An in-house radiation therapy beam scanner has been designed and constructed to facilitate many of the Quality Assurance (Q. A.) measurements recommended for megavoltage teletherapy units. The scanner provides two dimensional profiles of radiation and light fields and the design permits the scanner to be stand alone or mounted on the head of a treatment machine. Development of the scanner was originally motivated by the increasing need for an efficient means of accumulating and assessing routine Q. A. data. Although many devices have been developed for this purpose, no single device that performed the combination of functions of which this scanner is capable was available. Since that time, the ability to adapt the device to address unexpected issues has proven to be a significant advantage. The experience of developing such a device in-house, the challenges encountered, and the benefits realized will be discussed.

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