

NovaMic Mesh — User Guide

Service 2 · IP broadcast station chaining Version 1.0 · July 2026 ·

novamic.busycol.com

What is NovaMic Mesh?

NovaMic Mesh is an **IP bridge between radio stations** of the same chain. It allows a "headend" station to broadcast simultaneously to multiple "satellite" stations in different cities — all on air, with the same signal, in real time, without changing your current audio mixer.

It's the pro broadcast solution for radio chains that want to:

- **Syndicate programs** from a central station to the whole chain
- **Connect franchises** operating under the same brand
- **Share studios** between remote booths
- **Save** versus satellite links or dedicated T1 lines

Key benefits:

- **No install** — web configuration in minutes
 - **Private** — chain's own link, no crossover with others
 - **Broadcast audio** — Opus 48 kHz codec, radio-quality
 - ✂ **Low latency** — typical 200-400 ms between headend and satellite
 - **Scalable** — from 3 to 50+ simultaneous stations
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Requirements

At each station (headend and satellites)

- Stable internet connection — minimum 500 kbps upload/download per station
- Available audio output from your mixer (line or mic) to inject the signal
- A mid-range computer with updated Chrome/Edge/Firefox
- Optional: **Raspberry Pi 4 with NovaMic Mesh appliance** for fixed installation without dedicated PC (roadmap)

Authentication

Each chain station has its unique credential. Operators do NOT share passwords — each role has its permissions:

- **Chain admin:** manages station provisioning and program lineup
 - **Headend operator:** puts programs on air and monitors satellites
 - **Satellite operator:** receives the signal, can insert local commercials
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Available plans

Plan	Stations	Reporters	Price (USD/month)
Mesh Starter	Up to 3	15	\$99
Mesh Growth	Up to 10	50	\$229
Mesh Network	Up to 25	150	\$499
Mesh Enterprise Unlimited	Custom		Contact

All with 30-day trial, no credit card.

Step by step — Initial setup

1. Register your chain

1. Go to novamic.busycol.com and choose **NovaMic Mesh**
2. Register the chain name, estimated number of stations and main contact
3. You'll receive **chain admin** credentials by email

2. Provision each station

1. Log in as admin to the chain panel
2. **Stations → Add station** — fill in:
3. Station name (e.g. "FM Popular Neiva")
4. City
5. Role: headend or satellite
6. Local operator email
7. NovaMic generates a unique link per station

3. Set up audio at each station

At headend:

- Connect a mixer output (aux/master send) to the computer's audio input
- Open the link in the browser
- Adjust input level until VU is green/amber (avoid red/clip)

At satellite:

- Connect the computer's audio output to a line input on your mixer
 - Open the link in the browser
 - Turn up the mixer's gain until you hear the headend at good level
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Step by step — Daily operation

Put a program on air (headend)

1. In the headend panel, connected satellites appear
2. Tap **ON AIR** to start broadcasting to the whole chain
3. Verify all satellites show **RECEIVING** in green
4. You can talkback with each satellite operator internally

Receive the signal (satellite)

1. Open your station's link
2. When the headend is on air, you'll see **RECEIVING** with the VU moving
3. Signal comes out through the audio output connected to your mixer
4. You can interrupt for local content (commercial break, ID) without affecting the headend

Quality monitoring

At each station you'll see:

- **VU meter**: real-time audio level
- **Latency**: ms from headend to this station
- **Bitrate**: data speed
- **Uptime**: connected time without drops

If a satellite shows **latency > 800 ms** sustained, check its internet connection.

Troubleshooting

The headend doesn't reach a satellite

Check:

- Satellite's internet responds (try speedtest.net)
- Satellite's firewall doesn't block WebRTC (rare on residential connections)
- Satellite wasn't paused in the admin panel

Noise/pops in audio

Cause: headend input level is clipping.

Fix: lower the send gain from your mixer to the computer's input. Green VU with occasional amber peaks is ideal.

Latency is high (>1s)

Cause: one of the stations has unstable connection or ISP route is long.

Fix:

- If it's a single station: switch its WiFi to cable, or switch its ISP
- If it's all: contact NovaMic support to review the mesh network route

Satellite hears its own echo

Cause: feedback loop — the computer's output is entering back through the mixer's input.

Fix: check your mixer routing. The computer's input (going to the chain) must NOT receive the computer's output (bringing the headend).

Contact and support

- **Email:** contacto@busycol.com
- **Admin panel:** novamic.busycol.com

- **Priority Enterprise support:** dedicated WhatsApp Business
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NovaMic is a product of BUSYCOL.com · Ing. Fernando Rojas Prado