

ATOOLL

ELECTRONIQUE





## HISTORY

ATOLL Company was founded in September 1997 by Stéphane & Emmanuel DUBREUIL. The market shows at this period that only few audiophiles products were affordable to main people. Specialised magazines and melomanes immediately accorded them a great audience and interest especially for best buy integrated IN80. Then were proposed CD Players & and FM Tuner. Developing those new electronics was based on same passion for musicality. Few years after, the line was completed with A/V products preamplifier/processor, 3/5 channels power amplifiers, and with a DVD-SACD Player.

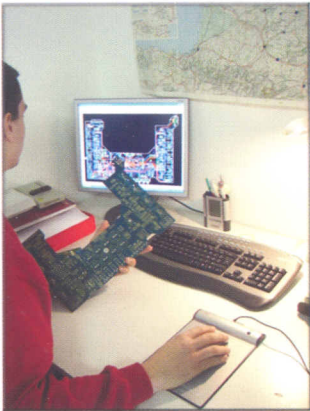
Our main goal have always been to propose people the ability to have the most realistic listening music. To reach it, we always have to search for an exceptional musicality/price rate when we are thinking about new products. That's the reason why long listening and comparisons periods are mixed with tests & measurements of electrical stages and choice of important components.

## CHOICES

- **CONCEPTION:** fully symmetrical stages with discrete components, double mono configuration, low feedback rate, audio short lenght path, star ground, internal protections;
- **ELECTRONIC COMPONENTS:** high-value Snap-In capacitors with low serial resistance, ALPS potentiometers, steel resistors, MOS-FET output transistors;
- **MANUFACTURE:** handmade implementation and soldering in our factory based in Brécey - France, assembling and manufacturing of all elements, tests with 4 phases of verifications, control, measurements and listening of each products before packaging;
- **FORWARDERS:** every specifics pieces such as front panel, chassis and boards are made in France. This offers reliable and regular quality, a good reactivity and a great flexibility of adaptation to any request;
- **QUALITY OF SERVICES:** our repair services is completed with update of all products and installation of optional boards.

*Today ATOLL is dealing with about 90 outlets in France and export its products in more than 30 countries in the world.*

## RESEARCH & DEVELOPMENT



BOARDS DESIGN

Developing process includes several steps:

- Electrical schemes simulation;
- Drawing of circuits boards;
- 3D drawing of specifics parts;
- Listening and configuration of components in auditorium.



## TECHNICAL CONSIDERATIONS

Product chassis are built from 1.5mm steel sheet and feature a solid aluminium front plate.

As well as creating a high-end look, these materials ensure a high degree of stability and reduce mechanical vibrations.

The audio stages are designed with discrete components and have a low negative feedback ratio. The result is a natural, live sound. The quality of the power supplies (toroidal transformers and high-value filter capacitors) allows for forceful reproduction of low frequencies. The presence of differential input stages as well as a star ground ensures better reduction of electrical noise and dynamic behaviour.

Some products use complex functions realized by micro-controllers. Those programs are written in-house.



PROGRAMMATION OF COMPONENTS

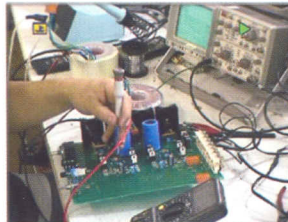
## PRODUCTS MANUFACTURING STEPS



COMPONENTS IMPLEMENTATION



HANDLE SOLDERING



BOARD CONTROL



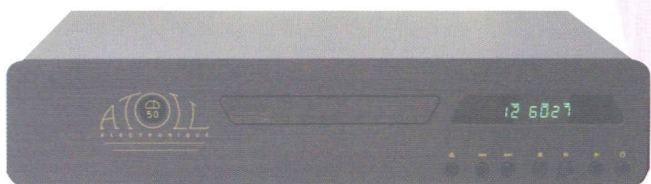
CHASSIS ASSEMBLING



SETUP AND FINAL TESTS

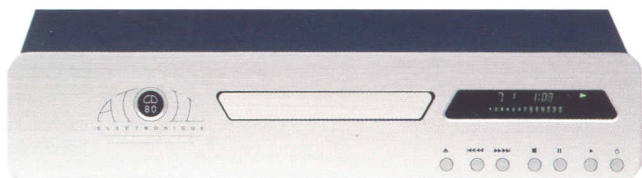
## CD PLAYERS

### CD50mk3



Source with pure lines and fluid sonorities, the CD50mk3 is a model of well-balanced and musical realism. The entire sonic construct is tidy and precise.

### CD80mk3



Tap into substance and density with the CD80mk3 which truly feeds music to the senses. Its great neutrality succeeds in giving instruments a life of their own. Bass is firmly clear-cut.

### CD100mk3



The CD 100mk3 builds on extraordinary power of analysis adding to outstanding dynamic capacity. Its class A polarized output stages make up for rich harmony delivered with incredible transparency.

### Technical details about CD Players:

- *Central mechanism PHILIPS VAM 1202 within a sound absorbing build.*
- *Fully-readable display feature.*
- *Remote control.*
- *Symmetrical outout stages with Class A polarized discrete components.*
- *Gold plated audio and digital (coaxial) outputs.*

### CD200



Our best-of-breed CD player, the CD200 features one of the best converters on the market. The sound is natural and realistic. Even the smallest details are reproduced with utmost precision.

### Characteristics of CD 200:

- 160 VA toroidal Transformer for audio output stages;
- 15 VA Transformer for digital section;
- Specific regulation for converter;
- BURR-BROWN PCM1794 converter:
  - 24 bits/192 kHz, 8x over-sampling;
  - 129 dB dynamic range, 129 dB signal to noise ratio;
  - Differential current outputs;
- Current/Voltage converters designed with discrete bipolar A class biased transistors;
- Full discrete differential A-class biased output stage;
- Audio class MKP capacitors.



CD200 internal view

## DVD - CD - SACD Player

### DVD 200

- 8mm wide aluminium front panel and 1,5 mm wide steel chassis;
- 160 VA toroidal Transformer for audio output stages;
- 30 VA Transformer for logic, digital and video sections;
- 4 BURR-BROWN PCM 1796 converters 24 bits/192 KHz (123 dB dynamic range, 123 dB signal to noise ratio);
- Full discrete differential A-class biased output stages;
- Audio class MKP capacitors;
- Exclusively linear power supply;
- SONY optic bloc.



#### Audio outputs:

"6 channel" analog.  
Down-mixed 2 channel  
Digital (coax. & optical)

#### Video outputs:

HDMI  
S-Video  
Composite  
YUV

### Product highlights:

- Progressive Scan (PAL&NTSC);
- Faroudja DCDi de-interlacer;
- Upscaling to 720p and 1080i;
- HDMI v 1.1 output (HDCP encryption);
- Multi-channel audio;
- Dolby Digital & DTS decoding;
- Intuitive OSD setup;
- Adjustable VFD display;
- Remote control.



#### • Disc playback media:

SACD, CD, CD-R, CD-RW, DVD, DVD+RW, DVD+R, DVD-RW, DVD-R, DVD-VIDEO, MP3-CD, Picture CD, JPEG, SVCD, Video CD, Video CD/SVCD, DIVX.

#### • Compression formats: MPEG1, MPEG2, MPEG4

#### • Disc playback media:

SACD, CD, CD-R, CD-RW, MP3-CD, MP3-DVD, WMACD

#### • Sound system: DTS, Dolby Digital (AC-3), Dolby Prologic II, Dolby Prologic Surround Sound.

### Version also available: SACD200

The SACD200 is a pure audio version for CD & SACD (stereo and multichannel) based on the same technology and quality as the DVD200.

## FM TUNER



### TU 80

The TU80 high precision audiophile FM Tuner stands out because of its excellent musical articulation and the finesse of its timbres.

- Fluorescent alpha-numeric display;
- 30 customizable presets;
- Automatic channel scan.

## INTEGRATED AMPLIFIER/PREAMPLIFIER

### IN50se



A sober and elegant design, a sophisticated electronic where every component has been chosen for its musicality: the IN50se is the dreaming link to start with a high-performance Hi-fi system.

### IN100se



The IN100se high-capacity power supply reproduces all the energy of the original live performance. The superb balance means that what you hear always corresponds to reality. And the whole sound is enhanced by an extremely tight and coherent stereo image.

#### Connect:

- 5 audio stereo inputs(RCA):
  - CD;
  - TUNER;
  - VIDEO;
  - AUX. (or PHONO optional);
  - TAPE (IN & OUT);
- Double Preamp Outputs.
- Headphone output;

### IN80se



Its imaginative design makes the IN80se apt to drive any loudspeakers type, including the most complex of designs. Its vivacity and natural timbres are bound to take you by surprise.

#### Characteristics of Integrated IN50se - IN80se - IN100se:

- Front panel in aluminium (4mm);
- Complete steel chassis of 1,5 mm;
- Original symmetrical schemes, fully equipped with discrete components.
- MOS-FET power transistors on each channel;
- Headphone output;
- Optional remote control ;

All integrated includes a By-Pass input (use of integrated as a power amplifier; easy adaptation in home-theater system);

MKP technology capacitors;

Input selection with high quality relays;

New Design: leds indicator for each source;

volume and inputs selected via the remote control;

all buttons in aluminium.



## IN200



The IN200 is equipped with a high-capacity power supply which allows it to deliver a performance that is rock-solid, sharply-defined and carefully nuanced. As well, the IN200 sports a high-end finish and an interface that is clear and user-friendly.

### IN 200 specifications:

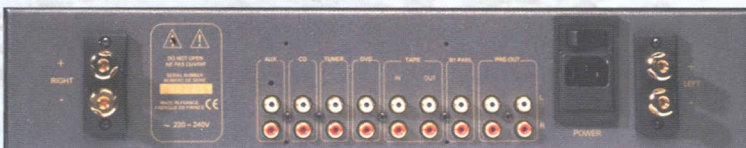
- 8 mm aluminium front panel with brushed surface and sand blasting;
- Aluminium buttons ;
- Fully symmetrical discrete design;
- 2 pairs of MOS-FET transistors on each channel ;
- 2 toroidal transformers (330VA), dual mono conception;
- Complete setup of volume and balance (via front panel and remote);
- Direct inputs access (via front panel and remote);
- Headphone output ;
- By-pass input.

Universal remote control compatible with all ATOLL products (Preamp., Integrated, Tuner, CD players).



### Connect:

- 5 audio stereo inputs(RCA):
  - CD;
  - TUNER;
  - TAPE (IN and OUT) ;
  - AUX. (PHONO or SPDIF optional);
  - DVD.
- 1 By-pass input (use as power amp.);
- 2 preamp. outputs (for bi-amp);
- Speakers power outputs.



## PREAMPLIFIERS

### PR100se



The PR100se is an exceptional audiophile product. Its perfectly adapted electronic circuits operate in pure class A. The acoustic scene is vast and various plan are scrupulously respected.

### PR200se



Thanks to its abundant power supply, the PR200se goes even farther. It gives you high-precision timbres and a wide stereo image.

All preamplifiers includes a By-Pass input (easy adaptation in home-theater system);

MKP technology capacitors;

Input selection with high quality relays;

New Design: leds indicator for each source;  
volume and sources selected  
via the remote control;  
all buttons in aluminium.



Rear view of preamplifiers



### PR300

Top-of-the-line components and carefully engineered audio circuits make the PR300 a preamp that is able to faithfully reproduce even the most subtle musical shadings.

#### Characteristics of PR300:

- Aluminium front panel of 8 mm and complete steel chassis of 1,5 mm;
- Fully symmetrical stages with discrete components;
- Toroïdal transformer, double-mono configuration;
- Complete adjustment (via front panel or remote control) of the volume & balance settings;
- Direct Inputs access;
- By-pass input.



## POWER AMPLIFIERS

### STEREO AMPLIFIERS AM50 – AM80 – AM100



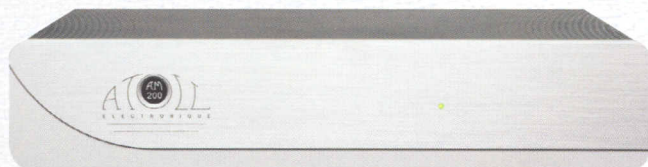
The AM50, AM80, AM100 and AM200 stereo blocks suit most hi-fi or audio-video applications.

Coupled with an ATOLL preamplifier, they make for transparent and detailed listening. The various sound plans are rigorously respected.

Built to be evolutionary, they can be used themselves or in bi-amplification. A double in/out system let's the possibility to chain all amplifiers for multi-amplification.

Further, all models are mono-block bridgeable.

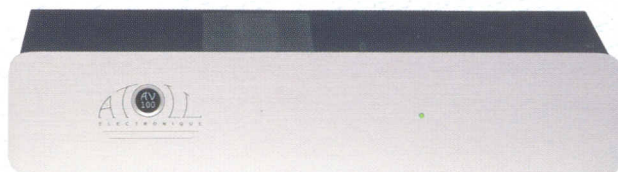
### AM200



#### **AM200 specifications:**

- Aluminium front panel of 8 mm and complete steel chassis of 1,5 mm;
- Fully symmetrical stages with discrete components;
- Double pair of MOS-FET transistors per channel on outputs;
- 2 toroidal transformers, double-mono configuration;
- Possibility of mono bridge;

### 3 CHANNEL POWER AMPLIFIERS AV50 – AV80 – AV100



The AV50, AV80 and AV100 are the ideal complements for the integrated (amplifier/preamplifier) or power amplifiers for audio/video applications. These amplifiers are very musical, bringing together power and finesse and they allow the listener to dive into the very heart of the action.

### 5 CHANNEL AMPLIFIER AV500

The AV500 retains all of the essential components for high-quality playback while offering a more compact solution and ear-grabbing performances for most multi-channel applications.



#### **Connect:**

- 5 RCA inputs;
- 5 RCA outputs(bi-amp);
- 5 loudspeakers outputs;



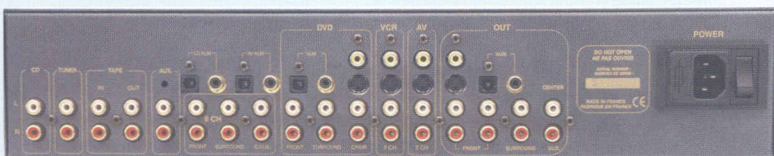
## AUDIO-VIDEO PREAMP/PROCESSOR PR5.1

Born from our experience in the field of sound reproduction, the PR5.1 gives you a listening reproduction that is realistic, precise and superbly musical. On the cutting edge of audio technology and equipped with multiple audio and video interconnect options, it fits perfectly into Hi-Fi and Home theater systems. As well, it stands out for ease of use and its unique quality/price ratio.



### CHARACTERISTICS:

- DOUBLE «6 CHANNEL» ANALOG INPUTS;
- SERIAL REMOTE CONTROL;
- BALANCE COMPLETE ADJUSTMENT;
- SPECIFIC POWER SUPPLY FOR ANALOG CIRCUITS;
- OUTPUT STAGES  
WITH CLASS A POLARIZED DISCRETE COMPONENTS;
- OPTIONAL DSP BOARD COMPATIBLE DTS®/DOLBY-DIGITAL®/PROLOGIC II.



### Connection of PR5.1:

- 4 audio (stereo) inputs:
  - CD (+ 1 digital);
  - TUNER;
  - TAPE (IN+OUT);
  - AUX. (or optional PHONO).
- 3 video inputs (coax. & S-VIDEO);
- 1 output 5+1 (double outputs for front channels) ;
- 1 video output (coax. & S-VIDEO);
- 1 digital output.
- 4 audio (stereo) inputs:
  - DVD (6 channel + 1 digital);
  - AV (+ 1 digital);
  - VCR;
  - 6 channel input (for SACD I.e.).

### **OPTIONAL DSP/PROCESSOR BOARD COMPATIBLE:**

**DTS 5.1; DOLBY-DIGITAL 5.1; DOLBY PROLOGIC II;  
MPEG 5.1 multichannel and stereo.**

- Auto detection of digital stream;
- Delays setup; bass manager (Crossover filters);
- Bass setup (from 40 to 120 Hz);
- Dynamic setup on Dolby Digital mode;
- Stereo to multichannel transfer (using Prologic II®);
- «Small» or «Large» speakers configuration;
- Complete setup from 2 up to 5 channels (with and without subwoofer) ;
- CRYSTAL DSP; BURR-BROWN converter 24 bits/96 kHz.

TECHNICAL FACTS	IN 50	IN 80	IN 100	IN 200	PR 100	PR 200	PR 300	AM50 AV50	AM80 AV80	AM100 AV100	AM200	AV500	CD50	CD80	CD100	CD200	DVD 200	TU80	PR5.1	
Power Wrms/channel/8 W	50 W	80 W	100 W	120 W	-	-	-	50 W (*)	80 W (*)	100 W (*)	120 W (*)	2*100 W 5*80 W	-	-	-	-	-	-	-	
Power Wrms/channel/4 W	70 W	120 W	140 W	200 W	-	-	-	70 W	120 W	140 W	200 W	2*140 W 5*120 W	-	-	-	-	-	-	-	
Impulse power	90 W	150 W	180 W	300 W	-	-	-	90 W	150 W	180 W	300 W	150 W	-	-	-	-	-	-	-	
Power supply	160 VA	330 VA	660 VA	668 VA	160 VA	330 VA	338 VA	160 VA	330 VA	660 VA	668 VA	660 VA	15+5 VA	15+5 VA	15+ 160 VA	15+ 160 VA	30+ 160 VA	15+ 160 VA	160 VA	
Total capacity (µF)	15000	30000	30000	62000	15000	30000	62000	15000	30000	30000	62000	73000	14000	17000	17000	17000	25 700		20000	
Number of inputs	5 + 1 by-pass							AM:2 AV:3			2	5	-	-	-	-	-	-	-	8 audio 3 vidéo
Input impedance (kΩ)	220	220	220	220	220	220	220	47	47	47	220	47	-	-	-	-	-	-	-	100
Sensitivity	100 mV	100 mV	100 mV	350 mV	450 mV	500 mV	500 mV	1,25 V	1,58 V	1,77 V	1,77 V	1,77 V	-	-	-	-	-	-	-	500 mV
Rising time	3 µs	2,5 µs	2,5 µs	2,5 µs	1,3 µs	1,3 µs	1,3 µs	1,5 µs	1,4 µs	1,3 µs	1,3 µs	1,3 µs	2 µs	2 µs	1,5 µs	1,5 µs	1,5 µs	2,5 µs	1,5 µs	
Bandwidth (-3dB)	5Hz-100kHz	5Hz-100kHz	5Hz-100kHz	5Hz-100kHz	5Hz-200kHz	5Hz-200kHz	5Hz-100kHz	5Hz-200kHz	5Hz-200kHz	5Hz-200kHz	5Hz-200kHz	5Hz-200kHz	5Hz-20kHz	5Hz-20kHz	5Hz-20kHz	5Hz-20kHz	5Hz-48kHz	5Hz-18kHz	5Hz-100kHz	
Output level	-	-	-	-	-	-	-	-	-	-	-	-	2V	2,5V	2,5V	2,5V	2,4V	2V	-	
Signal/noise	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	100 dB	105 dB	123 dB	75 dB	100 dB	
Distorsion at 1kHz	0,05 % /10W	0,05 % /10W	0,05 % /10W	0,05 % /10W	0,005 %	0,005 %	0,005 %	0,005 % /10W	0,005 % /10W	0,005 % /10W	0,005 % /10W	0,005 % /10W	0,002 %	0,002 %	0,002 %	0,002 %	0,005 %	0,2 %	0,005 %	
Dimensions	440 x 90 x 280 mm																			
Weight (kg)	7	8	10	11	7	8	9	7	8	10	11	11	5	5	7	8	8	8	9	

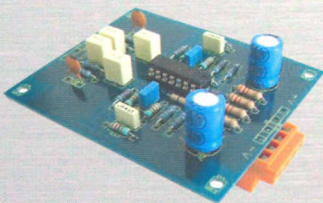
(\*) All stereo power amplifiers are mono block bridgeable: respective power are x 2,5.

## OPTIONS:

- All products are available in black or silver finish;

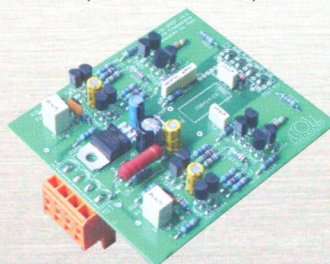
### MM PHONO STAGE (AUX. Input)

An MM phono stage can be adapted on all IN and PR.



### DIGITAL SPDIF BOARD (on AUX. Input)

Internal board compatible with uncompressed digital stream (24 bis / 96 kHz).



An optional remote control is available for IN50se, IN80se, IN100se, PR100se, PR200se and Tuner. This remote is included with PR5.1, IN200 and PR300.



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Dealer's stamp

Our mission: to let the vastest amount of people possible discover the fascinating universe of hi-fi sound through exceptional product lines which combine musicality and sobriety.