28/05/2015
15:30:45

12.62

DVR

The **MINiEXPLORER** Deluxe PLUS
is the full-featured model from the MINi EXPLORER series, and is totally different from the previous model for performance, features and functions.

The internal electronics have been completely redesigned and engineered using analog and digital technologies. It 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 it works 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 or 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 viewing & recording of two video signals from the cameras.

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.

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 muting.

The latter, when both divers are in Half duplex mode, allows the supervisor to enable / disable the second diver's sound while communicating with the first, thus avoiding the sound blackout that happens in these cases with most of the equipment currently in use.

Two other unique features of the MINiEXPLORER Deluxe Plus 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 Mini Explorer Deluxe, is the compensation system for abnormal onnection often due to false contacts and oxidations up to a maximum value of about 4200 ohms.

The sound power is 15w and is 4 times higher than the previous model. 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.
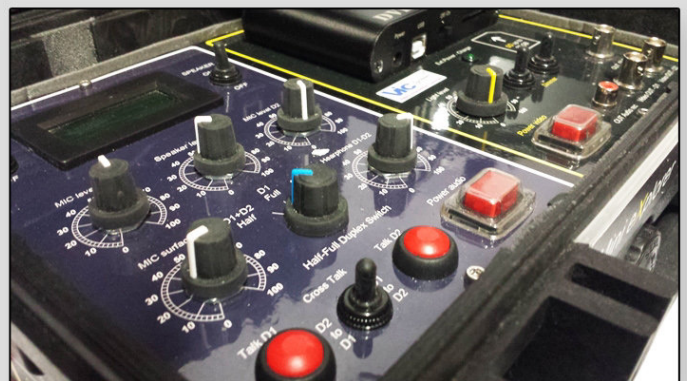
Furthermore, with the switch you can select the type of audio connection that you want (2-wire for half-duplex systems and 4-wire for full duplex).

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 video or photo recording and video source selection button with the ability to enable the picture in picture from the two cameras.

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 serves as the lid of the case, which in the full-featured version (deluxe plus) houses the 9" LED LCD monitor, the video selectors of the internal display and the USB port, the outlet for the connection with the base device, the LAN Video Server ports and the USB Video Grabber and the Wi-Fi antenna for the remote use of the apparatus by the supervisor via the optional transmitter.

This panel can be easily released and eparated from the central apparatus to facilitate repairs or to update older versions of the Mini Explorer equipped with the optional supervisor WI-FI and additional digital video connections described later.

On the body of the apparatus we find the two-channel DVR that records on the SD card and the controls for the LED spotlights for the two divers.

There is also the possibility to adjust the brightness of the spotlights using the potentiometer and to select different modes by means of two switches (on - off - adjustable brightness). Above the video section panel, you can see the LED indicator that indicates use with external battery or charging status and audio rec RCA connector for audio recording of communications with external devices.
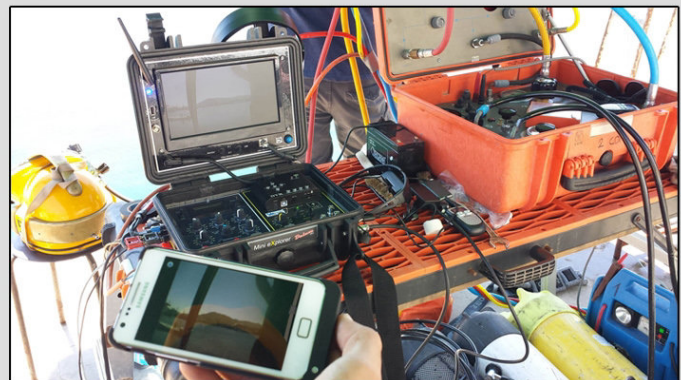
Compared to the previous version, the video switching selector is no longer present.

In fact, as can be seen from the diagram, the new MINiEXPLORER DELUXE PLUS is equipped with 3 independent analog video output plugs. Here , by means of external monitors, you can connect and view the video signals directly from the two sources and video from the DVR.

You can also view movies recorded on an SD card, the picture in picture of the two video sources and the OSD menu settings of the DVR. The external audio / video side plug can also be used to connect future accessories and video glasses.

The most important innovative characteristic of the new MINiEXPLORER DELUXE PLUS regarding connectivity, is the ability to interface with IP networks for remote supervision in real time for inspection jobs.

In fact, using the LAN jack and the integrated Video Web Server, you can connect multiple users with a common cross-platform browser to view, listen and remotely record both individual video sources with audio communications, as well as an overview of all video sources.

In addition, using the self-powered mini wi-fi router accessory with 3g USB modem, you will be able to supervise both from client wi-fi workstations placed within Hotspot range as well as remote internet stations without geographic limits.

The USB Video device connects to your Windows PC or Mac and provides a digital video source such as that of a webcam or high quality video s amplers and can be used to make dual audio / video recordings or broadcast live on the most common networks and Internet TV (USTREAM, LIVE-STREAM ETC).

Now a brief description of the functions of the internal monitor and DVR.

On the bottom of the screen are buttons for the power, the settings menu with the selection commands, the 16/9 or 4/3 format selector and switch for 2 video input channels, one for the direct sources and the other for the video output of the DVR where you can also view photos and play movies recorded on an SD card. All the functions of the monitor can also be activated from the ultra slim remote control included.

On top of the DVR there are the buttons to activate play-back functions, select the video source (camera 1 and 2) and the picture in picture, thumbnails during playback and the button to start / stop movie and photo recording.

By means of the menu button, you can setup the DVR with the ability to quickly select the recording mode (movies, photos, sequential photos up to 3 per shoot).

On the front at the bottom we find the slot for an SD card up to 32GB and the power light. In order to optimize the internal battery life you can even turn off just the monitor and / or the DVR in case of use via USB, LAN or for supervision without recording with just the multimedia video glasses.

The Mini Explore Deluxe Plus is completely waterproof and is able to operate in closed mode in the rain without damage.

It's possible to perform upgrades to expand the system by sending the product to our company.

GENERAL SPECIFICATIONS

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 he remote control, with or without a headset with microphone and video glasses.

SPECIFICATIONS

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 cord
- 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 eternal 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
- External video / light connectors for connection to cord and adaptable on request to other types in use.
- Built-in 9 " 16/9 and 4/3 LCD Monitor with two video inputs: one for viewing direct video sources and the second for viewing of the recordings and the general built-in DVR video.
- Switch for the two video sources on the DVR panel and the wired remote control; you can also select the picture in picture function
- Activation switch for the 2 LED spotlights with separate brightness adjustment for each diver.
- Independent 1 VPP analog video outputs for viewing of two cameras and the DVR directly to additional external monitors or for connections with extra equipment.
- External video port for use with multimedia glasses.

DVR

- Independent power switch.
- Recording Format: D1 - 720 x 576 PAL - 720 x 480 NTSC
- Frame rate during playback: PAL 25 fps - 30 fps NTSC
- Video recording on SD card up to 32 GB
- Recording: Movies - Single Photo - Sequential Pictures - Thumbnails.
- OSD menu: Setup - REC - Photo - Date and Time - Thumbnails - Recording Quality - the date and time on movies and photos.
- Button: start / stop rec photo / video on the DVR panel and wired remote control
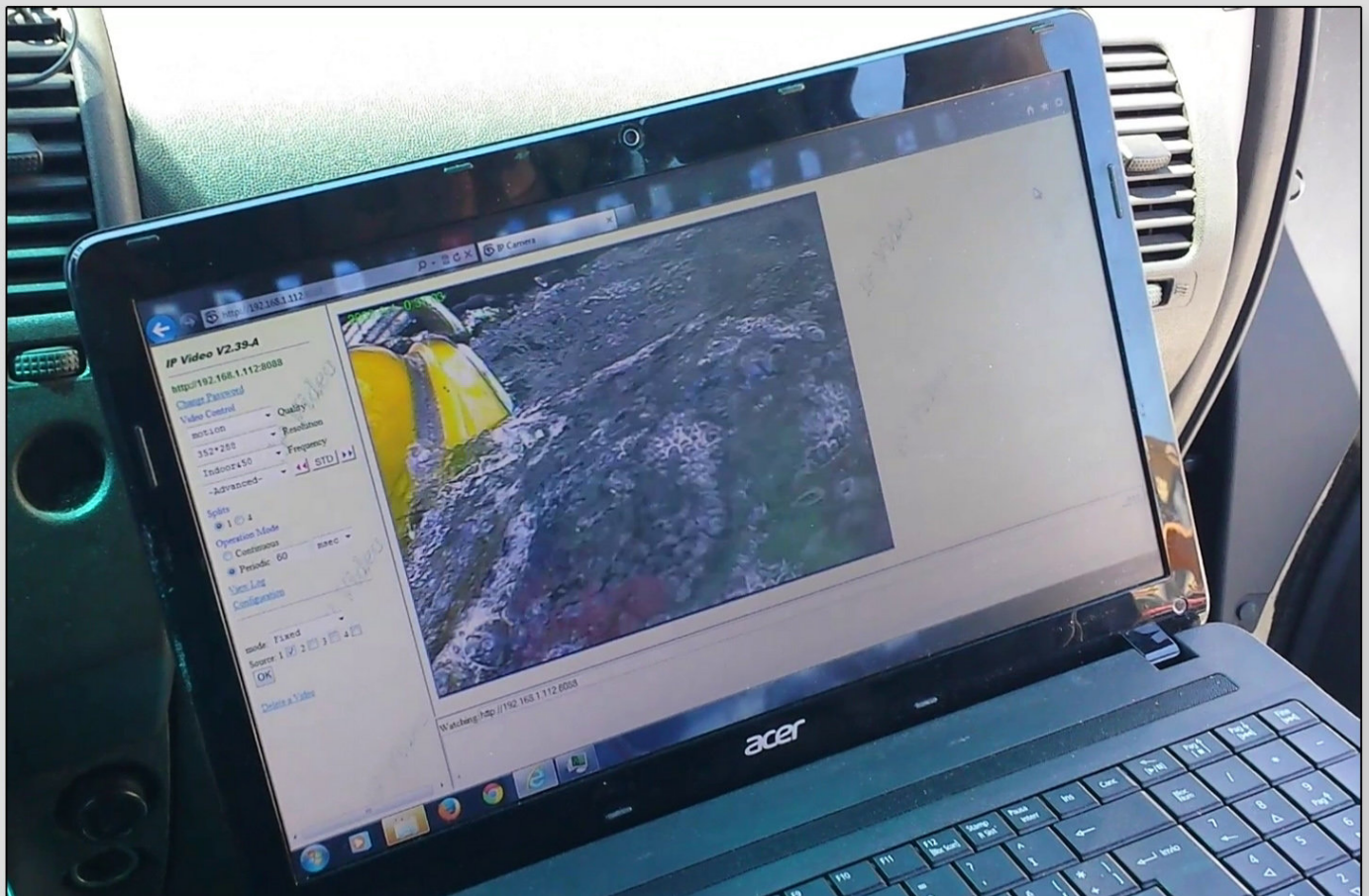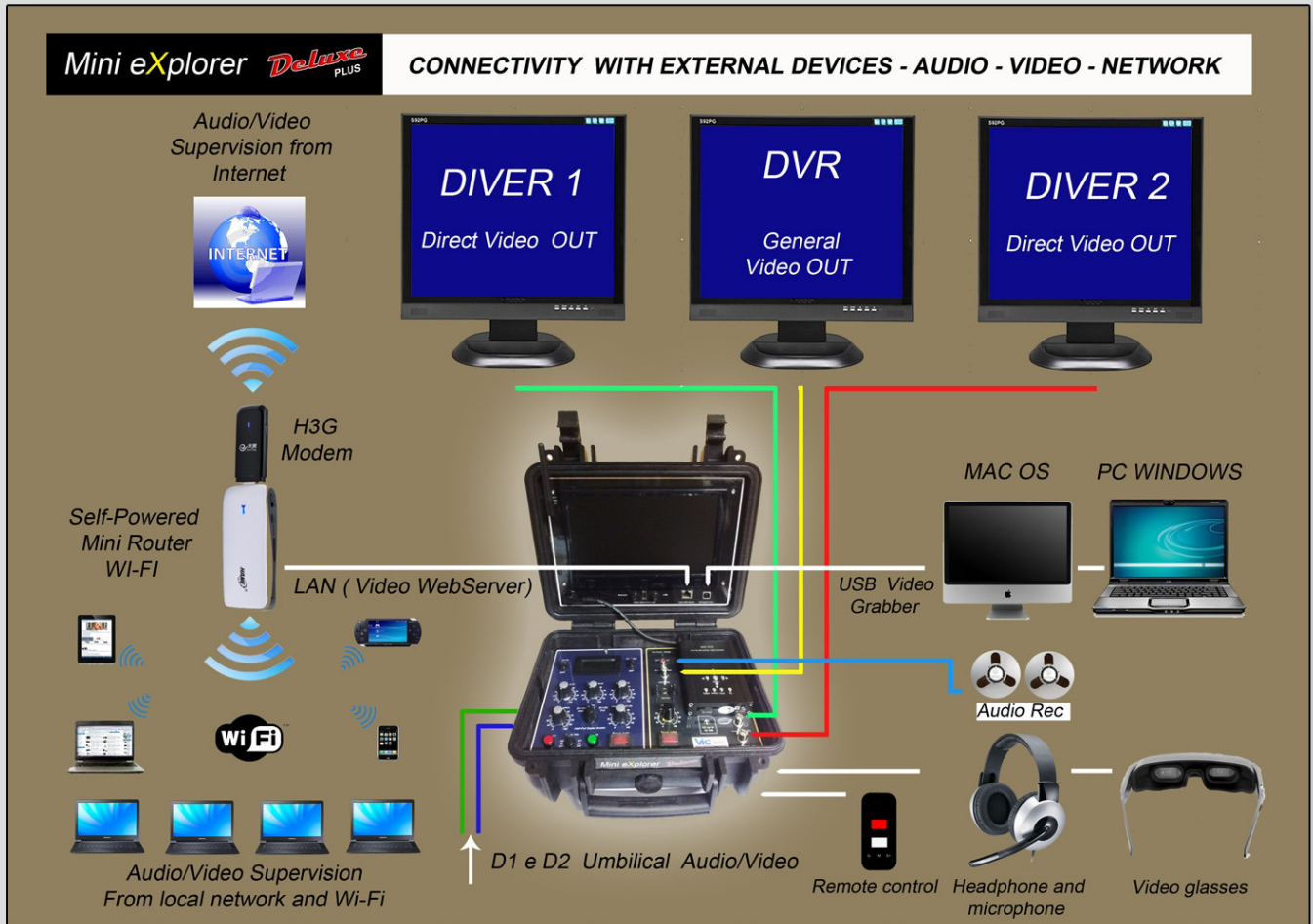- Play video / audio on internal and external monitor.

SPECIFICATIONS

VIDEO WEB SERVER

- Connection through 10/100 LAN port or WI - FI with self-powered Mini Wireless Router accessory.
- Audio and video streaming over a local network and the internet with H3G USB modem connected to the self powered mini router.

- Audio / video supervision through most popular browsers such as on MAC, Android, Windows, Linux, etc.
- ActiveX control and Java Plugin

- Complete Setup of configuration parameters from the web.
- Video overlay window on the browser remotely configurable up to a maximum resolution of 704 x 576 with the possibility to adjust the brightness, contrast, sharpness, color and tint of the video stream and record audio and video on the hard disk of the client used during viewing.
- Audio Priority Option - While supervising from the internet, in the presence of low bandwidth, you can enable this feature from the browser in order to give priority to fluid listening communication rather than that of the video that will always be of good quality but with a lower refresh rate.

Mini eXplorer *Deluxe* PLUS — **CONNECTIVITY WITH EXTERNAL DEVICES - AUDIO - VIDEO - NETWORK**

Audio/Video Supervision from Internet

DIVER 1 — Direct Video OUT

DVR — General Video OUT

DIVER 2 — Direct Video OUT

H3G Modem

MAC OS   PC WINDOWS

Self-Powered Mini Router WI-FI

LAN (Video WebServer)

USB Video Grabber

Audio Rec

Wi-Fi

Audio/Video Supervision From local network and Wi-Fi

D1 e D2 Umbilical Audio/Video

Remote control   Headphone and microphone   Video glasses

SPECIFICATIONS

CONNECTIVITY:

- 3 independent CVBS 1 Vpp video outputs on BNC connector
- General 1 Vpp audio output on RCA mono.
- USB - A/V port for connection with PC and MAC – auto-configurable.
- 10/100 LAN Port and incorporated video web server that can be used with wireless HOTSPOT and internet through self-powered mini router and H3G modem.
- External power port and charger with protection against polarity inversion.
- External headphone port - multimedia glasses .
- External microphone port and an extra speaker .
- Wired remote control port.
- Fuse.

ACCESSORIES

- Headset with microphone.
- Multimedia Video Glasses.
- Additional battery.
- Multi-function remote control with 1.2 meter wire.
- Video / light connectors adapters on demand.
- Adjustable shoulder strap.
- User Manual in English and Italian