Given a companion \((g \times g)\) matrix \(S\) for an irreducible monic equation with \(g\) real roots (listed in decreasing order) and integral matrices \(A, B\) commuting with \(S\). Then we solve the matrix equation \(W^2 - AW + B = 0\) (after diagonalizing by the Vandermondian). The diagonalized values of \(W\) are assumed totally complex with alternating signs for the imaginary surds. We also need a unimodular matrix \(U\) for which both \(U\) and \(US\) are symmetric. Then \(Z = WU^{-1}\) is a Riemann Matrix (\(Z = Z^t, \Im Z >> 0\)) and the Abelian period matrix \(J = [E, Z]\) has the endomorphisms \(S, W\), \((SJ = [S, ZS^t], WJ = [ZU, ZA^t - BU^{-1}])\). The case \(g = 1\) is elliptic, and Humbert (1899) showed for \(g = 2\) this is the most general case (not likely for \(g > 2\)). If the signs of the surds are chosen by group theory (not order) \(Z\) could be imaginary quadratic (but singular). (Received September 12, 2008)