## **12 VOLT COW POWER**



# The Australian designed and made MECHA **JICAL COW**

Set up anywhere • Easy to operate • Safe



Features: Full function Digital remote with optional MULTI Speed Bump and Programming. Ac power option and Adjustable mounting brackets are also available.

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## WELCOME TO WAZZ-A-COW CUTTER TM START UP MANUAL

Thank you for your purchase and the chance to have our Cow in your training pen, we have spent many years perfecting our system to meet the highest standards, please take the time to read our detailed manual as there are many features and tools available at your finger tips. You will need a 12 volt battery or optional AC Adapter to run your Cow, if running a 12 volt battery we suggest you use an optional solar charger to maintain charge on a weekly basis. Our Drive motor produces very high torque [power] with very low draw [amps] so a fully charged battery supply will run all day long, then simply charge overnight. Battery Tip - Keep the battery off the ground [rubber mat or similar] for longer life.

## **QUICK START UP-CONTROLLER & REMOTE**

- Step 1. Remove all the components from the box, 12 volt power lead, Idle pulley and Digital remote etc.
- Step 2. We suggest you power up the unit first and go through the basic functions before heading out and setting up in your pen, this way you will be confident to adjust speeds and general running of the unit.
- Step 3. Find a suitable bench to lay the controller down and plug the power lead in [12 volt clips to a battery or plug your AC adapter into mains power] The power plug has a black locking collar, simply push and rotate the two pin plug till they line up, then rotate the black collar clockwise to secure.
- Step 4. Turn on the unit, 'System Stopped' on screen. Fit the remote to your right or left index finger [next to your thumb] [adjust Velcro to suit] push the left Black arrow button with your thumb to go left, push the right Black button to go right. [Amps on screen] Amps simply means, the power being used to drive the motor.
- Step 5. Adjust the speed by clicking the top oval button to increase speed [every click 10% up] click the bottom oval button to decrease speed [every click 10% down] Look carefully at the remote and you will see up and down marked.
- Step 6. The Controller has many features and functions which can be set in the Menu, we will discuss these further in the Advanced Screen Display. OK, you are ready to set up your Cow/Flag in the pen.

## SET UP IN THE PEN

Step 1. Mount the Controller to the right hand side of your pen [est. 1-1.2 m / 3 - 3 ½ ft from the ground] using the adjustable Stainless brackets supplied with the Cockatoo & Eagle Packs or use the stainless steel support on the Outback pack. Please mount securely as the drive rope will need to be tightened later to avoid slipping. Hook up the power option your using, 12 volt or the AC adapter.

NB. Mount the AC Adapter away from the unit, if too close you may find interference with the remote [stop/ start effect] Do not allow the Adapter to swing from the Plug! Please mount securely.

- Step 2. The Idle pulley needs to be set up about the same height at the opposite end of your pen, use the Snap hook on the pulley and a small length of rope to mount to the rail. The idle pulley needs to run close to vertical to aid the drive rope.
- Step 3. ROPE SET UP. We supply 125 m / 410 ft of 16 Plait Yacht braid, this allows you to run up to a 30m/100 ft Cow. The Cow requires 1 x Drive rope - which goes around the Drive pulley and the Idle pulley in one length [cannot be joined] 2x Guide ropes which support the shoulder and the rump [cannot be joined] The Flag requires only the Drive rope to operate, so we suggest up to a 30m/100 ft run, this will leave you enough rope to run a Cow at a later date.
- Step 4. FLAG ONLY SET UP. [30m/100 Ft] Run the drive rope supplied through the Idle pulley and over the top of the Drive pulley and back, use the snap hooks and the Carbon Fibre cleat supplied to firmly tighten the rope at the bottom. Do not cut the rope until you are satisfied with the length of your run [NB. The drive rope cannot be joined, it must be in one length] Attach the Flag to the Drive rope with the velcro wrap and your ready to go, after several runs back and forth retention the drive rope as needed.
- Step 5. COW SET UP. Now you have run the drive rope for the Flag, you will need to run two Guide ropes to support the Shoulder & Rump of the Cow. We suggest you run the guide ropes in one length if possible, so tie off one end about 100mm/ 4 inches to the left of the Controller Drive pulley [see diagram] then run the rope to the opposite side and back. The guide ropes need to be about 150 - 200 mm / 6 - 8 inches apart to allow the Cow to turn around.

- Step 6. We have supplied two COW STOPPERS [EAGLE Pro pack] these are designed to stop your cow hitting the ends when busy with the reins. Position them about - 1.2m/3 ½ ft from the ends on the back Guide rope [see diagram] simply tie a knot behind the Ball to stop them moving. These Cow Stoppers will also work in Program play back if the Cow becomes a little lost, the electronics will sense them and stop to wait for the next programmed direction change.
- Step 7. Tighten the Guide ropes and retighten after a few runs until the rope settles in, the Drive rope will also need to be adjusted to avoid rope slippage, however Do Not Over Tension. Please use the Guide ropes to hold your Cow up and the Drive rope to simply pull the Cow / Flag back and forth.
- Step 8. Using the snap hooks provided, clip the Cows rump to the back guide rope and the Cows shoulder to the front guide rope. Now clip the Cows head to the bottom of the drive rope using snap hooks and tighten with the Carbon fibre cleat provided. Your now ready to go, so run the Cow back and forth several times then retention all the ropes as needed. You may adjust the guide rope width in or out to change the action of the Cow in the turnaround.

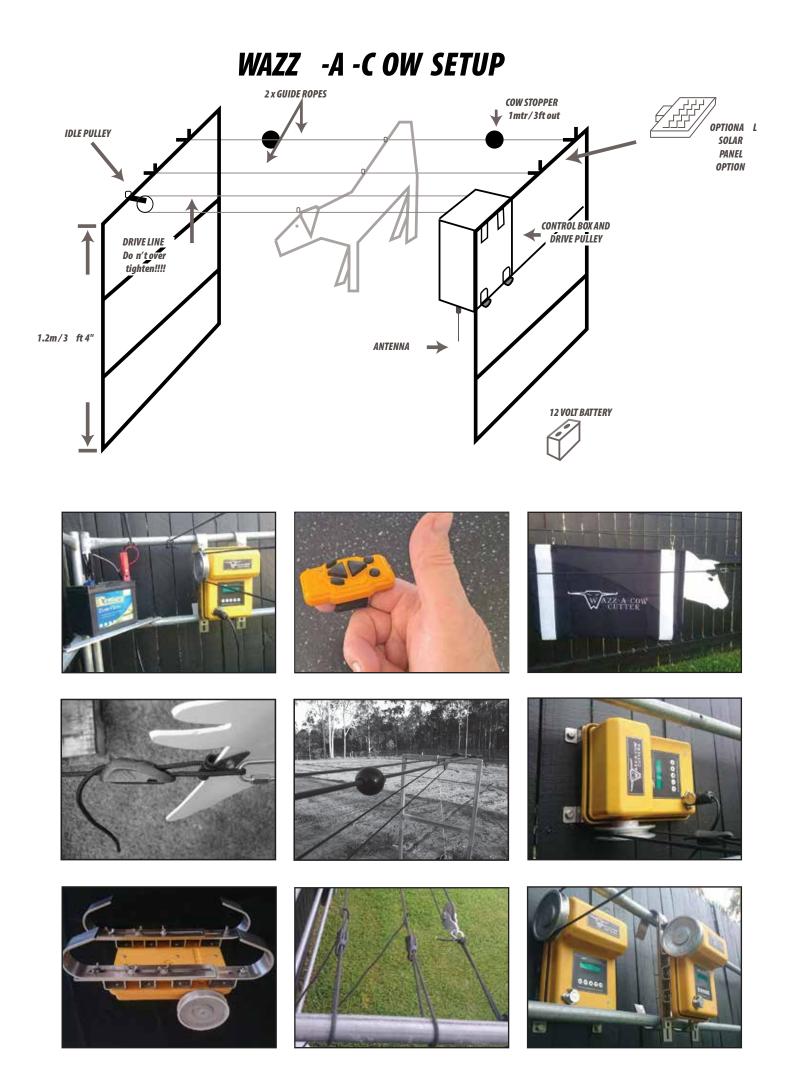
TIP FOR SET UP - The Adjustable mounting system supplied with the Cockatoo & Eagle Packs may be removed reversed and set up horizontally so you may mount the unit onto a flat wall, they are designed to be versatile and used in almost any configuration. Use wire or similar to weigh the flag down to reduce flapping in the wind this wire can be installed in the sleeve at the bottom of the flag.

### **REMOTE FUNCTIONS**

| THE OUTBACK PACK  | Use the Black arrow button to move Left or Right and the small oval button to speed Up and Down.  |
|-------------------|---|
| THE COCKATOO PACK | As above, with the added Speed Bump feature, hold the Left Arrow<br>down to move left, continue to hold down and roll your thumb over to click<br>the Right arrow button once. The Cow / Flag will speed up 20% above the<br>speed set at remote, when you stop, the speed will return [default] to your<br>remote speed setting. Then press and hold the Right arrow to go right and<br>click the Left arrow once for Speed Bump to take effect. [Adjust the Speed<br>Bump in the menu to 10-20-30%] |
| THE EAGLE PACK    | As above, with added Program Functions, we suggest you try Record and<br>Playback with the Controller on the bench first, set her up in the barn to read<br>the Screen information and obtain the feel of the buttons.<br>See Program setup below   |

#### SET UP FOR PROGRAM MODE [EAGLE PRO PACK]

- Step 1. RECORD Adjust the speed you would like to record at by running the Cow/Flag back and forth stopping in the middle. Then click the REC button once. Teach 1 will appear on screen, press the Left arrow button to move left and Right arrow to move right, record several moves back and forth, the unit records in real time, then stop in the middle. **The bright light on the front of the unit will flash when recording.**
- Step 2. STORING Now click the REC button again and Program 1 is stored, System stopped appears on screen and the unit is now returned to normal manual mode. Repeat the above to record program 2-3 & 4.
- Step 3. PLAYBACK Click the Play button once. SELECT PROG appears on the screen. Click the Left arrow button to Playback Program [1]- Click the top oval button to Playback Program [2] -Click the bottom oval to Playback Program [3]- Click the Right arrow button to Playback Program [4] while in playback mode any button will Pause the program and any button will resume playback. The bright light will stay on in playback.
- Step 4. PROGRAM SELECT Once any selected program has finished the Screen will read SELECT PROG. At this point you may select 1-4 programs to playback or simply press play again to exit and return to manual operation, System Stopped on screen.
- Step 5. DELETING PROGRAMS Hold the MENU button till max speed appears on screen, keep clicking the menu button till delete playback 1 appears on screen. Simply use the up and down arrows to select which program to delete then click the SET button to delete. To exit the MENU click the CODE button.
- Step 6. TIPS FOR PROGRAMMING Always start and finish your program recording in the middle of the pen [place a mark to sight the centre] and remember to have a start and a finish in your training. Our system allows for up to 100 moves back and forth, however we suggest only using about 10-15 moves so you and your Cow/Flag do not become lost. So mix it up with long and short runs at different speeds using the 1 4 programs available, remember the pause function allows you to stop at anytime during playback to give you and your horse thinking time. NB. If all four programs are used, Memory Full appears on screen if you try to record.
- NB. If program selected is empty, select another or exit play back by clicking the play button.



## **ADVANCED SCREEN DISPLAY**

- Step 1. To access the Menu, turn the unit on, then press and hold the menu button down till MAX SPEED 70% on screen. Whenever you turn the unit on, your Cow/Flag will start at this speed, use the remote to change speeds during operation.
- Step 2. Press Menu again, MIN SPEED 30% factory set, the remote speed adjust will not go below this figure.
- Step 3. Press Menu again, Max Current set at 15amps, the unit will shut down to protect itself if overloaded, auto reset.
- Step 4. Press Menu again, 'RAMPING STATUS UP OFF DOWN OFF' on screen, this will give you a instant start and instant stop. To change, click the Up arrow once to set 'RAMP UP ON DOWN OFF' this will give you a soft start and a instant stop. Click again to select 'RAMP UP ON & DOWN ON' this will give you a soft start and a soft finish.
- Step 5. Press Menu again, 'RAMP UP' on screen, here you have 4 settings, adjust by clicking the Up or Down arrows. Ramping up is the speed your Cow/Flag moves off, HIGH = 3 SEC delay - MED HIGH = 2 SEC delay - MED LOW = 1 SEC delay & LOW is no delay.
- Step 6. Press Menu again, 'RAMP DOWN' on screen, here you have 4 settings, adjust by clicking the Up or Down arrows.
- Step 7. Press Menu again, 'REMOTE TIME 50 ms' on screen, this is the reaction time the remote works at, and is Factory Set.
- Step 8. Press Menu again, [EAGLE PRO PACK only] 'DELETE PLAYBACK 1' on screen, use the arrows to select which program you would like to delete, use the SET button to delete.
- Step 9. Press Menu again, [COCKATOO & EAGLE PACK only] 'BUMP SPEED' on screen, use the up or down buttons to select, Bump speed is used to change your speed while the Cow/Flag is moving, refer to remote functions to operate

Step 10. Press Menu again, you have returned back to the start, press the CODE button to Exit the Menu.

TIP FOR SET UP At any time you may EXIT the Menu by pressing the CODE button, this will lock in any changes you have made to the Unit.

## **TROUBLE SHOOTING**

- BLANK SCREEN Check Power supply Unit turned on Check leads are correct, Red Positive, Black Negative Check battery charged Wiring connected at the board.
- SYSTEM STOPPED System Stopped on screen, no screen change when you press the remote, check if the battery is flat in the remote. Replace battery / try spare remote.
- START / STOP Check supply battery is charged Check and replace remote battery [ 2032 ] Out of range, operating range 25-30 meters Warn or damaged remote.
- START / STOP cont. Check Amps display on screen inside the box, if operating at 10 -12 amps continuous, auto safety shut down will take effect Check Idle pulley is free and the ropes are not tangled The run is too long.
- FLAG FLAPPING When operating in a windy environment make a small cut in the Flag hem and insert a length of plain wire or similar, this will weigh down the flag and reduce flapping.
- SMART COW You may change the width of the Static ropes that hold the Cow up, this will affect the way the Cow moves. Close together and the Cow will stop straight at speed then back up before turning. Move them apart for running slower to obtain a smooth turn around, a bit of trial and error to achieve the result you are looking for.
- 12 VOLT SUPPLY BATTERY Our motors are very high torque low draw so a small ride on mower style battery is OK and will charger faster when using a Solar panel. Remember to always have a rubber mat or similar under the battery... they hold charge longer.
- IDLE PULLEY Our idle pulley is super heavy duty and will last a lifetime, ensure your drive rope is not tangled and just tight enough to avoid the rope slipping, especially when record and playback is used.
- CONTROL BOX Our unit is designed to be left out in the weather.... However to keep the unit in tip top condition we suggest a small cover to keep the birds and animals off when not in use.
- FLAT SUPPLY BATTERY The 5 watt solar panel is a only a trickle charger, if you find your 12 volt supply battery is flat and you don't have the AC power Adapter, you may run our Cow on a Battery Charger... just leave the units two power lead clips on the battery, disconnect the solar panel clips and piggyback the charger clips onto the supply battery. Your unit will run all day long while charging the battery.

- COW HITTING THE ENDS When recording your program..... stop your Cow well away from the ends... only record 10 15 moves, you may repeat the run if needed..... Insure you have installed the COW STOPPERS either end of your run, this way if the Cow runs to far one way or the other the Cow stoppers will stop the Cow, and simply will wait for the next move. You may have to start the program you have selected a little to the left or right of centre to balance out the run.
- PAUSE MODE Remember any button on the remote will Pause the Playback..... Any button will restart it.... NB. Everytime you Pause, the program will extent slightly as your slowing down the motor to stop then restarting. You will do no harm by using the Cow Stoppers to stop the over run... Our electronics are designed to stop with this resistance.

#### **TUNING IN NEW REMOTES**

The remote batteries will run flat from time to time so keep a couple of spare batteries on hand, they use a 2032 - 3V button style battery available online.

- Step 1. Turn the unit on. System Stopped on screen, hold the CODE button down till 'REMOTE READY FOR CODING ' appears on screen.
- STEP 2. Press and hold either arrow on remote button till 'TX RECEIVED' appears on screen... then release remote button... wait till 'LEARN EXIT' appears on screen... then System Stopped. Try the remote...

#### HOW TO CHANGE THE REMOTE BATTERY

- Step 1. Using a small screw driver remove the bottom screw on the back
- Step 2. Loosen the screws [Velcro strap] no need to remove
- Step 3. Separate the two halves and remove the old button battery
- Step 4. Carefully install the new 2032 3V button style battery. [Avoid touching the flat surface of the battery]
- Step 5. Reassemble taking special care not to over tighten and strip the thread inside.

### WARRANTY:

1 YEAR ON THE REMOTE - 2 YEARS ON THE ELECTRONICS - 3 YEARS ON THE MOTOR Thank you for taking the time to read our Manual, in time the functions will become second nature and the Remote will become an extension of your thoughts for both position and timing on the Cow. Please do not hesitate to contact us for any assistance no matter how small, and again from all of us here at Wazz-a-cow Cutter thank you.

**Cheers Wazza** 

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