



**Nu-media Full Colour RGB & Monochrome (1 Colour) Video Models
Sign Installation & User Guides**

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For additional questions or support contact Nu-media at 1-800-676-4502

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SIGN INSTALLERS SECTION

You have been provided with a box from Numedia that contains the parts that are required to be installed by the sign installers, along with instructions and matching communication parts to provide to the end user.

PACKAGE CONTENTS:

- 1 x WiFi Bridge #1 (complete box with POE adapter & CAT5 wires to connect at Client/End users network end.
- 1 x WiFi Bridge #2 only (to connect to CAT5 wire from back of sign for WiFi Bridge-labelled#2@sign)
- 2 x WiFi Bridge Mounting Kits
- 1 x Instructions/Envelope (containing these instructions)

SECTION 1.0 - GENERAL SIGN INSTALLATION INSTRUCTIONS

Installation & Electrical Requirements:

!! Please Do Not Drill Into Sign Cabinet or CSA Certification and Warranty will be null and void.

Please consult manufacturer for confirmation of provided mounting bolts and/or required brackets as per drawings.

- Requires proper Earth Ground. Grounding rod and surge protection at sign are both recommended. Large signs may require 15amps per face or more. See CSA & Numedia label on back of sign or contact your sales rep.
- External Temperature Sensor must be carefully installed and correctly placed to avoid damage and false readings.
- External GPS Module (optional) must be mounted external to the structure and to have “Line of Sight” to the sky/satellites.
- Sign Cabinet must be installed to allow access to service screws in bottom and top of face frames for future maintenance or service. These screws are removed from the top and bottom of the face. Removing/loosening these will allow the face frame to hinge open
- Proper ventilation is required for internal sign fans. The fan vents on rear of each sign face should not be flush mounted. It is recommended to leave a small gap behind the fan covers.
- Communications equipment/wiring must be setup & installed accordingly.
- **ALL signs and communications equipment are setup to use DHCP from an existing network to acquire its TCP/IP addresses to all the parts included. (If you want to connect directly to a PC then you will require to purchase an inexpensive router from us or buy your own).**

1) Install sign as per the attached instructions, making sure that the Signs WiFi Bridge are mounted & pointed to & closest to the building.

2) Interconnect cables that join master and slave signs must be connected together tightly (It will “click/lock” in the last turn.

3) Do Not Drill into any of the sign cabinets, as this will cause damage to inner parts (warranty will be null and void). If there are mounting issues, contact your Nu-Media representative .

4) Power wires to be connected to separate 120 Volt - 30 Amp breakers (more or less depending on sign size). These breakers should NOT be shared with anything else, especially fluorescent lighting. Surge Protection is strongly recommended and should be installed at each sign face. Confirm amperage with label on back of sign or with your Sales Rep. Step down transformers must not be in or near the led signs.

5) Mount and install wireless receiver (WiFi Bridge #2-NanoStation) at sign (at highest possible point of the sign structure) and mounted closest to the building in order to establish a CLEAR LINE OF SIGHT TO THE SENDER at the building. Cables for connections are available from the back of the master side of the sign and must be connected at the time of installation and NOT to be left in the elements and get wet and corroded, which will then damage the Wifi bridge. The wifi bridge must be mounted top up, with the wire out the bottom to prevent water damage.

NOTE: The sending WiFi Bridge#1-NanoStation) will be installed at the PC Network, where it will need to also have a CLEAR LINE OF SIGHT TO THE SIGN'S RECEIVER, that usually works in a window. Long Distances may require outdoor mounting.

If signals are strong, then the status of the sender and receiver will be lit up with their signal strength lights as described in the instructions (usually takes approx.2-5 minutes to sync).

SECTION 1.1 - GENERAL SIGN INSTALLATION DIAGRAMS

WiFi BRIDGE SETUP AT SIGN

(To be done by the Sign Installer)

1) Take the WiFi Bridge #2 (labelled) and gently remove its cover plate at the bottom of it, then to be connected to the Cat5 Cable coming out of the "Master Sign" labelled "To WiFi Bridge#2".

2) To be installed/mounted at the highest point at the sign structure and to be "LOS" (LINE OF SIGHT) to the office or matching receiver connected to their buildings computer network.

3) Mounting brackets have been provided which has its instructions on its back cover of the box. Do Not use the suction cup part for outdoor use.



Wall Mounting Bracket to be used at Sign
For Wifi Bridge#2

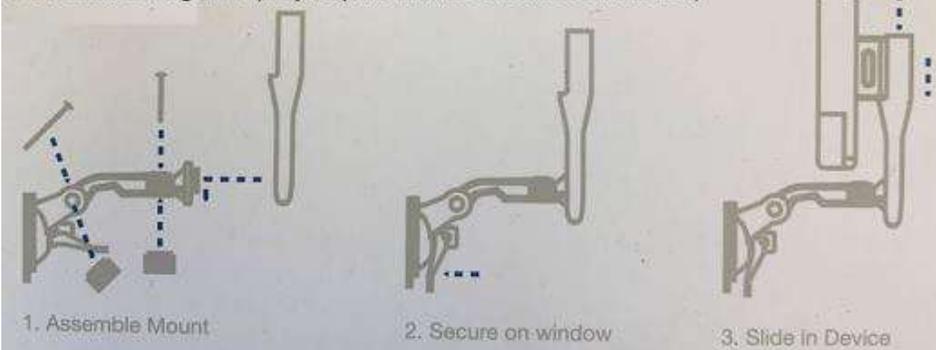


WiFi BRIDGE SETUP AT COMPUTER NETWORK

- 1) The WiFi Bridge#1 connects via Cat5e wire to POE port on POE Adapter.
- 2) LAN Port ON POE Adapter connects to existing network with Computers.
- 3) These are all configured to acquire an IP address from a Router's DHCP Server.
*If you want to use a standalone PC for this setup instead of connecting to your own company's existing network, then you need to purchase an inexpensive router that supports DHCP, from either us or on your own.
- 4) Make sure the device is "LOS" (Line of Sight) to the sign, that is usually in a window, and its Signal Lights should light up accordingly if paired with receiver at sign within a few minutes.



Window Mounting Bracket to be used indoors at building
For Wifi Bridge#1 (May require Wall mount if not on window)





Interconnect cable between Master and Slave Sign must be screwed tightly together and "Clicked" into place.



NanoStation #2-Wifi Bridge at Sign. To be Mounted at sign closest to the building. "Line of Sight" to the building is required.



NanoStation #2-Wifi Bridge Cat5-POE-Connection from the back of the Master sign. Must be connected at time of Instalation to avoid damage to wire with power on it



Sign Hinged Open (For service purposes only). Allan Keys in bottom of face MUST be accessible for service.



External Temp Sensor-not to be in direct sunlight, or directly installed on dark surfaces to avoid radiant heat-external to sign.



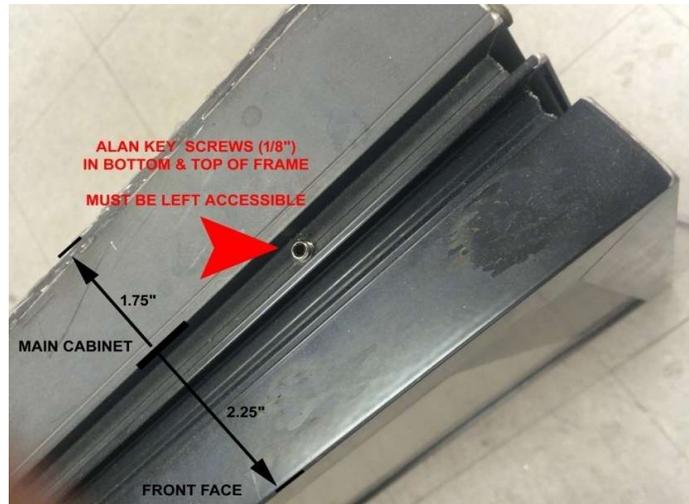
GPS to be installed with Line of Sight to the sky/satellites - external to the sign.



Do NOT Pinch cables when closing Hinged cabinet.



Allan Keys loosen to open and service sign. Require access from the top and bottom of the sign face.



Allan key screws in top & bottom of face frames need to be left accessible for future service & maintenance. 3 inches minimum gap needed to access & remove them.

For Help or additional questions contact Nu-media at 1-800-676-4502

SOFTWARE SETUP & USE SECTION

SECTION 3.0 - SOFTWARE DOWNLOAD LINKS

**Download the HDPlayer software from the following link.
Requires the end-user(s) to have Admin Rights on the Installed folder.**

<http://nu-mediadisplays.com/support/HDPlayer.zip>

NOTE: Some inconsistencies have been found when the program is installed to the Default Directory of "C:/ProgramFiles/HDPlayer" between Windows Versions 7-10 and we highly suggest to change the suggested path to "C:/HDPlayer" and the end user must have "Administrator Rights/Full Control" to that folder.

The following Section 3.1 describes the very basics to setup and use the software and a more detailed manual is available to review if needed.

Download the Software User Manual from the following link:

<http://nu-mediadisplays.com/support/HDPlayer-Manual.pdf>

Download the Led Fonts package for using standard led sign fonts for maximizing text spacing per pixel. Not required unless we have advised you to do so for some special circumstances.

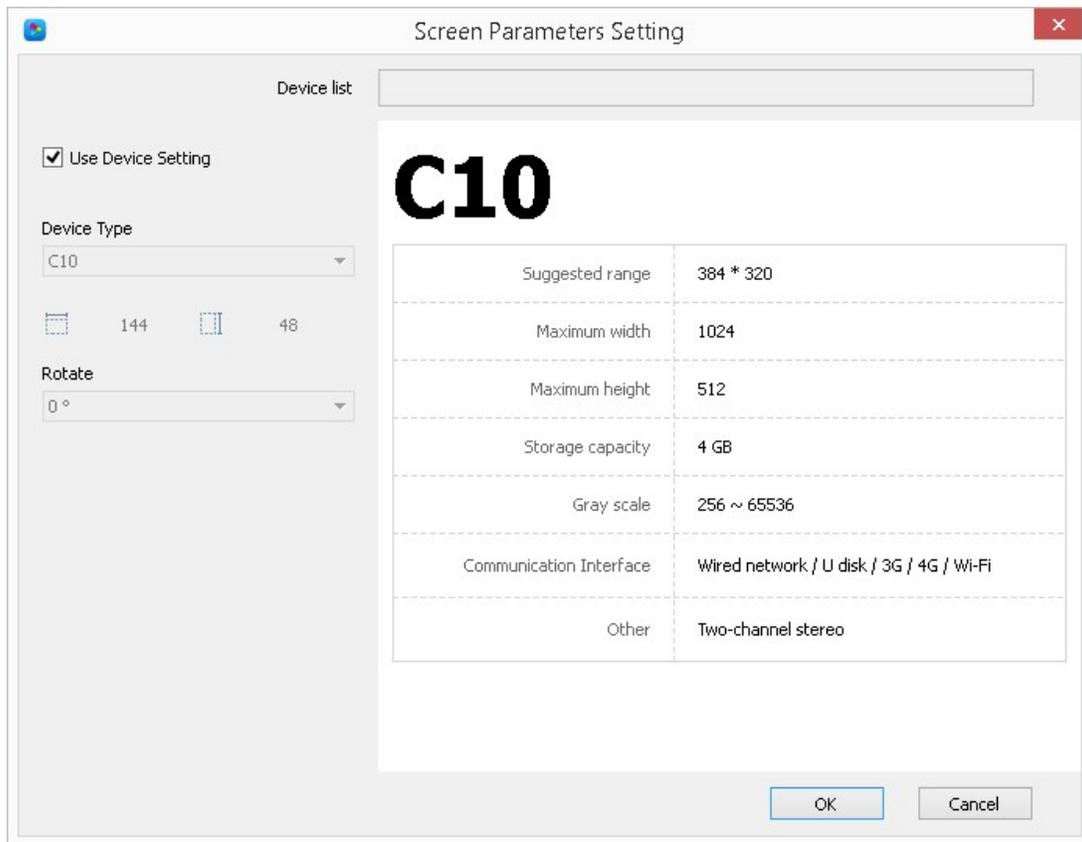
Download link: <http://nu-mediadisplays.com/support/ledfonts.zip>

Unzip/extract and then copy and paste into your "\\Windows\\fonts" folder, and windows should "install" the fonts. You must have Administrator Rights to do this.

Without the LED Fonts package, TrueType fonts are used. With True Type fonts only, there is limited control of text spacing on the sign. These led fonts appear in the font list as: 5x7, 5x8, 6x7, 6x9, OR CLR 5x7 (Regular), CLB5x8(bold) , CLI5x8 (italic). This represents the exact width of the character spacing used for maximum text use. Width "5x7" Height on a sign that is 64 wide x 32 high in pixel size will result in 4 lines of text, having 10-11 characters in length.

SECTION 3.1 - BASIC SOFTWARE SETUP

When the software is opened for the first time, the "Screen Parameters Settings" page will display. It is shown below. Ensure the "Use Device Setting" is checked. It should automatically show one of the controllers in the "Device Type" list, along with its type and size greyed out. Normally we use C10/C15/C16 controllers.

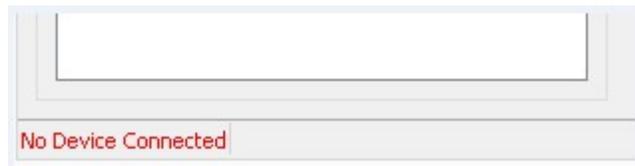


Press "OK" and continue to setup a new program/message & insert text/photo/video slides.

If No Device is connected or detected, check the connection status in the bottom left corner of the LED Software to verify its connection to the current network of your PC or laptop.

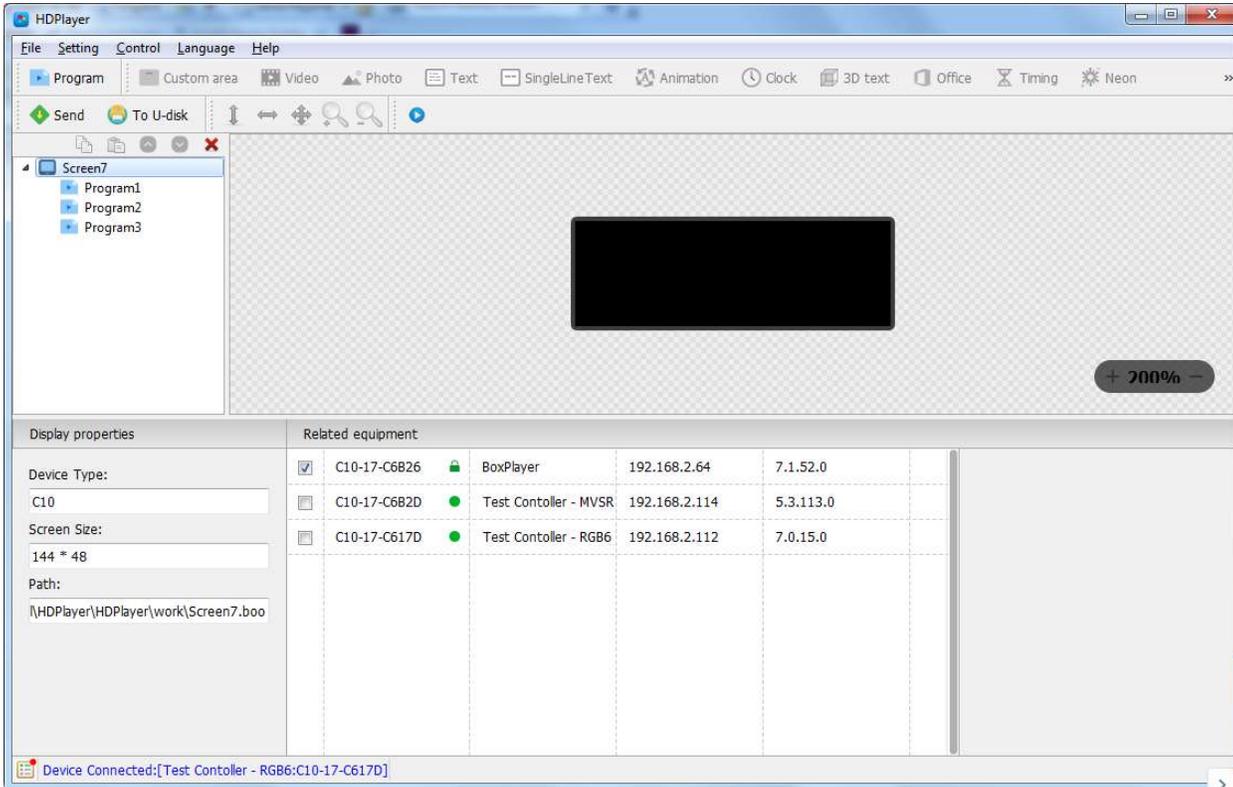


OR

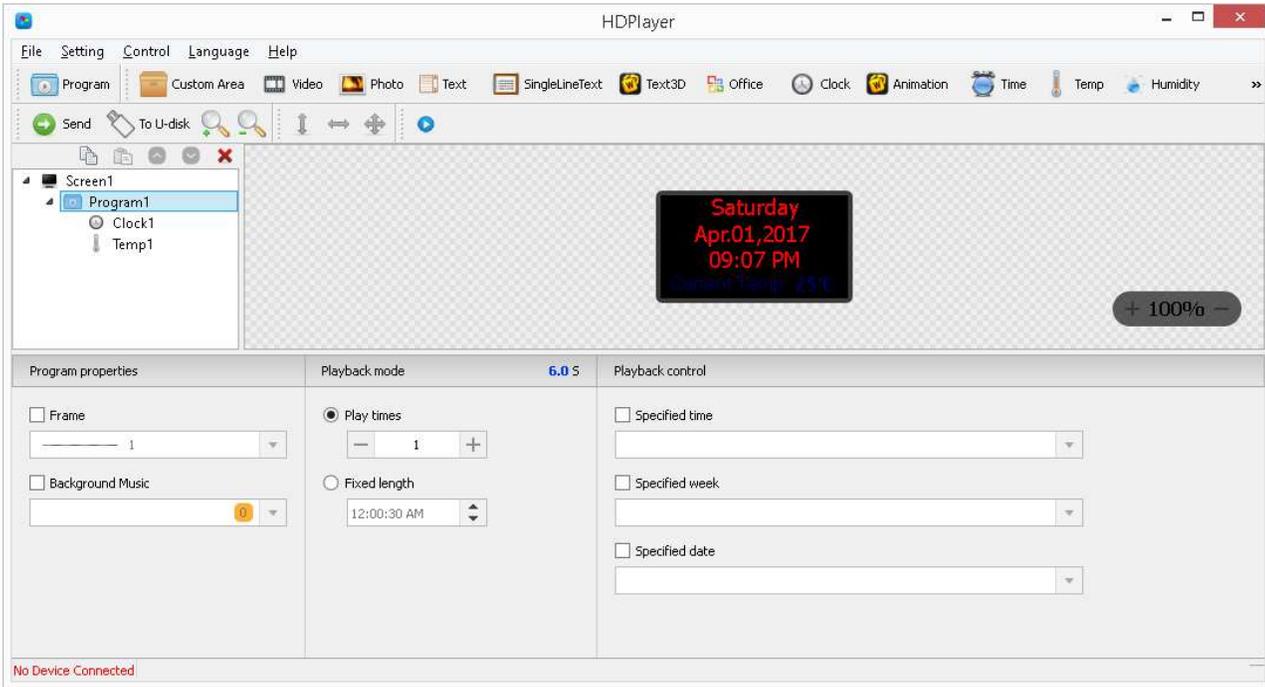


Highlight "Screen" in the Left Menu and the Display Properties for the Sign controller should be listed.

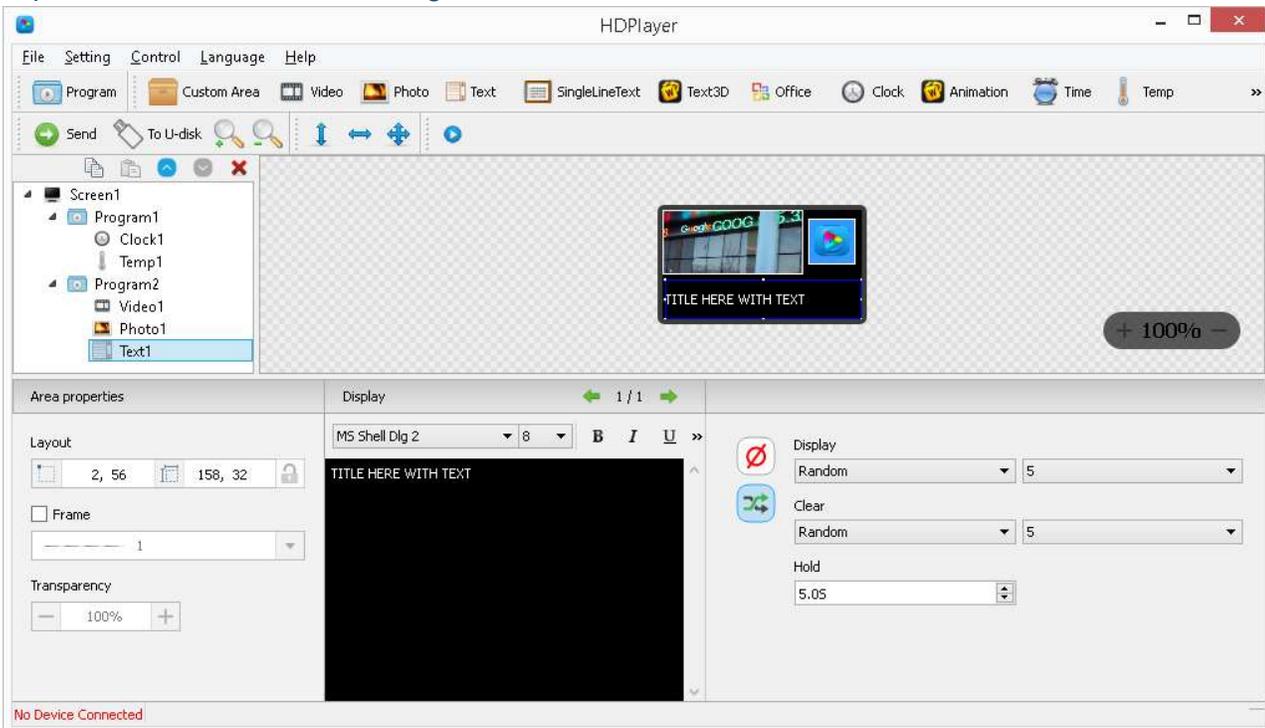
Additional signs that you may have, that are available on the same network, will also display in the list of Signs /Related Equipment in the bottom middle section. The first sign you previously detected and setup will be checked off. Select any additional signs checkboxes & the same content will be sent to those signs as well. This requires all signs to be the same size.



Next under "Screen" make a "Program". There are settings for "Playback Control" including Scheduling. Scheduling is used to play a particular program only at selected times of the day/week/year. Insert some content into the program. Below a Clock is inserted. The Clock uses a portion of the screen by dragging its content sizing box to the size and area to use. Similarly, another area at the bottom of sign is used for temperature.

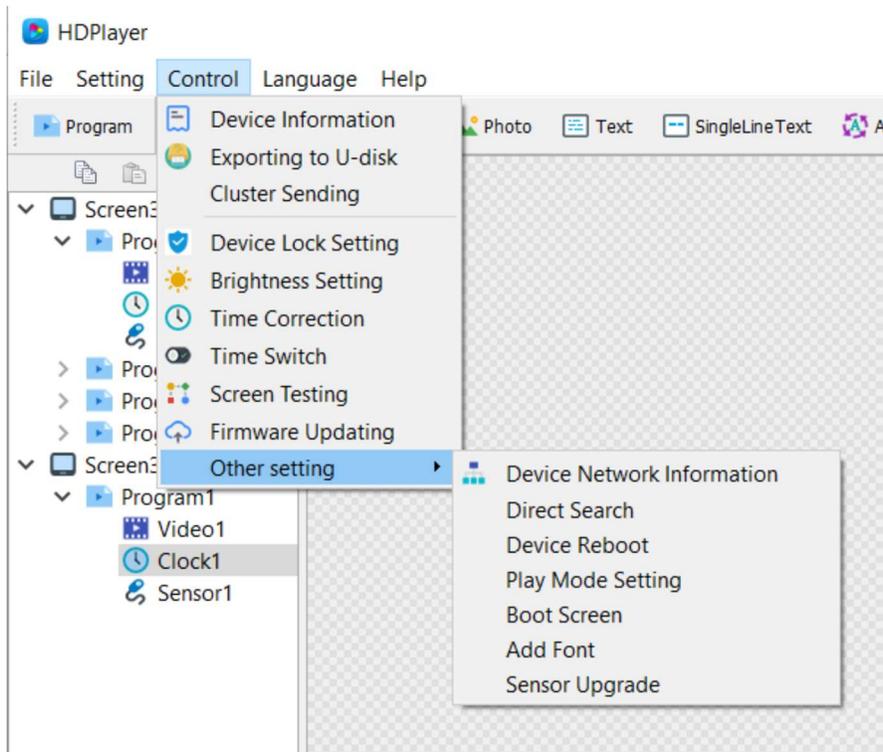


Experiment and make a New Program with various items..



Copy Text from documents or other sources and then Paste in the text area. Be aware, however, that the "TrueType" fonts do not entirely fill the space on the sign and may leave unused space. Save your "Screen" as a file name in order to use the file again on your next use, to either remove or add to it. It will open on your next launch of the software.

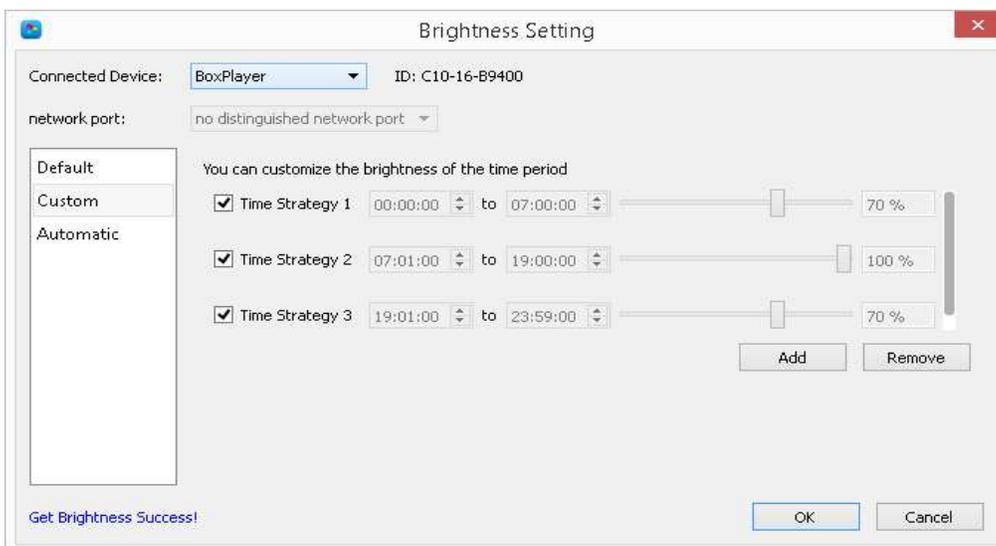
SECTION 3.2 - OTHER SOFTWARE CONTROL OPTIONS & SETTINGS



Brightness Settings:

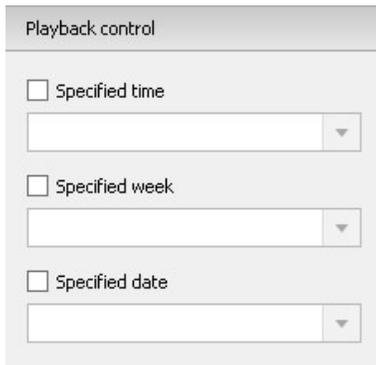
Under the control menu, select Brightness setting, and proceed to set the Brightness Settings. By default, the custom settings are set to be turned down from 7pm until 7am and otherwise set to full brightness.

Each controller in the "Connected Device" drop down list needs to be set individually. After pressing the "OK" button there should be confirmation in the left corner.



Scheduling Options:

Highlight the "Program" under the Screen that you want to assign, and use the options for Playback Control. Set the schedule for the program here.



The screenshot shows a 'Playback control' window with three scheduling options, each consisting of a checkbox and a dropdown menu:

- Specified time
- Specified week
- Specified date

Configuring Clock Synchronization Settings - Time Correction:

Setting the date and clock on your sign is necessary for applying Daylight Savings Time Changes, Time Zone settings, and Synchronizing via your PC Clock or via the internet directly option to a NTP server(Network Time Server) if available. Settings must be applied to each independent controller ('box player' as listed in its drop-down "Select device" box) for multiple signs/controllers. Your Program(s) that contain the time may also need to have its DST Button pressed. You can make 2 different slides that are offset with a schedule to accommodate this. Optionally, If your sign came with GPS this should be set to GPS(RS232) and will be in sync as long as the installer mounted it properly with "Line of Sight" to the sky/satellites to acquire the signal properly.

Configuring Static IP for sign controllers:

(Not recommended)

Using DHCP for all the equipment is highly suggested, and if Static IP addressing is required then your IT/Computer networking team will need to search the DHCP client list on there routers to assign MAC address reservations for the Wifi Bridges and Sign Controller(s). This must be done in a proper sequence from the farthest connection point first. Please consult with us for more details if required.

Saving your content and data:

Make sure to do so after every program/slide is made, as this program was not developed by us and has had some rare but known shutdowns. You must create a folder prior to Saving as it will ask you which folder to export to. Alternatively you may create a new folder on the same Export screen.

For help or support, contact Nu-Media at 1-800-676-4502

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CLIENT'S NETWORK / I.T. DEPT. COMMUNICATION OPTIONS

SECTION 2.0 - COMMUNICATIONS SETUP(S)

SECTION 2.1 - OPTION #1 - DIRECT TO PC OR NETWORK CONFIGURATION, USING NANOSTATION WIFI BRIDGE#1-REQUIRES ROUTER.

- The computer is not able to assign IP addresses to the sign controllers and WiFi Bridges (Nanostations), **and requires you to buy an inexpensive router** from us or your local computer store. You should be able to setup this router straight out of the box with minor configuration changes. We will not support third party equipment and your PC/Laptop must NOT be connected to any other network. This includes any WiFi connections and wired connections; conflicts will occur and prevent reliable sending to the signs. You can turn off or disconnect your WiFi on your PC temporarily and enable it again after completion.
- "Line of Sight" must be established to the sign through a window, or at long distances (max.1000') may require mounting outdoors.-See Page 5 for Diagram and mounting bracket use that is included.

1) Connect the WiFi Bridge#1 sending unit into the "POE" port on the POE Adapter. Connect the "LAN" port to the Router's Ethernet port.

2) Connect the PC to the same Router into a 2nd ethernet port, which should then automatically issue a DHCP IP address/subnet/gateway based on the router's settings.

3) Install the Led Software - download link to the PC, unzip it, install the software and follow the instructions in Section 2 - Setting up your Display. This should automatically detect the sign(s) on its initial "Screen Parameters Settings" Page.

NOTE: Some inconsistencies have been found when the program is installed to the Default Directory of "C:/ProgramFiles/HDPlayer" between Windows Versions 7-10 and we highly suggest to change the suggested path to "C:/HDPlayer" and the end user must have "Administrator Rights/Full Control" to that folder.

If the computer and network connection are working correctly the sign(s) will automatically show up in the software. If you look in the bottom left corner of the LED Software, you will detect if you have a connection or seen in the 'Device List' on a New Screen Parameters window.



Alternatively, you can manually configure according to the instruction manual for the software you are using, but normally this is not required or suggested. Do Not Alter any system settings and if unsure please call us.

SECTION 2.2 - OPTION #2 - NETWORK CONFIGURATION, FOR ADDING NANOSTATION WIFI BRIDGE#1 TO AN EXISTING NETWORK.

- Just like the above setup, Direct to a standalone PC, but instead of purchasing a router, you will be using your existing router/network connections. The network must support DHCP in order to issue TCP/IP addresses to all the equipment.
- The Next Step is to confirm that the Signs are discovered in the LED HD Player software (older versions use LedArt).

SECTION 2.3 - OPTION #3 – WIFI DIRECT CONNECTION FOR DIRECT CONNECTION TO SIGN VIA ITS WIFI HOTSPOT- WITHIN 75’.

- This setup involves connecting to the sign controllers direct WiFi Connection which is limited to a distance of approx. 75 feet.
- WiFi SSID and password is required to be entered on your laptop when within range of the signs WiFi signal. Default wifi settings can be changed once connected and set through the software.
- Once connected to the WiFi hotspot, it will issue a TCP/IP address to your laptop and confirm that the sign is connected as per your wifi connection and in the HDPlayer software in the bottom left corner (older versions use LedArt).It will report “No Internet” as it is only a connection to the sign that does not have internet.
- Default SSID: “controller#” Default Password: 88888888.

SECTION 2.4 - OPTION #4 – CELLULAR 4G/LTE INTERNET CONNECTION FOR CONNECTION TO SIGN VIA INTERNET

- This setup involves connecting to the sign controllers over the internet via the cellular network just like your phone.
- Requires an active Data Plan with an assigned static IP address from your Phone Carrier. This Sim Card and information must be supplied to us for testing prior to the sign shipping .
- Anyone with the HDPlayer software and the IP address to the sign entered into it, can send content from anywhere as long as they have internet connection. The IP address must be entered into the “Direct Search” section under “Other Setting’ in the Control menu. Once connected to it, the sign will show as “Device connected xxx” in the HDPlayer software in the bottom left corner.