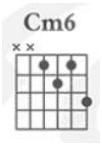
Coaxial Waves, Lyrics by Walter F. Smith, 11-30-11



Tune: Jingle Bell Rock, by Joseph Carleton Beale & James Ross Booth (1957)
Note: If you're not familiar with Cm6, you can use A instead.

G D7
If you want a cable that's great, then you should choose RG58!
D7 A D D7
It has capac'tance one hundred "puff" per meter– That's clearly enough!
G
Combine it with inductance two hundred five-oh
G D7
Nanohenries per meter, now watch the waves go!
D7 D7 G G7
Zippin' and zappin' at twice the speed c, Divided by three!
C G
[Bridge:] When it's wave time, you can save time by using this simple rule:
A D D7
That the V-wave is like the E-wave of light in a vacuum, ain't that cool?
G E
Giddy-up, current times L-naught (I think) moves like the B behaves!
Am Cm6 A D7 G
Swing and wiggle in cylindrical sync – That's coaxial waves!

G
The ratio of voltage to current is just
G D7
Root L-naught by C-naught, as we have discussed.
D7 D7 G G7
So, an infinite cable, though it sounds bizarre, feels like a 50-ohm R!
C G
[Bridge:] Let us all kneel to- Paul Neill, And Carl Conselman as well.
A D D7
The correct plug's a bayonet plug— The BNC connector's totally swell!
G E
For left-moving waves, the I's and the V's are one eighty degrees out of phase
Am Cm6 A D7 A D7
Swing with anti-symmetrical ease –That's coaxial, that's coaxial,
A D7 G
That's coaxial waves!