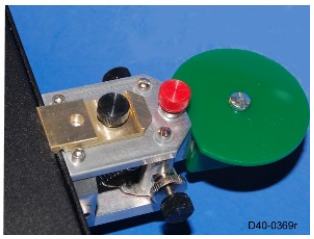
The Parkwood KXer PaddleKey

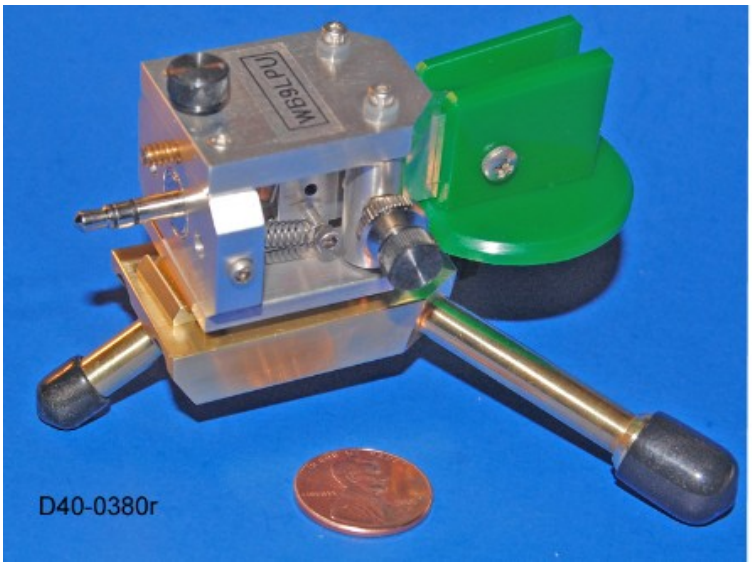
by WB9LPU

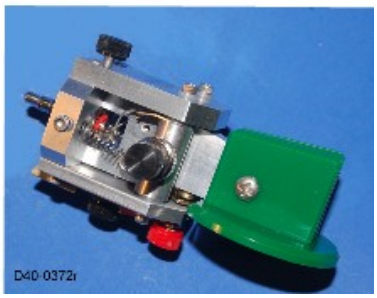
Although iambic paddles are popular with many amateur radio operators, there is a sizable group of hams who prefer a non-iambic paddle. Actually, many hams (perhaps most) do not take advantage of the technique of iambic keying. In any event, there appears to be a niche for a non-iambic key that would mount directly to the popular Elecraft KX-1® QRP transceiver.

In addition, there are hams that prefer a straight key to a paddle of any sort, and presently there is not such a device available. For both of these groups there is a possible solution – the Parkwood KXer PaddleKey. This key can be used as a non-iambic paddle or as a straight key with no mechanical adjustments required, and the efficient setup menu system of the KX-1 makes the internal transition straightforward as well.



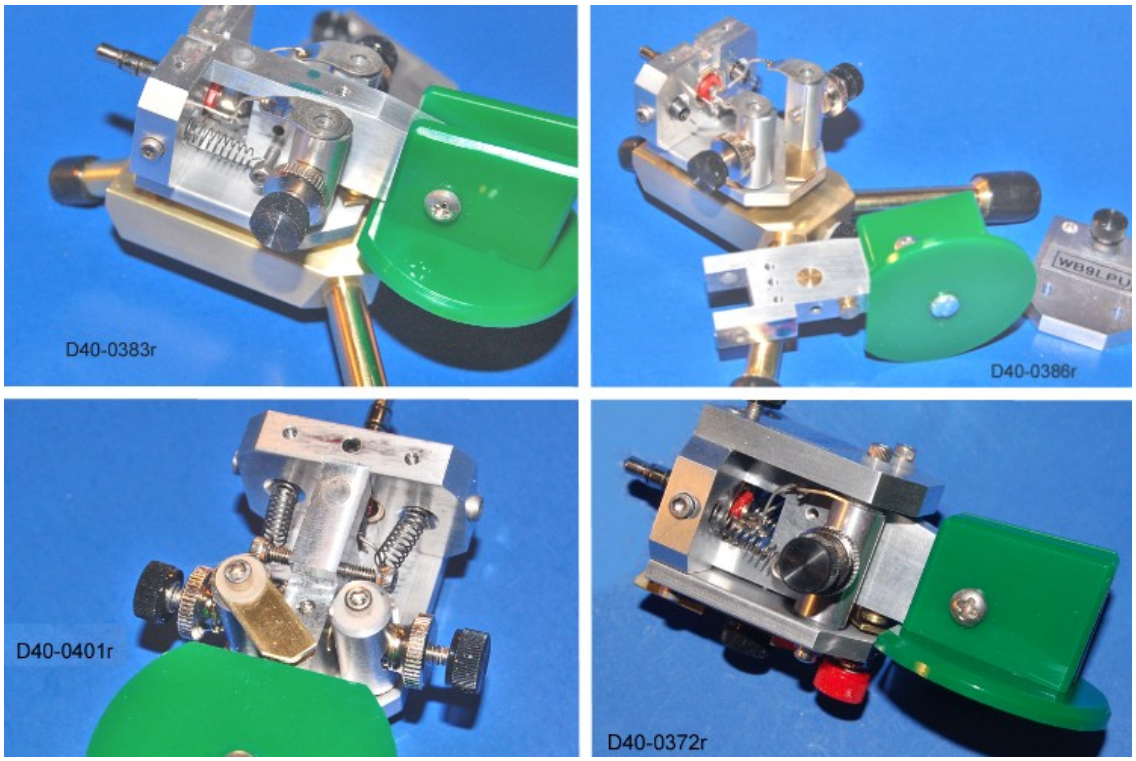
The PaddleKey mounts to the front of the KX-1 using the provided mounting fixtures. The top screw on the key (see above, left and upper right) grips a stud that is threaded into the KX-1, while a clamp on the base of the key grips the front edge of the transceiver case. This provides a stable mounting with no lost motion, and no modification of the KX-1.





For use off of the transceiver, or for use with other rigs, the PaddleKey can be mounted on a separate tripod base that provides a stable support for both modes of keying. A stereo audio cable provides a

means of connection. Paddle travel is adjustable with two lockable contact screws.



The PaddleKey uses a “rocker-plate” mechanism to provide a positive centering of the lever. This mechanism was first used in a larger series of PaddleKeys, and it produces a good touch for both the paddle and the straight-key functions. It allows for up-and-down motion or side-to-side movement with little overlap between the two modes. As shown above, a pair of coil springs provides the tension in both modes, and the tension can be varied by changing the attachment points of the springs (upper left). Contact spacing depends on the position of the lever contact screw (upper right), but this adjustment is best optimized and then left in that position. The bottom view (lower left) shows the lower straight-key contact, which is a flat brass extension of the dot-contact pillar and is ultimately connected to the center (tip) portion of the phone plug at the front of the key. With this

contact arrangement, nimble fingers can (with practice) actually use the key iambically to produce characters such as “C” and “K”.

This key is an outgrowth of a series of attempts to produce a smooth-working non-iambic paddle for the KX-1. A number of other related designs were tried. Most of them worked well but did not lend themselves to the straight-key function. The present design uses parts and dimensions developed for the KXer iambic paddles, although it doesn’t use magnets for its tension. This variation is being explored as time permits.

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