

Table 1 - Preferred Tube HF Linear Amplifiers

Mfr	Model	Bands	Power Out SSB (pep)	Power Out RTTY-cycle	Drive Reqd	QSK	Tubes	Dimensions (RF/PS) H"-W"-D" + Wt	Current \$ New
ACOM	A1500	160-6	1500w	1200w-15/3	85w	Yes	4CX1000A/8168	7.7-16.6-14.0, 58-lb	\$4150
	A1000	160-6	1000w	1000w-Cont	60w	Yes	4CX800A/GU74b	7.2-16.6-14.0, 49-lb	\$2800
	A1010	160-6	700w	500w	60w	Yes	4CX800A/GU74b	5.9-16.0-12.4, 40-lb	\$2200
Ameritron	AL-80B + AL-80A	160-15	1000w	500w-30/	85w	Opt	3-500zg	8.5-14.5-15.5, 48-lb	\$1800
Amp Supply	LK-500C	160-15	1500w	1500w-Cont	100w	Yes	2 3-500z	9.0-15.0-15.0, 103-lb	
	LK-550	160-15	1500w	1500w-Cont	100w	Yes	3 3-500z	9.0-15.0-15.0, 45-lb PS: xxx-xxx-xxx, 65-lb	
Dentron	DTR-2000L	160-15	1500w	750w-Cont	65w	No	3CX1500A7/8877	7.3-14.5-14.5, 54-lb	
Drake	L4B	80-10	1500w	750w	100w	No	2 3-500z ForcedAir	7.9-14.0-14.4, 32-lb PS: 7.9-6.8-11.0, 43-lb	
	L7	160-15	1500w	750w	100w	No	2 3-500z	6.8-13.7-14.3, 27-lb PS: 7.9-6.8-11.0, 43-lb	
	L75	160-15	1200w	500w	60w	No	3-500z	6.8-13.7-14.3, 42-lb	
Heath	SB-220	80-10	1200w	600w-10/10	100w	Opt	2 3-500z	8.3-15.0-14.6, 48-lb	
	SB-221	80-15							
	HL-2200	80-15	1200w	600w-10/10	100w	Opt	2 3-500z	8.3-15.0-14.6, 50-lb	
	SB-1000	160-15	1000w	500w-30/	85w	No	3-500z	8.5-14.5-15.5, 48-lb	
Henry	2KD-5	80-10	1200w	600w	100w	No	2 3-500z	10.5-15.0-17.5 62-lb	
Kenwood	TL-922	160-10	1200w	600w-10/	100w	Opt	2 3-500z	7.5-15.4-16.0, 68-lb	
	TL-922A	160-15							
TenTec	Centurion 422	160-15	1300w	650w-10/10	100w	Yes	2 3-500z	7.8-15.5-20.0, 52-lb	

Table 2 - Preferred Solid State HF Linear Amplifiers

Mfr	Model	Bands	Power Out SSB (pep)	Power Out RTTY-cycle	Drive Reqd	Tuner	Transistors	Dimensions (RF/PS) H"-W"-D" + Wt	Current \$ New
ACOM	A700S	160-6	700w	700w-Cont	40w	Sep	MRFE6VP61K25N	5.6-12.8-14.2, 26-lb	\$3250
	04AT (R-ATU)					ATU	LDMOS	11.8-20.1-15.8, 16-lb	\$1300
Elecraft	KPA-1500-F	160-6	1500w	1500w-5/5	50w	ATU	LDMOS	4.5-13.5-11.5, 22-lb PS: 4.5-13.5-11.5, 17-lb	\$6000
Icom	IC-PW2 (RemCntl)	160-6	1000w	1000w-Cont	100w	ATU	LDMOS	11.7-16.7-18.1 RC: 3.5-6.5-thin,	TBD
RF-KIT	RF2K-S	160-6	1500w+	1500w+	55w	ATU	2 BLF-189 LDMOS	7.5-12.2-6.7, 35-lb	\$4500
SPE Expert	1.3K-FA	160-6	1300w	800w-Cont	54w	ATU	LDMOS	4.7-11.1-15.1, 22-lb	\$4700
	1.5K-FA	160-6	1500w	1000w-Cont	54w	ATU	LDMOS	4.7-11.1-15.1, 22-lb	\$5000

Table 3 - Tube HF Linear Amplifiers (full list)

Mfr	Model	Bands	Power Out SSB (pep)	Power Out RTTY-cycle	Drive Reqd	QSK	Tubes	Dimensions (RF/PS) H"-W"-D" + Wt	Current \$ New
ACOM	2000A (RmtCntl)	160-15	2000w	1500w-Cont	50w	Yes	2 4CX800A/GU74b	7.0-17.3-17.8, 78-lb RC: 6.8-5.3-1.0,	\$6600
	A2100	160-6	1500w	1500w-Cont	85w	Yes	4CX1000A/8168	8.1-17.5-14.8, 65-lb	\$4450
	A1500	160-6	1500w	1200w-15/3	85w	Yes	4CX1000A/8168	7.7-16.6-14.0, 58-lb	\$4150
	A1000	160-6	1000w	1000w-Cont	60w	Yes	4CX800A/GU74b	7.2-16.6-14.0, 49-lb	\$3000
	A1010	160-6	700w	500w	60w	Yes	4CX800A/GU74b	5.9-16.0-12.4, 40-lb	\$2200
Alpha	76A 76PA + 76CA	160-15	1500w	600w 1200w-Cont	120w	No	2 3CX400/8874 3 3CX400/8874	7.5-17.0-14.8, 65-lb	
	77	80-10	1500w	700w-Cont	100w	Y/N	3CX1500A7/8877	9.5-17.0-18.0, 70-lb	
	374A	160-15	1500w	600w-Cont	140w	No	2 3CX400/8874	7.5-17.0-14.8, 65-lb	
	374+ 274	80-10	1500w	700w-Cont	40w	No	3 3CX400/8874 2 3CX400/8874	7.5-17.0-13.0, 52-lb	
	77Dx	160-15	1500w	600w-Cont	150w	Yes	3CX1500A7/8877	11.0-19.0-22.0, 95-lb	
	77Sx	160-15	2100w	1200w-Cont	175w	Yes	2 3CX1500A7/8877	11.0-19.0-22.0, 105-lb	
	78	160-15	1300w	500w-Cont	80w	Yes	3 3CX400/8874	7.5-17.0-14.8, 62-lb	
	86	160-15	1500w	1500w-Cont	70w	Yes	2 3CX800A7	7.5-17.0-15.0, 66-lb	
	87A	160-15	1500w	1500w-Cont	55w	Yes	2 3CX800A7	7.0-17.3-16.5, 75-lb	
	89	160-15	1500w	1500w	50w	Yes	2 3CX800A7	7.0-17.0-16.6, 75-lb	
	91B	160-15	1500w	1500w-Cont	60w	Yes	2 4CX800A/GU74b	7.5-17.0-15.5, 66-lb	
	99	160-15	1500w	1500w-Cont	60w	Yes	2 4CX800A/GU74b	7.5-17.0-16.5, 66-lb	
	8100	160-10	1500w	1500w-Cont	55w	Yes	2 4CX800A/GU74b	7.5-17.0-18.3, 69-lb	
	8410	160-10	1500w+	1500w-Cont	55w	Yes	2 4CX1500B	7.5-17.5-19.8, 76-lb	\$6000
	9500	160-6	1500w	1500w-Cont	60w	Yes	3CX1500A7/8877	7.5-17.5-19.8, 82-lb	\$8000
Ameritron	AL-1500	160-10	1500w+	1500w-30/	55w	Opt	3CX1500A7/8877	10.0-17.0-18.5, 77-lb	\$5900
	AL-1200	160-10	1500w+	1500w-30/	130w	Opt	3CX1200	10.0-17.0-18.5, 76-lb	\$4800
	AL-811	160-15	600w	400w-30/	70w	Opt	3 811A	8.0-13.8-16.0, 30-lb	\$1030
	AL-811H	160-15	800w	400w-30/	65w	Opt	4 811A	8.3-13.8-15.5, 30-lb	\$1100
	AL-800H	160-15	1500w	1000w-30/	55w	Opt	2 3CX800A7	8.5-14.3-14.5, 51-lb	\$4200
	AL-800	160-15	1200w	700w	85w	Opt	3CX800A7	8.5-14.3-14.5, 51-lb	\$2850
	AL-82	160-10	1500w+	1500w-30/	65w	Opt	2 3-500z ForcedAir	10.0-17.0-18.5, 76-lb	\$3150

	AL-80B + AL-80A	160-15	1000w	500w-30/	85w	Opt	3-500zg	8.5-14.5-15.5, 48-lb	\$1800
	AL-80 PoorQual	160-15	1000w	500w	65w	Yes	3-500z	6.6-12.0-11.8, 43-lb	\$650
Amp Supply	LK-500C	160-15	1500w	1500w-Cont	100w	Yes	2 3-500z	9.0-15.0-15.0, 103-lb	
	LK-550	160-15	1500w	1500w-Cont	100w	Yes	3 3-500z	9.0-15.0-15.0, 45-lb PS: xxx-xxx-xxx, 65-lb	
BTI	LK-2000	80-10	1200w	600w	200w	No	3-1000z (or 4-1000)	30.0-16.3-16.0, 115-lb	
	RF-2000 PS-2000	80-10	1200w	600w	200w	No	3-1000z	14.3-16.3-16.0, 50-lb PS: 12.5-16.3-15, 75-lb	
Collins	Collins 30L-1	80-10	1000w	Not rated	70w	No	4 811A or 572B	6.6-14.8-13.8, 38-lb	
	Collins 30S-1,	80-10	1000w	600w-Cont	80w	No	4CX1000A/8168	30.6-17.0-18.8, 160-lb	
Commander	HF-2500	160-10	1500w+	1500w	55w	No	2 3CPX800A7	9.0-18.0-16.0, 62-lb	
Dentron	Clipperton-L	160-15	1200w	500w	150w	No	4 572B	6.0-15.0-17.0, 46-lb	
	GLA-1000, B, C	80-15	1200w	400w	125w	No	4 6LQ6	5.4-11.0-11.0, 24-lb	
	160-10L	160-10	1200w	Not rated	125w	No	4 572B	Unknown	
	MLA-1200, B	80-10	1200w	Not rated	100w	No	8875	5.3-10.0-10.0, 13-lb PS: 7.8-5.5-14.5, 26-lb	
	MLA-2500	160-10	1200w	650w	65w	No	2 8875	5.0-14.0-14.0, 47-lb	
	DTR-2000L	160-15	1500w	750w-Cont	65w	No	3CX1500A7/8877	7.3-14.5-14.5, 54-lb	
Drake	L4B	80-10	1500w	750w	100w	No	2 3-500z ForcedAir	7.9-14.0-14.4, 32-lb PS: 7.9-6.8-11.0, 43-lb	
	L7	160-15	1500w	750w	100w	No	2 3-500z	6.8-13.7-14.3, 27-lb PS: 7.9-6.8-11.0, 43-lb	
	L75	160-15	1200w	500w	60w	No	3-500z	6.8-13.7-14.3, 42-lb	
Emtron	DX-1SP	160-10	1500w	1200w-Cont	60w	Opt	FU-728F	7.5-15.0-14.0, 44-lb	AUS
	DX-2SP	160-10	2500w	2000w-Cont	60w	Yes	GU84b then FU-728F	9.0-18.5-18.5, 100-lb	AUS
Gonset	GSB-201	80-10	900w	450w	100w	No	4 811	8.5-12.6-17.3, 81-lb	
	GSB-201 Mk2	80-10	900w	450w	100w	No	4 572B/T160L	8.5-12.6-17.3, 81-lb	
	GSB-201 Mk3	80-10	1200w	600w	100w	No	4 572B/T160L	8.5-12.6-17.3, 81-lb	
Heath	SB-200	80-10	1200w	Not rated	100w	No	2 572B	6.6-14.9-13.4, 34-lb	
	SB-220 SB-221	80-10 80-15	1200w	600w-10/10	100w	Opt	2 3-500z	8.3-15.0-14.6, 48-lb	
	HL-2200	80-15	1200w	600w-10/10	100w	Opt	2 3-500z	8.3-15.0-14.6, 50-lb	
	HA-10 Warrior	80-10	600w	400w	75w	No	4 811A	11.6-19.5-16.0, 90-lb	
	SB-1000	160-15	1000w	500w-30/	85w	No	3-500z	8.5-14.5-15.5, 48-lb	

Henry	2KD-5	80-10	1200w	600w	100w	No	2 3-500z	10.5-15.0-17.5 62-lb	
	2K-3	80-10	1200w	600w	100w	No	2 3-500z	unknown (floor standing)	
	3KD Premier	160-10	1500w	1000w	100w	No	3CX1500A7/8877	9.5-17.3-22.8, 90-lb	
	3K-A	80-10	2000w	1200w	100w	No	2 3-500z	32.5-16.0-20.0 167-lb	
	4K-2	80-10	2400w	1200w	150w	No	5CX1500A	unknown (floor standing)	
	4K Ultra	80-10	2500w	2000w	100w	No	3CX1500A7/8877	37.0-16.0-21.0, 225-b	
	2KD 2K Classic 2K Classic X	80-15	1200w 1200w 1800w	600w 600w 1500w	120w	No	2 3-500z	5.9-17.3-19.8, 80-lb 32.8-15.0-16.5, 125-lb 32.8-15.0-16.5, 140-lb	
	2-K 2-KD 2-KR (2-KD noPS)	80-10	1200w	600w	150w	No	2 3-400z	29.5-14.5-13.0, 154-lb 12.0-14.5-13.0, 154-lb 12.0-14.5-13.0, 40-lb	
Kenwood	TL-922 TL-922A	160-10 160-15	1200w	600w-10/	100w	Opt	2 3-500z	7.5-15.4-16.0, 68-lb	
National	NCL-2000	80-10	1200w	600w	40w	Opt	2 8122	7.7-16.3-13.0, 62-lb	
OM-Power	OM-2500HF	160-10	1500w+	1500w-30/	40w	Yes	GU84b, or FU-728F	8.0-19.1-18.0, 84-lb	\$5140
	OM-2500+	160-6	1500w+	1500w-30/	70w	Yes	FU-728F	8.0-15.6-14.6, 53-lb	\$3600
	OM-2000+	160-6	2000w	1500w	60w	Yes	FU-728F	7.7-15.4-15.6, 53-lb	\$4000
	OM-2501HF	160-10	2500w	2000w	60w	Yes	GU84b, or FU-728F	8.0-19.0-18.0, 88-lb	\$5225 \$5075
QRO	HF2500DX	160-10	1500w+	1500w-30/	60w	No	2 4CX800A/GU74b	8.0-20.0-19.0, 90-lb	\$4095
TenTec	Titan 425	160-15	1500w	1000w-Cont	80w	Yes	2 3CX800A7	5.3-15.3-15.0, 15-lb PS: 8.3-13.4-10.3, 45-lb	
	Titan-III 417A	160-15	1500w	1000w-10/10	60w	Yes	2 4CX800A/GU74b	8.5-19.0-20.0, 84-lb	
	Centurion 422	160-15	1300w	650w-10/10	100w	Yes	2 3-500z	7.8-15.5-20.0, 52-lb	
Yaesu	FL2100B	80-10	700w	360w	100w	No	2 572B/T160L	6.0-13.5-11.5, 41-lb	

Table 4 - Tubes in rough order of Suitability/Cost

Tube Type	Max CCS Anode Dissipation	Suitability + Cost + Availability
3-500z	500w	\$225, RF Parts. Readily available. Chinese Taylor brand in production. \$275, DX Engr.
GU74b (4CX800A)	800w	\$350, DX Engr. Readily available. Large stock of Svetlana tubes. \$600 for matched pair. QRO Parts. \$690 for matched pair (NOS). Array Solutions.
GU84b (4CX2500A)	2500w	\$620, QRO Parts, http://qro-parts.com/advanced_search_result.php?keywords=gu84b&x=13&y=7
3CX1500A7/8877	1500w	\$1200, RF Parts. https://www.rfparts.com/tubes/tubes-trans.html
4CX1000A/8168	1000w	\$850, Surplus Sales of Nebraska. https://www.surplussales.com/Tubes-Sock-Acc/0-5/TubesListed-4.html or replace with 4CX1500B/FU-728F
4CX1500B	1500w	\$950, Surplus Sales of Nebraska.
FU-728F (4CX1500B)	1500w	\$800, OM Power/Array Solutions. https://www.arrayolutions.com/fu-728f
3CX400A7/8874	400w	\$389, RF Parts, limited quantity. \$1500, Newark.
4-1000A	1000w	\$1075, Surplus Sales of Nebraska.
3CX800A7	800w	\$1225, RF Parts, or special order item (expensive), from Ameritron.
3CX1200	1200w	\$1229, RF Parts.
5CX1500A	1500w	\$900 (rebuilt), RF Parts
8875	300w	Extinct
3-1000z	1000w	Extinct.
8122	400w	Extinct
572b/ T160L	100w	These tubes gnerally require many in parallel and/or operation well beyond CCS design limits. Hence, expect a shortened tube life.
811A	45w	
6LQ6	30w	

Table 5 - Solid State HF Linear Amplifiers (full list)

Mfr	Model	Bands	Power Out SSB (pep)	Power Out RTTY-cycle	Drive Reqd	Tuner	Transistors	Dimensions (RF/PS) H"-W"-D" + Wt	Current \$ New
ACOM	A1200S	160-6	1000w	1000w-Cont	50w	No	BLF-188 LDMOS	6.4-14.7-16.5, 27-lb	\$3750
	A700S 04AT (R-ATU)	160-6	700w	700w-Cont	40w	Sep ATU	MRFE6VP61K25N LDMOS	5.6-12.8-14.2, 26-lb 11.8-20.1-15.8, 16-lb	\$3250 \$1300
	600S	160-6	600w	600w	30w	No	MRFE6VP6300H LDMOS	6.5-13.0-15.0, 27-lb	
Ameritron	ALS-600A	160-10	600w	350w-30/ (Not recom'd)	100w	No	4 MRF-150 FETs Optional QSK	6.0-9.5-12.0, 13-lb PS: 6.0-9.5-12.0 33-lb	\$2300
	ALS-606	160-6	600w	No spec - not recom'd	100w	No	4 MRF-150 FETs Optional QSK	7.0-9.5-14.0, 15-lb PS: 6.0-9.5-12.0 33-lb	\$2300
	ALS-1300	160-10	1200w	700w-30/	90w	No	8 MRF-150 FETs Optional QSK	6.7-10.5-19.0, 22-lb PS: 6.7-10.5-13.0, 15-lb	\$3100
	ALS-1306	160-6	1200w	No spec - not recom'd	100w	No	8 MRF-150 FETs Optional QSK	7.0-10.5-17.5, 23-lb PS: 6.7-10.5-13.0, 15-lb	\$2850
Elecraft	KPA-500 kit + KAT-500 ATU	160-6	500w	500w-10/5	50w	Sep ATU	2 Microsemi VRF2933 FETs	4.0-10.8-10.0, 26-lb ATU: 1.5-10.8-10.0, 5-lb	\$2700 + \$750
	KPA-1500-F	160-6	1500w	1500w-5/5	50w	ATU	LDMOS	4.5-13.5-11.5, 22-lb PS: 4.5-13.5-11.5, 17-lb	\$6000
Flex	PowerGenius-XL	160-6	2000w	2000w-Cont	50w	No	LDMOS	6.3-14.0-19.5, 38-lb	\$7000
Icom	IC-2KL IC-AT500	160-15	500w	500w-10/	80w	Sep ATU	MOSFETs	4.3-9.5-11.8, 30-lb PS: 4.3-9.5-11.8, ATU: 4.4-9.5-11.8, 14-lb	
	IC-4KL (RemCtl) IC-AT500 ATU	160-10	1000w	1000w-Cont	100w	Sep ATU	MOSFETs	11.7-16.7-18.1, 36-lb RC: 5.9-7.9-13.4, 6-lb ATU: 4.4-9.5-11.8, 14-lb	
	IC-PW1 (RemCtl)	160-15+6	1000w	1000w	100w	ATU	8 MRF-150 FETs	10.4-13.8-14.8, 55-lb	\$4700
	IC-PW2 (RemCntl)	160-6	1000w	1000w-Cont	100w	ATU	LDMOS	11.7-16.7-18.1 RC: 3.5-6.5-thin,	TBD
Palstar	LA-1K + HF-AUTO (ATU)	160-6	1000w	500w	55w	Sep ATU	2 5600H LDMOS	6.3-12.8-16.5, 27-lb ATU: 6.5-12/5-16.5, 25-lb	\$3500 + \$1600
RF-KIT	RF2K-S	160-6	1500w+	1500w+	55w	ATU	2 BLF-189 LDMOS	7.5-12.2-6.7, 35-lb	\$4500

SPE Expert	1.3K-FA	160-6	1300w	800w-Cont	54w	ATU	LDMOS	4.7-11.1-15.1, 22-lb	\$4700
	1.5K-FA	160-6	1500w	1000w-Cont	54w	ATU	LDMOS	4.7-11.1-15.1, 22-lb	\$5000
	2K-FA	160-6	2000w	1000w-Cont	72w	ATU	6 MRF-151G FETs	7.2-15.0-17.0, 55-lb	\$6700

Color Key

Key	Criteria
First Choice	Known reputation and reliability.
Good Choice	Commonly utilized.
Neutral Choice	Good specs, but unknown quality + longevity.

For Tube Amplifiers

Notes	The Ameritron AL-80A is identical to the Health SB-1000 kit. A 4CX1000 may be able to be replaced with an FU-728F, but successfully finding a quality tube is uncertain. Neither Alpha, Emtron, nor TenTec (same ownership) offers repair support or parts, which could be a serious issue on complex amps. Estimated max SSB pep output: 1.5* Rated Dissipation; max RTTY output = Rated Dissipation.
Preferred	160-thru-20m, 80-thru-20m acceptable on a particularly nice unit.
Disqualifiers	Height >12-inches. Width >16.9-in to rack tray mount (if width <17.75-in, may rack stack). Power out <500w. High drive (>100w) requirement.

For Solid-State Amplifiers

Preferred	LDMOS only. Built-in ATU.
Disqualifiers	Height >12-inches. Width >16.9-in to rack tray mount (if width <17.75-in, may rack stack). Power out <500w. Neither built-in nor associated separate ATU.