CAVS Network Karaoke System

Version 1.0

0. Content

1. IO Gear GCL1800 17" LCD Console

Installation

The KVM unit is designed as 1U rackmountable. To support its heavy weight, be sure to connect both the front and back rackears of the KVM firmly into front and back of the rack system.

Connection

Connect the yellow VGA connector on the back of the KVM to the VGA connector on the back of the CAVS JB-199 IV Karaoke player using the enclosed USB KVM cable.

Use the VGA + USB end of the USB KVM cable to connect to the JB-199 IV player's VGA and USB connectors. Use the VGA only end of the USB KVM cable to connect to the KVM's VGA connector.

Connect the enclosed power cable to a power source and turn on the KVM.

2. Synology RS422+ Nas Server

Assembly

The NAS server first requires assembly. Insert the hard drives numbered 1 - 4 into the slots numbered 1 - 4 of the NAS server. The numbers must match and be sure to push in the hard drives firmly to snap close the lock handles.

Next attach the enclosed rackears to the NAS server. There are only 2 front rackears.

Connection

Connect an Ethernet port on the back of the NAS server to the ship network/VLAN323 using the enclosed LAN cable. You can use any one of the two Ethernet ports to connect. Note the MAC address corresponding to the connected Ethernet port. It is written on the back and will be needed to enable the NAS server in the VLAN323. Connect the enclosed power cable to a power source. Power on by pressing the Start button in the top of the front panel.

Setting IP address

When connecting the NAS server to the VLAN323 for the first time, it is required to set the IP address of the NAS server within the range of the IP address allowed in the VLAN323. Connect directly an Ethernet port of the NAS server to an Ethernet port of a laptop installed with Synology Assistant program. Run the Synology Assistant program in the laptop and follow the program instruction to set the IP address for the NAS server. The Synology Assistant program can be downloaded from Synology.com website.

3. CAVS JB-199 IV Online

Assembly

Attach the enclosed rackears to the JB-199 IV player. There are only 2 front rackears. To support its weight, the JB-199 IV player is better to be located at the bottom of a rack system where its whole body can be supported rather than just by the front rackears.

Connection to KVM in Broadcasting Center

- Use the USB KVM cable enclosed with the KVM to connect the yellow VGA connector on the back of the KVM to the VGA connector on the back of the CAVS JB-199 IV Karaoke player.
- Use the VGA + USB end of the USB KVM cable to connect to the JB-199 IV player's VGA and USB connectors.
- Use the VGA only end of the USB KVM cable to connect to the KVM's yellow VGA connector.
- Connect an Ethernet port, any of the two on the back of the JB-199 IV player, to the ship network/VLAN323 using an enclosed Ethernet cable.
- Connect the enclosed power cable to a power source. Power on.

Finding MAC address

After powering on the JB-199 IV, use the KVM keyboard, mouse, and monitor to operate the JB-199 IV. Inside the JB-199 IV, go to Command Prompt and type in "ipconfig /all". Look for "Physical Address" which is the JB-199 IV's MAC address.

Setting IP address

When connecting the JB-199 IV to the ship network/VLAN323 for the first time, it is required to set the IP address of the JB-199 IV within the range of the IP address allowed in the VLAN323. In the JB-199 IV, go to Open Networks & Internet setting > Ethernet > Change adopter options. Right click on the Ethernet port which is connected to the ship network/VLAN323 and select Properties. Next select Internet Protocol Version 4 (TCP/IPv4) and click Properties. Select the Use the following IP address and fill in the IP address, Subnet mask, and Default gateway. Also selet Use the following DNS server address, and fill in the Prefered DNS server and Alternate DNS server. Click OK and exit. Reboot the JB-199 IV Online player.

4. CAVS JB-199 mini II

Assembly

Attach the JB-199 mini II onto a rack shelf. Use velcro tapes rather than screws to attach the player to the shelf.

Connection to AV system in lounge

- Connect the enclosed Red license dongle to a USB port on the back of the JB-199 mini II player.
- Connect the enclosed wireless keyboard and mouse receiver dongle to a USB port on the back of the JB-199 mini II player.
- Connect one HDMI connector on the back of the JB-199 mini II player to a control monitor using a enclosed HDMI to HDMI cable.
- Connect the other HDMI connector on the back of the JB-199 mini II player to a wall TV using a enclosed HDMI to HDMI cable.
- Connect the head phone jack on the front of the JB-199 minni II player to the mixer/sound system using the enclosed Jack to RCA cable.
- Connect the LAN port on the back of the JB-199 mini II player to the ship network/VLAN323 using the enclosed LAN cable.
- Alternatively use the Wi-Fi connector in the JB-199 mini II player to connect to the ship network/VALN323.
- Connect the enclosed power cable to a power source. Power on.

Finding MAC address

After powering on the JB-199 mini II, go to Command Prompt and type in "ipconfig /all". Look for "Physical Address" which is the JB-199 mini II MAC address.
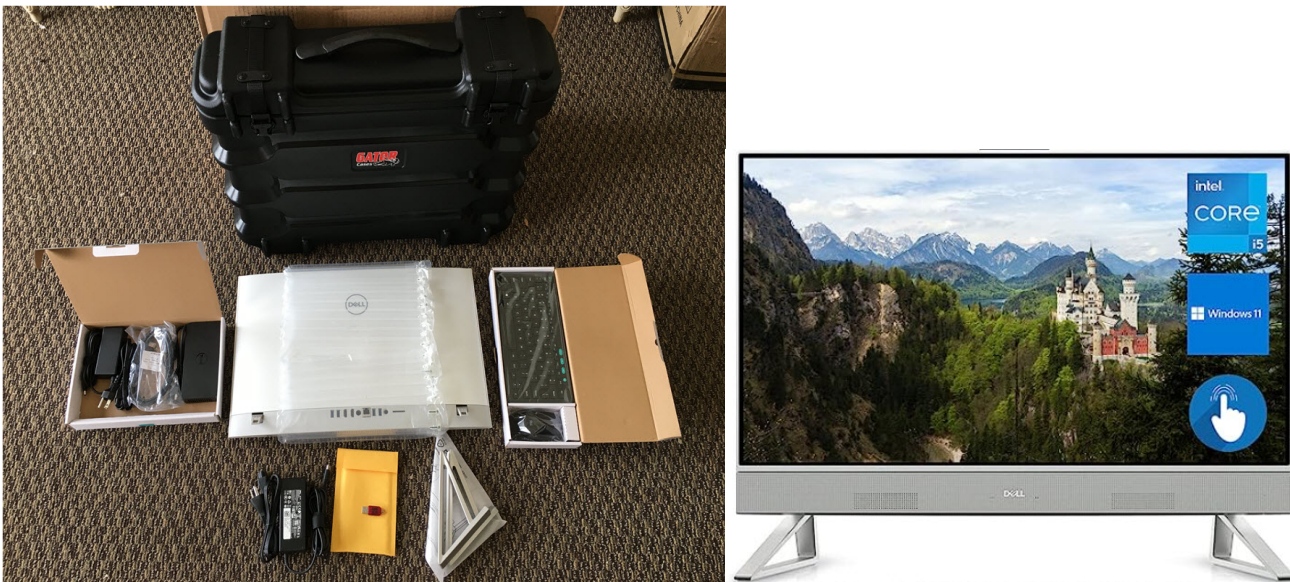
Setting IP address

When connecting the JB-199 minni II player to the ship network/VLAN323 for the first time, it is required to set the IP address of the JB-199 mini II player within the range of the IP address allowed in the VLAN323. Inside the JB-199 mini II, go to Open Networks & Internet setting > Ethernet > Change adopter options. Right click on the Ethernet port and select Properties. If the JB-199 mini II is connected wirelessly to the ship network/VLAN323, go to Open Network & Internet setting > Wi-Fi > Change adopter options. Right click on the Wireless port and select Properties. Next select Internet Protocol Version 4 (TCP/IPv4) and click Properties. Select the "Use the following IP address" and fill in the IP address, Subnet mask, and Default gateway. Also selet "Use the following DNS server address", and fill in the Prefered DNS server and Alternate DNS server. Click OK and exit. Reboot the JB-199 mini II player.

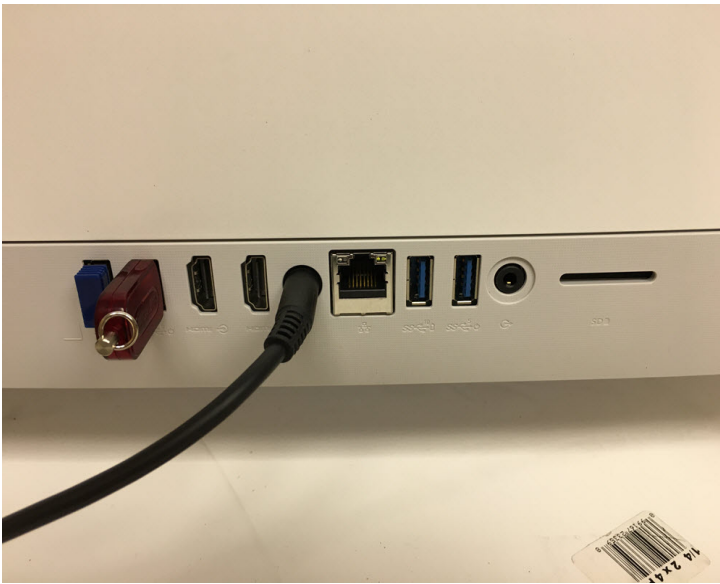# 5. Dell Inspiron 5410 All-In-One Touch Screen Karaoke Player

Assembly

The unit comes in a carry case. Remove all parts from the case. Snap in the leg stands and upright the Touch Screen karaoke player as shown below.

Connection

- Connect the enclosed Red license dongle to a USB port on the back of the Touch Screen player.
- Connect the enclosed wireless keyboard and mouse receiver dongle to a USB port on the back of the Touch Screen player.
- Connect the Touch Screen player to a power source using its enclosed power cable. Connect the docking station to a power source using its enclosed power cable. Each has its own power supply cable.
- Connect the Touch Screen player to the docking station using the enclosed USB-B cable.

- Connect one HDMI connector on the docking station to a control monitor.
- Connect the other HDMI connector on the docking station to a wall TV.
- Connect the head phone jack on the docking station to the mixer/sound system using the enclosed Jack to RCA cable.
- Connect the Ethernet port on the docking station to the ship network/VLAN323.
- Alternatively use the Wi-Fi connector in the Touch Screen player to connect to the ship network/VLAN323.

Finding MAC address

After powering on the Touch Screen player, go to Command Prompt and type in "ipconfig /all". Look for "Physical Address" which is the MAC address of the Dell AIO player.

Setting IP address

When connecting the Dell AIO player to the VLAN323 for the first time, it requires to set the IP address of the Dell AIO player within the range of the IP address allowed in the VLAN323. Inside the Dell AIO player, go to Open Networks & Internet setting > Ethernet > Change adopter options. Right click on the Ethernet port which is connected to the ship network/VLAN323 and select Properties. If connected wirelessly, go to Open Networks & Internet setting > Wi-Fi > Change adopter options. Right click on the wireless port which is connected to the ship network/VLAN323 and select Properties. Next select Internet Protocol Version 4 (TCP/IPv4) and click Properties. Select the Use the following IP address and fill in the IP address, Subnet mask, and Default gateway. Also selet Use the following DNS server address, and fill in the Prefered DNS server and Alternate DNS server. Click OK and exit. Reboot the Dell AIO player.

6. MS Surface Go

Assembly

The Surface Go tablet comes with its own charging cable. Use the cable to charge the battery for full 9 hours of use.

Connection

There are three ways to connect the Surface Go tablet for karaoke use.

- Passengers: Connect the tablet wirelessly to the ship network and click on a link or scan a QR code to connect to the NAS server at port 5003. Passengers can browse the songbook and inform the karaoke hosts the song numbers of the songs that they like to sing.
- Hosts: Connect the tablet wirelessly to the ship network and input an IP address or scan a QR code to connect to the karaoke player at the port 5000. The hosts can reserve, play, stop, or cancel the songs in the karaoke player.
- Hosts: Start the CSRS II Client app installed in the tablet to connect to JB-199 III or PlayCDG KJ Delxue 64 LT karaoke players onboard. The hosts can reserve, play, stop, or cancel the songs in the JB-199 III or PlayCDG KJ Delxue 64 LT karaoke players.

Finding MAC address

After starting the tablet, go to Command Prompt and type in "ipconfig /all". Look for "Physical Address" which is the MAC address.

Setting IP address

When connecting the tablet to the ship network in all three cases above, it requires to set the IP address of the tablet according to the instruction of the IT administration. Go to Open Networks & Internet setting > Wi-Fi > Change adopter options. Right click on the wireless port which is connected to the ship network and select Properties. Next select Internet Protocol Version 4 (TCP/IPv4) and click Properties. Select the Use the following IP address and fill in the IP address, Subnet mask, and Default gateway. Also selet Use the following DNS server address, and fill in the Prefered DNS server and Alternate DNS server. Click OK and exit. Reboot the tablet.

Appendix 1. URL Whitelist for VLAN323

The VLAN323 requires the following whitelist of URLs.

CAVS USA Inc	Port
cavskaraoke000.synology.me	1194
cavskaraoke003.synology.me	1194

Microsoft	Port
windowsupdate.microsoft.com	443

*.windowsupdate.microsoft.com	443
*.update.microsoft.com	443
*.windowsupdate.com	443
download.windowsupdate.com	443
download.microsoft.com	443
*.download.windowsupdate.com	443
wustat.windows.com	443
ntservicepack.microsoft.com	443
go.microsoft.com	443

Synology	Port
account.synology.com	443
api.insight.synology.com	443
api.segment.io	443
api.wootric.com	443
apiauth.quickconnect.to	443
auth.docker.io	443
autoupdate7.synology.com	443
cdn.auth0.com	443
cdn.segment.com	443
cdn.wootric.com	443
checkip.dyndns.org	443
checkip.synology.com	443
checkip.webrtc.quickconnect.to	443
checkipv6.quickconnect.to	443
checkipv6.synology.com	443
checkport.synology.comÿ	82
codecstatistic.synology.com/codec_feedback.php	443
collectorautoupdate7.synology.com	443
collectorupdate7.synology.com	443
czr1.re.cs.quickconnect.to	443
czr2.re.cs.quickconnect.to	443
dataautoupdate7.synology.com	443
database.clamav.net	443
dataupdate.synology.com	443
dataupdate7.synology.com	443
ddns.synology.com	443
dec.quickconnect.to	443
der3.re.cs.quickconnect.to	443
der4.re.cs.quickconnect.to	443
der7.re.cs.quickconnect.to	443

der8.re.cs.quickconnect.to	443
desktop.docker.com	443
docker.io	443
docker-pinata-support.s3.amazonaws.com	443
download.synology.com	443
download.synology.com/routerdb	443
dseasb33srnrn.cloudfront.net	443
elb-io.us-east-1.aws.dckr.io	443
elb-registry.us-east-1.aws.dckr.io	443
frlp.lp.cs.quickconnect.to	443
frp1.punch.cs.quickconnect.to	443
frp2.punch.cs.quickconnect.to	443
frp3.punch.cs.quickconnect.to	443
frp4.punch.cs.quickconnect.to	443
frr2.re.cs.quickconnect.to	443
frr3.re.cs.quickconnect.to	443
frr4.re.cs.quickconnect.to	443
global.download.synology.com	443
global.geo.synology.com/multilingual_reverse.php	443
global.quickconnect.to	443
global.synologydownload.com	443
gofile.me	443
help.synology.com	443
help.synology.com/spreadsheet/	443
hub.docker.com	443
hub.docker.com/_/node	443
identity.us.c2.synology.com	443
index.docker.io	443
jpr4.re.cs.quickconnect.to	443
jpr5.re.cs.quickconnect.to	443
kb.synology.com	443
ldap.identity.us.c2.synology.com	443
license.synology.com	443
login.docker.com	443
myds.synology.com	443
notification.synology.com	443
notify.bugsnag.com	443
orlp.lp.cs.quickconnect.to	443
orp1.punch.cs.quickconnect.to	443
orp2.punch.cs.quickconnect.to	443
payment.synology.com	443

pkgautoupdate7.synology.com	443
pkgupdate7.synology.com	443
production.cloudflare.docker.com	443
registry.hub.docker.com	443
registry.npmjs.org	443
registry-1.docker.io	443
registry-origin.docker.io	443
report.synology.com/upload.php	443
sessions.bugsnag.com	443
sgr3.re.cs.quickconnect.to	443
sgr4.re.cs.quickconnect.to	443
signal1.fr.webrtc.quickconnect.to	443
signal1.or.webrtc.quickconnect.to	443
signal1.ty.webrtc.quickconnect.to	443
signal2.fr.webrtc.quickconnect.to	443
signal2.or.webrtc.quickconnect.to	443
signal2.ty.webrtc.quickconnect.to	443
signal3.fr.webrtc.quickconnect.to	443
signal4.fr.webrtc.quickconnect.to	443
sns.synology.com	443
subscribe.insight.synology.com	443
supapi.synology.com	443
synocloudsync.synology.com	443
synoconf.synology.com	443
synoconfkms.synology.com	443
synosurveillance.synology.com	443
twc.quickconnect.to	443
twr1.re.cs.quickconnect.to	443
twr2.re.cs.quickconnect.to	443
twr5.re.cs.quickconnect.to	443
twr6.re.cs.quickconnect.to	443
twr7.re.cs.quickconnect.to	443
twr8.re.cs.quickconnect.to	443
tylp.lp.cs.quickconnect.to	443
typ1.punch.cs.quickconnect.to	443
typ2.punch.cs.quickconnect.to	443
update.nai.com	443
update.synology.com	443
update.synology.com/btsearchupdate/getServerInfo.php	443
update.synology.com/filehostupdate/getfilehosts.php	443
update7.synology.com	443

us.c2.synology.com	443
usc.quickconnect.to	443
us-east-1-elbio-rm5bon1qaeo4-623296237.us-east-1.elb.amazonaws.com	443
us-east-1-elbregis-10fucsvj1tcgy-133821800.us-east-1.elb.amazonaws.com	443
usr1.re.cs.quickconnect.to	443
usr2.re.cs.quickconnect.to	443
usr5.re.cs.quickconnect.to	443
usr6.re.cs.quickconnect.to	443
utyupdate.synology.com	443
www.synology.com	443
www.synology.com/company/legal/privacy	443
www.synology.com/company/legal/Services_Data_Collection_Disclosure#technical-support	443
www.synology.com/company/term_packagecenter.php	443

Appendix 2. Data Sync and Map Drive

Data Sync

After the NAS server and the JB-199 mini II karaoke players are setup in the ship network/VLAN323 with their own respective local IP addresses, the
NAS server can next be connected to CAVS HQ NAS server using VPN for data synchonization.

- In a JB-199 mini II karaoke player, open the Google Chrome browser and naviagate to "NAS server IP address:5000". You will see the signin page of the NAS server.
- Input the username and password to enter. Select Control Panel > Network > Network Interface.
- Click on "VPN-Connection" and press "Connect". A message "Connected" will appear showing you the connection is successfully made. Close the Control Panel.
- Sign out of the NAS server by selecting the User Account at the top right corner of the screen. Sign in again and confirm that the "Synology Drive ShareSync" icon appears at the top right corner of the screen. Sign out of the NAS server and close the Google Chrome browser in the JB-199 mini II player.

Map Drive

- In the JB-199 mini II, open the File Explorer and go to Documents > JB-199 mini. Right click on the mapdrive.json file and select edit.
- Replace the IP address shown in the mapdrive.json file with the local IP address of the NAS server. Do not change anything else, such as port number, etc.
- Save and close the editor and close the File Explorer. Restart the karaoke program in the JB-199 mini II.
- When the karaoke program restarts, confirm that the network drive X:\ is activated.

Appendix 3. Advertisement and Background video

File Format

File formats recommended for the Advertisement and Background video are as follow.

- Photo
  - JPG, BMP
  - 16:9 (for example 1920 x 1080)
- Video

- MP4
- 16:9 (for example 1920 x 1080)
- 15 - 30 fps
- Embedded audio is automatically muted

Loading

After the contents for the Advertisement and Background video are created, contact Princess Cruise / Entertainment Department for loading of the contents onto the NAS server.

Advertisement Sync

After the Data sync and Map drive are established between the CAVS HQ NAS server, the ship NAS server, and the JB-199 mini II karaoke players, the Advertisement sync and BGV Sync can next be established as follows.

- In a JB-199 mini II karaoke player, go to the Control Panel > Function Menu > Advertisement.
- Click on the Load button at the far right side. Navigate to X:\AdvLibrary and select Adv.txt to open..
- Click on Playlist in the Function Menu.

Background Video Sync

- In a JB-199 mini II karaoke player, go to the Control Panel > Function Menu > Pictures.
- Click on the Load button at the far right side. Navigate to X:\BgvLibrary and select Bgv.txt to open..
- Click on Playlist in the Function Menu.

Reboot the JB-199 mini II to store the new settings.

END