Let $G$ be a Lie group acting on a homogeneous space $G/K$. The center of the universal enveloping algebra of the Lie algebra of $G$ maps homomorphically into the center of the algebra of differential operators on $G/K$ invariant under the action of $G$. In the case that $G$ is a Jacobi Lie group, we prove that this homomorphism is surjective and hence that the center of the invariant differential operator algebra is the image of the center of the universal enveloping algebra. This is an extension of work of the first author with Bringmann and Richter in the rank 1 case. (Received September 13, 2013)