

# Cable supervisor IPU-100, User Manual

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**Device operation:** Cable supervisor sounds an alarm when the vehicle is jolted or at the latest when the motor is started if the heater cable is still connected. Alarms work even if the heater is not on ie. no electricity.

**Before usage:** Activate the Cable supervisor at the beginning of the heating season by connecting it to a live protective grounded power socket for 10 minutes then the Cable supervisor will exit its energy saving mode. An activated Cable supervisor which is connected to a power socket will sound an alarm when shaken by fingers.

**Usage:** Usage during the heating season doesn't require any expertise. You just plug the Cable supervisor into vehicles protective grounded power socket in the cabin. Cabin heater can be connected directly into Cable Supervisors socket. Cable Supervision begins in about thirty seconds after the heater cable of the vehicle is connected.

**Maintenance, management and storing:** Store the Cable supervisor indoors outside the heating season. The device will enter energy saving mode within one week. The battery will last an average heating season. When changing the battery, open the mounting screws on the bottom of the device. Hold the horizontally aligned device's bottom cover so that the plug is facing downwards. Push by thumb the side of the bottom cover that is facing towards you and push and twist the top cover with your fingers from the opposite side upwards so that the hooks on the cover are released and the cover is opened. Change the battery. When a new battery is inserted to its place, the device will test itself and during the test the device will give out sound signals to indicate that everything is in order. First, align that side of the cover which has two hooks to its place and snap the cover to its place and attach the mounting screws.

**Procedures in error or malfunction situations:** When the battery is almost empty, the device will indicate this by giving out two short sound signals once a day. If the cable supervisor is sounding an alarm while the car is running and the heater cable is not connected, check the condition of the heater cable's connector outside the car. The reason may be that there's inside the connector water that must be removed. Needless alarming can be stopped by detaching the cable supervisor from the power socket. If the connect doesn't contain any water, but the alarming continues, check the car's heating system's ground leakages in car maintenance.

**Removing from usage:** The package can be disposed among regular household garbage. The Cable Supervisor can be recycled through electronic recycle facilities.

**Technical specifications:** The Cable supervisor is incorporated control device, whose control is electrically operated and the power socket must be grounded. This electronic device is EMC and electrical safety tested and fulfills the CE requirements.

Use only indoors and inside the vehicle cabin. Device pollution degree is 2. Ball pressure temperature: 125°C. Rated impulse voltage 1500 V. Operating temperature is -20..+60 degrees Celsius. The coin cell battery type is CR2032 3V Lithium.

The front panel contains an LED, which is on if the power socket is live. The back label contains Nominal voltage 230V~, nominal frequency 50Hz and nominal current 16 A max, Type: IPU-100, Serial number and the manufacturer: KaS Innovations Oy [www.kaapelivahti.fi](http://www.kaapelivahti.fi)

**Common warnings:** The socket-outlet must be adequately earthed for operational and safety reasons. Kids or people unable to read or understand the manual should not use this device unless they are supervised by someone who ensures that they can handle the Cable supervisor in a safe way.

Designed and developed in Finland, for Finnish conditions!

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