CAUTION & WARNING

Our video overlay units are supplied as system components. They require correct connection to power, and other system components such as a video camera, video recording device and / or video monitor to operate. Correct installation and maintenance is the responsibility of the user. Please ensure proper care is taken in making power and video connections in your system. Correct connection does no mean simply plugging the right plug into the right socket. Your system must at all times provide the correct signals at the specified signal levels for the system to operate. Although the designated power connector is protected against accidental reverse polarity connection, short circuiting power to the video connectors or other input connector will result in the electrical failure of the unit. Our warranty specifically excludes failure due to electrical damage caused by improper connection.



Please ensure that all installation is done in accordance with these instructions by technically competent people.

Power supply

The GPSBOXKBD units without keyboard draw approximately 150mA. All versions are designed to be powered from a 9 - 12V DC regulated power supply. The power supply used should be capable of providing 300 - 500mA according to the requirements of the keyboard and camera being used with the overlay unit. The keyboard used should not have a current draw greater than 200mA. It is recommended that the keyboard is only connected to the unit when required for setting the display to save power in battery operated systems.

WARNING! It is important to ensure correct connection of the video text overlay unit to the power supply or battery. Failure to observe correct power supply connection polarity may result in the electronic failure of the unit or in the battery bursting to cause personal injury and damage. The power supply <u>must</u> have a regulated output. Direct connection to a non-regulated power supply, in particular direct connection to a vehicle alternator via a cigar lighter socket or similar, can cause the unit to fail. The warranty is void in such a case.

Connections

Before making or removing any connections ensure the power supply is off to all elements of the system, overlay unit, camera and recorder. Do not insert or remove the overlay unit power connector while it is connected to power. The video overlay unit requires a 9 - 12V DC regulated power supply connected via the 2.1mm power connector on the unit's front panel. The unit has a simple on / off power switch designed to isolate it for battery powered applications. There is no internal battery compartment. All connections should be made to the overlay unit before powering the system up.

All our video overlay units are designed to be used with standard 1 V p-p composite video signals. They cannot be used with proprietary systems which transmit amplified or encoded video signals without an adaptor which provides a standard composite video signal output.

The active antenna supplied with GPSBOXKBD+ units should be attached to the connector on the front panel of the enclosure. The antenna should be situated in a location with a relatively clear view of the sky. If testing the unit indoors this should be at least a window sill, preferably south facing. Optimal accuracy will result from the antenna being placed with a clear 360° view of the sky. Avoid mounting the unit close to potential sources of electrical interference such as engine ignition coils, alternators or radio transmitters.

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The connections to the video in and video out connectors should be made with appropriate screened coaxial cable suitable for video signals. The cable screen which carries the video signal ground from the camera is connected to the video ground of the overlay unit. Care must be taken to ensure that the video signal grounds and the power ground of the system are connected separately. Failure to do this can result in the overlay unit failing in the event of the system being subject to mistaken reverse polarity connection or a short circuit in a power cable. Failures due to this type of problem in your system are not covered by our warranty.

It is beyond the scope of this document to advise on avoiding the common problems, like ground loops, which can occur in the complicated video systems used in underwater survey and other applications. It is your responsibility to ensure that such problems do not occur as they can result in the video overlay unit being degraded or damaged. For this reason it is important that the unit be properly installed.

WARRANTY

The BlackBoxCameraTM Company Ltd. warrants its products to be free of defects in materials and workmanship under normal use and service for a period of twelve months from the date of original purchase. The obligations of The BlackBoxCameraTM Company Ltd. shall be limited within the warranty period, at its option, to repair or replace the product or any part thereof. The company shall not be responsible for dismantling and/or installation charges. To exercise the warranty the product must be returned carriage paid and insured. Under this limited warranty the maximum liability of The BlackBoxCameraTM Company Ltd. shall not in any case exceed the purchase price of the product, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against The BlackBoxCameraTM Company. This warranty does not apply in the following cases: Improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than The BlackBoxCameraTM Company.

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