

## -USER MANUAL-OPERATING INSTRUCTIONS TRANSMITTER MODEL DSX-2437

### APPLICATION:

- 1) THE MODEL DSX-2437 VIDEO TRANSMITTER IS SPECIFICALLY DESIGNED FOR THE BROADCAST OF STANDARD NTSC SIGNALS TO BE RECEIVED AND PROCESSED BY A BROADCAST VIDEO RECEIVER, PROVIDING A WIRELESS LINK FOR CLOSED CIRCUIT TELEVISION SYSTEMS. THE OUTPUT POWER OF THE TRANSMITTER IS 5 WATTS.
- 2) THIS EQUIPMENT IS TYPE ACCEPTED FOR LICENSED USE UNDER FCC RULES PART 90 FOR USE IN THE 2450MHz TO 2500MHz FREQUENCY BAND. INTENDED USERS INCLUDE STATE AND LOCAL AGENCIES OF LAW ENFORCEMENT, FIRE DEPARTMENTS OR OTHER PUBLIC SAFETY ORGANIZATIONS OR AGENCIES.
- 3) THIS EQUIPMENT IS EMI/RFI SEALED AND IS INTENDED TO BE DUST, WATER AND WEATHER RESISTANT UNDER NORMAL ENVIRONMENTAL AND OPERATING CONTITIONS. ANY ATTEMPT TO OPEN THE UNIT OR TO EXPOSE THE INTERNAL COMPONENTS, BY OTHER THAN A MANUFACTURERS AUTHORIZED TECHNICIAN, WILL VIOLATE THE INTEGRITY OF THE SEALING SYSTEM AND WILL INVALIDATE THE WARRANTY.

#### **CAUTIONS:**

- 1) **RF EXPOSURE COMPLIANCE:** RF EXPOSURE COMPLIANCE IS HANDLED DURING LICENSING BY THE RESPONSIBLE FCC BUREAU(S). THE INSTALLER OF THE ANTENNA TO BE USED WITH THIS TRANSMITTER MAY BE REQUIRED TO PERFORM AN **MPE** EVALUATION AND A ENVIRONMENTAL ASSESSMENT (EA) OF THE LOCATION AT THE TIME OF LICENSING PER CFR 47 PART1.1307. ADDITIONALLY, FIXED MOUNTED ANTENNA(S) THAT ARE CO-LOCATED WITH OTHER ANTENNA(S) MUST SATISFY THE CO-LOCATION REQUIREMENTS OF PART 1.307, FOR SATISFYING RF EXPOSURE COMPLIANCE.
- 2) A SUITABLE 50 OHM ANTENNA OR LOAD SHOULD BE CONNECTED TO THE RF OUTPUT OF THE TRANSMITTER BEFORE APPLYING DC INPUT POWER!
- 3) DO NOT ATTEMPT TO OPERATE THE TRANSMITTER ON LESS THAN 6 VDC ABSOLUTE MINIMUM VOLTAGE OR MORE THAN 28 VDC ABSOLUTE MAXIMUM VOLTAGE.

### **INSTALLATION & OPERATION:**

1) IDEALLY, THE TRANSMITTER SHOULD BE LOCATED SUCH THAT THE SPACE BETWEEN THE TRANSMIT AND RECEIVE ANTENNAS IS UNOBSTRUCTED. PHYSICAL, MAN MADE, AND ENVIRONMENTAL STRUCTURES OR TOPOGRAPHICAL FEATURES BETWEEN THE ANTENNAS WILL ABSORB OR REFLECT TRANSMITTED SIGNALS; REDUCING OR LIMITING THE TRANSMIT RANGE. METAL OR METALIZED MATERIAL IN THE ANTENNA WAVE PATTERN WILL CAUSE SIGNALS TO BE REFLECTED. OTHER STRUCTURAL AND PHYSICAL OBSTRUCTIONS, IE., CONCRETE, GLASS, TREES ETC. WILL CAUSE THE TRANSMITTED SIGNALS TO BE ATTENUATED BY ABSORBTION TO SOME DEGREE. THE EXTENT OF REDUCTION IN TRANSMITTED DISTANCE AS AN EFFECT OF THESE FACTORS MAY NOT BE STATED; BUT RATHER LEARNED THROUGH ACTUAL TRIAL APPLICATION AND EXPERIENCE.

**NOTE:** THE MANUFACTURER MAKES NO CLAIMS REGARDING THE TRANSMISSION RANGE OR DISTANCE PERFORMANCE OF THIS SYSTEM EXCEPT WHEN OPERATED IN AN IDEAL ATMOSPHERIC AND "LINE-OF-SIGHT" CONDITION.

- 2) CONNECT A SUITABLE 50 OHM ANTENNA TO THE TRANSMITTER AND ORIENT IT SO THAT THE SIGNAL WILL PROPAGATE IN THE DIRECTION OF THE RECEIVER. LOCATE THE ANTENNA AWAY FROM METAL OBJECTS, JUNCTION BOXES OR ELECTRICAL SWITCHES. THE ANTENNA MAY BE CONNECTED DIRECTLY TO THE TRANSMITTER OR VIA A SHORT LENGTH OF LOW LOSS 50 OHM IMPEDANCE COAXIAL CABLE.
- 3) APPLY DC POWER TO THE TRANSMITTER USING A BATTERY OR POWER SUPPLY. THE TRANSMITTER HAS BEEN DESIGNED TO OPERATE FROM 8 VDC TO 24 VDC AND CONSUMES ABOUT 18 WATTS OF INPUT POWER. WHEN OPERATED AT 12 VDC, INPUT CURRENT IS ABOUT 1.5 AMP. POWER SOURCES SHOULD BE STABLE, REGULATED AND BE CAPABLE OF SUPPLYING SLIGHTLY MORE THAN THE REQUIRED CURRENT. THE MATING POWER CONNECTOR IS A LEMO MODEL FGG.OB.302.CLAD42. RED DOT IS POSITIVE.
- 4) THE NTSC 1 VP-P VIDEO OUTPUT OF THE CAMERA IS CONNECTED TO THE FEMALE BNC VIDEO INPUT OF THE TRANSMITTER VIA STANDARD RG 58 / 75 OHM COAXIAL CABLE. ANY LENGTH CABLE MAY BE USED AS LONG AS THE VIDEO SIGNAL DOES NOT DROP APPRECIABLY BELOW THE 1 VP-P LEVEL.



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### **SERVICE & MAINTENANCE:**

THE TRANSMITTER CONTAINS NO USER SERVICABLE PARTS OR COMPONENTS. ANY UNIT REQUIRING SERVICE OR REPAIR MUST BE RETURNED TO THE MANUFACTURER OR THE MANUFACTURERS AUTHORIZED REPRESENTATIVE.

FOR HELP OR ADVICE REGARDING ANTENNA SET-UP OR RANGE CALCULATIONS, CONTACT THE MANUFACTURER AT THE ADDRESS BELOW:

### CONTACT:

### **DELL-STAR TECHNOLOGIES, INC.**

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