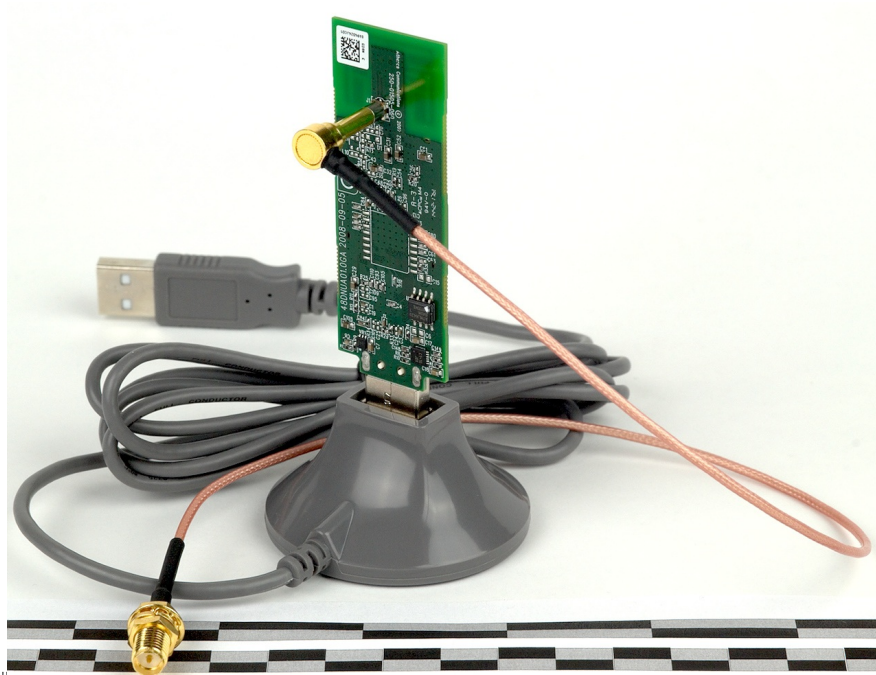


## CT711 LANforge RF Noise Generator

The CT711 RF Noise generator is used for WiFi testing. The CT711 uses modified firmware to generate modulated RF Noise. The burst width, burst spacing, and number of bursts are configurable, with about 20us precision. Since the burst is modulated, it is not good for emulating RADAR, but it is useful as a constant-tx source of modulated (CCK, OFDM, HT) noise for CCA testing.

The CT711 is controlled by the LANforge software suite, which includes a GUI management tool as well as CLI interface for automated scripting. If you do not already have a LANforge Linux system, then you can install LANforge on your own Linux hardware, or you can purchase an additional LANforge Linux system. Contact your sales representative if you have any questions.

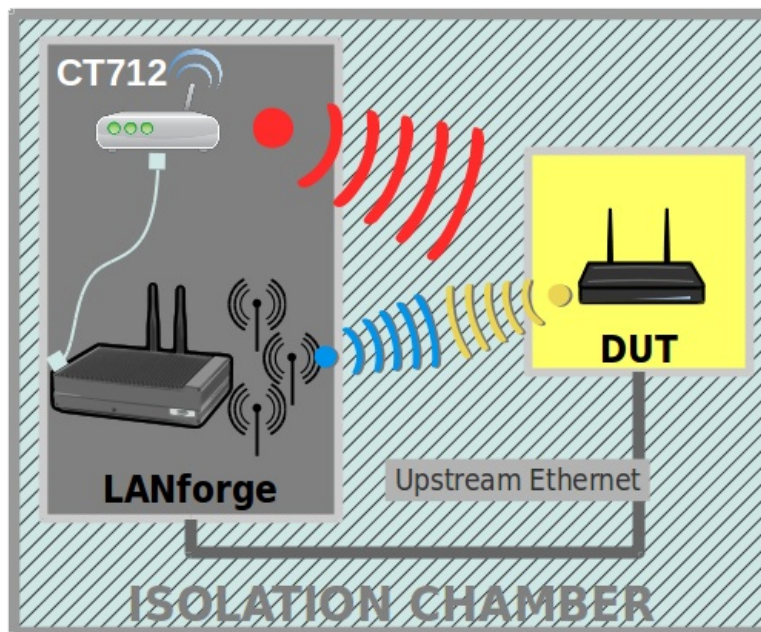
The CT711 includes 1 USB WiFi NIC, 2 RP-SMA Female cable assemblies and USB Cable.



NOTE: This product may have a different hardware configuration than the system pictured above.  
Refer to your official quote for details.

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## Example Network Diagram



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## Quick Start Guide

1. Install LANforge on Linux PC.
2. Connect RF Noise generator NIC to PC.
3. Connect LANforge-GUI to PC, and go to Port Mgr tab.
4. Select the wiphy radio, click Modify.
5. Select the channel in the Standard Configuration tab.
6. Click on the RF Patterns tab.
7. Select the values accordingly and press Apply.
8. Verify RF pattern using RF Analyzer.

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## LANforge RF Noise Generator Related Images

### LANforge-GUI RF Noise Generator Configuration Screen

**wiphy3 (ct523-3ac-f19) Configure Settings**

Port Status Information

Current: LINK-DOWN NONE

Driver Info: Port Type: WIFI-Radio Driver: carl9170-PAT() Bus:

Port Configurables

Standard Configuration RF Patterns Firmware

RF Pattern Generator

☐ None ☒ TX-100

☐ CCK (11b) ☒ OFDM (11g/a) ☐ HT (11n) ☐ DL-OFDM (MCS-32)

☒ Antenna 1 ☐ Both Antenna

☒ HT20 ☐ HT40

Transmit Power: 10.0 (20)

Transmit Rate Encoding: 54 Mbps a/g (12)

Pulse Width: 50us FCC5-Radar (50 us)

Pulse Interval: 1428us FCC1/5, J1-1 Radar (1.428 ms)

Pulse Count: 18 FCC1, J1/2 Radar (18)

Sweep Time: 1 second (1 s)

Print View Details Logs Probe Sync Apply OK Cancel

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## Software Features

### RF Noise Generator.

This tool generates modulated (CCK, OFDM, HT) RF noise, so it can be used to test that part of CCA behaviour when configured for constant noise generation.

The configurables include:

#### Pulse Width

This specifies the duration (in micro-seconds) for the transmitter to be enabled. The accuracy is about 20us, and the signal is modulated, so it does not work for RADAR emulation detection in modern WiFi equipment.

#### Pulse Interval

This specifies the time (in micro-seconds) between starting to generate a pulse. This is also known as "Pulse Repetition Interval (PRI)". The user may type in a specific value, and the LANforge-GUI has pre-set values in pull-down menus.

#### Pulse Count

This specifies how many pulses to generate before pausing for "sweep time". If you want to pulse continuously, set Sweep Time to zero. This is also known as "Pulses per Burst (PPB)". The user may type in a specific value, and the LANforge-GUI has pre-set values in pull-down menus.

#### Sweep Time

This specifies how long to pause (in micro-seconds) between pulse bursts. This emulates RADAR sweep time. Set this value to zero for continuous pulsing.

#### Frequency

Select the frequency on which to generate the RF signal.

**Encoding** Select CCK, OFDM or HT modulation.

## Hardware Specification

1. RF Noise generator.
2. Includes **ORINOCO 8494-US 802.11A/B/G/N** USB WiFi adapter and USB cable.
3. Includes 2 SMA cable assemblies for conductive testing.
4. Modified firmware and software to control the tool is included.
5. Software licenses for this feature are included with purchase.

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## Additional Feature Upgrades

Unless otherwise noted in the product description, these features usually cost extra:

- WanPaths (LANforge-ICE feature set)
- Virtual Interfaces: MAC-VLANs, 802.1Q VLANs, WiFi stations, etc
- FIRE Connections: Base FIRE license includes 1000 active connections.
- LANforge-ICE Network Emulation.
- VOIP: Each concurrent call over the included package requires a license.
- VoIP-Mobile Audio Quality Testing using POLQA/PESQ.
- Mobile-Mobile Audio Quality Testing using POLQA/PESQ.
- Armageddon: Each pair of ports requires a license if not already included.
- RF Chambers for WiFi testing.
- External battery pack: 12+ hours for CT520, CT523, CT92X and other platforms.

