

CORRECTIONS TO

Digital and Analog Communication Systems, L. W. Couch, II

6th Edition, 4th Printing

Prentice Hall, 2001

These are the **corrections** for the 4th printing of the 6th Edition. (These are also corrections that have been found after 10/27/2003 for the 1st printing. **Additional** corrections for the 1st printing found before 10/27/2003 are given after this list.) Look at the bottom of the Copyright Page of your book, on the line preceding the ISBN number, to determine which printing you have.

If you find additional corrections that need to be made or if you have suggestions for improvements or changes, please send an email to him or mail to him at:

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Thank you for your help. Warm regards, *Leon Couch*

PAGE NO.	LINE NO.	Table, Eq., or Fig. NO.	CORRECTION
xxii	31		Plank's constant 6.63 X ...
	95	5	Eq. (2-180) should be Eq. (2-176)
116		Prob 2-13	In the equation, $t < 0$ should be $t < 1$
140		Fig.3-8b	In label, Dashed line should be Analog signal, $a(t)$ In label, Solid line should be Quantized PAM signal
187	6	Eq.(No#)	Letting $f_1 = f - f_0$ in the second intgral, $\exp(-j\omega_0 t)$ should be $\exp(j\omega_0 t)$
267		Fig.4-14	On left side (Input), $\text{Re}[g(t)\exp(-j\omega_c t)]$ should be replaced by $\text{Re}[g(t)\exp(j\omega_c t)]$
298		Prob4-14b	In denominator of equation, change b to B

PAGE NO.	LINE NO.	Table, Eq., or Fig. NO.	CORRECTION
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406		Footnote	...and the Russian mathematician A.I. ...
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482		Last Eq.	v_0 should be σ_0
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483		First Eq.	$\frac{1}{2}(A-V_T/\sigma_0)$ should be $\frac{1}{2}Q(A-V_T/\sigma_0)$
-----	--	-----------	--

491		(7-50)	Second term on right side, $-y(t)\cos(\dots,$ Should be $-y(t)\sin(\dots$
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578	1		$h = 6.63 \times \dots$
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END OF CORRECTIONS

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PAGE NO.	LINE NO.	Table, Eq., or Fig. NO.	CORRECTION
30	15		... line when there are
52	15		In 2 nd intergal (f-f ₀) should be (f+f ₀)
66	13		Should have $\phi_m(t)=\exp(jm\omega_0t)$
88		(2-167)	Change sign in exponent to +
136		Fig.3-6b	In $ \sin x/x $ the r should be τ
161		Fig.3-15e	Delete t in Bipolart RZ
165		Below (3-40)	... and (3-37b) into ...
235	9	under column g(m)	last part exp is $\dots 1+m(t) \}$
240		Fig.4-3a	Remove the 1 subscript from both h(t) and k(t)
276		Fig.4-22	In LPF block, $F_1(f)=F(f)$
277		Fig.4-23	Top right label should be Δf_n (not sub_n)
286		Fig.4-31	Q channel should be modulated by $-2\sin(\omega_{IF}t)$

NO.	NO. or Fig.	NO.	
294	Tab.4-5		Reference frequency=1,000 kHz (not 1,000 Hz)
295	2		... of about $\frac{1}{2}$ if the IF ...
295	5		(see Table 4-5) ...
302	(5-2a)		... $[G(f-f_c)+$... (sub_c not sub_0)
311	Fig.5-3a		$v_2(t)$ equation should have $\sin\theta_e$ not $\cos\theta_e$
311	Fig.5-3b		BP Filter output should have A_c^2 not A_c
312	24	(5-16)	change \pm to $-$ over $+$
347	(5-83)		Summation index n is missing
357	(5-99)		Summation index n is missing
364	Fig5-35		MSK label num is... $\cos^2(2\pi f/R)$
367	9		... as defined by Eq. (2-177)...
456	Next to last line		$ H(f)^2$ should be $ H(f) ^2$
505	10	Eq.after(7-71)	$(\frac{1}{2}+\frac{1}{2}+...$ should be $(\frac{1}{2}+\frac{1}{4}+...$
537	2		Lower limit on left integral is 0
703	26		Transfer Protocol (HTTP), ...
726	9		.. A Mathematical Theory of Communication ...

END OF CORRECTIONS

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