



2013

Robo Cow

the **CUTTING EDGE** *of*
CUTTING HORSE TRAINING

OPERATING YOUR REMOTE CONTROL

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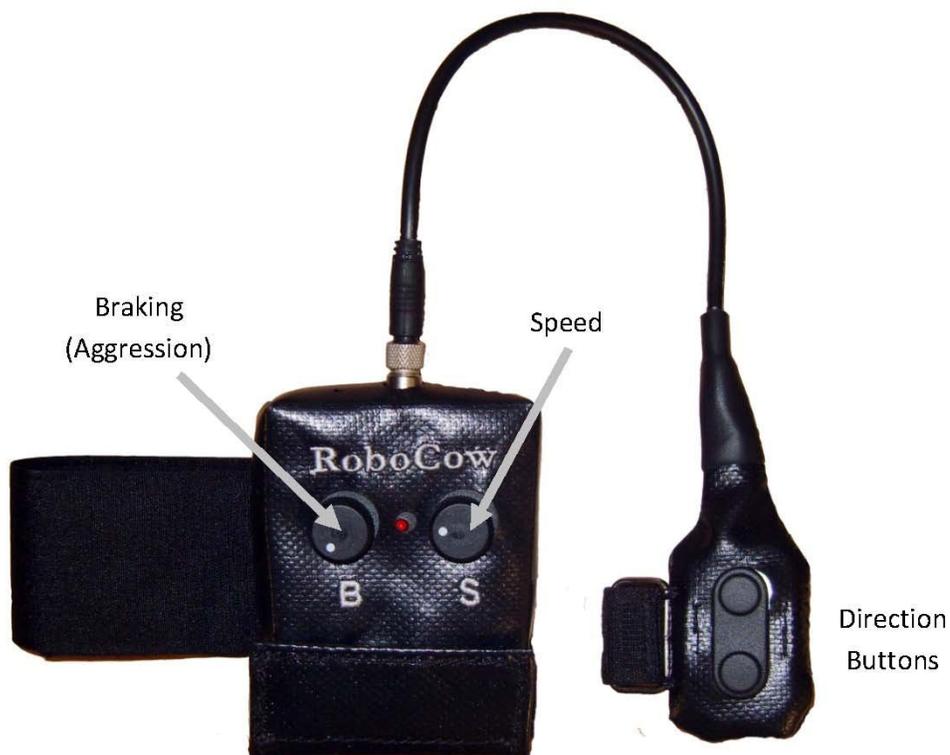
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Operating your remote control

*We use the term Flag for the documentation-but it also applies to the cow.

The two control knobs are used to set the speed and aggression of the flag.

Aggression is also known as “braking” and is labeled “B” on the body of the control. This knob is used to turn up and down the braking. It works like a volume control – turning the aggression down will slow the acceleration and deceleration of the flag. This is used for young horses. Turning it up will cause the flag to start and stop rapidly – this is great for tuning up an experienced horse. The speed knob – labeled “S” is used to set the speed of the flag. The one knob sets both the low speed and the high speed. The controller automatically maintains the ratio of low speed to high speed operation. If you wish to adjust this ratio – see the section title



“High Speed / Low Speed Ratio Adjustment”.

The direction buttons are used to set the direction of the flag. Press the button until you feel one click – press a little harder to feel a second click. The first click represents the lower speed. The second click is high speed. Pressing both buttons at once will cause the flag to move in a random direction. This is good for general practicing because it prevents you from providing subtle hints to your horse about which direction you are going to go.

Setting the arena limits:

Please read the page about operating remote control before performing this procedure.

Before plugging in the machine!

- 1) Set the speed to about 15% by adjusting the speed control – just like a volume control knob.
- 2) Move the flag or cow by hand to about 10 feet from the home position – the home position should be at least 3 feet or 1 meter from the pulley. The home position can be at either end.
- 3) Depress and **CONTINUE TO HOLD** both directional buttons on the remote control all the way down – keep them held.
- 4) **While holding both buttons completely down, plug in the main control box.** After 3 seconds, release both of the buttons.
- 5) Use the direction button to move the flag toward the home position about 3 feet from the pulley. (To properly set arena limits, the user must move the flag with the remote to the home position before step 6. If the user attempts to set the home limit without moving the flag, the machine will not store the proper arena limits).
- 6) Depress and hold both buttons completely down again for 2 seconds.
- 7) Use the other direction button to move the flag to the other end of the arena – at least 3 feet away from the pulley.
- 8) Depress and hold both buttons down again for 2 seconds.
- 9) Your arena limits are now set. Test by running the flag (slowly) into the arena limits making sure that it stops without hitting the pulley. If it does not stop, then please repeat the procedure (Remember to unplug the main unit first!) and call to tell us what was confusing, so that we can improve the documentation.

Quick Reminder Version: Depress both buttons, plug in machine, move to home, press both buttons, move to other end, and depress both buttons, done.

Turning Arena Limits Off:

To turn the arena limits feature off: Unplug the main controller from power. Depress and **CONTINUE TO HOLD** both directional buttons on the remote control all the way down – keep them held.

Plug in the main control box. After 3 seconds, release the buttons.

Unplug the main controller from power. Wait 5 seconds and plug it back in. Arena limits should now be turned off.

Powering up a machine with Arena Limits.

When a unit with arena limits programmed in is unplugged then plugged back in, the machine assumes that the flag is at the home position. It is good practice to return the flag to the home position (the limit closest to the control unit) when you have completed your session. This will ensure that the machine will be in the correct position if there happens to be a power failure. If the arena limits do not appear to be working correctly, simply unplug the machine and move the flag by hand back to the home position (without hitting any buttons), then plug it back in.

Migration of Arena Limits.

The humidity level, temperature, tension of the rope as well as the aggression of the operator may cause the arena limits to shift over time. To adjust the arena limits back to their original location, follow the procedure below.

If limits have migrated away from control unit:

- Move the flag towards the control box until it stops at the home limit. Release the button and then depress the same button again and then quickly release it. The Flag should jump about 1 foot toward the control unit. Repeat this procedure until the limit is back into its original position.

If limits have shifted away from end pulley assembly:

- Move the flag to the limit by the end pulley. Release, fully depress and quickly release the button again and the flag should move about 1 foot closer to the end pulley. Repeat the procedure until the limit is back to where you prefer it to be.

Setting the low speed ratio value

The factory default setting of the low speed ratio is set at 75% - a value recommended by numerous leading trainers.

Before adjusting your low speed ratio please confirm that the machine is operating normally and that arena limits set up functions correctly. Please refer to the section on using your remote to make sure that you understand which buttons and knobs are being indicated.

Adjustment Procedure:

- Turn both speed (“S”) and aggression (“B”) knobs on the remote all the way clockwise (zero speed, zero aggression)
- Depress and continue to hold both directional buttons down on the remote.
- Wait two seconds until the red LED light turns on.
- While buttons are fully depressed, set the desired ratio with the SPEED knob (all the way counterclockwise = 15% of the full speed; all the way clockwise = 85% of the full speed – or anywhere in between – straight up in the middle would be 50%).
- Release the buttons

The speed ratio is now set.

Return the SPEED and Aggression (Brake) knob to the desired position.

Switching motor direction – sometimes known as “Logic switch” on other machines.

Ensure that the machine has completed Arena limits setup and is operating normally.

Turn the speed control knob to zero.

Press and hold both buttons simultaneously until the LED turns on.

Release one of the buttons all the way and wait until the LED turns off.

The motor direction should now be changed.

GENERAL INFORMATION FOR THE USE, CARE OF, AND TROUBLE SHOOTING OF YOUR ROBOCOW UNIT

Important Safety Precautions

1. The main control unit should not be left in the rain or stored in very damp locations. If the unit has become wet, wipe it off and allow it to dry before plugging it back in.
2. **WARNING:** Do not use your RoboCow if the power cord is damaged. Do not disconnect or modify any of the internal wiring. **Serious electric shock or death may occur.**
3. Plug the unit only into a properly grounded 110VAC outlet with the supplied surge suppresser (or a 240VAC outlet for those units manufactured for use outside of North America).
4. Unplug the unit when not in use if it will not be used for an extended period of time.
5. The RoboCow unit is designed and tested to be used solely for its stated purpose. All other uses and any modifications to the device not authorized by the manufacturer will void the warranty and may put operator at risk.
6. Do not allow children or pets to play around the unit during operation nor allow them to ride on the flag/cow as serious injury may result.
7. Keep the cover closed on the control box at all times during operation of the unit. The electronics in the control box are light sensitive and exposure to direct light may cause them to stop functioning properly.

Care and Maintenance

Your RoboCow unit is basically a maintenance free package that is designed to operate for many years without servicing. The following general care precautions should be followed for years of reliable use:

1. The remote control should be kept in its pouch at all times.
2. The control box and the remote are designed to withstand exposure to moisture but are not meant to be rained on or submerged in water. If they do get wet, wipe off excess water with a damp cloth and then allow to dry off completely before reuse.
3. Use a damp cloth to wipe off dirt and debris from the unit.
4. The buttons and cord are rugged but will break with excessive or prolonged twisting and tugging.
5. Avoid pushing the buttons sideways – over time this will cause the protective cover to split leading to button failure.
6. Use only a quality 9V replacement battery in the remote. Ensure that when the battery is replaced, the battery clip fits tightly on the battery terminals.
7. The end pulley assembly and rope should not be left exposed to the elements for an extended period of time. Wet pulleys will freeze in cold temperatures and may break if used in this condition.
8. Check the control unit periodically for worn or loose pulleys. Dirt on the line will cause excessive wear to the drive pulley. Repeated jamming of the flag or cow into the control unit can lead to loose/damaged pulleys. Use a 1/8" Allan key to keep them secure.

Troubleshooting

If you are experiencing a problem with the operation of your unit, review the list below for some simple checks/procedures to perform prior to calling for assistance. If you have any questions concerning the operation of your unit, do not hesitate to call or email us.

Control unit will not operate:

- Is the unit plugged in? Check the breaker or fuse.
- Open the door to the control box and check that the LED lights are on. If they are on it indicates that the unit has power but the fault is elsewhere.
- Ensure that the antenna is properly attached to the top of the unit.
- Is there a battery in the remote?
- Depress and hold one of the buttons on the remote. If the red LED on the remote flashes then the remote is working.

Flag starts and stops:

- Check that the rope is looped around both pulleys on the control box and that the line is tight. The anti-slip feature will shut the unit off when both pulleys do not move at the same time.
- If the unit functions fine when the operator is close to the control box but sputters as the remote is moved away, this usually indicates a weak battery. Replace with a new 9V battery.

Arena Limits migrate significantly or do not hold:

- Ensure that the control unit is installed vertically and the rope is tight.
- Repeat procedure for setting arena limits.

Remote control stops working when it is shaken or cord is twisted:

- Ensure that the battery is properly installed and that the clips are firmly in place around the battery terminals.
- Verify that the buttons cable is screwed completely into the remote.
- When the buttons cord has been over repeatedly over twisted the control unit may periodically cut out during operation. If this occurs, hold down one button and move the button cord around in various directions to see if it causes the LED to stop flashing. This indicates a broken button cord.