# SHARMAN — multiCOM

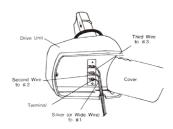
# **INSTRUCTION MANUAL**

AR-600XL

# **OUTDOOR DRIVE UNIT INSTALLATION**

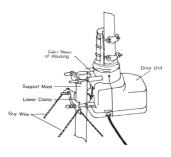
# STEP 1 - DRIVE UNIT CONNECTION

Up to 84m of 20AWG 3 conductor cable may be used. For longer runs, use heavier gage wire. To attach cable to the drive unit, snap open the cover using a screw driver and connect the cable as shown. Remove the grommet and insert the cable through the slot. Press the grommet back into the housing. Separate leads for 1 ½". Find the silver or wide jacketed lead and connect it to Terminal 1. Connect the adjacent lead to Terminal 2, and the next lead to Terminal 3. If 4 wire cable is used, connect both wire 3 and 4 to Terminal 3. Make sure there are no loose strands which can short between terminals. Recheck the wiring order and securely close the cover. To avoid moisture collecting in the cable be sure jacket of cable passes through the grommet.



#### STEP 2 - DRIVE UNIT MOUNTING

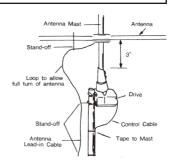
If not mounted inside a tower, attach the rotator unit to the support mast by loosening the nuts enough to get the clamps over the mast. Lower the rotator unit until the cast nose of the housing sits on top of the support mast then tighten the nuts. Moderate tightening of the nuts with a 7/16" wrench will cause the teeth to grip the mast securely. Do not over-tighten to the point that you deform the mast, since this will reduce its strength. Mast diameters of 1 ¼" to 2" (3-5cm) may be used. If guy wires are used, fasten two through each of the two holes of the lower clamp.



**CAUTION:** Select a mounting location where the antenna cannot come in contact with power lines while being installed, and where the installation will not fall across power lines if a guy wire should fail.

# STEP 3 - ANTENNA/CABLE INSTALLATION

After connecting the antenna lead-in cable to the antenna fasten it to the antenna mast using stand-off insulators as shown. Provide a generous loop at the drive unit and attach lead-in cable to the support mast with stand-off insulators approximately every four metres. Secure the rotator control cable directly to the support mast.



# INDOOR CONTROL UNIT INSTALLATION & PROGRAMMING

#### STEP 1

- terminal 1 on the rotator connects to terminal 1 on the control unit
- terminal 2 on the rotator connects to terminal 2 on the control unit
- terminal 3 on the rotator connects to terminal 3 on the control unit

Do not rely on colour codes or the manual - simply make sure it is wired 1-1, 2-2, 3-3

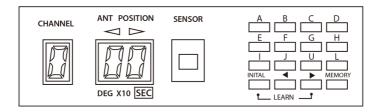


#### STEP 2

Plug power cord of the control unit into AC outlet, and then turn on.

# STEP 3

When powered on, the **CHANNEL** will display "0" and the **ANT POSITION** will display "00". Please press the "**INITIAL**" key, control unit and rotator will synchronise and return to initial (lamp " $\P$ " will stop blinking, this means that the control unit and rotator have zeroed). Synchronized operation can now begin.



#### STEP 4

Press "INITIAL" key and "▶" key. ANT POSITION display will count down from 36 to 0. Release "INITIAL" key and "▶" key.

- NOTE: 1. LEARNING must be performed before installing the antenna mast so it can judge 0-360 degrees for the rotator.
  - 2. After a strong storm or power failure, the rotator may appear in a different position. Use the "INITIAL" key to re-synchronise the system if this occurs, the antenna or driver motor may be misaligned on the antenna mast. You may either go to the antenna and re-orient it or program the control unit to correspond to the new antenna orientation.

#### STEP 5

Tune your radio to the station that you want to receive.

- A. While watching the radio, move the antenna back & forth with the "▶" (clock-wise) & "◄" (counterclockwise) keys until the best reception is obtained.
- A B C D
  E F G H
  I J U L
  INITAL A MEMORY
  L LEARN J
- B. Press the "MEMORY" key, the ANT. POSITION indicator will blink.
- C. There are 12 memory location keys (A,B,C,D,E,F,G,H,I,J,U,L) press the one in which you want to store the station's position. This position is now stored for later use. Indicator will display antenna direction.
- D. Repeat the above procedure for each location. Up to 12 station positions may be stored. A single programmed location will be suitable for all stations that come from any particular direction.

NOTE: When you press a memory location key (A,B,C,D,E,F,G,H,I,J,U,L) ANT.POSITION indicator will blink continuously. After storing CHANNEL figure MEMORY will stop or press "MEMORY" key again to stop "MEMORY" key in which you have already stored a position after pressing MEMORY key, the previous position is erased and the current position stored.

#### STEP 6

Install two 1.5 volt batteries into infrared remote control.

#### SET MEMORY

- A. Turn off, hold "B" (or "D") key and turn on at same time. The "◀▶" lights will flash.
- B. Release "B" (or "D") key, turn off then on again. The control unit will perform "INITIAL", display as

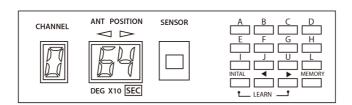


in the meantime, all the memory will be cleaned. Unit is now reset and ready for re-learning.

NOTE: Press "B" key to clean memory

# **LEARNING**

Simultaneously press the "INITIAL" key and ">" key (press "INITIAL" key first then press ">" key, otherwise, control unit will mistake for clockwise operation, not perform "LEARNING"). Thus, rotator will turn to 360° (turn one cycle). Release "INITIAL" and ">" key at same time, the ANT.POSITION indicator will shows rotator cycle time.



This unit can match up with other rotator brands using the learning function. However, they must be the 3 cord type to get the result of synchronization.

# **OPERATION**

1. Automatic positioning: After your unit has been programmed using either the remote control or the keypad on the control unit, simply press the location key (A,B,C,D,E,F,G,H,I,J,U,L) corresponding to the station you want to monitor.

The antenna will turn to that position and the indicator will display the **ANTENNA POSITION** angle.

# 2. MANUAL POSITIONING & FINE TUNING

Press the ">" (clock-wise) or "◄" (counter clock-wise) keys on the control unit or remote control to rotate the antenna to a position not already stored in memory, or for fine tuning.

- 3. If the INITIAL key is pressed accidentally, the INITIAL function can be halted by pressing the INITIAL key again.
- 4. In order to interrupt the rotator while it is turning toward a stored angle, press the clockwise "▶"or counter clockwise "◄"key. The rotator will stop immediately.

#### SERVICE INFORMATION

- 1. Unplug this product from the wall outlet and the rotator before maintenance.
- 2. Read the electric circuit schematic diagram attached carefully before maintenance.
- 3. Use only parts with identical electrical characteristics as shown in the diagram attached.
- 4. Make leakage-current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning this appliance to the user.