# Ebling Back Blade Snow Plow Wireless Controller Kit

Only sold by SnowplowsPlus.com and ControlAllWireless.com

WARNING – Always unplug the plow or shut off the battery breaker when in transport or not in use. NOTE: SEE THE QUICK PROGRAM INSTRUCTIONS BEFORE OPERATING THE FIRST TIME. DO NOT REMOVE THE TRANSMITTER BATTERY

Ebling Plow Wireless Control Kit Includes:

- Wireless transmitter with boot and lanyard and function decal on transmitter
- Receiver with fly in leads
- Connectors
- Power cord plow side
- Power cord truck side
- Breaker 300amp
- 10-AMP fuse link for receiver
- Solenoid with 2 bolts, nuts

NOTE: These directions cover our Ebling Wireless Kit only. If you ordered just the transmitter and receiver, you will not have the components of the kit and will need to supply your own in order to complete the installation. Never jump start or charge the source battery without first disconnecting this unit.



Check out one of our customer's <u>videos to see the Ebling wireless controller in action</u>. Use the YouTube videos as a general overview only. Follow the directions below for complete wiring directions and valve connection instructions.

#### <u>Transmitter Button and Wire Assignments</u>

Button #	<b>Button Function</b>	Wire Color	Connects to
Button 1	Down	Yellow	Single Spade C1
Button 3	Up	Green	Both C2 Coils
Button 2	Both wings retract	Orange	
Button 4	Both wings extend	Pink	
Button 7	Driver's wing extend	Purple	C5
Button 5	Driver's wing retract	Brown	C6
Button 8	Passenger wing extend	Pink	C3
Button 6	Passenger wing retract	Orange	C4

- Red wire: use 10 AMP fuse battery power
- Black wire: to battery ground
- See Figure B for valve connections.

#### Valve Wiring Diagram Showing Valve Functions

The valve wiring diagram showing valve functions and color of wireless remote wire connections, which correspond to the button numbers. NOTE: you will leave the black ground wire harness that connects to all valves in place.



#### Installation Instructions for the Ebling Plow Wireless Controller Kit

- 1. Black wire goes from receiver wire to the Motor ground (not the solenoid)
- 2. 14 gauge red wire goes from the receiver, with 10-amp fuse link, to always-hot side of the solenoid (large post)
- 3. Install solenoid to lower left enclosure. You will need to drill a hole to mount the solenoid.
- 4. Connect the grey wire from the wireless receiver to one of the small solenoid posts.
- 5. Connect a 14 gauge black wire to the other small post of the solenoid and then to the motor ground.
- 6. Install 24' truck side power and ground cable to the battery that is directly connected to the alternator (if dual battery vehicle) using a breaker/shut off.
- 7. Install the supplied plow-side power/ground cable. Black wire goes to motor base. Red wire goes to the always-hot side of the solenoid (large post, same post for the receiver power)
- 8. Use the supplied large gauge red wire to connect from the hot side motor post to the empty large post on the solenoid. Note: this should be the only wire on this post.

## Programming Transmitter to Receiver: Video link see online

The following are step-by-step procedures for setting the unique address between the transmitter and receiver or adding extra transmitters to the receiver.

NOTE: You need to be next to the receiver and the receiver needs to have verified 12-volt power and ground connected, along with the receiver cover removed.



- 1. On the backside of the transmitter key fob, use a paperclip and **GENTLY** insert it in the hole next to the clear blue window. Once the button is pressed, a blue LED will flash for 15 seconds.
- 2. While the blue light is flashing, Flip the keychain remote over and push and release each button individually. Make sure the blue light stops blinking before proceeding.
- 3. Look inside the receiver box next to the small red LED light and press the black programming button. The red LED will begin to flash for 15 seconds.
  - a. NOTE: if the flash is dim, check your power and ground connections, clean connections, or repair.
- 4. While the red LED is flashing, Push and release each button individually on the keychain remote
- 5. The red light will stop blinking. You have now completed the programming. Test functions
- 6. Re-install the cover on the receiver.

NOTE: The transmitter battery can last for years. Before removing the battery, you can check if it's still good by using the paperclip method outlined above. As long as the blue light starts flashing, the battery is fine. If you do attempt this, you will need to complete the rest of the programming process.

### **MT-8 Wireless Transmitter**

The MT-8 wireless transmitter is 2.87" x 4.65" in size. This industrial unit can be mated with Control All Wireless's current lineup of wireless receivers. All MT-8 transmitters come from the factory with a preinstall address (1 in 16 million). The MT-8 will transmit up to 8 individual signals to the wireless receiver using buttons 1 thru 8. NOTE TRANSMITTER WILL COME WITH THE APPROPRIATE FUNCTION DECAL INSTALLED.

Button Indicator LED.

This LED will light up when you press any of the 8 buttons, and go off when you release the button. If the LED doesn't light up the MT-8 will still work but it's time to change batteries



Programming indicator LED.

This LED will light up for 15 seconds after you press the programming button on the back and will go out on its own.

#### **Programming**

- Turn on the transmitter by toggling the switch on top to the right
- Make sure receiver has power and the cover of the receiver is off. You can test if the receiver
  has power by depressing the black button inside. The right red led will begin to flash if power is
  present. Wait until the light goes out before continuing with programming.
- You will want to program the MT-8 remote within a couple feet of the receiver
- MT-8 programming hole is found on backside of MT-8
- Using a paperclip carefully depress the button threw the hole on the backside of the MT-8
- Flip the MT-8 over and you will see a red LED flashing on the upper right side of the transmitter. While the LED is flashing, push and release each of the 8 buttons one at a time.
- LED will stop flashing after 15 seconds of pushing programming button. Wait until the light quits flashing before continuing.
- Next depress the black button inside the receiver. The receiver led will begin to flash. Again
  depress each button one at a time on the transmitter. When finished wait until the receiver light
  stops blinking. You are now programmed test all functions. Note if a function seems to be
  missing. Reprogram.



**Battery Cover** 

#### **Battery Replacement**

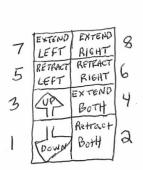
The MT-8 uses 2 standard Alkaline AA batteries. If the MT-8 is going to be used in below 0 Fahrenheit conditions, we recommend changing the batteries to Lithium. In normal use it will provide 1 to 2 years of operation. To replace the battery, remove the cover on backside of MT-8. Observe the battery polarity when replacing.

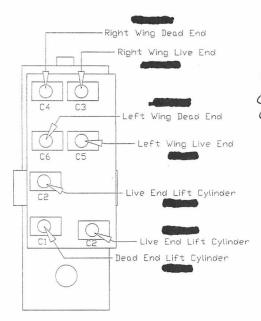
<u>In rare instances the batteries my lose connection with the terminals and need to be rolled.</u>



#### 17.4 Plow Side Hydraulic & Electrical Connections - Hydraulic Wings

#### VALVE/COIL LOCATIONS





Red - PosiTIVE

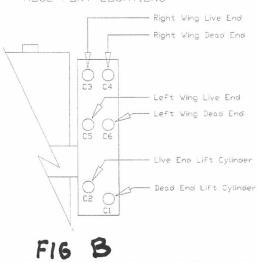
BLACK- Ground

Grey - Small Post Solenoid

Other Small Solenoid Post

Connects to Ground.

HOSE PORT LOCATIONS



#### WARRANTY INFORMATION

- 90 day warranty on wireless receiver and wireless transmitter. See specific wireless warranty on the website for in depth details.
- Check online for any updated directions at <a href="https://www.controlallwireless.com">https://www.controlallwireless.com</a>
- User must maintain good, clean and properly connected connections in order for proper operation and to avoid damage to the receiver as well as possibly voiding the warranty. It is recommended that you use a battery disconnect when the unit is not in use, as continuous powered wiring will enhance corrosion of wiring.
- We have no control over the end user's method used to install our wireless controllers. For any
  warranty consideration, all units must be sent back for inspection and testing. Burnt boards or
  any modification of factory wires of any type means that failure to follow proper installation has
  occurred. With electronics, care needs to be taken and directions need to be followed in order
  to keep your warranty in tact. All warranty claims will require pictures of the installation along
  with battery, fuse or breaker installation.