



OPERATING MANUAL
Document: BALS-MEGATREE-OM-01
Revision: 1.0 · June 2026
Independently verified to BS EN Eurocodes

CHRISTMAS & FESTIVE DISPLAY STRUCTURE

Mega Tree Light Frame

Operating & Safety Manual

Set-up, ballast, wind limits and safe operation
for the 12 ft and 17 ft frames

Small	Tall	Verified to
12 ft / 3.7 m	17 ft / 5.2 m	BS EN Eurocodes

Whatever the weather — winding the tree down is always the safe position.

Read this manual in full before assembling or operating the frame. Keep it with the product for the life of the structure.

© Build A Light Show. Independently verified by a chartered structural engineering practice; source calculations available on request.

Before you begin

This manual turns an independent structural engineer's report into plain, usable instructions. Follow it and the frame will perform exactly as it was verified to.

IMPORTANT — READ FIRST

This frame is safe **only** when it is used within the wind limits, configurations and ballast set out in this manual. The single most important instruction in this document is simple: **when the wind approaches the limit for your set-up, wind the tree down**. A wound-down tree is short, packed and cannot be blown over.

How this manual is organised

- 1 The one rule that keeps you safe** — winding down
- 2 Know your frame** — sizes, parts, lights and the star
- 3 Choose your set-up** — the five operating configurations
- 4 Wind limits & what they mean** — the headline figures, in plain English
- 5 Ballast & anchoring** — indoors, outdoors, sandbags, ground screws
- 6 Assembly & set-up** — putting the tree up, step by step
- 7 Operating procedure** — weather watch, winding down
- 8 Inspection & maintenance** — keeping it verified-condition
- 9 Responsibilities & limitations** — who is responsible for what

Quick reference card — print this and keep it on site

A NOTE ON THE FIGURES

Every wind speed and ballast figure in this manual comes directly from independent structural verification of these frames, carried out by a chartered structural engineering practice to the relevant BS EN Eurocodes and UK National Annexes. We have done the engineering so you don't have to — your job is to apply it correctly. **The full source calculations can be shared on request.**

THE PRINCIPLE EVERYTHING ELSE DEPENDS ON

1. The one rule that keeps you safe

If in doubt, wind the tree down.

The Mega Tree frame telescopes. It extends up to full height for display, and packs back down to a short, stable bundle. That packing-down ability is your built-in safety system.

Every wind limit in this manual assumes the tree is **fully erected** — that is the only condition in which it can be loaded by the wind. When the tree is **wound down**, it is low, compact and presents almost no surface to the wind, so it is effectively removed from any risk of being blown over.

SAFE STATE — WOUND DOWN

Low height, packed sections, minimal wind catch.

No realistic risk of wind collapse. This is where the tree should always be when conditions are uncertain, overnight in exposed locations, or whenever no one is monitoring it.

LOADED STATE — FULLY ERECTED

Full height, lights and (optionally) the star deployed. Safe **only** while the wind stays below the limit for your configuration. Above that limit, it must be wound down.

What this means in practice

- **Check the forecast before you raise the tree** and keep checking it while erected.
- **Compare the forecast gust speed** to the limit for your set-up (Section 4).
- **If gusts are forecast to reach or exceed that limit, wind the tree down** in good time — before the weather arrives, not during it.
- **You can always choose to run lighter ballast** than the table shows, provided you accept the lower wind limit that comes with it and wind down accordingly (Section 6). Winding down remains available at any time.

WHY THIS MATTERS

Wind load rises with the *square* of wind speed — doubling the wind quadruples the force on the frame. There is no benefit in "seeing how it holds up". The correct response to rising wind is always the same: bring the tree down to its safe state.

WHAT YOU'RE WORKING WITH

2. Know your frame

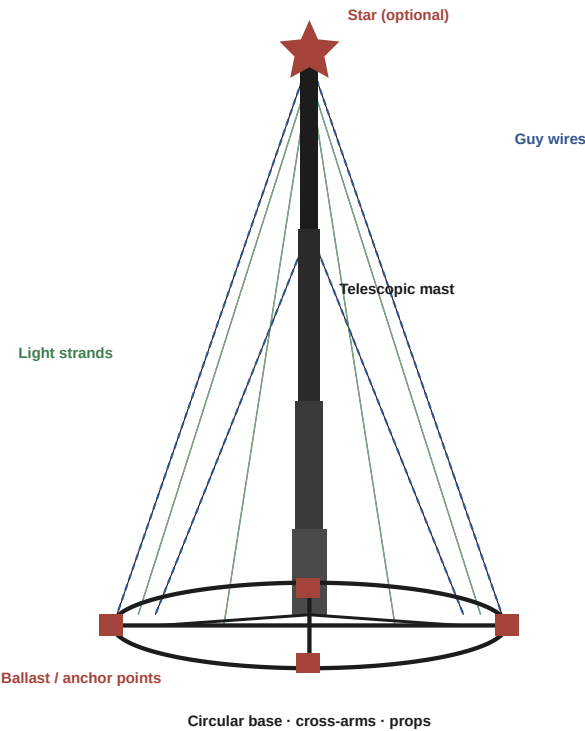
The Mega Tree is a free-standing steel frame that supports strings of lights in a conical "tree" shape. A central telescopic mast rises from a circular base. Light strands fan out from the top down to the base ring, and an optional star can be fitted at the very top.

It is supplied in two sizes. Both share the same construction; the tall tree simply adds a second set of guy wires part-way up the mast.

12 ft SMALL TREE · 3.7 M	17 ft TALL TREE · 5.2 M
------------------------------------	-----------------------------------

Key components

- **Telescopic mast** — S355 steel box sections that slide inside one another and pin in place at full height.
- **Circular base** — a steel ring with four horizontal cross-arms and four diagonal props.
- **Guy wires** — 4 mm **rated** steel wire rope bracing the mast to the base. Small tree: 4 wires; tall tree: 8 wires.
- **Connections** — supplied D-shackles, wire-rope grip clamps, bolts and pins (all rated to the loads).
- **Star fitting** — an optional top attachment for a star / decoration (max area 1 m²).



Mega Tree frame — principal components (tall tree shown, 8 guy wires)

Two lighting options — and why it matters

The lighting you fit changes how much wind the frame catches, which changes its wind limit and ballast. Choose deliberately.

LIGHT TYPE	WHAT IT IS	WIND BEHAVIOUR
TTG LIGHTS	64 strands of very fine 3 mm wire with 10 mm globes every 25 mm.	Low wind catch. Allows the highest wind limit and the least ballast.
STRIP LIGHTS	64 strands of 25 mm-wide HDPE strip with lights pressed in.	High wind catch — the wide strip acts like a sail. Lower wind limit, much more ballast.
STAR / TOP DECORATION	Optional decoration at the top, up to 1 m ² in area.	Adds wind catch high up. Fitting it caps the wind limit at 15 m/s for either light type.

PICK THE CONFIGURATION THAT SUITS YOUR SITE

3. Choose your set-up

The frame is verified for five configurations. Each combines a lighting type, with or without the star, and gives you a wind limit and a ballast figure. Decide which one you are running **before** you set up — it determines everything that follows.

#	CONFIGURATION	LIGHTS	STAR	WIND LIMIT
i	Star + TTG lights	TTG	Yes	15 m/s 34 mph
ii	Star + strip lights	STRIP	Yes	15 m/s 34 mph
iii	TTG lights, no star	TTG	No	25 m/s 56 mph
iv	Strip lights, no star	STRIP	No	20 m/s 45 mph
v	TTG lights, no ballast	TTG	No	3 m/s 7 mph

INDOORS (E.G. SHOPPING CENTRE / MALL)

In a fully enclosed, sheltered space with no meaningful air movement, use **configuration v** — **no ballast is required**. Still position the tree where it cannot be knocked or climbed, and keep it clear of doorways, atria and loading bays where draughts or wind tunnelling can occur.

OUTDOORS / OPEN AIR

You **must** ballast or anchor the frame to the figures in Section 5 for your chosen configuration, and you **must** monitor the forecast and wind down when gusts approach the limit. Strip lights need much more ballast than TTG lights.

The trade-off, in one line

More wind catch (strip lights, and especially the star) means a **lower** wind limit — the tree must be wound down in gentler wind. The ballast then depends on that limit (Section 5). The most weather-tolerant outdoor display is TTG lights with no star — configuration iii.

THE HEADLINE NUMBERS, IN PLAIN ENGLISH

4. Wind limits & what they mean

READ YOUR FORECAST CORRECTLY

The limits below are **3-second gust speeds**. Weather forecasts and apps usually report this as the **"gust"** figure (not the average or "mean" wind speed). Always compare the forecast **gust** against the limit for your set-up — and treat the gust, never the average, as the number that matters.

The limits are the same for both tree sizes. Here is what each one feels like, so you can sense-check a forecast:

WIND LIMIT	MPH	BEAUFORT	WHAT IT FEELS LIKE	APPLIES TO
3 m/s	7	F2	Light breeze — leaves rustle, flags stir.	No-ballast indoor use (config v)
15 m/s	34	F7	Near gale — whole trees in motion; awkward to walk into.	Any set-up with the star (i, ii)
20 m/s	45	F8	Gale — twigs break off trees; hard to walk.	Strip lights, no star (iv)
25 m/s	56	F9–10	Strong gale / storm — minor structural damage possible.	TTG lights, no star (iii)

THESE ARE MAXIMUM LIMITS, NOT TARGETS

Operating at or near a limit leaves no margin for an unexpectedly strong gust. Build in a sensible buffer: plan to wind down **before** the forecast reaches your limit, not at the moment it does. Using the frame in winds stronger than its limit will degrade its stability and risks collapse.

Simple weather-watch routine

1

Before raising

Check today's and tomorrow's forecast gusts for your exact location.

2

While erected

Re-check at least twice a day, and before leaving the tree unattended.

3

If gusts approach the limit

Wind the tree down before the weather arrives.

4

Overnight / unattended

If in any doubt about conditions, wind down as a precaution.

For live on-site readings, a handheld anemometer is a worthwhile addition — but a wound-down tree never needs one.

HOLDING THE TREE DOWN OUTDOORS — HOW MUCH, AND WHY

5. Ballast & anchoring

Outdoors, hold the tree down with **ballast** (sandbags) or **ground screws**. This page tells you how much you need; the next shows how to apply it.

HOW MUCH YOU NEED DEPENDS ON TWO THINGS

1 · How much wind the set-up catches. The wide strip lights and the star catch a lot of wind; the thin TTG wires catch almost none.

2 · The top wind speed it is signed off for. Wind force rises steeply with speed, so a set-up allowed to run in stronger wind needs more ballast.

Both are shown in the table — so **taking the star off can need *more* ballast, not less**: without the star the tree is allowed to run in stronger wind, and that extra speed outweighs the star's lost area.

FIGURES ARE PER LEG

The ballast figures are the weight at **each leg** (each of the four base-arm ends) — **not** a total to share out. The total on the structure is **four times** the per-leg figure.

SET-UP	WIND CATCH	SIGNED OFF TO	TREE	BALLAST PER LEG	TOTAL (4 LEGS)
i · Star + TTG	Medium	15 m/s	Tall	80 kg	320 kg
			Small	80 kg	320 kg
ii · Star + strip	Very high	15 m/s	Tall	215 kg	860 kg
			Small	175 kg	700 kg
iii · TTG, no star	Very low	25 m/s	Tall	70 kg	280 kg
			Small	50 kg	200 kg
iv · Strip, no star	High	20 m/s	Tall	280 kg	1,120 kg
			Small	195 kg	780 kg
v · TTG, indoors	Very low	3 m/s	Both	None	None

Find your set-up and read across. Each figure already accounts for both the wind catch and the wind speed, so the rows aren't meant to be ranked against each other. Worst case is **280 kg per leg** (tall, strip lights at 20 m/s).

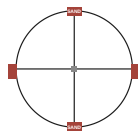
BALLAST & ANCHORING — CONTINUED

Applying the ballast

Once you know how much (previous page), apply it one of two ways — ballast **or** ground screws, **never a mix counted together**.

Option A — Ballast (sandbags)

- Use sandbags, water weights or similar dead weight of **known mass**.
- Place ballast at the **four ends of the base cross-arms**, at the edge of the structure.
- The table figures are **per leg** — put that full weight at **each** of the four arm-ends.
- The base must sit on a **firm, level, non-slip surface** — ballast holds by friction, so avoid smooth, wet or icy ground.

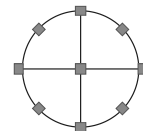


Ballast: the per-leg weight at each of the 4 arm-ends

■ Ballast (sandbag) location ■ Ground-screw location

Option B — Ground screws

- Use **proper engineered ground screws** (flighted earth anchors) — **not** bar or stakes knocked in like tent pegs, which will pull straight out.
- Fit **one at each leg** and at the centre (tall tree adds four diagonals).
- Each must hold **at least 2.5 kN per leg** in your ground (covers the worst case). We recommend the **Spyrabase Hurricane range** (5.6–12.6 kN; 500/650/900 mm flites — longer for softer ground): spyrabase.co.uk.
- **Verify holding capacity in your actual ground** — soft or sandy soil holds far less. This is the operator's check.



Ground screws: arm-ends + centre (tall tree adds 4 diagonals)

A FEEL FOR THE QUANTITIES

Sandbags are commonly 15–20 kg each. So the lightest outdoor case (50 kg per leg) is about 3 bags at each of the four arm-ends; the worst case (280 kg per leg) is roughly 14 bags per leg — about 56 bags in total. Always work to the actual weight of your bags, and split the per-leg figure evenly around each arm-end.

PUTTING THE TREE UP, STEP BY STEP

6. Assembly & set-up

The tree is raised and lowered on a winch and goes up and down several times during set-up. Throughout, use only the parts supplied with the frame.

- 1 **Position the mast.** Stand the main mast assembly upright on firm, level ground (grass or concrete is fine) that will not sink or subside — apply normal common-sense ground checks. Keep the tree's whole footprint clear of obstacles and level throughout.
- 2 **Drop the legs.** Remove the lock pins holding the legs up against the mast (the transit position) and let the legs drop down. Refit those pins into the holes that lock the legs out rigid.
- 3 **Fit the braces.** Add the braces from the mast down to each leg. Using the pins you just removed, pin the **top (mast) end** of each brace to the mast — the bottom end needs no pin.
- 4 **Build the base ring.**
 - **12 ft tree:** place the 4 ring quadrants onto the legs and fasten with the supplied Allen bolts — the pieces are keyed so they form one continuous ring.
 - **17 ft tree:** place the 8 ring sections onto the legs, adding the mid-point feet, and bolt them all together with the supplied Allen bolts.
- 5 **Ballast or anchor the base.** Add your ballast or ground screws now. If you haven't already, read **Ballast & anchoring** (Section 5) to work out exactly what your configuration needs. Secure the base before going any further.
- 6 **Attach the guy / tensioner wires.** Shackle the pre-assembled wires to the eyelets at the top of the mast — **4 on the 12 ft, 8 on the 17 ft**. Use each supplied D-shackle correctly: the pin passes **through the eyelet**, and the shackle is loaded along its axis — **never side-load a shackle**. Repeat at the lower end, shackling to the eyelet on the foot by the base ring.
- 7 **Raise to tensioning height.** Winch the tree up until the **red safety / stop line** on the mast appears, then back it off until that line *just* goes out of sight.
- 8 **Tension the wires.** Release each clamp, pull the wire taut, then re-tighten the clamp. For extra tension you can wind the mast down an inch or so to pull everything tight — just make sure all wires end up **evenly tensioned**.
- 9 **Fit the topper, then the lights.** Wind the tree back down. Bolt on the topper / star fixing with the supplied Allen bolts, then hang your lights and connect them to the base ring. (*Remember: with the star fitted, your wind limit drops to 15 m/s — Section 4.*)
- 10 **Raise and light up.** Winch the tree back to full height, complete your cabling and light it up.

THE WINCH WORKS BOTH WAYS

The same winch that raises the tree also lowers it. That wound-down position isn't only for take-down — it's your safe state whenever the weather turns (Section 1).

RUNNING THE TREE SAFELY, DAY TO DAY

7. Operating procedure

Once assembled (Section 6), keeping the tree safe is mostly about watching the weather and using the winch in good time.

Before you raise it each time

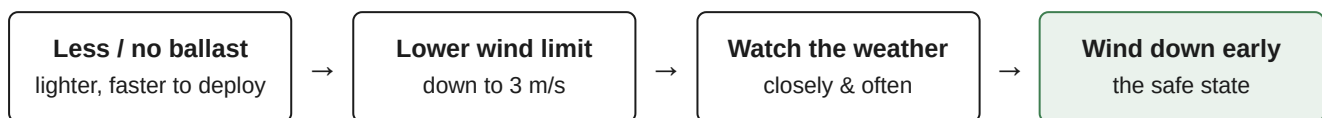
- Confirm the **wind limit and ballast** for your configuration (Sections 3–5) are right for today's conditions.
- Check the forecast gusts, and that ballast/anchors are in place and guy wires tensioned.

While the tree is up

- Keep checking the forecast gust speed against your limit (Section 4).
- Periodically confirm ballast is still in place and guy wires remain tensioned.
- **Wind down whenever gusts are forecast to approach your limit, before leaving it unattended in uncertain weather, or any time you are unsure.**

The minimal-ballast option — and what you take on

You may choose to run **less ballast than the table specifies, or none at all**. That is a legitimate way to operate — but it lowers the wind speed at which the tree can safely stay up, all the way down to the **3 m/s / 7 mph** no-ballast threshold.



IF YOU RUN LIGHT BALLAST, THIS IS ON YOU

Choosing reduced ballast means you accept responsibility for winding the tree down in good time, at the lower wind speed that choice implies. The frame must never be left fully erected, with insufficient ballast, in winds above the corresponding limit. **Winding down is always available and is always the safe answer.**

Taking it down

- To wind down for weather: it is acceptable to **retract the mast and lower the height** to bring the tree into its safe state quickly; lights and star can stay fitted.
- For full pack-down: remove the star and lights, release guy wires, retract and unpin the mast, then dismantle the base.
- Coil and store the **rated wire ropes** carefully — they are load-bearing and must not be kinked or damaged.

KEEPING THE FRAME IN VERIFIED CONDITION

8. Inspection & maintenance

The frame's verification assumes it is in good condition and built with the supplied rated parts. Inspect it before every erection and replace anything worn or damaged.

Pre-erection checklist

- ☐ **Wire ropes** — no kinks, no broken or frayed strands, no significant corrosion. The wire runs close to its working capacity, so its condition is critical — **replace any suspect rope immediately**.
- ☐ **Shackles & grip clamps** — present, correct type, fully tightened.
- ☐ **Bolts & pins** — all present and tight; use only the pins/bolts supplied.
- ☐ **Welds** — no visible cracks at the base, stiffeners or arm connections.
- ☐ **Telescopic sections** — slide freely, fully engage (≥ 120 mm overlap) and pin securely.
- ☐ **Base** — ring, arms and props straight and undamaged; sits flat with no rock.
- ☐ **Star fitting** (if used) — secure, decoration within 1 m² area.

USE ONLY THE SUPPLIED PARTS — DO NOT REPLACE THEM

This frame is supplied with specific rated parts — wire rope, D-shackles, clamps, bolts and pins. **Use only the parts supplied, and do not replace or substitute them** with generic or shop-bought alternatives (for example unrated wire or carabiners). Doing so invalidates the verification and the wind/ballast figures in this manual no longer apply.

Routine care

- Keep wire ropes and fittings clean and dry between uses; store coiled, not kinked.
- Touch up any damaged coating to protect against corrosion.
- Keep telescopic joints clean so sections engage fully and pin reliably.
- Retire and replace components rather than improvising repairs.

What not to do

- Do not exceed the wind limits, ballast omissions or light loads described here.
- Do not add signage, banners, netting or extra decoration beyond the 1 m² star — these add wind load that has not been verified.
- Do not modify the frame, drill it, or change section sizes or wire specification.
- Do not leave it fully erected and under-ballasted in rising wind — wind it down.

WHO IS RESPONSIBLE FOR WHAT

9. Responsibilities & limitations

Build A Light Show supplies a frame that has been independently verified, together with the information you need to operate it safely. Safe operation on site is the operator's responsibility.

Build A Light Show provides

- A Mega Tree frame built to the verified specification, complete with the rated parts needed to assemble it (wire rope, D-shackles, clamps, bolts and pins).
- Independent structural verification of the frame to the relevant BS EN Eurocodes and UK National Annexes.
- This manual: the wind limits, configurations, ballast and anchoring data, and operating guidance.

The operator is responsible for

- Assessing the site, ground conditions and exposure.
- Assembling the frame correctly with the supplied parts.
- Selecting a configuration and applying the correct ballast or anchors for it.
- Verifying ground-anchor holding capacity in the actual ground.
- Monitoring the weather and **winding the tree down in good time**.
- Inspection, maintenance and timely replacement of components.

Conditions of safe use

The wind limits, ballast figures and verification in this manual apply **only** when the frame is:

- Used in one of the five configurations described, within the stated wind limit;
- Ballasted or anchored exactly as specified for that configuration (or wound down to suit reduced ballast);
- Assembled, inspected and maintained as described, using only the supplied rated components;
- Wound down to its safe state whenever conditions approach or exceed the limit.

WHAT VOIDS THE VERIFICATION

Modifying the frame; replacing or substituting any of the supplied parts (wire rope, D-shackles, clamps, bolts or pins); adding decoration or signage beyond the verified star; exceeding the wind limits; or operating fully erected with insufficient ballast. In any of these cases the figures in this manual no longer apply and all resulting risk passes to the operator.

THE SAFE STATE IS ALWAYS AVAILABLE

There is no condition in which the correct response to bad weather is anything other than winding the tree down. Used within this manual, the Mega Tree is a verified, safe structure; operated outside it, it is not. The choice — and the responsibility for making it in time — rests with the operator.

Structural basis: independent verification of these frames by a chartered structural engineering practice, to BS EN 1990, BS EN 1991 (general & wind actions) and BS EN 1993, with UK National Annexes. This manual summarises those calculations for operational use; the full source document governs in case of any conflict and can be provided on request.

PRINT THIS PAGE AND KEEP IT ON SITE

Quick reference card

THE GOLDEN RULE

If the wind approaches your limit — or you're not sure — wind the tree down. A wound-down tree cannot blow over.

Set-up, wind limit & ballast at a glance

SET-UP	WIND CATCH	SIGNED OFF TO	TALL/LEG	SMALL/LEG
i · Star + TTG lights	Medium	15 m/s · 34 mph	80 kg	80 kg
ii · Star + strip lights	Very high	15 m/s · 34 mph	215 kg	175 kg
iii · TTG lights, no star	Very low	25 m/s · 56 mph	70 kg	50 kg
iv · Strip lights, no star	High	20 m/s · 45 mph	280 kg	195 kg
v · TTG, indoors/sheltered	Very low	3 m/s · 7 mph	None	None

Read across your set-up's row — don't rank the rows. Ballast depends on both the wind catch and the wind speed each set-up is signed off for, so a no-star set-up can need more (it's used in stronger wind). Figures are **per leg** (×4 = total); use ballast OR ground screws, never both; limits are 3-second gusts. Reduced ballast is allowed only if you wind down at the lower wind speed.

Do

- Check the forecast gust before and during use.
- Ballast/anchor to the table for your set-up.
- Use only the supplied rated wire and fittings.
- Pin every mast joint; tension every guy wire.
- Wind down early when in doubt.

Don't

- Exceed the wind limit for your set-up.
- Add signage or extra decoration beyond the star.
- Swap in generic wire, carabiners or fixings.
- Leave it erected, under-ballasted, in rising wind.
- Guess the wind — use the forecast or an anemometer.



Mega Tree Operating Manual · Rev 1.0 · June 2026
Independently verified to BS EN Eurocodes
Source calculations available on request

IMPORTANT — READ WITH THE REST OF THIS MANUAL

A. Safety notice

These notices apply throughout the life of the product. Read them alongside the instructions and limits set out in the preceding sections.

DANGER

Failure to follow this manual and its safety instructions can result in serious injury or death and/or property damage.

WARNING

Read the entire manual before installation, operation, maintenance, cleaning, or servicing. Keep this manual for future reference and ensure all operators and maintenance personnel have unrestricted access to it at all times.

CAUTION

Do not remove, bypass, or defeat any guard, interlock, or safety device. Use the product only as intended and under the conditions described in this manual. Wear appropriate personal protective equipment as specified for the task and environment. Inspect before each use and stop use immediately if any damage, abnormal noise, odour, leakage, overheating, or malfunction is suspected. Do not modify the product or use incompatible accessories or parts.

NOTICE

Follow all applicable laws, regulations, and site rules. Maintain housekeeping around the product and secure the work area to prevent unauthorised access. Ensure only trained and competent persons install, operate, or service the product.

Keep this notice with the manual. Failure to comply increases risk to health, safety, and property.

CONDITIONS OF SUPPLY AND USE

B. Exclusion & limitation of liability

The following terms apply to the supply and use of the Product and should be read together with this manual.

1. Acknowledgement of Safety Manual

- 1.1 The Customer acknowledges that it has been provided with the Product safe operation manual (the "Manual") and has had a reasonable opportunity to read and understand it.
- 1.2 The Customer shall ensure that the Product is used strictly in accordance with the Manual and any other instructions, warnings and labelling supplied with the Product, and that all users are appropriately trained and supervised.

2. Exclusion of Liability for Non-Compliance

- 2.1 To the fullest extent permitted by law, the Supplier shall have no liability for any loss, damage, injury or death arising out of or in connection with:
- (a) any failure to follow the Manual or other instructions, warnings or labelling;
 - (b) misuse, abnormal use, negligent use or wilful misconduct;
 - (c) use of the Product for any purpose or in any environment not expressly permitted by the Manual;
 - (d) failure to carry out inspections, maintenance, servicing or repairs in accordance with the Manual;
 - (e) any modification, alteration, tampering or repair not authorised in writing by the Supplier; or
 - (f) use of any parts, accessories or consumables not supplied or approved by the Supplier.

3. General Exclusions

- 3.1 Subject to clause 4, and to the fullest extent permitted by law, the Supplier shall not be liable for any:
- (a) loss of profit, loss of revenue, loss of business, loss of goodwill, loss of anticipated savings;
 - (b) indirect or consequential loss; or
 - (c) loss or corruption of data,
- whether arising in contract, tort (including negligence), misrepresentation, restitution, breach of statutory duty or otherwise, even if foreseeable or if the Supplier has been advised of the possibility of such loss.

4. Liability Cap

- 4.1 Subject to clause 4.2, the Supplier's total aggregate liability arising out of or in connection with the Product (including its supply and use) shall not exceed the sum paid for the frame itself (or, if higher, the sums paid and payable for the Product in the 12 months preceding the event giving rise to the claim).
- 4.2 The cap in clause 4.1 shall apply to all claims in aggregate, whether arising in contract, tort (including negligence), misrepresentation, restitution, breach of statutory duty or otherwise.

5. Non-Excludable Liability

- 5.1 Nothing in this agreement shall exclude or limit either party's liability for:
- (a) death or personal injury caused by its negligence;
 - (b) fraud or fraudulent misrepresentation; or
 - (c) any other liability which cannot be excluded or limited under applicable law.

6. Customer Responsibility and Risk

- 6.1 The Customer is responsible for assessing the suitability of the Product for its intended use and operating environment and for implementing appropriate health and safety measures, risk assessments and safe systems of work.
- 6.2 The Customer uses (and permits others to use) the Product at its own risk, subject always to clause 5.