




E-fish 500W Electro-Fishing Backpack System

Quick Start Guide


1 BEFORE YOU START

 Due to the use of high-voltage electric fields in the presence of water, electro-fishing is a potentially hazardous activity, for both the operator and surrounding personnel, unless correct safety and operational guidelines are observed.

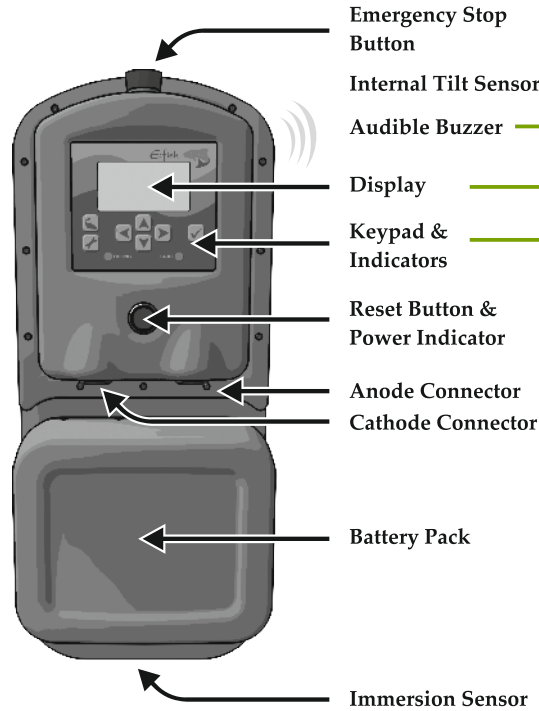
 This quick-start guide is intended to assist in the quick setup and operation in the field. However, please read the full User Manual before using the system for the first time as this contains important safety information.

 In summary, for the safety of yourself and others...

- Electro-fishing work should never be undertaken by any single person.
- All personnel operating or working in close proximity of the equipment should have received training relating to its use and safe operation, and should not have any medical condition that could be affected electro-fishing activities.
- Wear suitable clothing (waders, life-jacket, etc.), and do not allow unprotected body parts to come into contact with water when electro-fishing is in progress. Equipment and clothing must not be conductive when wet. Avoid wooden handles, ropes and other wicking materials.
- Only use this equipment for electro-fishing when wading in water depths of 0.8m or less. Do not use simultaneously with other electro-fishing systems.
- Only the operator of the backpack and anode should remove debris from the electrode when the system is de-energised with the Stop button locked in position.
- Warning signs and barriers should be used where there is risk of spectators or animals being in close proximity (5m) of electro-fishing operations.

 Always charge the battery packs in a well ventilated area, as charging may produce small amounts of hydrogen gas.

2 BACKPACK FEATURES












When fishing, audible tones represent...

- Fishing – slow pulsed mid-pitch tone.
- Fishing & Limiting – pulsed mid-pitch tone with high pitch chirp.
- Fishing & Non-critical Error – fast pulsed low-pitch tone.
- Critical Error – continuous low-pitch tone.

Fishing Setup		
VOLTAGE	FREQUENCY	DUTY
200V	30Hz	50%
TIMER	TEMP	BATTERY
15:00	19.6°C	24.3V 100%

Status Icons

-  Battery Low
-  Battery Flat
-  Timer Enabled
-  Timer Expired
-  Presets Locked
-  APC Enabled
-  Tilt Alarm
-  Thermal Alarm
-  Water Alarm



System Menu Button

Press to display & control system functions.



Fishing Menu Button

Press to display and adjust fishing parameters (voltage, frequency, etc.)



Arrow Keys

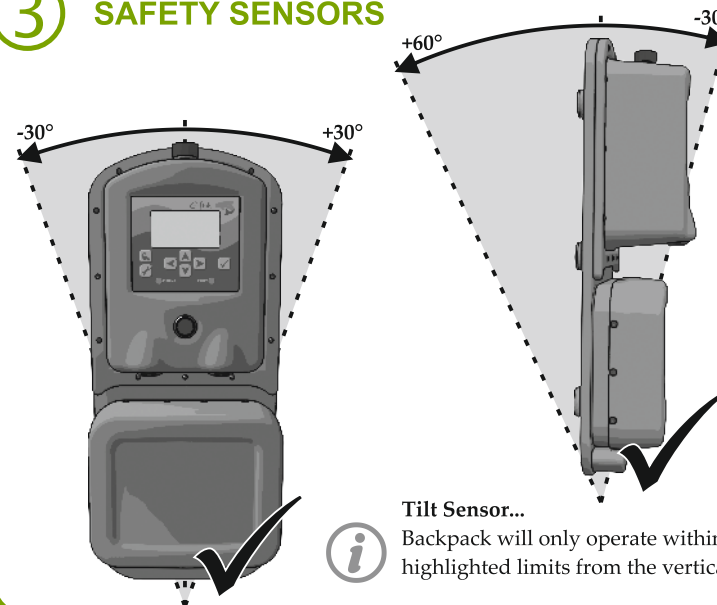
Use these to navigate through menus or adjust parameter values.



Enter/Select Button

Press to select an item or confirm a change to a parameter and clear error or warning messages.

3 SAFETY SENSORS



Tilt Sensor...

Backpack will only operate within highlighted limits from the vertical.



Immersion Sensor...

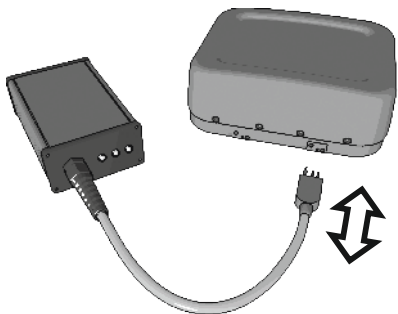
Check sensor is clean of dirt and other detritus.



4 BATTERY CHARGING & FITTING

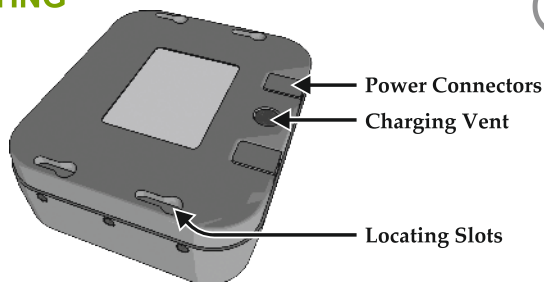
To charge the battery pack...

With the charger turned off, connect the charging cable to only one of the battery pack connectors.



⚠ During charging, the battery pack may emit small amounts of hydrogen gas. Always charge battery packs in a well ventilated area.

i The battery is fully charged when the green light illuminates on the charger, and may be left in this state until needed for use.



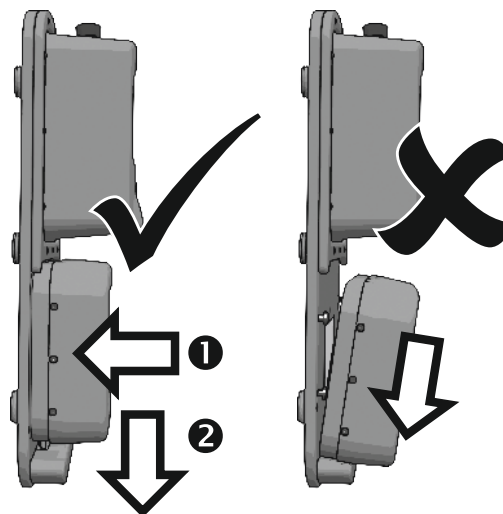
To fit the battery pack...

- Hold the battery pack above the main backpack base plate.
- Check the 4 locating pins align with the slots on the battery pack
- Lower the battery pack down onto the base plate, then slide to engage the connectors and lock into position.

! Do not force the battery pack into place, or attempt to connect if the locating pins are not correctly engaged into their slots.

i For best battery life...

- Avoid fully discharging the battery if possible.
- Always recharge the battery after use, and don't store in a discharged state.
- When in storage, top up battery charge every 6 months.



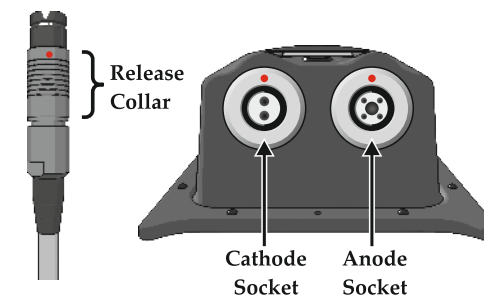
5 CONNECT ANODE & CATHODE

To connect the anode or cathode cable...

- Check that socket receptacles and plugs are clear of mud or other detritus.
- Align the red dot on the plug with the corresponding dot on the socket and firmly insert the mating part into the socket until you hear an audible click.

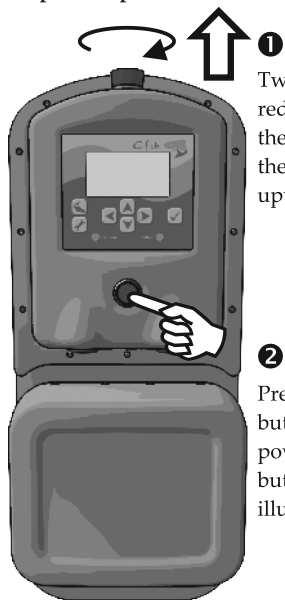
To disconnect...

- Hold the plug firmly by the release collar, and pull straight back away from the socket.



6 POWER UP & RESET

To power up or reset the backpack...



1 Twist the "Stop Button" red cap clockwise until the latch releases and the red cap springs upwards.

2 Press the green "Reset" button. If the system powers up correctly, the button will be illuminated green.

7 ADJUST FISHING SETTINGS

Press... Adjust: Voltage Duty-Cycle Frequency



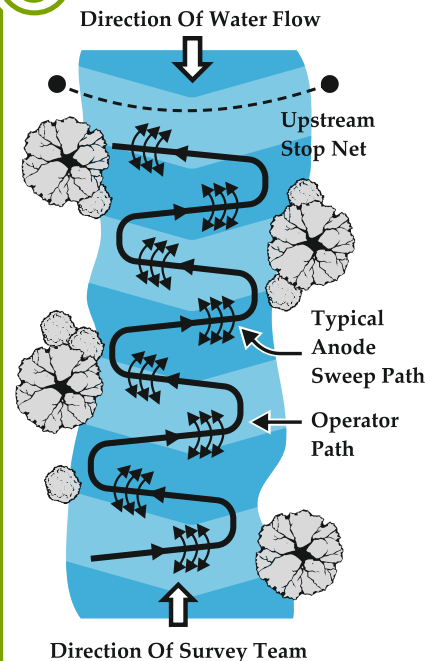
Conductivity	Voltage Range	Duty-Cycle Range
< 150 uS/cm	250 - 300V 300 - 400V	10% 10% or DC (100%)
150 to 500 uS/cm	200 - 250V 250 - 300V	10 - 20% 10 - 20% or DC (100%)
500 to 800 uS/cm	150 - 200V	10 - 30%
800 to 1000 uS/cm	120 - 180V	10 - 40%
> 1000 uS/cm	100 - 150V	10 - 50%

Use to adjust, then

! These tables only provide a very simplified overview - refer to manual section 7.4 for further details on selecting suitable fishing settings.

Fish Type	Frequency Range
Salmonids	40 - 60Hz
Cyprinids	30 - 50Hz
Percids	10 - 40Hz
Pike	30 - 50Hz
Eel	10 - 40Hz

8 TYPICAL USAGE



For survey work, it may be desirable to erect an upstream stop net to further fish entering the survey zone.

Hold the fishing trigger (on the anode pole) to energise the electric field after all other personnel have indicated their readiness.

The operator should walk in a zig-zag pattern across the water-course sweeping the anode in front of them across their path.

Where possible, you should fish in a discontinuous manner, briefly switching off the anode at intervals (whilst keeping it in the water) such that fish are not driven ahead of the fishing team.

A team member should accompany the operator with a catch net and fish holding bucket.