RETRACTABLE TARPS P/L

TARPING SYSTEMS & COMPONENTS

ACN 069 575 711 ABN 34 069 575 711

ELECTRICAL SYSTEM OPERATING GUIDE

If a fully electric system has been installed, take time to familiarise with the button layout on both the provided key fob and DC motor Controller (DCM).

Automatic One Touch Operation

To activate the system:

Close - To close the tarp, press button 1 momentarily and the tarp will automatically extend out to the closed position with no need for holding the button.

Open - To open the tarp, briefly depress button one in the same fashion to engage the automatic rollup procedure.

Figure 1: Standard Two Button Key fob

Emergency Stop

If the tarp needs to be stopped at any point during the automated opening or closing cycle, simply press either the open or close (1 or 2) button and the system will stop immediately. Once stopped, the system can be closed or opened in the same fashion as previously mentioned.

Overload Protection

Due to the high torque output of Roll-Rite^{R}, the system implements an overload protection system. This is important to the user due to its effect on the tarp system if triggered. In the case of excessive load or Resistance on the rolling motion of the system, the DMC is tripped and the system ceases to operate. After a 5 second cool down period, the tarp can be used as normal. It should be noted that this form of cut out is used to fully tension the tarp, both in the fully open and closed positions and should not occur at any other point.

DMC L.E.D. INDICATORS

L.E.D. Indicators

On start-up of the DMC unit, the unit indicates its pre-programmed amperage cut off tolerances through combinations of flashing L.E.D.'s. The following table displays the amperage tolerances.

Table 1: Amperage Limit Indicators of DMC

L.E.D.	Current Limit	Application
Yellow Only	20 Amp	24 Volt Systems
Green Only	40 Amp	12 Volt (Mesh Material Systems)
Yellow and Green	50 Amp	12 Volt (PVC Systems)
Red and Yellow	70 Amp	12 Volt (Roll over systems)

After the self-testing procedure, the DMC flashes all three L.E.D.'s in sequence to denote that the unit is fully initialised and ready for operation. The unit will then generate the following contextual indicators as required.

Table 2: Power Status Indicators

Power L.E.D. - GREEN		
No Light	Not Activated	No power Supplied to Motor
Solid Green	Activated – Normal	Power Supplied to Motor
Slow Flashing Green	Activated – Low Voltage	Power Supplied to Motor
Fast Flashing Green	Activated – Underpowered	Below Minimal Power Supplied to Motor

In the case of an overload (cut-out) situation:

Table 3: Overload Status Indicators

Overload L.E.D. – Red		
Solid Red	Activated – Overload	No Power Supplied to Motor
Slow Flashing Red	Activated – Input Error	No Power Supplied to Motor
2 Flashes, pause, 2 flashes	Motor Terminal Connected to ground	No Power Supplied to Motor
3 Flashes, Pause, 3 Flashes	Voltage Applied to Motor Terminal	No Power Supplied to Motor
4 Flashes, pause, 4 flashes	No Motor Connected	No Power Supplied to Motor

Additionally, temperature is also monitored:

Overload Temperature L.E.D. – Amber		
Flashing Amber	Over Temperature	No Power Supplied to Motor

In the Case of any issues the following troubleshooting methods can be applied:

DMC TROUBLESHOOTING

Low Voltage
DMC is being supplied with 8.5 to 11.5 Volts

- Ensure that the correct wire gauge has been used, refer to provided wiring diagram.
- Check that connections are fully contacting, free of corrosion and crimped tightly where required.

Under Voltage
DMC is being supplied with less than 9.5 Volts

- Check supply voltage.
- Ensure that the correct cable gauge has been used, refer to the provided wiring diagram.
- Check that connections are fully contacting, free of corrosion and crimped tightly where required.

Overload
DMC has tripped due to excessive current draw

- It is normal for the unit to overload at the fully open/closed position for 5 seconds.
- If the DMC trips prematurely, inspect the tarping system for damage and ensure that there are no obstructions which inhibit the tarps movement.

Input Error
Switch wires are being activated simultaneously or incorrectly

- Check manual switch for faults and inspect the cables and terminals.

Motor Terminal Connected to Ground

- Ensure cables are connected to the correct terminals on the DMC.
- Check for possible shorts to the body of the vehicle if terminals are correctly wired.

Voltage Applied to Motor Terminal

- Ensure cables are connected to the correct terminals on the DMC
- Check that the power is not rerouted directly to the motor with the DMC still integrated into the circuit.

No Motor Connected

- Check all connections in the system leading up to and from the motor
- Check the DMC for correct terminal wiring

Over temperature
Operating Temperature exceeds 80^{o}C

- Inspect the entire tarp system for damage
- Inspect the complete wiring system for faults