Errata for Acoustics: Sound Fields and Transducers by Leo Beranek & Tim Mellow, September 2017 onwards.

Updated September 1, 2019

P. 38: Replace Eq. (2.56) with $\Gamma = \dfrac{\tilde{p}_+}{\tilde{p}_-} = \dfrac{Z_T - \rho_0 c}{Z_T + \rho_0 c}$.

P. 38: Replace Eq. (2.57) with $SWR = \dfrac{1+|\Gamma|}{1-|\Gamma|}$.

P. 47, 1st line: Replace "Sec. 6.6" with "Section 7.6".

P. 47, Last line before Heading 2.6: Replace "Secs. 3.22 and 3.23" with "Sections 4.22 and 4.23".

P. 81, 2nd line from top: Replace "$Y_M = \dfrac{\tilde{u}}{\tilde{f}} + \dfrac{\tilde{u}}{\tilde{f}_1 + \tilde{f}_2}$" with "$Y_M = \dfrac{\tilde{u}}{\tilde{f}} = \dfrac{\tilde{u}}{\tilde{f}_1 + \tilde{f}_2}$".

P. 97,4th line from bottom: Between "permittivity of the" and "piezoelectric dielectric" insert "free (non-blocked)".

P. 97: At end of 3rd line from bottom add "with electrical short-circuited".

P. 99, 4th line of last paragraph: Replace "driving force blocked" with "motion blocked".

P. 100, Eqs. (3.39a) to (3.40b): Replace "d_{33}" with "d_{31}".

P. 102, Example 3.6: Replace "1.414 T" with "1.414 T·m"

P. 104, Example 3.8: Replace "acoustic impedance of 300 + j300 N·s/m^5" with "acoustic impedance of (300 + j300) N·s/m^5" and replace "= 1.92 + 1.92 Ns/m" with "= (1.92 + j1.92) N·s/m".

P. 121, after Eq. (4.2), replace "If $\ell' < 16$, the second term" with "If $\ell' < \lambda/16$, the second term".

P. 121, 1st line after heading 4.3: Replace "$(\ell = 0)$" with "(x = 0)".

P. 129, in Eq. (4.24): Replace "kg/m^2" with "kg/m^4".

P. 139, 9th line after Heading 4.10: Replace "$\tilde{p}_+$" with "$\tilde{A}_+$".

P. 140, Eq. (4.70): Replace "$\boldsymbol{R}_s$" with "$\boldsymbol{R}_M$".

P. 179, 4th row of Table 4.6: Replace "$R_{S2} = \pi a^2 \rho_0 c \qquad R_{S2} = \rho_0 c \qquad R_{S2} = \dfrac{\rho_0 c}{\pi a^2}$"

with "$R_{M2} = \pi a^2 \rho_0 c \qquad R_{S2} = \rho_0 c \qquad R_{A2} = \dfrac{\rho_0 c}{\pi a^2}$".

P. 187, Eq. (4.227): Replace both instances of "z_{11}" with "$z_{11} - z_{12}$".

P. 187, Eq. (4.228) and P. 188, Eq. (4.229): Replace "***1***" with "1".

P. 194, Between Eqs. (4.253) and (4.254), in Eq. (4.254) and 1st line after Eq. (2.54): Replace "δ_V" with "δ_{visc}".

P. 198, 1st line after Eq. (4.263): Replace "(6×10^7)" with "(6×10^6)".

P. 211, Last line of 1st paragraph: Replace "Chapter 6" with "Chapter 7".

P.216, Fig. 5.18 (a): Replace "$\tilde{\eta}(w)$ $\updownarrow$" with "$\downarrow \eta$"

P. 219, Eq. (5.40): Replace "$\tilde{e}$" with "$-\tilde{e}$".

P. 220, Figs. 5.20 and 5.21: Replace "$\uparrow \tilde{e}$" with "$\downarrow \tilde{e}$".

P. 236, 2nd line after Eq. (5.95): Replace "Fig. 533" with "Fig. 5.34".

P. 306, 5th line from end of last paragraph: Replace "bass-will reflex" with "bass-reflex".

P. 313, Eqs. (7.36) and (7.37): Replace "=" with "≈".

P. 314, Eqs. (7.38) and (7.39): Replace "=" with "≈".

P.337, After Eq. (7.85): Replace "$\omega_S^2 = P_4 / \omega_B^2$" with "$\omega_S^2 = P_0 / \omega_B^2$".

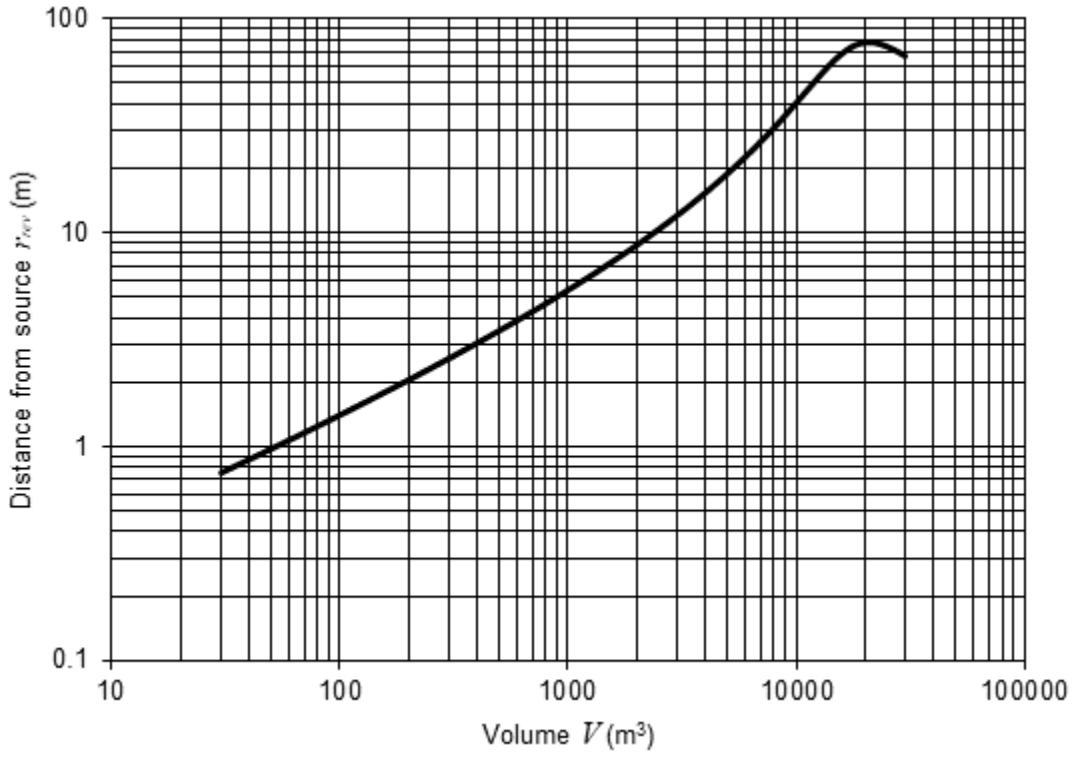
P. 360, 4th line after "Summary of transmission-line design": Replace "acts as a high-pass filter" with "acts as a low-pass filter".

P. 470, Eqs. (10.45) and (10.46): Replace "*cs*" with "*cS*".

P. 477: Replace Fig. 10.16.

P. 477: Replace Eq. (10.70) with $\alpha_{tot} = \dfrac{0.161V}{S_{tot}T}, \qquad \alpha_{ey} = 1 - e^{-0.161V/(S_{tot}T)}$

P. 477: Replace Fig. 10.16 with



P.493, Fig. 12.5: Exchange "$D(\pi)$" and "$D(0)$".

P. 501, 1st line after Eq. (12.46): Replace "$20\log_{10}(D(\theta)/D(0))$" with "$20\log_{10}(|D(\theta)|/|D(0)|)$".

P. 503, Caption to Fig. 12.15 and 1st line after Eq. (12.47): Replace "$20\log_{10}(D(0))$" with "$20\log_{10}|D(0)|$" and replace "$20\log_{10}(D(\pi))$" with "$20\log_{10}|D(\pi)|$".

P. 503, 4th line after Heading 12.6: Replace "the next problem" with "Section 12.8".

P. 506, last line before Fig. 12.17: Replace "$20\log_{10}(D(\theta)/D(0))$" with "$20\log_{10}(|D(\theta)|/|D(0)|)$".

P. 507, 1st line after Eq. (12.61) and caption to Fig. 12.18: Replace "$20\log_{10}(D(0))$" with "$20\log_{10}|D(0)|$".

P. 508, Replace Eq. (12.63) with

$$Z_s = \frac{\tilde{F}}{\tilde{U}_0} = j\rho_0 c\left(\frac{\sin^2\alpha\, h_0^{(2)}(kR)}{4h_1^{(2)}(kR)} - \frac{(1-\cos^3\alpha)^2 h_1^{(2)}(kR)}{\sin^2\alpha\left(h_0^{(2)}(kR) - 2h_2^{(2)}(kR)\right)} \right.$$
$$\left. - \sum_{n=2}^{\infty} \frac{(2n+1)^2\left(\sin\alpha\, P_n(\cos\alpha) + \cos\alpha\, P_n^1(\cos\alpha)\right)^2 h_n^{(2)}(kR)}{(n-1)^2(n+2)^2\left(nh_{n-1}^{(2)}(kR) - (n+1)h_{n+1}^{(2)}(kR)\right)} \right)$$

P. 513, 1st line after Eq. (12.85): Replace "$20\log_{10}(D(0,0))$" with "$20\log_{10}|D(0,0)|$".

P. 514, Caption to Fig. 12.21: Replace "$20\log_{10}(D(0,0))$" with "$20\log_{10}|D(0,0)|$".

P. 516, Eq. (12.98): After "=" delete "–".

P. 518, 1st line after Eq. (12.111): Replace "$20\log_{10}(D(\theta)/D(0))$" with "$20\log_{10}(|D(\theta)|/|D(0)|)$".

P. 518, 1st line after Eq. (12.112): Replace "$20\log_{10}(D(0))$" with "$20\log_{10}|D(0)|$".

P. 519, Caption to Fig. 12.24: Replace "$20\log_{10}(D(0))$" with "$20\log_{10}|D(0)|$".

P. 524, Eq. (12.138): Replace "$(2n - 1)(2n + 1)$" with "$(2n - 1)(2n + 2)$".

P. 524, 1st line after Eq. (12.138): Replace "$20\log_{10}(D(\theta)/D(0))$" with "$20\log_{10}(|D(\theta)|/|D(0)|)$".

P. 525, Caption to Fig. 12.28 and 1st line after Eq. (12.139): Replace "$20\log_{10}(D(0))$" with "$20\log_{10}|D(0)|$".

P. 531, 1st line after Eq. (12.167): Replace "$20\log_{10}(D(\theta)/D(0))$" with "$20\log_{10}(|D(\theta)|/|D(0)|)$".

P. 531, 1st line after Eq. (12.168) and caption to Fig. 12.32: Replace "$20\log_{10}(D(0))$" with "$20\log_{10}|D(0)|$".

P. 543, After Eq. (13.40): Replace "an Fourier" with "a Fourier".

P. 555, Eq. (13.100): After "=" insert "–".

P. 555, Eq. (13.101): After "=" delete "–".

P. 556, Eq. (13.104): After "=" delete "–".

P. 563, Eq. (13.125): After "=" delete "–".

P. 564, Eq. (13.130): After "=", delete "–".

P. 576: Replace 3rd equation from top with "$D(0) = ka\rho_0 c(\boldsymbol{G}_S + jB_S)$".

P. 576, caption to Fig. 13.15: Replace "Plot of 20 $\log_{10}(D(0))$" with "Plot of 20 $\log_{10}(\pi |D(0)|/4)$"

P. 588, Eqs. (13.234) and (13.237): After "=" delete "–".

P. 605, Eq. (13.258): Replace "i" with "j".

P. 606, Eq. (13.260): Replace "i" with "j".

P. 607, Eq. (13.265): Replace "i" with "j".

P. 609, Eqs. (13.267) and (13.268): Replace "i" with "j".

P. 610. 1st line: Replace "impedance" with "resistance".

P. 684, Eq. (102): Replace "α_m" with "α_{km}" and "α_n" with "α_{kn}".