

INSTRUCTIONS FOR THE

ARISTO-CRAFT DISTINCTIVE MINIATURES

MODEL CR-1

CARRIER RECEIVER

The Aristo-Craft Model CR-1 carrier wave receiver is a super regenerative single hard tube receiver. It is of unique design and far superior to any other radio receiver of this type due to its extreme sensitivity and stability. The light weight and compact design make the CR-1 suitable for any R/C installation. This receiver utilizes the "Dip system" in that the B current drops when the carrier wave is received from the transmitter.

The Aristo-Craft CR-1 will operate and is tunable over all the new frequencies of 26.995 to 27.255 MC as allocated by the FCC.

The relay used is the extra sensitive "GENIE".

Any CW (carrier wave) transmitter of 1/2 watt output or more will operate the receiver. However, an excellent companion transmitter, which will give you years of trouble-free operation is the Aristo-Craft MOPA. Another is the Aristo-Craft Rangemaster 1-AP.

Dimensions and Battery Complement

The weight of the receiver is approx. 2 oz., and it measures 1 1/4" x 1 5/8" x 2 3/4".

Battery

Voltage

| | |
|-------------|----------------------------------------|
| "A" battery | { 1 } 1.5 v. Burgess Size "C" or equal |
| "B" battery | { 1 } 65.5 v. Burgess K-45 or equal |

WIRING

Familiarize yourself with the CR-1 receiver before installing in your favorite model. Wire your receiver and get to know its operation and functions; a mock-up of your installation, done on your workbench is ideal and will further guarantee trouble-free operation when final installation is made in your model.

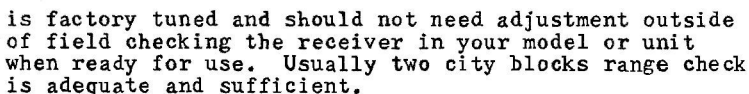
Wire your CR-1 receiver as shown in Fig. 1. Study this diagram so that no errors are made; the components can be damaged by reverse battery connections. Always double check all wiring before turning your switch to the "ON" position. This simple precaution applies to all electrical devices and will save dollars in repair costs.

INSTALLATION

In any installation, it is important to keep all wiring neat and wires as short as possible. However, do not make the wires or cables so short as to impose a strained connection. Mount batteries, switch, and

See Fig. 2 for suggested mounting of the receiver in your model.

(1) The CR-1 receiver is supplied with a plug. When wires are soldered to this plug as shown in the drawing, the plug is then inserted into the receiver power socket. Keep all leads as short as possible and avoid running the power cable near the antenna circuit. Double check all wiring with the drawing. Then insert an 0-5 MA meter into the closed circuit metering jack and extend the receiver antenna to its fullest length (approx. 28"). Turn the receiver switch to the "ON" position. The CR-1 receiver



Located on the top of the receiver are two tuning controls. The one directly opposite the power socket is for frequency tuning and the next in line is the sensitivity control. Refer to the drawing for pictorial view.

(2) Turn the sensitivity control using an insulated tuning wand to full counter clockwise (turning screw fully out). The meter will then read approx. 3.5-3.8 milliamperes.

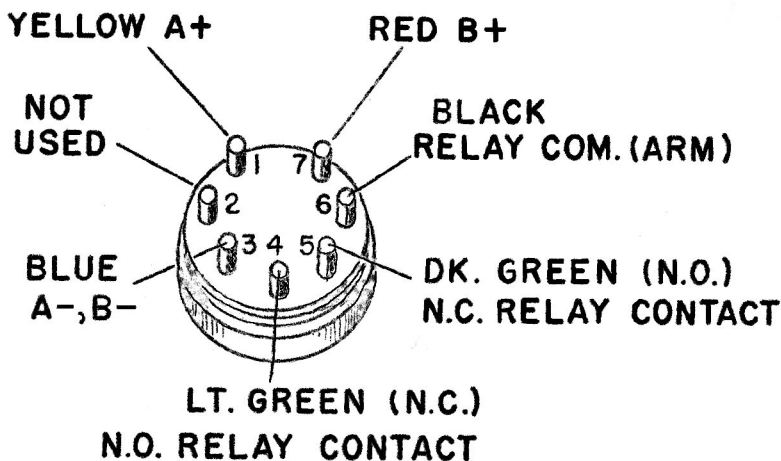
(3) Turn "ON" transmitter and push transmitter key. Rotate the receiver frequency tuning control to the point where a maximum drop of meter movement is noticed. Now screw the sensitivity control in, while still keying the transmitter. You will note that the meter reading continues to drop. Continue screwing in this control until approx. 1 MA reading is had on the meter.

Further screwing in of the sensitivity control may cause the relay to buzz. This is the point of greatest sensitivity. Do not fly the model at this setting. Turn the sensitivity control one and a half turns to two turns counter clockwise (out). The sensitivity increases when your plane is flying and meter removed from jack.

(4) After completing above steps as outlined, range check your model as previously described in the instructions.

RELAY

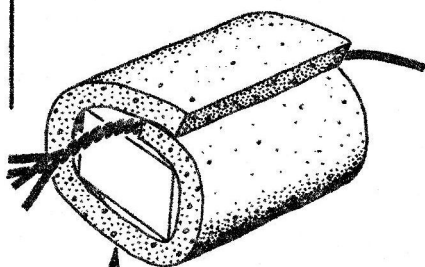
Do not touch the relay unnecessarily. It is factory adjusted. The relay terminals will take up to 6 volts D.C. at 1 amp. maximum. It is set between 2.8 MA pull in and 2.2 MA drop out.



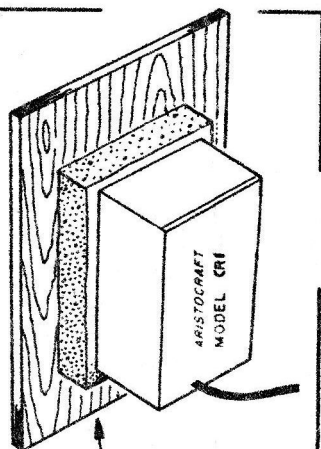
TOP VIEW OF POWER PLUG

Note: When wiring a compound servo or a compound escapement the normally OPEN relay contact (N.O.) and the normally CLOSED relay contact (N.C.) are reversed for proper compound operation.

FIG. 2



ROLL IN 1/2" PLASTIC
FOAM BEFORE INSTALLING
IN RECEIVER COMPARTMENT.



FLEXIBLE PLASTIC FOAM
(FASTEN TO BULKHEAD
AND RECEIVER WITH
"PLIOBOND" CEMENT)

WARRANTY AND GUARANTEE

Factory assembled and tested Aristo-Craft Radio Control Equipment is warranted for a period of thirty days from the date of purchase. Any factory assembled and tested unit that fails to operate within this period will be repaired or replaced FREE OF CHARGE upon return DIRECTLY TO THE FACTORY. This warranty is void if the equipment has been tampered with, excessive voltage used, modified, used with acid core solder, or otherwise abused beyond that encountered in normal use.

Tubes, transistors, and crystals cannot be guaranteed against burn-out or breakage. If your equipment requires service PLEASE follow outlined procedure:

(A) Send your equipment direct to ARISTO-CRAFT DISTINCTIVE MINIATURES, Radio Control Dept., 184 Pennsylvania Ave., Newark 2, N.J. Do not return your equipment to your hobby dealer; he is not authorized to make repairs, adjustments, or exchanges. Any commitment your dealer may make is his own responsibility and does not bind Aristo-Craft to said commitment unless written authorization is given by Aristo-Craft.

(B) Pack in a rugged container, wrap your package carefully, AND CLEARLY PRINT your RETURN name and address in the upper left-hand corner. DO NOT ship in the original packaging as it is not considered adequate for safe shipment. We cannot be held liable for damage due to poor or insufficient packaging.

(C) DO NOT SEND BATTERIES OR BATTERY BOXES.

(D) Send package by INSURED MAIL.

We will make every effort to return your fully repaired unit in ten days or less.

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