We discuss pointwise a-priori estimates for the $\overline{\partial}$–Neumann problem on an arbitrary weakly pseudoconvex domain $D$ in $\mathbb{C}^n$. Such estimates provide an analog of the classical basic estimate in the $L^2$ theory that has been the starting point for all major work in this area involving $L^2$ and Sobolev norm estimates for the complex Neumann and related operators. In particular, it is shown that for $(0,q)$ forms $f$ in the domain of the adjoint $\overline{\partial}^*$ of $\overline{\partial}$, for any coefficient $f_J$ of $f$ the pointwise growth of $\overline{\partial} f_J$ is controlled by the sum of the suprema of $f$, $\overline{\partial} f$, and $\overline{\partial}^* f$ over $D$ multiplied with $\text{dist}(z,bD)^{-1+\delta}$, for any $\delta < 1/2$. These results generalize known estimates from the strictly pseudoconvex case to general weakly pseudoconvex domains. The proofs utilize the new non-holomorphic Cauchy-Fantappié kernels recently introduced by the author (Math. Ann. 356 (2013), 793–808) that reflect the complex geometry of the boundary of $D$. (Received September 10, 2015)