**USER MANUAL** 

USER MM. Datasher A Series Profe

com

**Professional Power Amplifiers** 

Minimum 4 ohm	N
A500	A
A700v	A
A750	A
A1000	A
A1004	A
A1500	A
Q6	Q
Q1004	
QB1000/600	

Minimum 2 ohm A2000 A3000 A4000 A5000 A5003 A6000 Q900

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	INSTALLATION							
UNPACKING	PLEASE READ THIS SECTION BEFORE USING THE AMPLIFIER. IF YOU HAVE ANY QUERIES, CONSULT AN AUTHORISED CHEVIN DEALER The carton contains the amplifier and:							
	► A700v: 1 x Neutrik Speakon plug							
	Q6, Q1004, QB1000/600, Q900: 4 x Neutrik Speakon plugs							
	All other models: 2 x Neutrik Speakon plugs							
	User manual & warranty card     Please make a note of the serial number (on rear panel)							
	Please complete & return the warranty card. Failure to register may result in delays if you							
	require warranty service. Full warranty details are at the back of this manual.							
	? IF ANY ITEM IS MISSING OR DAMAGED, CONTACT YOUR DEALER IMMEDIATELY.							
COOLING &	A Series amplifiers draw in air at the back and expel it at the front: keep front & back of unit free of obstruction.							
ENVIRONMENTAL	The amplifier may be used free-standing or installed in a 19" rack. If installed in a rack, the rear of							
	the chassis should be supported. Rear rack-mount supports are integral on all models except the A500 & A700v.							
VOLTAGE SELECTION	The amplifier is factory set to your local supply voltage							
SELECTION	✓ WARNING: THE VOLTAGE SHOULD ONLY BE CHANGED BY AN AUTHORISED CHEVIN DEALER							
AC WIRING	The A500 & A700v connect to the mains supply via a detachable power cable with integral connector (supplied).							
	All other models connect to the mains supply via a fixed power cable, colour coded to European standard:							
	Green/Yellow = Earth Blue=Neutral Brown= Live							
	N.B.							
	□ The amp must be connected to a 3-pin grounded outlet via a 3-pin connector of sufficient voltage							
	and current rating. If the connector has provision for a fuse, a suitable fuse must be fitted.							
	<ul> <li>The A5000, A6000 and Q900 have 2 power cables</li> <li>WARNING: ALL CHEVIN AMPLIFIERS MUST BE EARTHED</li> </ul>							
MAINS POWER								
SUPPLY	The power rating of the supply should be at least twice the total audio output of the system.							
	ELECTRIC SHOCK/FIRE HAZARD: The unit must be connected to an adequately rated grounded outlet. All cables, switch gear et al must be adequately rated to avoid risk of overheating & fire.							
THREE PHASE	outlet. All cables, switch gear et al must be adequately rated to avoid risk of overheating & fire. The neutral current will not balance on three-phase systems.							
SYSTEMS	<ul> <li>Use individual neutral connections from each phase outlet back to the distribution point.</li> </ul>							
	Alternatively, ensure the neutral conductor is of sufficient capacity to handle a return current							
	equal to the sum total of the current in the three phases.							
INPUT	All amplifiers are fitted with XLR connectors on the inputs.							
CONNECTIONS	All inputs are electronically balanced and can accept signal from balanced & unbalanced sources.							
	▶ A500 and A700v: One female XLR connector on the input of each channel.							
	A750, A1000, A1004, A1500, A2000, A3000, A4000, A5000, A5003, A6000, Q900:							
	One male & one female XLR connector on the input of each channel. These connectors are wired in parallel.							
	Q6, Q1004 & QB1000/600: One female XLR connector on the input of each channel.							
	N.B. The amps are not mixing amplifiers: do not directly connect any channel to more than 1 signal source.							
	Maintain the same phase polarity on all equipment in signal chain.							
	PIN WIRING - MALE & FEMALE XLR INPUT SOCKETS							
	PIN 1: GROUND, connects directly to chassis PIN 2: HOT (+) PIN 3: COLD(-) CONNECTION TO BALANCED SOURCES							
	1. Fit XLR connectors at both ends of the cable.							
	<ol> <li>PIN 1 connects via the cable braid (screen). Always connect the screen at both ends of the cable.</li> </ol>							
	<ol> <li>PINS 2 &amp; 3 connect via the two signal wires of the cable.</li> </ol>							
CONNECTION TO UNBALANCED SOURCES								
	<ol> <li>At the SOURCE END of the cable, the cable screen &amp; cold (-) signal wire connect to the chassis of the</li> </ol>							
	source equipment via the sleeve of the jack plug/phono connector/PIN 1 of the XLR-type plug.							
	2. The signal carrying conductor (which connects to PIN 2 of the XLR at the amp end) connects to the							
	HOT output terminal of the source equipment via the jack plug tip/phono connector pin/signal-carrying XLR pin							

<b>A</b>	INSTALLATION									
OUTPUT CONNECTIONS	nection is made to the amplifier's load via Neutrik Speakon sockets. As with input nectors, maintain phase polarity throughout the system.									
Speakon Socket Wiring										
	1- = GROUND 2- = GROUND									
	A700v 1 Speakon socket per channel, wired as follows: 1+ = HOT 2+ = NO CONNECTION									
	1- = COLD (not ground) 2- = NO CONNECTION									
	WARNING: The A700v output is permanently connected in bridge mode. Both hot and cold									
	outputs carry high level signal. Further bridging is impossible. No terminal of the speaker									
	socket is connected to ground. Do not connect any part of the speaker system to ground. A750, A1000, A1004, A1500, A2000, A3000, A4000, A5003, Q900									
	2 parallel-connected Speakon sockets per channel, wired as follows:									
	1+ = HOT 2+ = NO CONNECTION									
	1- = GROUND 2- = GROUND									
	A5000/ A6000 Two (2)parallel- connected Speakon sockets per channel, wired as follows:									
	1+=HOT 2+= NO CONNECTION									
	1-=COLD (not ground) 2-= COLD (not ground) ✓ WARNING: The A5000 &A6000 outlets are permanently connected in bridge mode. Both hot &									
	cold outputs carry high level signal. Further bridging is impossible. Do not connect any part of the									
	A5000 and A6000 outputs to the ground. Take care when using loudspeaker controllers or processors.									
	Q6, Q1004 One Speakon socket per channel, parallel connected in channel pairs: A&B, C&D.									
	Each socket in the pair carries the output of both channels. Wiring as follows:									
	□ Channel A socket (600 watts) carries its own & Ch. B's 600 watt output.									
	Channel B socket (600 watts) carries its own & Ch. A 's 600 watt output. The same applies to Channel C & D sockets									
	□ The same applies to Channel C & D sockets. Channel A & C Sockets: 1+ = HOT (Ch. A & C output) 1- and 2- = GROUND									
	2+ = HOT (Ch. B & D output, respectively)									
	Channel B & D Sockets: 2+ = HOT (Ch. B & D output) 1- and 2- = GROUND									
	1+ = HOT (Ch. A & C output, respectively)									
	QB1000/600 One Speakon socket per channel, internally configured as follows:									
	$\Box$ Channel B socket carries only its own 1000 watt output.									
	☐ Channel B socket carries only its own 1000 watt output. ☐ Channel C socket carries only its own 1000 watt output.									
	□ Channel D socket (600 watts) carries both its own & Ch. C's 1000 watt output.									
	Outer sockets Ch A & D: 1+ = HOT (600 watts output) 1- and 2- = GROUND									
	2+ = HOT (1000 watts output) 1- and 2- = GROUND									
	Inner sockets Ch B & C: 2+ = HOT (1000 watts output) 1- and 2- = GROUND ✓ WARNING: High voltages are present at output terminals during operation & for a period afterwards.									
	Do not connect the amp output to any other amp output or to any other equipment except									
	a loudspeaker system									
Loudspeaker	Suggested speaker ratings, per amplifier channel, in watts.									
Power Ratings										
	A500 115 230 460 - A750 160 300 600 -									
	<u>A1000/Q6</u> 230 450 900 -									
	A1004/Q1004 400 750 1500 -									
	<u>A1500 500 1000 1900 -</u> OP1000/600 A&D 230 450 000									
	QB1000/600 A&D 230 450 900 - B&C 400 750 1500 -									
	A2000 230 500 1000 1800									
	A3000 350 650 1300 2300									
	A4000 450 800 1500 3000 A5003/A5000 500 1000 3000 3600									
	<u>A5003/A5000 500 1000 2000 3600</u> A6000 800 1200 2600 4500									
	Q900 350 650 1300 2300									

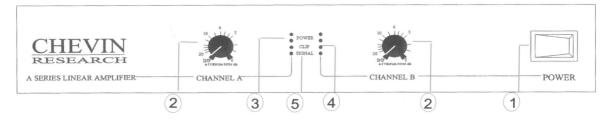
	INSTALLATION							
Loudspeaker Impedance	Correct total loading for the amplifiers is as follows. Multiple speakers are connected in parallel A500, A750, A1000, A1004, A1500, Q6, Q1004, QB1000/600 per channel							
	4 or less speakers of $16\Omega$ OR 2 or less speakers of $8\Omega$ OR 1 speaker of $4\Omega$ WARNING: Do not use a system with a total impedance per channel of under 4 ohms							
	A2000, A3000, A4000, A5003, A5000, A6000, Q900 per channel							
	8 speakers or less of 16 $\Omega$ OR 4 or less speakers of 8 $\Omega$							
	OR 2 or less speakers of $4\Omega$ OR 1 speaker of $2\Omega$							
	WARNING: Do not use a system with a total impedance per channel of under 2 ohms.							
A700V Loudspeaker	<b>Power Handling.</b> The A700v can be used to drive a 70 volt distribution system or to drive a conventional system, as follows:							
Power Ratings								
& Impedance	Can drive 100 volt line system at reduced output.							
	N.B. Don't connect a transformer between the A700v output and distribution system Where line transformers are used to match speakers to the distribution system, adjust							
	to suit characteristics of the speaker.							
	Conventional Speaker System							
	<u> </u>							
	WARNING: Do not use a system with a total impedance per channel of under 8 ohms.							
PRE-SET								
LIMITER	The A6000 and A5000 (4u) models incorporate an adjustable output limiting control, concealed behind the front panel Consult an authorised Chevin dealer if you wish to make use of this feature.							
	OPERATION							
Power Up	Connect the unit to the mains supply and switch on. The green power LEDs illuminate. The fans may							
	run, depending on temperature. The green signal LEDs illuminate when signal is present.							
	The red clip LEDs illuminate if overdriving is imminent.							
Power Down	Turn the gain controls to minimum position. Switch off the amp & disconnect from the mains power supply.							
Protection	Mains power supply failure. When power is restored, the amp AutoMutes for 10 seconds.							
Systems	Do not increase gain settings during this period. Please note the A500 & A700v do not AutoMute.							
	Shorted output. The unit can operate indefinitely into a shorted output. Normal operation will resume							
	upon removal of the short circuit.							
	Low load impedance. Protection is immediate.							
	Clipping. The affected channel's red Clip LED illuminates shortly before clipping. A further increase in signal level							
	will activate the soft-clip circuit. <b>RF, DC or very low frequency signal at output</b> . A self-resetting circuit activates to protect the load.							
	<b>Cooling systems.</b> The internal fans react to both signal level and temperature inside the unit. If the							
	ambient temperature is high, fan speed will increase even in the absence of signal.							
Sound Levels	WARNING: keep sound levels down! High levels of sound can damage hearing.							
	SERVICING							
Maintenance	WARNING: ALL SERVICING AND INTERNAL MAINTENANCE MUST BE REFERRED TO AN							
	AUTHORISED CHEVIN DEALER							
	Do not remove any covers or touch any internal parts							
Dem	Do not allow any objects, for example screwdrivers or cable ends, to enter the unit.							
Damage	Water. If the unit or any other electrical equipment in the system becomes wet during operation, immediately disconnect the power at source. Do not touch the amplifier. Consult a qualified engineer							
	Mechanical. If there are any signs of mechanical damage - for example, broken parts, covers							
	or fans guards pushed in, loose internal parts, mains cable damage etc disconnect the amplifier							
	from the mains and consult a qualified engineer.							
	WARNING Chavin Research accepts as responsibility or liability relating to injuny or demograp suffered as a result							
	Chevin Research accepts no responsibility or liability relating to injury or damages suffered as a result							
	of misuse or unauthorised tampering with any of its amplifiers							

	MONO BRIDGE MODE					
	✓ WARNING: YOU CANNOT BRIDGE THE A700v, A5000 (4U), A6000 or QB1000/600					
INPUT CONNECTIONS	<ul> <li>WARNING: YOU CANNOT BRIDGE THE A700v, A5000 (4U), A6000 or QB1000/600</li> <li>A500         <ol> <li>Make a lead with a suitable connector for the source equipment and two (2) XLR plugs for the amplifier end.</li> <li>The HOT output from the source equipment goes to Pin 2 of Ch. A XLR plug and Pin 3 of Ch. B XLR plug</li> <li>The COLD connection from the source equipment goes to Pin 3 of Ch A. XLR plug and to Pin 2 of CH. B XLR plug</li> <li>The colle screen connects to Pin 1 of the XLR plugs in both cases</li> </ol> </li> <li>A750, A1000, A1004, A1500, A2000, A3000, A4000, A5003, Q900         <ol> <li>Bring the input signal into Channel A as usual.</li> <li>Make a link cable with XLR plugs at both ends to go from Ch. A LINK socket to Ch. B INPUT socket.</li> <li>Pin 2 at one end connects to Pin 3 at the other end: that is, PIN 2-3 and PIN 3-2</li></ol></li></ul>					
OUTPUT CONNECTIONS	<ul> <li>A500, A750, A1000, A1004, A1500, A2000, A3000, A4000, A5003, Q900</li> <li>1. Split the speaker cable by separating the 2 conductors for a distance of 20cm along the cable.</li> <li>2. Connect the red conductor to Terminal 1+ of the Ch. A Speakon connector</li> <li>3. Connect the black conductor to Terminal 1+ of the Ch. B Speakon connector</li> <li>Re the Q900: repeat the above procedure to bridge Channels C&amp;D</li> <li>✓ WARNING: Do not make connections to any other terminals.</li> </ul>					
OPERATION	Set both channels' gain controls in the same position, preferably at maximum, and control the gain from elsewhere in the system. This ensures the load is shared equally between channels.					
LOADING & POWER OUTPUT	A500one (1) load of $\$\Omega$ minimum.Power output is 650 watts.A750one (1) load of $\$\Omega$ minimum.Power output is 850 watts.A1000one (1) load of $\$\Omega$ minimum.Power output is 1200 watts.A1004one (1) load of $\$\Omega$ minimum.Power output is 2000 watts.A1500one (1) load of $\$\Omega$ minimum.Power output is 2500 watts.A2000one (1) load of $\$\Omega$ minimum.Power output is 2400 watts.A2000one (1) load of $\$\Omega$ minimum.Power output is 3000 watts.A3000one (1) load of $\$\Omega$ minimum.Power output is 3000 watts.A4000one (1) load of $\$\Omega$ minimum.Power output is 3000 watts.A5003/A5000one (1) load of $\$\Omega$ minimum.Power output is 5000 watts.Q900one (1) load of $\$\Omega$ minimum per channel pair.Power output is 3000 watts per channel pair.					
INPUT CONNECTIONS	<ul> <li>Q6, Q1004</li> <li>Make a lead with a connector at the source end and two (2) XLR plugs at the amp end. Wiring as follows: <ol> <li>The source equipment HOT output goes to PIN 2 of Ch. A (C) XLR plug and PIN 3 of Ch. B (D) XLR plug.</li> <li>The COLD connection from the source equipment must go to PIN 3 of the Ch. A (C) XLR plug and PIN 2 of the Ch. B (D) XLR plug.</li> <li>The cable screen connects to PIN 1 of the XLR plugs in both cases.</li> </ol> </li> </ul>					
OUTPUT CONNECTIONS	<ol> <li>Connect the RED conductor of the speaker cable to Terminal 1+ of Ch. A (C) Speakon connector.</li> <li>Connect the BLACK conductor of the speaker cable to Terminal 2+ of Ch. B (D) Speakon connector.</li> <li>WARNING: Do not make connections to Terminals 1- or 2</li> </ol>					
OPERATION	Set both channels' gain controls in the same position, preferably at maximum, and control the gain from elsewhere in the system. This ensures the load is shared equally between channels.					
LOADING & POWER OUTPUT	<ul> <li>Q6 one (1) load of 8Ω minimum per channel pair. Power output is 1200 watts per channel pair.</li> <li>Q1004 one (1) load of 8Ω minimum per channel pair. Power output is 2000 watts per channel pair.</li> </ul>					

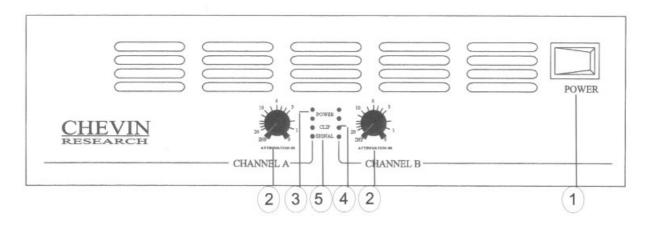
## FRONT PANELS

### A500 3 5 CHEVIN IAME RESEARCH POWER CHANNEL B A 500 LINEAR AMPLIFTER CHANNEL A 2) 2) 4 (1)A700V 3 OWE CHEVIN 5 RESEARCH POWER GAIN A700 V LINEAR AMPLIFIER (2) (4 (1)

## A750, A1000, A1004, A1500, A2000, A3000



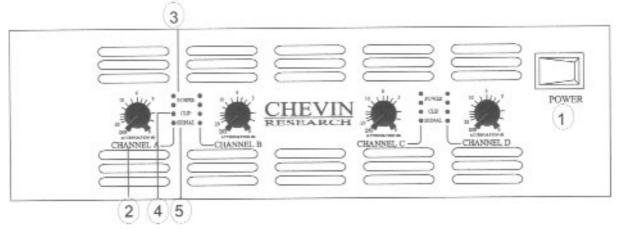
### A4000, A5003



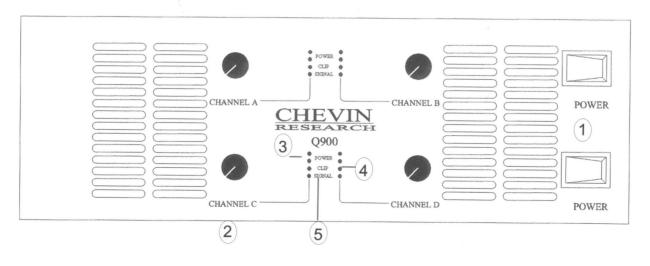
Q6



### Q1004, QB1000/600



Q900



1. Power Switch 2. Output Controls

3. Power LEDs

4. Clip LEDs

Controls the mains power supply to the amplifier

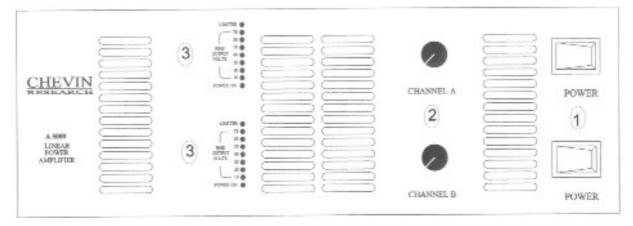
- Controls the output level (gain) of each channel
- Top green LEDs. They illuminate when the unit is ON

Red LEDs, one per channel. They illuminate when the unit is being driven into clip and indicate the SoftClip system is active.

5.Singnal LEDs

Bottom green LEDs. They illuminate when the signal is present On the A500 & A700V, the signal LEDs are in the middle.

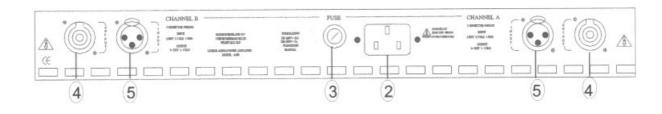
### A5000 & A6000



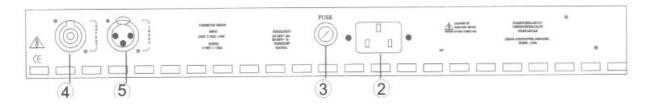
- 1. Power Switch
- 2. Output control 3. Output Bargraph
- Controls the mains power supply to the amplifier Controls the output level (gain) of each channel
- - Power LED. The bottom green LED, illuminates when the unit is ON Output Voltage LEDs. The column of green LEDs above the power LED. These give indication of the output voltage. Output power will be determined by load impedance. Illumination of the 70V LED indicates imminent clipping.
  - Clip LED. The top red LED. It illuminates when the amplifier is being driven into clip and indicates the SoftClip system is active. If the Clip threshold is exceeded, the intensity of this LED provides an indication of the degree of overdrive.

# BACK PANELS

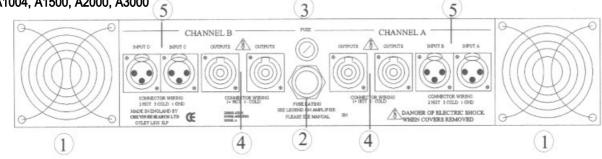
A500

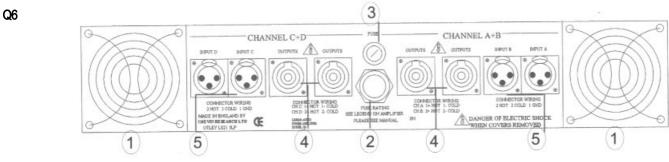


A700V

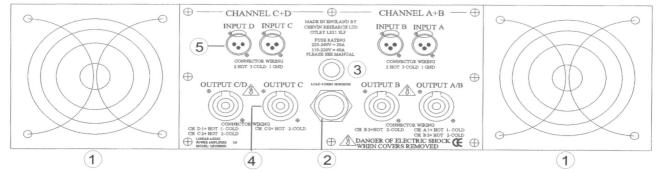


A750, A1000, A1004, A1500, A2000, A3000

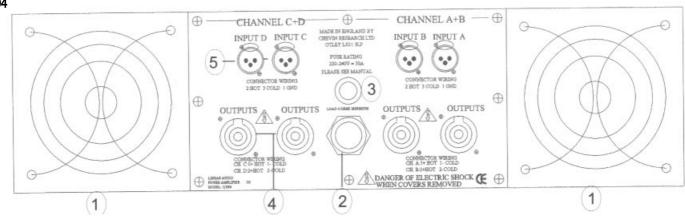


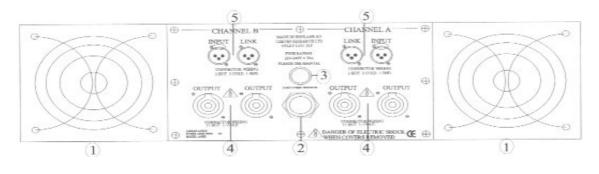


QB1000/600

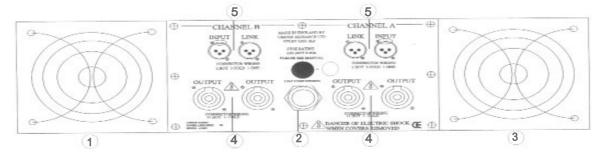




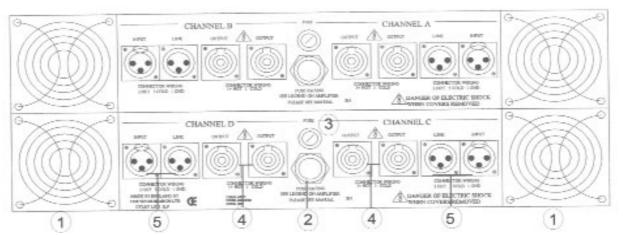




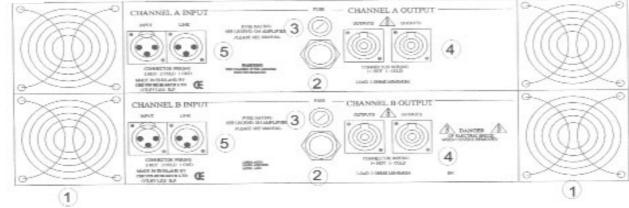
A5003



Q900



### A5000/A6000



1. Vari Speed Fans	On the A500 & A700V, the fan is internal. On all other models, fans are at the back. These spin at variable speeds depending on the signal level and ambient temperature					
2. Mains Input	<ul> <li>On the A500 &amp; A700V, mains input is via a detachable 3-core main cable with integral connector.</li> <li>All other models have a fixed, high current 3-core mains cable. Wiring as per standard European colour coding.</li> </ul>					
3. Mains Fuse	Correct fuse rating indicated on the back panel legend. Please note the A5003 fuse is internal					
4.Output Connectors	Neutrik Speakon sockets.         Pin wiring indicated on legend           ▲         A500, A700, Q6, Q1004, QB1000/600:         One per channel           ▲         A750, A1000, A1004, A1500, A2000, A2500, A3000, A4000, A5000, A5003.         A6000, Q900:         Two per channel					
5. Input Connectors	XLR sockets. Pin and wiring indicated on legend. A500, A700v, Q6, Q1004, QB1000/600: One female XLR connector per channel. A750, A1000, A1004, A1500, A2000, A2500, A3000, A4000, A5000, A5003, A6000, Q900 One male and one female XLR connector per channel.					



## SPECIFICATIONS

Specifications	A500	A1000	A1004	A1500	Q6	Q1004	QB1000/600
- RMS Power Output							
into 4 $\mathbf{\Omega}$ , watts per channel	350	600	1000	1250	600	1000	2 x 1000/ 2 x 600
into $8\Omega$ , watts per chanel	200	350	600	650	350	600	2 x 600 / 2 x 375
No of Channels	2	2	2	2	4	4	4
Power Bandwidth +0dB, - 3dB	2Hz-40kHz	2Hz-80kHz	2Hz-80kHz	2Hz-80kHz	2Hz-80kHz	2Hz-80kHz	2Hz-80kHz
Slew Rate in excess of	40V/μs	75V/μs	75V/μs	60V/µs	75V/μs	75V/μs	75V/µs
Gain	x 37.5	x 50	x 65	x 70	x 50	x 65	x 65 / x 50
Total Harmonic Distortion							
Typical @ 1 dB below clip	0.06%	0.04%	0.04%	0.04%	0.04%	0.04%	0.04%
20kHz @ 1dB below clip	0.08%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%
Signal to Noise Ratio							
Typical ref. full output, unweighted	-120dB	-125dB	-125dB	-125dB	-125dB	-125dB	-125dB
Worst case 10Hz - 30kHz	-95dB	-95dB	-95dB	-95dB	-95dB	-95dB	-95dB
Crosstalk							
Typical	-115dB	-115dB	-115dB	-115dB	-115dB	-115dB	-115dB
Worst case 10Hz - 30kHz	-95dB	-95dB	-95dB	-95dB	-95dB	-95dB	-95dB
Damping Factor	400	400	400	400	400	400	400
Input Impedance							
electronically balanced	10k Ohm	10k Ohm					
Common Mode Rejection							
typically	-70dB	-70dB	-70dB	-70dB	-70dB	-70dB	-70dB
Input Sensitivity							
ref. full output into 4 ohms	IV RMS	IV RMS					
Protection							
Clipping	Soft	Soft	Soft	Soft	Soft	Soft	Soft
Load Below 2.4 ohms	Dynamic linear	Dynamic linear					
Shorted Output, DC or RF at output	Immediate	Immediate	Immediate	Immediate	Immediate	Immediate	Immediate
Power Consumption	1.2kVA	2kVA	3.3kVA	4kVA	4kVA	6.6kVA	5.2kVA
Power Requirements							
50/60Hz ac in volts	220- 240v	220- 240v					
Internally selectable for	100-120v	100-120v	100-120v	100-120v	100-120v	N/A	100- 120v
Dimensions							
Rack Units	1u	2u	2u	2u	2u	3u	3u
Height x Width x Depth in inches		3.5 x 19 x 15		3.5 x 19 x 15	3.5 x 19 x 15	5.25 x 19 x 15	5.25 x 19 x 15
Height x Width x Depth in mm	44 x 483 x 215	88 x 483 x 381	132 x 483 x 381	132 x 483 x 381			
Weight							
Gross in kg/lbs	5.2kg/11.5lbs	10kg/22lbs	13.3kg/29lbs	14kg/31lbs	14kg/30.9lbs	16kg/34lbs	20kg/44lbs
Net in kg/lbs	4.7kg/9lbs	8.4kg/18.5lbs	11.7kg/26lbs	12.4kg/27lbs	12.3kg/27lbs	14kg/29.6lbs	18kg/40.5lbs

## SPECIFICATIONS

RMS Power Output 10Hz-20Hz         Indext         Particle         Partis Particle         Particle <t< th=""><th></th><th></th><th></th><th></th><th></th><th>A COOO</th></t<>						A COOO
into 22. watts per channel into 42. watts per channel into 42. watts per channel into 42. watts per channel into 82. watts per channe	Specifications	A2000	A3000	A4000	A5003	A6000
into 4Q. wats per chanel         1000 watts	RMS Power Output 10Hz-20kHz					
into 8Q, watts per chanel         350 watts         500 watts         600 watts         900 watts         1200 watts           No of Channels         2	into 2 $\mathbf{\Omega}$ , watts per channel	1200 watts	1600 watts	2000 watts	2500 watts	3000 watts
No of Channels         2         2         2         2         2         2         2           Power Bandwidth +0dB, -3dB         2Hz-80kHz         0.04%         0.04%         0.04%         0.04%         0.04%         0.04%         0.04%         0.04%         0.04%         0.04%         0.04%         0.04%         0.04% </td <td>into 4<math>oldsymbol{\Omega}</math>, watts per channel</td> <td>650 watts</td> <td>900 watts</td> <td>1000 watts</td> <td>1500 watts</td> <td>2000 watts</td>	into 4 $oldsymbol{\Omega}$ , watts per channel	650 watts	900 watts	1000 watts	1500 watts	2000 watts
Power Bandwidth +0dB, -3dB         2Hz-80kHz         500/µs         500/µs <th< td=""><td>into 8<math>oldsymbol{\Omega}</math>, watts per chanel</td><td>350 watts</td><td>500 watts</td><td>600 watts</td><td>900 watts</td><td>1200 watts</td></th<>	into 8 $oldsymbol{\Omega}$ , watts per chanel	350 watts	500 watts	600 watts	900 watts	1200 watts
Siew Rate in excess of Gain         75V/µs         50V/µs         65V/µs         65V/µs         50V/µs           Total Harmonic Distortion Typical of 1dB below cip         0.04%         0.04%         0.04%         0.04%         0.04%           20kHz @ 1dB below cip         0.07%         0.07%         0.07%         0.07%         0.07%           Signal to Noise Ratio Typical ref. full output, unweighted         -125dB         -125dB         -125dB         -125dB           Vorst case 10Hz - 30kHz         -95dB         -95dB         -95dB         -95dB         -95dB           Vorst case 10Hz - 30kHz         -95dB         -95dB         -95dB         -95dB         -95dB           Damping Factor         400         400         400         400         400         400           Input Impedance electronically balanced         10k Ohm           Shorted Output, DC or RF at output         IV RMS         IV RMS         IV RMS         IV RMS         Soft         Soft           Soft Soft         Soft         Soft         Soft         Soft         Soft         Soft         Soft         Soft           Damping Factor         Jynamic linear <t< td=""><td>No of Channels</td><td>2</td><td>2</td><td>2</td><td>2</td><td>2</td></t<>	No of Channels	2	2	2	2	2
Gah         x 50         x 60         x 65         x 70         x 90           Total Harmonic Distortion Typical @ 1 dB below cip 20kHz @ 1dB below cip 20kHz @ 1dB below cip 0.07%         0.04%         0.04%         0.04%         0.04%         0.04%         0.04%         0.04%           Typical @ 1 dB below cip 20kHz @ 1dB below cip         0.07%         0.07%         0.07%         0.07%         0.07%           Signal to Noise Ratio Typical ref. ful output, unweighted         -125dB         -95dB         -15db chtttttttttttttttttttttttttttttttttttt	Power Bandwidth +0dB, - 3dB	2Hz-80kHz	2Hz-80kHz	2Hz-80kHz	2Hz-80kHz	2Hz-50kHz
Total Harmonic Distortion Typical @1 dB below clip         0.04% 0.04%         0.04% 0.07%         0.04% 0.07%         0.04% 0.07%         0.04% 0.07%         0.04% 0.07%         0.04% 0.07%           20kHz @118 below clip         0.07%         0.07%         0.07%         0.07%         0.07%         0.07%           Signal to Noise Ratio         -125dB         -125dB         -125dB         -125dB         -125dB           Typical ref. full output, unweighted         -125dB         -95dB         -95dB         -95dB         -95dB           Crosstalk         -         -         -115dB         -115dB         -115dB         -115dB           Worst case 10Hz - 30kHz         -95dB         -95dB         -95dB         -95dB         -95dB         -95dB           Damping Factor         400         10k Ohm	Slew Rate in excess of	75V/μs	50V/μs	65V/μs	65V/μs	50V/μs
Typical @ 1 dB below dip         0.04%         0.04%         0.04%         0.04%         0.04%           20kHz @ 1dB below dip         0.07%         0.07%         0.07%         0.07%         0.07%           Signal to Noise Ratio         -125dB         -125dB         -125dB         -125dB         -125dB         -125dB           Worst case 10Hz - 30kHz         -95dB         -95dB         -95dB         -95dB         -95dB           Cosstalk         -115dB         -115dB         -115dB         -115dB         -115dB           Worst case 10Hz - 30kHz         -95dB         -95dB         -95dB         -95dB         -95dB           Damping Factor         400         400         400         400         400         400           Input Impedance         10k Ohm         10k Ohm         10k Ohm         10k Ohm         10k Ohm         10k Ohm           Input Impedance         -         -         -         -         -           Input Impedance         IV RMS         IV RMS         IV RMS         IV RMS         IV RMS           Input Sensitivity         -         -         -         -         -         -           Kortel Output, DC or RF at output         Inv RMS         Soft	Gain	x 50	x 60	x 65	x 70	x 90
20kHz @ 1dB below dip         0.07%         0.07%         0.07%         0.07%         0.07%           Signal to Noise Ratio         -125dB         -125dB         -125dB         -125dB         -125dB           Typical ref. full output, unweighted         -95dB         -95dB         -95dB         -95dB         -95dB           Crosslak         -115dB         -115dB         -115dB         -115dB         -115dB         -115dB           Worst case 10Hz - 30kHz         -95dB         -95dB         -95dB         -95dB         -95dB         -95dB           Damping Factor         400         400         400         400         400         400         400           Input Sensitivity         -70dB         -70dB         -70dB         -70dB         -70dB         -70dB           Input Sensitivity         -70dB         -70dB         IV RMS         IV RMS         IV RMS         IV RMS         IV RMS           Protection         Clipping         Soft         Soft         Soft         Soft         Soft         Soft         Dynamic linear         Immediate         Immediate           Protection         Soft         Soft         Soft         Soft         Soft         Soft         Soft         SokVA	Total Harmonic Distortion					
Signal to Noise Ratio Typical ref. full output, unweighted Worst case 10Hz - 30kHz-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-125dB -95dB-9	Typical @ 1 dB below clip	0.04%	0.04%	0.04%	0.04%	0.04%
Typical ref. full output, unweighted Worst case 10Hz - 30kHz         -125dB         -125dB         -125dB         -125dB         -125dB         -95dB         -115dB         -100         -10k         -10k 0hm	20kHz @ 1dB below clip	0.07%	0.07%	0.07%	0.07%	0.07%
Worst case 10Hz - 30kHz         -95dB         -95dB         -95dB         -95dB         -95dB         -95dB           Crosstalk Typical         -115dB         -115dB         -115dB         -115dB         -115dB         -115dB         -115dB         -115dB         -95dB	Signal to Noise Ratio					
KonstructionCrosstalk-115dB-115dB-115dB-115dB-115dB-115dB-115dB-115dB-115dB-95dB <td>Typical ref. full output, unweighted</td> <td>-125dB</td> <td>-125dB</td> <td>-125dB</td> <td>-125dB</td> <td>-125dB</td>	Typical ref. full output, unweighted	-125dB	-125dB	-125dB	-125dB	-125dB
Typical Worst case 10Hz - 30kHz        115dB -95dB        156dB        95dB         -97dB         -97dB         -97dB	Worst case 10Hz - 30kHz	-95dB	-95dB	-95dB	-95dB	-95dB
Worst case 10H-2         -95dB         -95dB         -95dB         -95dB         -95dB         -95dB           Damping Factor         400         400         400         400         400         400           Input Impedance         10k Ohm         10k Ohm         10k Ohm         10k Ohm         10k Ohm         10k Ohm           Common Mode Rejection         10k Ohm         10k Ohm         10k Ohm         10k Ohm         10k Ohm         10k Ohm           Mort Statistivity         -70dB         -70dB         -70dB         -70dB         -70dB           Input Sensitivity         -70dB         IV RMS         IV RMS         IV RMS         IV RMS           Protection         IV RMS         IV RMS         IV RMS         IV RMS         IV RMS           Load Below 1.2 ohms         Dynamic linear         Dynamic linear         Dynamic linear         Dynamic linear           Shorted Output, DC or RF at output         3.9kVA         5.3kVA         6.6kVA         8kVA         5.3kVA per channel           Power Requirements         220- 240v         100-120v           Internally selectable for </td <td>Crosstalk</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Crosstalk					
Damping Factor400400400400400400Input Impedance10k Ohm10k Ohm10k Ohm10k Ohm10k Ohm10k Ohm10k Ohmelectronically balanced10k Ohm10k Ohm10k Ohm10k Ohm10k Ohm10k OhmCommon Mode Rejectionrypically-70dB-70dB-70dB-70dBInput Sensitivityref. full output into 4 ohmsIV RMSIV RMSIV RMSIV RMSProtectionSoftSoftSoftSoftSoftSoftLoad Below 1.2 ohmsDynamic linearDynamic linearDynamic linearImmediateImmediatePower Consumption3.9kVA5.3kVA6.6kVA8kVA5.3kVA per channelPower Requirements220- 240v220- 240v220- 240v220- 240vSoftOHz ac in volts2u2u3u3u4uHeight x Width x Depth in inches2u2u3u3u4uHeight x Width x Depth in inches2w2u3u3u178 x 483 x 381WeightWeightweightweightweight132 x 483 x 381132 x 483 x 381132 x 483 x 381	Typical	-115dB	-115dB	-115dB	-115dB	-115dB
Input Impedance400400400400400400400electronically balanced10k Ohm10k Ohm10k Ohm10k Ohm10k Ohm10k OhmCommon Mode Rejection typically-70dB-70dB-70dB-70dB-70dBInput Sensitivity ref. full output into 4 ohmsIV RMSIV RMSIV RMSIV RMSIV RMSProtection ClippingSoftSoftSoftSoftSoftSoftLoad Below 1.2 ohmsDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediatePower Consumption S0/60Hz ac in volts220- 240v220- 240v220- 240v220- 240v220- 240vN/A100-120v100-120vN/AN/A100-120v100-120vDimensions Rack Units2u2u3u3u4uHeight x Width x Depth in inches3.5 x 19 x 153.5 x 19 x 155.25 x 19 x 155.25 x 19 x 157 x 19 x 15Height x Width x Depth in mm88 x 483 x 38188 x 483 x 381132 x 483 x 381178 x 483 x 381	Worst case 10Hz - 30kHz	-95dB	-95dB	-95dB	-95dB	-95dB
Input Impedance electronically balanced10k Ohm10k Ohm10k Ohm10k Ohm10k OhmCommon Mode Rejection typically-70dB-70dB-70dB-70dB-70dBInput Sensitivity ref. full output into 4 ohmsIV RMSIV RMSIV RMSIV RMSIV RMSProtection ClippingSoftSoftSoftSoftSoftSoftDynamic linear Shorted Output, DC or RF at outputDynamic linear ImmediateDynamic linear Immediate <td< td=""><td>Damping Factor</td><td>400</td><td>400</td><td>400</td><td>400</td><td>400</td></td<>	Damping Factor	400	400	400	400	400
Common Mode Rejection typically-70dB-70dB-70dB-70dB-70dBInput Sensitivity ref. full output into 4 ohmsIV RMSIV RMSIV RMSIV RMSIV RMSProtection Clipping Load Below 1.2 ohmsIV RMSIV RMSIV RMSIV RMSIV RMSShorted Output, DC or RF at output Storted Output, DC or RF at output3.9kVA5.3kVA6.6kVA8kVA5.3kVA per channelPower Consumption Storted Difference Storted Output, DC or RF at output220- 240v220- 240v220- 240v220- 240vPower Requirements Storted Difference Storted Difference Storted Dutput, DC or RF at output220- 240v220- 240v220- 240vPower Requirements Storted Difference Storted Difference Storted Dutput, DC or RF at output220- 240v220- 240v220- 240vPower Requirements Storted Difference Storted Difference Storted Dutput, DC or RF at output220- 240v220- 240v220- 240vPower Requirements Storted Difference Storted Difference Storted Difference Back Units2u2u3u3u4uHeight x Width x Depth in inches Height x Width x Depth in inches8x 483 x 38188 x 483 x 381132 x 483 x 381132 x 483 x 381178 x 483 x 381	Input Impedance	100	100	100	100	100
typically typically-70dB-70dB-70dB-70dB-70dBInput Sensitivity ref. full output into 4 ohmsIV RMSIV RMSIV RMSIV RMSIV RMSProtection ClippingSoftSoftSoftSoftSoftSoftLoad Below 1.2 ohmsDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediateDynamic linear ImmediatePower Consumption3.9kVA5.3kVA6.6kVA8kVA5.3kVA per channelPower Requirements S0/60Hz ac in volts220- 240v220- 240v220- 240v220- 240vS0/60Hz ac in volts220- 240v220- 240v220- 240v220- 240v220- 240vRack Units2u2u3u3u4uHeight x Width x Depth in inches Height x Width x Depth in inches3.5 x 19 x 155.25 x 19 x 155.25 x 19 x 157 x 19 x 15Height x Width x Depth in inches88 x 483 x 38188 x 483 x 381132 x 483 x 381178 x 483 x 381	electronically balanced	10k Ohm	10k Ohm	10k Ohm	10k Ohm	10k Ohm
Input Sensitivity ref. full output into 4 ohmsIV RMSIV RMSIV RMSIV RMSIV RMSIV RMSProtection ClippingSoftSoftSoftSoftSoftSoftDynamic linearLoad Below 1.2 ohmsDynamic linear ImmediateDynamic linear Immediate	Common Mode Rejection					
ref. full output into 4 ohmsIV RMSIV RMSIV RMSIV RMSIV RMSIV RMSProtection ClippingSoftSoftSoftSoftSoftSoftSoftLoad Below 1.2 ohmsDynamic linear ImmediateDynamic linear Immediate <td>typically</td> <td>-70dB</td> <td>-70dB</td> <td>-70dB</td> <td>-70dB</td> <td>-70dB</td>	typically	-70dB	-70dB	-70dB	-70dB	-70dB
Protection ClippingSoftSoftSoftSoftSoftSoftSoftLoad Below 1.2 ohms Shorted Output, DC or RF at outputDynamic linear ImmediateDynamic linear <td>Input Sensitivity</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Input Sensitivity					
Clipping Load Below 1.2 ohmsSoftSoftSoftSoftSoftSoftSoftShorted Output, DC or RF at outputDynamic linear ImmediateDynamic linear ImmediateDynamic linear 	ref. full output into 4 ohms	IV RMS	IV RMS	IV RMS	IV RMS	IV RMS
Load Below 1.2 ohmsDynamic linearDynamic linearDynamic linearDynamic linearDynamic linearDynamic linearDynamic linearDynamic linearImmediateDynamic linearImmediate <td>Protection</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Protection					
Shorted Output, DC or RF at outputImmediateImmediateImmediateImmediateImmediatePower Consumption3.9kVA5.3kVA6.6kVA8kVA5.3kVA per channelPower Requirements220- 240v220- 240v220- 240v220- 240v50/60Hz ac in volts220- 240v220- 240v220- 240v220- 240vInternally selectable for100-120v100-120vN/AN/A100-120vDimensions2u2u3u3u4uHeight x Width x Depth in inches3.5 x 19 x 153.5 x 19 x 155.25 x 19 x 155.25 x 19 x 15Height x Width x Depth in mm88 x 483 x 38188 x 483 x 381132 x 483 x 381132 x 483 x 381178 x 483 x 381	Clipping	Soft	Soft	Soft	Soft	Soft
Power Consumption         3.9kVA         5.3kVA         6.6kVA         8kVA         5.3kVA per channel           Power Requirements         220- 240v         100-120v         100-120v         N/A         100-120v         100-1	Load Below 1.2 ohms	Dynamic linear	Dynamic linear	Dynamic linear	Dynamic linear	Dynamic linear
Power Requirements         220- 240v         200- 120v         100-120v         100-120v         N/A         100-120v	Shorted Output, DC or RF at output	Immediate	Immediate	Immediate	Immediate	Immediate
50/60Hz ac in volts       220- 240v       220- 240v       220- 240v       220- 240v       220- 240v         Internally selectable for       100-120v       100-120v       N/A       N/A       100-120v         Dimensions       Zu       Zu       Su       Su       4u         Height x Width x Depth in inches       3.5 x 19 x 15       3.5 x 19 x 15       5.25 x 19 x 15       5.25 x 19 x 15       7 x 19 x 15         Height x Width x Depth in mm       88 x 483 x 381       88 x 483 x 381       132 x 483 x 381       132 x 483 x 381       178 x 483 x 381	Power Consumption	3.9kVA	5.3kVA	6.6kVA	8kVA	5.3kVA per channel
Internally selectable for         100-120v         N/A         N/A         100-120v           Dimensions         Zu         Zu         Su         Su         4u           Height x Width x Depth in inches         3.5 x 19 x 15         3.5 x 19 x 15         5.25 x 19 x 15         5.25 x 19 x 15         7 x 19 x 15           Height x Width x Depth in mm         88 x 483 x 381         88 x 483 x 381         132 x 483 x 381         132 x 483 x 381         178 x 483 x 381	Power Requirements					
Dimensions         Aug         Aug         Aug         Aug           Rack Units         2u         2u         3u         3u         4u           Height x Width x Depth in inches         3.5 x 19 x 15         3.5 x 19 x 15         5.25 x 19 x 15         7 x 19 x 15           Height x Width x Depth in mm         88 x 483 x 381         88 x 483 x 381         132 x 483 x 381         132 x 483 x 381           Weight         Weight         Image: State of the sta	50/60Hz ac in volts	220- 240v	220- 240v	220- 240v	220- 240v	220- 240v
Rack Units         2u         3u         3u         4u           Height x Width x Depth in inches         3.5 x 19 x 15         3.5 x 19 x 15         5.25 x 19 x 15         5.25 x 19 x 15         7 x 19 x 15           Height x Width x Depth in mm         88 x 483 x 381         88 x 483 x 381         132 x 483 x 381         132 x 483 x 381         178 x 483 x 381           Weight         Veight         Veig	Internally selectable for	100-120v	100-120v	N/A	N/A	100-120v
Height x Width x Depth in inches       3.5 x 19 x 15       3.5 x 19 x 15       5.25 x 19 x 15       5.25 x 19 x 15       7 x 19 x 15         Height x Width x Depth in mm       88 x 483 x 381       88 x 483 x 381       132 x 483 x 381       132 x 483 x 381       178 x 483 x 381         Weight       Weight       Image: Constraint of the problem in the pro	•					
Height x Width x Depth in inches       3.5 x 19 x 15       3.5 x 19 x 15       5.25 x 19 x 15       5.25 x 19 x 15       7 x 19 x 15         Height x Width x Depth in mm       88 x 483 x 381       88 x 483 x 381       132 x 483 x 381       132 x 483 x 381       178 x 483 x 381         Weight       Veight       Image: Mark and the second seco	Rack Units	2u	2u	3u	3u	4u
Height x Width x Depth in mm         88 x 483 x 381         88 x 483 x 381         132 x 483 x 381         132 x 483 x 381         178 x 483 x 381           Weight         Weight         Image: Mark and Mar		3.5 x 19 x 15	3.5 x 19 x 15	5.25 x 19 x 15	5.25 x 19 x 15	7 x 19 x 15
Weight	•	88 x 483 x 381	88 x 483 x 381	132 x 483 x 381	132 x 483 x 381	178 x 483 x 381
	•					
Gross in kg/bs   13.3Kg/29IDS   14Kg/31IDS   16Kg/34IDS   16Kg/34IDS   23.5Kg/59IDS	Gross in kg/lbs	13.3kg/29lbs	14kg/31lbs	16kg/34lbs	16kg/34lbs	23.5kg/59lbs
Net in kg/lbs 11.7kg/26lbs 12.4kg/27lbs 14kg/29.6lbs 14kg/29.6lbs 21.5kg/47.4lbs	•	-	12.4kg/27lbs	14kg/29.6lbs	14kg/29.6lbs	21.5kg/47.4lbs

This precision engineered CHEVIN product is guaranteed against defects due to faulty materials and workmanship for a period of 24 months from the date of the original purchase, subject to the following restrictions.

- This warranty is only valid in the country of purchase
- The equipment has not been abused or operated in conjunction with unsuitable or faulty apparatus.
- The equipment has not been disassembled, modified or tampered with by any person other than our CHEVIN staff or overseas by our own or distributors' staff.
- The equipment has not suffered damage in transit.

Should service be required, notify the dealer from whom you purchased the equipment to arrange for an authorised CHEVIN agent to confirm the need for attention.

- Do not dispatch the goods without the prior approval of CHEVIN or its authorised agents. If asked to return the goods, pack carefully (preferably in the original carton) and return pre-paid. Insurance is recommended as goods are returned at owner's risk.
- Packing insurance and freight on the return journey will be paid for by CHEVIN or its authorised agents only if warranty work proves necessary. If warranty work proves unnecessary, goods will be released upon payment by the owner for charges for non-warranty repair work and return packing, insurance and freight.
- The attached warranty card should be completed and returned to CHEVIN RESEARCH LTD. Failure to register by not returning the warranty card in no way limits or invalidates the warranty, but in the event of service being required, delay may result since warranty work cannot begin until the original sale has been verified.
- In case of difficulty, contact CHEVIN RESEARCH LTD. This warranty in no way affects your statutory rights.

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