



Limited Warranty Policy

Professional loudspeaker transducers — LF, HF and coaxial

REDCATT Technology Co., Ltd. · Dongguan, China · Woodinville, WA, USA

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Effective date	[to be confirmed on approval]
Applies to	REDCATT-branded transducers supplied through authorised channels
Supersedes	None — first issue

1. Scope

1.1 This Limited Warranty is given by REDCATT Technology Co., Ltd. ("REDCATT") in respect of REDCATT-branded loudspeaker transducers — low-frequency drivers, high-frequency drivers, compression drivers and coaxial drivers — supplied by REDCATT or by a REDCATT-authorized distributor.

1.2 It covers the transducer as supplied. It does not extend to any enclosure, crossover, amplifier, cable or system into which the transducer is fitted, nor to any product built around a REDCATT transducer by a third party.

1.3 OEM and ODM production. Transducers manufactured to a customer's specification, or supplied unbranded or under a customer's brand, are not covered by this policy. Warranty terms for those products are set out in the individual supply agreement between REDCATT and that customer, and the customer is responsible for the after-sales policy given to its own market.

1.4 This warranty is transferable with the product. A subsequent owner has the same rights as the original purchaser for the remainder of the period, provided the unit is traceable under clause 3.

2. Warranty period

2.1 REDCATT warrants each transducer against defects in material and workmanship for whichever of the following expires later:

- three (3) years from the production date encoded on the unit's batch label; or
- two (2) years from the date of invoice, where the claimant can produce a REDCATT or authorized-distributor invoice for the unit.

2.2 *The dual basis exists so that a valid claim is never lost because an invoice cannot be produced, and so that stock held in a distributor's warehouse does not consume the entire term.*

2.3 A repaired or replaced unit carries the unexpired remainder of the original period, or ninety (90) days from the date of the replacement, whichever is longer. A replacement does not restart the term.

3. Traceability

3.1 Every REDCATT transducer carries a batch label with the model, serial or batch number and production date code. This label is the primary basis of every warranty determination.

3.2 A unit whose label is missing, defaced, overpainted or unreadable cannot be validated and is not warrantable (code N17). Distributors and installers should photograph the label before installation, particularly where the driver will be mounted label-inward.

4. What is covered

4.1 REDCATT will remedy, on the terms of clause 9, any transducer that within the warranty period is found on REDCATT analysis to have failed because of a defect in material or workmanship — that is, a condition that originated in the design, materials or manufacture of the unit rather than in its subsequent handling, installation, drive conditions or environment.

4.2 In practice this includes adhesive and bonding failures, suspension failures originating at a bond line, winding and termination faults, magnetic-assembly and gap defects, and measured performance outside the published tolerance. Annex A lists these by code.

5. What is not covered

5.1 This warranty does not cover any failure arising from:

- thermal overload of the voice coil, from any cause — including sustained overpowering, amplifier clipping, DC offset, and operation without the specified filtering;
- mechanical over-excursion, including operation below the enclosure tuning frequency without an effective high-pass filter;
- accident, impact, crushing, puncture or other handling damage;
- water, condensation, salt, humidity, chemicals, fire, lightning, mains surge or electrostatic discharge;
- incorrect installation, mounting, wiring or enclosure design, including obstruction of the pole vent or cooling path;
- any repair, recone, re-diaphragm or modification carried out outside a REDCATT-authorised facility;
- damage in transit, which is a claim against the carrier;
- normal wear, cosmetic ageing, and any unit outside the warranty period.

5.2 Annex A sets out the specific failure modes in each category, with the physical evidence on which the determination is made.

5.3 Exceeding the published power rating is not, by itself, a defect in the amplifier or the system — but the resulting damage is not a manufacturing defect and is not covered. The published AES and programme power ratings assume the drive and filter conditions of clause 6.

6. Conditions of use

6.1 The warranty is given on the basis that the transducer is used within the conditions below. These are the conditions under which its published ratings are established; a failure that occurs outside them is an application failure, not a defect.

6.2 Drive and filtering

- Power ratings are established to AES2-2012 over two hours with a pink-noise signal of 6 dB crest factor, band-limited as stated on the datasheet. Programme power is twice the AES rating and assumes normal music duty cycle.
- A high-pass (subsonic) filter is mandatory for any driver in a vented, bandpass or horn-loaded enclosure. It must be set at or above the enclosure tuning frequency, with a slope of at least 12 dB/octave; 24 dB/octave is recommended. Below tuning the cone unloads and excursion rises without mechanical limit.
- The amplifier must not be operated in sustained clipping. Clipped output raises average power well above the sine equivalent and is a common cause of coil burn.
- Band-pass limits stated on the datasheet must be respected. A high-frequency driver must be crossed over at or above its stated minimum crossover frequency, with the stated minimum slope.
- Any limiter or DSP protection specified for the model must be enabled and correctly configured.

6.3 Conditioning

New drivers require a conditioning period before their suspension settles. Thiele/Small parameters should be measured only after conditioning at low level; parameters taken on an unconditioned unit will differ from the published figures and are not by themselves grounds for a claim.

6.4 Mounting and enclosure

- The baffle must be flat at the mounting face and the driver must seat on its gasket without distortion of the frame.
- Fixings must be tightened progressively in a star pattern to the torque stated on the datasheet. Over-torquing warps the frame, shifts the gap and causes rub.

- The pole vent, rear vent and basket windows must remain unobstructed. Rear clearance must be sufficient for airflow.
- Net internal volume and vent tuning should follow the datasheet or a REDCATT-reviewed design. Enclosure defects that load the driver asymmetrically will be classified as installation faults.

6.5 Storage and handling

- Store in the original packaging, dry, between 5 °C and 35 °C, below 70 % relative humidity, away from strong magnetic fields and ferrous debris.
- Do not stack drivers on their cones or dust caps, and do not lift a driver by its cone, dust cap, lead wires or terminals.
- Unless the datasheet states an IP rating, the transducer is not weather-rated and must be protected from moisture and airborne contamination.

7. How REDCATT determines a claim

7.1 Every returned unit is examined by REDCATT Quality Assurance and assigned a defect code from Annex A. The determination rests on the physical evidence in the unit, not on the description of the symptom.

7.2 Annex B sets out the evidence used to separate a manufacturing defect from an application failure where the visible symptom is the same. A torn spider, a detached surround or an open circuit can each arise either way; the distinction lies in the tear path, the condition of the adhesive, the state of the voice coil and former, and the pattern across the lot.

7.3 Where the evidence is ambiguous, or where thermal and manufacturing indications are both present, the unit is classified under Group C and assessed on which cause predominates, including against reference units from the same production lot.

7.4 REDCATT issues a written finding for every claim, stating the defect code, the evidence, and the outcome. Where a claim is rejected, the finding states what was observed and why it falls outside the warranty.

7.5 Batch and epidemic failures. Where the same covered defect code is confirmed on 2 % or more of a delivered production lot, or on five or more units of one lot, whichever is reached first, REDCATT will open a formal 8D investigation, place the affected lot on hold in its own stock, and agree containment and remedy for the balance of that lot with the customer — including units not yet failed.

8. Claim procedure

8.1 Shipment discrepancies, visible transit damage and cosmetic damage must be reported to REDCATT and to the carrier within seven (7) days of delivery, with photographs of the packaging and the goods.

8.2 All other claims are made through the REDCATT-authorized distributor from whom the goods were bought, or directly to REDCATT where the goods were bought directly. A claim should be raised within thirty (30) days of the fault being discovered.

8.3 A claim must be submitted on the REDCATT RMA form and must include:

- model, quantity and a legible photograph of each batch label;
- the purchase invoice or purchase order reference, where available;
- a description of the symptom, when it appeared, and the approximate service hours;
- the system context: amplifier model and output power, processor and filter settings, high-pass frequency and slope, limiter settings, crossover point, enclosure type and volume;
- photographs of the front, rear, label and defect area;
- an impedance sweep or DC resistance reading where the fault is electrical, if measurement is available.

8.4 REDCATT will issue an RMA number within five (5) working days of a complete submission. Goods returned without an RMA number will not be accepted. Authorised returns must be shipped within thirty (30) days of the RMA being issued, in the original or equivalent packaging.

8.5 REDCATT will complete its analysis and issue its written finding within fifteen (15) working days of receiving the goods.

8.6 Where a claim is rejected, or the returned unit is found to meet specification (code N23), REDCATT may charge a handling and analysis fee and the cost of return carriage, and will offer a chargeable repair or recone quotation where one is available. The customer may instead instruct REDCATT to scrap the unit.

9. Remedy

9.1 For a claim accepted under this warranty, REDCATT will at its own option repair the unit, replace it, or issue a credit against the invoiced value. Where a recone kit or replacement diaphragm is available for the model and the failure is confined to the moving assembly, REDCATT may supply the kit as the remedy.

9.2 Freight. The claimant bears the cost of returning goods to REDCATT. Where the claim is accepted, REDCATT bears the cost of returning the repaired or replacement goods, or of shipping a replacement or kit.

9.3 Repair and replacement are the claimant's sole and exclusive remedy under this warranty.

10. Limitation of liability

10.1 REDCATT's liability under this warranty is limited to the repair, replacement or credit of the transducer found to be defective, and shall not in any event exceed the invoiced value of that transducer.

10.2 REDCATT is not liable for the cost of removing or reinstalling the transducer, for labour, access, hire or rental costs, for damage to any other equipment, for loss of profit, loss of use, cancelled events, or for any other indirect or consequential loss.

10.3 Nothing in this clause limits any liability that cannot lawfully be limited, including liability for death or personal injury caused by negligence.

11. Relationship with statutory rights

11.1 This Limited Warranty is a commercial guarantee given by REDCATT in addition to, and not in substitution for, any rights the purchaser has under the applicable law of sale.

11.2 In particular, a consumer in the European Union retains the statutory right to remedies for lack of conformity against the seller under Directive (EU) 2019/771 and the national law implementing it, for the statutory period, irrespective of this warranty. Where mandatory local law gives the purchaser more than this warranty gives, that law prevails to the extent of the difference.

11.3 Governing law and dispute resolution are as set out in the applicable REDCATT terms of sale or supply agreement. [To be confirmed by legal review.]

12. Contact

Warranty claims, RMA forms and technical enquiries: [warranty@redcatt.net] — to be confirmed. General enquiries: info@redcatt.net, +86-769-8318-1898.

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Annex A — Defect classification

This annex states how REDCATT classifies each failure mode. Codes M, E and P are covered by the warranty where the stated evidence is present. Codes in Group N are outside the warranty. Codes in Group C require analysis before a determination is made. Every REDCATT warranty finding cites one of these codes.

Code	Failure mode / observation	Status	Basis of determination
MECHANICAL AND STRUCTURAL — GROUP M			
M01	Spider (damper) delaminated from the cone neck or from the basket landing — clean separation along the bond line	Covered	Adhesive bond made in production did not develop full strength. Adhesive remains as a discrete bead or film on one face only; the spider material itself is intact.
M02	Voice-coil winding or collar delaminated from the former — no discolouration	Covered	Winding adhesive cure or application defect. Wire varnish still amber/clear, no carbon odour, DCR within tolerance.
M03	Surround delaminated from the cone edge or from the basket rim	Covered	Bond-line failure. Separation follows the adhesive line; the surround roll is unstretched and shows no permanent set.
M04	Dust cap or phase plug detached along its bond line	Covered	Assembly adhesive defect, provided there is no impact mark, puncture or thermal evidence.
M05	Gasket detached, misaligned, or not fully seated	Covered	Assembly defect.
M06	Spider torn at or immediately adjacent to a bond line, or torn from a fold/pleat trapped at assembly	Covered	Tear path follows the glue line or an assembly crease. Corrugations away from the tear retain their original geometry.
M07	Surround torn at a bond line, or split from an incorrectly formed or over-stretched roll	Covered	Tear originates at the joint, not across the working section of the roll.
M08	Voice coil ovalised or off-centre in the gap as manufactured	Covered	Concentricity error measurable; rub present at low drive level from first use, symmetric about the axis.
M09	Top plate, back plate or magnet assembly shifted; gap geometry out of tolerance	Covered	Magnetic assembly bonding or fixture defect.
M10	Tinsel lead too short, too long, mis-routed, or fractured at the anchor point with correct lead geometry	Covered	Lead-forming or anchoring defect. Lead shows no slap marks against the cone and no thermal damage.
M11	Loose pole piece, loose phase plug, or debonded magnet	Covered	Structural bonding defect.
M12	Metal chips, adhesive beads or other foreign matter in the magnetic gap as supplied	Covered	Gap-cleaning defect. Contamination is ferrous swarf or cured adhesive, not field debris, dust or insect matter.
M13	Basket porosity, casting crack, or frame warpage present as supplied	Covered	Verified against the mounting record; no evidence of over-torque or impact.
M14	Terminal, terminal block or connector loose, badly staked, or incorrectly located	Covered	Assembly defect.
M15	Corrosion of plated or finished parts on a unit stored within the stated storage conditions	Covered	Plating or protective-finish defect. Excluded where salt, humidity or condensation exposure is evident (see N10).
ELECTRICAL — GROUP E			
E01	Open circuit in the winding or at an internal joint, with no thermal damage	Covered	Wire, joint or termination defect. Winding varnish undamaged, no carbon residue, former undeformed.
E02	Turn-to-turn or layer-to-layer short with no thermal damage	Covered	Insulation or winding-tension defect.
E03	Cold, dry or incomplete solder joint at the terminal	Covered	Soldering process defect.
E04	Winding insulation (varnish) defect	Covered	Material or curing defect.
E05	DC resistance outside the published tolerance on a new unit	Covered	Wire gauge, turn count or termination defect.

Code	Failure mode / observation	Status	Basis of determination
PERFORMANCE AND ACOUSTIC — GROUP P			
P01	Thiele/Small parameters outside published tolerance on a new, correctly run-in unit	Covered	Verified by REDCATT measurement after the standard conditioning routine of clause 6.3.
P02	Impedance curve anomaly — irregular minimum, split resonance, unexpected peak	Covered	Indicates a winding, suspension or gap defect.
P03	Rub and buzz present from first use or at low drive level	Covered	Concentricity, gap or suspension defect.
P04	Audible buzz or rattle traced to a loose internal component	Covered	Assembly defect.
P05	Sensitivity or frequency response outside published tolerance	Covered	Verified against the reference curve for the model.
P06	Spider softened or sagging with no thermal or over-excursion evidence	Covered	Resin content or curing defect in the spider material.
P07	Magnetic flux density below specification	Covered	Charging or magnet material defect.
P08	Air leak through the frame, gasket seat or dust cap on a unit specified as sealed	Covered	Assembly or material defect.
NOT COVERED — APPLICATION, HANDLING AND ENVIRONMENT — GROUP N			
N01	Voice coil burned, charred, blackened or fused to the gap; adhesive carbonised	Not covered	Thermal overload. The driver dissipated more power than its rating for longer than it can shed. This is an application condition, not a material defect.
N02	Coil burned uniformly over its whole length, often with the former collapsed onto the pole	Not covered	DC offset or amplifier failure. The fault lies in the amplifier, not the transducer.
N03	Coil burned with the amplifier operating in sustained clipping	Not covered	Square-wave content raises the average power far above the sine equivalent and concentrates energy in the driver's passband.
N04	Former end mushroomed, crumpled or bottomed against the back plate; collar deformed	Not covered	Over-excursion. The coil struck the back plate; Xmax and Xdamage were exceeded.
N05	Spider torn through the corrugations, with permanent stretch or flattening of the corrugations either side of the tear	Not covered	Over-excursion. The suspension was driven beyond its mechanical limit.
N06	Surround torn across the working section of the roll, with stretch marks, thinning or permanent set	Not covered	Over-excursion, or ageing beyond the warranty term. Distinguish from M07 by the tear path.
N07	Cone cracked at the neck joint, creased, or permanently deformed	Not covered	Over-excursion or impact.
N08	Damage on a vented (bass-reflex) enclosure operated without a high-pass filter, or with the filter set below the box tuning frequency	Not covered	Below tuning the cone unloads and excursion rises without limit. Clause 6.2 makes a subsonic filter a condition of the warranty.
N09	Damage where the pole vent, rear vent or basket windows were obstructed, or a vented-pole driver was mounted against a solid surface	Not covered	Blocked cooling path and trapped pressure. Both raise coil temperature and load the suspension asymmetrically.
N10	Water, condensation, salt fog, high humidity, mould, or corrosion from environmental exposure	Not covered	REDCATT drivers are not weather-rated unless the datasheet states an IP rating. Moisture also degrades adhesives — a bond failure with moisture evidence is classified here, not under Group M.
N11	Impact, crush or puncture damage: dented or holed cone, punctured dust cap, bent basket, snapped terminals	Not covered	Handling damage.

Code	Failure mode / observation	Status	Basis of determination
N12	Damage found on receipt attributable to transport or packaging	Not covered	Claim lies against the carrier. Report to REDCATT and the carrier within 7 days of delivery (clause 8.1).
N13	Frame distortion, air leaks or rub caused by over-torqued, unevenly torqued or incorrectly sequenced mounting bolts, or by an out-of-flat baffle	Not covered	Installation fault. See the mounting requirements in clause 6.4.
N14	Damage from incorrect wiring: series/parallel error, wrong tap, dual-coil driver wired out of phase or with one coil unloaded	Not covered	System wiring fault leading to overload or asymmetric drive.
N15	Insect, rodent or other biological damage	Not covered	Environmental.
N16	Product reconed, re-diaphragmed, re-terminated, re-gasketed, re-charged, painted, coated or otherwise modified	Not covered	Warranty is void on any unit opened or altered outside a REDCATT-authorised facility, whatever the original complaint.
N17	Date code, batch label or model marking defaced, removed, overpainted or unreadable	Not covered	The unit cannot be traced to a production lot and cannot be validated.
N18	Product not supplied by REDCATT or a REDCATT-authorised distributor, or found to be counterfeit	Not covered	No warranty relationship exists. REDCATT will report counterfeit findings.
N19	Cosmetic marks, scuffs or finish blemishes that do not affect performance	Not covered	Excluded unless reported within 7 days of delivery as a shipment discrepancy.
N20	Normal ageing and wear: gasket compression, finish dulling, surround or spider stiffness change consistent with service life	Not covered	Wear is not a defect.
N21	Fire, lightning, mains surge, electrostatic discharge, or force majeure	Not covered	External cause.
N22	Damage from solvents, adhesives, sealants, paints, cleaning agents or treatments applied to the driver	Not covered	Chemical attack on cone, surround or adhesive systems.
N23	No fault found — the returned unit meets published specification	Not covered	Handling and analysis charges may apply (clause 8.6).
N24	Warranty period expired, or neither a readable date code nor a valid purchase document can be produced	Not covered	Chargeable repair or recone may still be offered.
REQUIRES ANALYSIS — GROUP C			
C01	Voice-coil former blistered or delaminated between layers	Conditional	Covered where the wire varnish and adhesive show no discolouration and DCR is within tolerance — this points to a former bonding defect. Not covered where any browning, carbon odour or collar deformation is present.
C02	Coil rubbing appearing after a period in service	Conditional	Covered where a concentricity or gap error is measurable and the gap is free of field debris. Not covered where the former shows bottoming marks or the gap contains foreign matter.
C03	Adhesive joint failure on a unit that also shows moisture or corrosion evidence	Conditional	Assessed on which cause predominates. Corrosion of steel parts or water tide lines on the cone will normally place the claim under N10.
C04	Open circuit at a tinsel lead	Conditional	Covered where the fracture is at the anchor point with correct lead length and no slap marks. Not covered where the lead shows slap wear against the cone, or where the coil also shows thermal damage.
C05	Spider or surround softened with partial thermal evidence	Conditional	Assessed by comparing the coil condition against the suspension condition, and against other units from the same lot and the same system position.

Annex B — Distinguishing a manufacturing defect from an application failure

The same visible symptom can have either cause. A spider can tear because its bond never developed strength, or because the driver was pushed past its mechanical limit; a coil can go open circuit because a joint was cold-soldered, or because it burned. The evidence below is what separates them, and is applied consistently to every returned unit.

What is examined	Points to a manufacturing defect	Points to an application failure
Voice coil and winding	Varnish clear or amber, wire bright, no odour. DCR within published tolerance or open at a discrete joint.	Wire darkened, blistered or fused. Carbon odour. Adhesive squeeze-out browned. DCR open with visible burn, or collapsed to near zero.
Failed adhesive joint	Adhesive present as a discrete bead or film on one face only; the mating face is clean. Materials either side undamaged.	Adhesive charred, glassy or absent through heat; or the joint is intact and the material itself has torn away from it.
Spider	Tear follows the glue line, or an assembly fold is visible. Corrugation geometry normal away from the tear.	Tear crosses the corrugations. Corrugations either side stretched, flattened or permanently set. Often paired with former damage.
Surround	Separation along the bond to cone or frame. Roll section unstretched, original profile retained.	Tear through the roll material. Stretch marks, thinning, whitening or permanent deformation of the roll.
Former end and back plate	Former end square and undamaged. Back plate unmarked.	Former end mushroomed, crumpled or split. Witness marks, polishing or impact rings on the back plate.
Magnetic gap	Ferrous swarf or cured adhesive from production. No field dust.	Field debris, fibres, insect matter, corrosion products, or fragments of a failed former.
Frame and mounting face	Casting flaw, porosity or warp with no bolt-hole distortion.	Bolt holes deformed or dished, paint witness rings, frame pulled out of plane at the fixings.
Resonance frequency (Fs)	Off the published value on a new unit, before any service.	Shifted downward on a used unit with suspension fatigue, or upward after thermal exposure.
Pattern across the lot	Same defect code appears on units from the same production lot, in different systems and different positions, at widely different service hours.	Failures concentrate in the hardest-driven positions of one system, or follow one amplifier channel, one enclosure, or one event.

Two failures reported here — glue delamination and suspension tearing — are the clearest illustration of why the distinction has to be written down. A clean separation along a bond line, with the adhesive present but unbonded and the coil untouched, is a manufacturing defect and REDCATT stands behind it. A tear that crosses the corrugations of a spider whose former end is mushroomed against the back plate is the same part, broken a different way, by the system it was fitted into.