAN/WAN Network Connection

Use LAN1 / LAN2 ports to connect the DigiEye to the network. Up to 2 networks can be connected to the system, with different management modes (backup/load-balance/dual-homing). If you use only 1 network, use the LAN1 port. Network interfaces are of the 10/100/1000 Base-T/Base-TX (self-adaptive) kind. We recommend to use professional network switch and shielded cables CAT-5e (minimum) to achieve optimal network performances.

## 4. Analog Cameras Connection (mod. DVR/HVR)

In DVR/HVR units, connect the analog cameras to the BNC video inputs on the rear of the system.

## 5. Inputs/Outputs Connection

### Mod. 3A-DVR/HVR

The DigiEye 3G-DVR/HVR unit is provided with:

- 10 (mod. 8 ch.) or 18 (mod.16 ch.) opto-isolated inputs, dry contacts (potential free)
- 10 (mod.8 ch.) or 18 (mod.16 ch.) relay outputs (24VDC/1A), potential free – with maximum load of 1A at 24Vdc for each output.

I/O contacts are available through the DB37F connectors on the rear of the system, the optional accessory IO-PANEL can be connected to them.

The pin-out of the DB37 connectors is shown in the below charts.

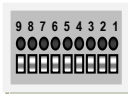
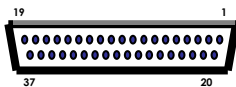
### Mod. 3A-NVR

The DigiEye 3G-NVR unit is provided with:

- 4 opto-isolated inputs, dry contacts (potential free) – common GND
- 2 relay outputs (24VDC/1A), potential free – with maximum load of 1A at 24 Vdc for each output.

I/O contacts are available through the 9-pole clamp on the rear of the system, with the following pin-out :





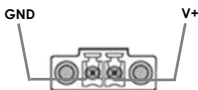
ALARM - DIGITAL INPUT	PIN DB37
INPUT 1	1 20
INPUT 2	2 21
INPUT 3	3 22
INPUT 4	4 23
INPUT 5	5 24
INPUT 6	6 25
INPUT 7	7 26
INPUT 8	8 27
INPUT 9	9 28
INPUT 10	10 29
INPUT 11	11 30
INPUT 12	12 31
INPUT 13	13 32
INPUT 14	14 33
INPUT 15	15 34
INPUT 16	16 35
INPUT 17	17 36
INPUT 18	18 37

Pin	Description
1	GND
2	IN1
3	IN2
4	IN3
5	IN4
6	OUT1A
7	OUT1B
8	OUT2A
9	OUT2B

ALARM - DIGITAL OUTPUT	PIN DB37
OUTPUT 1	1 20
OUTPUT 2	2 21
OUTPUT 3	3 22
OUTPUT 4	4 23
OUTPUT 5	5 24
OUTPUT 6	6 25
OUTPUT 7	7 26
OUTPUT 8	8 27
OUTPUT 9	9 28
OUTPUT 10	10 29
OUTPUT 11	11 30
OUTPUT 12	12 31
OUTPUT 13	13 32
OUTPUT 14	14 33
OUTPUT 15	15 34
OUTPUT 16	16 35
OUTPUT 17	17 36
OUTPUT 18	18 37

### 1. Power Supply

Connect the power supply to 4 poles Mini-DIN socket on the rear of the unit. The connector has the following pinout:



Power Supply	
Tension	9 – 30 Vdc (recommended 12Vdc)
Power	60W (max.)

The DigiEye unit is supplied with an AC-DC transformer, of the kind 12Vdc/10A.

DigiEye 3A starts as soon as it receives power in input.

For all eventualities, DigiEye is protected against reverse polarity of the input voltage.

For EN 50130-4 DigiEye must be connected to a UPS system.

### 6. Serial ports connector (mod. DVR/HVR) optional

Up to two serial ports are available on this connector to control devices such as keyboards, speed-domes, PTZ units, etc.

The following table shows the pin description for both RS-232 and RS-485 mode.

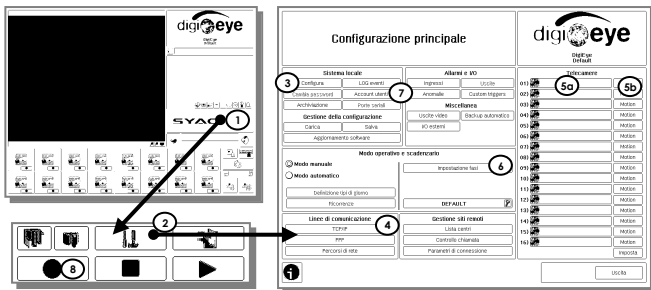
Pin no.	RS-232 mode	RS-485 mode	Port
1	TX	D-	COM 1
2	RX	D+	
3	GND	GND	
4	TX	D-	COM 2
5	RX	D+	
6	GND	GND	

### 2. Analog Video Outputs (only mod. DVR/HVR)

The DigiEye 3G units are provided with the following analog video outputs:

- MON 1-4 : monitor video outputs controlled by internal video matrix (only for analog video)

## 4. Initial configuration (Legacy interface)

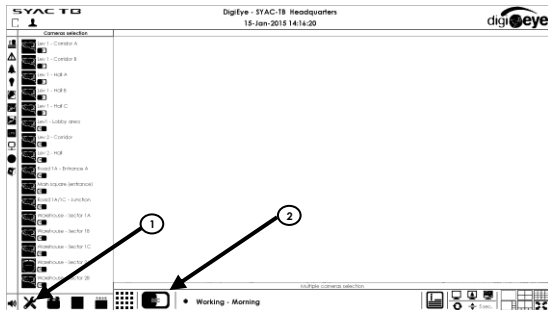


- Press the button with SYAC-TB logo
- Press the Configuration button (tools icon)
- Set local parameters ("Configure" button)
  - System name
  - Date/time
  - Number of analog/IP channels (for hybrid systems)
  - Automatic recording reactivation time
- Network parameters setup ("TCP/IP" button)
  - Static or dynamic IP address (DHCP) for LAN1 interfaces and, if necessary, LAN2.
- For each camera to be connected to the system:
  - 5a
  - 5b
- 6
- 7
- 8

- a. Press *Camera* button: for analog cameras set *Input Mode* =Color/BN, for IP cameras select *Enable* and set *Model* and *IP Address* (or perform an automatic search pressing the button *Detect*), followed by button *Probe/Connect* to establish video connection.
  - b. To set up recording on motion detection press the button *Motion* of each camera, define the detection area using the drawing tools and set alarm thresholds.
6. To configure the cameras to record press the *Phase settings* button and activate the base recording (column with red dot) or the alarm recording (column with green bell) for each camera in the "Recording Settings" section. To enable the operation of the secondary monitor, select the corresponding check.
7. To enable the user management press "User Account", enter user name and password with supervisor rights (AC) defined on the system. Factory defaults are User = *SUPER* and Password = *SUPER*. Enable the option *Access Control* enabled. To reset the password select the user's row, press the *Modify* button and change the password field.
8. To enable recording, exit the configuration screen and, in the main screen, press the record button (red dot). While recording the cameras will be indicated in pink (base recording) and in red color (alarm/motion recording).

## 5. Initial Configuration

*(Full-HD interface – from s/w 6.0)*



1. Press the Configuration button (tools icon) and refer to the former section.
2. At the end of system configuration press the REC button to start Video Recording.

## 6. Reset to factory configuration

In case you want to reset the system configuration to the factory defaults, proceed as follows:

1. Turn off the DigiEye system and connect a USB mouse and a monitor to the VGA or HDMI port.
2. Turn on the system and during the initial loading (boot) hold both the left and right buttons of the mouse **SIMULTANEOUSLY**, moving the mouse at the same time.
3. At the prompt for Utente / Password : enter username and password with Supervisor rights (AC) defined on the system. Factory defaults are User = *SUPER* and Password = *SUPER*. In case of Utente/Password loss, please contact SYAC-TB technical support.
4. To completely reset the configuration press the following key sequence:
  - a. *Reinitialize configuration*
  - b. *Reinitialize TCP/IP settings*
  - c. *Delete sequences*
  - d. *Exit*
5. Wait until system reboots.

## 7. Technical Support

The instructions in this document are a simplified base example.

For a detailed description of the DigiEye system and a complete guide to its configuration we recommend to read the user manual, available in digital format on the supplied CD.

The latest version of the manual can also be downloaded from the restricted area of SYAC-TB site (requires registration)

**[www.syac-tb.com](http://www.syac-tb.com)**

To contact SYAC-TB tecnica support:

E-mail : **[support.syac@techboard.it](mailto:support.syac@techboard.it)**

Phone: +39-059-289899

### English

**Correct Disposal of this Product** (electrical and electronic waste)



This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.