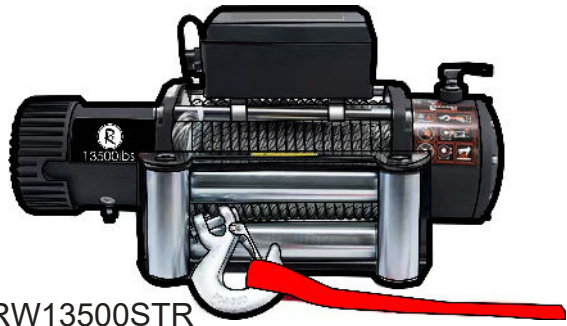




Rocwood



RW13500SNR



RW13500STR

WINCH

13500lb



This manual provides important safety information and instructions on how to install your winch. Every winching situation has the potential for personal injury. In order to minimize that risk, it's important to read this manual carefully.

This manual features a quick start guide. This can be used to aid the setup of your winch but it's important to read and understand this manual fully prior to setting up the winch.

Keep this manual in a safe place, review it frequently and ensure that all users have read it to ensure safe operation.

English

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- 03 -Mounting
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- 04 -Freespool operation
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- 12 - Detailed specifications - RW13500SNR
- 16 - Detailed specifications - RW13500STR
- 20 - Wireless remote wiring diagram
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Quick start guide

Mounting

CAUTION: To prevent serious injury due to accidental activation, complete the winch installation before wiring.

WARNING: Always choose a mounting location that is sufficiently strong to withstand the winch pulling capacity.

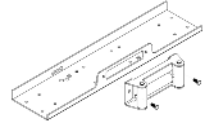
WARNING: Always spool the winch rope onto the drum in the direction specified in the documentation. This winch should always be mounted in a horizontal orientation with the rope winding on / off the bottom of the drum. This ensures that the automatic brake will function correctly and it helps prevent the rope from bunching on one end of the drum. Bunching can damage the winch.

Included Mounting Components:

4 x M10 locknuts (1.5), 4 x M10 bolts (1.5 / 35 8.8), 2 x 7/16 bolts (1 / 14)

1. Install a mounting bracket if necessary

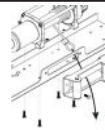
2. If using a mounting bracket, fasten the fairlead to the mounting bracket using the 2 x 7/16 bolts (1 / 14). If you're not using the mounting plate included, attach the fairlead to the appropriate position of your own mounting plate. It must be directly in-line with the rope spool direction.



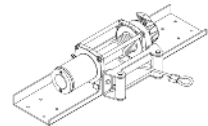
3. Set the 4 x M10 locknuts (1.5) into the winch feet.



4. Thread the end of the rope through the opening of the mounting bracket and fairlead.



5. Set the winch in mount, install the 4 x M10 bolts (1.5 / 35 8.8) and tighten them. Always confirm required bolt length to ensure proper thread engagement.



6. Attach the hook to the winch rope loop and attach the hook strap to the hook.

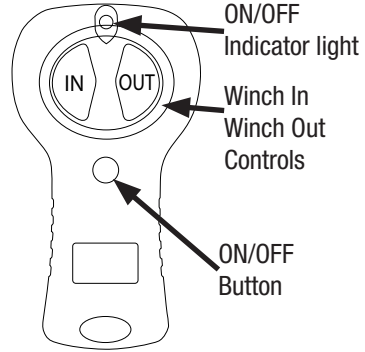


Wireless remotes

Before you begin, you should familiarize yourself with the wireless remotes.


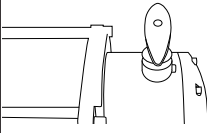
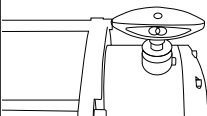
The remotes should be turned off when not in use. The battery is located in the back of the remotes. Be careful to keep your remotes away from water. To power on the remote, hold the ON/OFF button for 2 seconds you will notice the indicator light turn red.

To power off the remote, hold the ON/OFF button for 2 seconds you will see the indicator light has now turned off.

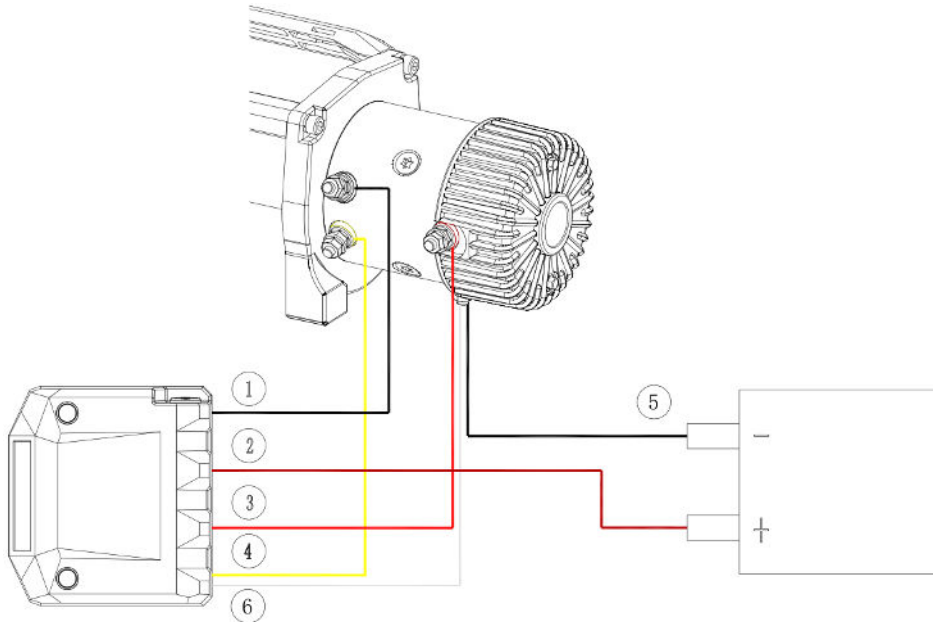


Freespool operation

Rotate the clutch to the “free spool” position. Re-engage the drum by returning the clutch knob to the “engaged” position. If the drum rotates in the wrong direction when in use, check your wiring. Ensure that at least five turns of wire cable / ten turns of synthetic rope are left on the drum at all times.

Clutch type	Freespool Operation	 CAUTION
Engaged		<ul style="list-style-type: none"> • Never engage clutch knob while drum is turning. • Always discontinue power supply if the motor stalls. • Always fully engage the clutch before winching. • Never use excessive force on the clutch handle. If it's hard to turn under load, release some tension first.
Disengaged (Freespool)		

Wiring diagram



Control box

- ① Control to Winch(Black)
- ② Power to Battery (Long Red +)
- ③ Power to Winch(Red)
- ④ Control to Winch(Yellow)
- ⑤ Power from Battery(Black-)
- ⑥ Control to Winch (thin Black wire)

Battery

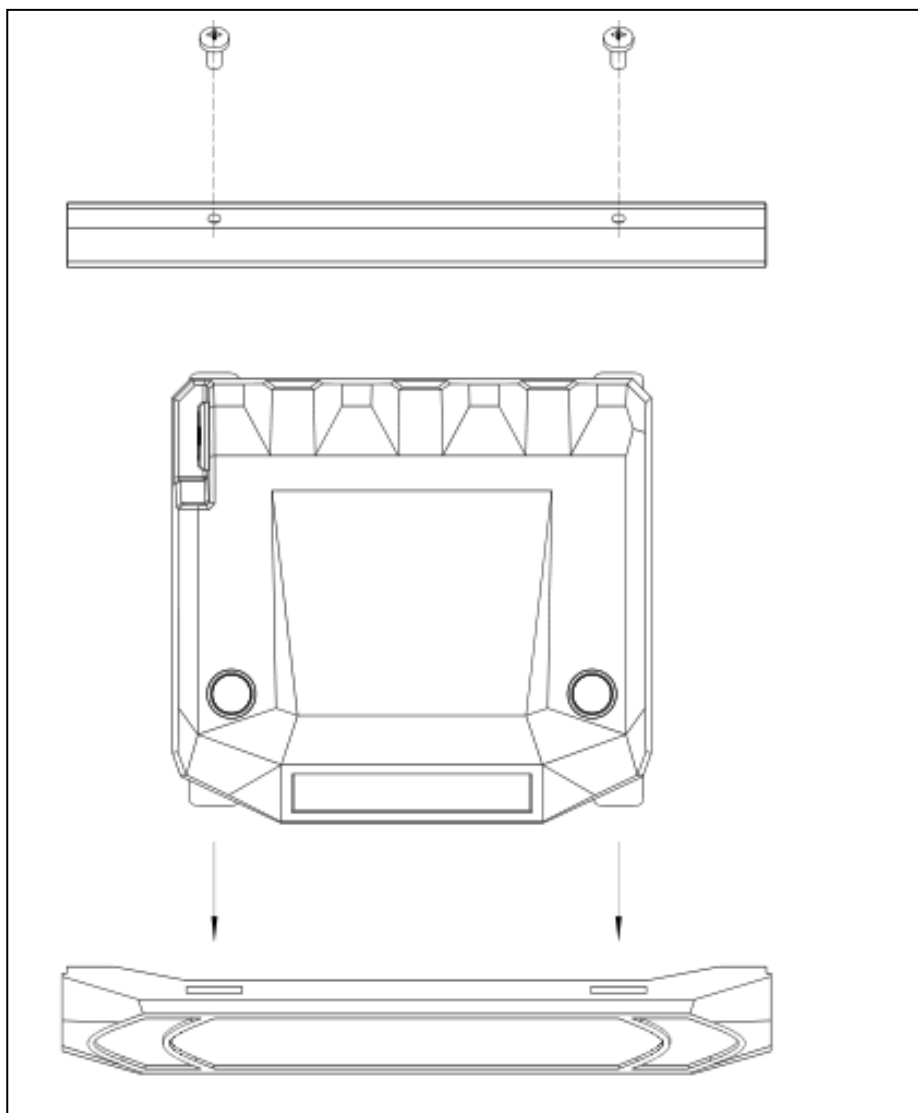
Control Box Connections

1. Connect the Black wire to the Black terminal on the winch ①
2. Connect the Red wire to the Red terminal on the winch ③
3. Connect the Yellow wire to the Yellow terminal on the winch ④
4. Connect the thin Black wire to the Earth terminal in the winch ⑥

Battery Connections

5. Connect the long Red cable from the control box to the Positive terminal + on the battery ②
6. Connect the negative terminal from the battery to the Earth terminal on the winch with the Black cable provided ⑤

13500lb control box setup



The control box can be put over tie bar. First insert the bracket under the control box into the front tie bar, then install the control box bracket on the black tie bar with two screws.

Health and safety symbol index

Symbol	Explanation
	Always wear leather gloves
	Always wear hearing and eye protection
	Never use winch as a hoist
	Properly seat load in hook
	Wind rope on the bottom of the drum
	Finger crushing hazard
	Hand piercing / cutting hazard
	Explosion hazard
	Never route cables across sharp edges
	Never route cables around pinch / wear points

Symbol	Explanation
	Not suitable for moving people
	Always use supplied hook strap
	Never hook back on the rope
	Never apply load to hook tip or latch
	Never wind rope over the top of the drum
	Fairlead pinch point
	Hot surface hazard
	Fire and burn hazard
	Never route cable through / near moving parts
	Insulate exposed wiring and terminals

As you read these instructions, you will see various information relating to safety and the correct use of your winch. This important health and safety information will be displayed as follows:

WARNING: critical safety advice that indicates a potentially hazardous situation which, if not avoided, could result in serious injury or even death.

CAUTION: critical safety advice that indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury. Also, it may alert you to an unsafe practice.

NOTICE: advice to help protect against property damage.

Health and safety precautions

FCC Regulations

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna or increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.
- It is recommended that an isolator switch is installed on all electric winches by a qualified auto electrician and inspected every six months



WARNING



FALLING OR CRUSHING HAZARD

- **Always** stand clear, keep hands clear and keep others away when using the winch.
- **Never** operate the winch with less than five turns of wire cable / ten turns of synthetic rope around the drum. The cable / rope could come loose because the rope attachment to the drum is not designed to hold a load.
- **Never** use the winch as a hoist or to suspend a load.
- **Never** use winch to lift or move people.
- **Never** use excessive force to free spool the winch rope.
- **Always** use proper posture / lifting technique or get lifting assistance while handling and installing the product.
- **Always** spool the rope so that it feeds out of the bottom (mount side) of the drum as per the drum rotation labels on the winch. This is required for the automatic brake to function properly.



WARNING



CHEMICAL AND FIRE HAZARD

- **Always** remove jewellery and wear eye protection.
- **Never** route electrical cables across sharp edges.
- **Never** route electrical cables near parts that get hot.
- **Never** route electrical cables through or near moving parts.
- **Always** place the supplied terminal boots on the wires and terminals.
- **Never** lean over the battery while making connections.
- **Never** route electrical cables over the battery terminals.
- **Never** short the battery terminals with metal objects.
- **Always** consult the operator's manual for the correct wiring diagrams.
- **Always** insulate and protect all exposed wiring and electrical terminals.



WARNING



MOVING PARTS ENTANGLEMENT HAZARD

Winching Safety:

- **Never** exceed the winch or winch rope rated capacity. If required, double line using a snatch block to reduce the load on the rope.
- **Always** wear heavy leather gloves when handling winch rope.
- **Never** use the winch or winch rope for towing. Shocks can cause damage / overload and break the rope.
- **Never** use this winch to secure a load for transport.
- **Never** operate this winch when under the influence of drugs, alcohol or medication.
- **Never** operate this winch if you are under 16 years of age.

Installation Safety:

- **Always** use class 8.8 metric (grade 5) or better hardware.
- **Never** weld mounting bolts.
- **Always** use factory approved mounting hardware, components, and accessories.
- **Never** use bolts that are too long.
- **Always** confirm required bolt length to ensure proper thread engagement.
- **Always** keep hands clear of the winch rope, hook loop, hook and fairlead opening during installation and operation.
- **Always** position the fairlead with a warning readily visible on top.
- **Always** pre-stretch the rope and re-spool under load before use. Tightly wound rope reduces the chances of "binding", which can damage the rope.
- **Always** use the supplied hook strap during installation and during operation.










WARNING









MOVING PARTS ENTANGLEMENT HAZARD

General Safety:

- **Always** inspect winch rope, hook, and slings before operating the winch. Damaged components must be replaced before operation. Be careful to protect all parts from damage.
- **Always** remove any element or obstacle that may interfere with safe operation of the winch.
- **Always** be certain the anchor you select will withstand the load and the strap or chain will not slip.
- **Always** require operators and bystanders to be aware of vehicle and / or load.
- **Always** be aware of the stability of the vehicle and load during winching. Keep others away and alert all bystanders of an unstable situation.
- **Always** unspool as much winch rope as possible when rigging. Double line or pick a distant anchor point.
- **Never** touch the winch rope or hook while someone else is at a control switch, during winching operation or while under tension / load.
- **Never** engage or disengage the clutch if the winch is under load, the winch rope is in tension or the drum is moving.
- **Always** stand clear of the winch rope and load and keep others away while winching.
- **Never** use a vehicle to pull on the winch rope. Combined load or shock load can damage, over load and break the rope.
- **Never** wrap the winch rope back onto itself. Use a choker chain or tree trunk protector on the anchor.
- The operator must have direct line of sight of the vehicle / load.
- **Never** pair more than one winch and one remote together at the same time.

 WARNING			 WARNING	
				
<p>MOVING PARTS ENTANGLEMENT HAZARD</p> <ul style="list-style-type: none"> • Always ensure the hook latch is closed correctly. • Never apply a load to the hook tip or latch. Apply the load only to the center of the hook. • Never use a hook if the throat opening has increased, or the tip is bent / twisted. • Always use a hook with a latch. 			<p>CUT AND BURN HAZARD</p> <p>To avoid injury to hands and fingers:</p> <ul style="list-style-type: none"> • Always wear leather gloves when handling the winch rope. • Always be aware of possible hot surfaces such as the winch motor, drum or drop during / after use. 	

 CAUTION		 CAUTION	
			
<p>MOVING PARTS ENTANGLEMENT HAZARD</p> <p>To avoid injury to hands and fingers:</p> <ul style="list-style-type: none"> • Never leave any remote control where it can be activated during free spooling, ringing or when the winch is not being used. • Never leave the wireless winch remote control turned on when installing, free spooling, rigging, servicing winch or when the winch is not being used. 		<p>CUT AND BURN HAZARD</p> <ul style="list-style-type: none"> • Never let winch rope slip through your hands. 	

NOTICE

AVOID WINCH AND EQUIPMENT DAMAGE

- Always avoid side pulls that can bunch the rope at one end of the drum.
- This can damage the rope or the winch.
- Always ensure the clutch is fully engaged or disengaged.
- Always take care not to damage the vehicle frame when winching.
- Never fully submerge the winch in water.
- Always store the remote controls in a clean, dry area.

RW13500SNR (Synthetic Rope 13,500lbs Winch)

Rated Line Pull: 13500LB(6124kg) single-line

Motor: 6.5hp/4.8kw 12v, Series Wound motor

Gear Train: 3-stage planetary

Gear Reduction Ratio: 216:1

Clutch: Up and down 90°

Rope :(φ10mm x 26m)

Drum Size: φ2.51" x 8.82"(φ64mm x 224mm)

Overall Dimensions: (L x W x H)21.1" x 7.9" x 7.9"(562 x 200 x 200mm) Gross

Weight: 25.1KGS

Duty Cycle: Intermittently

Fairlead: Aluminum Fairlead

Package: 1pc/box, 610 x 350 x 260mm

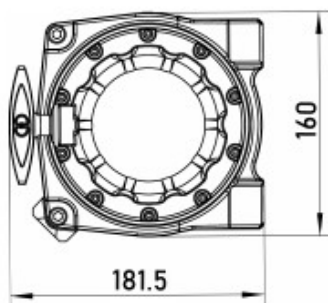
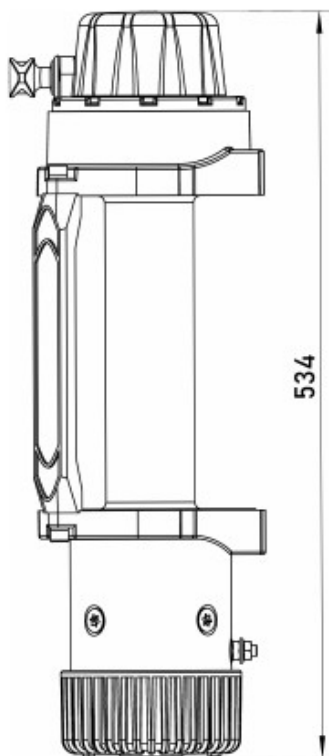
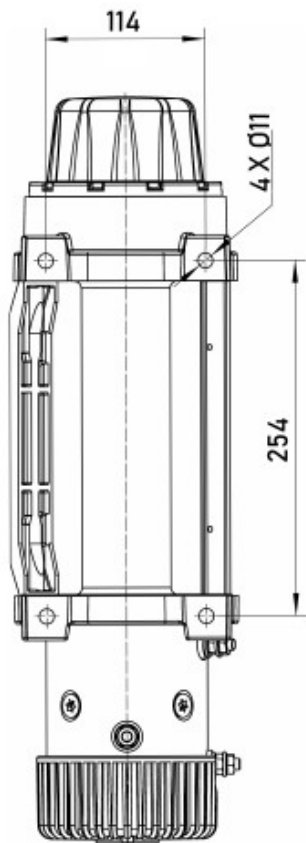
Mounting Bolt Pattern: 10" x 4.5"(254mm x 114.3mm)

Remote Control: Included

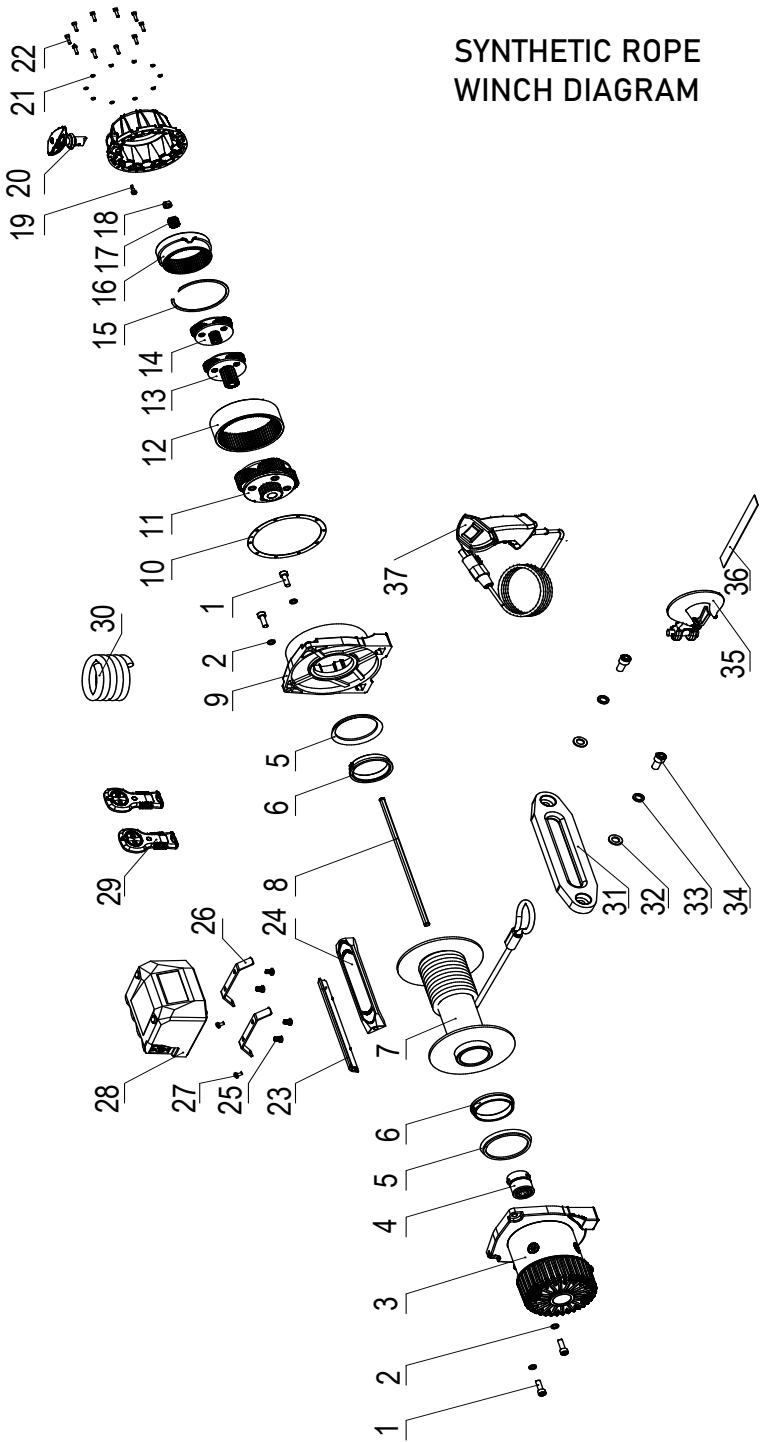
LINE PULL AND ROPE CAPACITY LAYER					
Layer of cable		1	2	3	4
Rated line pull	Lbs	13500	10714	8881	7584
	Kgs	6124	4860	4028	3440
Cable of layer	Ft	16	39	69	89
	M	5	12	21	27

LINE SPEED & AMP DRAW-FIRST LAYER							
Line pull	Lbs	0	4000	6000	8000	10000	13500
	Kgs	0	1814	2721	3630	4536	6124
Line Speed	Fpm	36.1	23.3	18.0	13.4	11.2	7.5
	Mpm	11	7.1	5.5	4.1	3.4	2.3
Amp	A	70	195	240	291	335	375

SYNTHETIC ROPE MOUNTING DIAGRAM



SYNTHETIC ROPE WINCH DIAGRAM



RW13500SNR (13,500lbs synthetic rope)

No.	Name	Qty	No.	Name	Qty.
1	M8x25 inside hexagonal bolt	4	21	M4 spring washer	1
2	8MM spring washer	4	22	M4 inner hex screw	1
3	Motor assembly	1	23	Rear tie bar	1
4	Brake assembly	1	24	Front Tie bar	1
5	O ring sealing	2	25	M5 screw	4
6	Free bearing	2	26	Control box bracket	2
7	Drum	1	27	M4 screw	2
8	Transmission shaft	1	28	Control box assembly	1
9	Gear box bracket	1	29	Wireless remote control	2
10	Sealing ring	2	30	Battery wire	1
11	3 rd stage planetary gear	1	31	Aluminum fairlead	1
12	3 rd stage inner gear ring	1	32	M10 flat washer	2
13	2 nd stage planetary gear	1	33	M10 spring washer	2
14	1 st stage planetary gear	1	34	M10 inner hex screw	2
15	Spring ring	1	35	3/8" hook	1
16	1 st and 2 nd stage inner gear ring	1	36	Hoop belt	1
17	Hexagonal center gear	1	37	Wired control	1
18	Bearing	1			
19	M4 round inner hex screw	8			
20	Clutch handle assembly	1			

RW13500STR (STEEL ROPE 13,500lbs Winch)

13500LB(6124kg) single-line

Motor: 6.5hp/4.8kw 12v, Series Wound motor

Gear Train: 3-stage planetary

Gear Reduction Ratio: 265:1

Clutch: Up and down 90°

Cable :(φ10mm x 26m)

Drum Size: φ2.51" x 8.82"(φ64mm x 224mm)

Overall Dimensions: (L x W x H)21.1" x 7.9" x 7.9"(562 x 200 x 200mm) Gross

Weight: 37.9kgs

Duty Cycle: Intermittently

Fairlead: 4-way roller Fairlead

Package: 1pc/box, 610 x 350 x 260mm

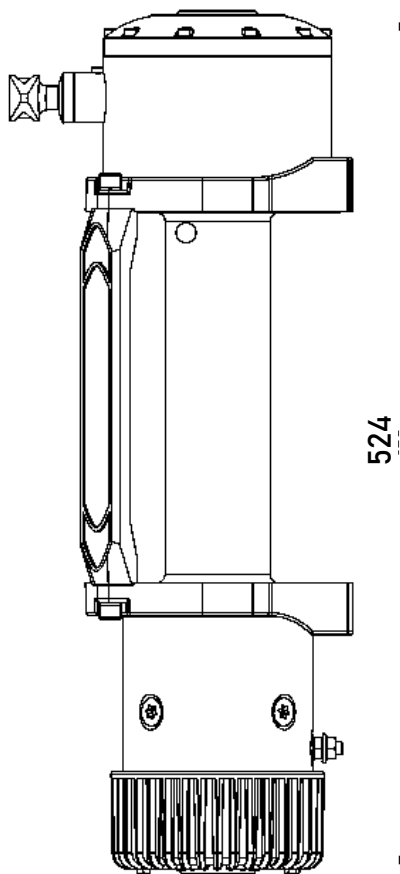
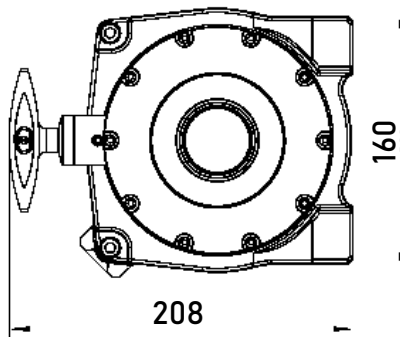
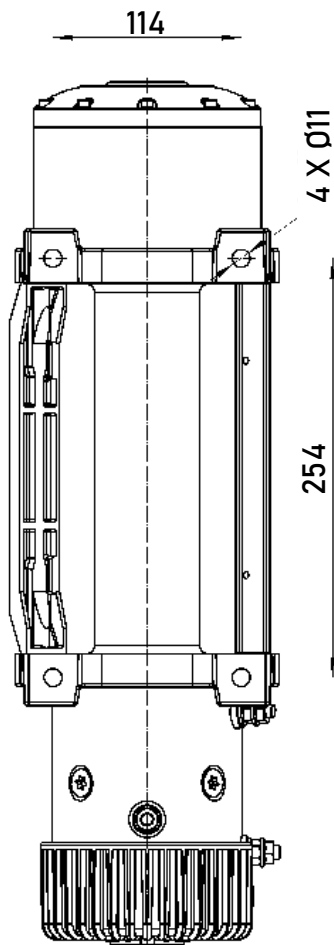
Mounting Bolt Pattern: 10" x 4.5"(254mm x 114.3mm)

Remote Control: Included

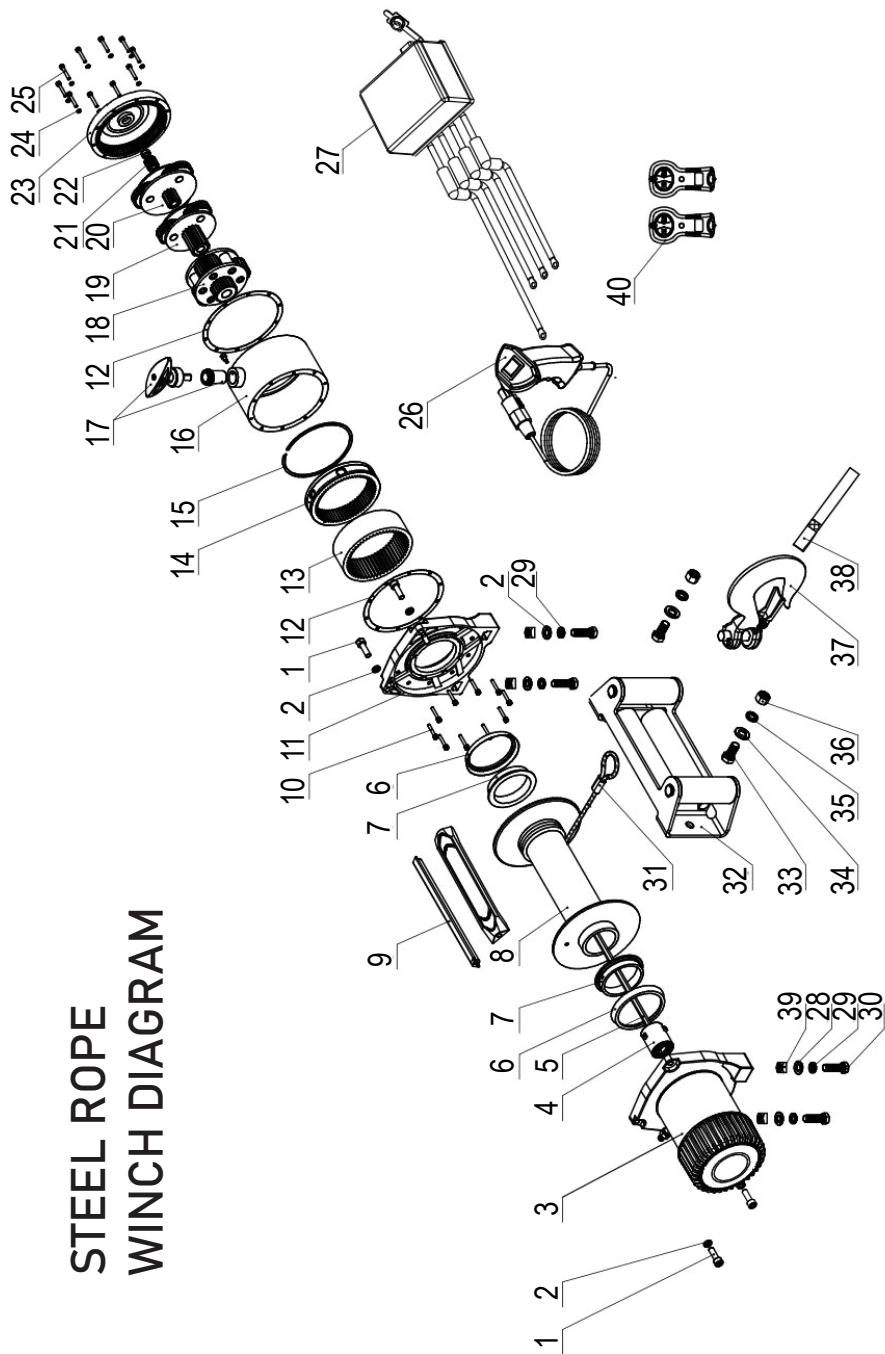
LINE PULL AND ROPE CAPACITY LAYER					
Layer of cable		1	2	3	4
Rated line pull	Lbs	13500	10714	8881	7584
	Kgs	6124	4860	4028	3440
Cable of layer	Ft	16	39	69	89
	M	5	12	21	27

LINE SPEED & AMP DRAW-FIRST LAYER							
Line pull	Lbs	0	4000	6000	8000	10000	13500
	Kgs	0	1814	2721	3630	4536	6124
Line Speed	Fpm	30.0	21.7	17.0	13.1	10.8	7.5
	Mpm	9.1	6.6	5.2	4.0	3.3	2.3
Amp	A	70	190	236	286	330	370

STEEL ROPE MOUNTING DIAGRAM

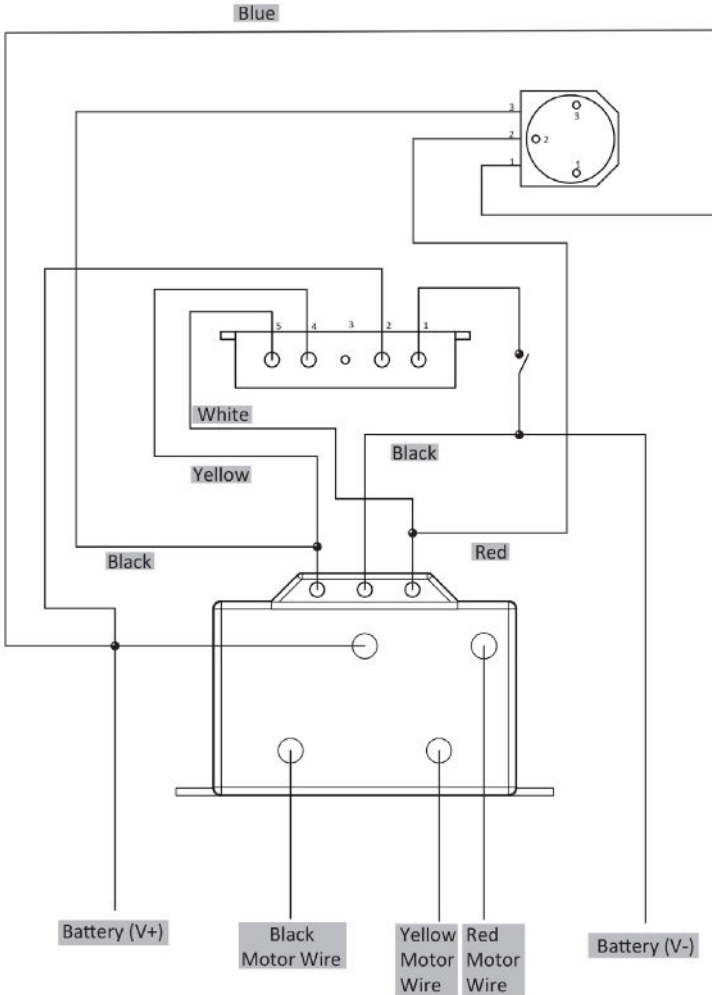


STEEL ROPE WINCH DIAGRAM



RW13500STR (13,500lbs steel rope)					
No.	Name	Qty	No.	Name	Qty.
1	M8x25 inside hexagonal bolt	4	21	Hexagonal center gear	1
2	8MM spring washer	4	22	Heel block	1
3	Motor assembly	1	23	Gear box end cover	1
4	Brake assembly	1	24	4MM spring washer	10
5	Transmission shaft	1	25	Inside hexagonal bolt 4x25	10
6	Free bearing	2	26	Wired remote handle	1
7	O ring sealing	2	27	Control box assembly	1
8	Drum	1	28	Φ10 Flat washer	4
9	Tie bar	2	29	Φ10 spring washer	4
10	Inside hexagonal bolt 4x16	8	30	10x35 hexagon screw	4
11	Gear box bracket	1	31	Wire rope assembly	1
12	Washer	2	32	Roller Fairlead	1
13	3 rd stage inner gear ring	1	33	12x25 hexagon screw	2
14	1 st and 2 nd stage inner gear ring	1	34	Φ12 spring washer	2
15	Spring ring	1	35	Φ12 flat washer	2
16	Gear box outer casing	1	36	12MM hexagon nut	2
17	Clutch handle assembly	1	37	Hook	1
18	3 rd stage planetary gear	1	38	Hook belt	1
19	2 nd stage planetary gear	1	39	10MM square nut	4
20	1 st stage planetary gear	1	40	Wireless remote control	2

Wireless remote wiring diagram



Maintenance

Check	Before first use	After each use	Every 90 days
Check connections to make sure they are tight. Replace damaged connectors.	√		√
Ensure there is no exposed or damaged wiring, terminals or cable insulation.	√		√
Inspect rope for damage. Replace rope immediately if damaged.	√	√	√
Keep entire unit free from contaminants. Use a clean rag or towel to clean.		√	
Check and insert / replace the battery of wireless remote control.	√		√
Turn power off after use.		√	

Troubleshooting

Symptom	Possible cause	Remedy
Winch will not operate	Loose, cut or damaged wiring	Check all wiring carefully to ensure good condition
	The remote battery is critically low	Replace remote battery or use the wired remote
	Wireless signal strength is low	Decrease the distance between remote and winch
	Defective remote control	Test with the wired remote, replace wired remote
Runs in only one direction	Loose, cut or damaged wiring	Check all wiring carefully to ensure good condition
Will not free spool	Free spool not disengaged	Disengage free spool
No Brake	Disengage free spool	Engage free spool
Winch runs in opposite direction	Motor leads crossed	Reverse electric connections to motor
	Solenoid control crossed	Reverse black and red wires on solenoid
	Remote control or trigger switch crossed	Reverse electric connections
Motor runs extremely hot	Long period of operation	Stop operation to let the unit cool down
	Weight overload	Reduce load

Disposal

Batteries should not be disposed of in general household waste. Observe the local waste disposal regulations, details of which can be obtained from your local authority.

All electrical and electronic equipment must be disposed of separately from general household waste using the sites designated by local authorities.

If a product displays this symbol of a crossed-out wheellie bin, the product is subject to European Directive 2012/19/EC.

The appropriate disposal and separate collection of used equipment serve to prevent potential harm to the environment and health. They are a prerequisite for the re-use and recycling of used electrical and electronic equipment.

For further information on disposing of your used equipment, please contact your local authority or your refuse collection service.

CE Certificate of conformity

We hereby declare that the machine described below complies with the relevant basic safety and health requirements of the EU Directives, both in its basic design and construction as well as in the version put into circulation by us. This declaration shall cease to be valid if the machine is modified without our prior approval.

The undersigned: Dale Griffiths
as authorised by: Rocwood Ltd

Declares that

Description: 12V Electric Winch

Identification code: Rocwood Winch RW13500SNR RW13500STR

Conforms to the following directives and standards:

- Machinery Directive 2006/42/EC
- EMC Directive 2014/30/EU
- EC-RED Directive 2014/53/EU

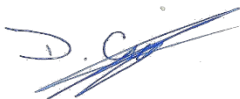
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 - EN ISO 12100:2010,
 - EN 61000-6-1:2007,
 - EN 61000-6-3:2007+A1:2011+AC:2012,
 - EN 61000-3-2:2014,
 - EN 61000-3-3:2013

Notified body: ENTE CERTIFICAZIONE MACCHINE SRL

The technical documentation is kept by: Rocwood Ltd

Date: 01/10/2023

Signed:



Dale Griffiths
Managing Director.

Name and address of the manufacturer:

Rocwood Ltd,

Registered address: Rocwood Ltd, Rocwood House, Lightwood Green Ind Est,
Overton, Wrexham, LL13 0HU United Kingdom.