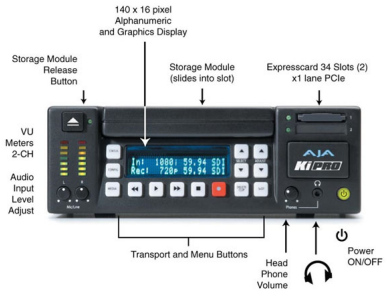Operator Side