

Application Engineering Team



QSC Business Music Solutions **Technical Notes** QSC MP-M Series Mixers

Network setup and troubleshooting

The default settings of a QSC MP-M Series mixer will have it obtain an IP address automatically from a DHCP server, typically in a switch or router, once it establishes a network connection. As long as the setup computer is connected to the same network, it and the mixer will be able to communicate via the MP-M Install or MP-M Manage applications.

MP-M firmware 1.0

If there is no DHCP server or it fails to respond, the mixer will self-assign a default IP address.

For an MP-M Series mixer the default IP address information is:

- IP Address 169.254.112.112
- Subnet Mask 255.255.0.0
- Gateway 169.254.44.244

Therefore, if there are two or more MP-M Series mixers on a network with no DHCP, their default address settings will cause an IP conflict because they will all try to use the same IP address. It becomes necessary to assign static IP addresses to the individual mixers so they can coexist on the network.

MP-M firmware 1.1 or higher

If a DHCP server is not present or it fails to respond, the mixer will self-assign a true Link Local address in the 169.254.x.x subnet range. The last two octets of the IP address will be unique to each mixer on the network.

Static IP address assignment in MP-M firmware 1.1 and higher

NOTE: Assigning a static address to an MP-M Series mixer requires configuring a valid Gateway Address. This will ensure proper network communication even if all the devices are connected on the same network.

For example, on a network that uses a 192.168.1.X domain:

- IP Address 192.168.1.20
- Subnet Mask 255.255.255.0
- Gateway 192.168.1.1

NOTE: After you enter the IP address, subnet mask, or gateway address, press Enter. Click Apply to make the settings active.

MP-M network troubleshooting

For the network connection, be sure to use the RJ-45 jack labeled ETHERNET.

If you are troubleshooting a network connection on an MP-M Series mixer but it does not appear in the device list of the app on the setup computer, make sure the security settings of the switch or router are not blocking the mixer's discovery protocol. These are the MP-M Series discovery protocol settings:

- Discovery Type Bonjour
- Protocol
- Discovery Address 224.0.0.251
- Network Ports
 Randomly selected by the mixer / Not defined

The network must allow mDNS functions with this discovery address.

mDNS

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The mixer will randomly select multicast ports whenever it boots up or reconnects to the network. Network discovery is not routable and there are no hard links for it. The MP-M Install and MP-M Manage apps will not connect if discovery is prevented or interrupted.

If the mixer is not discoverable and you suspect that network security is blocking its discovery protocol, try connecting the mixer and setup computer to a simplified router or switch, or connect the computer and mixer directly. Then verify that the mixer is discoverable.

It may become necessary to reset the mixer to its factory default settings:

- 1. Use a paper clip or similiar implement, press and hold the **Reset** button (the pinhole to the right of the top MFC RJ-45 connector) for 10 seconds.
- 2. After you count 10 seconds, release the button. The chassis fan will spin after release. (If it doesn't, you did not hold the button long enough; start over again with the **Reset** button.)
- 3. Turn the mixer off, and then on again.
- 4. Follow the MP-M Network Setup procedure to configure its settings.



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