

MOAS Antenna Controller – K1XM

Parts List

Semiconductors

| | | |
|----|-----------|-------------------|
| U1 | ATMEGA16L | Digikey or Mouser |
| U2 | MAX232A | Digikey or Mouser |
| U3 | 7805 | Digikey or Mouser |
| U4 | 7808 | Digikey or Mouser |

| | |
|--------|--------|
| D1 | 1N4001 |
| D2-D22 | 1N4148 |

| | | |
|--------|--------|---------------|
| Q1, Q2 | 2N4401 | Or equivalent |
|--------|--------|---------------|

Display

| | | |
|-----|---------------|--|
| DS1 | LCM-X01604DXX | 16x4 LCD. Part number is Lumex, similar available from several companies |
|-----|---------------|--|

Plugs and Jacks

| | |
|----|------------------------------|
| J1 | 2.1mm power jack |
| J2 | 4-Pin “Microphone” connector |
| J3 | DB-25F |
| J4 | DB-25F |
| J5 | RCA Phono |
| J6 | RCA Phono |
| J7 | RCA Phono |
| J8 | RCA Phono |

Crystal

| | | |
|----|------------|-------------------|
| X1 | 7.3728 MHz | Digikey or Mouser |
|----|------------|-------------------|

Resistors

| | | |
|---------|---------------|-----------------------|
| R1 | 10K Linear | Trimmer pot |
| R2-R17 | 10K | May be resistor packs |
| R18-R29 | 1K | May be resistor packs |
| R30 | 15 ohm 3 watt | |
| R31-R34 | 1K | May be resistor packs |

Capacitors

| | |
|---------|---------|
| C1, C2 | 20 pF |
| C3, C4 | 22 uF |
| C3 – C9 | .01 uF |
| C10-C21 | .047 uF |
| C22-C32 | .1 uF |

Inductor

| | |
|----|-------|
| L1 | 10 uH |
|----|-------|

Switches and Encoders

| | | |
|--------|----------------|--------------------------|
| S1 | | Any SPST |
| S2, S3 | 61C22-01-04-02 | Grayhill optical encoder |
| S4-S8 | C&K 8125 | Any SPST (NO) momentary |

Fuses

| | |
|----|-----|
| F1 | .5A |
|----|-----|

Miscellaneous

| | | |
|-------|--------|--------------------------|
| Bezel | 142-1 | RMF Products, Batavia IL |
| Case | TPB-45 | 2.5 x 6 x 5, Ten Tec |