

## WiFi Router Setup Recommendations <<http://routerguide.net/>>

- 1) 2.4 Ghz vs 5 Ghz: 2.4GHz for range, 5GHz for speed
- 2) 802.11 N Support: ON if all devices support N **N only**
- 3) 20 Mhz or 40 Mhz: 20Mhz on 2.4GHz channels, 40MHz on 5GHz channels
- 4) Lower 5GHz channels have better range in the US
- 5) AP isolation: OFF **off**
- 6) IGMP Snooping: ON if streaming video especially if using an Apple device. **IGMP snooping on, proxy off**
- 7) Multicast Rate: AUTO
- 8) DTIM Interval: DEFAULT (1 – 3 times Beacon Interval) **3**
- 9) Beacon Interval: DEFAULT (100ms) **100**
- 10) Tx Burst (Frame Burst / Pack Burst): OFF if all devices 802.11N or higher **TX burst disabled**
- 11) WMM Support: ON especially if Apple devices need WiFi **on**
- 12) WMM APSD: ON unless mobile devices drop off **enable**
- 13) Optimize AMPDU Aggregation: ON **on**
- 14) Optimize Ack Suppression: OFF **disabled**
- 15) Airtime Fairness: ON if all devices function well **off**
- 16) Beamforming: ON if in a big house **Explicit 5GHz only, Implicit/Universal OFF**
- 17) IP Flood Detection: (=Enable DoS protection) OFF on local networks, ON for public networks
- 18) Preamble Type: SHORT if all devices support. If any drop off, revert to AUTO. **Short**
- 19) Jumbo Frame: only has benefit with network storage
- 20) NAT Acceleration: Typically does not affect connection speeds below 100Mbps. Use CTF1

Transcribed 13 Aug 2018, DJL

See also <<http://www.snbforums.com/threads/guide-troubleshooting-wifi-issues.12825/>>

**rmerlin adds:** Explicit Beamforming can help a little with clients at medium range and should be enabled. I recommend keeping Implicit Beamforming (which was previously called Universal Beamforming) disabled, for compatibility reasons.

MU-MIMO is an experimental feature at this point that is best kept disabled

Generally speaking, what I recommend is:

- Disable MU-MIMO
- Disable Nitro/Turbo-QAM
- 5 GHz: disable universal (implicit) beamforming
- 2.4 GHz: disable both beamforming
- Set a static channel on both bands

In newer routers, if you experience wireless stability issues then it's recommended that you disable the following options:

MU-MIMO (some hardware revisions have non-functional/unreliable implementations)

Airtime Fairness (causes connectivity issues for various devices, including wireless printers)

Universal Beamforming (non-standard, might cause compatibility issues with some clients)

Everything else should be left to default, unless you want to experiment with them and see how your specific environment handles these.

**sfx2000 adds:** IGMP Proxy however - this is not at the switch level, and this can cause problems for many clients - so consider disabling that one...

**john9527 adds:** I'm personally also wary about the WMM APSD setting. "WMM Support" is always on.

**l&ld great tips:** *Me&M Config* <https://www.snbforums.com/threads/noob-definition-of-minimal-and-manual-configuration.27115/#post-205573>

*Sanitize Network* <https://www.snbforums.com/threads/rt-ac66u-slow-wan-to-lan.12973/page-3#post-269410>

*Save NVRAM Settings* <https://www.snbforums.com/threads/asus-dsl-88u-transfer-settings-question.42274/#post-359390>

*Control Channel Set up* <https://www.snbforums.com/threads/ac66u-b1-x2-or-ac86u-x1-details-in-the-description.55582/#post-472051>