



HEAR-2-DANCESM

System Description

The Hear-2-DanceSM system is composed of three components,

- 1) a FM transmitter (caller or club owned, cost less than \$70)
- 2) a FM receiver (dancer owned, cost less than \$30)
- 3) ear buds, ear phones, or a telecoil neckloop (dancer owned, cost less than \$10)

These components are off-the-shelf items which can be bought in many stores or on the internet.

A Hear-2-Dance system diagram is shown in Figure 1. Then each component is described and one or more links is provided to stores where the components can be purchased. The requirements for each component are specified on the Requirement page.



Component 1 - Digital controlled FM Transmitter

The FM transmitter is usually owned by the club or the caller, although it can be provided by a dancer. We selected C. Crane's Digital FM Transmitter because it:

- 1) accepts monitor output, line out, speaker out, voice out or music out using an input volume control;
- 2) transmits on any open FM frequency from 88-108 MHz;
- 3) the frequency is specified digitally and has a phase lock loop circuit to assure a specific frequency;
- 4) is FCC licensed;
- 5) transmits from 40 to 70 feet, but in an open room as used by square dancers, goes 100 feet;
- 6) has an AC power supply;

Similar FM transmitters are available but were not tested. Often they will have a much shorter range.

Note: the C. Crane transmitter will transmit in stereo.

The C. Crane transmitter costs \$70.00 from C. Crane <http://www.ccrane.com/radios/fm-transmitters/fm-transmitter.aspx>, It comes with a 3.5mm stereo plug and an RCA to 3.5mm stereo adapter. [Note: if your transmitter does not give you the range you are expecting contact C. Crane and their technician may be able to help you adjust your transmitter.]



If you connect the transmitter to an amplifier which has a 1/4 inch mono output (pretty much standard), you will also need an audio adaptor like the Radio Shack number 42-2545 6-Inch Shielded Y-Adapter Audio Cable which sells for \$3.99. This cable has two female RCA connector which match the C. Crane input.

Be sure to the read the web page on [Transmitter Setup / Troubleshooting](#) for complete setup details.

Component 2 - Portable FM Radio

The portable FM radio is usually owned by the dancer but may be provided by a club or caller. We selected the Sony Walkman SRF-M37V AM/FM/Weather/TV Radio because it:

- 1) has digital tuning to any FM band;
- 2) has a lock button so the tuning will not change during dancing and unit will not be accidentally turned on when not in use and drain batteries;
- 3) does not have a speaker so it is light weight;
- 4) has presets;
- 5) has a volume control with lots of volume;
- 6) has an ear phone jack;
- 7) has a low battery indicator;
- 8) has relatively long battery life (40 hrs, about 10 dances);
- 9) provides a belt clip but can fit in a shirt pocket;
- 10) can be used as a regular radio on FM, AM, TV (0-13) and weather bands.

Again, other radios have these features but the Sony was the one we have tested. The Sony radio costs under \$30 at Target and Wal-Mart and can be obtained in addition on the Target, Sears and Sony websites.

Component 3 - Ear Buds or Telecoil Neckloop or Ear Links

The ear buds, headset, ear links, etc. are owned by the dancer. If a club provides the FM radio each dancer may prefer to own their own ear buds. The Sony radio mentioned above comes with headphones, others may not. If you would like ear buds instead of the headphones, you can buy Radio Shack (33-1106) over-the-ear ear buds. They are good for this application because:

- 1) they have a 3.5mm plug to match radio;
- 2) will stay on ear during movement;
- 3) are light weight.

Cost: \$10.00 at Radio Shack

<http://www.radioshack.com/product/index.jsp?productId=2104028&cp>.

Telecoil Neckloop - The Williams Sound neckloop has a 3.5mm plug and works with hearing aids equipped with a telecoil T-switch.

<http://www.hearinglosshelp.com/products/pocketalker.htm#neckloop>.

It costs approx. \$39.00 Ear links (approx. \$49.00) are basically neckloops for each ear (can receive stereo) and are explained at

http://www.hearinglosshelp.com/products/earlinks.htm#music_links.

WARNING: PEOPLE WITH PACEMAKERS OR OTHER MEDICAL DEVICES SENSITIVE TO MAGNETIC FIELDS SHOULD CONTACT THEIR DOCTOR BEFORE USE, AND, AS WITH ALL LOOPS WORN AROUND THE NECK, BE CAREFUL OF GETTING INTO A SITUATION WHERE IT COULD CHOKE YOU!

To be labeled a Hear-2-Dance system the components must meet specific system requirements which qualify them to be used in the square and round dance setting. The requirements for each component are specified on the Requirements page. When a square or round dance provides a transmitter meeting the system requirements it can be advertised as a Hear-2-Dance event and use the Hear-2-Dance service mark in its advertising.

Although dancers can use any FM radio to pick up the FM signal, they should use a receiver meeting the Hear-2-Dance requirements to have the best dance experience. Dancers who use receivers that do not meet the requirements should not complain about the Hear-2-Dance service.

If you use a component not described above which meets the requirements please email us and we can add it to our list of tested components. Also if you experience problems please let us know.

While 'New Square Music' and 'Bee Sharps' recommend usage of this system as described on this site, neither makes any guarantees or warranties regarding such usage.