

**Unicont SPb Ltd**

# **Marine Panel Personal Computer MVPC-1901**

Technical Documentation

(1901-4-06042011)

**St. Petersburg**  
2011

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## 1. Device description

MVPC-1901 is a computer with integrated LCD display. In accordance with its technical characteristics (electronic cartography, automatics systems and etc.) the present device is meant for a wide range of tasks.

## 2. Delivery Set

1. Computer-monoblock	1 piece
2. Corbels for desk-top mounting	2 pieces
3. Sun visor	1 piece
4. Power cable	1 piece
5. Operation manual	1 piece

Upon customer request the MVPC-1901 can be equipped with the following additional options:

- Touchscreen,
- CD disk with drivers.

## 3. Technical characteristics

### Electrical Specifications:

Supply voltage:	220VAC (10..36 VDC – at option)
Power consumption:	no more than 120W
Protection rate:	IP 22

### Computer's characteristics:

Processor:	Pentium M 1,86 GHz
RAM:	DDR 1024 MB
Flash-HDD capacity:	8 GB
HDD capacity:	120 GB (at option)*
Motherboard:	NOVA-8522G10

*\*if you want to setup additional HDD without assistance, please certain of that HDD's jumper setup to "Slave" position.*

### Characteristics of built-in display:

Resolution:	1280 x 1024 (SXGA)
Diagonal:	19"
Contrast:	700:1
Luminosity:	300 cd/m2
Viewing angles:	160°
Response time:	5 ms (Gray-to-gray)
Brightness control:	by twist handle on front panel ("deep" dimming)

**Operating characteristics:**

Overall dimensions:	449 x 418 x 96 mm
Weight:	no more that 14 kg
Storage temperature:	-20..+70 °C
Operating temperature:	-15..+55 °C

**Output interface characteristics:**

3 x RS-232, 1 x RS-422 (DB-9M)  
1 x LPT (DB-25F)  
4 x USB (Type A)  
1 x USB (Type A, front panel)  
2 x PS/2 (keyboard and mouse/trackball)  
3 x 3,5 mm jack (microphone input, line audio-input/output)  
2 x LAN (RJ-45)  
1 x VGA (D-SUB)

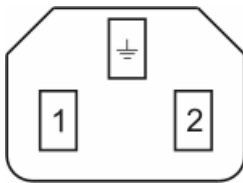
## 4. Description of device connectors

There are the following connectors on the back panel of device:



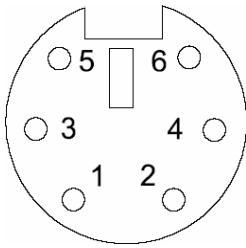
Name	Type	Functionality
M	PS/2	Connection of pointing device «mouse» or «trackball»
K	PS/2	Connection of keyboard
COM1, COM2, COM3	DB-9M	Connection of serial interface RS-232
COM4	DB-9M	Connection of serial interface RS-422
USB1, USB2, USB3, USB4	USB Type A	Connection of external devices USB
LPT1	DB-25F	Connection of printer
VGA	DB-15F	Connection of external display
A_IN	3,5 mm jack	Line audio input. Connection of external audio signal source.
A_OUT	3,5 mm jack	Line audio-output. Connection of audio receiver.
MIC	3,5 mm jack	Connection of microphones
POWER		Power connection
LAN1, LAN2	RJ-45	Connection of networking equipment Ethernet (10Mb/100Mb/1Gb).

### Connector «Power»



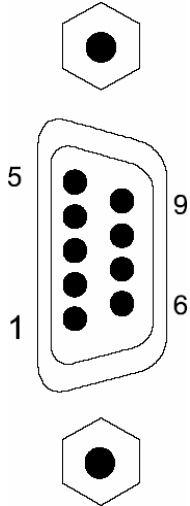
Pin No.	Functionality
1	Power supply voltage 220 VAC – L. Power supply voltage 10..36 VDC – «+»
2	Power supply voltage 220 VAC – N. Power supply voltage 10..36 VDC – «-»
	Grounding terminal

**Connector «K», «M»**



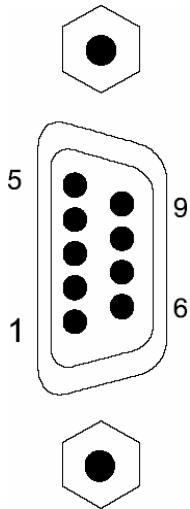
Pin No.	Functionality
1	Keyboard signal
2	Mouse signal
3	GND
4	5 VDC
5	Keyboard synchronous signal
6	Mouse synchronous signal

**Connector «COM1», «COM2», «COM3»**



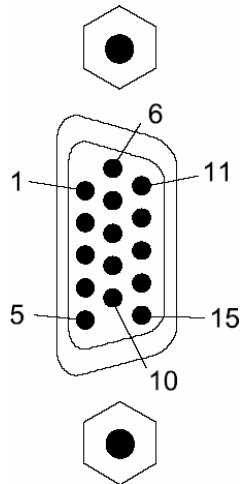
Pin No.	Functionality
1	DCD
2	RxD
3	TxD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI

**Connector «COM4»**



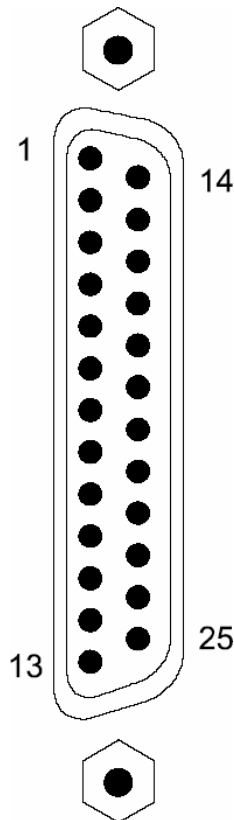
Pin No.	Functionality
1	RX-
2	RX+
3	GND
4	Tx+
5	Tx-
6	NC
7	NC
8	NC
9	NC

**Connector «VGA»**



Pin No.	Functionality
1	Red
2	Green
3	Blue
4	NC
5	NC
6	GND
7	GND
8	GND
9	NC
10	GND
11	GND
12	GND
13	HSYNC
14	VSYNC
15	NC

**Connector «LPT1»**

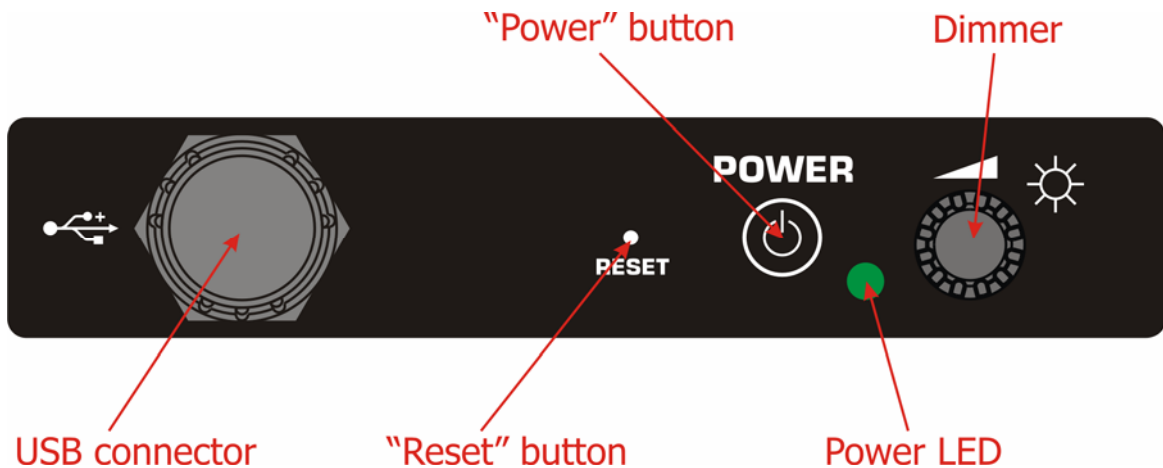


Pin No.	Functionality
1	-STROBE
2	DATA0
3	DATA1
4	DATA2
5	DATA3
6	DATA4
7	DATA5
8	DATA6
9	DATA7
10	-ACKN
11	BUSY
12	PE
13	SELECT
14	-AUTOFD
15	-ERROR
16	-INIT
17	-SLCTIN
18-25	GND

## 5. Controls

On the front of the device you can see:

- Waterproof connector USB (Type A)
- Power on/off button «Power»
- Button «Reset»
- Display light brightness control knob
- Power supply indicator



To press button “Reset” it is necessary to use any available thin tool (e.g. paper-clip). Such construction is chosen for prevention of stray keystroke and following “hard” rebooting of the device.

## 6. Device setting

Device case can be used both for desk-top and panel mounting:

In case of panel mounting it is recommended to prepare seat according to the dimensional drawing (see Figure 1) to the panel via mounting hole.

In case of desk-top mounting it is recommended to fasten the corbel on the MVPC-1901 case, prepare a seat for its setting and fix the computer screwing the corbel with the screw M5.

After device setting connect connection cables of external devices and plug them to the corresponding connectors of MVPC-1901. Screw the connectors to prevent random disconnection of plugged cables.



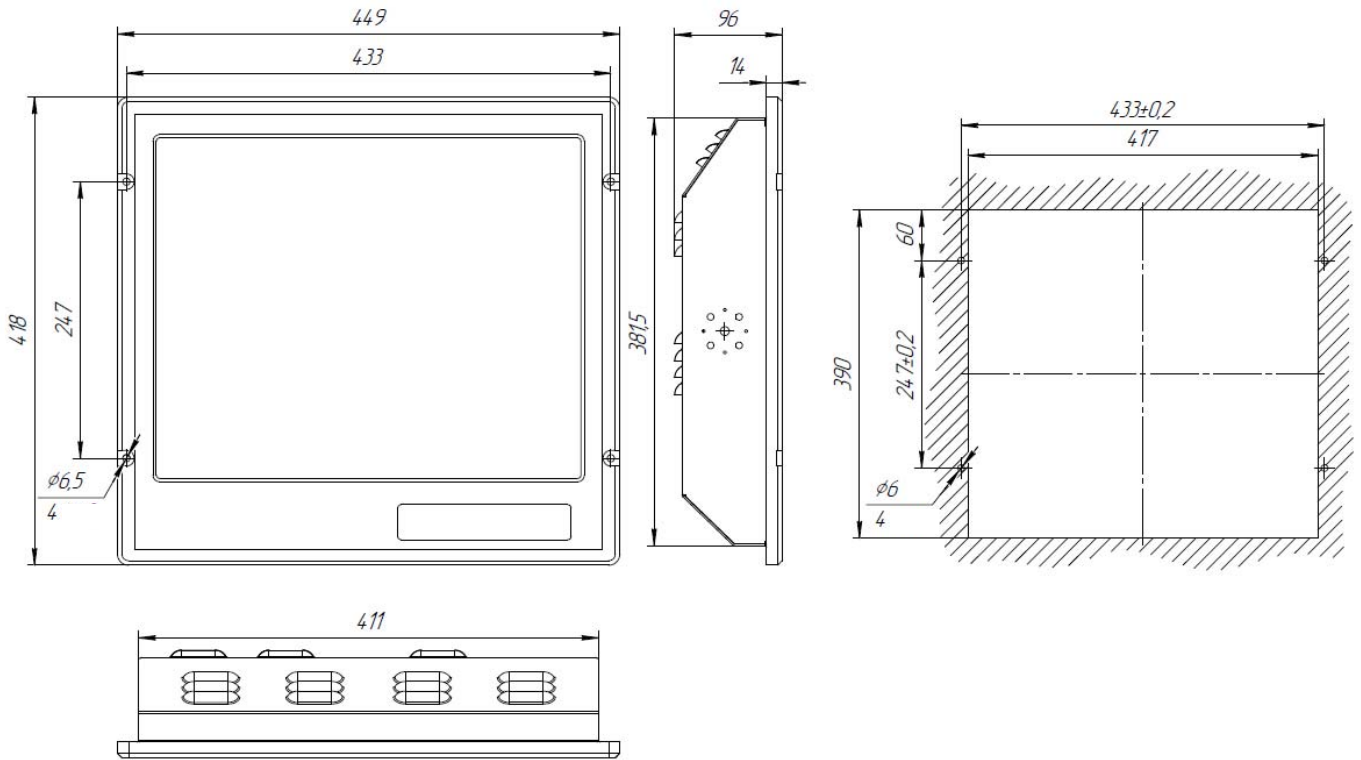


Figure 1. Dimension drawing.

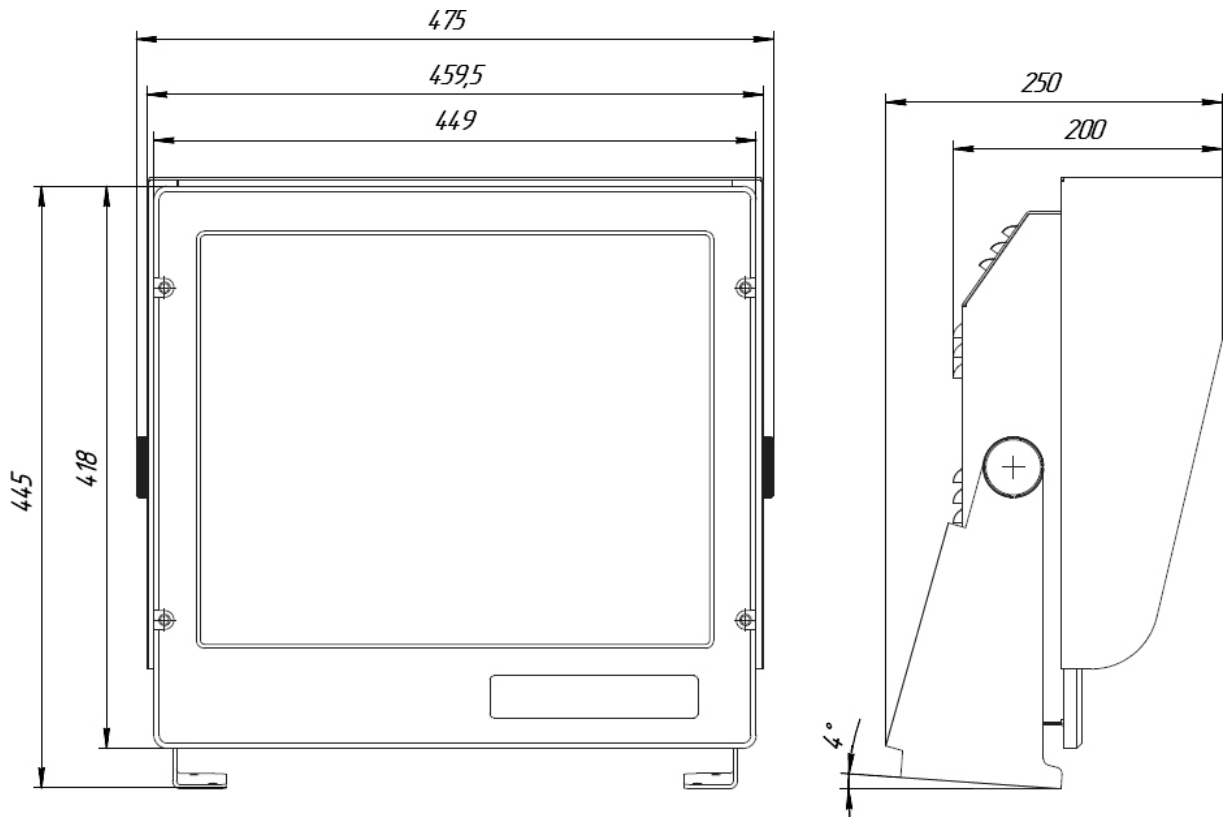


Figure 2. Outline drawing of the device on the brackets with a protective shield.

## 7. Drivers and on-board devices

All drivers for MVPC-101 you can find on CD-ROM in the delivery set. Also manufacturer copy drivers to folder "Drivers" on the "C" disk.

Audio	Realtek ALC655 AC'97 Codec
LAN	RTL8110SC
Video	Intel Extreme Graphics 2
Chipset	852GM

## 8. Warranty

The manufacturer guarantees the unit MVPC-1901 complies with this manual provided that the operation, transportation and storage conditions are adhered to during the warranty period.

The unit's warranty period expires 24 months from the date of its shipping from the manufacturer's storehouse.

Within the warranty period, the owner is entitled for a free repair, or a replacement of a separate part, provided that the malfunction occurred through the manufacturer's fault.

Warranty repair is provided if the unit is submitted with the manufacturer's label and a legible serial number available on it, as well as this operating manual.

The manufacturer is not responsible and cannot guarantee the unit's operation:

1. After the warranty period is over;
2. In case of the failure to observe the unit's operation, transportation, storage and installation rules and conditions;
3. If the unit is in an unmarketable condition, or has a damaged body, and other causes beyond the manufacturer's control;
4. If self-made electrical devices were used.
5. If there was an attempt to repair the unit by a person who is not an authorized representative of the manufacturer.

If the owner loses this operating manual or the manufacturer's label with a serial number, the manufacturer shall not provide their copies, and the owner shall be divested of the right for a free repair during the warranty period.

Upon the warranty expiry, the manufacturer shall facilitate the repair of the unit at the owner's expense.

Note: in case of warranty repair, the unit's disassembling from the installation site and its delivery to the manufacturer's service center are done at the owner's expense.

Visit the manufacturer's website [www.unicont.spb.ru](http://www.unicont.spb.ru) (section "support/warranty") to find:

- forms to fill in claims,
- full warranty description;
- full description of the warranty service rendering procedure.

### **The manufacturer service center's address and contact details:**

**Unicont SPb, Ltd.**

**Bld. 26E Kibalchich Str., Saint Petersburg, 192174, Russia**

**tel.: +7 (812) 622 23 10, +7 (812) 622 23 11**

**fax: +7 (812) 362 76 36**

**e-mail: [service@unicont.spb.ru](mailto:service@unicont.spb.ru)**

## 9. DATE OF PACKING

Marine Panel Personal Computer      MVPC-1901      №  
 name of article      designation      serial number

Packed Unicont SPb Ltd., Russia.  
 Manufacturer

according to the requirements of the current technical documentation.

\_\_\_\_\_      \_\_\_\_\_      \_\_\_\_\_  
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\_\_\_\_\_  
 year, month, day

## 10. ACCEPTANCE DETAILS

Marine Panel Personal Computer      MVPC-1901      №  
 name of article      designation      serial number

was manufactured and accepted in accordance with the regulatory requirements of the state standards and applicable technical documentation, and is suitable for operation.

Quality control representative

Stamp \_\_\_\_\_  
 here      signature      clarification of signature

\_\_\_\_\_  
 year, month, day

## 11. DATE OF COMMISSIONING

Marine Panel Personal Computer      MVPC-1901      №  
 name of article      designation      serial number

The unit has been put into operation.

Date of installation: \_\_\_\_\_

Place of installation: \_\_\_\_\_

Person in charge of installation: \_\_\_\_\_