

## Allstar MVP Transmitter

### 1. General description.

Allstar MVP transmitter is a miniature, key chain, or visor mounted, 3-button programmable transmitter operating at 318 MHz. Primary usage is garage door opener. Device can be programmed to use 9-bit (Allstar compatible) or 10-bit (new Allstar MVP compatible) code via modulation. All timing derived from internal 1.2MHz internal oscillator. Unit is operating at 6V DC, supplied by two CR2030 batteries.

### 2. Programming.

User needs to program up to three different 9-'bit' codes into the transmitter. Each 'bit' can be one of three values – '+'(button1), '0'(button2), or '-'(button3). (The term bit in this case is a misnomer, since there are three values, but it is used for simplicity, same pattern as previous versions of ALLSTAR transmitters).

Transmitter can be programmed to use with conventional Allstar receivers, and also with new MVP systems. Each button on the transmitter can be programmed separately to accommodate either one of modes.

As default all buttons will work in MVP mode.

#### a. User Programming Sequence

Programming is a three-step process:

1. To program button in conventional Allstar mode press “-“(most right) button then, while holding, activate “+” (most left) button; to program button in new MVP mode press “+“(most left) button then, while holding, activate “-” (most right) button  
Press one from outside buttons then press any other button. After 5 seconds period the LED will flash to indicate the start of programming. **Release buttons during flashing. The user cannot begin the program sequence (step 2) while the LED is flashing. User is forced to wait until LED is steady.**
2. Press the button you want to program. After pressing a button the LED goes on and stays on.
3. Press the 9-button sequence to program the 9-bits. Each button on the transmitter is labeled either +, 0, or -. Push the button for each bit representing the symbol for that position in the code. As each button is pushed the LED will goes off and come back on. After the entry of the final bit (#9) the LED will blink three times indicating that programming is complete, and the transmitter goes back to its normal mode.

### **b. Other Programming Notes**

If, at any time during programming, no button is pushed for 15 seconds, the transmitter will exit programming mode and turn the LED off.

If button is pressed for 15 second the transmitter will exit programming mode and turn the LED off.

Transmitter changes its code after full programming sequence.

Anytime button #1 is programmed and the final bit (bit 9) is '+', the software will automatically create codes for buttons 2 and 3, by using the first 8 bits of button one and appending a '0' or '-' respectively.

The transmitters will be initialized during manufacturing to an 'unusable' code that can be received by a specially designed tester but not by a field receiver.

### **3. Regular operation.**

When any of buttons of the transmitter ~~was~~ activated unit RED led will go on and unit will send programmed code to the receiver. Transmitter will cease its transmission when button was pressed for more than 15 seconds.