

# Your First HT

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Most new hams these days start with a handheld (or HT) radio. They are very convenient for public service, parades, ARES® events, hamfests, and other outdoor ham radio activities where you can't be tied to your 120vac wall outlet. The ARRL, understandably, won't give you a specific recommendation<sup>1</sup> since there are so many variables<sup>2</sup> and they like the continued support of their advertisers. I, on the other hand, have no advertising supporters so here are my specific recommendations. These recommendations are driven by your budget, ease of use, and whether you have specific interests in APRS<sup>3</sup> or D-STAR<sup>4</sup>. Since one's budget is a driver for a lot of hams let me remind you that any HT you'll buy today is very likely to still be going strong *ten* years from now. So when you consider the “amortized” cost, that \$480 radio is really only \$4 per month!<sup>5</sup>

So without further ado, here we go. If you're on a very tight budget and “amortizing the cost” is not an option then get a monoband Alinco DJ-175T 2m radio (discontinued but may still be available) for under \$90.<sup>6</sup> The Yaesu FT-252 (less than \$75) does not have a full keypad. And while *very* inexpensive, stay away from Wouxun, BaoFeng, and other Chinese-manufactured HTs as they are difficult to program in the field without computer software. Also to note, some of these very inexpensive HTs including the Alinco DJ-175T don't have a 13.8vdc jack – they must be recharged in a charging cradle. If budget is less of a concern then you have “four” choices (in no particular order) for multiband HTs:

1. Kenwood TH-F6A.<sup>7</sup> 5 watts on 2m and 70cm *and* the 220 MHz band! This radio has the largest aftermarket battery of any HT - a whopping 4000 mAh capacity that charges through the radio with the supplied charger. But no D-STAR or integrated APRS.
2. Kenwood TH-D72A.<sup>8</sup> 5 watts on 2m and 70cm. Integrated GPS and full APRS functionality. A close second is the Yaesu VX-8DR but the menu structure on the Kenwood is more intuitive, and the “optional” GPS mounted on Yaesu's microphone makes the mike a little heavy for your shirt collar. Neither radio is D-STAR capable.

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<sup>1</sup> <http://www.arrl.org/what-rig-should-i-buy>

<sup>2</sup>

<http://www.arrl.org/files/file/Ham%20Radio%20License%20Manual/HRLM%203rd%20ed/Choosing%20a%20Ham%20Radio-2014.pdf>

<sup>3</sup> <http://aprs.org/>

<sup>4</sup> <http://www.dstarinfo.com/>

<sup>5</sup> This can be a persuasive argument for young hams with limited access to mom or dad's wallet. Try it; what have you to lose?

<sup>6</sup> <http://www.alinco.com/Products/ham/ht/DJ-175/DJ-175.pdf>

<sup>7</sup> <http://www.kenwood.com/usa/com/amateur/th-f6a/>

<sup>8</sup> <http://www.kenwood.com/usa/com/amateur/th-d72a/>

3. Icom ID-51A Plus2.<sup>9</sup> If you're even remotely interested in D-STAR then this is the radio for you. 5 watts on 2m and 70cm. Dual band and dual mode (FM/DV), with an integrated GPS so it mimics APRS functionality with D-PRS<sup>10</sup> through many D-STAR repeaters.
4. Kenwood TH-D74A.<sup>11</sup> This is an TH-F6A on steroids! 5 watts on three bands plus APRS and D-STAR on all three bands! Integrated TNC and GPS. Pricey, but there's nothing else close.

Now that you have your shiny new HT it's easy to convert it into a 35-45 watt mobile radio! Simply get a Mirage B-34<sup>12</sup> (2m only) amplifier for under \$110 or a Mirage BD-35<sup>13</sup> (2m/70cm) amplifier for under \$200. Either of these amplifiers work just fine with APRS and D-STAR, and are easy to move between your house and the car. Also note that the antenna that comes with your HT *cannot* handle the higher power of these amplifiers so an inexpensive dual band antenna with a magnetic mount like an MFJ-1729<sup>14</sup> is strongly recommended. It works great with a ground plane such as the roof of your car or a pizza pan on your apartment's balcony.

All of these products are available from most any of the major ham radio dealers so shop around for the best price!

Comments and questions are always welcomed, [n8ik@arrl.net](mailto:n8ik@arrl.net)  
Latest version of this document is at <http://www.n8ik.net/classes.php>

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<sup>9</sup> <http://www.icomamerica.com/en/products/amateur/dstar/ID51APlus2/default.aspx>

<sup>10</sup> <http://www.aprs-is.net/dprs.aspx>

<sup>11</sup> <http://www.kenwood.com/usa/com/amateur/th-d74a/>

<sup>12</sup> <http://www.mirageamp.com/Product.php?productid=B-34>

<sup>13</sup> <http://www.mirageamp.com/Product.php?productid=BD-35>

<sup>14</sup> <http://www.mfjenterprises.com/Product.php?productid=MFJ-1729>