

OPERATION

- To turn on the transmitter, press and hold the POWER button for at least 2 seconds until both red and green LEDs turn on then release.
- The transmitter is designed with a power saving feature which turns the transmitter off after 15 minutes if no buttons are pressed, regardless of receiver status.
- The PUMP output comes on along with both UP and DOWN functions.
- When the blank button is pressed, the DOWN output will turn on only
- There are red and green LEDs both on the front of the transmitter and inside the receiver case. The green LED will blink rapidly when the transmitter and receiver are communicating. It will slowly if there is no communication (i.e. - no power to the receiver)
- The transmitter's red LED blinks 1 time per second if the battery is low and needs to be charged.
- The red LED will stay on while charging and when the charge is completed the green LED will stay on. ••
- It will take longer to charge if the transmitter is on during charging. ••
- Transmitters' and receivers' green LEDs will turn on solid for 1 second at power up

SYNCHRONIZING TRANSMITTER AND RECEIVER

Each transmitter and receiver pair is synchronized together at the factory. If a new transmitter is needed, synchronizing is required. Use the following procedure:

- 1. Turn both transmitter and receiver off
- 2. With the transmitter off, press and hold the POWER button for more than 10 seconds. The LEDs will start blinking. Release the power button
- 3. Turn on the receiver
- 4. Wait for a few seconds until just the green LED begins to blink rapidly on the transmitter
- 5. Teach complete

CLONING TRANSMITTERS

WARNING! - ONLY ONE TRANSMITTER CAN BE ON AT A TIME, THEY CANNOT BE USED SIMULTANEOUSLY - use with CAUTION!

Occasionally, it is desirable to have more than one transmitter work with a single receiver. This is accomplished by a process called cloning. Cloning allows an additional transmitter (B) to have the same ID code as the original transmitter (A). If this feature is desired, use the following procedure:

- 1. Make sure both transmitters and the receiver are off
- 2. On Transmitter A, press and hold the POWER button for 10 seconds until LEDs blink, then release. Green and red LEDs will blink together at this point
- 3. On Transmitter B, press and hold buttons UP, DOWN, and POWER simultaneously until both LEDs start to blink
- 4. Wait for few seconds until the green LED starts to blink on transmitter A and transmitter B.
- 5. Turn both of the transmitters off

6. Synchronize one of the transmitters to the receiver using SYNCHRONIZING TRANSMITTER AND RECEIVER instructions above

If the cloning feature has been invoked and is no longer desired, the ID code of one of the transmitters needs to be changed. This will unclone the transmitters. If this is desired, use the following procedure:

- 1. Make sure the receiver and transmitter are OFF
- 2. Press and hold buttons UP, DOWN, BLANK, and POWER buttons simultaneously until both LEDs start toggling then release
- 3. Press any button again to select a new ID
- 4. Uncloning complete. Follow the SYNCHRONIZING TRANSMITTER AND RECEIVER procedure above to link the uncloned transmitter to a new receiver

SPECIFICATIONS

- RF: 902-928MHz FHSS 10mW
- Temperature: Receiver: -40 to +85°C Transmitter: -20 to 60°C
- Output Rating: 5A each (sourcing) 20A system maximum
- Encapsulated electronics inside receiver
- Transmitter Power: 3.7V LiPo rechargeable battery
- Battery life: 30-40 hours continuous ••
- Receiver Power: 9-30V DC, 20mA current draw at 12V



OPERATION

- To turn on the transmitter, Press and hold the POWER button for at least 2 seconds until both red and green LEDs turn on then release.
- The transmitter is designed with a power saving feature which turns the transmitter off after 15 minutes if no buttons are pressed, regardless of receiver status.
- The PUMP output activates along with all the functions.
- There are red and green LEDs on the front of the transmitter and a green LED on the receiver front. The green LED will blink 2 times per second when the transmitter and receiver are communicating. It will blink 1 time per second if there is no communication (i.e. - no power to the receiver)
- The transmitter's red LED blinks 1 time per second if the battery is low and needs to be charged.
- •• The red LED will stay on while charging and when the charge is completed the green LED will stay on.
- •• It will take longer to charge if the transmitter is on during charging.

• Transmitters' and receivers' green LEDs will turn on solid for 1 second at power up

SYNCHRONIZING TRANSMITTER AND RECEIVER

Each transmitter and receiver pair is synchronized together at the factory. If a new transmitter is needed, synchronizing is required. Use the following procedure:

- 1. Turn both transmitter and receiver off
- 2. With the transmitter off, press and hold the POWER button for more than 10 seconds. LEDs start blinking 3. Turn on the receiver
- 4. Wait for a few seconds until just the green LED begins to blink rapidly on the transmitter 5. Teach complete

OUTPUT PROGRAMMING

The user has the ability to program the receiver as desired for activating PUMP output. By default the receiver is programmed to be in POWER DOWN mode (PUMP turns on with all outputs). To program it to be in GRAVITY DOWN mode (PUMP output does not turn on with DOWN output) follow this procedure:

- 1. Make sure receiver is off and transmitter is on
- 2. Press and hold HOIST UP and HOIST DOWN buttons for five seconds until the red LED starts to blink. Release the buttons.
- 3. Apply power to the receiver
- 4. Press HOIST DOWN button for Gravity Down or press HOIST UP button for Power Down. The receiver's green LED will turn on solid for three seconds when programming is complete and accepted.
- 5. Programming complete

By default the receiver is programmed be in POWER OUT mode (PUMP turns on with OUT and IN outputs). To program it to be in GRAVITY OUT mode (PUMP only turns on with IN output) follow this procedure:

- 1. Make sure receiver is off and transmitter is on
- 2. Press and hold OUT and IN buttons for five seconds until the red LED starts to blink. Release the buttons.
- 3. Apply power to the receiver
- 4. Press OUT button for Gravity Out or press In button for Power Out. The receiver's green LED will turn on solid for three seconds when programming is complete and accepted.
- 5. Programming complete

CLONING TRANSMITTERS

WARNING! - ONLY ONE TRANSMITTER CAN BE ON AT A TIME, THEY CANNOT BE USED SIMULTANEOUSLY - use with CAUTION! Occasionally, it is desirable to have more than one transmitter work with a single receiver. This is accomplished by a process called cloning. Cloning allows an additional transmitter (B) to have the same ID code as the original transmitter (A). If this feature is desired, use the following procedure: 1. Make sure both transmitters and the receiver are off

- 2. On Transmitter A, press and hold the POWER button for 10 seconds until LEDs blink, then release. Green and red LEDs will blink together at this point
- 3. On Transmitter B, press and hold buttons IN, OUT, and POWER simultaneously until both LEDs start to blink
- 4. Wait for few seconds until the green LED starts to blink on transmitter A and transmitter B.
- 5. Turn both of the transmitters off
- 6. Synchronize one of the transmitters to the receiver using SYNCHRONIZING TRANSMITTER AND RECEIVER instructions above

If the cloning feature has been invoked and is no longer desired, the ID code of one of the transmitters needs to be changed. This will unclone the transmitters. If this is desired, use the following procedure:

- 1. Make sure the receiver and transmitter are OFF
- 2. Press and hold buttons IN, OUT, BLANK, and POWER buttons simultaneously until both LEDs start toggling then release
- 3. Press any button again to select a new ID
- 4. Uncloning complete. Follow the SYNCHRONIZING TRANSMITTER AND RECEIVER procedure above to link the uncloned transmitter to a new receiver

SPECIFICATIONS

- RF: 2.4GHz FHSS 100mW
- Temperature: Receiver: -40 to +85°C Transmitter: -20 to 60°C
- Output Rating: 5A each (sourcing) 20A system maximum
- Encapsulated electronics inside receiver
- Transmitter Power: 3.7V LiPo rechargeable battery, Battery life: 30-40 hours continuous
- Receiver Power: 9-30V DC. 14mA current draw at 12V