

# HD SURFACE CONSOLE

## DOCUMENTATION



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## General

The Surface Console provides a totally portable solution for viewing your Seaviewer camera from the surface. The console comes with internal power (battery) or can be powered externally from any 12v source. Your console was shipped with a 110-220 converter to provide such power. Additionally you can connect the console directly to any 12v battery. We recommend reading through this document prior to use however we have provided a short version below that should eliminate any issues if you want to get started quickly. Many issues can be prevented by connecting all accessories prior to turning on your Surface Console.

## Quick Start

### POWER ON

1. Make sure the power switch is in the neutral position (middle)
2. Plug in the Seaviewer Camera and Camera Power to the lower right portion of the panel.
3. If using “external power connection” connect external power.
4. POWER ON – Turn power on (external source or battery)

### POWER OFF

1. Finalize the recording (IE: Stop the recorder, if installed)
2. POWER OFF – Turn power off
3. Disconnect the camera from the console
4. Prior to closing lid make sure no objects will damage the monitor

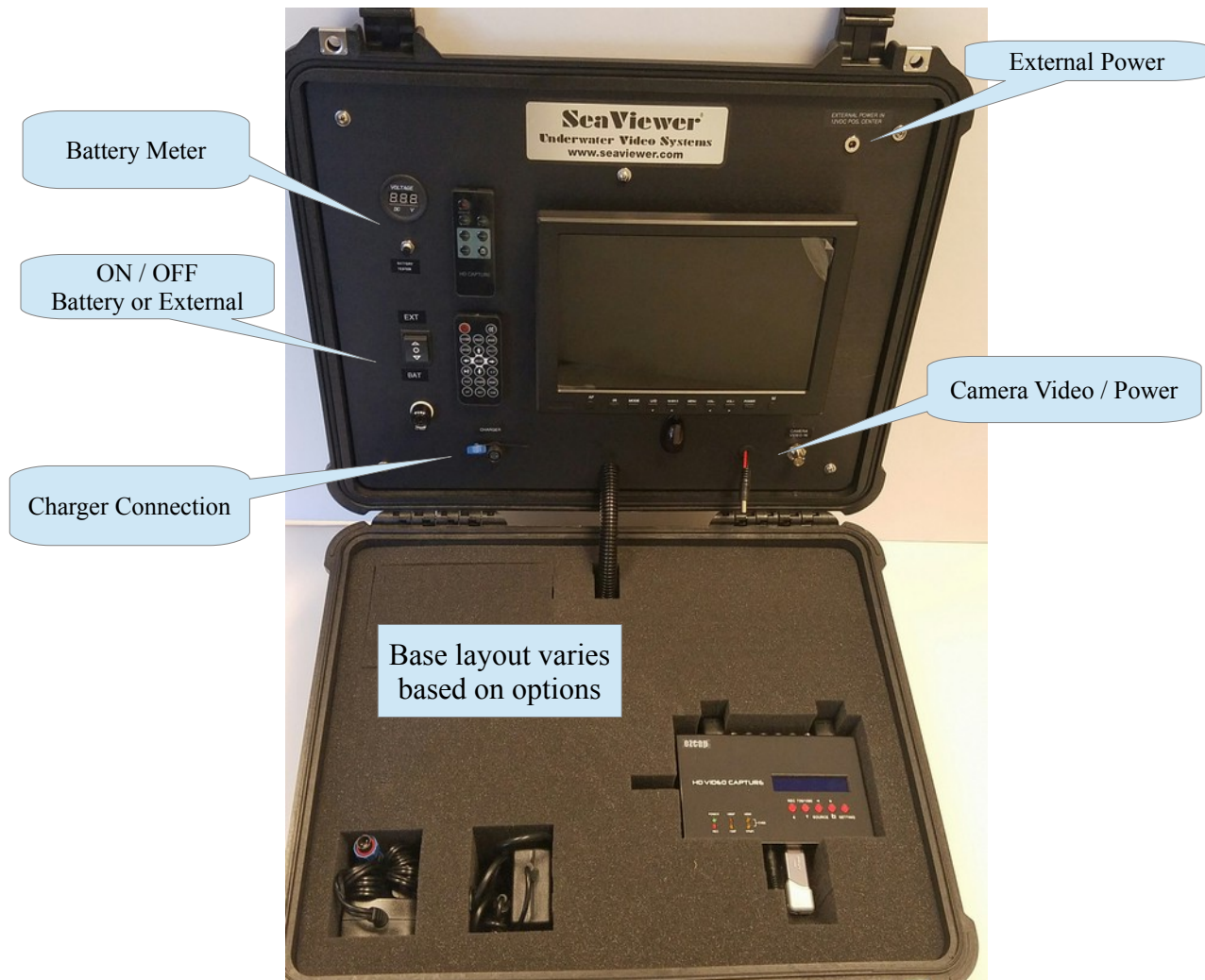
### RECHARGING

1. Make sure the power switch is in the OFF or EXTERNAL Position
2. Attach the charger to the console
3. The light on the charger will start in **RED** , and turn **GREEN** when fully charged. The charger is a high quality float charger but should be disconnected within 2 or 3 days of being charged.

### DISCLAIMER

This manual may contain features that were not purchased with your Surface Console. Specific images related to the devices included in the console may change as products are updated. In addition the specific layout of the devices in the Surface Console will change based upon the manufactures choices during assembly. The goal in layout is to provide the best functional system for our users.

## Typical Connections HD-PRO (with Recorder)



### Connections and Powered Panel

Fuses – The console has 2 fuses. The main console fuse (7amp slow blow glass) is located on the anodized panel while the other fuse (10amp mini spade) is located on the positive (+) terminal of the battery. If proper procedures are followed these fuses should never need to be replaced.

### Usage

Make sure power is in the OFF position prior to connecting the camera and camera power. If you connect the camera when power is on you might blow a fuse (10amp).

1. Verify power is off
2. Connect the camera to the Surface Console
3. Connect external power if using that as the power source
4. Power on – Select external or battery using the On/Off switch
5. Power off – When turning off the console please STOP the recorder if installed. This allows the recorder to properly close any recordings in process.

## Typical Connections HD-PRO + (with Recorder & GPS Overlay)



### Additional Connections in the HD-PRO+

The top portion of the console is basically the same layout as the HD-PRO Console. As more options are added the console load ratings are increased so we do make additional component changes to handle the additional amperage and camera requirements.

With the addition of the HD-Overlay you will need to connect your external GPS. We have provided a connection for the GPS with different adapters to allow specific configuration. The documentation for the overlay device is contained on a USB drive.

The HD Overlay is configured at our factory with standard protocol for most GPS systems. You have the ability to modify the configurations via the keyboard.

To activate the Overlay Menu you would plug the keyboard in the front of the HD Overlay device and select F11. Once the menu is in place you are able to change any settings. Remember to SAVE the settings.

## Connections Continued



Typical connections / Shown with optional accessories

### **CAMERA CONTROL BOX**

The HD camera connection has multiple cables on the control box.

Dimmer Control – equipped if lights were ordered

On/Off Switch – controls lights if lights were ordered

On/Off Switch – Turns off camera video if no lights were ordered (should be always on)

Green – Not Used

Red – Power (Connected to Console)

Yellow – Analog Test Signal (not connected to console)

### **CONNECTING CAMERA TO CONSOLE**

BNC on CONSOLE connects to BNC Connector on CONTROL BOX (shown below with a green cable) – the color of your cable will vary.

# HD-DVR Recorder Documentation

## H.264 Recorder Operations



These instructions are designed for Recorders Installed in a console

1. Turn console to Power ON. (Recorder will light when power is applied)
2. USB Drive - Plug USB Drive in the recorder.
3. Recording - The RED button on top of the recorder "Starts / Stops" recording
  - a) When recorder is recording the RED LED light will be lit
  - b) When not recording the RED LED is off

**NOTE: There is a 8 second delay before recorder starts recording; this is normal operation.**

4. Video Sources
  - a) HDMI - This is the HD (High Definition) input - HD Camera
  - b) Composite - This may be used with Analog Camera Signals
5. Remote - The remote offers "Snap Shot Feature" - snapshot does not work if recorder is recording video.

Note: If the recorder is supplied with a remote you can also use the remote to control the recorder.

## HD OVERLAY – PROTEUS II



When used in our console the Proteus is configured directly after the camera to assure the GPS overlay is recorded and displayed on the monitor.

The overlay device has a standard RS232 input which would be connected to your GPS. Connect your GPS to the device. Once communication has been established you will see the GPS information on the screen.

Refer the digital manual included with the Proteus for enhanced features and configuration specifics.

Proteus II is our versatile and powerful HD video overlay device. It provides professional, scientific and industrial users with the capability to overlay crisp and clear texts, graphics and telemetry generated information into an incoming HD & SD video in real time. Proteus accepts video in HD-SDI, HDMI, Component, Y/C and Composite. Proteus is super compact, light weight and stand-alone IE. does not require to be connected to a computer.

## NOTES FOR ALL USERS ...

A) The Display Console should always be ventilated (lid open) when using or charging to avoid heat issues.

B) It is recommended not to use the Battery Charger while running the equipment since this could cause the current rating of the Charger to be exceeded in some cases.

C) TURN “OFF” -STOP THE RECORDING prior to turning off the main console switch. It is NOT required that you turn off all accessories during the shutdown process.

D) Additional component documentation may be included for each accessory.

E) The DVR draws power from the MAIN POWER BATTERY .

F) The BATTERY CHARGER (110-240 Volt AC @ 50/60Hz) for the MAIN BATTERY is inside the foam. You may expect to power the Surface Console and a SeaViewer Camera for up to 8 hours with the MAIN BATTERY charged, depending on your choice of components. See the pages below concerning Battery Information to get a more accurate estimation.

G) CABLE WITH ALLIGATOR CLIPS (IF EQUIPPED) – is used to power system when internal battery is low, or to conserve internal battery. First turn OFF main battery switch. Then connect the cigarette lighter plug to the console. If using alligator clips ordered from Seaviewer, connect the FEMALE cigarette lighter plug to the alligator clips provided.

**BE SURE RED CLIP IS ON POSITIVE (+) BATTERY POST.**

## CONSOLE BATTERY, CHARGER & SWITCH INFORMATION

There are two different size batteries available. Both are sealed lead-acid (SLA) batteries, and output approximately 12 Volts DC. They are maintenance-free and come with a charger that uses 110-240 Volt (50/60 Hz) AC input, along with an inline 12-Volt DC fuse which is replaceable. Those built into the Surface Console units also include an ON/OFF switch. It is recommended not to use the Battery Charger while running the equipment since this could cause the current rating of the Charger to be exceeded in some cases.

## BATTERY SIZES

The difference between the batteries, other than size and weight, is the running-time which they will allow before needing to be re-charged. Of course, the more equipment that is powered, the less the running-time will be; and also the larger the battery that will be required to achieve the same running-time. The size of the battery is rated in Amp-Hours (AH). The running time below is based upon the the typical configuration of our consoles.

Typical Hours of Operation:

Complete System FISH – no recorder (7ah – 5 hours / 18ah – 7 hours)

Complete System PRO – with Recorder (7ah – 4 hours / 18ah – 6 hours)

Complete System PRO+ – with Recorder and GPS/Overlay (7ah – 2-3 hours / 18ah – 5 hours)