HAMRAD ELECTRONICS

CATALOGUE

TEL: +27 (0)21 555 2348
FAX: +27 (0)21 555 2866
EMAIL: hamrad@mweb.co.za
19 Woodbridge Business Park, Montague Gardens,
7441, Cape Town, South Africa

www.hamrad.co.za

Public Address

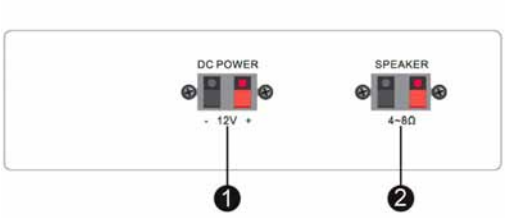
DOWA 10



- This model operates on 12V DC only.
- The speaker outputs are 4-8 ohms low-impedance outputs.
- 6.35mm Front of the signal input interface



1. Aux input
2. MIC1 input
3. Power switch
4. LED power indicator light
5. AUX volume control
6. MIC1 volume control



1. 12V DC power input
2. Low impedance outputs 4-8 ohms

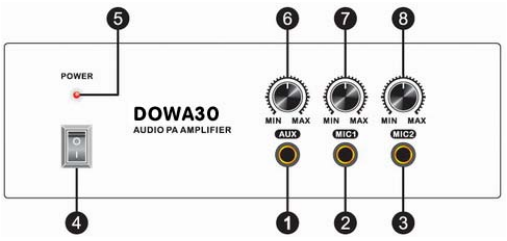
TECHNICAL DATA	DOWA 10
Output power	10W RMS
Frequency response	Mic: -3dB (200Hz – 20KkHz) Line : -3dB (100Hz – 20kHz)
THD at 1 kHz	less than 1%
Inputs	1 Mic Input : -50dB (2.45mV) / 2k ohms, unbalanced 1 Aux Input: -10dB (2.45mV) / 5k ohms, unbalanced
Outputs, speakers	Low-impedance outputs (4-8 ohms)
Signal-to-noise ratio	Mic: > 70 dB Line: > 80dB
Power Consumption	12V DC 3A
Power Supply	12V DC
Dimensions WxHxD/weight	160x55x190, 1.8kg

Public Address

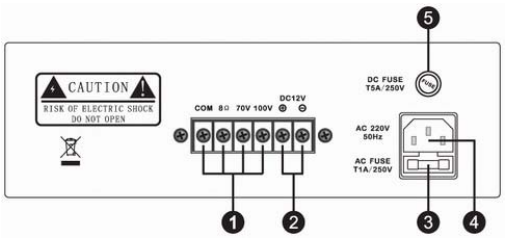
DOWA 30



- This model operates both on 220V mains power and 12V DC.
- The speaker outputs are available as 100V and 70V as well as 8 ohms low-impedance outputs.
- MIC input 1 has microphone priority override.
- 6.35mm Front of the signal input interface.



1. Aux input
2. MIC1 input
3. MIC2 input
4. Power switch
5. LED power indicator light
6. AUX volume control



1. 8 ohms and 70V and 100V outputs
2. 12V DC power input terminals

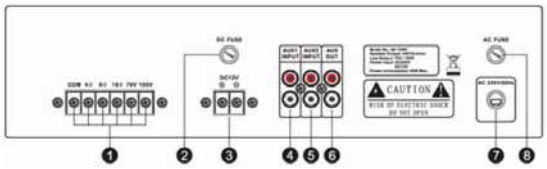
TECHNICAL DATA	DOWA 30
Output power	30W (RMS)
Frequency response	Mic: -3dB (200Hz – 20kHz) Line: -3dB (100Hz – 20kHz)
THD at 1 kHz	less than 1%
Inputs	Input 1 : Mic: -50dB (2.45mV) / 2k ohms, unbalanced Input 2 : Mic: -50dB (2.45mV) / 2k ohms, unbalanced Input 3 : AUX: -10dB (245mV) / 5k ohms, unbalanced
Outputs, speakers	70V and 100V Low-impedance outputs (8 ohms)
Signal-to-noise ratio	Mic: > 70dB Line: > 80dB
Power Consumption	DC12V/4A AC220V/0.5A
Power Supply	230V (AC – 50-60Hz) mains power and 12V DC
Dimensions WxHxD/weight	250x85x250mm, approx. 3.8kg

Public Address

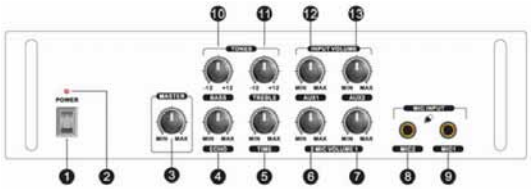
DOWA 60



- This model operates both on 220V mains power and 12V DC.
- The speaker outputs are available as 100V and 70V as well as 4.8 and 16 ohms low-impedance outputs.
- MIC input 1 has microphone priority override.
- Treble and bass controls; Bass control adjustable
- + 12dB and treble control adjustable + 12dB.
- The unit also includes the following special features:
- CD input on RCA sockets, PHONO input on RCA sockets.



1. Power switch
2. LED power indicator light
3. Master volume control
4. Microphone ECHO control
5. Microphone Time control
6. MIC1 volume control
7. MIC2 volume control
8. MIC2 input
9. MIC1 input
10. Bass controls
11. Treble controls
12. AUX1 Volume control



1. Low impedance outputs and 100V
2. and 70V speaker outputs
3. DC Fuse
4. DC inlet holder
5. AUX1 input
6. AUX2 input
7. AUX out
8. AC inlet holder
9. AC fuse

DOWA 60

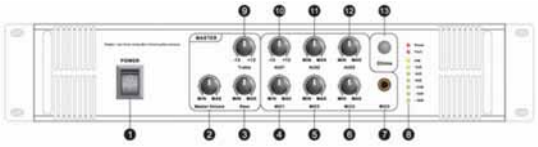
TECHNICAL DATA	DOWA 60
Output power	60W (RMS)
Frequency response	Mic: -3dB (200Hz – 20kHz) Line: -3dB (100Hz – 20kHz)
THD at 1 kHz	less than 1%
Inputs	2Mic Input : -50dB (2.45mV) / 2k ohms, unbalanced 2Aux Input : -10dB (245mV) / 5k ohms, unbalanced
Outputs, speakers	70V and 100V Low-impedance outputs (4, 8, 16 ohms)
Signal-to-noise ratio	Mic: > 70dB Line: > 80dB
Power Consumption	DC 12V 3A AC220V/0.8A
Power Supply	230V (AC – 50-60Hz) mains power and 12V DC
Dimensions WxHxD/weight	250x85x250mm, approx. 6Kg

Public Address

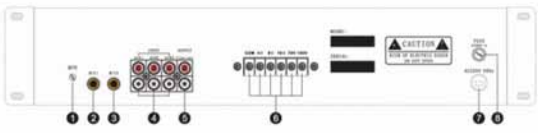
DOWA 120 / 2350



- The speaker outputs are available as 100V and 70V as well as 4,8 and 16 ohms low-impedance outputs.
- 3 MIC input, 3 AUX input and 1 line output.
- Treble and bass controls; Bass control adjustable
- + 12dB and treble control adjustable + 12dB.
- **The unit also includes the following special features :**
- CD input on RCA sockets, PHONO input on RCA sockets.
- Prompted alarm function.
- Priority microphone with mute-function.



1. Power switch
2. Master volume control
3. Bass controls
4. MIC1 volume control
5. MIC2 volume control
6. MIC3 volume control
7. MIC3 input
8. LED level meter for indication of signal level
9. Treble controls
10. AUX1 volume control
11. AUX2 volume control
12. AUX3 volume control
13. Chime switch



1. MIC MUTE control
2. MIC1 input
3. MIC2 input
4. AUX input
5. AUX output
6. Low impedance outputs and 100V
7. And 70V speaker outputs
8. AC inlet holder
9. AC fuse

Public Address

DOWA 120 / 2350

TECHNICAL DATA	DOWA120 / 2350
Output power	20W RMS / 350W RMS
Frequency response	Mic: -3dB (200Hz – 20kHz) Line: -3dB (100Hz – 20kHz)
THD at 1 kHz	less than 1%
Inputs	3Mic input : -50dB (2.45mV) / 2k ohms, unbalanced 3Aux input : -10dB (245mV) / 5k ohms,
Outputs, speakers	70V and 100V Low-impedance outputs (4, 8, 16 ohms)
Signal-to-noise ratio	Mic: > 70dB Line: > 80dB
Power Consumption	AC220V / 1A
Dimensions WxHxD/weight	250x85x250mm, approx. 3.8kg

Battery Types

SUPER HEAVY DUTY



05204	GP23A 12V
05248	AA
05257	9V
05242	C SIZE

SEALED LEAD ACID



05037	12V 2AH
05029	12V 7AH
05040	6V 4AH
05038	6V 10AH

DURACELL



05300	D SIZE
05301	C SIZE
05302	AA
05306	AAA
05304	9V

LITHIUM / BUTTON / WATCH



Battery Tester

BATTERY TESTER



BATTERY TEST SIZE	AAA @ 10mA Load
PHOTO BATTERY TEST	AA @ 50mA Load
BUTTON BATTERY TEST	D @ 250mA Load

06005

BATTERY PACKS



BATTERY PACKS	4.5V, 6V, 9V, 12V, 22V

Battery Charger

SEALED LEAD ACID BATTERY CHARGER



06220

MW126C18GS
INPUT VOLTAGE: 220V
OUTPUT VOLTAGE: 6V / 12V
LED CHARGING STATUS DIMENSIONS: 135 x 86 x 75mm
CHARGING CABLE INCLUDED

BENTON 5 STEP SWITCH MODE BATTERY CHARGER



Rechargable Batteries

06552

BX-1 (M)
INPUT VOLTAGE: 220V
OUTPUT VOLTAGE: 12V 0.8A / 3.8A
DIMENSIONS: 435 x 270 x 310

- Automatically Diagnoses, Recovers, Changes and
- Maintains Batteries for months.
- Fully automatic from charge to maintenance
- No Risk of over charging
- Charges wet / flooded, Gel, AGM type Lead-Acid

CAR BATTERY CHARGER



06551

INPUT VOLTAGE: 220V AC
OUTPUT VOLTAGE: 6V / 12V DC 8 AMPS
VOLTMETER
LED CHARGING CURRENT DISPLAY
THERMAL PROTECTION
BATTERY REVERSE PROTECTION

Battery Holders

AAA UM-4



06013

6 X AA UM-3



06026

1 X AA UM-3



06003

8 X AA UM-3



06019

2 X AA UM-3



06031

10 X AA UM-3



06028

4 X AA UM-3



06004

2 X C UM-2



06029

4 X AA UM-3



06030

2 X D UM-1



06018

HAMRAD ELECTRONICS

Cabinets

		D W H
09108	Grey S1	72 x 50 x 25mm
09109	Black S1	72 x 50 x 25mm
09183	Grey S10	85 x 56 x 31mm
09109	Black S10	85 x 56 x 31mm
09184	Grey S20	131 x 69 x 44mm
09191	Black S20	131 x 69 x 44mm
09185	Grey S30	106 x 106 x 51mm
09191	Black S30	106 x 106 x 51mm
09186	Grey S40	151 x 91 x 51mm
09190	Black S40	151 x 91 x 51mm
09187	Grey S50	195 x 110 x 61mm
09188	Black S50	195 x 110 x 61mm
09031	Black ABS 020	110 x 60 x 40mm
09210	Speaker Grille 8” Ceiling	
09206	Speaker Housing 6 x 4	

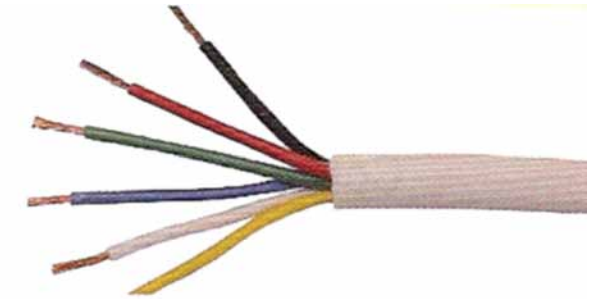




Telephone/Network Cable

TELEPHONE CABLE (ALARM WIRING)

10038 4 Core Round White
10039 6 Core Round White
10040 8 Core Round White
10041 10 Core Round White
10042 12 Core Round White
10043 20 Core Round White
10044 30 Core Round White



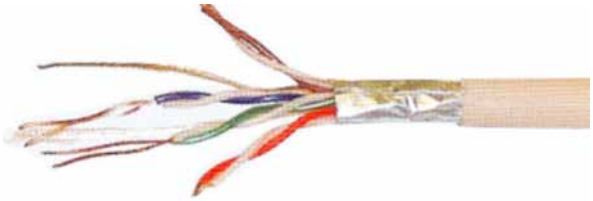
TELEPHONE CABLE

10036 4 Core Flat



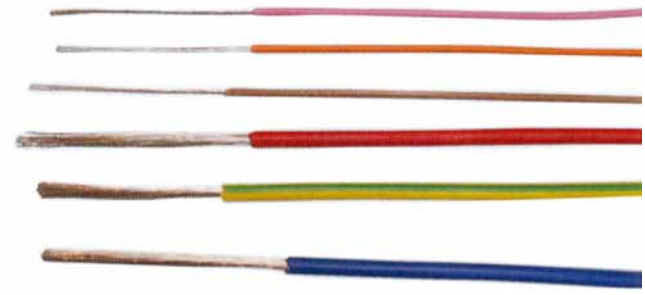
NETWORK CABLE

10090 Cat 5 Cable Stranded



PANEL WIRE (HOOK UP WIRE)

10011 0.5mm Green
10018 0.5mm Blue
10025 1mm Yellow
10015 0.5mm Orange
10018 0.5mm Red
10033 1mm Black
10012 0.5mm White
10025 0.5mm Yellow
10034 1mm Red
10016 0.5mm Black



Audio Visual Cable

RIPCORD / SPEAKER CABLE)

10046	0.2mm White
10047	0.2mm Brown



10092	0.5mm White
10092	0.75mm White
10053	0.75mm Black



10032	0.5mm Clear (Monster type)
10031	1.0mm Clear
10035	1.5mm Clear



10182	0.2mm Red / Black
10181	1.0mm "
10059	1.5mm "
10056	2.5mm "
10059	4.0mm "



MICROPHONE / SCREEN CABLE

10071	1 Core Black 4m
10070	1 Core Black 6mm



10087	2 Core Black
10082	2 Core Blue
10083	2 Core Red
10084	2 Core Green
10086	2 Core Yellow
10006	2 Core Flat Grey (Ripcord type)
10009	2 Core Flat Black



Fans

AC FANS SLEEVE BEARING

19009 220V AC 80 x 80 x 38
19010 220V AC 120 x120 x 38



AC FANS BALL BEARING

19002 220V AC 120 x 120 x 38

DC FANS

19005 12V DC 40 x 40 x 10
19003 12V DC 60 x 60 x 25
19011 12V DC 80 x 80 x 25
19008 12V DC 90 x 90 x 25
19006 12V DC 120 x 120 x 38
19007 24V DC 40 x 40 x 20



FAN GUARD

19014 80 x 80
19012 120 x 120



DUST GUARD

19014 80 x 80
19012 120 x 120

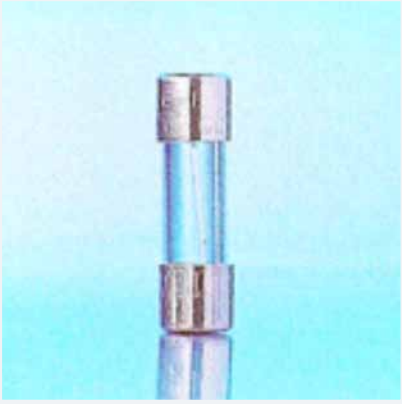


Fuses

5 X 20 MM STANDARD BLOW

21029	250mA
21028	500mA
21030	1A
21031	1.5A
21032	2A
21033	3A
21036	3.15A
21034	4A
21035	5A

21049	6A
21037	6.3A
21038	8A
21039	10A
21040	15A
21041	20A
21044	25A
21045	30A



6.3 X 30MM STANDARD BLOW

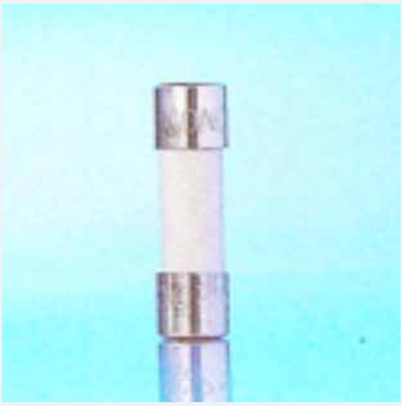
21005	500mA
21006	1A
21007	1.5A
21008	2A
21009	2.5A
21018	3A
21010	4A
21011	5A

21023	6A
21012	8A
21013	10A
21014	15A
21015	20A
21032	25A
21016	30A



5 X 20MM CERAMIC FUSE

21203	4A
21204	6.3A
21205	8A
21206	10A
21208	15A



Fuses

6.3 X 30MM CERAMIC FUSE

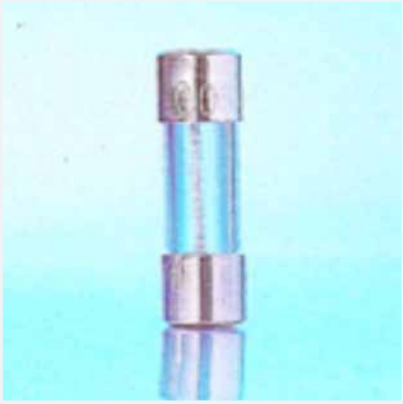
21211	8A
21210	10A
21207	12A
21208	15A



SLOW BLOW FUSES

21052	630mA
21057	800mA
21054	1A
21053	1.25A
21056	1.6A

21055	2A
21061	3.15A
21062	4A
21063	5A



Blade Fuses

AMT (MAX BLADE TYPE) 29MM

- Voltage Rating 32V
- Transparent Body

	Ampere Rating	Body Colour
21350	20A	Yellow
21355	25A	Grey
21360	30A	Green
21365	35A	Brown
21370	40A	Orange
21375	50A	Red
21380	60A	Blue
21385	70A	Tan



AST (MINI BLADE TYPE) 11MM

- Voltage Rating 32V

	Ampere Rating	Body Colour
21300	3A	Violet
21305	5A	Orange
21310	7A	Brown
21315	10A	Red
21320	15A	Blue
21325	20A	Yellow
21330	25A	Clear
21335	30A	Green

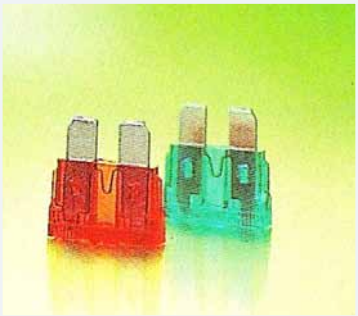


Blade Fuses

ATQ (BLADE TYPE) 20MM

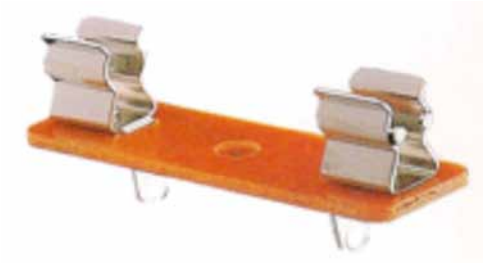
- Voltage Rating 32V

	Ampere Rating	Body Colour
21250	3A	Violet
21255	5A	Orange
21260	7A	Brown
21265	10A	Red
21270	15A	Blue
21275	20A	Yellow
21280	25A	White
21285	30A	Green
21290	40A	Amber



Fuse Holder

21046	Fuseholder PC Mount 20mm
21047	Fuseholder PC Mount 30mm



21042	Fuseholder Chassis Mount 20mm
21043	Fuseholder Chassis Mount 30mm



21048	Fuseholder Inline 20mm
21051	Fuseholder Inline 30mm



21004	Fuseholder Inline Bakelite 30mm



21003	Fuse Clip



Coil Winder

COIL WINDER M104

THIS HIGH GRADE UNIT OFFERS REMARKABLE VALUE FOR MONEY.

- Coils between 13 and 153mm in diameter and 6 and 8mm in length may be wound
- With wire between 17 and 46 swg.
- Gear ratios are 1:6 and 1:1.5
- Stepless regulation of the guide carriage speed is provided.
- The circular counter counts up to 2500 turns.
- Dimensions : 480 x 286 x 242mm



63705

Megaphones

DOWA MSN25W

- Siren or whistle function
- 25 Watts max. Power
- Abs housing
- Dimensions 230 dia x 345mm
- Sound cover approx. 600m
- Weightapprox. 1.45kg
- 8 X 1.5v ‘c” size battery



03028

DOWA MSNM25

- Siren or whistle function
- 25 Watts max. Power
- Abs housing
- Dimensions 230 dia x 345mm
- Sound cover approx. 600m
- Weightapprox. 1.45kg
- 8 X 1.5v ‘c” size battery



03025

Microphone Accessories

FLOOR MIC STAND WITH BOOM

- **Height** : 95cm – 165cm
- **Boom Length :** 80cm
- Steel Tube Chrome Finish
- Brass Insert
- Tripod Base
- **Weight :** 1.9Kg



36185

SPEAKER STAND

- Heavy Duty
- Black Finish
- Height : 120 – 200cm
- Steel Tube
- Load Capacity: 60Kg
- Metal Tripod Bracket



36186

DESK STAND

- Adjustable Height : 24cm – 37cm
- Chrome and Black Finish
- 16cm Base
- Weight : 1.5Kg



36180

Microphone Accessories

MICROPHONE HOLDER

- Clamp / Spring Type
- 16mm Thread
- Brass Insert



36028

MICROPHONE HOLDER

- Soft Holder
- 16mm Thread
- Brass Insert



36027

XLR MALE TO 6.35 MONO PLUG 5M

XLR MALE TO 6.35 MONO PLUG 10M



43010

43021

6.35 MONO PLUG TO XLR PLUG 5M



43012

Microphones

YOGA DM-250

DYNAMIC CARDIOID IMPEDANCE : 600 Ohm + 30%
FREQUENCY RESPONSE: 50HZ – 16KHZ
SENSITIVITY : -74 + 3dB
HOUSING : ZINC DIE CAST
CORD : 5m with 6.3mm PHONO PLUG



36016

YOGA DM-302

DYNAMIC CARDIOID FREQUENCY RESPONSE : 80HZ – 12KHZ
IMPEDANCE : 600 Ohm
SENSITIVITY : -76 dB
HOUSING : ABS
CORD : 3m with 6.3mm PHONO PLUG



36010

YOGA CB100

DYNAMIC FREQUENCY RESPONSE : 200HZ – 5KHZ
OUTPUT IMPEDANCE : 500 OHM + 30%
SENSITIVITY : -70dB + 3dB
CORD : 1.8m 3 Core and Screen



36026

Microphones

YOGA

DM-193 HEADWORN MICROPHONE
TYPE : DYNAMIC
DIRECTION : CARDIOID
IMPEDANCE : 500 OHM + 30%
FREQUENCY RESPONSE : 100HZ – 15KHZ
SENSITIVITY : -79 + 3Db



36013

YOGA

EM-020 TIE CLIP MICROPHONE
TYPE : CONDENSER OMNI DIRECTIONAL
OUTPUT IMPEDANCE : 1K OHM
FREQUENCY RESPONSE : 20 - 16KHZ
SENSITIVITY :-65dB + 3dB
POWER SUPPLY : UM3 BATTERY



36015

YOGA

GM-9 GOOSENECK
TYPE : UNI DIRECTIONAL DYNAMIC
FREQUENCY RESPONSE : 60 - 12KHZ
SENSITIVITY : -80dB + 3Db
OUTPUT IMPEDANCE : 500 OHM + 30dB
WITH ON / OFF SWITCH and XLR MALE SOCKET



36044

DS1 BASE

TABLE MIC STAND FOR USE WITH GOOSENECK DYNAMIC MICROPHONE



36044

Microphones

BLACK ELECTRET CONDENSER MIC

EM-280

- Rugged construction
- Operates on standard aa batteries
- Built in voice and music switches
- Frequency response 100hz – 16khz
- Cardoid pick up pattern
- Sensitivity -68db
- Impedance 600 ohms



BLACK ELECTRET CONDENSER MIC

CB-130

- Noise cancelling
- Dynamic
- Frequency 300hz – 7khz
- Bi directions pick up pattern
- Sensitivity -79db
- Impedance 500 ohms
- Plastic housing
- Aluminium housing



Wireless microphones

AUDIO LABS JS308
FM RADIO MICROPHONE SET

CORD and CORDLESS
BLACK ABS BODY
FM RADIO BAND
FREQUENCY RESPONSE: 80 – 12KHZ
SENSITIVITY : -72dB
RANGE : UP TO 30m
TRANSMITTER and RECEIVER



36037

J65 PROFESSIONAL WIRELESS MICROPHONE

OPTIONS
J65A HANDHELD MIC WITH RECEIVER
J65B TIE PIN MIC WITH RECEIVER
J65C HEADSET MIC WITH RECEIVER

RF FREQUENCY : 200 – 250MHZ
FREQUENCY STABILITY : 0.05%
UNI DIRECTIONAL
FREQUENCY RESPONSE: 50 – 14KHZ
AUDIO RANGE > 95dB UP TO 40m
SENSITIVITY : -95dB



36035

Wireless microphones

JP300 FM RADIO MICROPHONE WITH RECEIVER

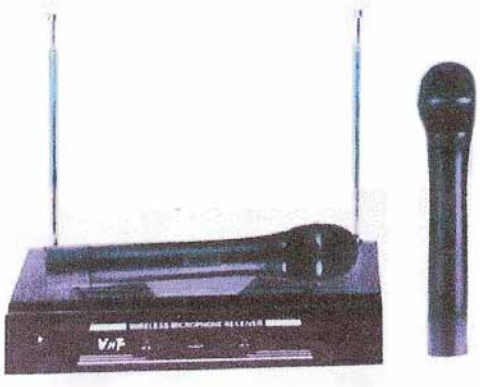
TIE PIN and HEADSET MIC
FREQUENCY MODE : FM FREQUENCY
RESPONSE : 80 – 15 KHz
RANGE : 30m
SENSITIVITY : -72dB



36036

JM62 VHF WIRELESS MICROPHONE

2 HAND MICS
RF FREQUENCY : 170 – 250MHz
FREQUENCY STABILITY : 0.005% - Quartz
UNI DIRECTIONAL
RESPONSE : 50 – 12 KHz
S/N RATIO : > 90dB
AUDIO RANGE : > 100dB UP TO 50m
2 DIFFERENT FREQUENCIES



36034

AC/DC

AC PLUGS, SOCKETS AND ADAPTORS

44005	AC Socket 3 Pin Inline Male
44006	AC Socket 3 Pin Chassis Mount Female
44572	AC Socket 3 Pin Inline Female
44654	AC Socket 3 Pin Chassis Mount Male



44008	AC Socket 2 Pin Chassis Mount
44532	AC Socket 2 Pin Chassis Mount
44533	AC Socket 2 Pin Chassis Mount
44529	AC Socket 2 Pin USA Inline



44601	AC Adaptor 2 Pin Round to 2 Pin Flat
44602	AC Adaptor 2 Pin Flat to 2 Pin Found



DC PLUGS, SOCKETS AND ADAPTORS

44544	DC Plug 0.7 x 2.5 x 9mm
44541	DC Plug 1.4 x 3.4 x 9.5mm
44543	DC Plug 1.7 x 4 x 9mm
44029	DC Plug 2.1 x 5.5 x 9.5mm
44536	DC Plug 2.1 x 5.5 x 14mm
44030	DC Plug 2.5 x 5.5 x 10mm
44538	DC Plug 2.5 x 5.5 x 14mm
44031	DC Plug 3.1 x 6.3 x 10mm
44035	DC Plug 3.4 x 1 x 9mm
44535	DC Plug 1.7mm Sony with Cable



44028	DC Socket 2.1mm Inline
44537	DC Socket 2.5mm Inline
44545	DC Socket Chassis Mount 2.5mm
44540	DC Socket Chassis Mount 2.5mm



Banana

BANANA PLUGS, BINDING POST, SOCKETS AND ADAPTORS

44066	Banana plug male red
44067	Banana plug male black
44071	Banana plug male red rubber
44068	Banana plug male black rubber
44069	Banana plug male green
44070	Banana plug male yellow

44066

44070



44160	Banana plug male red stackable
44162	Banana plug male black stackable
44164	Banana plug male white stackable
44166	Banana plug male blue stackable
44168	Banana plug male yellow stackable
44170	Banana plug male green stackable
44583	Banana plug male gold plate red
44585	Banana plug male gold plate black

44162

44160

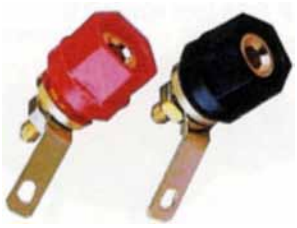


44585

44583



44020	Banana plug socket chassis mount red binding post
44021	Banana plug socket chassis mount black binding post
44753	Banana plug socket chassis mount red binding post
44754	Banana plug socket chassis mount black binding post



44020 44021

44756	Banana plug socket chassis mount red gold plated
44755	Banana plug socket chassis mount black gold plated



44756

HAMRAD ELECTRONICS

Mono

MONO PLUGS, SOCKETS AND ADAPTORS

44033 Mono jack plug 2.5mm inline
44029 Mono jack plug 3.5mm inline
44027
44491 Mono jack plug 6.3mm inline socket metal
44417 Mono jack plug 6.3mm back to back



44033

44452 Mono jack plug 2.5mm



44449

44449 Mono jack plug 3.5mm black plastic
44034 Mono jack socket 3.5mm pcb mount
44434 Mono jack socket 3.5mm chassis mount
44431 Mono jack socket 6.3mm pcb mount
44432 Mono jack socket 6.3mm chassis mount



44034

44442 Mono jack plug 6.3mm metal
44444 Mono jack plug 6.3mm red plastic
44445 Mono jack plug 6.3mm black plastic
44450 Mono jack plug 6.3mm gold tip
44487 Mono jack plug 6.3mm gold tail
44416 Mono jack plug 6.3mm metal right angle



44432

44515 Mono adaptor 3.5 Jack plug / 2.5mm socket
44420 Mono adaptor 3.5 Jack plug / 3.5 Stereo socket
44424 Mono adaptor 3.5 Jack plug / rca socket
44426 Mono adaptor 3.5 Jack plug / 6.3mm mono socket



44445

44440 Mono adaptor 6.3mm jack plug / 5 pin din
44421 Mono adaptor 6.3mm jack plug / rca socket
44422 Mono adaptor 6.3mm jack plug / 3.5 Mono socket



44421

Stereo

STEREO PLUGS, SOCKET AND ADAPTORS

44289 Stereo jack socket 2.5mm inline
44599 Stereo jack plug 2.5mm



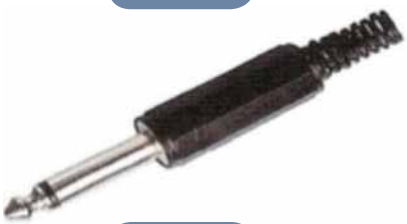
44658

44658 Stereo jack socket 3.5mm chassis mount
44032 Stereo jack socket 3.5mm pcb mount
44447 Stereo jack plug 3.5mm nickel
44448 Stereo jack plug 3.5mm black plastic



44447

44657 Stereo jack socket 6.3mm pcb mount
44432 Stereo jack socket 6.3mm chassis mount
44430 Stereo jack plug 6.3mm metal
44443 Stereo jack plug 6.3mm black plastic
44425 Stereo jack plug 6.3mm black plastic
44425 Stereo jack socket 6.3mm inline



44443

44575 Stereo adaptor 2.5mm socket inline
44519 Stereo adaptor 2.5 Jack socket / 3.5 Mono plug



44425

44400 Stereo adaptor 3.5mm plug / 3.5 Mono jack socket
44420 Stereo adaptor 3.5 Jack socket/3.5 Mono jack plug
44419 Stereo adaptor 3.5 Jack plug / 2 rca sockets
44423 Stereo adaptor 3.5 Jack plug / 6.3 Jack socket
44514 Stereo adaptor 3.5 Jack plug / 3.5mm jack socket
44517 Stereo adaptor 3.5 Jack plug / 2 x 3.5mm sockets
44520 Stereo adaptor 3.5 Jack socket / 3.5mm jack sockets
44515 Stereo adaptor 3.5 Jack socket / 2.5 Jack plug
44577 Stereo adaptor 3.5 Jack socket inline



44419

44492 Stereo adaptor 6.3 Jack plug / 2x3.5mm sockets
44494 Stereo adaptor 6.3 Jack socket / 6.3 Socket b/back
44513 Stereo adaptor 6.3 Jack plug / 2x rca sockets



44513

RCA

RCA PLUGS, SOCKETS AND ADAPTORS

44456	RCA phono plug male red
44454	RCA phono plug male black
44446	RCA phono plug male yellow
44451	RCA phono plug male green
44455	RCA phono plug male blue
44457	RCA phono plug male white



44454

44453	RCA phono plug male gold plated red
44458	RCA phono plug male gold plated black



44283

44283	RCA phono plug male nickel plated red
44282	RCA phono plug male nickel plated black



44458

44436	RCA phono socket female chassis mount red
44437	RCA phono socket female chassis mount black



44439

44489	RCA phono socket female chassis mount gold plated red
44488	RCA phono socket female chassis mount gold plated black

44439	RCA phono socket female inline red
44438	RCA phono socket female inline black
44486	RCA phono socket female inline white
44495	RCA phono socket female inline yellow
44288	RCA phono socket female inline gold plated red
44287	RCA phono socket female inline gold plated black



44516

44503	RCA adaptor male plug / bnc socket
44475	RCA adaptor male plug / 3.5mm mono socket
44518	RCA adaptor 2 x male plug / female rca socket
44516	RCA adaptor 2 x female sockets / male rca plug
44485	RCA adaptor 2 x female sockets / 2 x female socket back to back
44419	RCA adaptor 2 x female sockets / 3.5mm stereo male jack plug
44513	RCA adaptor 2 x female sockets / 6.3mm stereo male jack plug
44522	RCA adaptor female socket / svhs male plug
44476	RCA adaptor female socket / female socket back to back
44421	RCA adaptor female socket / 6.3mm mono jack plug
44001	RCA adaptor 3 x female sockets / scart plug



44476



44485

TV

TV PLUGS

44551	Tv plug male
44556	Tv plug female
44548	Tv plug male metal
44547	Tv plug female metal
44552	Tv plug back to back m/male
44550	Tv plug back to back f/female
44553	Tv plug cable joiner
44418	Tv socket – mini jack adaptor



44551

44655	F Connector



44552

44656	F Connector Back To Back
44013	F Adaptor Female / Pal Male
44014	F Adaptor Male / Pal Female
44247	Tv Outlet Box



44655

59565	Tv Splitter 2 Way Plastic
59561	Tv Splitter 4 Way Plastic



59565

59511	Tv Splitter F 3 Way
59510	Tv Splitter F 4 Way



44909

44917	Tv Splitter Y 1 male / 2 female
44918	Tv Splitter Y 1 female / 2 male

44909	Tv Splitter Z 1 female / 2 male
44911	Tv Splitter Z 1 male / 2 female



44906

44906	Scart Plug

Telephone

TELEPHONE PLUGS, SOCKETS AND ADAPTORS

44912	Phone Plug RJ 09 4P4C
44907	Phone Plug RJ 11 6P4C
44913	Phone Plug RJ 12 6P6C
44914	Phone Plug RJ 45 8P8C
44916	Phone Boot RJ 45 Black



PHONE JACK DETANGLER

44002	Phone Jack Detangler



PHONE JACK WALL OUTLET SINGLE

44002	Socket RJ11



PHONE JACK WALL OUTLET DOUBLE

44076	Socket RJ11



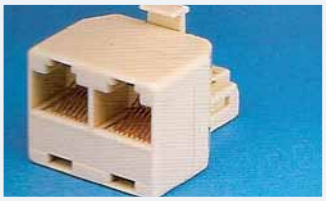
PHONE COUPLER INLINE BACK TO BACK

44025	Phone Coupler Inline Back to Back RJ11
44026	Phone Coupler Inline Back to Back RJ45



PHONE ADAPTOR DUPLEX

44908	1 Male / 2 x Female



Telephone

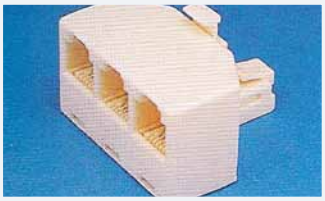
PHONE ADAPTOR TRIPLEX

44905 Phone Adaptor Triplex 1 Female / 2 x Female



PHONE ADAPTOR TRIPLEX

44037 Phone Adaptor Triplex 1 Male / 3 x Female



PHONE ADAPTOR

44079 Phone Adaptor RJ11 Female / Protea Male / Female



PHONE ADAPTOR

44082 Phone Adaptor RJ11 Female / Protea Male



PHONE BELL EXTENSION

44010 Phone Bell Extension



DC / AC Invertors

DC / AC INVERTORS

The dc/ac invertor converts 12v dc to 220v ac power

This device is suitable for the majority of ac appliances which includes computers, printers, fax machines, audio / video devices, etc.

These units are fitted with overload protection and overheating protection.

OUTPUT VOLTAGE : 220v ac 50hz
OUTPUT OVERLOAD PROTECTION
OVERHEATING PROTECTION

45013 Dowa Df1753 – 1000w
12v Dc – 220v Ac
Dimensions : 515x295x330mm

45105 Dowa Df1753 – 2000w
12v Dc – 220v Ac
Dimensions: 565x515x330mm

45100 Dowa Df1751 – 1000w
24v Dc – 220v Ac
515x295x330mm



45000 Dowa Df1753 – 600w
12v Dc – 220v Ac
Dimensions : 220x130x80mm



Switching Power Supplies

PRIMARY SWITCHED DESKTOP ADAPTOR

MW7H50GS
Input Voltage : 100 – 240V AC
Selectable Output Voltage : 6 / 7.5 / 9 / 12 / 13.5 / 15V DC REGULATED
Output Plug : 6 X C Detachable Plugs
Dimensions : 136 x 70 x 37mm
Output Current : 6 – 12V 5A
13 – 15V 3.8A



45002

PRIMARY SWITCHED DESKTOP ADAPTOR

MW7H350GS
Input Voltage : 100 – 240V AC
Selectable Output Voltage : 15 / 16 / 17 / 19 / 20 / 22 / 24V DC
Output Plug : 6 x C DETACHABLE PLUGS
Dimensions : 146 x 65 x 39mm
Output Current : 15 – 22V 3.5A
24V 3A



45060

SWITCHING POWER SUPPLY FOR DIGITAL CAMERA

MW2006GS
Input Voltage : 100 – 240V AC 50/60HZ
Selectable Output Voltage : 3 / 3.3 / 5 / 6 / 6.5 / 7 / 8.4V DC
Output Plug : 7 x Different DC Plugs
Output Current : 3 – 5V DC 2.5A
6 – 7V DC 2.1A
8.4V DC 1.5A



45050

Power Supplies

SWITCH MODE POWER SUPPLY

MW7H380GS
This MW7H380GS is a Switch Mode Power Supply, which can supply a varied Output Voltage from 5V to 24V.

This single output voltage is set by using a specific Resistor for its specific voltage.

Input Voltage : 100 – 240V AC
Output Voltage : 5V – 24V
Dimensions : 136x38x37mm



45040

Output Voltage and Current

OUTPUT VOLTAGE	OUTPUT CURRENT	OUTPUT VOLTAGE	OUTPUT CURRENT
5.0V	3800mA	15.0V	2400mA
6.0V	3700mA	16.0V	2200mA
7.0V	3600mA	17.0V	2100mA
8.0V	3500mA	18.0V	2000mA
9.0V	3400mA	19.0V	1880mA
10.0V	3300mA	20.0V	1800mA
11.0V	3200mA	21.0V	1700mA
12.0V	3000mA	22.0V	1630mA
13.0V	2700mA	23.0V	1560mA
14.0V	2500mA	24.0V	1500mA

DOWA DF1720S

Input Voltage : 220V AC
Output Voltage : 3- 4.5 – 6 – 7.5 – 9 – 12V
Current : 1.5A
Dimensions : 450x230x190mm



45181

Power Supplies

DOWA POWER SUPPLIES



45170	3 / 5A
45161	5 / 7A
45174	7 / 9A
45160	10 / 12A
45178	20 / 22A
45186	30 / 32A

Output Voltage and Current

Input Voltage : 220 Volt Ac
Output Voltage : 13.8v Dc
Output Current : As Specified For Each Model

Short Circuit Protection
10% Load Regulation
5% Voltage Regulation
Current Limit Protection For Ac Input

Variable AC/DC Power Supply

VARIABLE DIGITAL POWER SUPPLY 5A

Input Voltage : AC 220V
Output Voltage : 0 – 30V DC
Output Current : 5 Amp
Low Ripple Voltage : < 1mV
Current Limiting Protector
Dimensions : 36.5x22x22.5



45136

VARIABLE DIGITAL POWER SUPPLY 10A

Input Voltage : AC 220V
Output Voltage : 0 – 30V DC
Output Current : 10 Amp
Low Ripple Voltage : < 1mV
Current Limiting Protector
Dimensions : 37x26.2x16.3cm
Weight : 12Kg



45140

AC/DC Adaptors

PLUG IN AC/DC ADAPTOR

MINWA
MW108RUK
Input Voltage : 220V AC
Selectable Output Voltage : 3 / 4.5 / 6 / 7.5 / 9 / 12V DC
Output Current : 500mA Maximum
Output Plug : 6 Way Universal Connector



45022

PLUG IN AC/DC ADAPTOR

MINWA
MW79RUK
Input Voltage : 220V AC
Selectable Output Voltage : 3 / 4.5 / 6 / 7.5 / 9 / 12V DC
Output Current : 1000mA Maximum
Output Plug : 6 Way Universal Connector



45023

PLUG IN AC/DC ADAPTOR WITH CIGARETTE LIGHTER SOCKET

Input Voltage : 220v Ac
Output Voltage : 12v 1a
Ideal For Charging Cell Phone Batteries And Other 12v Dc Items



45036

AC/DC Adaptor

SWITCHING POWER SUPPLY

LCD AC ADAPTOR
FOR USE WITH TV – DVD – LCD

AC Input	:	100 – 240V AC
DC Output	:	12V 6A (72W)
Dimensions	:	32 x 58 x 118mm

Built-in Smart IC control, providing short circuit, overheating and overload protection. High-Intensity fireproof VO-Grade material casing.



45012

LCD AC ADAPTOR
FOR USE WITH TV – DVD – LCD

AC Input	:	100 – 240V AC
DC Output	:	12V 3A (36W)
Dimensions	:	29.3 x 49.4 x 110mm

Built-in Smart IC control, providing short circuit, overheating and overload protection. High-Intensity fireproof VO-Grade material casing.



45004

Universal AC/DC Laptop Adaptor/Charger

LS - PAB90MH



90W

LS-PAB90MH

Input: 100-240V 1.5A 50 - 60 Hz
Output: 12-24V 6A (MAX) 90W

LED Display | Voltage by hand | Worldwide use | SAFETY PROTECTION

- Adjusting optional Voltage by hand, fast and convenient
- Multi-types of exchangable connectors use for laptops and other digital products
- It's safe and reliable with 12 - 24V output voltage
- Input 100-240V worldwide compatible
- 100,000 level defending static-safety design
- Strong over-fire protection case design
- Installing EMC an EMI, that's for absorbing in-burst current and restraining electro circuit

LS-CR90AH/LS-PAB90I/ LS-PAB90AH CONNECTORS SPECIFICATION

No.	Output Voltage	Range Voltage	Output Current (Max)	Connectors Spec.	Replacement
A	19V	18.2-19.5V	6.3A	Φ4.8*1.7*10.7 mm DC-F	**HP/COMPAQ:** 18.5V/2.7A, 18.5V/3.5A, 18.5V/3.8A, 18.5V/4.5A, 18.5V/4.9A **DELTA :** 19V/2.64A; ASUS: 19V/2.64A; **NEC:** 19V/2.64A Etc
B	19V	18.2-19.5V	6.3A	Φ5.5*2.1*10 DC-F	**ACER:** 19V/3.16A, 19V/3.42A, 19V/4.74: **NEC :** 19V/3.16A etc. **LITEON:** 19V/3.16A, 19V/3.42A
C	19V	18.2-19.5V	6.3A	Φ5.5*3.0*10.7 mm DC-F	**SAMSUNG :** 19V/3.16A, 19V/3.75A, 19V/4.22A, 19V/4.74A etc.
D	15V	14.2-15.5V	8A	Φ6.3*3.0*10.7 mm DC-F	**TOSHIBA :** 15V/3A, 15V/4A, 15V/5A/45W; **NEC:** 15V/6A etc.
E	16V	15.2-16.5V	7.5A	Φ6.0**4.3*10.7 mm pin 1.0	**SONY :** 16V/3.42A, 16V/3.75A, 16V/4A, 19.5V/2.7A, 19.5V/3A, 19.5V/4.1A,
F	19V	18.2-19.5V	6.3A	Φ5.5*1.7*10.7 mm DC-F	**TOSHIBA :** 19V/3.95A; ACER: 19V/3.42A; **DELTA:** 20V/3.5A etc.
G	22V	21.2-22.5V	5.45A	Φ3.5*1.35*9.5 mm DC-F	**SHARP :** 22V/2.04A etc.
H	20V	19.2-20.5V	6A	ΦW7.3*7.4 mm	**DELL :** 20V/3.5A, 20V/4.5A etc.
* I	19.5V	18.7-20.0V	6.15A	Φ7.4*5.0*12 mm pin 0.6	**DELL :** 19.5V/3.34A, 19.5V/4.62A etc.
* J	20V	19.2-20.5V	6A	Φ7.9*12*pin0.9	**IBM/LENOVO:** 20V/3.25A, 20V/4.5A etc.
* K	24	23.2-24.5V	5A	7.7*2.5*4.3mm	**APPLE :** 24V/1.875A, 24V/2A, 24.5V/2.65A etc.

*** Not supplied as a standard connector**

Universal DC/DC Laptop Adaptor / Charger

LS-CR90AH



90W

LS-CR90AH

Input: 11-15V 12A

Output: 12-24V 6A (MAX) 90W

LED Display | Voltage by hand | DC air | SAFETY PROTECTION

- Unique patented RDrive technology, switching voltage with button
- Multi-types of exchangable connectors use for laptops and other digital products
- It's safe and reliable with 12-24V output voltage
- Input 11-15V Car Charging, suitable for travelling using
- 100 000 level defending static-safety design
- Strong over-fire protection case design
- Installing EMC and EMI, that's for absorbing in-burst current and restraining electro circuit

LS-CR90AH/LS-PAB90I/ LS-PAB90AH CONNECTORS SPECIFICATION

No.	Output Voltage	Range Voltage	Output Current (Max)	Connectors Spec.	Replacement
A	19V	18.2-19.5V	6.3A	Φ4.8*1.7*10.7 mm DC-F	**HP/COMPAQ:** 18.5V/2.7A, 18.5V/3.5A, 18.5V/3.8A, 18.5V/4.5A, 18.5V/4.9A **DELTA :** 19V/2.64A; ASUS: 19V/2.64A; NEC: 19V/2.64A Etc
B	19V	18.2-19.5V	6.3A	Φ5.5*2.1*10 DC-F	**ACER:** 19V/3.16A, 19V/3.42A, 19V/4.74: **LITEON:** 19V/3.16A, 19V/3.42A
C	19V	18.2-19.5V	6.3A	Φ5.5*3.0*10.7 mm DC-F	**SAMSUNG :** 19V/3.16A, 19V/3.75A, 19V/4.22A, 19V/4.74A etc.
D	15V	14.2-15.5V	8A	Φ6.3*3.0*10.7 mm DC-F	**TOSHIBA :** 15V/3A, 15V/4A, 15V/5A/45W; NEC: 15V/6A etc.
E	16V	15.2-16.5V	7.5A	Φ6.0**4.3*10.7 mm pin 1.0	**SONY :** 16V/3.42A, 16V/3.75A, 16V/4A, 19.5V/2.7A, 19.5V/3A, 19.5V/4.1A, 19.5V/4.7A
F	19V	18.2-19.5V	6.3A	Φ5.5*1.7*10.7 mm DC-F	**TOSHIBA :** 19V/3.95A; **ACER:** 19V/3.42A; **DELTA:** 20V/3.5A etc.
G	22V	21.2-22.5V	5.45A	Φ3.5*1.35*9.5 mm DC-F	**SHARP :** 22V/2.04A etc.
H	20V	19.2-20.5V	6A	ΦW7.3*7.4 mm	**DELL :** 20V/3.5A, 20V/4.5A etc.
* I	19.5V	18.7-20.0V	6.15A	Φ7.4*5.0*12 mm pin 0.6	**DELL :** 19.5V/3.34A, 19.5V/4.62A etc.
* J	20V	19.2-20.5V	6A	Φ7.9*12*pin0.9	**IBM/LENOVO:** 20V/3.25A, 20V/4.5A etc.
* K	24	23.2-24.5V	5A	7.7*2.5*4.3mm	**APPLE :** 24V/1.875A, 24V/2A, 24.5V/2.65A etc.
* L	24V	23.2-24.5V	5A	9.5*3.5*4.0mm	**APPLE :** 24V/1.875A, 24V/2A, 24.5V/2.65A etc.
* M	15V	23.2-24.5V	5A	W9.2*6.4mm 4 pin	**TOSHIBA:** 15V/8A etc.

Universal DC/DC Laptop Adaptor /Charger

LS-PAB120MH



120W

LS-PAB120MH

Input: 11-15V 12A

Output: 12-24V 6A (MAX) 90W

LED Display | Voltage by hand | Worldwide use | SAFETY PROTECTION

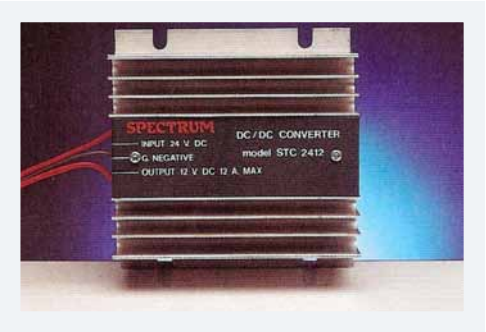
- Adjusting optional Voltage by hand, fast and convenient
- Multi-types of exchangeable connectors use for laptops and other digital products
- It's safe and reliable with 12-24V output voltage
- Input 100-240V worldwide compatible
- 100,000 level defending static-safety design
- Strong over-fire protection case design
- Installing EMC and EMI, that's for absorbing in-burst current and restraining electro circuit

LS-PAB120MH CONNECTORS SPECIFICATION

No.	Output Voltage	Range Voltage	Output Current (Max)	Connectors Spec.	Replacement
A	19V	18.2-19.5V	6.3A	Φ4.8*1.7*10.7 mm DC-F	**HP/COMPAQ:** 18.5V/2.7A, 18.5V/3.5A, 18.5V/3.8A, 18.5V/4.5A, 18.5V/4.9A **DELTA :** 19V/2.64A; **ASUS:** 19V/2.64A; **NEC:** 19V/2.64A Etc
B	19V	18.2-19.5V	6.3A	Φ5.5*2.1*10 DC-F	**ACER:** 19V/3.16A, 19V/3.42A, 19V/4.74: **LITEON:** 19V/3.16A, 19V/3.42A
C	19V	18.2-19.5V	6.3A	Φ5.5*3.0*10.7 mm DC-F	**SAMSUNG : 19V/3.16A, 19V/3.75A, 19V/4.22A, 19V/4.74A etc.**
D	15V	14.2-15.5V	8A	Φ6.3*3.0*10.7 mm DC-F	**TOSHIBA :** 15V/3A, 15V/4A, 15V/5A/45W; NEC: 15V/6A etc.
E	16V	15.2-16.5V	7.5A	Φ6.0**4.3*10.7 mm pin 1.0	**SONY :** 16V/3.42A, 16V/3.75A, 16V/4A, 19.5V/2.7A, 19.5V/3A, 19.5V/4.1A,
F	19V	18.2-19.5V	6.3A	Φ5.5*1.7*10.7 mm DC-F	**TOSHIBA :** 19V/3.95A; ACER: 19V/3.42A; DELTA: 20V/3.5A etc.
G	22V	21.2-22.5V	5.45A	Φ3.5*1.35*9.5 mm DC-F	**SHARP :** 22V/2.04A etc.
H	20V	19.2-20.5V	6A	ΦW7.3*7.4 mm	**DELL :** 20V/3.5A, 20V/4.5A etc.
* I	19.5V	18.7-20.0V	6.15A	Φ7.4*5.0*12 mm pin 0.6	**DELL :** 19.5V/3.34A, 19.5V/4.62A etc.
* J	20V	19.2-20.5V	6A	Φ7.9*12*pin0.9	**IBM/LENOVO: 20V/3.25A, 20V/4.5A etc.**
* K	24	23.2-24.5V	5A	7.7*2.5*4.3mm	**APPLE :** 24V/1.875A, 24V/2A, 24.5V/2.65A etc.
* L	24V	23.2-24.5V	5A	9.5*3.5*4.0mm	**APPLE :** 24V/1.875A, 24V/2A, 24.5V/2.65A etc.
* M	15V	23.2-24.5V	5A	W9.2*6.4mm 4 pin	**TOSHIBA:** 15V/8A etc.

DC/DC Converter DC 24V to 12V

STC-2412



STC-2422



STC-2440



	STC-2412	STC-2422	STC-2440
INPUT VOLTAGE		20 VDC – 28 VDC	
MAX OUTPUT 15 SEC	12 A	22 A	40 A
OUTPUT 15 MINUTE	7.5 A	15 A	25 A
OUTPUT CONTINUE	3 A	5 A	9 A
NETWORK PROTECT	FUSE	FUSE	FUSE AND DIODE
DIMENSION	(L) 112 (W) 115 (H) 54mm	(L) 230 (W) 115 (H) 54mm	(L) 370 (W) 115 (H) 54mm
NET WEIGHT	0.470 KG	0.965 KG	1.560 KG

Soldering Equipment

SOLDER STATIONS

54039 Digital Display Soldering Station
54110 Replacement Soldering Iron
54051 Spare Tip
54050 Replacement Sponge

- Temperature controlled soldering iron 48w
- Temperature 160°C - 480°C
- Iron voltage 24 volt AC
- Digital display
- Ideal for laboratory and workshop



54040 Professional Solder Station
54170 Replacement Soldering Iron
54165 Replacement Tip
54043 Replacement Sponge

- With On / Off Switch
- Temperature 150°C- 450°C
- Soldering Iron 48W
- Safety Guard Soldering Iron Holder



54048 Economical Solder Station
54180 Replacement Soldering Iron
54165 Spare Tip
54050 Replacement Sponge

- For General Electronic Repair
- Ideal For Classroom
- Rotating Temperature Setting
- Variable Temperature From 100°C To 400°C
- Safety Guard Soldering Iron Holder



Soldering Equipment

SOLDERING IRON



GENERAL ELECTRONIC AND ELECTRIC REPAIR

54096 Solder Iron 25W
54100 Solder Iron 40W

100W SOLDERING IRON



FOR GENERAL ELECTRIC APPLIANCES AND MAJOR COMPONENT REPAIRS

54071 100w Soldering Iron

DESOLDERER



54094 Aluminium

DESOLDERER



54095 Blue / Aluminium

DESOLDERER



54037 Large

Antex

18 WATT SOLDER IRON CS18





54007 18 Watt Solder Iron CS18

- 220 Volt Input
- 18 Watts – Tip Temperature 390°C
- Leakage Current <1.5µA

Spare Bits for CS18

54019 Bit # 1100
54021 Bit # 1101
54022 Bit # 1106

25 WATT SOLDER IRON XS25





54008 25 Watt Solder Iron XS25

- 220 Volt Input
- 25 Watts – Tip Temperature 420°C
- Leakage Current <2.0µA

Spare Bits for XS25

54019 Bit # 1100
54021 Bit # 1101
54022 Bit # 1106

100 WATT SOLDER IRON HP100





54011 100 Watt Solder Iron HP100

- 220 Volt Input
- 100 Watts – Tip Temperature 600□C
- Leakage Current <2µA

Spare Bits for XS25

54017 XS230E 25W Element
54010 CS220 15W Element
54018 CS230E 18W Element

Soldering Equipment

SOLDER

500g Roll	54115	1.6mm	54116	1.25mm
	54147	0.9mm	54148	0.71mm
250g Roll	54113	0.9mm		
	54114	0.71mm		
100g Roll	54111	0.9mm		



DISPENSER

54048 10g 0.8mm



SOLDER WICK

54064 2.5mm



SOLDER STAND

54047 Solder Stand



HELPING HANDS

63702 Solder Stand



Horn Speakers

5″ HORN SPEAKER WHITE

Power	:	10 Watts
Impedance	:	8 Ohm
Frequency Range	:	500-8khz
Housing	:	Abs
Dimension	:	135x125mm



55506

5″ HORN SPEAKER BLACK

Power	:	10 Watts
Impedance	:	8 Ohm
Frequency Range	:	500-8khz
Housing	:	Black Abs
Dimension	:	135x125mm



55508

RECTANGULAR HORN SPEAKER

Power	:	10 Watts
Impedance	:	8 Ohm
Frequency Range	:	500-5000 hz
Housing	:	White Abs
Dimension	:	203x125x230mm



55051

DOWA 8″ HORN SPEAKER

Power	:	12 Watts Rms
Impedance	:	8 Ohm
Frequency Range	:	500hz-5 khz
Sensitivity	:	108db/1w 1m
Housing	:	Aluminium
Dimension	:	205x190mm



55049

Horn Speakers

DOWA 10" HORN SPEAKER

Power : 25 Watts
Impedance : 8 Ohm
Frequency Range : 500hz-5khz
Sensitivity : 108db/1w 1m
Housing : Aluminium
Dimension : 250 Dia x 270mm



55048

DOWA 12" HORN SPEAKER

Power : 40 Watts
Impedance : 8 Ohm
Frequency Range : 500hz-7khz
Sensitivity : 108db/1w 1m
Housing : Aluminium
Dimension : 310 Dia X 305mm



55154

20" TRUMPET HORN

55122 **Housing** : Aluminium



55122

18" TRUMPET HORN

55121 **Housing** : Aluminium

55121

HORN DRIVER UNIT 60W

55095
Power : 60 Watt
Impedance : 8 Ohm
Colour : Grey
Material : Aluminium
Dimension : Dia 115 x 90

HORN DRIVER UNIT 100W

55097
Power : 100 Watt
Impedance : 8 Ohm
Colour : Grey
Material : Aluminium
Dimension : Dia 122 x 112mm



55095

55097

FOR AUDIO LINE TRANSFORMERS REFER TO THE TRANSFORMER SPECIFICATIONS

Waterproof Speakers

- Dual Cone Full Range Speakers
- Completely Waterproof
- Polypropylene Cone
- Built In Molded Grille
- Complete Pair With Wire And Mounting Hardware
- For Marine Or Car Door Use
- Molded Abs Plastic Basket
- Ultra – Slim Design

MDC-6

55019
- 5¼" (130mm)
- 100 Watts Rated Power (Peak)
- 4 Ohm Impedance
- 20 Oz Circular Magnet
- Frequency Response 100hz – 18khz
- Mounting Depth Only 1½" (40mm)



55019

MDC-7

55020
- 6½" (165mm)
- 120 Watts Rated Power (Peak)
- 4 Ohm Impedance
- Frequency Response 45 – 16khz
- 1" (25mm) Voice Coil
- 20 Oz Circular Magnet

SUPPLIED PER PAIR



55020

Waterproof /Hi Fi

DOWA 690B

Black Cabinet

DOWA 690W

White Cabinet



SPECS :

- 4” Woofer And 2”Tweeter Inside
- Full Range 20w Output
- Abs Cabinets Spring Bindings Sealed Throughout
- Full Swing Multi-Mount, Mounting Brackets & Optional Rear Brass Fasteners Incl.
- Available In Black Or White
- **Sensitivity:** 88db/1w,1m
- **Frequency Range:** 60hz-20khz
- **Dim:** 145x120x240mm
- Approx.1.3kg /Unit Pc
- **Package:** 7”L X 15”W X 8.5”H. (Pair)

Switches

TOGGLE SWITCHES

58205	2p	Spst On/Off	2a Miniature
58065	3p	Spdt On/Off/On	3a Miniature
58142	3p	Spdt On/On	3a Miniature
58143	3p	Spdt On/Off/On	3a Miniature
58203	4p	Spdt On/On	3a Miniature
58145	6p	Dpdt On/On	3a Miniature
58063	6p	Dpdt On/On	3a Miniature
58206	6p	Dpdt On/On	3a Miniature
58171	2p	Spst On/Off	10a
58170	3p	Spdt On/On	10a
58169	6p	Dpdt On/On	10a
58172	6p	Dpdt On/Off/On	10a



58142



58145



58169

PUSH BUTTON SWITCHES

58059	On – Mom	Red	Round Small Button
58700	On – Mom	Black	Round Small Button
58701	On – Mom	Red	Round Small Button
58033	Off – Mom	Black	Round Small Button
58034	Off – Mom	Red	Round Small Button
58207	On – Mom	Black	Square Large Button
58208	On – Mom	Red	Square Large Button
58217	On – Off	Red	Square Large Button
58218	On – Off	Black	Square Large Button
58702	On – Mom	Red	Round Large Button



58701



58208



Switches

ROCKER SWITCHES

58660 4P SPST ON/OFF



58065 3P SPDT ON/OFF



58060 3P (SPST) ON-OFF ILLUMINATED 250V 10A



MICRO SWITCHES

58190 MINIATURE SPDT ON-ON 250V 3A



58195 WITH LEVER + ROLLER SPDT ON-ON 250V 3A



58198 WITH LEVER SPDT ON-ON



ELECTRICAL SWITCHES

58003 WHITE THROUGH SWITCH 250V AC 3A



58000 BELL PUSH SWITCH WHITE



58005 TABLE LAMP (POP) SWITCH 2A 250V



Digital Multimeter

HIGH PRECISION DIGITAL MULTIMETERS

61007 DMM8902

DC VOLTAGE : 200mV – 2V – 20V – 200V – 1000V
AC VOLTAGE : 200Mv – 2V – 20V – 200V – 750V
DC CURRENT : 200µA – 2mA – 20mA – 200mA – 10A
AC CURRENT : 200µA – 2mA – 20mA – 10A
RESISTANCE : 200 Ohm – 2K Ohm – 20K Ohm
2M Ohm – 20M Ohm – 200M Ohm
DIODE : 2.8V / 1mA
TRANSISTOR TESTER
MAX DISPLAY 2000 – 3½ DIGIT LCD
POWER : 9V BATTERY



HIGH PRECISION DIGITAL MULTIMETERS

61008 MY64

DC VOLTAGE : 200mV – 2V – 20V – 200V – 1KV
AC VOLTAGE : 200mV – 2V – 20V – 200V – 750V
DC CURRENT : 200µA – 2mA – 20mA – 200mA – 10 Amp
AC CURRENT : 200µA – 2mA – 20mA – 10 Amp
RESISTANCE : 200 Ohm – 2K Ohm – 20K Ohm – 2M Ohm
20M Ohm – 200M Ohm
CAPACITANCE : 2nF – 20nF – 200nF – 2uF – 20uF
TEMP. : -40°C - 1400°C
FREQUENCY : 20 KHz
DIODE TESTER : 2.8v / 1Ma
TRANSISTOR TESTER : HFE VCE 3V, 10µA



Digital Multimeter

CAPACITANCE METER

61001
EM6013B

CAPACITANCE RANGE
2000pF – 20nF – 200nF
2uF - 20uF – 200uF
20mF - 200mF

with Yellow Housing



61001

DIGITAL TONG TESTER

61012
DT266

DC VOLTAGE : 1000V
AC VOLTAGE : 750V
AC CURRENT : 200A – 1000A
RESISTANCE : 200 Ohm – 2000M Ohm
DATA HOLD : Yes
BUZZER
MAXIMUM DISPLAY : 1999
DISPLAY SIZE : 16 x 48
RANGE : Manual



61012

Analogue Multimeter

YX2000A

61019
YX2000A

DC VOLTAGE	:	0 / 2.5 / 10 / 50 / 250 / 500V
AC VOLTAGE	:	0 / 10 / 50 / 250 / 500V
DC CURRENT	:	0 / 500V / 10mA / 250mA
RESISTANCE	:	RX10 / RX1K
BATTERY TEST	:	1.5V / 9V
DIMENSIONS	:	105 x 70 x 33
WEIGHT	:	85g
BATTERY	:	AA 1.5V x 1



61019

YX360TRN

61003
YX360TRN

DC VOLTAGE	:	0.1 / 0.5 / 2.5 / 10 / 50 / 250 / 1000V
AC VOLTAGE	:	10 / 50 / 250 / 1000
DC CURRENT	:	50µ / 2.5mA / 25mA / 250mA
RESISTANCE	:	2K / 20K / 200K / 2M
SIZE	:	150 x 100 x 36mm
WEIGHT	:	280gm
BATTERY	:	2 x 1.5V 1 x 9V Battery



61003

HAMRAD ELECTRONICS

Oscilloscope

DUAL CHANNEL OSCILLOSCOPE

61028
CQ620
DUAL CHANNEL OSCILLOSCOPE

- 20MHz Dual Channel
- Height Sensitivity 1mV / div
- Alt Triggering Function
- Z-Axis Input, CH1 Output
- Encoder for Sweep Switch
- Fully Sealed Long Life Vertical Sensitivity Switch
- 10 times Sweep magnification
- TV Synchronisation X-Y mode
- Triggering Level Lock function
- Automatic Synchronise function

Power Source : 220V 50Hz
Size : 310 (W) x 150 (H) x 455 (D)
Weight : Approx. 8Kg
Accessories : Operational manual, 2 x Probes, Mains Lead



Crimping Tools

ECONOMY CRIMPING TOOL AND WIRE STRIPPER



63830

MODULAR CONNECTOR CRIMPING TOOL



63815

63815
Network – Telephone

4P 4C
6P 2C
6P 4C
6P 6C – 8P 8C

- Cuts, Crimps And Strips
- Steel Frame

ECONOMY TELEPHONE PLASTIC CRIMPING TOOL 4P4C RJ11



63809

63809
Economy Telephone
Plastic Crimping Tool 4P4C RJ11

CRIMP TOOL TELEPHONE

63810

63011

63020



63810 **RJ11/12** Crimp Tool Telephone
63011 **RJ45** Crimp Tool Telephone
63020 **RJ9/11/12/45** Crimp Tool Telephone

- Metal Handle
- Cuts, Crimps And Strips
- Steel Frame

HAMRAD ELECTRONICS

220V / 110V AC/AC

DW50R – 66087

INPUT : 220v / 240v AC 2 Pin Round
OUTPUT: 110v AC

This Convertor Is Used For Appliances Using Less Than 50 Watts



DW50R – 66087

INPUT : 110V AC
OUTPUT : 220V AC

DW100S / 300S / 500S

INPUT VOLTAGE 220/240V AC
OUTPUT VOLTAGE 2x110V AC SOCKETS

66600 DW 100 - 100 WATTS OUTPUT
66605 DW 300 - 300 WATTS OUTPUT
66610 DW 500 - 500 WATTS OUTPUT

ON / OFF SWITCH



DW1000S / DW2000S

INPUT VOLTAGE 220V / 240V AC
OUTPUT VOLTAGE 3x110V AC OUTPUT
CIRCUIT BREAKER PROTECTION

66615 DW1000 - 1000 WATTS OUTPUT
66620 DW2000 - 2000 WATTS OUTPUT

CARRYING HANDLE
ON / OFF SWITCH



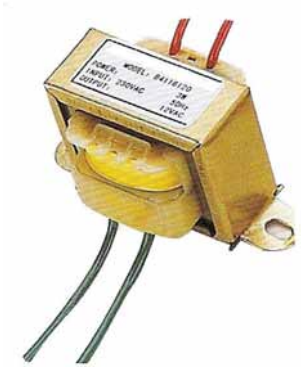
- All Units from 100W (DW100) to 2000W (DW2000S) inclusive are fitted with a Voltage Input Switch.
- This Switch selects either 220V AC or 110V AC.
- If 220V is selected the Output is 110V AC and if 110V Input is selected the Output will be 220V AC.
- If, however, the 110V option is selected the Output Wattage is reduced by 50%.

Transformers

66510	220V AC	06-0-06V AC	300mA	
66540	220V AC	06-0-06V AC	1A	
66500	220V AC	08-0-08V AC	500mA	
66520	220V AC	09-0-09V AC	300mA	Chassis Mount
66521	220V AC	09-0-09V AC	500mA	
66525	220V AC	12-0-12V AC	500mA	
66530	220V AC	12-0-12V AC	1A	
66019	220V AC	12-0-12V AC	3A	
66550	220V AC	15-0-15V AC	2A	



66070	220V AC	12-0-12V AC	500mA	PCB Mount



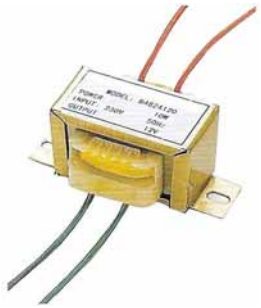
66074	220V AC	2 x 06 V AC	2A	MMT 13
66018	220V AC	2 x 12 V AC	2A	MT 71 Chassis

66095	220V AC	2 x 12V AC	4A	MT 18
66020	220V AC	2 x 12V AC	10A	MT 72

66095	220V AC	2 x 12V AC	4A	MT 18
66020	220V AC	2 x 12V AC	10A	MT 72

220 Volt Ac Input – 30 Volt Multi Tap AC Output

Output Voltages Available 3-4-5-6-8-9-10-18. 12-0-12, 15-0-15



66094	0.5 Amp	MT 112 AT
66022	1 Amp	MT 79 AT
66002	2 Amp	MT 3 AT
66008	3 Amp	MT 21 AT

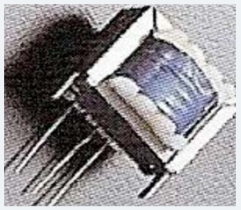
Battery Charger Transformer

66056	220V AC	6 / 10/ 16 Volt 2 Amp

Transformers

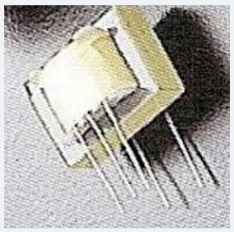
AUDIO LINE TRANSFORMERS

66155	5 Watt	5 / 2.5 / 1.25 Watt
66160	10 Watt	10 / 5 / 2.5 Watt
66159	25 Watt	25 / 12.5 / 6.25 / 3.125 Watt
66158	50 Watt	50 / 25 / 12.5 / 6.25 Watt



TRANSISTOR DRIVER

66116	LT 41 20K / 1K
66122	LT 54 10K / 2K
66126	LT 60 2K / 1K



TRANSISTOR OUTPUT

66130	LT 77 300 / 8
66132	LT 760 400 / 3.2



LINE INPUT

66190	600 / 600 Ohm

Variable /Variac

AC / AC CONTACT VOLTAGE REGULATOR (VARIAC)

VARIABLE AC POWER SUPPLY

Input Voltage : 220V AC
Output Voltage : 0 – 250V AC
Output Current : 8 Amp
Single Phase



66119

AC / AC CONTACT VOLTAGE REGULATOR (VARIAC)

VARIABLE AC POWER SUPPLY

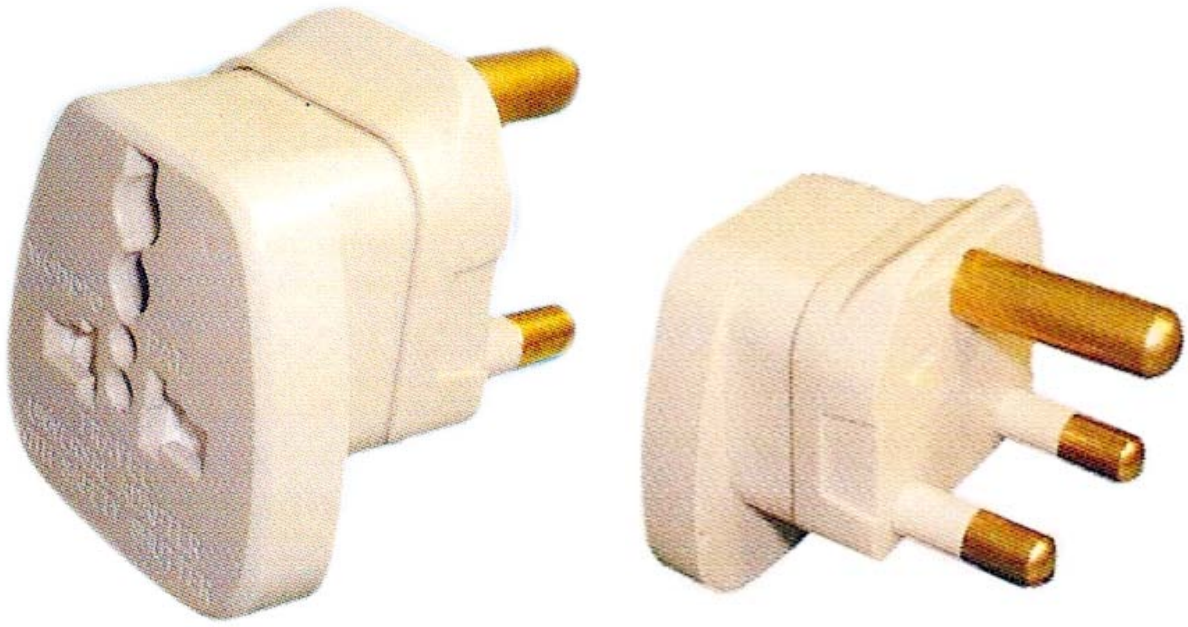
Input Voltage : 380V AC
Output Voltage : 0 – 430V AC
Output Current : Available for 3A - 30 Amp



Special order only on request

Wonpro Travel Adaptor

WONPRO WAS10L SA



44611

WONPRO WAS10L SA UNIVERSAL TRAVEL ADAPTOR

- Converts any international ac plug to fit south african electrical outlets.
- With safety shutter.
- Approved by SABS (South African Bureau Of Standards)

N.B. This product is for change of plug pins only. It does not perform voltage step up or step down conversion between 120 + 220volt AC .

To prevent damage to your electronic apparatus please check that your product is compatible with the local voltage.

HAMRAD ELECTRONICS

CATALOGUE

TEL: +27 (0)21 555 2348
FAX: +27 (0)21 555 2866
EMAIL: hamrad@mweb.co.za
19 Woodbridge Business Park, Montague Gardens,
7441, Cape Town, South Africa

www.hamrad.co.za