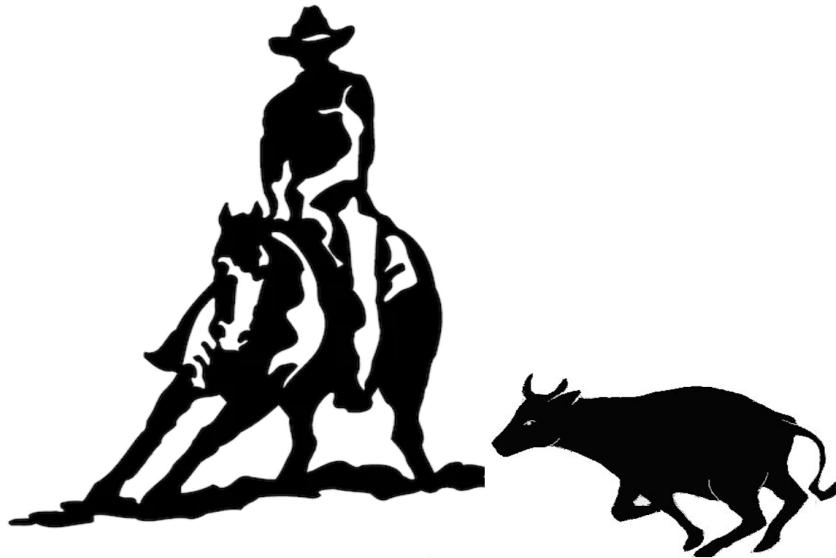


R'n'R Equine Trainer

Rate and Rollback Equine Trainer, by Starview Farm



Rate & Rollback Trainer

(c) Chris Retterath, Starview Farm, 2022, 2023

Installation & Use

Components:

1. Base unit: enclosure with drive pulley, on backing plate; power input SAE 12V connector.
2. Mounting rails and hardware.
3. Idler – return pulley.
4. Braided line, 250 feet of paracord.
5. Flag – provided with either grommets or velcro flaps.
6. Remote control with finger controller, within a wrist band.
7. 5V charger for the remote control.
8. Power cable with battery clips and an SAE plug.

Requirements:

1. Fence or arena wall, to mount the base unit and idler, ideally over 100 feet apart for best results. Maximum length is 125 feet between the base unit and idler. For longer runs, contact us for longer line options.
2. A power supply – either the optional AC power supply, or a 12 volt lead-acid battery that can provide 150watts continuously for a training session. A deep discharge (marine style) battery provides the best service.

Optional Components

1. AC power supply. Provides 12V power at 150 watts, with a compatible SAE plug, from AC.
2. Longer lines. Contact us for options to support a flag over 125 feet in length. Solutions include a separate tensioned line to support the flag, and holders to move the flag along that line.

Safety

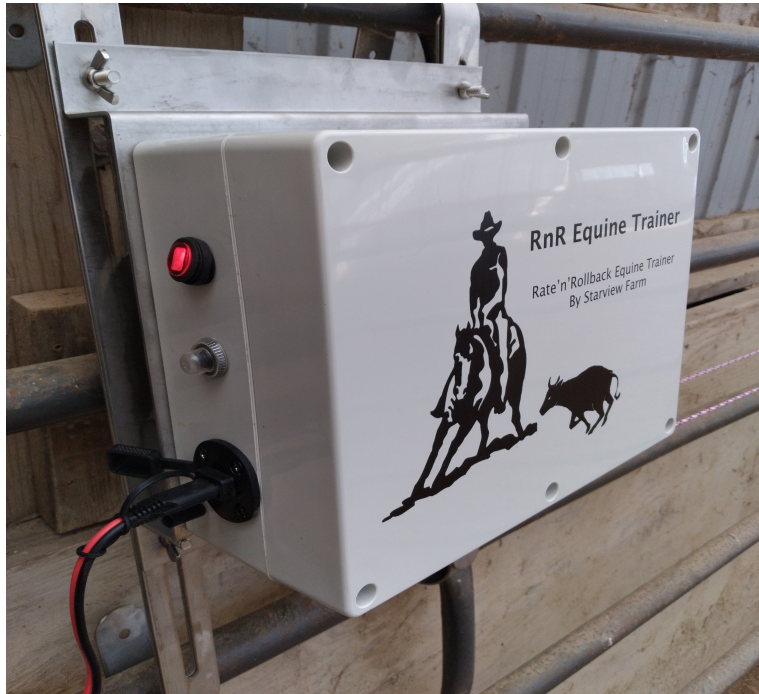
Any power unit can potentially cause a safety hazard. If using a 12V battery, make sure it is upright and secure from tipping. A 12V battery may emit hydrogen gas, a colourless explosive gas, when it is being charged. Do not enclose the battery in an unvented enclosure.

To prevent sparking when attaching or detaching cable clamps, turn the unit off first. Safety glasses should be worn. Connect red clamp to positive post, black to negative post, on the battery.

Protect power supplies from children and livestock. Do not immerse or flood the power supply or cables with water.

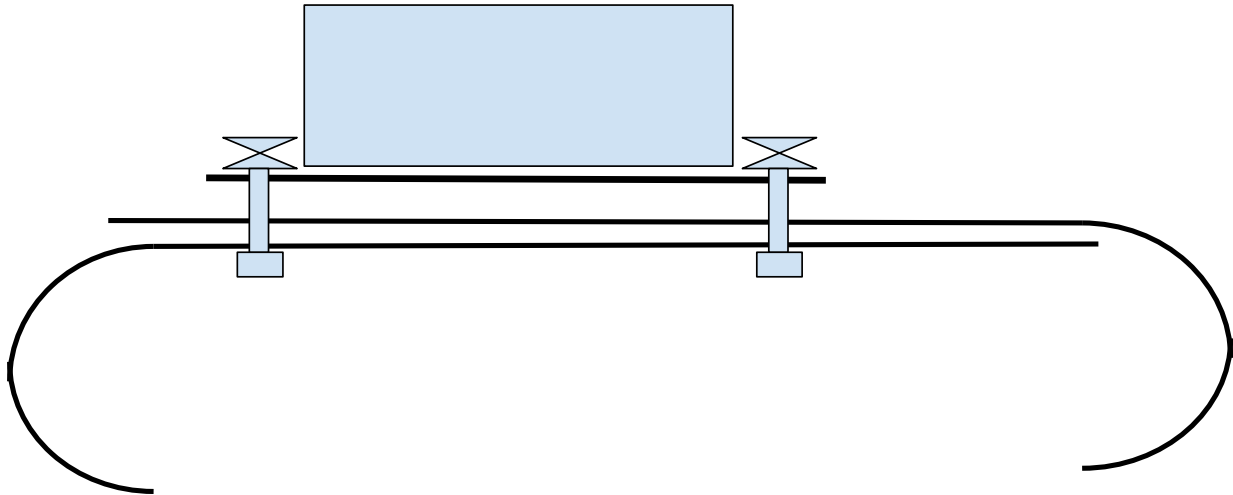
To power the AC supply, use a properly installed GFI outlet for outside use, and if required, an exterior-style extension cord.

A reset-breaker is mounted on the side of the unit, below the power switch. The breaker will pop out when overloaded. Fix the reason for the overload (such as a stalled line) and reset the breaker by pushing it inwards until it clicks.



Initial Installation

Assemble and bolt sliding rails together as shown. Carriage bolts slide on the rails, and are mounted through the rails and into the backing plate holes. Attach bolts loosely so there is some play. Put the rails and enclosure in this position to make the initial attachment:



When assembled, lift and turn the unit upright. Mount the top slide onto the top rail of your fence. Slide the system towards a vertical rail of the fence, or add a blocker board, so the tension of the line will pull the unit against a rail. This keeps the unit from sliding towards the idler.

Push the rails together so they hold onto the fence, and hand tighten the wing nuts to finish.

Optionally – the rails can be removed and the base unit attached with lag bolts, to a board on the inside of the arena.

Mount the idler pulley. On the far end of the arena, tie it off to a top rail with a piece of cord (not provided). Optionally use a ratcheting tie down strap (not provided) to allow tension to be adjusted later, after the line is installed.



Line Installation

Once the base unit and idler are installed, put up the line. Bring some electrical tape to wrap excess line, or a knife to cut it off.

1. Unspool enough line to pass the end around the idler pulley. It helps to hold the spool with a rod or long screwdriver passed thru the spool centre, for easier unrolling.
2. Walk the end of the line, back towards the base unit, unspooling as required.
3. Pass the line between the base unit and the drive pulley, to hold it off the ground.
4. Walk the line back to the spool, so there is now a continuous loop.
5. If the flag has grommets, tie the free end of the line to the grommet on the left side of the flag. Otherwise, tie the free end to a washer (provided). Use two half hitches to make a secure connection.
6. On the spool side, unspool to the end of the line. Let this line fall to the ground.
7. If the flag has grommets, pass the unspooled end through the right grommet.
8. If the flag has velcro flaps, pass the unspooled end through the washer.
9. In either case, pull the end tight to take out slack. Tighten some more to get the flag off the ground and take up some tension. Tie off the end to the right grommet, or washer.
10. If flag has velcro flaps, open the flaps and place the flag over the washer. Extra looped line can be placed under the flaps (if not excessive). Use tape to bundle the line together, or cut it off.
11. If flag has grommets, loop excess line between the grommets to hold it out of the way.
12. With the line up, walk to the base unit and pull on the line to get slack. Slip the line over the drive pulley. Some units are shipped with a dual pulley – in which case, use the the lowest pulley.

When the line is up, the system is installed. The line will stretch after initial use. If the flag dips too low, undo one of the knots and re-tension the line, or move the base unit or idler pulley to add more tension. If using a ratchet strap on the idler, do not over-tighten the line, as this puts extra pressure on the bearings of the drive motor.

Temporary Line Removal

If the arena is used for turn-out, be sure to take the flag and line down. If a horse or cow is turned out they may pull the lines down and damage the system.

To remove, run the flag to the idler end of the arena. At the base unit, use some tension to get slack, and pull the line off the drive pulley. Coil the doubled line, walking towards the idler. At the idler end, depending on the idler used – either remove the entire idler, or slip the line off the pulley. Store in a clean dry place, to protect the flag. The braided line is non-kinking, and can be coiled and stored.

To reinstall, reverse these steps – mount the idler, then walk the coil and flag back to the base unit, and slip the line back on the drive pulley.

The base unit should be protected with a rail fence or gate, or other mechanism. The power supply must be protected from livestock access; take it away if necessary.

Charge the Remote

The remote contains a rechargeable battery. Charge it by sliding the remote from the wrist strap, to access the barrel jack. Plug the 5V charger into the wall and then insert the power jack into the barrel remote.

A red light is displayed near the jack while the battery is being charged. A blue light will display when the unit is completely charged. Unplug when fully charged.

Powering the Base Unit

If using a battery as a power supply, use the cable with battery clamps. Attach the red clamp to the positive post, and the black clamp to the negative post. If the cable has a rocker switch, click it to On.

If using the 120V power supply, plug it into a suitable electrical outlet.

In either case, plug the power supply cable into the unit. There is only one way to install the cable – examine the plug before attempting to connect. Uncover it if it is covered.

When plugged in, turn the base unit on. The power switch should light up. It can now be used. If not, check the trouble shooting section below.

Trouble Shooting Base Unit

- A) If the power switch does not light up:
 - . Check that power supply is properly connected and seated.
 - . Ensure the battery is fully charged, or the AC power supply has power.
 - . Check the cords. Ensure battery cable rocker switch is ON.
 - . If the reset button has popped out, push it in to reset the breaker.
- B) If the power switch is lit but the pulley does not turn:
 - . Check the unit – turn up the speed knob. A very low setting will not move the flag.
 - . If you hear clicks when the flag is supposed to be moving, check your power supply voltage. A low battery will light the power switch but not have enough power to run the motor. Charge the battery to full capacity and retry.
- C) If the flag barely moves or moves a little and then stops:
 - . Check that the line is on both the drive pulley, and the idler pulley. Pull it and slip it over the sheave. The line will be damaged if it is not running on the sheaves of the pulleys.
- D) If power switch is on and power is sufficient, then the unit may have been damaged. Contact Starview Farm for warranty repair.

Remote Control

Use the remote to control the RnR Trainer from horseback.

To use, slide the remote into the wrist strap, so that the flex cord to the finger control runs out under the flap. Close the flap. Place the wrist strap over your right wrist. Make it tight enough to keep the controls from moving while you are riding.

Test the unit on the ground before mounting your horse. Get used to how the system works and think ahead as to how you want to use it in a session. There is a knack to riding a horse while controlling the flag, so it may be useful at first to have someone else run the flag while you ride.

Make sure the base unit is powered on.

Turn on the remote, by lifting the flap on the wrist band and pushing the power switch down (towards your wrist). A red LED should flash once to show that it is ready.

Fit the finger control on your right hand. Most people find it works well

on either their index or 2nd finger, with their finger tip above or near the 'boost' button on the end of the finger control. The direction switch is spring loaded and is actuated with your thumb. The system is designed to keep your hands free to hold reins.

There is a lot of personal preference to how to wear the control. The velcro strap on the finger control can be adjusted. The flex can be looped under the wrist band flap, to keep it out of the way. Try different combinations to see what suits you.

Looking at the fence where the flag is located, try pressing the direction switch with your thumb, towards the boost button. The flag should start moving left. Release the switch to stop that movement. If the flag moves right, and you want it to go left, see the "Direction Setup" below.



If the flag is barely moving or moving too fast, see the “Speed Setup” section below. Be sure the line is actually on the drive pulley, and not trapped between the pulley and the base unit.

Now, using your thumb to send the flag left or right, try pressing the boost button on the tip of the finger control. The flag should speed up. Releasing the boost button causes the flag to slow back down.

Using the boost is a fairly advanced step. You are doing three things at once – guiding your horse, pressing the flag direction with your thumb, and using your finger tip to ask for an additional burst of speed. Practice using the system without the boost until you are comfortable with the controls and how your horse is working, then move up gradually to use all the controls.

The boost amount is customizable – it can be anywhere from zero (no boost) to 2 jumps in speed. To change, see the section on ‘Setting Boost Amount’ below.

Speed Setup

The base unit speed may require adjustment for the work to be done in that session. High speeds are not recommended, as you may end up frustrating your horse.

At startup, the base unit speed is set by a speed control knob underneath the unit (beside the pulley). Start with this in the middle and adjust to your preferences.

NOTE: if the knob is turned all the way up, there will be no room for boost adjustment (the boost will do nothing). In this case, turn the knob down a bit to get boost to work again.



If the knob is turned all the way down, the flag may not move at all. Adjust this from the ground before starting work.

The remote can also be used to fine tune the speed. Click the fast or slow button once, to get an increment of speed. For a large change in speed, press and hold the fast or slow button for more than a second – while it is pressed, the speed will change. The flag does not have to be moving while the speed is changed – you can make a few adjustments and then try bumping the direction switch to see the result. Changing speed with the remote is lost when the base unit is shut down.

Direction Setup

When shipped, the unit is setup as follows:

- if the base unit has the pulley on the bottom,
- and the finger control switch is pushed to the left,
- and the flag is mounted on the line, on the front side of the pulley;
- then the pulley will turn counter clock wise, causing the flag to run to the left.

To reverse the direction of the flag, follow these steps:

1. Double click the boost button, 3 times within 5 seconds.
2. The LED on the remote should go on for 5 seconds.
3. When the LED goes out, double click the boost button again.

The flag will now be reversed. This setting is maintained in the remote.

To reverse this back to the original setting, redo this process again.

Setting Boost Amount

If the flag is moving, pressing the boost button should speed up the flag. This speed up is held as long as the boost button is held down. Releasing the boost button should restore the previous speed.

If the speed setting is at maximum, there is no room for a boost, so make sure it is not turned all the way up -- most training should be at slower speeds.

The boost button setting can be 0 (no boost), 1 (as shipped), or 2, for a larger speed bump.

Change the boost as follows:

- to reduce or eliminate boost, double-click the Slow button, 3 times, within 5 seconds, to bring the boost down by one increment (say, from 1 to 0)
- to increase boost, double-click the Fast button, 3 times, within 5 seconds.

If successful, the LED will display a short flash. If the LED did not flash, the double clicks were not recognized or not provided within the 5 second window – try it over again.

Once changed, run the flag and press the boost button, to check that this change is what you want. If not, try a different setting.

Boost settings are saved in the remote.

Running the Flag

The Rate'n Rollback Trainer helps you get a horse trained to:

1. Rate a cow – that is, follow the cow at the same speed, not getting ahead of the hip, and not falling too far behind.
2. Deep stops – when the cow stops, the horse should stop, without getting ahead of the hip, and with a soft, deep stop that can then be the base for a quick turnaround (rollback), or another move forward.
3. Perform Rollbacks – in cattle work, this is done by turning on the haunches, with shift of weight to the rear, and then a turn around to follow the cow. The turn is always towards the cow.

With the RnR Trainer, you can practice this without a cow – the horse and rider use the flag to mimic the cows movements. This can be part of the initial training of a horse, and also a regular 'tune-up', to keep reinforcing the lessons. The flag stands for the cow's hip.

Practicing the “Rate”

Use the remote to bring the flag into the left end of the arena wall, with room behind it for your horse. Position your horse parallel to the wall, so it is facing the right end of the wall, and with the flag in front of the horse.

WARNING – most horses will be startled by the first flag movement. Start with your horse at least 30 feet away from the wall and flag, and be prepared for a spook. As your horse gets used to the flag, you can get closer – eventually staying 10 or 15 feet away off the wall, or whatever keeps you and your horse comfortable

Start the flag at low speed and push your horse to follow the flag. After a few lengths, stop the flag and ask the horse to stop. Wait a few seconds, then restart the flag and push your horse to follow the flag again.

Do not let the flag get too far ahead of your horse - you want the horse to be with the flag. If the flag is too fast, slow it down. Do this exercise at the walk.

When you are ready to change direction, do it with the flag stopped and the horse quiet. If you have to stop and ride up to face the other way, thats fine, too. Remember to position your horse so it is following the flag.

Practice the “Rate” until your horse is comfortable following the flag at a walk.

The next step is to add some boost as the flag and horse are moving. Be ready to cue your horse to move forwards and stay with the flag, and to stop when the flag is stopped

Then, try dropping the boost before stopping the flag, and settling down in the saddle to cue a slowdown. Work on having your horse 'hooked onto' following the flag.

Getting the Stop

Background

It helps at first to think of a stop as three steps:

1. Stop (whoa) – sit deep, lift your hand;
2. Step back – ask for one step backwards: keep your hand up, and use your legs to get the step back;
3. Release – stop leg pressure and lower your hand. Let your horse rest.

The release is the reward to the horse. At first, count to 5, to establish the reward. This can shorten as you and your horse get better at the stop.

Doing stops like this, consistently, is key. If your horse throws its head up at the stop, or gets excited about backing up after a stop, tracking sideways or tossing its head, then you need to fix these issues first. Always providing a soft release will help reduce anxiety, and getting the shift backwards will provide a deep stable stop for cow work.

When your horse can do these things, the step back can be compressed into a shift backwards in weight. Your horse will be ready to stop deep, and then move lightly off his front end and turn around (rollback). At speed, this will set the horse up for a sliding stop.

Stopping with the Flag

Once you have established a good solid stop, use the flag to reinforce it.

Following the flag, when the flag stops, your horse should stop.

At first, you will have to ask for the stops. And to reinforce the backwards shift, stop the flag, get the stop on the horse, and then back the flag up until it is positioned at the horse's hip. Stop the flag at that position, then turn your horse so that its nose is even with the flag. This will help lead to working on the rollback.

Don't hurry these maneuvers – work the flag slowly up the arena, with your horse's nose behind it. Stop the flag, stop the horse, then back up the flag to your horse's hip, and then turn around again to go back the other way. Don't use boost – keep everything slow and easy for your horse.

The turn must be done with a light front end. Leg pressure on the side away from the wall will push the horse around to finish the turn. Keep your hands light.

Practicing Rollbacks

Once you have rating and stopping, you can work on the rollback. You can do a rollback at any speed, anywhere in the arena. Using the flag is useful for concentrating your horse on consistently getting set up for a deep soft stop, and immediate rollback, to follow the flag.

Work at slow speeds first, until you have this working.

In the rollback, you will follow the flag with your horse, stop the flag and the horse, and when the stop is complete, press the remote for the other direction. The flag is in front of the horse at the stop, but wait until the flag is at your horse's hip, and then ask for the turn. Guide your horse to follow the flag and come around, using weight on the haunches and with a light front end. Practice at slow speeds until these are solid. Then mix it up, with a slow run down, then a fast turn around back, then perhaps a slow run the other way.

Storage and Care

Keep the remote in a clean, dry place when not in use. Recharge before storing.

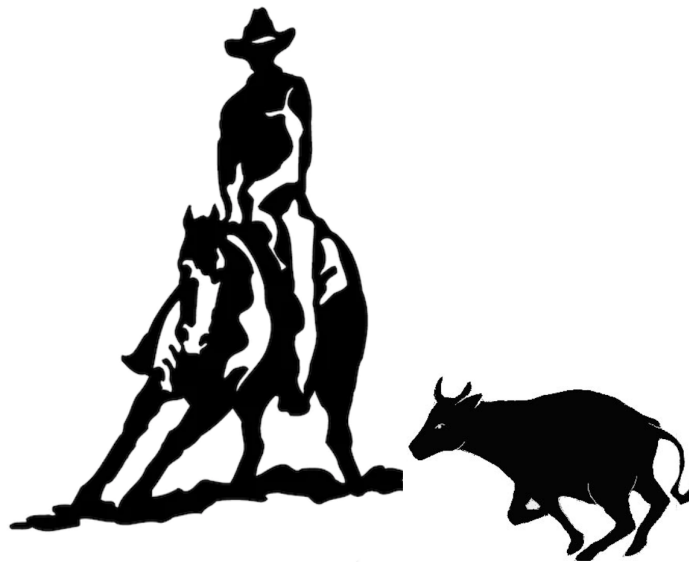
If the flag is velcroed to the line, they can be easily removed for washing or storage. To prevent weathering and fading, they should be stored when not in use. Hand washing is recommended, as there is a wire in the bottom seam of the flag that could escape and damage a washing machine.

If the wire is lost or missing, cut a piece of straight wire, such as a coat hanger wire, and slip into the seam on the bottom edge of the flag. The wire keeps the flag from curling up when driven.

The motor drive has ball bearings that can develop flat spots if left holding a tight line for a long time. Recommend pulling the line off the drive pulley when it is not in use; simply tie the line to the rail fence by the base unit; or if using a wooden fence, attach a mount point such as a screw or nail and slip the line over that point when not in use.

The base unit should be turned off when not in use. Clean with non abrasive cloth and mild detergent.

If mounted permanently outside, cover the base unit when not in use, to keep out weather and bugs. Protect the unit from inquisitive livestock, with a rail panel or guard.



Packing List

- Base unit: enclosure on steel plate; 4 sliding steel rails; 4 SS carriage bolts and wingnuts.
- Flag.
- Paracord, spool, 250 feet. Washer for end connection (velcro flags only)
- 12V battery clamps with SAE connector.
- Idler wheel or pulley.
- Remote control with attached finger control.
- Wrist band for remote control.
- 5V charger for the remote control.
- Installation/instruction booklet