












Wireless problems – Improve Reception

If you are experiencing wireless reception drop outs or disconnections, there are two basic reasons. This guide describes the solution to these problems.

Avoid obstacles and interference

Avoid placing your WiFi router near devices that may emit radio “noise,” such as microwave ovens or “dense” objects that can inhibit wireless communication.

Such devices and objects include:

-  Refrigerators
-  Washers and/or dryers
-  Metal cabinets
-  Large aquariums
-  Metallic-based, UV-tinted windows
-  If your wireless signal seems weak in some spots, make sure that objects such as those listed above are not blocking the signal’s path (between your devices and the WiFi router).
-  If you have a cordless phone and the performance of your wireless network continues to be impaired after considering the above issues:
 -  Try moving cordless phones away from your WiFi router and your wireless-enabled computers.
 -  Unplug and remove the battery from any cordless phone that operates on the 2.4GHz band (check manufacturer’s information). If this fixes the problem, your phone may be interfering with the WiFi router.
 -  If your phone supports channel selection, change the channel on the phone to the farthest channel from the channel be used by your wireless network. For example, change the phone to channel 1 and move your WiFi router to channel 11 for the 2.4GHz band. See your phone’s user manual for detailed instructions.
 -  If necessary, consider switching to a 900MHz or 1800MHz cordless phone.

For best performance, place the router in a central location, somewhere one (1) meter above the ground/floor and avoid any object that might block the signal (see above). Ideally place the router on a table or rack that stands alone in empty surroundings.

Choose the “Quietest” Channel for your Wireless Network

In locations where homes, apartments or offices are close together, such as duplexes, town houses, apartment buildings or office complexes, there may be wireless networks nearby that can interfere with your wireless network.

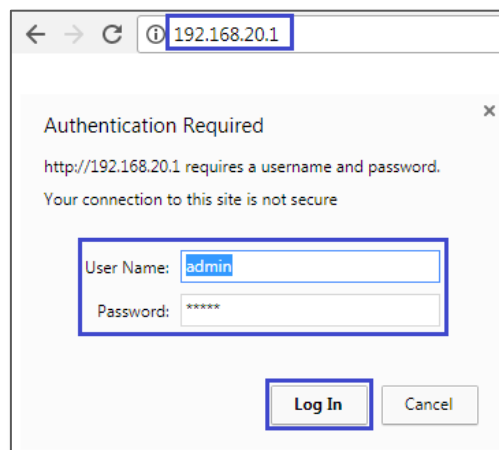
Use the Site Survey capabilities found in the Wireless Utility of your wireless adapter to locate any other wireless networks that are available (see your wireless adapter’s user manual), and switch the channel used by your NF10WV and computers to a channel as far away as possible from those used by the other networks.

Manually Change Channel

To find the clearest connection and avoid interference from neighbouring cordless phones or other wireless devices experiment with more than one of the available channels.

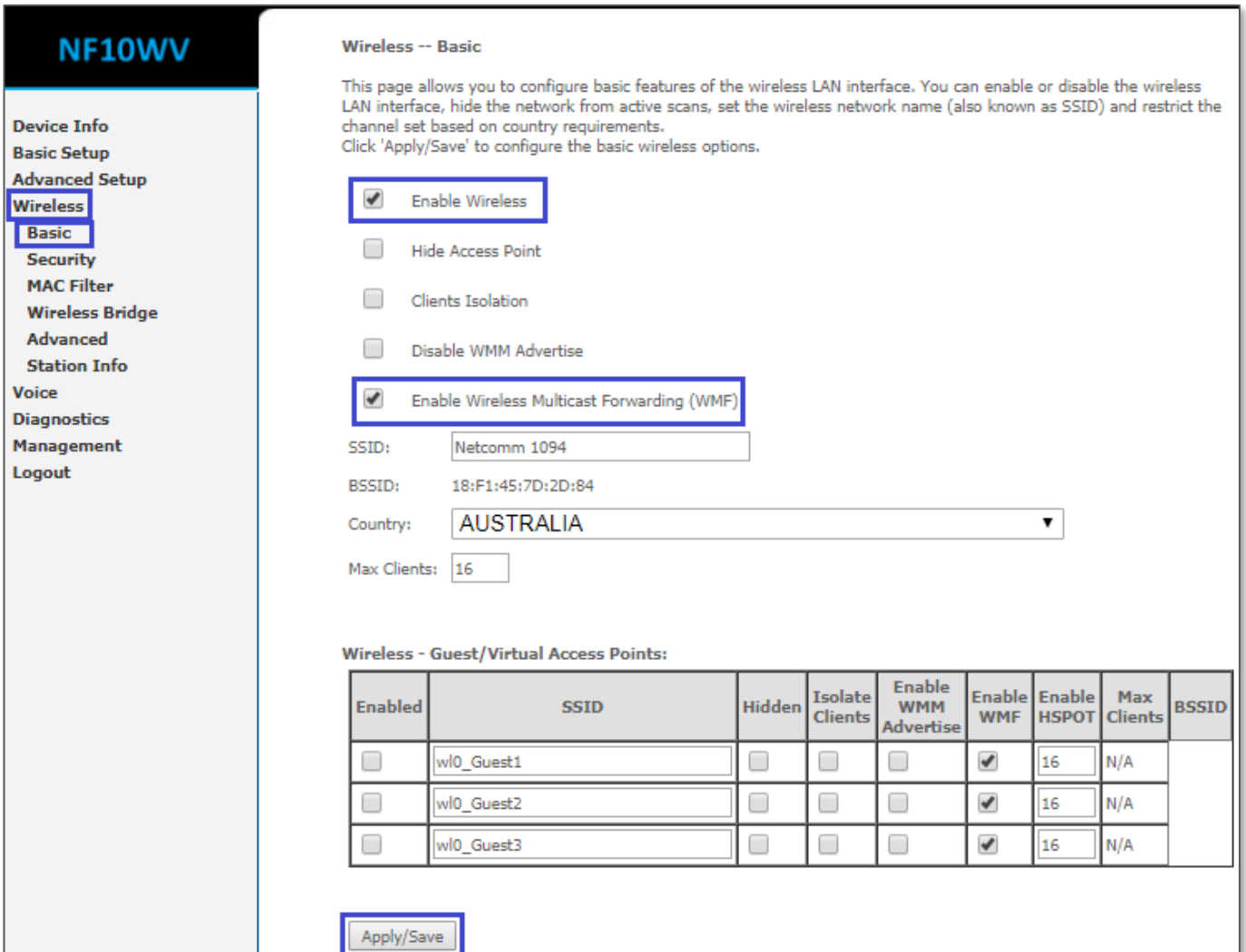
By default, the NF10WV will pick up a channel automatically when it starts. You may also select a channel manually. The suggested way is to change the channel and keep using your devices. If improvement is observed use that channel, otherwise manually select and test the reception on another.

- 1 Open a web browser (such as Internet Explorer, Google Chrome or Firefox), type <http://192.168.20.1> into the address bar and press **Enter**.
- 2 At the login screen, type **admin** into both the **User Name** and the **Password** fields and click **OK** or **Log In**.



- 3 Open the **Wireless** menu, then select **2.4GHz** and then **Basic** from the submenu.

4 The **Wireless – Basic** page will open:



NF10WV

Wireless -- Basic

This page allows you to configure basic features of the wireless LAN interface. You can enable or disable the wireless LAN interface, hide the network from active scans, set the wireless network name (also known as SSID) and restrict the channel set based on country requirements. Click 'Apply/Save' to configure the basic wireless options.

Enable Wireless

Hide Access Point

Clients Isolation

Disable WMM Advertise

Enable Wireless Multicast Forwarding (WMF)

SSID:

BSSID:

Country:

Max Clients:

Wireless - Guest/Virtual Access Points:

| Enabled | SSID | Hidden | Isolate Clients | Enable WMM Advertise | Enable WMF | Enable HSPOT | Max Clients | BSSID |
|--------------------------|---|--------------------------|--------------------------|--------------------------|-------------------------------------|---------------------------------|-------------|-------|
| <input type="checkbox"/> | <input type="text" value="wl0_Guest1"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="text" value="16"/> | N/A | |
| <input type="checkbox"/> | <input type="text" value="wl0_Guest2"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="text" value="16"/> | N/A | |
| <input type="checkbox"/> | <input type="text" value="wl0_Guest3"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="text" value="16"/> | N/A | |

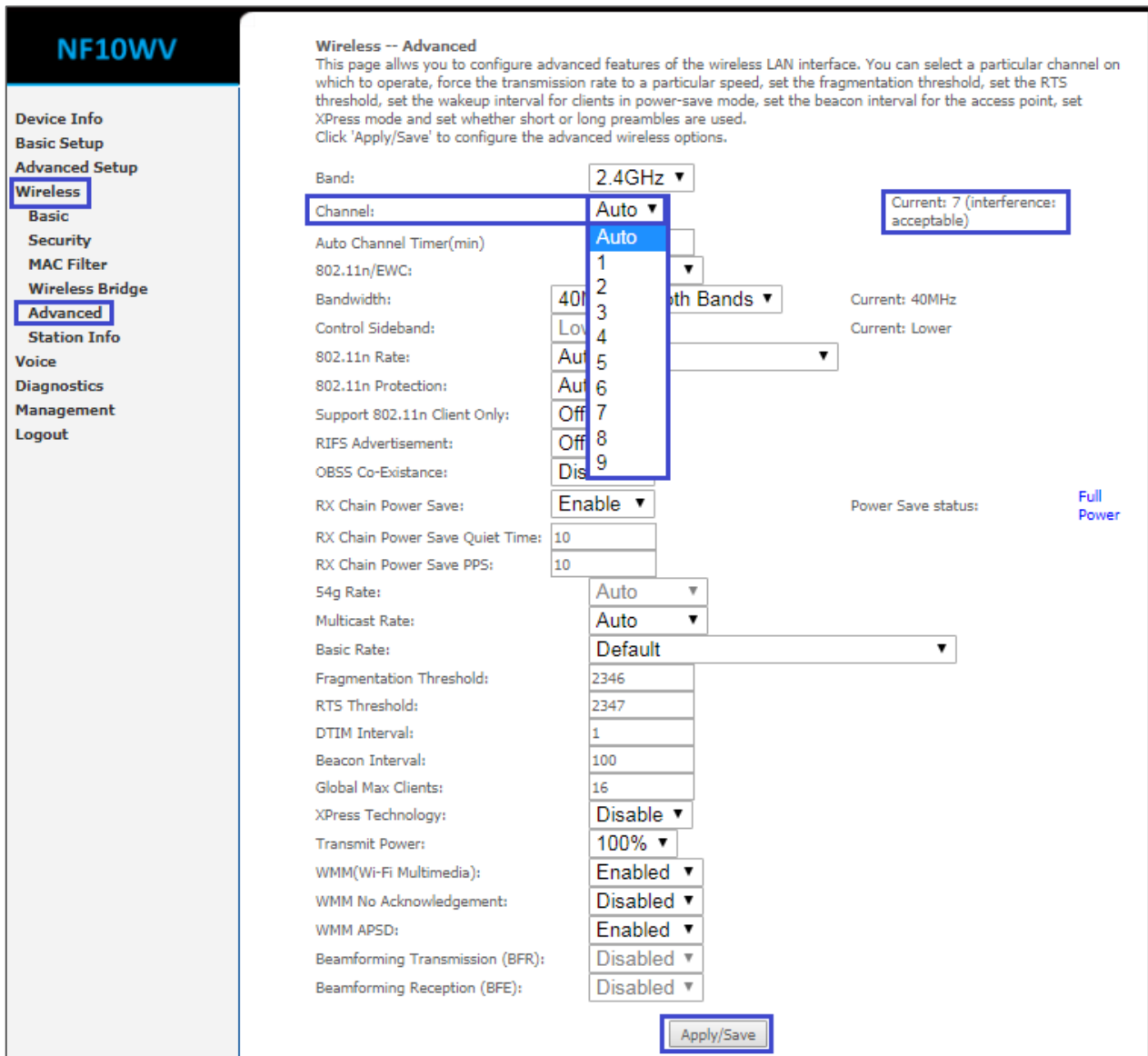
5 Ensure **Enable Wireless** and **Enable Wireless Multicast Forwarding** are ticked then click **Apply/Save** button.



Note – This is applicable for 2.4 GHz band only.

6 Now select **Advanced** from the **Wireless/2.4 GHz** submenu

7 The **Wireless -- Advanced** page opens.



Wireless -- Advanced
 This page allows you to configure advanced features of the wireless LAN interface. You can select a particular channel on which to operate, force the transmission rate to a particular speed, set the fragmentation threshold, set the RTS threshold, set the wakeup interval for clients in power-save mode, set the beacon interval for the access point, set XPress mode and set whether short or long preambles are used. Click 'Apply/Save' to configure the advanced wireless options.

Band: 2.4GHz
 Channel: Auto (Current: 7 (interference: acceptable))
 Auto Channel Timer(min): Auto
 802.11n/EWC: 1
 Bandwidth: 40MHz (Current: 40MHz)
 Control Sideband: Low (Current: Lower)
 802.11n Rate: Auto
 802.11n Protection: Auto
 Support 802.11n Client Only: Off
 RIFS Advertisement: Off
 OBSS Co-Existence: Disable
 RX Chain Power Save: Enable (Power Save status: Full Power)
 RX Chain Power Save Quiet Time: 10
 RX Chain Power Save PPS: 10
 54g Rate: Auto
 Multicast Rate: Auto
 Basic Rate: Default
 Fragmentation Threshold: 2346
 RTS Threshold: 2347
 DTIM Interval: 1
 Beacon Interval: 100
 Global Max Clients: 16
 XPress Technology: Disable
 Transmit Power: 100%
 WMM(Wi-Fi Multimedia): Enabled
 WMM No Acknowledgement: Disabled
 WMM APSD: Enabled
 Beamforming Transmission (BFR): Disabled
 Beamforming Reception (BFE): Disabled

Apply/Save

- 8 From the **Channel** drop down list select a numbered **Channel (1 thru 9)** instead of the default **"Auto"**.

Check your current channel and try selecting channels at opposite ends of the scale from the channel you are currently using. This allows you to avoid any interference you are experiencing on your currently selected channel.

Recommended channels to use are **1, 3, 6 or 9**, but you may need to test all channels to find out what is the best channel for your environment.

Click **Apply/Save** every time you change the channel.

- 9 Test with the new channel for few hours or a day. If it does not work better than before, change to a different channel and repeat the process.

Important – An alternative way to find the best channel for your location is to use a free software such as ["inSSIDer Home"](#) for windows and ["Wi-Fi Analyzer"](#) for android.



These software applications will show you the channels currently used at your location.

Choose a 'least used' channel for best reception.