

DYNAMIC INDUSTRIES CO LTD

UNIT 2205, 22F, 57, HUNG TO RD.KLN .HONG KONG.

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ENGINEERING DEPARTMENT

ITEM NO:**MODEL NAME:- SQUART LITTLE 2 RC CAR**FREQUENCY :- **27.145MHZ**

DATE :- 22ND JAN 2002

BY: B.LEE

REV 0

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(CIRCUIT DESCRIPTION)**** CIRCUIT DESCRIPTION :-****IN TRANSMIT MODE.**

WHEN THE CONTROL KNOB IS PRESSED, A CW SIGNAL IS TRANSMITTED. THE CRYSTAL CONTROLLED OSCILLATOR Q1 OUTPUT IS COUPLED THROUGH C 2 TO THE BASE OF Q2. FROM Q2 THE SIGNAL IS FED THROUGH T1. THE LOW PASS FILTER MADE UP OF C7 & T-1 & C8 WHICH IS CONNECTED TO THE ANTENNA. THE MODULATION IS PROVIDED BY IC-1. WHEN SWITCH IS PUSHED, THE MODULATION SIGNAL WILL BE SENT TO THE BASE OF Q2 THAT WILL MODULATE THE RF WAVE DIRECTLY. ENERGY IS SUPPLIED BY A 9.V ALKALINE BATTERY.

IN RECEIVE MODE

Q1 IS THE SUPERREGENERATOR & DETECTOR.

IC-1 IS THE SIGNAL PRE-AMPLIFIER & DECODER.

QQ2/Q3/Q4/Q5/Q6/ & Q7 ARE THE MOTOR DRIVERS.

ENERGY IS SUPPLIED BY FOUR 1.5V AA TYPE ALKALINE BATTERY.

**** ANTENNA AND GROUND CIRCUITRY.**

THIS UNIT MAKES USE OF AN EXTERNAL 4 1/2 -INCH ANTENNA. THE ANTENNA IS INDUCTIVELY COUPLED.

THE UNIT RELIES ON THE GROUND TRACE OF THE PRINTED CIRCUIT BOARD. NO EXTERNAL GROUND IS PROVIDED.

ENERGY IS SUPPLIED BY A 9.V ALKALINE BATTERY.

DYNAMIC INDUSTRIES CO LTD
UNIT 2205, 22F, 57, HUNG TO RD

ENGINEERING DEPARTMENT

MODEL NO:-

MODEL NAME:-

DATE:-

BY:

FREQUENCY USED:-

SQUART LITTLE 2 RC CAR

19TH JAN 2002

B.LEE

27.145MHZ

TECHNICAL DATA

A. TX SECTION

| | | | |
|----|------------------------------|---|-----------------------|
| 1 | DC POWER SUPPLY:- | 9.0VDC | (006P)/ 1604A//522/ |
| 2 | DC IDLE CURRENT:- | 23.000 | MA DC (TYPICAL) |
| 3 | DC OPERATING CURRENT | 40.00 | MA DC (TYPICAL) |
| 4 | TRANSMITTED OUTPUT FREQUENCY | 27.145 MHZ (+/- 2KHZ.) | CONTRILLED BY CRYSTAL |
| 5 | TRANSMITTED OUTPUT POWER | LESS THAN 80 dbuv | PER METER |
| 6 | TRANSMITTED DISTANCE | WITHIN 15 FT IN OPEN AREA. | (TYPICAL) |
| 7 | MODELATION AUDIO FREQUENCY | CONTROLLED BY TX IC-1 | |
| 8 | MODULATION SYSTEM | 100% | (AM) |
| 9 | MANUAL DC POWER OFF | WHEN THERE IS NO ANY OF THE CONTROL KEY PRESSED | |
| 10 | AUTO RF POWRE OUTPUT OFF | WHEN THERE IS NO ANY OF THE CONTROL KEY PRESSED | |

B. RX SECTION

| | | | | |
|---|--------------------------|------------|-------------|------------------|
| 1 | DC POWER SUPPLY | 6.0VDC | 4 X1.5V AAA | ALKALINE BATTERY |
| 2 | DC IDLE CURRENT | 21.000 | MA DC | TYPICAL |
| 3 | FREE RUN- DC CURRENT | 210.00 | MA DC | TYPICAL |
| 3 | MAX DC OPERATING CURRENT | 1.000 | AMP DC | TYPICAL |
| 4 | BATTERY OPERATING HOUR | 45 MINUTES | TYPICAL | |
| 5 | RF RECEIVING FREQUENCY | 27.145 MHZ | | |
| 6 | MANUAL POWER OFF | YES | | |

TX-SIDE-- CONTROL KNOBS

A FORWARD

TO CONTROL RX UNIT GOING FORWARD.

B BACKWARD & SPIN

TO CONTROL RX UNIT GOING BACKWARD & TURN AROUND.

C. WHEN THERE IS NO CONTROL KNOB BE PRESSED, UNIT WILL STOP ALONE.