

Recommended equipment for; Emergency voice only Amateur Radio Station.

The basic package necessary for an amateur radio station to communicate effectively in the greater Houston area will consist of an antenna, coax, radio and a power supply. Every ham radio operator has his/her brand preferences. However every item listed here is a good piece of radio equipment and it is not the intent of HCOEM or Harris County ARES to recommend one brand over another.

Antenna's Comet and Diamond are two of the more popular brands of amateur radio antennas on the market. Some people prefer the Decibels DB-224 design antenna because of their long history of providing reliable communications. The only reason they are not shown here is that they are mono-band antennas. You would need one for VHF and one for UHF plus a duplexer to tie them together. All listed models are dual band 146/440 MHz.

Brand	Model	Gain (V/U)	Length	Cost 06/2007
Comet	GP-1	3.0 / 4.5	4' 6"	\$75
Comet	GP-3	4.5 / 7.2	5' 11"	\$100
Comet	GP-6	6.5 / 9.0	10' 2"	\$160
Comet	GP-9	8.5 / 11.9	16' 9"	\$220
Diamond	X-30A	3.0 / 5.5	4' 6"	\$70
Diamond	X-50A	4.5 / 7.2	5' 7"	\$100
Diamond	X-200A	6.0 / 8.0	8' 3"	\$125
Diamond	X-510NA	8.3 / 11.7	17' 3"	\$200

Coax – You will need to have enough coax to connect the radio to the antenna. The longer the run the better the coax has to be. The coax needs a connector at each end and in some circumstances be ordered installed on the coax at the time of purchase. Allow \$25 for having connectors installed. Belden and Andrews are the "old" industry standards. Times Micro Wave is also very good coax with good properties at an economical price.

Brand	Model	Loss / 100'	Good up to	Cost 06/2007
Times Micro Wave	LMR-400	1.5 dB @ 150 MHz	~ 200'	\$0.83 / ft
Times Micro Wave	LMR-600	1.0 dB @ 150 MHz	~ 300'	\$1.19 / ft
Times Micro Wave	LMR-900	0.7 dB @ 150 MHz	~ 400'	\$1.90 / ft
Belden	RG/8U 8214	2.0 dB @ 150 MHz	~ 150'	\$0.89 / ft
Belden	RG/8U 9913	1.6 dB @ 150 MHz	~ 200'	\$1.19 / ft
Andrews	FSJ4-50B	1.3 dB @ 150 MHz	~ 250'	~\$1.50 / ft w/ connectors
Andrews	LDF4-50A	.81 dB @ 150 MHz	~ 400'	~\$2.00 / ft w/ connectors
Andrews	LDF5-50A	.49 dB @ 150 MHz	~ 600'	~\$4.00 /ft w/ connectors

Radios – A dual band is highly recommended. A dual band / dual receive is even more highly recommended because it allows the user to monitor two different frequencies at the same time.

Brand	Model			Cost 06/2007
Alinco	DR-620T/E	DB/DR		\$340
Alinco	DR-635T/E	DB/DR		\$370
ICOM	IC-208H	DB/SR		\$275
ICOM	IC-2720	DB/DR		\$350
Kenwood	TM V71A	DB/DR		\$400
Kenwood	TM V708A	DB/DR		\$375
Yaesu	FT-7800R	DB/SR		\$250
Yaesu	FT-8800R	DB/DR		\$375

Power Supplies – Provides 12 volts DC for the radio.

Brand	Model	Capacity		Cost 06/2007
Astron	RS20A	16 Amps		\$100
MFJ	MFJ-4125	25 Amps		\$110
Samlex	SEC1223	23 Amps		\$100

Dealers

Houston Amateur Radio Supply 281.355.7373
<http://www.texasparadise.com/hars>

Texas Towers (Plano TX) 800.272.3467
<http://www.texastowers.com>

K-Comm (SATX) 210.344.3311
<http://home.satx.rr.com/kcomm>

Austin Amateur Radio 800.423.2604
<http://www.aaradio.com>

Amateur Electronics Supply 800.558.0411
<http://www.aesham.com>

Ham Radio Outlet 800.444.9476
<http://www.hamradio.com>

Gigaparts 866.535.4442
<http://www.gigaparts.com>

Any Questions?

Questions can be directed to Keith LeJeune, ALERT Manager at Harris County Office of Homeland Security and Emergency Management at 713.881.3100