



# Mini eXplorer HD



Portable integrated AUDIO-VIDEO HD system for professional, commercial and military diving

## USER GUIDE



# INTRODUCTION

## GUIDE TO THE MANUAL

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*Serial number:* \_\_\_\_\_

*Purchase date:* \_\_\_\_\_

*Place of purchase:* \_\_\_\_\_

## Introduction

Thank you for choosing this VicSystem product. Before operating the unit, please read this manual and keep it for future reference.

## Description

The **MiniExplorer Deluxe HD and HD Plus** are surface-mounted portable HD audio-video systems for recording, supervising and for the audio video communications management with divers during diving.

They provides high performance in terms of reliability, quality of audio and video communications and a greater battery life, along with a wide range of connectivity with external audio / video equipment (even remote), as they work on IP networks.

With its small size, it is a unique device and one of the best equipped currently on the market: versatile, compact and lightweight (5.5 kg) and can be used either for quick more demanding jobs with two divers and a supervisor.

It can be used in closed mode, on the shoulder using the strap on the ground, through the multi-function remote control and direct listening with the internal speaker or through a headset (with microphone) and multimedia video glasses.

Or it can be used in a fixed position for complete control of audio communications from the surface in half or full duplex even in cross talk between divers and for the viewing / recording of four video signals coming from the cameras of divers and from external sources as well as ONVIF compatible IP video sources via external RJ45 network socket.

The dimensions of the apparatus in the closed mode are 30 cm wide, 14 cm high and 24 cm deep. The weight, as we have already said, is about 5.5 kg including the internal battery, strap and remote control.

Outside there are, on one side the waterproof connectors for connection to the audio and video cables with the possibility of using the two-wire audio set for half duplex systems or the four-wire set for full duplex.

On the other side there are two other waterproof connectors for the remote control and headphones with microphone and multimedia video glasses and the usb port. The headphone jack can also be used as a general audio-video output for connecting when necessary additional external speakers, external fixed base microphones and future accessories.

On the same side there is the built-in loudspeaker grille which is completely waterproof and in sealed plastic.

On the back of the case there is the plug for the backup battery or the battery charger and the fuse to protect against overloads.

Opening the suitcase you will immediately notice that it is divided into two sections: one audio and one video with the possibility to be powered independently should just one be in use.

On the control panel of the audio section, we can see the voltmeter display that constantly indicates the output voltage and the internal battery life, as well as the backup battery life when connected, and the charging voltage.

To the left are the two switches: one for turning off the internal speaker and the other for the conversation blocking.

The latter is active only in Full duplex mode and allows the supervisor to operate by hands-free and maintain the communications active to a single or both divers with no need to press the manual buttons on the panel or on remote control.

Two other unique features are electronic protection to limit audio peaks that often cause the microphones and headphones in the helmets to break, and the restore communications system in full duplex mode in case of breakage of the same microphones.

It is activated automatically by switching the communication to half duplex mode by using (in this mode) the headset inside the helmet as a provisional microphone.

Another feature that has been implemented in the new version of MiniExplorer Deluxe HD, is the compensation system for abnormal connection often due to false contacts and oxidations up to a maximum value of about 3200 ohm.

The audio power is 15W for the listening channel and 15W for communication with the divers.

With the HD version improvements have been made to the quality of the audio by cutting unused frequencies for speech, reducing background noise and isolating wired connections.

With the internal potentiometers you can adjust and balance the sound level of the two divers, adjust the volume of the internal speaker, the microphone on surface level and the listening level for the divers.

Furthermore, with the switch you can select the type of audio connection that you want (2-wire for half-duplex systems and 4-wire for full duplex).

At the bottom are the "push to talk" buttons, the "cross talk" switch used between the divers under the supervisor's supervision, and the power switch. The remote control has a duplicate of all the buttons and switches that the panel has with the addition of a "block conversation" button for use with either diver (useful in full-duplex mode for hands-free operation), microphone preamplifier, the start / stop button for quad screen selection on the monitor and the video sources selection button.

With the remote control you have complete management of communications when used with the case closed or with the shoulder strap, both with or without headphones. If you do use the headphones, maybe in a noisy environment, you will need to turn off the internal speaker with the power switch and use the built-in microphone in the headset that will turn on automatically in the place of the one built-into the remote control.

The video section is made up of a removable panel that acts as a cover for the device and which houses the 10" LCD LED monitor, the two high-brightness LEDs that indicate both the active recording status (in blue), and any general anomalies in the DVR (in red). It also houses the plug for connection to the base device and the optional HDMI video input plug that can be used to display external HD video sources on the AUX channel of the monitor.

This panel can easily be released and removed from the central device to facilitate any repairs or updates.

On the base body of the device where the HD DVR and the SSD storage unit are housed, we find the slim, self-powered, removable, wi-fi touch pad. The touch pad is used to manage DVR functions, it has the control section of the two divers' LED spotlights and allows the brightness of the light to be regulated using the specialised potentiometer. Different modes can be selected by means of two specialised switches (on, off and adjustable brightness), and there is the quad vision or full screen selection button for video sources and the toggle switch for fast forward-rewind selection of video sources to be displayed in full screen.

At the top right-hand side of the panel on the audio section, you can see the LED light that indicates whether the device is using the external battery or the charging status. On the right, on the video panel, there is the RCA socket for audio recording of communication with external devices.

The new MiniExplorer DELUXE HD and HD Plus are equipped with 2 HD or CVBS video plugs for additional video sources with BNC connectors. These are on the bottom right-hand side of the video panel. Using the specific toggle switch, these additional external sources can be diverted to channels 1 and 2 or to channels 3 and 4 of the DVR. The BNC connectors can also act as independent video output plugs for divers' 1 and 2 in order to be displayed on other external monitors.

The most important and exclusive feature regarding the connectivity of the new Mini Explorer Deluxe HD and HD Plus, is the option to connect to IP networks to allow real-time remote supervision of all inspection operations. In fact, using the LAN plug and an external amplified wi-fi antenna, a point-to-point or multi-user internet connection is possible in order to view, listen to and record both video sources and audio communications remotely. This can be done with all participants using the same multi-platform browser or with the right software for PC or Mac or through our specialised app for Android OS. This also allows the remote supervisor to interact without geographical limits (in the case of connection via the internet), and give voice instructions to the local supervisor directly through the loudspeaker.

The USB port on the outer right-hand side of the device, can be used to save recordings from the built-in SSD card to external devices such as USB drives or external hard disks etc., as well as to make extra audio / video recordings from a pre-selected video port in order to guarantee greater safety in the event of accidental data loss.

Above the USB port there is also the general HDMI video port (of equally high resolution as the internal monitor), where a larger external full HD monitor or additional video devices can be connected.

At the bottom of the monitor are the power buttons, the settings menu with the selection buttons and the selector for the additional HDMI - VGA - AV video connections. All monitor functions can also be activated from the ultra slim remote control if equipped.

To optimise internal battery life, it is also possible to turn off just the monitor alone and supervise with just the multimedia video glasses connected to the external HDMI plug or via the external Full HD monitor.

The MiniExplorer Deluxe HD and HD Plus are waterproof and can operate in closed mode in the rain without being damaged. The Deluxe HD model is assembled with just the video section while the Deluxe HD Plus version also includes the audio section for communication. In either case, it will be possible to carry out upgrades at a later stage to improve the equipment by shipping the product to our company.



## GENERAL TECHNICAL FEATURES

**Housing** - made from impact-resistant plastic IP67 Dustproof

**Weight** - 5.5 kg including internal battery

**Dimensions** - cm L 30 - W 24 - D 14

**Power supply** - Internal battery 12v 5A and external socket for charger or extra battery

**Battery life** - In audio mode about 12 hours; In video mode at full load ( 2 LED spotlights -2 cameras - Monitor and DVR in use ) about 4 hours

**Protection against polarity inversion and overvoltage**

Adjustable quick-release shoulder strap in synthetic fabric.

**Shielded electronic circuits immune to radio interference.**

**Power saving system with eparate audio / video power sections**

**Automatic restoration of communications** in full duplex mode in case of failure of the divers' microphones

**Sound peak limiting system** to protect divers' microphones and headphones

**Use in closed mode** using the remote control, with or without a headset with microphone and video glasses.

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# SAFETY MEASURES

## Safety measures

*Precautions*

*Water resistance*

## SAFETY MEASURES

Read these instructions carefully. Keep this document for future reference. Follow all warnings and instructions marked on the product.

Turn off the product before cleaning. Unplug this product from external power source before cleaning. Do not use liquid or spray cleaners. To clean, use a damp cloth. For any questions about the manual or the device, contact your authorized VicSystem RSM s.r.l dealer.

The Miniexplorer DeLuxe Plus is an excellent tool for the supervision of divers in underwater work when used by supervisors with certified qualifications AND IN NO EVENT SHOULD IT REPLACE THE INSTRUCTIONS OF THE SUPERVISING DIVER.

## WARNINGS AND LIMITATIONS

- The Miniexplorer is not a tool for monitoring the physiological condition of the diver.
- The Miniexplorer should not be used in environments with pressurized air.
- Do not use compressed air to dry the device.
- Do not place this product on unstable surfaces. If the product should fall, it could be seriously damaged.
- This product should never be placed near or on top of radiators or air heaters of any kind, and should never be installed in frame-mounted structures unless proper ventilation is provided.
- It is hazardous to push objects of any kind through the gaps in the frame of this product as they may come into contact with areas of high voltage that can cause short circuits and lead to fire.
- Never spill liquid of any kind onto or into the product.
- To prevent damage to the internal components, do not place the product on surfaces where there may be vibrations for a prolonged period of time.

## USE OF ELECTRICITY

- This product should be operated using the advised type of power source. In case of doubt about the type of power available, consult the manual.
- Do not allow anything to rest on the power cord connected to the device.

# SAFETY MEASURES

## **WATER RESISTANCE**

*The MiniExplorer is not an underwater device.*

*VicSystem RSM s.r.l assumes no responsibility for damage caused by moisture unless the instructions of this manual are strictly adhered to. In case of damage or malfunction of the device, deliver the product to the dealer or to an authorized distributor immediately.*

# CHECKING OF THE ACCESSORIES PROVIDED

---

## STANDARD ACCESSORIES



- 1 - Headset with microphone
- 2 - Power supply unit 12v 5A Vdc / 110 - 220 Vac
- 3 - Electric charger 14,4 Vdc 1,5 A / 110 - 220 Vac
- 4 - Power cord with battery and external plugs
- 5 - LAN cable
- 6 - Video RCA cables and BNC adaptors
- 7 - Wired multifunction remote control with microphone



# CHECKING OF THE ACCESSORIES PROVIDED

---

## OPTIONAL ACCESSORIES



1 - Video glasses and adapters - ( standard on **Military** supplies )

## VERSIONS

**MiniExplorer Deluxe HD Plus** - Audio-video-network sections

**MiniExplorer Deluxe HD** Only video-network functions

# STANDARD EQUIPMENT

## **MiniExplorer Deluxe HD Plus - Audio-Video-Network Sections**

- 4 video plugs which are compatible with video sources as well as analogue and digital cameras: AHD, CVBS, IP ONVIF, TVI, HD-CVI
- 1 Full HD HDMI video socket for external, large format monitors or HDMI video systems
- 1 Full HD HDMI video plug for external sources (optional)
- Built-in 10" LCD monitor - illuminated digital voltmeter
- LED light on the monitor to signal system anomalies as well as active recording
- Built-in HD DVR
- LAN video web server port and IP ONVIF compatible port
- USB port for backups, extra recordings, external mouse and accessories
- Built-in 240 GB SSD memory card (expandable up to 1 TB)
- Quad or full screen video button on the video panel and remote control
- Multifunction wired remote control with built-in microphone
- Headphones with built-in microphone
- Touchpad for managing DVR functions
- Brightness regulators for the spotlights with separate management for each diver (Diver 1 and Diver 2)
- Long-life internal battery
- Plug for external power supply and for charging with reverse polarity protection
- 2 RCA video wires with BNC adapters
- Fast battery charger 110 - 220 VAC - 14,4v 1.5A
- Switching power supply 110 - 220 VAC - 12v 5A
- Cable for battery power and external power supplies
- Cable for car cigarette lighter supply (12v 5A Minimum)
- 1 mt LAN cable
- Shoulder strap
- Recording and management software (Windows / MAC)
- Remote Explorer app for Android OS for remote management and recording with real time audio intercom between remote and local supervisor through the in-built speaker.
- DVD with manual, drivers etc.

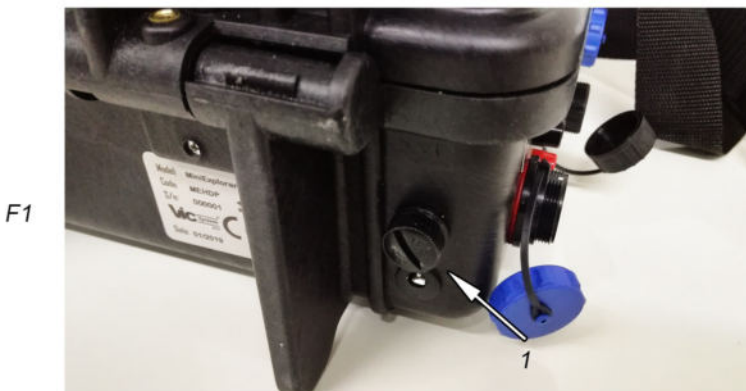
## **MiniExplorer Deluxe HD - Only Video-Network sections**

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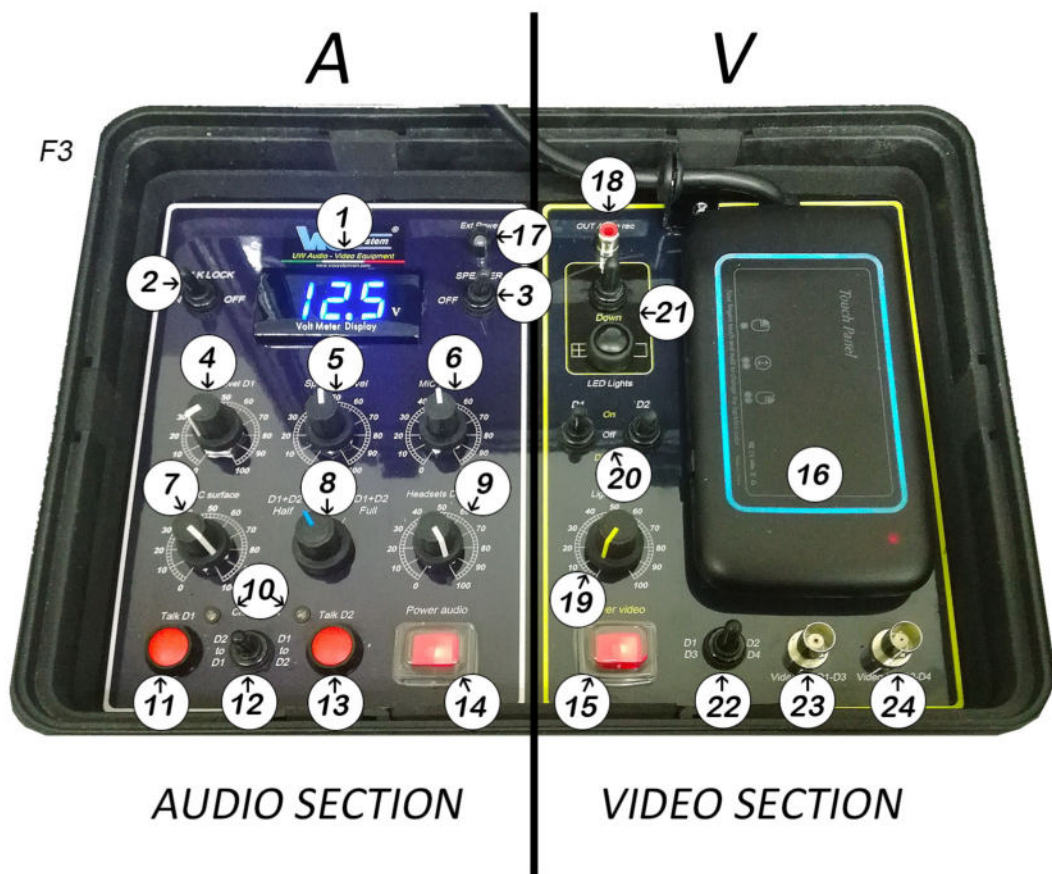
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- Shoulder strap
- Recording and management software (Windows / MAC)
- Remote Explorer app for Android OS for remote management and recording with real time audio intercom between remote and local supervisor through the in-built speaker.
- DVD with manual, drivers etc.

## FUSE REPLACEMENT



To substitute the fuse, unscrew the upper part of the fuseholder located on the back (F1-1), and replace it with a new one of the same value - **5A rapid**.

# BASE PANEL FUNCTIONS



## A - AUDIO SECTION

- 1 - Voltmeter – Indicates voltage of the internal battery, the charger and external power source
- 2 - ON - OFF block conversation in Full Duplex
- 3 - ON - OFF Internal speaker
- 4 - Diver 1 microphone volume
- 5 - Internal speaker volume
- 6 - Diver 2 microphone volume
- 7 - External microphone volume
- 8 - Audio mode switch - Half duplex / Full Duplex
- 9 - Divers' headphone volume
- 10 - LED indicators of communication with supervisor and / or between divers
- 11 - Switch for communication between supervisor and diver 1
- 12 - Switch for cross-communication between divers
- 13 - Switch for communication between supervisor and diver 2
- 14 - Power switch for audio section

## V – VIDEO SECTION

- 15 - Video section power button
- 16 - Touchpad for management of the built-in HD DVR functions
- 17 - External power indicator LED - charging - (green light) - wrong connection polarity from the external source (red light)
- 18 - BF audio plug for external units. Provides a general output audio signal for communication between the divers and the supervisor
- 19 – Brightness switch for the LED spotlights
- 20 - Power mode selectors for divers' spotlights - bright - off - variable
- 21 - Switch for quad or full screen viewing and video plugs
- 22 - IN-OUT switch for additional video plugs on the quad channels of the DVR (1-2 or 3-4)
- 23 - Video output or auxiliary input HD or CVBS (1 or 3) for large format monitors and external video units
- 24 - Video output or auxiliary input HD or CVBS (2 or 4) for large format monitors and external video units

## REMOTE CONTROL FUNCTIONS



**Figure 4**

### **Multifunction remote control with microphone**

- 1 - Switch for communication between supervisor and diver 1
- 2 - Switch for communication between supervisor and diver 2
- 3 - Communication lock switch with D1 - D2
- 4 - Switch for cross-communication between divers
- 5 - Quad or full screen mode button
- 6 - Video sources selector
- 7 - Pre-amplified microphone

# VIDEO PANEL FUNCTIONS

F11



**Figure 11 - Upper panel - Cover**

- 1 - Plug and connector for connection with the base unit
- 2 - Video input selector for viewing on the internal monitor: VGA - HDMI - AV
- 3 - Additional HDMI video plug for external HD video sources (option)
- 4 - Scroll button - back - monitor setup menu
- 5 - Scroll button - forward – monitor setup menu
- 6 - On / off button for internal monitor
- 7 - Red LED that signals anomalies in the built-in DVR
- 8 - Monitor setup menu button
- 9 - Blue LED that signals recording

## PLUGS AND EXTERNAL CONNECTORS

F5



F6



**Figure 5 - Audio/Video umbilical sockets**

- 1 - Video-Light connector plug for Diver 1
- 2 - Video-Light connector plug for Diver 2
- 3 - Connector plugs for half-duplex and full-duplex standard audio communication for Diver 1
- 4 - Connector plugs for half-duplex and full-duplex standard audio communication for Diver 2
- 5 - RJ45 LAN socket for connection to compatible ONVIF IP video sources or to routers and wi-fi adapters

**Figure 6 - Remote control ports - audio/video accessories headphones**

- 6 - Airtight internal speaker grill
- 7 - Full HD HDMI video output and USB DVR port for backup and extra recording on external media and additional external mouse.
- 8 - Multifunction remote control plug (see standard accessories, figure 8)
- 9 - Headset plug (see standard accessories, figure 1)

## PLUGS AND EXTERNAL CONNECTORS

F7



**Figure 7 - Plug for charging and power supply**

1 - The network cable (see standard features in figure 2), the electronic charger (see standard features in figure 3), and the power supply cable for batteries and external sources (see standard features in figure 4) should be connected to this socket. The device is protected from short circuits in the cables connected to the socket and from reverse polarity of external power sources

F9



F10

### Releasing the upper panel

In case of necessity or for fixed installations, repairs and system updates, you can separate the top from the base unit. Proceed as follows: Loosen screw 1 F10, disconnect connector 2 F9 from plug 3 F9, tilt the cover to 45 ° and simultaneously slide it to the right.

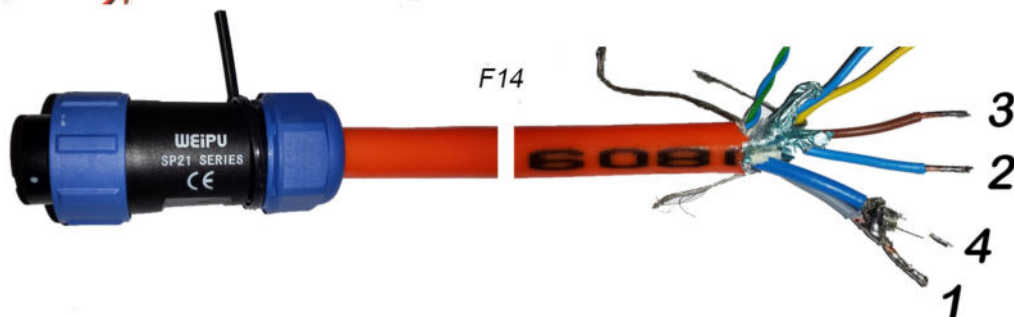


# Audio-Video umbilicals cabling

F12



F13



**Figure 14 - Example of cable connector using DCS0005 type it is possible to use other cables.**

1 - Shielding and negative power - Weld to the gray cable

2 - Positive power of the camera

3 - Positive power of the LED spotlight

4 - Video signal

--- ALL OTHER TERMINALS ARE UNUSED ---

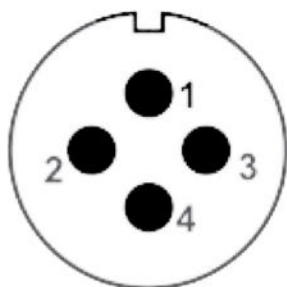


**1 = Shielding / - negative**

**2 = + 12 V Camera**

**3 = + 0 : 12V LED spotlight**

**4 = CVBS 1vpp video signal**



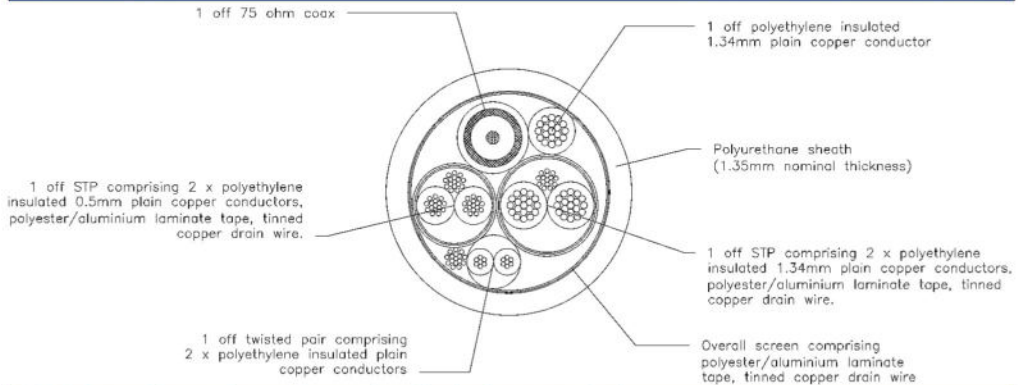
Connector seen from behind on the welded side

# Audio-Video umbilicals cabling

## TECHNICAL SPECIFICATION OF CABLES TO USE

### Mini TV Cable

CFBX Part No - DCS0005



### Weights, dimensions & mechanical characteristics

Outside diameter	11.0mm
Weight in air	170.0 Kg/Km
Weight in sea water	72.5 Kg/Km
Density	1,788.0 Kg/Km
Minimum bend radius (static)	70 mm
Minimum bend radius (dynamic)	105 mm
Minimum break strength	N/A

### Electrical characteristics

<b>1.34mm<sup>2</sup> STP</b> (NEEDED)	Conductor resistance @ 20°C	15.0 Ω/Km (maximum)
	Resistance (core – core)	500 MΩ/Km (minimum)
	Resistance (core – screen)	250 MΩ/Km (minimum)
	Operating voltage	500 V (maximum)
<b>0.5mm<sup>2</sup> STP</b> (NOT NEEDED)	Conductor resistance @ 20°C	41.0 Ω/Km (maximum)
	Resistance (core – core)	500 MΩ/Km (minimum)
	Resistance (core – screen)	250 MΩ/Km (minimum)
	Operating voltage	500 V (maximum)
<b>0.22mm<sup>2</sup> STP</b> (NOT NEEDED)	Conductor resistance @ 20°C	94.0 Ω/Km (maximum)
	Resistance (core – core)	500 MΩ/Km (minimum)
	Resistance (core – screen)	250 MΩ/Km (minimum)
	Operating voltage	500 V (maximum)
<b>1.34mm<sup>2</sup> Single Core</b> (NEEDED)	Conductor resistance @ 20°C	15.5 Ω/Km (maximum)
	Resistance (core – core)	500 MΩ/Km (minimum)
	Resistance (core – screen)	250 MΩ/Km (minimum)
	Operating voltage	500 V (maximum)
<b>Mini Coax</b> (NEEDED)	Conductor resistance (inner) @ 20°C	147.0 Ω/Km (maximum)
	Conductor resistance (outer) @ 20°C	36.5 Ω/Km (maximum)
	Impedance	75 Ω

Data sheet

DCS0005/REV00/021006

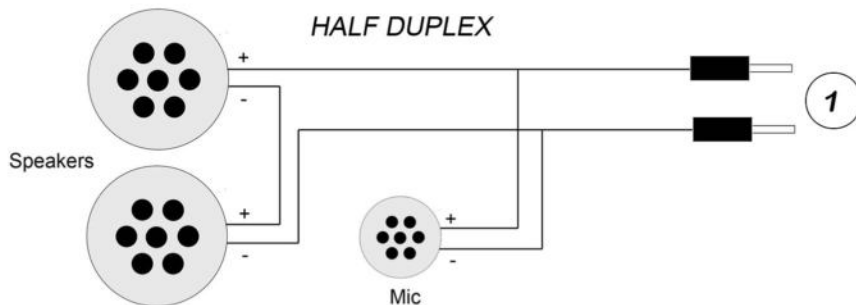
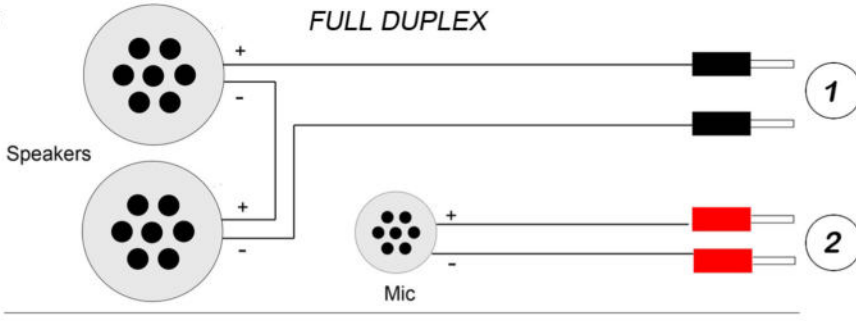
# Audio-Video umbilicals cabling

## CONNECTIONS CHART WITH STANDARD AUDIO SET HALF - DUPLEX / FULL - DUPLEX

F15



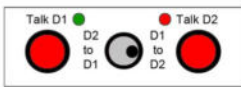
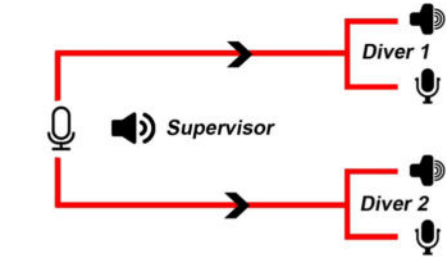
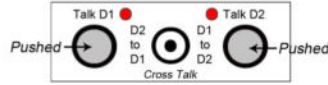
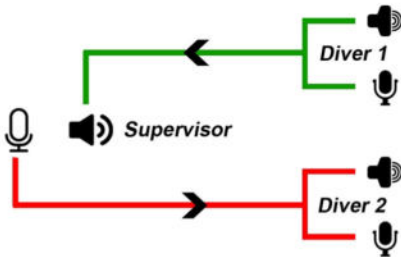
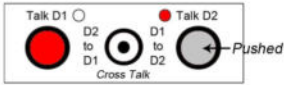
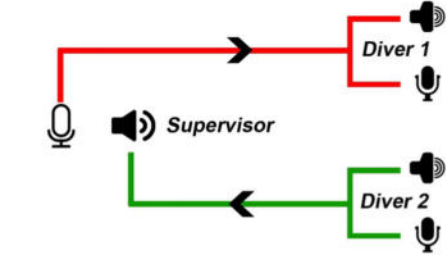
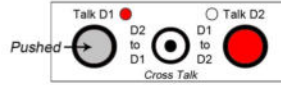
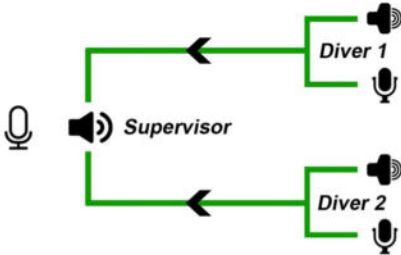
F16



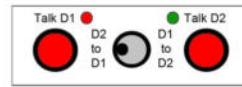
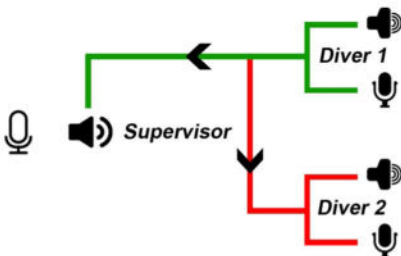
# AUDIO COMMUNICATIONS OPTIONS

## Various audio switching options

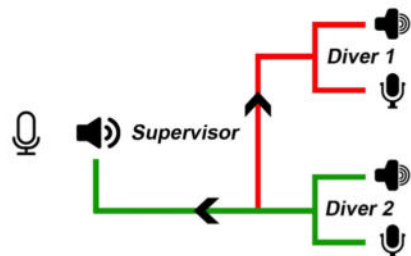
Diver 1 and Diver 2 HALF DUPLEX



Cross talk in half duplex mode



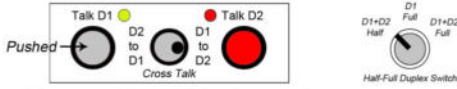
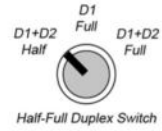
Cross talk in half duplex mode



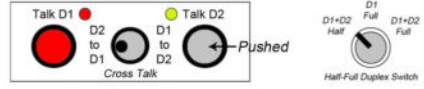
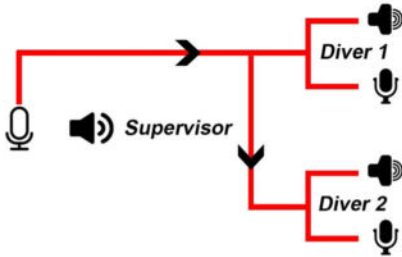
# AUDIO COMMUNICATIONS OPTIONS

## Various audio switching options

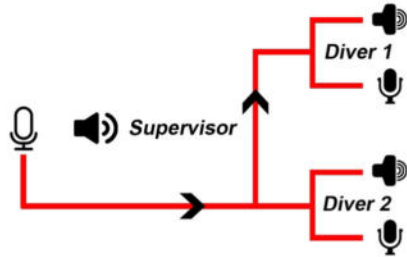
Diver 1 and Diver 2 HALF DUPLEX



**Cross talk in half duplex mode**  
Crosstalk break by supervisor talking to both divers



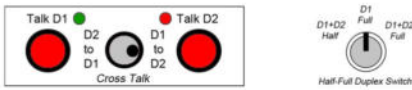
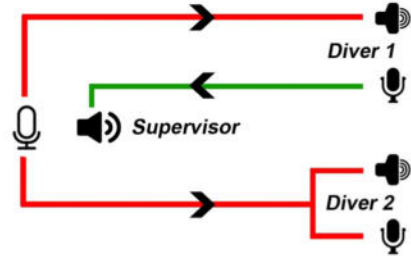
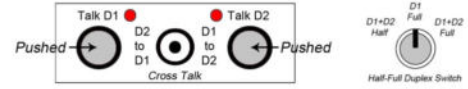
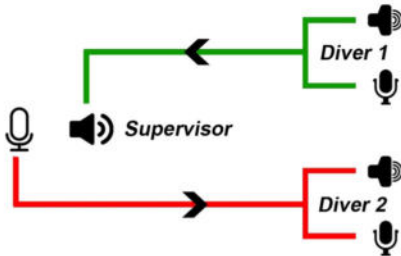
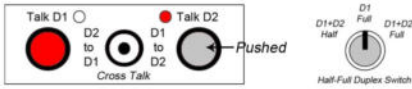
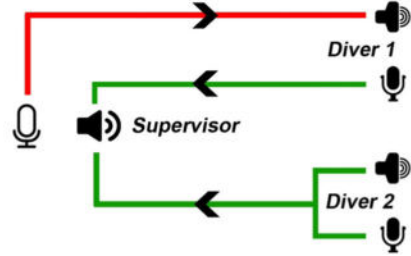
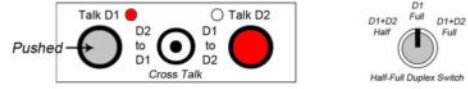
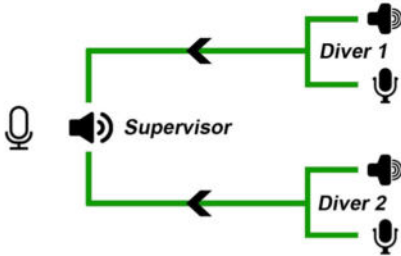
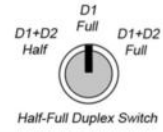
**Cross talk in half duplex mode**  
Crosstalk break by supervisor talking to both divers



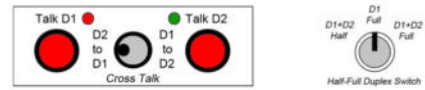
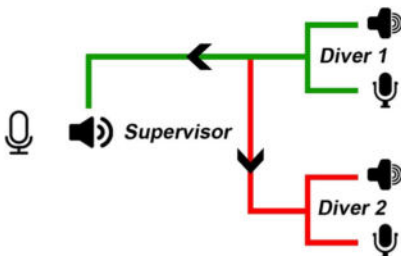
# AUDIO COMMUNICATIONS OPTIONS

## Various audio switching options

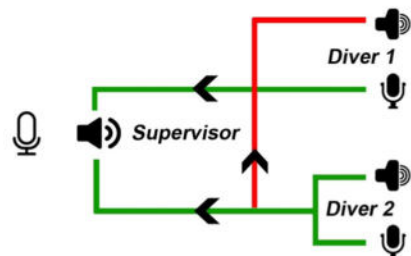
Diver 1 FULL DUPLEX (4 wires) and Diver 2 HALF DUPLEX (2 wires)



Cross talk with D1 in duplex mode



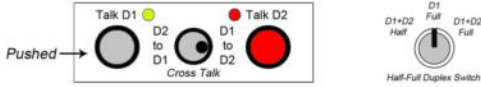
Cross talk with D1 in duplex mode



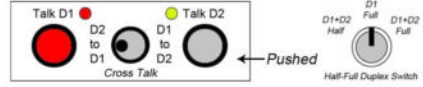
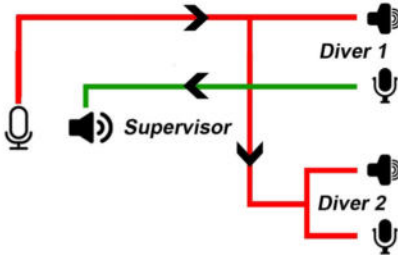
# AUDIO COMMUNICATIONS OPTIONS

## Various audio switching options

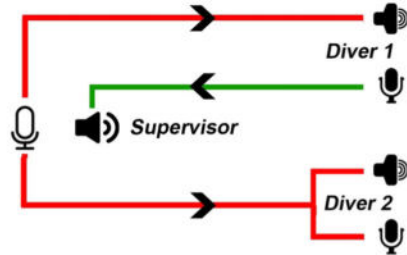
Diver 1 FULL DUPLEX (4 wires) and Diver 2 HALF DUPLEX (2 wires)



**Cross talk in duplex mode**  
Crosstalk break by supervisor talking to both divers



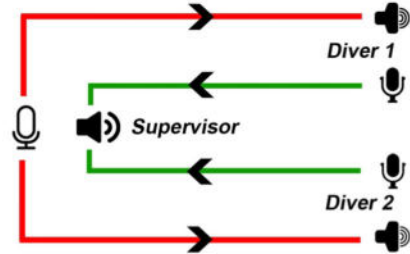
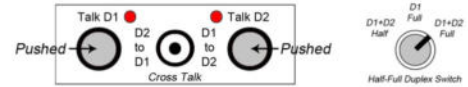
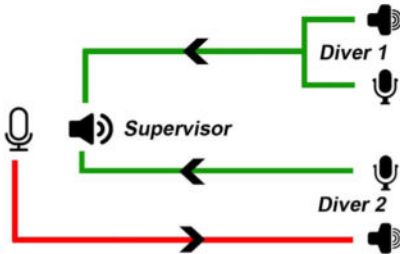
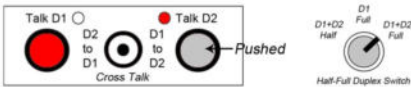
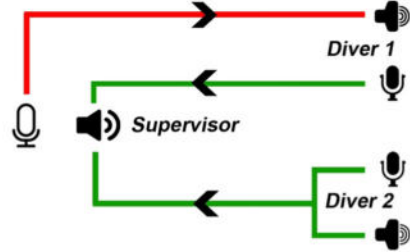
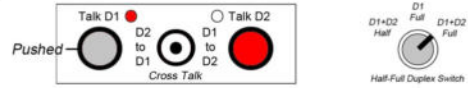
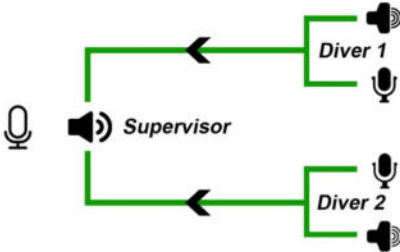
**Cross talk in duplex mode**  
Crosstalk break by supervisor talking to both divers



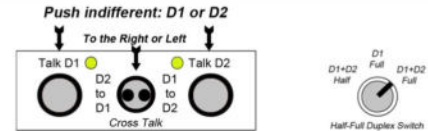
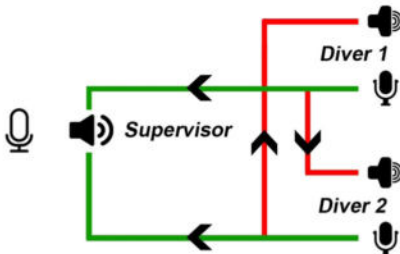
# AUDIO COMMUNICATIONS OPTIONS

## Various audio switching options

Diver 1 and Diver 2 FULL DUPLEX (4 wires + 4 wires)

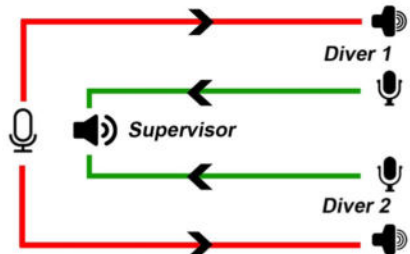


Cross talk between D1+D2 in duplex mode



Cross talk between D1+D2 in duplex mode

Crosstalk break by supervisor talking to both divers





# USE OF THE SYSTEM

## PRELIMINARY OPERATIONS

*Before powering the unit, insert the fuse supplied separately in a plastic bag inside the unit.*

*Recharge the internal battery if necessary via electronic charger supplied or power the system from an external battery, the battery supplied or a 12V DC external source with minimum current of 5A. To verify correct operation with external sources, check if the LED gauge on the 17-F3 base panel is green. Alternately, if the LED is red it means that the external power source was connected with reversed polarity. In any case, the unit will not be damaged as it is protected from such errors.*

*Place the unit on a stable surface and attach the audio and / or video connections with the cables. In case of use in adverse weather conditions, once internal adjustments are made, close the apparatus and operate in closed mode with the multifunction remote control and / or headphones with built-in microphone and / or the video glasses.*

## USE OF THE AUDIO SECTION

*After connecting the standard audio terminal cables to the system following the diagrams shown in Figures 15 and 16, select the desired type of communication on the base panel via the 8-F3 switch. In the case of use of different audio sets for each diver (eg. one FULL-DUPLEX and the other HALF-DUPLEX), take care to always use the DIVER 1 audio inputs for the FULL-DUPLEX audio set.*

*Turn on the audio section via the 14-F3 switch. The LCD display will light up indicating the voltage of the internal battery and / or that of the external power source if connected. Adjust / balance the volume of the divers' microphones using potentiometers 4 and 6 - F3. Then adjust the overall internal speaker volume using potentiometer 5-F3. Adjust the sensitivity of the surface microphone and headphone volume of divers with potentiometers 7 and 9 - F3, so as to get undistorted sound in the divers' headphones as well as having the right preamplification of the supervisor's microphone in relation to the distance and the environment in which it is operating.*

*Use the respective divers' communication buttons to enable communication with them, both for duplex and half-duplex communications. The communications buttons are located both on the base panel of 11-13-F3, as well as on the wired multifunction remote control 1 and 2-F4. Note that the system makes use of both the microphone located on the remote control as well as an internal pre-amplified microphone. The latter is only activated at the touch of the communication buttons located on the base panel in order to be able to use the system without any external accessory connected. If you are operating in duplex mode, even with a single diver, you can block the conversation between the divers and the surface via the 2-F3 switch and operate hands-free. In half-duplex mode for both divers, the lock switch is turned off automatically.*

## USE OF THE SYSTEM

*To enable communication between divers, use the switch on the 12-F3 panel or the F4 switch on the multifunction remote control.*

*The two 10-F3 LED indicators on the panel will light up. The green one indicates the diver who is talking and the red the diver who is listening.*

*During these stages the supervisor is always listening and may interrupt the conversation between the divers, and talk simultaneously with both quickly (for all possible communications options, refer to the diagrams in*

*("AUDIO COMMUNICATIONS -OPTIONS ").*

*To mute the internal speaker and operate with headphones only set the 3-F3 switch to OFF and, if necessary, close the device to operate in adverse weather conditions.*

*Working with the headphones plugged in, the remote control's built-in microphone will turn off automatically and that of the headphones will be used.*

# USE OF THE SYSTEM

## USE OF THE VIDEO SECTION

After connecting the video-light cables correctly according to the diagram in the section - Video and audio cable connections - turn on the video section via the 15-F3 switch.

The LCD display will light up indicating the voltage of the internal battery and / or that of the external source if connected.

At this stage, you can choose the internal or external monitor to display video signals from the divers' cameras and from external sources connected to the BNC plugs on the panel in quad mode or in full screen.

To select the two modes, use the 21-F3 controls on the panel and select the video sources by flipping the toggle switch forward and backward. The same controls are available on the wired remote control 5 - 6 F4.

To access the internal DVR's main menu, use the touchpad or a mouse connected to the external USB port and press the right button to login.

**IMPORTANT!** - Touching two fingers simultaneously on the touchpad is equivalent to clicking the right mouse button while touching with a single finger is equivalent to clicking the left button.

The two video inputs on the base panel with BNC plugs 23 -24 F3 can be diverted via the lever selector 22 F3 on channels 1 and 2 or 3 and 4 of the DVR. They can also become independent auxiliary video outputs for video signals coming from the cameras of divers 1 and 2 to be displayed or managed on external devices or monitors.

Together with the two BNC video input/outputs, again on the base panel, there is a BF audio plug (18-F3) with RCA connector that provides a general audio output of low frequency communications. This again can be used with external audio equipment.

To turn on the two respective divers' LED spotlights, use the 20-F3 switches and select the two modes for each LED spotlight: on or dimmer (adjustable). In "dimmer" mode use the 19-F3 potentiometer to adjust the brightness of the spotlight. To get the maximum brightness of the LED spotlight, select ON instead of turning the potentiometer to maximum while in "dimmer" mode.

## USE OF THE DVR

### 1- Access to the main menu:

Right click the mouse or touch the touchpad with two fingers to display the menu-list as shown in fig. 1 - Then left click on Main Menu

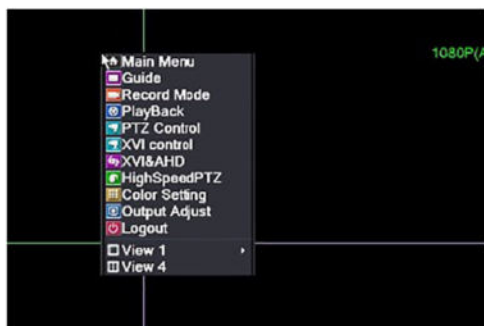


Fig. 1

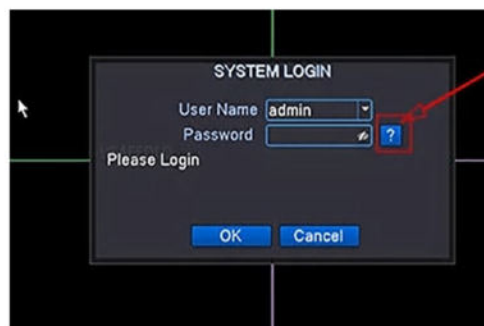


Fig. 2

To access the main menu, you need to log in. At this point the system provides the functions associated with the profile used to access the system.

A default access profile is available called "admin"; the factory settings do not require a password for this profile. "Admin" is the administrator profile and has all operating privileges on the device.

It is possible to add additional users with different privileges by accessing the "Users" menu. Once logged in, you can also access the main menu highlighted in Fig. 3.

*Password protection note: If the password is entered incorrectly more than five consecutive times, access to the system will be blocked. (By restarting or after about half an hour, the account will be automatically unlocked).*

# USE OF THE SYSTEM

## USE OF THE DVR

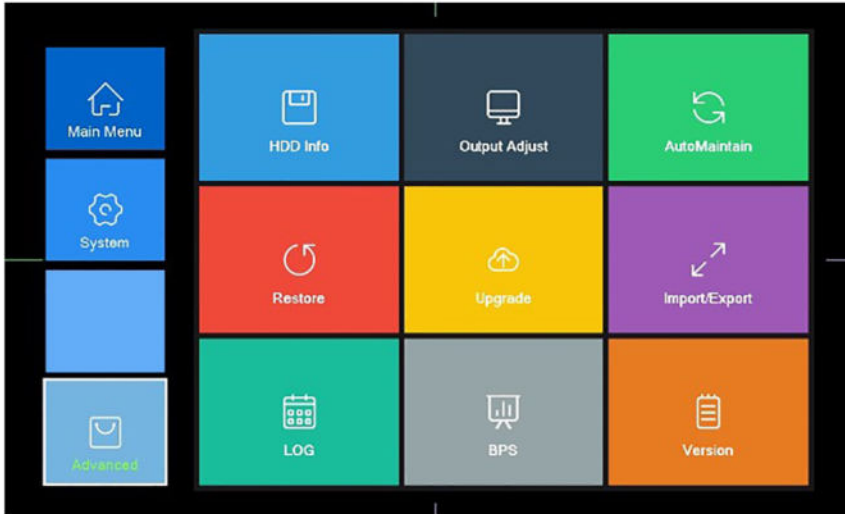
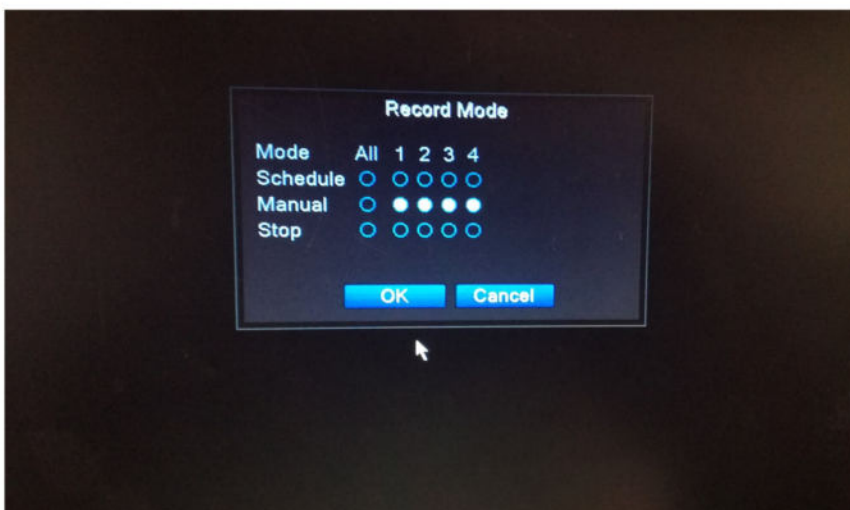


Fig. 3

Main menu with external settings and system info

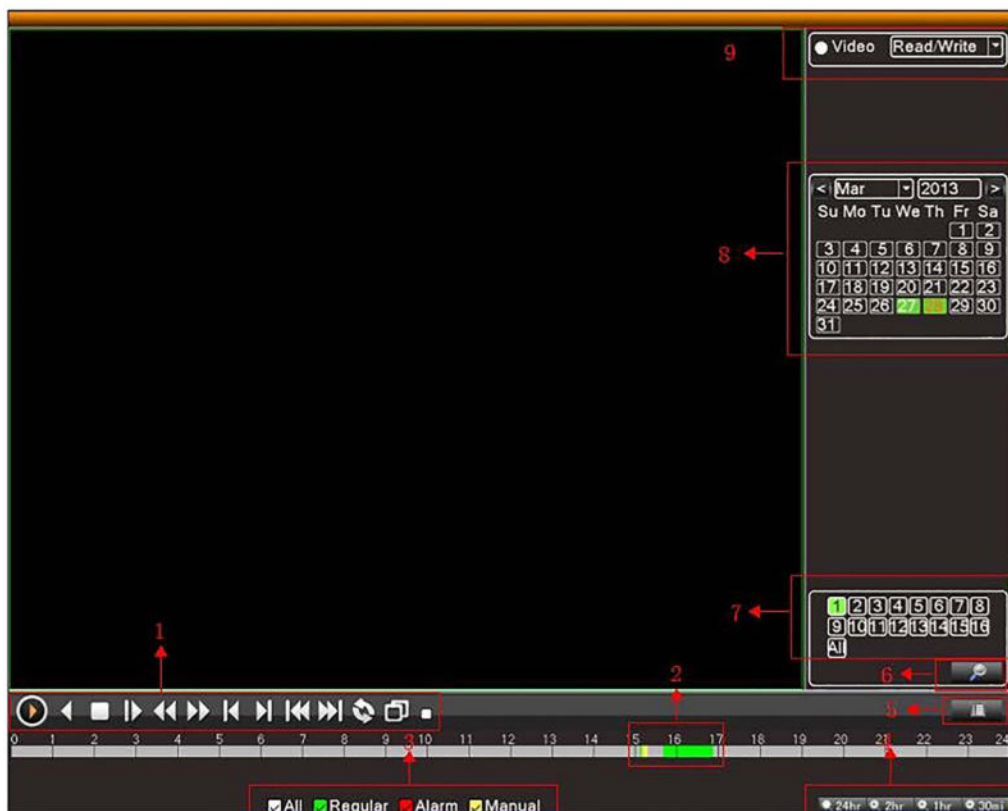
### Record Mode:

Turn on or select the recording mode for each of the 4 video sources as well as for any IP sources. By selecting "Stop All", recording on all channels will be deactivated and the blue LED light on the video panel will turn off..



# USE OF THE SYSTEM

## USE OF THE DVR – Play Back:



1. Control buttons for video playback
2. Timeline
3. Search button
4. Zoom search button
5. Search by file
6. Search button
7. Channel selection
8. Recording calendar (the days on which there have been recordings are highlighted)
9. Choice of storage type

Recorded images can be searched for in two ways: by selecting the date and time on the Timeline or by searching through the list.

### **Search by date and time**

After selecting > Playback from the main menu (or through the shortcut by right clicking the mouse) the above screen appears.

# USE OF THE SYSTEM

## USE OF THE DVR – Play Back:

Select the required date and the channel of interest and press the button with the magnifying glass in the channel selection box.

At this stage, the Timeline uses coloured stripes to highlight any recordings present on the hard disk for the selected date.

The default timeline scale is set to daily mode (from 00.00 to 24) but can be changed using the buttons on the right side of the search options area (ref. 4). In the search options bar it is also possible to find files of interest by filtering them for continuous recordings, by alarm (motion or Alarm in / out) or for manual recordings.













On the left-hand side of the search options bar synchronized mode can be selected. This allows playback of video clips from different channels (cameras) while simultaneously showing images with the same time reference.

## Search by file

The other search method is by file; press the file search button on the playback screen (ref. 6) and the calendar disappears and a list of files is shown distributed by hour; select the one of interest.

## Control buttons

For video playback, refer to the following table for more information.

button	function	button	function
	Play		Fast back
	Pause		Fast Forward
	Stop		Fast Play twice
	Slow Play		Frame Forward
	Snapshot		Start Record
	Full Screen		Loop

Note: Frame-by-frame playback only runs in "pause" mode.

# USE OF THE SYSTEM

## USE OF THE DVR

### Local zoom:

In full screen playback mode, you can drag the mouse on the screen to select a section to enlarge; confirm your choice with a left click. Use the right mouse button to exit the zoom function.

### Backup:

Video files can be backed up on external storage media. This function can be accessed in two ways: through the backup button on the playback screen or from Menu> Record> Backup.

Note: The external storage card must be installed before accessing the back up menu.



Backup window image

**【Det. unit】** Detects the storage card connected to the NVR.

**【Backup】** Opens the backup dialogue

**【Record】** Enables live recording on the chosen external media

**【Canc. Data】** Deletes the contents of the external storage medium.

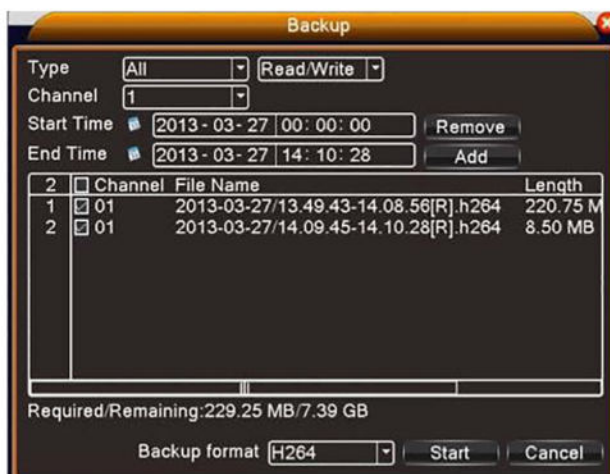
**【Stop】** Stops backup.

Backup files can be chosen by date, time, recording type (motion, etc.)



# USE OF THE SYSTEM

## USE OF THE DVR



*Backup file selection window image*

**Type:** allows recordings to be selected by filtering them by type of recording (by motion event, by external alarm etc.) and allows selection of the search source (main disk or backup unit)

**Channel:** selects the channel or channels to be searched

**Start time:** Selects the start time to be searched

**End time:** selects the end time to be searched

**Delete:** deletes the file information

**Add:** Shows the information of the selected file according to the set parameters.

**Start / Stop:** Click Start to start backup and click Stop to stop backup.

**Cancel:** During backup it is possible to exit the page layout to carry out other functions.

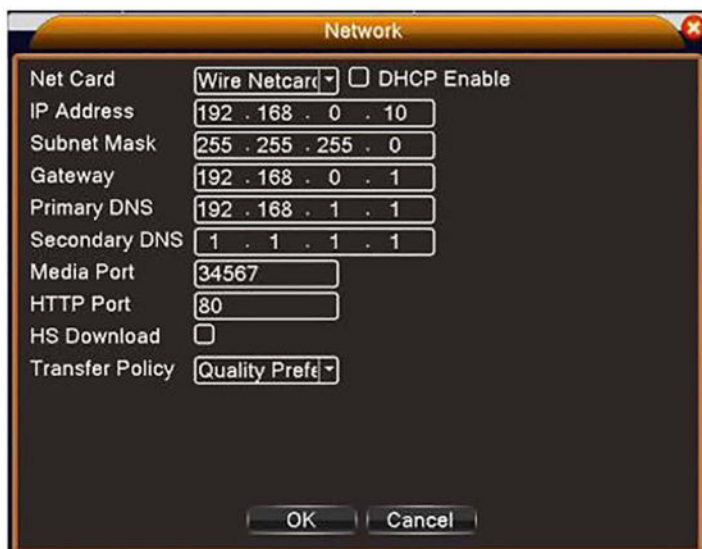
**Backup format:** Selects the H264 export format (owner) and AVI (for use on video players such as VLC)

# USE OF THE SYSTEM

## USE OF THE DVR

### Configuration of Network Parameters

To access the network parameter configuration screen, right click to access the main menu then>



- [IP address]** Configures IP address (Default: 192.168.1.10)  
**[Subnet Mask]** Configures the subnet mask. (Default: 255.255.255.0)  
**[Gateway]** Configures default gateway. Default: 192.168.1.  
**[Main DNS]** Configures main DNS  
**[Secondary DNS]** Configures secondary DNS  
**[Media port]** Configures the communication port for access from CMS.  
Default: 34567  
**[HTTP port]** Configures the communication port for access from the browser.  
Default: 80  
**[HS download]**  
**[Transfer Policy]** There are three data transfer types:  
- Adaptive, data flux is balanced between image quality and fluidity.  
- Fluidity, fluidity is favoured at the expense of image quality.  
- Quality, quality is favoured at the expense of fluidity.

Both the DVR and the router must be in the same network segment.

# USE OF THE SYSTEM

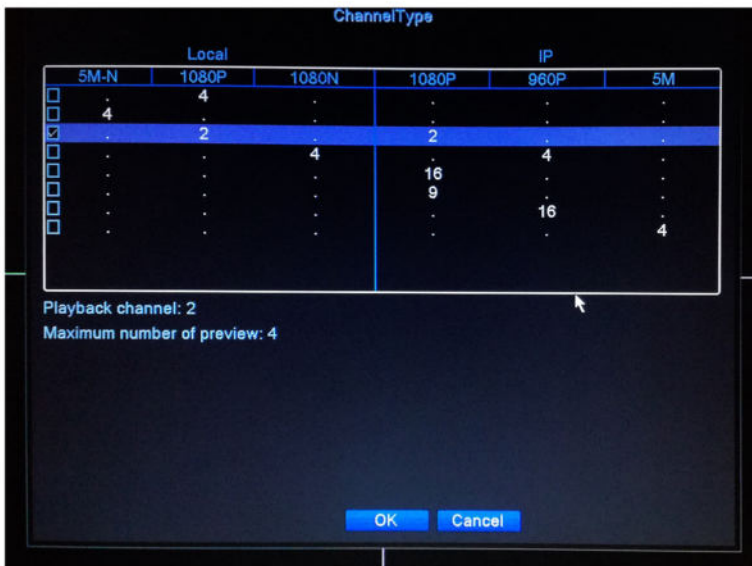
## USE OF THE DVR

### Management of AHD and IP Channels

It is possible to view / manage digital connections. By going into the System > Digital menu, you access the following screen.



From this menu it is possible to configure the analogue and IP channels and to check their status. To configure the type of video inputs according to the sources to be connected on the respective channels, select the "Channel Type" menu and configure as in the picture below.

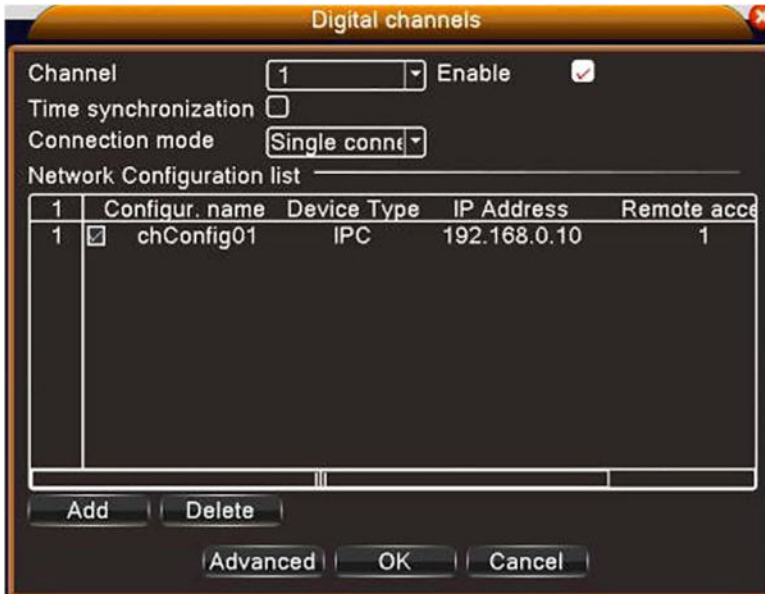


# USE OF THE SYSTEM

## USE OF THE DVR

### Digital Channels

When selecting Digital Channels the following screen opens.



**[Channel]** Selects the NVR input channel.

**[Enable]** Enables the channel

**[Synchronization time]** Synchronizes the times of the NVR and the IP device connected

**[Connection mode]** It can be single or multilink. The multilink function can connect several devices that will be displayed one by one in sequence starting from a minimum time of 10 seconds.

**[Add]** Adds IP devices.

**[Delete]** Deletes the selected device.

# USE OF THE SYSTEM

## USE OF THE DVR

### Digital channels:

By selecting **[Add]** the following screen appears.

0	Device Name	MAC	IP Address	Port
---	-------------	-----	------------	------

**[Config. name]** Name of the device.

**[Device Type]** selects the type of device: IPC (IP camera), DVR, HVR (hybrid).

**[Protocol]** Selects the protocol: net IP or ONVIF.

**[Remote access]** insert the remote channel you want to connect. For the IP camera leave 1, for DVR or HVR indicate the channel of the device to be connected.

**[Stream]** Selects the IP device flux (main or secondary).

**[IP address]** IP address of the device.

**[Port]** Access port, default is 34567

**[User name]** User name for accessing the device.

**[Password]** Password for accessing the device.

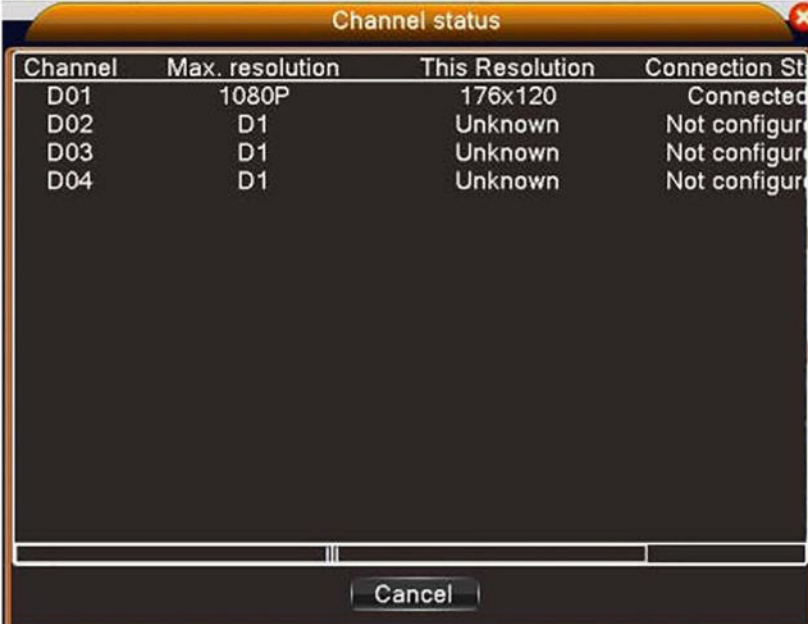
**[Search]** Searches for compatible devices on the network.

# USE OF THE SYSTEM

## USE OF THE DVR

### Channel Status

By selecting **Channel Status**, the following screen is accessed.



The screenshot shows a window titled "Channel status" with a table containing the following data:

Channel	Max. resolution	This Resolution	Connection St
D01	1080P	176x120	Connected
D02	D1	Unknown	Not configur
D03	D1	Unknown	Not configur
D04	D1	Unknown	Not configur

At the bottom of the window is a "Cancel" button.

This is a view only screen that shows the information and status of the digital channels managed by the DVR.

### Remote connection via LAN

Before you can access the device remotely, you need to connect the device to the intranet (or internet).

After connecting to the network, it is possible to access remote monitoring in two different ways: with the software client CMS and using the browser Internet Explorer.

### Connection using the browser Internet Explorer

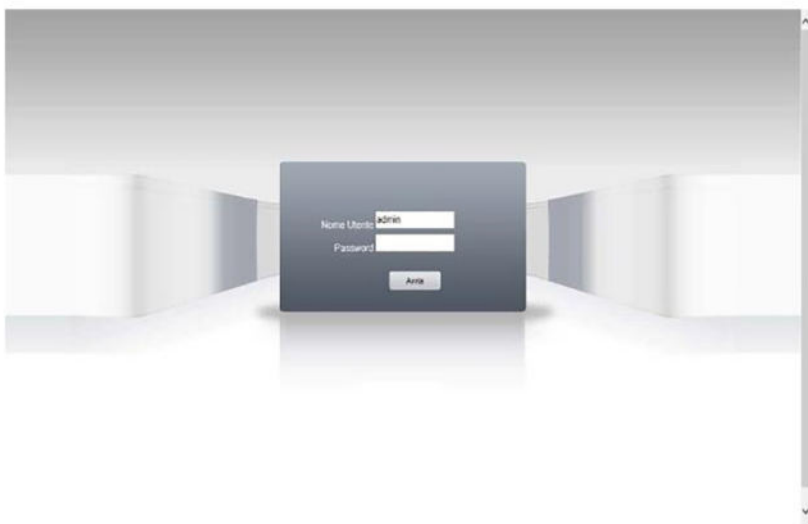
To access the DVR, type in the IP address of the DVR in the addresses window. Upon first connection you will be asked to download Active X which is necessary for the correct viewing of images (Active X is also available on the CD provided with the device).

*Caution:* Often Internet Explorer settings prevent installation of Active X components, therefore it is necessary to enable the installation of the latter through the "Internet Options > Security" menu.

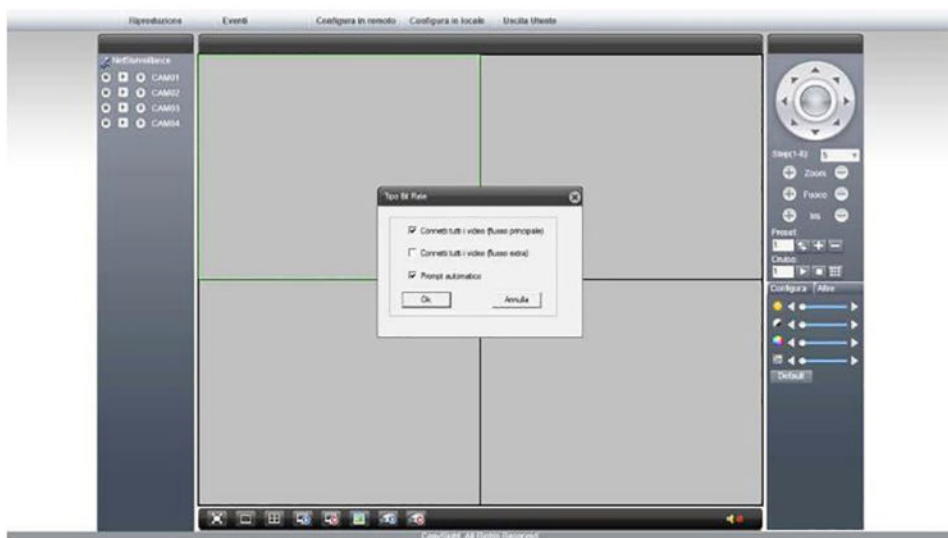
# USE OF THE SYSTEM

## USE OF THE DVR

The following screen will appear:



After typing in the access credentials the following screen appears:



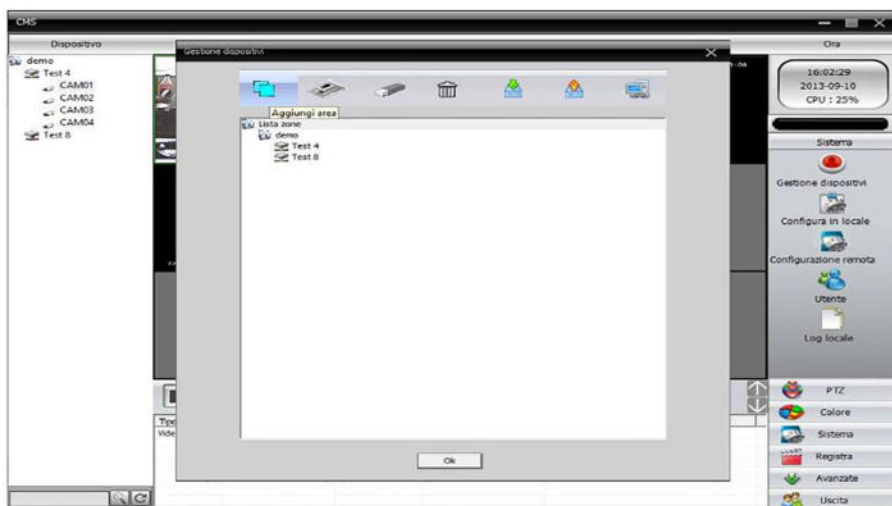
Confirm by clicking OK to view the images.

# USE OF THE SYSTEM

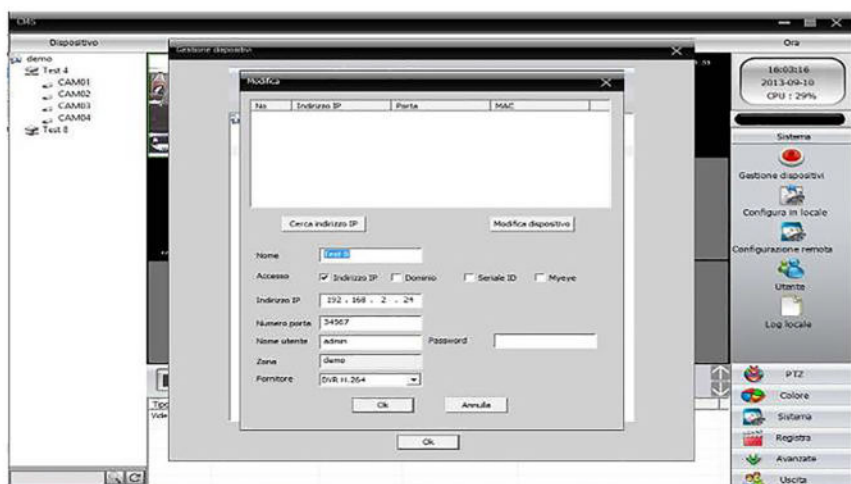
## CMS Software

CMS software is installed on a computer and can manage several DVRs / NVRs simultaneously.

The CMS software is present on the CD supplied with the NVR. Once installed, launch the CMS and enter the NVR address. To do this click on the System > Device Management button in the new window that opens.



**[Add area / device]** and insert the DVR information requested.



It is possible to add more Devices / DVRs by repeating the same operation. Once inserted, the devices will appear on the screen in the left-hand column; at this point it will be possible to select the individual NVR or the cameras that it is made up of to create the required monitoring window.



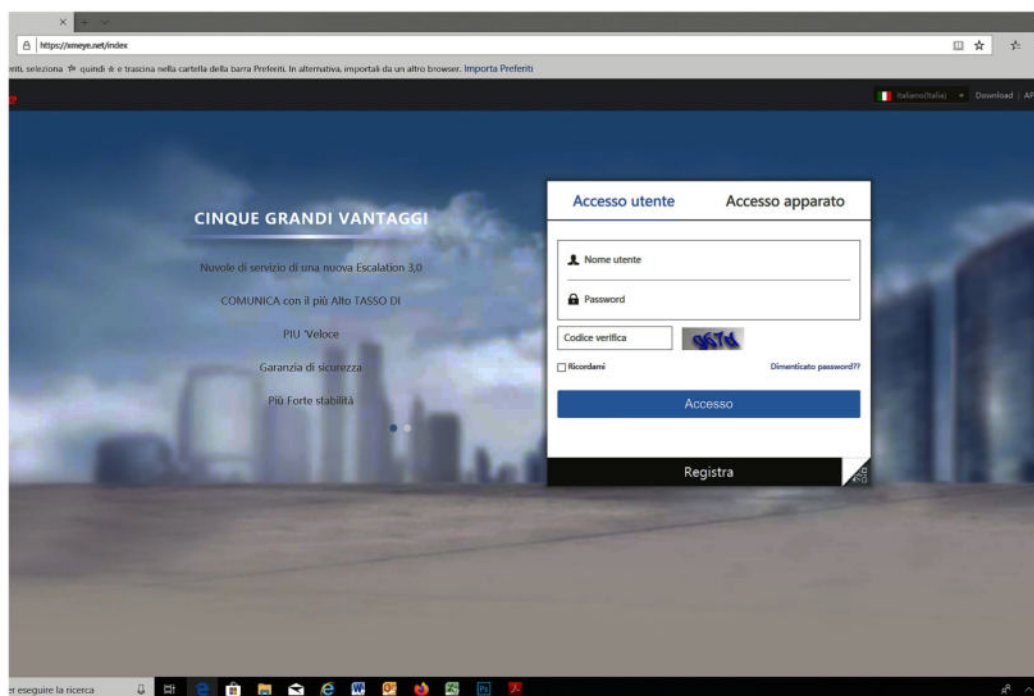
# USE OF THE SYSTEM

## Cloud software

The procedure described below allows you to view the images managed by the DVR from a PC or other mobile terminals through a free DDNS server. The procedure described below depends on the correct connection to the intranet / internet of the DVR.

## Downloading ActiveX Software

Using a browser connect to this site <http://xmeye.net>.



Select the Download option to download and install the application on the PC. Downloading and installing is automatic. Click "next" until installation is complete.

## User registration

Now select Registration and the following screen appears.

# USE OF THE SYSTEM

## Cloud software

iet/cloud\_register\_register\_member

idi e trascina nella cartella della barra Preferiti. In alternativa, importali da un altro browser. [Importa Preferiti](#)



Registra

Log Indietro

Nome utente  (4-15 caratteri, per i cinesi, i numeri, \_ e -  
Composizione)  
E-Mail  (\*\*@\*\*,\*\*\*)  
Inserisci codice  
verifica   
Password  (8-32 caratteri di lunghezza, composto da  
lettere, numeri e underscore)  
Conferma  (Si prega di essere coerente e password)

Ok

Annulla

*Fill in the highlighted fields and press OK*

*Select Device Manager and then Add.*

*The following window appears and needs to be filled out in full. .*

# USE OF THE SYSTEM

## Cloud software

**CAUTION:** Both for direct login to the device and to add it to the registered account, the device's serial code is requested. This code can be found inside the DVR by opening *Menu> System info> Version info* or through the QR code which can be activated by selecting "Guide" from the short menu.



At this point registration is complete and you can connect to the DVR in various ways.

- ☒ Through the site <http://xmeye.net>
- ☒ Through the smartphone app Android Remote Explorer.

**Access to the DVR:** Online through the site <http://xmeye.net>

Log in with your credentials (the data entered in the registration procedure described above); click on *My Devices*. If the procedure described above was successful, the device or devices previously registered by entering the serial code will appear in the left-hand column. Finally, click on the device name and the system activates the connection and viewing of the images acquired by the DVR.

**NOTE:** in order to view images, ActiveX must be installed as described in the "Download Active X software" section of this guide.

# SPECIFICATIONS

## GENERAL:

**Housing** - made from impact-resistant plastic IP67 Dustproof

**Weight** - 5.5 kg including internal battery

**Dimensions** - cm L 30 - W 24 - D 14

**Power supply** - Internal battery 12v 5A and external socket for charger or extra battery

**Battery life** - In audio mode about 12 hours; In video mode at full load ( 2 LED spotlights -2 cameras - Monitor and DVR in use ) about 4 hours

**Protection against polarity inversion and overvoltage**

Adjustable quick-release shoulder strap in synthetic fabric.

**Shielded electronic circuits immune to radio interference.**

**Power saving system with eparate audio / video power sections**

**Automatic restoration of communications** in full duplex mode in case of failure of the divers' microphones

**Sound peak limiting system** to protect divers' microphones and headphones

**Use in closed mode** using the remote control, with or without a headset with microphone and video glasses.

## AUDIO

- Independent on/off switch
- Supports two divers in full duplex or half duplex ( 2-wire or 4-wire)
- External connectors for connection to the cords
- Separate adjustment of the volume for general listening, listening level and balance of divers, the level of the headphone volume for the divers and microphone level at the surface.
- On/off switch for internal speakers
- Automatic MUTE switch in Half duplex mode
- Intercommunication between divers with supervision from the surface of the conversation and the possibility for the supervisor to intervene
- 15w RMS power amplifier with built-in speaker is also active when case is closed.
- Audio output for recording additional audio communications with external devices.
- Audio switching functions on the inside panel and on the remote control: communication between surface and diver 1 or diver 2 - between the surface and diver1 + diver2 - between divers with switch blocked in Full Duplex mode for hands-free operation.

## SPECIAL FEATURES:

- Automatic restoration of communications in Full Duplex mode in case of failure of the divers' microphones.
- Sound peak limiting system to protect the microphones and headphones of divers.
- Compensation system for connection fluctuations
- In half-duplex mode it is possible to constantly monitor the second diver during conversation between the supervisor and the first diver.

# SPECIFICATIONS

## VIDEO

- Independent power switch.
- Supports two divers with two video sources and two LED spotlights and two extra video inputs AHD-CVBS on the main panel.
- External video / light connectors for connection to cord and adaptable on request to other types in use.
- Built-in 10" 16/9 and 4/3 LCD Monitor with aux video inputs:
- Switch for the video sources on the DVR panel and the wired remote control;
- Activation switch for the 2 LED spotlights with separate brightness adjustment for each diver.
- Independent 1 VPP analog video outputs for direct viewing of the two cameras of the divers to additional external monitors or for connections with extra equipment.
- External video port HD -HDMI for use with multimedia glasses, external monitors and video splitter Full HD

## DVR

### **Main characteristics:**

Support H.265X encoding, compatible with H.264 surroundings;  
Support HDMI full HD output ;  
Support ONVIF; access third party;  
Support multiple cloud technology, network penetration, and other functions;  
Support web, CMS, center platform management software MYEYE,  
Support various mobile monitoring (iPhone, Android);  
Remote Access, With DNS (ARSP), easy to monitor remotely  
Support UTC, control signal & video stream transmit through one single coaxial  
Support XVI/AHD/TVI/CVI/CVBS/IP six signals;

### **Specifications:**

System Main processor Hi352D0V300

Interface Preview: 1/4

Video Codec: H.265X (H.264)

Monitor quality: HDMI(1080P at most)

Preview ability: 4\*5M-N@20fps (6 in 1) ; 4\*4M-N (6 in 1) ; 4\*1080P (6 in 1)

Encode ability: 4\*5M-N@12fps (6 in 1) ; 4\*4M-N@15fps (6 in 1) ;

4\*1080P@15fps (6 in 1)

Decode ability: 2\*5M-N@12fps (6 in 1) ; 4\*4M-N@15fps (6 in 1) ;

4\*1080P@15fps (6 in 1)

### **Multistandard inputs:**

Analog : 4\*1080P

hybrid : 2\*1080P (analog) +2\*1080P (network)

4\*1080N (analog) +4\*960P (network)

network : 16\*1080P ; 9\*1080P ; 16\*960P ; 4\*5M ;

Each screen can be set to 192 (16 \* 12) detection areas; multi-level sensitivity can be set

Audio: Audio compression G.711A

Intercom support

Record & playback

# SPECIFICATIONS

## DVR

Record mode: manual>timing

Local Playback: 4/2ch(analog input mode)

Search mode: Search by time, calendar, event, channel

### Storing and backup

Video storage: HDD, network

Backup mode: Network, USB hard disk, USB burner, SATA burner

### External interfaces

Video input : 4ch

Video output : 1ch HDMI

Audio: I/O 1/1

Network interface: RJ45 10M/100M self-adaption

PTZ control: Support kinds of PTZ protocols

1 USB Port: USB 2.0 port

HDD 1\*SATA port (Max 1TB)

Wireless 3G, WIFI (extend via USB)

Working environment Temperature:0°C—+55°C, Humidity:10%—90%, At-

m:86kpa—106kpa

# PRECAUTIONS

## **Precautions during use:**

**1** During traditional use of audio communications, place the Cross Talk switch on the base panel and on the remote control to the center position. (The LEDs on the panel, positioned to the sides of the Cross Talk switch must be turned off)

**2** When using the device with a single diver, turn the microphone volume potentiometer to the 0 position of the diver that is not in use, in order to avoid background noise.

**3** To power the device from the mains, do not use the battery charger but the electronic power adapter supplied.

**4** While using the headset, when inserting its connector into the audio / video port, the built-in microphone in the wired multifunction remote control will automatically turn off, and the microphone built into the headphones will be used.

**5** During playback of movies recorded, in order to also listen to the audio communication between the divers and the supervisor directly from the device's speaker, set both divers' microphone potentiometers to zero and adjust the overall volume.

**6** When using the device without the remote control and headphones, audio communication between the supervisor and the divers will be guaranteed by the built-in microphone located on the front panel of the DVR. The microphone will only be activated when using the communication buttons located inside the device instead of those on the remote control.

**7** Do not power halogen spotlights, cameras or LED lights that are not compatible from the device in order to avoid irreparable damage. The maximum total current drawn by the camera and light should not exceed 1 to 1.5 A 12V.

**8** When necessary, replace the fuse, making sure to use a new one with the same characteristics (**5A rapid**)

# PRECAUTIONS

## **Precautions for disposal:**

*Disposal of the device and its accessories*



*Disposal of old electrical or electronic devices  
(Applicable in the European Union and other European countries with recycling systems)*

*This symbol on the product or its packaging indicates that the product should not be treated as household waste, but must be delivered to an appropriate collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate disposal.*

*The recycling of materials helps to conserve natural resources. For more detailed information about the recycling of this product, please contact your local council, your local waste disposal service or the shop where you purchased the product.*

*In the event of illegal disposal of electrical and / or electronic equipment you may be subject to the penalties provided for by law (valid only in Italy).*

*Disposal of dead batteries*



*(applicable in the European Union and other European countries with recycling systems)*

*This symbol on the product or its packaging indicates that the battery should not be disposed of as household waste.*

*On some types of batteries this symbol might be used together with a chemical symbol.*

*The chemical symbols for mercury (Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate disposal.*

*The recycling of materials helps to conserve natural resources. In case of products that for safety, performance or data integrity reasons require a permanent connection with a built-in battery, this battery should be replaced only by qualified personnel. Deliver the old item to a collection point for the recycling of electrical and electronic equipment to ensure that the inbuilt battery will be disposed of properly. For other batteries, please view the section on safe battery removal.*

*Take dead batteries to a collection point for recycling. For more detailed information about the recycling of this product or dead battery, please contact your local council, your local waste disposal service or the shop where you purchased the product.*



# GUARANTEE

## **Location of the identification label**

Labels indicating the model number, date of manufacture (month / year) and the supply voltage (in accordance with applicable safety standards) are located on the back of the device.

## **LIMITS OF WARRANTY AND ACCESSORIES**

The product is in warranty for one year from the purchase date.

VicSystem RSM s.r.l. provides this warranty to anyone buying one of the Miniexplorer device versions and its supplied accessories. In case of malfunction or a manufacturing defect during the warranty period, the user is required to contact the authorized service center shown on the web site at [www.vicsystem.it](http://www.vicsystem.it), which will take responsibility for the product and, at its sole discretion, remedy defects in materials or workmanship free of charge:

- a) repair the product or faulty parts;
- b) replace the product or faulty parts;
- c) refund the purchase price of the product according to the terms and conditions of this limited warranty.

Any service carried out during and after the limited warranty period is subject to a service charge and compensation for any shipping costs incurred by VicSystem RSM s.r.l. or an Authorized Service Center. Please note that the Warranty Service can be carried out by a service center located in a country other than that of where you purchased the product.

## **WARRANTY PERIOD**

The warranty period starts from the date of retail purchase by the original end user. Some accessories supplied with the Miniexplorer may have different warranty periods. These are:

- 1) One year for the Miniexplorer Deluxe HD system;
- 2) Six months for parts and accessories that may need to be replaced including (but not limited to): rechargeable batteries -battery chargers - cables - power supply (even if sold separately) - remote control - headphones - video glasses.

In line with national laws, the warranty period will not be extended or renewed in the event of subsequent resale of the product, or in the event of authorized repair or replacement of the product. However, the parts repaired or replaced by an authorized service center will be covered by the guarantee in the following terms: either for the three months following the date of repair or replacement, or for the remaining period of the original warranty, whichever is longer.

# GUARANTEE

## EXCEPTIONS AND LIMITATIONS

### **This limited warranty does not cover:**

- 1) - Normal wear and tear;
  - Faults caused by transport (including and without limitation, defects caused by pointed objects, bending, compression or breaking due to a fall etc.);
  - Faults or damage caused by improper use, including use contrary to the instructions provided by RSM VicSystem s.r.l. (for example as given in the product user guide and / or instruction manual);
  - Other acts caused by third parties and outside the control of RSM VicSystem s.r.l.
- 2) - Use not mentioned in the manuals provided by RSM VicSystem s.r.l.  
*This is true even if use is indicated in user manuals or any third-party software (even if packed or sold as Miniexplorer VicSystem RSM s.r.l. accessories) settings, content or data, whether included or downloaded in the product or whether included during installment, assembly, shipping or at any other time or in any other way, if we have not supplied it and it has not been purchased by you.*
- 3) - Faults or alleged faults caused by the use or connection of the device with any other product, accessory, software and / or services not provided by RSM VicSystem s.r.l. or used differently from its intended use.
- 4) - Use of a power supply other than the one supplied and recommended by VicSystem RSM s.r.l. in this manual.
- 5) - Use of an external battery or external power source other than that recommended and supplied by VicSystem RSM s.r.l. in this user manual.

### **This limited warranty is not valid if:**

- The product has been opened, modified or repaired by anyone other than VicSystem RSM s.r.l. or non-authorized service centers.
- The product has been repaired using unauthorized spare parts;
- The product's serial number has been removed, erased, or its data altered or made illegible in any way (and this is determined at the sole discretion of VicSystem RSM s.r.l.);
- The product has been used when the surrounding temperature exceeds the range of -10 to + 50 ° C
- The product has been exposed to chemical products.
- The product has been used in environments with dust / air particles that could block the air vents;
- The product has been subject to high pressure jets of air.

# GUARANTEE

*VicSystem RSM s.r.l. does not guarantee that the functioning of product will be uninterrupted or free of errors, or that the product will work in combination with any hardware or software provided by third parties.*

## **APPLICATION TO THE VICSYSTEM RSM s.r.l. GUARANTEE SERVICE**

*Before you ship the product to the authorized service center, contact them and provide your name, address, proof of purchase (supplier's invoice, date and place of purchase and model) together with the serial number of the device, as well as informing them of the type of problem / fault before sending the product yourself.*

*In the event the Authorized Service Center deems that the problem or fault cannot be solved with appropriate guidance and support, they will proceed with the technical assistance covered by the warranty, will let you know the ticket number, and invite you to arrange for the shipment of the device by prepaid carrier.*

*The claim will be honored and the product repaired or replaced at no charge and returned in a reasonable period of time. This is determined at the sole discretion of VicSystem RSM s.r.l. or service center authorized by the former. If the product is not covered by the terms or conditions of this limited warranty, VicSystem RSM s.r.l. or its Authorized Service Center reserves the right to charge for transport costs and the payment of a management fee.*

*Any claim under this Limited Warranty is subject to notification to VicSystem RSM s.r.l. or its authorized Technical Assistance Centre of the alleged fault in a reasonable time and in any case no later than the end of the warranty period.*

## **ALSO OF NOTE**

*Please remember to backup all content and data stored on the device (where possible), before shipment for warranty repair, as this data could be lost during repair or replacement of the product. VicSystem RSM s.r.l. or its Authorised Technical Assistance Centre is not responsible for any damage or loss of any nature arising from damage or corruption of content or data loss during the repair or replacement of the product.*

*When a product or part is replaced during repairs, the replaced item becomes the property of VicSystem RSM s.r.l.*

*If the product is reimbursed by VicSystem RSM s.r.l., it must be delivered to the authorized service center because at that time it becomes the property of VicSystem RSM s.r.l.*

*At the time of warranty repair / replacement of the product, VicSystem RSM s.r.l. or its Authorised Service Centre may use new, equivalent to new or reconditioned products or spare parts.*

# GUARANTEE

## **LIMITATION OF LIABILITY**

*TO THE EXTENT THAT IT IS ALREADY PERMITTED BY THE APPLICABLE LAWS, THIS LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE REMEDY AND SUBSTITUTES OTHER WARRANTIES, EXPRESS OR IMPLIED.*

*VICSYSTEM RSM S.R.L. WILL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL OR PUNITIVE DAMAGE, INCLUDING WITHOUT LIMITATION, LOSS OF BENEFITS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF DATA, PUNITIVE DAMAGE, LOSS OF USE OF THE PRODUCT OR RELATED EQUIPMENT OF ANY KIND, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT OR SERVICES, DOWNTIME, CLAIMS OF THIRD PARTIES (INCLUDING CUSTOMERS) AND PROPERTY DAMAGE RESULTING FROM THE PURCHASE OR USE OF THE PRODUCT OR ARISING FROM BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, TORT OR ANY OTHER LEGAL OR EQUITABLE THEORY, EVEN IF VICSYSTEM RSM SRL KNEW OF THE POSSIBILITY OF SUCH DAMAGE.*

*VICSYSTEM RSM S.R.L. WILL NOT BE LIABLE FOR DELAYS IN SERVICE DURING THE LIMITED WARRANTY PERIOD, OR LOSS OF USE DURING THE PERIOD NECESSARY FOR REPAIR.*









For informations on products VicSystem:  
[Http://www.vicsystemrsm.com](http://www.vicsystemrsm.com)

**vic** System <sup>®</sup> **RSM** s.r.l.



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