

User manual

Crane winch 1601





Read through the entire manual before using the product. It contains important safety information.



EN

Thank you for choosing a crane winch from IGLAND!

This user manual is designed to provide you with detailed information about the use, installation, safety, and maintenance of the equipment.

It is important that you read this manual carefully before using the machine.

The safety of our users is our highest priority. This manual contains important information on how to use the machine safely and avoid potential hazards.

To ensure your safety, we want you to be aware of and consider that accidents, misuse, and equipment failure can lead to dangerous situations. It is important that you position yourself during work so that any accident does not result in personal injury.

The instructions provided in this manual must always be followed. Careless or incorrect use can result in serious injury or death. Modifications or other alterations to the original design of the product are made at your own risk and responsibility. It is important to note that any modification or alteration of the product will void the warranty.

For a valid warranty, please remember that the acceptance form supplied with the product must be returned within 14 days.

If you have any questions or need assistance, please contact our service center at +47 479 20 192. Always state the type, serial number, and year of manufacture when making inquiries and ordering parts.

We are here to help you have a safe and enjoyable user experience.

Product	
IG400051	1601 crane winch with radio control (factory-fitted)
IG300005	1601 crane winch with radio control (for retrofitting)

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Al-translated from the original user manual

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1. SAFETY INSTRUCTIONS

1.1 General safety instructions

To ensure safe use of the winch, it is important to follow our safety instructions carefully.

- Read the user manual: Before using the winch and any additional equipment, read and review the user manual carefully to understand proper use and maintenance.
- Area of use: Never use the winch for lifting or other tasks for which it is not designed. The winch is only to be used for pulling timber. The manufacturer is not liable for damage or destruction caused by misuse of the equipment.
- Safety distance: Always observe safety distances and ensure that you maintain a safe distance from moving parts during operation.
- Operation: Familiarize yourself thoroughly with the controls and functions of the winch. Ensure that only qualified and trained personnel operate the equipment.
- Personal protective equipment: Always wear the necessary personal protective equipment, including a helmet, safety glasses, gloves, and safety shoes during operation.
- Risk of crushing: Be aware of the risk of crushing from all moving parts.
- Risk of tipping: Always be aware of the risk of tipping.
 Keep the tractor and trailer in a stable position.
- Emergency preparedness: Keep first aid equipment, fire extinguishers, and emergency numbers readily available in case of an accident or emergency.
- Modifications or other alterations to the original design of the product are made at your own risk and responsibility. It is important to note that any modification or alteration of the product will void the warranty.
- Inspect the winch and its components regularly for signs of wear, damage, or loose parts and screws. Replace worn or damaged parts with components approved by the manufacturer. All damage must be repaired before the winch can be used again.
- Only use steel cables with sufficient strength. Lowquality steel cables can cause serious damage if they break. If there is visible damage to the steel cable, replace it immediately.
- Keep a record of maintenance and repairs carried out on the winch.

1.2 Safe use

- Follow safety rules to limit and prevent accidents.
- Only use the winch for its intended purpose.
- Never use steel cables that are not of sufficient strength.
 Never stand below the timber and tractor/trailer when winching on sloping terrain, or between the winch cable and the tractor/trailer when pulling.
- Never stand below the timber and tractor/trailer when winching on sloping terrain, or between the winch, timber and tractor/trailer when pulling.
- Keep a safe distance from timber being pulled in.
 Stumps or other obstacles can cause the timber to tip up or sideways. Never pull in without being able to see the tractor and trailer.
- Keep an eye on the drum during flushing so that the steel cable is not pulled out completely and starts to pull in
- Always use the support legs and crane as support when pulling in.
- Handle the transmitter with extreme care when pulling out and strapping timber. Accidental pulling in can cause serious injury. Turn off the transmitter if it cannot be handled safely when not in use.
- Keep away from moving parts that may cause a risk of crushing or entanglement.
- Be especially careful when pulling heavy loads, as this can cause the tractor and trailer to shift or tip.
- **Ensure that all spectators** are at a safe distance from the tractor and winch during use.
- Never touch steel cables, pulleys, or other components that are moving or under tension.
- Avoid wearing scarves and other loose clothing that could get caught in moving parts.
- Be particularly careful when working in extreme weather conditions, such as heavy rain, snow, or strong winds, as this can increase the risk of accidents.









1.3 Storage

- Store the winch in a dry and secure place.
- Do not allow children to climb or play on or near the machine.
- Park the machine on a firm and level surface when it is stored or not in use.
- Store electronics indoors if possible.

1.4 Checklist before use

- Always inspect the winch for wear and damage before use. Any damage must be repaired by qualified personnel before the equipment is used again.
- Ensure you have a full overview of the work area.
- Keep children away from the work area.
- Ensure that covers, guards, and components are in good condition.
- Check hydraulic hoses and couplings.
- Lubricate the machine as specified.
- Check that the radio control is working properly.
- Ensure that all moving parts are clean enough for use.
- Follow safety rules to limit and prevent accidents.



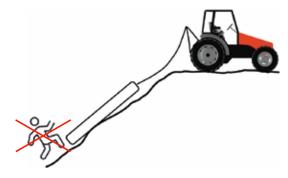
1.5 Safe Operation

- Never use the winch for lifting or other tasks for which it is not designed. The winch should only be used for pulling timber.
- Avoid standing below the timber and tractor when winching on sloping terrain.
- Be careful when pulling heavy loads, as this can cause the trailer to shift or tip over.
- Always use the support legs and crane as support when retracting.
- Never pull in without being able to see the tractor and trailer.
- Ensure that the tractor is in good condition and perform regular maintenance checks.
- Ensure that all bystanders are at a safe distance from the tractor and winch during use.
- Never stand between the winch cable and the trailer/winch when pulling.
- Keep an eye on the drum when unwinding, so that the steel cable is not pulled out completely and starts to retract.
- Keep a safe distance from timber that is being pulled in.
- Stumps or other obstacles can tip the timber up or sideways.
- Handle the transmitter with extreme caution when pulling out and strapping timber. Accidental retraction can cause serious injury! Turn off the transmitter if it cannot be handled safely when not in use.
- Do not touch steel cables, pulleys, or other components that are moving or under tension.
- Keep away from moving parts that pose a risk of crushing or snagging.





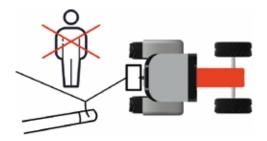




1.5.1 Do not walk behind a timber skid on steep slopes



1.5.2 Do not position yourself in such a way that you are at risk if the tractor or other equipment overturns

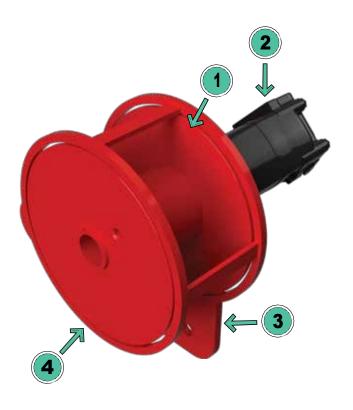


1.5.3 Do not position yourself in the angle between the winch, timber, and pulley block



1.5.4 Obstacles can cause the timber to tip up or sideways.

2. MAIN COMPONENTS









- 1. Drum
- 2. Motor
- 3. Mounting bracket
- 4. Drum gate

- 5. Pulley
- 6. Valve
- 7. Radio receiver
- 8. Radio transmitter

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#3. TECHNICAL SPECIFICATIONS

Igland 1601 winch				
General specifications				
Operation	Hydraulic			
Operation	Radio control			
Oil volume	5–60 L/min			
Oil pressure	50–160 bar			
Recommended oil type	10W-30			
Traction force (empty drum, at 160 bar)	16 kN (1.6 tons)			
Drums	1			
Maximum theoretical steel rope capacity	60 m, 8 mm			
Recommended steel cable	40 m, 8 mm			
Retraction speed (60 L/min)	0.81–1.66 m/s			
Required power input	15.2 kW			
Mounting	2x M20 bolts			
Height/width/depth	28 cm / 28 cm / 40 cm (without bracket)			
Weight (without steel cable)	47.5 kg			

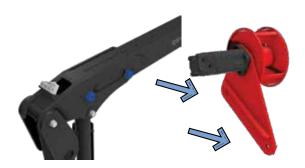
Radio control		
Batteries (transmitter)	2x 1.5V AAA (included)	
Voltage (receiver)	12V DC	
Antenna	Integrated	
Frequency	2.4GHz	
Number of buttons	4	

#4. ASSEMBLY

4.1 Mounting on Igland timber crane

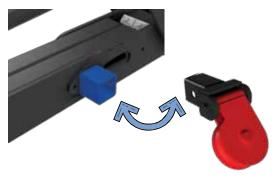
Select the timber crane and attach the timber claw around the frame of the timber hanger. Stop the tractor and release the pressure from the crane. Use a crane or other suitable lifting equipment to lift the winch into place. The winch is mounted in the two threaded sleeves on the crane. Secure it with the two M20 bolts with washers supplied.

NB! The screws must be retightened after first use and then monthly.



4.1.1 Winch installation

The winch is attached to the square profile at the end of the boom. Insert the holder and secure it with the supplied M16 bolt.



4.1.2 Mounting the pulley

If the supplied valve is used, the holder must be welded in place at a suitable location on the crane base.

NB Disconnect the trailer from the tractor to protect the tractor's electronics during welding.

4.2 Other mounting

The winch can also be mounted on other vehicles or implements. The user is responsible for ensuring that the installation is secure. Mounting in locations without sufficient strength can result in serious damage.

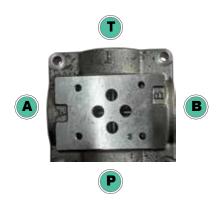
Use the pulley supplied to ensure good winding on the drum. A long distance from the pulley to the drum gives more even winding.

NB! The winch must not be used for lifting!

4.3 Connecting the hydraulics

NB! The maximum pressure is 160 bar. The motor must not be connected directly to a separate valve that provides a higher pressure than this. The pressure on the original valves must never be adjusted above 160 bar.

Ports on valve and motor:



4.3.1 Porters on directional valve



4.3.2 Porter on motor

4.4 Mounting on timber trailers with standard two-way valve

Use the directional valve supplied.

- 1. Connection points $\bf A$ and $\bf B$ on the valve are connected to the motor with the thin hoses (3/8").
- 2. Disconnect the pressure hose from the tractor/pump (**P**) on the crane control unit.
- 3. Move the quick coupling to one of the thick hoses (1/2"), which is connected to **P** on the winch valve.
- 4. The second thick hose (1/2") is connected from ${\bf T}$ on the winch valve to ${\bf P}$ on the crane control panel.

4.5 Installation on timber trailers with light valve or radio control

The valve supplied is not used. The thin hoses (3/8") are connected to the motor and section no. 5 on the light valve (the center on the swing cylinder) or section no. 9 on the radio valve.

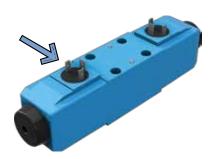
NB! On timber trailers with radio control, the connection of hydraulics and electronics/remote control may vary between different model years. Contact your dealer/workshop/manufacturer if necessary. **Incorrect connection may cause damage to equipment.**

4.6 Installation without crane

Use the directional valve supplied. Connect the thin hoses (3/8") from A and B on the valve to the ports on the motor. Connect P to the pressure line and T to the return/tank line.

4.7 Connecting the radio

Connect the two connectors to the valve (either the supplied valve, light valve, or radio valve). The power connector is connected to the tractor's 12V outlet. The connectors on the valve can be swapped to achieve the desired up/down arrow function.



4.7.1 Connecting the connector on the valve block

The radio receiver should be mounted in the tractor cab to protect it from moisture.

4.8 Winding the steel cable

Check the function and direction of rotation of the winch before attaching the steel cable.

Unroll the entire steel cable and stretch it out along the ground, or attach it to suitable equipment to unwind it. Make sure it does not twist or become tangled.

Thread the steel cable through the pulley on the boom and into the underside of the drum. Then thread it through the hole in the drum and secure it with a loose wire clamp. Keep the steel cable taut and start winding. The steel cable should enter the underside of the drum when it is wound in.



4.8.1 Pulling the steel cable

#5. OPERATION

NB! Read the safety rules before use!

Turn on the power supply in the tractor and turn on the transmitter with the switch on the back.

Activate the hydraulic outlet from the tractor to supply oil to the winch. Press ON on the transmitter to activate the radio control. Make sure you are familiar with the direction of rotation before using the winch.



5.1 Radio transmitter

Lower the support legs and place the crane on the ground for good support. The crane should point as much as possible in the direction of the timber.

Hold down the up/down arrow to unwind. Keep the steel cable taut to avoid tangles and jamming on the drum. Strap the log. Think about how to handle and position the transmitter during strapping and moving, so that the buttons are not pressed accidentally. Turn off the transmitter if it cannot be handled safely. Move away from the timber and hold down the up/down arrow to retract. Make sure that the hanger is stable under load.

Press OFF on the transmitter to deactivate the radio control.

When the steel cable is unwound in long stretches, make sure that it is not pulled out completely. If the drum becomes completely empty during unwinding, it will start to retract in the opposite direction. When retracting, the steel cable must be wound on at least three turns to provide sufficient friction and force.

6. TROUBLESHOOTING

See the figure below for the positions of buttons and diodes.

If the winch does not work, check the following:

- Check that the valve is receiving oil pressure from the tractor.
- Check whether the diode on the transmitter lights up when the buttons are pressed.
- · Check the batteries in the transmitter.
- Check whether the voltage diode (B) in the receiver lights up, indicating that it is connected to a power source.
- Check whether the relay diodes (A) in the receiver light up and whether the relays click when the buttons on the transmitter are pressed.
- Measure the voltage in the valve connector or listen for clicking in the valves.
- Check that there is no moisture or other damage to the transmitter or receiver.
- Try to connect the transmitter and receiver.

6.1 Pairing the transmitter and receiver

See the figure below for the positions of the buttons and diodes.

- 1. Unscrew the cover on the receiver by loosening the four screws.
- 2. Press the function button (C) on the receiver so that the red function LED (E) lights up.
- Press the select button (D) on the receiver so that all relay LEDs (A) light up red.
- 4. Press and hold the up and down arrows on the transmitter.
- When the relay diodes (A) flash three times, release the buttons on the transmitter.

6.2 Removing transmitters registered in the receiver

- The transmitter must be turned off or out of range to be removed.
- Press the function button (C) on the receiver so that the red function diode (E) lights up.
- Press and hold the select button (D) on the receiver. All relay diodes (A) light up red.
- Release the select button (D) when the relay diodes (A) turn off. When the relay diodes (A) flash three times, release buttons 1 and 2 (Up arrow and "On").



6.2 Radio receiver

A = Relay diodes

B = Voltage diode

C = Function button D = Select button

E = Function diode



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Our Workshop and Service Center in Mandal provides technical support for all our products.

We service and repair older and well-used winches. This extends the life of the products and is good for the environment.

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