

Fundamentals of General Linear Acoustics Errata

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Errata

Page	Correction
21	Exchange p_i and p_r in Figure 3.9 to obtain the figure in the end of this document
79	Correct the denominator of the last expression of Equation (7.9) to $Z_{a,i} = \frac{Z_{a,t} \cos kl + j(\rho c/S) \sin kl}{j(S/(\rho c))Z_{a,t} \sin kl + \cos kl}$
80	Replace $\hat{u}_z(l)$ with $\hat{u}_z(-l)$ in Example 7.3 so the second equation becomes $\hat{u}_z(-l) = \frac{2jp_{\pm}}{\rho c} \sin kl e^{j\omega t}$
93	Replace the '+' with a multiplication between B and $\frac{S}{\rho c}$ in Equation (7.54) to obtain $TL = 10 \log \left(\frac{1}{4} \left A + B \frac{S}{\rho c} + C \frac{\rho c}{S} + D \right ^2 \right)$
111	Replace $k_{rmn} =$ with $k_{rmn}a =$ below subfigures of Figure 7.30 to obtain the figure in the end of this document
120	Add $e^{-jk_m z}$ so Equation (7.166) becomes $G(\mathbf{r}, \mathbf{r}_0) = -\frac{j}{Sk} \sum_{m=0}^{\infty} \frac{\psi_m(x,y)\psi_m(x_0,y_0)}{\sqrt{1-(k_m/k)^2}} e^{-jk_m z}$
218	Replace ϕ with φ in Equation (A.13) to read $p = \text{Re}\{\hat{p}\} = \text{Re}\{ A e^{j(\omega t + \varphi_A)}\} = A \cos(\omega t + \varphi_A)$
219	Replace ϕ with φ in Equation (A.18) to read $v = \text{Re}\{\hat{v}\} = B \cos(\omega t + \varphi_B)$
223	Include $x(t)$ in the integral in Equation (B.2) so $X(\omega) = \int_{-\infty}^{\infty} x(t)e^{-j\omega t} dt$
261	Replace 'Frequence' with 'Frequency' in Figure B.31
280	Replace '873' with '83' in the entry for 'piston in a baffle'

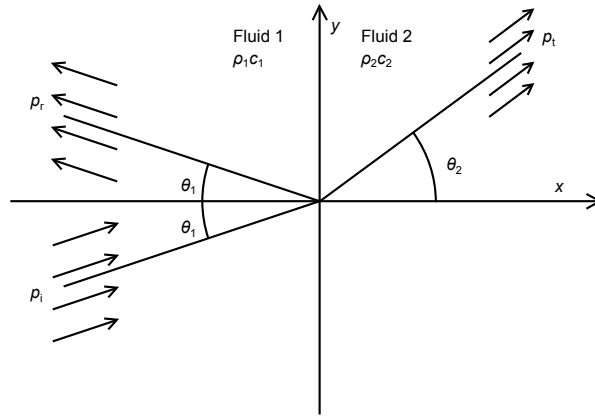


Figure 3.9 Transmission from one fluid to another; oblique incidence

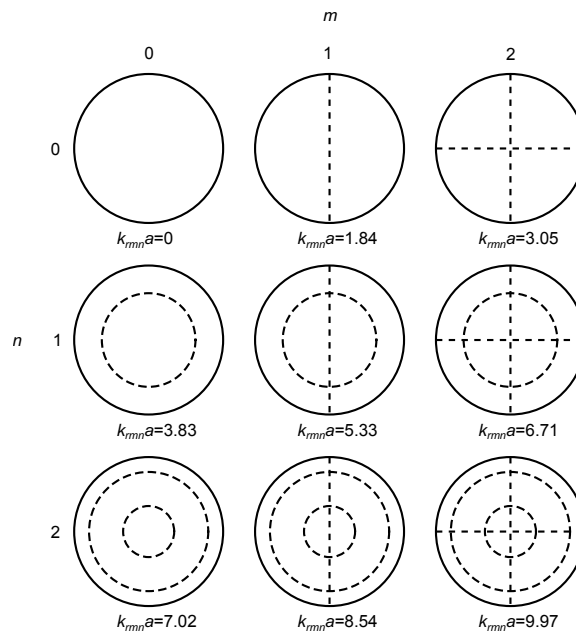


Figure 7.30 Nodal lines of (m, n) -modes in a duct with circular cross section. The orientation of the nodal planes that occur when $m > 0$ depends on φ_m .