EndoVue Plus 4K 55

МОНИТОРЫ ХИРУРГИЧЕСКИЕ

РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-4159 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48

Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73

Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Саранск (8342)22-96-24 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35

Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35 Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

Адрес: https://nds.nt-rt.ru/ || эл.почта: nsi@nt-rt.ru

Table of Contents

Safety Information
Madical Davica Shinning Symbols
System Safety Dequirements
Crounding
Dower Cord
Installation Notes
VECA Compliant Display Mounting
VESA Compliant Display Mounting
Enclosure Assembly and Cleaning
Cable Cover Installation
General maintenance information
Cleaning Instructions
Display User Interface
Display Keypad
Menu Navigation
Input Menu
Display Menu
Image Adjustment
Connector Panel Overview
EndoVue Connector Panel (90K0091/90K0093)9
EndoVue Connector Panel (90K0092/90K0094)10
Electrical Symbols
Power On or Off Device
Cable Bend Radius
Specifications
Specifications
EndoVue Plus 4K 55" Parts List by Region
Operating principle
Troubleshooting
Electromagnetic Compatibility Tables15
Electromagnetic Emissions
Electromagnetic Immunity
Recommended Separation Distances18
Terms and Conditions
Declarations of Conformity
Legal Statement

Warnings and Cautions



This symbol alerts the user that important information regarding the installation and/or operation of this equipment follows. Information preceded by this symbol should be read carefully.

This symbol warns the user that uninsulated voltage within the unit may have sufficient magnitude to cause electrical shock. Do not touch any part inside the unit. To reduce the risk of electric shock, DO NOT remove the cover or back.

Note: There are no user serviceable parts inside. Refer servicing to qualified service personnel.



This symbol alerts the user that information preceded by this symbol should be read carefully to avoid damage to the equipment.



This symbol denotes the manufacturer.



This symbol denotes the manufacturer's European Community representative.



This symbol indicates compliance with the Waste Electrical and Electronic Equipment Directive (WEEE Directive). Please follow the national guidelines for unit disposal.



This symbol indicates the device is a Medical Device. This product is intended only for use by healthcare professionals in professional healthcare environments.



This product is T.U.V. approved with respect to electric shock, fire and mechanical hazards only in accordance with CAN/CSA C22.2 No. 60601-1 and ANSI/AAMI ES60601-1.

This product meets the requirements of EN60601-1 so as to conform to the 2017/745 Medical Device Regulation of European Union.



Alternating Current



This symbol indicates only use at altitudes below 2000 meters.

Note: If any serious incident or adverse event has occurred in relation to the device, it should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

Medical Device Shipping Symbols

Medical device shipping symbols, as defined below are printed on the shipping containers used to transport this product.







Fragile keep dry

System Safety Requirements

External equipment connected to the signal input/output or other connectors of this product for use in a patient environment must comply with the requirements of ISO and UL/EN/IEC 60601-1 safety standards. A person who connects such equipment to this product has by definition formed a system, and is responsible for compliance of that system to the same ISO and UL/EN/IEC 60601-1 safety standards.

To prevent fire or shock hazards, do not expose this unit to rain or moisture.

Grounding

This product is energized from an external electrical power source for 2017/745 Medical Device Regulation of European Union Class I equipment. It is the responsibility of the installer to test the product's earth ground to verify that it complies with the hospital, local and national impedance requirements.

A ground post is located on the back of the product to use for grounding the chassis of the unit. Any such grounding must be installed in accordance with applicable electrical codes.

The installation shall only be carried out by NDS authorized and trained personnel.

Power Cord

MEDICAL EQUIPMENT should be positioned so that the disconnect device is readily accessible.

The power cord is the only recognized disconnect device. Disconnect the power cord from the AC mains. Remove power cord to fully turn off the device.

For Customers in North America

Use a hospital grade power cord with the correct plug for your power source.

Monitors should be powered from a center tapped circuit when used in the US at voltages over 120 volts.



WARNING: To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth (ground).

For Customers in China

Use China Compulsory Certificate (CCC)-approved power cord.

For Customers in Japan

The supplied power cord is for use only with this monitor.

Installation Notes

This product is a Class I medical device. No modifications are allowed. Monitors are intended for continuous operation.

Intended Use and Contraindications

EndoVue Plus 4K 55"

This product is intended only for use by healthcare professionals in professional healthcare environments.

Intended Use

The EndoVue Plus 4K 55" is intended for use in a medical environment to display high quality video and graphics images.

The EndoVue Plus 4K 55" is indicated for use in surgical procedures where a reference image is to be displayed.

The EndoVue Plus 4K 55" is intended for infant or adults by profession Health care professionals.

Contraindications

- 1. This product is capable of displaying Radiology (PACS) images for reference only.
- 2. This product is not for diagnostic use.
- 3. For mission critical applications, we strongly recommend that a replacement unit be immediately available.
- 4. Do not use this product in the presence of flammable anesthetics mixture with air, oxygen or nitrous oxide.
- 5. No part of this product may come in contact with a patient. Never touch the product and a patient at the same time.

Image Retention Notice



Warning: Leaving a fixed (constant) image on the monitor for a long period of time can result in image retention. Avoid leaving a fixed image on the monitor, or turn the monitor off when it is not in use.

- No Applied Parts
- •I IPX0
- Not AP or APG Category

VESA Compliant Display Mounting

EndoVue series displays are compliant with the VESA Mounting Interface Standard.

EndoVue® Plus 4K 55"

The EndoVue® Plus 4K 55" utilizes 500mm x 100mm VESA mounting pattern configured to size and weight of the display suitable for wall mounting.



Warning: The mounting bracket screws must be securely tightened. Failure to properly secure the mounting bracket to the display could be hazardous. Use suitable mounting apparatus to avoid risk of injury. It shall be mounted by trained and authorized personnel on adequate allowances for quality materials used to make the connection. In consideration of thickness of the mounting bracket or stage, tighten the M6 Screws (4pcs) with washer which depth of tapped hole is 30mm length.

Installation Notes

This product is a Class I medical device. No modifications are allowed. Monitors are intended for continuous operation.

Cable Cover Installation

- 1. Connect power, control, and video cables before installing the cable cover.
- 2. Align the cable cover to the cable well recess on the back of the display.
- 3. Slide the cable cover forward into the recess, with cables positioned under the cut-out.
- 4. Slide the cable cover forward until tabs on the bottom edge click into place and using a screw driver, tighten the screw.
- 5. The cable cover cannot be removed under normal use conditions.

General maintenance information

EndoVue series monitors do not require any scheduled maintenance or calibration activities. If any abnormal situation found, please return the display to our approved maintenance organization. For any questions, please call Customer Service for assistance at (877) 637-1110.

Cleaning Instructions



Warning: Prior to cleaning, the display should be turned OFF and disconnected from the power source.

- Do not allow liquids to enter the interior of the unit, as severe damage to the unit can result.
- Do not use solvents such as benzene or thinner, or any acid, alkaline or abrasive detergents.

Front Glass: Thoroughly wipe the front glass surface with a lint-free cloth. For persistent spots or smudges, use a lint-free cloth dampened with distilled water. Do not use any harsh solvents, abrasive detergents or chemical cleaning cloths.

Enclosure: Wipe all exterior surfaces with a lint-free cloth dampened with distilled water or 70% Isopropyl alcohol or Vinegar (distilled white vinegar, 5% acidity). If 70% Isopropyl alcohol or Vinegar (distilled white vinegar, 5% acidity) is used, wipe all exterior surfaces with a lint-free cloth dampened with distilled water afterwards.

Cleaning frequency: Once every two weeks

Note: Do not use the following products:

- MEK (Methyl Ethyl Ketone)
- Toluene
- Acetone
- Benzene or thinner
- Acid
- Alkaline or abrasive detergents
- Chemical Cleaning cloths

Display Keypad

The Display Keypad is located at the lower right side of the front frame edge, providing controls for adjustment of display parameters using the On Screen Display (OSD) Menu system.



Menu Navigation

INPUT and MENU Buttons: Open OSD Menus



To open the Input Menu, press the INPUT button. To open the Display Menu, press the MENU button.

SCROLL Button: Vertical Selection Control

SCROLL

To enter a menu and begin a parameter selection process, press the **SCROLL** button. The top parameter row is first selected, and the selection moves downward to the next row with each successive press of the button.

To exit a menu, use the **SCROLL** button to move the selection to the bottom menu row, and then press the **SCROLL** button just once to highlight the menu tab, where you can use the ④ or buttons to select another menu tab.

Left/Right Buttons: Horizontal Selection Controls



To adjust a parameter, select the parameter row using the SCROLL button, then press the <a> or <>> buttons to make the adjustment or to select a setting.

Input Menu

- To select or change an input source, press the INPUT button to access the Input Menu. press the SCROLL button to highlight the desired input and press the dutton to select it.
- A **P** symbol in the left column designates the active input of Primary image, and an **S** symbol in the right column designates the active input of Secondary.

DP-1	3840 x 21	60 @ 60.0 H	z HDMI-1 3840 x 2160 @ 60.0 Hz
Inp	ut		
Р	•	X	DisplayPort-1
			DisplayPort-2
		S	HDMI-1
			HDMI-2
PIP Posit	ion		
		Press: ④	Primary 🕞 Secondary

The Input Menu automatically closes 30 seconds after the last action. It can also be closed by pressing the INPUT button.

Display Menu



To open the Display Menu of the primary, press the MENU button (press twice for secondary). The Picture Menu displays by default, with details of the current video input listed across the top of the menu above

the menu tabs. To select other menus, press the <</td>or buttons to highlight the menu tab, then press the SCROLL button to enter the menu.

To adjust a parameter, press the **SCROLL** button to move the row selection down to it, and then press the ④ or buttons to adjust the parameter or to select a setting. Parameter adjustments are applied in real time while changing values or settings.

The Display Menu automatically closes 30 seconds after the last action. It can also be closed by pressing the MENU button.

Note: Grayed out descriptions indicate parameters not available for the current signal or input configuration.

Picture Menu

		HDMI-1	3840 x :	2160 @ 60.0 Hz
Picture Col	or	Setup	$\sum_{i=1}^{n}$	Defaults
Sharpness	50 - 🔳			+
Overscan	0 1	2 3	4 5	6
Scaling	Fill	A	spect	1:1
Mirroring	Off		On	
Operating Hours	2:23			
BIOS	58M0018	3 A01.13		

Note: Picture Menu display only those parameters that apply to specific input signals.

Sharpness

To adjust sharpness (edge enhancement) of the displayed image, press the < or > buttons.

Overscan (Video)

Parameter enabled when the input is 16:9, 480P, 576P, or interlaced. Press the () or () buttons to select.

0: The image is displayed at a size that fills the screen without losing any video information. Image could be displayed as letterboxed, with black bars top and bottom or left and right.

1, 2, 3, 4, 5 or 6: Incrementally enlarges and crops the centered image. As the image becomes larger, video information is lost on all sides.

Scaling (Graphics)

Parameter enabled when input signal is not 16:9, 480P, 576P, or interlaced. Press the 🕢 or 🕟 buttons to select.

Mirroring On/Off

The displayed image swapped from right to left. The default setting is Off. Press the ④ or buttons to select On or Off. After AC on, the mirror setting will always be set to Off automatically.

Operating Hours

Displays in hours and minutes the accumulated time the monitor has been in use.

BIOS

Version number of the display firmware.

Color Menu

DP-1 640 x 480 @ 60.0 Hz	
Picture Color	Setup Defaults
Gamma	1.8 2.0 2.2 2.4 2.6 Video PACS
Color Temperature	5500 6500 8000 9300 User
Red	50 - +
Green	50 - +
Blue	50 - +
Saturation	50 - +
Hue	50 - +
Video Level	Normal Expanded
Color Correction	NDS BT .709 BT .2020

Gamma

To select a gamma setting, press the < or > buttons.

1.8, 2.0, 2.2, 2.4 or 2.6: Preset gamma values

Video: Linear gamma Look Up Table (LUT)

PACS: DICOM gamma LUT

This product is capable of displaying Radiology (PACS) images for reference purposes only.

Color Temperature

To select a preset color temperature, press the < or > buttons.

5500, 6500, 8000, 9300: Preset color temperatures.

User: If a preset color temperature is selected, and any other parameter is subsequently changed, the resulting values are copied to the **Color Temperature User** presets and **User** is selected

Red, Green, Blue

To increase or decrease the intensity of the selected color, press the \bigcirc or \bigcirc buttons.

Saturation

To set the saturation (color intensity) of the image, press the \bigcirc or \bigcirc buttons.

Hue

To set the hue (color tint) of the image, press the 🕢 or 🕟 buttons.

Video Level

Expand input signal level for limited timing.

Normal: Provides a dynamic range equivalent to the incoming signal with no change.

Expanded: Expands the signal level such that an input signal with range 16 (black) to 235 (white) will be expanded to a range of 0 (black) to 255 (white).

Color Correction

Select color gamut standard. If BT709 or BT2020, some color functions should be disabled for color gamut accuracy.

Setup Menu

		HDMI-1 384	0 x 2160 @ 60.0 Hz
Picture	Color	Setup	Defaults
Menu Position	2 2		••••
Language	English		
DPMS Enable	Off	On	
Auto Source Select	Off	On	
Menu Lock	Off	On	

Menu Position:

To select from nine preset screen locations for display of the OSD menus, press the < or > buttons.

Language:

To select one of 19 languages: English, German, French, Italian, Swedish, Spanish, Dutch, Portuguese, Norwegian, Danish, Finnish, Turkish, Greek Russian, Polish, Korean, Japanese, Simplified Chinese, Traditional Chinese, press the () or () buttons.

DPMS Enable

To enable or disable Display Power Management System (DPMS), press the () or (buttons.

Off: Default setting.

On: If there is no input signal, a "D.P.M.S" message displays for 10 - 15 seconds before the display goes into Power Saving mode. The display turns on when the input signal is restored.

Auto Source Select

To disable or enable Auto Source Select, press the <a>o or <a>b buttons.

Off: Video input is manually selected.

On: Searches through all possible input sources until an active video source is found.

Menu Lock

To enable Menu Lock, press the 🕟 button.

Off: Default setting.

On: Disables access to OSD menus to prevent inadvertent changes to display settings. The OSD closes, and a MENU LOCKED message displays briefly. To unlock OSD access, simultaneously press and hold the **MENU** and **SCROLL** buttons until a MENU UNLOCKED message displays.

Defaults Menu

DP-1 3840 x 2160 @	60.0 Hz		
Picture	Color	Setup	Defaults
Factory Defaults	Р	ress 🕟 to sele	ect
User Defaults 1		*** EMPTY **>	•
User Defaults 2		*** EMPTY **>	•
User Defaults 3		*** EMPTY **>	
User Defaults 4		*** EMPTY **>	•
User Defaults 5		*** EMPTY **>	•
Press: ④ Save	e	Restore	🛞 Clear

Factory Defaults

To return all changed parameter settings to factory preset values, press the **b** button. The "Restoring Factory Defaults" message displays while processing.



User Defaults

To save changes to default parameters in a User Default profile, press the **SCROLL** button to select a User Defaults profile marked ***EMPTY*** and press the button to save the profile. The "Saving User Defaults" message displays while processing.



To restore a User Defaults profile after changing other parameters, select the saved User Defaults profile and press the **button**. The "Restoring User Profile" message displays while processing. To clear a User Defaults profile, select the saved User Defaults profile and press the **button**. The "Clearing User Profile" message displays while processing. To clear a User Defaults profile "message displays while processing. To clear a User Defaults profile" message displays while processing. To clear a User Defaults profile and press the **button**. The "Clearing User Profile" message displays while processing.



Image Adjustment



Brightness/Contrast Button

Press the ^(%) (Brightness/Contrast) button once to access the Brightness control. Press the button twice to access the Contrast control, or press it three times to access the Backlight control. Press the () or buttons to adjust the controls. Press [SCROLL] to select Primary/Secondary displayed image for adjusting.



Brightness Control

To adjust brightness of the designated input of primary, press the <a> or <a> buttons.

Press [SCROLL] to select secondary. To adjust brightness of secondary press the () or () buttons.

NOTE: Setting brightness too high or too low reduces the range of shadow and highlight detail of the displayed image.

Contrast Control

To adjust contrast of the designated input of primary, press the <a> or <>> buttons.

Press [SCROLL] to select secondary. To adjust contrast of secondary, press the 4 or 5 buttons.

Note: Setting contrast too high or too low reduces the range of shadow and highlight detail of the displayed image, with a negative effect on color saturation.



Backlight Control

To adjust the backlight level of your monitor, press the
or buttons.
Press [SCROLL] to select secondary. To adjust backlight of secondary, press
the or buttons.

Note: Lower backlight levels increase backlight lifetime.

Connector Panel Overview

The EndoVue® Plus 4K 55" is available in two different input/output connector panel configurations:

Part number 90K0091/90K0093 – DisplayPort and HDMI inputs only

Video inputs:

- Two DisplayPort 1.2 Inputs
- Two HDMI 2.0 Inputs

Video Outputs:

• Two HDMI outputs

Part number 90K0092/90K0094 - with optional Quad-Link/12G-SDI

Video Inputs:

- Two DisplayPort 1.2 Inputs
- Two HDMI 2.0 Inputs
- Four SDI Inputs (Supporting multiple signal configurations, see below*)

Video Outputs:

- Two HDMI outputs
- Four SDI outputs

EndoVue Connector Panel (90K0091/90K0093)

_			HDM IN	1 HDMI1 OUT	HDMI 2 IN	HDMI 2 OUT	DISPLAYPORT 1 IN	DISPLAYPORT 2 IN	RS-232	USB IN	5V DC OUT	12V DC OUT	\triangleleft	AC POWER INPUT
=	0 0	0 0 0 0	°°	° ° ° ° °	° ° °	° ° °	• • • • • •	° ° ° °						
0	0	0 0							لبها			9	° ⊟° °	

Connector Types

Inputs	Connector Types
DisplayPort 1.2	DisplayPort, Digital 100 Ohm differential
HDMI 2.0	HDMI, Digital 100 Ohm differential
RJ-11	RS-232 transmission only. Do not use for Internet

EndoVue Connector Panel (90K0092/90K0094)



Note:

The four SDI input connections can support one of the following signal configurations at a given time:

- Quad-link SDI (UHD resolution, Square Division or 2Si), 4 x 3G-SDI using 4 BNCs
- A single 12G-SDI input, using one of the four input BNCs
- Four separate 3G-SDI signals each at full HD resolution (can be displayed as a quad-split, or individually upscaled to full screen)

Note:

The 5VDC/2A Output port shall be used only for external accessories such as fiber optical to DVI converter.

Electrical Symbols





Equipotentiality

This symbol appears next to the display Potential Equalization Conductor (ground post).

Closed (On) Switch

This symbol appears below the closed, or on, side of the display On/Off switch.

Open (Off) Switch

This symbol appears below the open, or off, side of the display On/Off switch.

Power On or Off Device

The device has a power switch next to the AC power input. Make sure the power switch is in the ON position after the power is connected.

The power switch can be used to power off the display.

NOTE: Disconnect the power cord to remove power to the device. This is the only authorized power removal procedure. Power cord shall be connected to a socket-outlet near the device and be easily accessible.



WARNING: To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth (ground).

Cable Bend Radius



We recommend that the bend radius of metallic cables be no less than 63 mm (2.5 inches) or 7 times the diameter of the cable whichever is greater. The bend radius of Fiber Optic cables should be no less than 10 times the diameter of the cable. Sharper bends can damage the cable, and/or degrade the video signal.

Specifications

Specifications

Specifications are subject to change without notice. Contact factory for current specifications.

	EndoVue 55"
Model Name	BC-WK55-A1B00
Viewing Area (Diagonal)	54.64 in. (1388mm)
Typical Luminance (cd/m ²)	460
Native Resolution	3840 x 2160
Aspect Ratio	16:9
Pixel Pitch (mm)	0.315
Viewing Angle (Horizontal & Vertical)	178°
Contrast Ratio (Nominal)	1000:1
RATING/AC Input	100-240V~,50-60HZ,2A-0.83A
RATING/DC Output	5V/2.0A, 12V/2.0A
AC Power Consumption (Nominal) ^a	BC-WK55-A1B00: 185W
Dimensions (W x H x D)	Display only: 71.6 x 1261.8 x 738.8mm Display with carton: 210 x 1455 x 923 mm
Display Weight ^b	BC-WK55-A1B00 Net weight 71.21 lb (32.3 kg) Gross weight 93.70 lb (42.5 kg)
Operating Temperature	0 – 40°C (Ta=40°C, Humidity max=90%)
Non-Operating Storage Temperature	-20 – 60°C (Ta=60°C, Humidity max=40%)
Transport Temperature	-4 – 122°F (-20 – 50°C)
Operating Humidity (Non-condensing)	20 - 80%
Storage Humidity (Non-condensing)	10 – 90%
Transport Humidity (Non-condensing)	10 – 90%
Operating Altitude (Maximum)	0 to + 6,560 feet [2,000m]
Non-Operating Storage Altitude (Maximum)	33,000 ft (10,000 m)
Transport Altitude (Maximum)	33,000 ft (10,000 m)

EndoVue Plus 4K 55" Parts List by Region

Part Number	Item Name
90K0091	ENDOVUE PLUS 4K 55", AMERICA, JAPAN, EMEA, BC-WK55-A1B00
90K0092	ENDOVUE PLUS 4K 55", QUAD-LINK SDI, AMERICA, JAPAN, EMEA, BC-WK55-A1B20
90K0093	ENDOVUE PLUS 4K 55", CHINA, BC-WK55-A1B00
90K0094	ENDOVUE PLUS 4K 55", QUAD-LINK SDI, CHINA, BC-WK55-A1B20

Operating principle

The LCD monitor will contain an interface board with driver board, a power board, a function key board.

The interface board will house the flat panel control logic, brightness control logic and DC-DC convection to supply the appropriate power to the whole board and LCD panel, and transmitting by one signals into LCD Module to drive the LCD display circuit.

The function key board will provides the OSD control signal to the interface board.

The driver board will drive the LCD monitor backlight.

The power board provides the DC12V to interface board and LED driver board, it also provides the DC 12V, to the panel via interface board.

The interface board will provides the 5V and 12V out to external media BOX.

The power board shall accept AC power.

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-4159 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89 Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48

Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81 Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73

Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47 Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Саранск (8342)22-96-24 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35

Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35 Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

Adpec: https://nds.nt-rt.ru/ || эл.почта: nsi@nt-rt.ru