Description of Jupiter Transmit Roll-Off Control

The TX Roll-Off control was added to the user menu in version 1.17. This control allows the user to
position the lower edge of the selected transit filter. The lower edge setting affects the
transmitted audio range. The control range is 0 to 1270 Hz with a default value of 200 Hz.

When adjusting this feature it important to remember transmit bandwidth and TX Roll-Off together
determine the audio quality. The TX Roll-Off determines where audio starts on the lower side and
transmit filter selection determines the passband. For example: if you have a 3 kHz filter selected
and set a 400 Hz TX Roll-Off the transmitted audio would be 400 Hz to 3400 Hz.

The large control range will allow digital mode users to place narrow filters at any position they
choose. A large TX Roll-Off with a wide filter is not possible as other factors limit the usable
range. Likewise, the low frequency audio response is affected by hardware. So there is some inherent
roll-off of frequencies below 150 Hz.