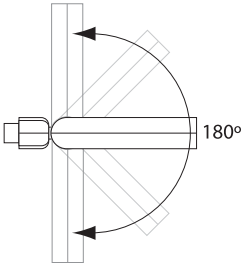


AUDIO AND VIDEO. DIGITAL TV

Compact digital TV receiver with PVR function and time shift: records digital TV programmes and plays video, audio and image files. Compatible with Spanish and Portuguese digital TV.



DVB-T REC USB TIME SHIFT



DVB-T REC USB TIME SHIFT



RDT-714U

CHARACTERISTICS	Compact digital TV receiver with Scart. Video recorder (PVR with time shift): records and plays digital TV programmes. Host controller USB port, FAT and NTFS file format. Video, audio and image multi-media file player. Direct Scart connection to the screen. Hinge for installation behind the screen. Aerial signal path with receiver switched off. SD standard definition output through Scart. .mpg recording format. Subtitles, language selection in multi-audio channel and teletext. Channel editing (favourites, move, parental lock, delete and sort). Quick and easy installation. Remote control. Easy to use multi-language menu. Highly sensitive reception. Electronic programme guide. 16:9 and 4:3 screen.
OUTPUT	Audio/video: Scart
POWER SUPPLY	5 V DC, 1 A with adapter included
COLOUR	Black
DIMENSIONS	67 x 20 x 128 mm depth. Folded: 67 x 55 x 92 mm depth
WEIGHT	0.1 kg
ACCESSORIES	USB cable Remote control extension lead Batteries for the remote control.

RDT-756U

Digital TV receiver. Video recorder (PVR with time shift): records and plays digital TV programmes. USB controller host port, FAT and NTFS file format. Multimedia video, audio and image file player. Output formats: 576i and 480i. SD standard definition output through Scart. .mpg recording format. Subtitles, language selection in multiaudio channel and teletext. Channel editing (favourites, move, parental control, delete and sort). Quick and easy installation. Remote control. Easy to use multi language menu. Highly sensitive reception. Electronic programme guide (EPG). 16:9 and 4:3 display.
Audio/video: Scart Stereo audio, 2 x RCA Composite video, RCA Coaxial digital audio, RCA
230 V AC, 5 W maximum
Black
168 x 40 x 102 mm depth
0.4 kg
Batteries for the remote control

HD digital TV receiver with HDMI output and PVR function with time shift: records digital TV programmes and plays video, audio and image files. Compatible with Spanish and Portuguese digital TV.



DVB-T **HD TV** **FULL HD 1080p** **HD REC** **USB** **TIME SHIFT** **HDMI**

RDT-896HD

CHARACTERISTICS	HD Digital TV receiver. Video recorder (PVR with time shift): records and plays digital TV programmes. Host controller USB port, FAT and NTFS file formats. Multimedia video, audio and image file player. HD output formats: 1080p, 1080i, 720p, 576p, 576i, 480p y 480i. HD high definition output up to 1080p through HDMI and standard definition SD through scart. .ts,.mpg recording formats. HDMI output. Subtitles, language selection in multi-audio channel and teletext. Channel editing (favourites, move, parental lock, delete and sort). Quick and easy installation. Remote control. Easy to use multi-language menu. Highly sensitive reception. Electronic programme guide. 16:9 and 4:3 screen.
OUTPUTS	Audio/video: HDMI Scart Stereo audio, 2 x RCA Composite video, RCA Coaxial digital audio, RCA
POWER SUPPLY	100-240 V AC, 6 W maximum
COLOUR	Black
DIMENSIONS	188 x 44 x 135 mm depth
WEIGHT	0.5 kg
ACCESSORIES	Batteries for the remote control

RELATED PRODUCTS



7908

Digital A/V HDMI cable. With interference ferrite suppressors at both ends and gold-plated contacts. Compatible with 4k x 2k, Full HD 1080p, Full 3D, high velocity data transfer with ethernet and audio return channel. 28 AWG. Page 471.



7912

High quality digital A/V HDMI cable with gold-plated connectors. Compatible with 4k x 2k, Full HD 1080p, Full 3D, high speed data transfer with Ethernet and audio return channel. 30 AWG. Page 472.

AUDIO AND VIDEO. SATELLITE

HD satellite receiver DVB-S2/MPEG-4/MPEG-2 with HDMI output, PVR function with time shift. Multimedia player, USB connection. Ethernet and Wi-Fi with web applications included.



- DVB-S2
- WiFi
- FULL HD 1080p
- USB
- TIME SHIFT
- HDMI

RDS-583WHD **N!**

CHARACTERISTICS	HD satellite receiver. DVB-S2/MPEG-4/MPEG-2. HD output formats:1080p, 1080i, 720p, 576p and 480p. Personal video recorder (PVR with time shift function). Multimedia player. USB port 2.0. Conditional access (CA) smart card reader. Wi-Fi and ethernet. Web applications. RS-232. DiSeqC 1.0/1.1/1.2/1.3 (USALS). Multilingual menu. 4:3 and 16:9 screen format. Electronic programme guide (EPG). Automatic and manual scan. Software upgrading through USB. Remote control.
OUTPUTS	HDMI TV Scart Composite video, RCA Stereo audio, 2 x RCA SPDIF coaxial digital audio, RCA
POWER SUPPLY	100-240 V AC, 20 W maximum
COLOUR	Black
DIMENSIONS	260 x 48 x 165 mm depth
WEIGHT	0.8 kg
ACCESSORIES	HDMI cable Batteries for the remote control

HD DVB-S2/MPEG-4/MPEG-2 satellite receiver with HDMI output, PVR function with time shift.
Multimedia player, USB port.



DVB-S2 **FULL HD 1080p** **USB** **TIME SHIFT** **HDMI**

RDS-520HD **N!**

CHARACTERISTICS	HD satellite receiver. DVB-S2/MPEG-4/MPEG-2. HD output formats: 1080p, 1080i, 720p, 576p, 576i, 480p and 480i. Personal video recorder (PVR with time shift function). Multimedia player. 2 x USB 2.0 ports. DiSeqC 1.0/1.1/1.2/1.3 (USALS). Multilingual menu. Screen format: 4:3 and 16:9. Electronic programme guide (EPG). Auto and manual scan. Software upgrading through USB. Remote control.
OUTPUTS	HDMI Composite video, RCA Stereo audio, 2 x RCA SPDIF coaxial digital audio, RCA
POWER SUPPLY	100-240 V AC, 15 W maximum
COLOUR	Black
DIMENSIONS	260 x 48 x 165 mm depth
WEIGHT	0.6 kg
ACCESSORIES	HDMI cable Batteries for the remote control AV to scart cable

AUDIO AND VIDEO. VIDEO SENDER

Wireless remote control extension system via radio frequency.



433 MHz

VS-430



CHARACTERISTICS	Wireless remote control extension system in 433 MHz, maximum distance 75 m without obstacles. Quick and easy installation.
INPUTS	Transmitter: 1 IR sensor remote control
OUTPUTS	Receiver: 1 IR transmitter remote control, 2.5 mm jack
POWER	80 dB μ V/m at 3 m 10 mW
POWER SUPPLY	9 V DC, 150 mA with 2 AC/DC adapters included
DIMENSIONS	Transmitter and receiver: 71 x 26 x 79 mm depth
ACCESSORIES	1 IR transmitter remote control

AUDIO. PORTABLE LOUDSPEAKERS

Portable loudspeakers for amplifying the audio from mobile telephones, MP3 players or laptop computers. Lightweight, compact, easy to transport with sharp and intense audio. Smooth finish.



AP-20B

AP-20N

CHARACTERISTICS		Portable speaker. Compact and lightweight. Sharp and intense audio. Cable with 3.5 mm stereo plug connector for connecting to the headphone output on mobile telephones, MP3 players and audio devices. Li-ion battery.
RESPONSE	100-20 000 Hz	100-20 000 Hz
POWER	2 W RMS	2 W RMS
SPEAKER	1 1/2" aluminium diaphragm	1 1/2" aluminium diaphragm
DISTORSION	Harmonic: < 1%	Harmonic: < 1%
S/N RATIO	> 80 dB	> 80 dB
CABLE	10 cm with 3.5 mm stereo plug connector	10 cm with 3.5 mm stereo plug connector
CONNECTORS	Mini female USB B recharge connector	Mini female USB B recharge
POWER SUPPLY	Rechargeable Li-ion battery, 400 mAh	Rechargeable Li-ion battery, 400 mAh
COLOUR	White	Black
DIMENSIONS	60 x 50 x 60 mm depth	60 x 50 x 60 mm depth
WEIGHT	0.1 kg	0.1 kg
ACCESSORIES	Male USB A to mini male USB B cable Length: 30 cm	Male USB A to mini male USB B cable Length: 30 cm

Portable loudspeakers with USB/ MicroSD/MP3 player and digital FM tuner. Compact and portable design allowing you to enjoy your favourite music anywhere, with the best quality.

USB
MICRO SD
MP3
MPEG
RADIO



RU-30A

RU-30N

CHARACTERISTICS		Portable speaker with USB/Micro SD/MP3 player and digital FM tuner. Compact and lightweight. Clear, intense audio. USB port. Micro SD card reader. Auto scan for stations and tuning. Digital display. Li-ion internal battery. Cable with 3.5 mm stereo plug connector for connecting to the mobile telephone, MP3 players and audio device headphone output. Battery charge indicator.
RESPONSE	150 - 18 000 Hz	150 - 18 000 Hz
POWER	2 W RMS	2 W RMS
SPEAKER	1 3/4"	1 3/4"
S/N RATIO	> 80 dB	> 80 dB
INPUTS	1 USB port 1 port for MicroSD cards 1 line in, 3.5 mm stereo jack	1 USB port 1 port for MicroSD cards 1 line in, 3.5 mm stereo jack
OUTPUTS	1 headphone, 3.5 mm stereo jack	1 headphones, 3.5 mm stereo jack
POWER	Rechargeable Li-ion battery, 450 mA	Rechargeable Li-ion battery, 450 mAh
COLOUR	Blue	Black
DIMENSIONS	50 x 50 x 50 mm depth	50 x 50 x 50 mm depth
WEIGHT	0.1 Kg	0.1 Kg
ACCESSORIES	80 cm cable with USB A plug to mini USB B plug. 50 cm audio cable with 3.5 mm stereo plug to 3.5 mm stereo plug	

Portable loudspeakers with USB/MicroSD/MP3 player, digital FM tuner and auxiliary input. Compact and portable design allowing you to enjoy your favourite music anywhere with the highest quality.

USB
**MICRO
SD**
MP3
MPEG
RADIO


RU-40A

RU-40B

RU-40N

RU-40R

CHARACTERISTICS

Portable loudspeaker with USB/MicroSD/MP3 player, digital FM tuner and auxiliary input.

Compact design.

Soft rubber finish.

Metal grille.

Sharp and intense audio.

USB port and MicroSD card reader.

Automatic station and tuner scan.

Removable Li-ion battery.

Cable with 3.5 mm stereo plug connector for connecting to the headphone output on mobile telephones, MP3 players and audio devices.

RESPONSE	100-20 000 Hz	100-20 000 Hz	100-20 000 Hz	100-20 000 Hz
POWER	2 x 3 W	2 x 3 W	2 x 3 W	2 x 3 W
LOUDSPEAKER	2 x 1 3/4" 1 1/2" x 1" passive radiator	2 x 1 3/4" 1 1/2" x 1" passive radiator	2 x 1 3/4" 1 1/2" x 1" passive radiator	2 x 1 3/4" 1 1/2" x 1" passive radiator
S/N RATIO	≥ 80 dB	≥ 80 dB	≥ 80 dB	≥ 80 dB
INPUTS	1 USB port 1 port for MicroSD cards 1 auxiliary, 3.5 mm stereo jack	1 USB port 1 port for MicroSD cards 1 auxiliary, 3.5 mm stereo jack	1 USB port 1 port for MicroSD cards 1 auxiliary, 3.5 mm stereo jack	1 USB port 1 port for MicroSD cards 1 auxiliary, 3.5 mm stereo jack
POWER SUPPLY	Rechargeable Li-ion battery, 500 mAh	Rechargeable Li-ion battery, 500 mAh	Rechargeable Li-ion battery, 500 mAh	Rechargeable Li-ion battery, 500 mAh
COLOUR	Blue	White	Black	Red
DIMENSIONS	176 x 70 x 53 mm depth	176 x 70 x 53 mm depth	176 x 70 x 53 mm depth	176 x 70 x 53 mm depth
WEIGHT	0.4 kg	0.4 kg	0.4 kg	0.4 kg
ACCESSORIES	Male USB A to male micro USB B cable 3.5 mm stereo jack to 3.5 mm stereo jack audio cable			

AUDIO. PORTABLE LOUDSPEAKERS

Portable loudspeakers with bluetooth receiver, MicroSD/MP3 player and auxiliary input. Attractive, compact and portable design allowing you to enjoy your favourite music anywhere with the highest quality.

MICRO
SD

MP3

MPEG



BSD-50A

BSD-50B

BSD-50N

BSD-50R

CHARACTERISTICS

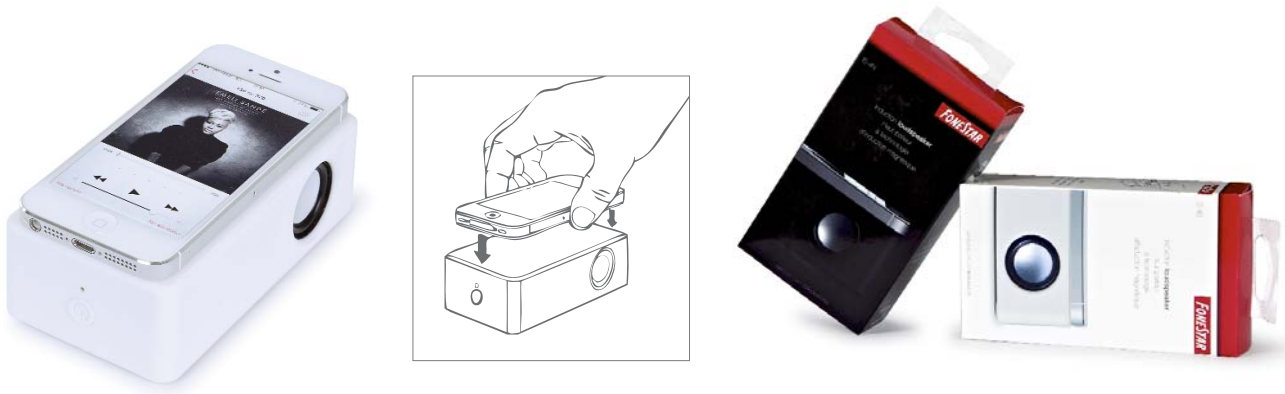
Portable loudspeaker with bluetooth receiver, MicroSD/MP3 player and auxiliary input.
Bluetooth receiver incorporated, plays music received from a mobile telephone.

MicroSD card reader.
Attractive, compact and lightweight design.
Soft finish, silicone lids.
Sharp and intense audio.
Removable Li-ion battery.

Cable with 3.5 mm stereo plug connector for connecting to the headphone output on mobile telephones, MP3 players or audio devices.

RESPONSE	100-20 000 Hz	100-20 000 Hz	100-20 000 Hz	100-20 000 Hz
POWER	2 x 3 W	2 x 3 W	2 x 3 W	2 x 3 W
LOUDSPEAKER	2 x 1 1/2" 2" x 1" passive radiator	2 x 1 1/2" 2" x 1" passive radiator	2 x 1 1/2" 2" x 1" passive radiator	2 x 1 1/2" 2" x 1" passive radiator
S/N RATIO	≥ 85 dB	≥ 85 dB	≥ 85 dB	≥ 85 dB
INPUTS	1 port for MicroSD cards 1 auxiliary, 3.5 mm stereo jack	1 port for MicroSD cards 1 auxiliary, 3.5 mm stereo jack	1 port for MicroSD cards 1 auxiliary, 3.5 mm stereo jack	1 port for MicroSD cards 1 auxiliary, 3.5 mm stereo jack
POWER SUPPLY	Rechargeable Li-ion battery, 600 mAh	Rechargeable Li-ion battery, 600 mAh	Rechargeable Li-ion battery, 600 mAh	Rechargeable Li-ion battery, 600 mAh
COLOUR	Blue	White	Black	Red
DIMENSIONS	154 x 57 x 40 mm depth	154 x 57 x 40 mm depth	154 x 57 x 40 mm depth	154 x 57 x 40 mm depth
WEIGHT	0.2 kg	0.2 kg	0.2 kg	0.2 kg
ACCESSORIES	Male USB A to mini male USB B cable 3.5 mm stereo jack to 3.5 mm stereo jack audio cable			

Induction loudspeakers. Amplifies the audio from your mobile telephone, by just placing the telephone on the loudspeaker. It also has an auxiliary input for amplifying the audio from other devices.



IS-4B

IS-4N

CHARACTERISTICS		Induction loudspeaker. No need for special configuration in the telephone, no need for cables. Auxiliary input. Soft rubber finish.
POWER	2 x 2 W RMS	2 x 2 W RMS
LOUDSPEAKER	2 x 1"	2 x 1"
INPUTS	1 auxiliary, 3.5 mm stereo jack	1 auxiliary, 3.5 mm stereo jack
INDICATORS	LED power/low battery indicator	LED power/low battery indicator
POWER SUPPLY	3 x LR6-AA batteries or using a male USB A to male micro USB B cable	3 x LR6-AA batteries or using a male USB A to male micro USB cable
COLOUR	White	Black
DIMENSIONS	66 x 40 x 122 mm depth	66 x 40 x 122 mm depth
WEIGHT	0.2 kg	0.2 kg
ACCESSORIES	Male USB A to male micro USB B cable	Male USB A to male micro USB B cable

RELATED PRODUCTS



AD-17U
AC/DC Adapter 2 x USB, 5 V, 2100 mA
Page 436.



F-LR6
Blister pack with 4 LR6-AA 1.5 V alkaline
batteries
Page 442.

AUDIO. Hi-Fi AMPLIFIER

Compact Hi-Fi stereo amplifiers, especially suitable for personal sound systems.



AS-24U



AS-13



Stereo
25 + 25 W
Surround 10 + 10 W

Stereo
25 + 25 W
Surround 10 + 10 W

	AS-24U	AS-13
CHARACTERISTICS	Compact Hi-Fi stereo amplifier. USB/SD player of MP3 files supporting ID3 tag. LCD screen. Bass, trebles and balance control. Remote control for MP3 player. Surround and stereo loudspeaker output.	Compact Hi-Fi stereo amplifier. Bass, treble and balance control. Surround and stereo loudspeaker output.
POWER	Stereo: 25 + 25 W maximum 15 + 15 W RMS at 4 Ω 12 + 12 W RMS at 8 Ω Surround: 10 + 10 W max 6 + 6 W RMS at 8 Ω	Stereo: 25 + 25 W maximum 15 + 15 W RMS at 4 Ω 12 + 12 W RMS at 8 Ω Surround: 10 + 10 W maximum 6 + 6 W RMS at 8 Ω
PROTECTION	Soft start, short-circuit and overload	Soft start, short-circuit and overload
INPUTS	3 stereo inputs: CD, tuner and auxiliary, 2 x RCA 400 mV	3 stereo inputs: CD, tuner y aux, 2 x RCA 400 mV
OUTPUTS	Speakers: 4-8 Ω stereo, spring and surround terminals, 2 x RCA	Loudspeakers: stereo 4-8 Ω, Spring terminals and surround, 2 x RCA
FREQUENCY RESPONSE	20-20 000 Hz	20-20 000 Hz
S/N RATIO	> 70 dB (A weighting)	> 70 dB (A-weighting)
DISTORTION	Harmonic: < 0.1%	Harmonic: < 0.1%
CROSSTALK	40 dB	40 dB
POWER SUPPLY	230/115 V AC, 65 W	230/115 V AC, 50 W
DIMENSIONS	200 x 68 x 160 mm depth	200 x 68 x 160 mm depth
WEIGHT	1.9 kg	1.7 kg

Stereo Hi-Fi amplifier with digital AM/FM tuner and output for 2 groups of A/B loudspeakers. 4 auxiliary inputs. High quality audio.

RADIO



AS-150R

75 + 75 W RMS

CHARACTERISTICS	Stereo Hi-Fi amplifier. Digital AM/FM tuner with 64 pre-tuned channels and RDS. 4 inputs (CD, DVD, VCR and AUX) and one final stage input. 1 recording (rec) output and one preamp output. Blue VFD screen. Bass, treble and balance controls through the menu. Remote control. 2 groups of loudspeakers A/B. Headphone output.
POWER	75 + 75 W RMS at 4 Ω
PROTECTION	3 circuits: short-circuit, overload and surge
TUNER	Digital AM/FM with 64 pre-tuned channels and auto-scan RDS information
INPUTS	4 stereo inputs: CD, DVD, VCR and aux, 2 x RCA 1 amp in, 2 x RCA 1 rec out, 2 x RCA 1 pre out, 2 x RCA 1 stereo earphones, 6.3 mm jack Speakers: 2 stereo groups A/B selectable: A or B 4-16 Ω, A and B 8-16 Ω, screw terminals or banana sockets
RESPONSE	20-20 000 Hz ±1 dB
S/N RATIO	88 dB (A weighting)
DISTORTION	Harmonic: ≤ 0.04% (1 W)
POWER SUPPLY	230 V AC, 200 W maximum
DIMENSIONS	435 x 105 x 335 mm depth
WEIGHT	5.9 kg
ACCESSORIES	AM and FM aerial cable Batteries for the remote control

RELATED PRODUCTS

BR-3032
Bluetooth receiver
Page 402.



SF-2200U
Hi-Fi turntable with
direct recording
function in USB/SD.
BELT DRIVE.
Page 403.



AUDIO. Hi-Fi AMPLIFIER

Stereo Hi-Fi amplifier with USB/MP3 player, digital AM/FM tuner and output for 2 groups of A/B loudspeakers. 4 auxiliary inputs and 2 microphone inputs. High quality audio.



USB MP3 MPEG RADIO

AS-170RU 80 + 80 W RMS

CHARACTERISTICS	Hi-Fi stereo amplifier. USB player for MP3 files supporting ID3 tag. AM/FM digital tuner with 64 pre-tuned channels and RDS. 2 microphone inputs with independent volume control, 4 inputs (CD, DVD, VCR and aux/phono) and 1 amp in. 1 recording output (rec) and 1 pre out. Blue VFD display. Bass, treble and balance control through the menu. Remote control. 2 groups of loudspeakers A/B. Headphone output.
POWER	80 + 80 W RMS at 4 Ω
PROTECTION	3 circuits: short-circuit, overload and surge
PLAYER	Maximum number of index-linked files and folders: 65,000 8 levels of folders maximum
TUNER	Digital AM/FM with 64 pre-tuned channels and auto-scan RDS information
INPUTS	2 unbalanced mics. with independent volume control, 6.3 mm jack 4 stereo inputs: CD, DVD, VCR and selectable aux/phono, 2 x RCA 1 amp in, 2 x RCA
	1 rec out, 2 x RCA 1 pre out, 2 x RCA 1 stereo earphone, 6.3 mm jack Speakers: 2 stereo groups A/B selectable: A or B 4-16 Ω, A and B 8-16 Ω, screw terminals or banana sockets
RESPONSE	20-20 000 Hz ±1 dB
S/N RATIO	88 dB (A weighting)
DISTORTION	Harmonic: ≤ 0.04% (1 W)
POWER SUPPLY	230/115 V AC, 200 W maximum
DIMENSIONS	435 x 105 x 335 mm depth
WEIGHT	6.7 kg
ACCESSORIES	AM and FM aerial cable Batteries for the remote control

Stereo Hi-Fi amplifier with USB/MP3 player, digital AM/FM tuner and output for 2 groups of A/B loudspeakers. 9 auxiliary inputs and 1 microphone input.



USB MP3 MPEG RADIO

AS-360RU

150 + 150 W RMS

CHARACTERISTICS	Stereo Hi-Fi amplifier. USB MP3 file player with ID3 information tag. AM/FM digital tuner with 64 pre-tuned channels and RDS. 1 microphone input with independent volume control, 9 inputs (CD, DVD, aux 1 to 4, phono, PC1 and 2) and one final stage input. 1 recording output (REC) and one pre out. Blue VFD display. Bass, treble, and balance controls through menu. Remote control. 2 groups of speakers A/B. Headphone output.
POWER	150 + 150 W RMS at 4 Ω 115 + 115 W RMS at 8 Ω
PROTECTION	3 circuits: shortcircuit, overload and surges
PLAYER	Maximum number of indexable folders and files: 65 000 Maximum of 8 levels of folders
TUNER	Digital AM/FM with 64 pre-tuned channels and auto scan RDS information
INPUTS	1 unbalanced mic. with independent volume control, 6.3 mm jack 9 stereo inputs: CD, DVD, aux 1 to 4, phono and PC2, 2 x RCA and PC1 on the front panel, 3.5 mm jack 1 amp in, 2 x RCA
OUTPUTS	1 recording, 2 x RCA 1 pre out, 2 x RCA 1 stereo headphones, 6.3 mm jack Speakers: 2 selectable A/B stereo groups, A or B 4-16 Ω, A and B 8-16 Ω, screw terminals or banana plugs
FREQUENCY RESPONSE	20-20 000 Hz ± 1 dB
S/N RATIO	88 dB (A weighting)
DISTORTION	Harmonic: $\leq 0.04\%$ (1W)
POWER SUPPLY	230/115 V AC, 600 W maximum
DIMENSIONS	435 x 120 x 320 mm depth
WEIGHT	8.3 kg
ACCESSORIES	AM and FM aerial cable Batteries for the remote control

AUDIO. Hi-Fi PLAYERS

CD/USB/MP3 player. Player with CD reader and USB port. Analogue and digital audio outputs. 10 second anti-shock buffer memory and headphone output with volume control. Automatic playback function that switches on with the last selected playback mode. High quality, elegant finish.

- CD
- USB
- MP3
- MPEG



CD-150U

CHARACTERISTICS	CD/USB/MP3 player. Plays audio CD and MP3, CD-R and CD-RW. 10 second anti-shock buffer memory. USB port for the connection of flash drives and hard discs with FAT32 format. Blue VFD display. ID3 tag in MP3 files. Viewing of the CD playback time in different modes. Remote control. Analogue, digital and headphone audio output.
RESPONSE	20-20 000 Hz
OUTPUTS	1 auxiliary, 2 x RCA 1 coaxial digital audio, RCA 1 optical digital audio, Toslink 1 stereo earphone with volume control, 6.3 mm jack
POWER SUPPLY	100-240 V AC, 25 W
COLOUR	Black
DIMENSIONS	430 x 105 x 286 mm depth
WEIGHT	3.8 kg
ACCESSORIES	Audio cable, 2 x RCA Remote control batteries

Bluetooth receiver. Receives music from a mobile telephone, tablet, etc. Increases the functions on your audio system.

BR-3032 **N!**



CHARACTERISTICS	Bluetooth receiver. Compact and lightweight design. Bluetooth 3.0 EDR Transmission distance 10 m
OUTPUTS	1 auxiliary, 3.5 mm jack
INDICATORS	LED state indicator LED power indicator
POWER SUPPLY	5 V DC, 0.5 A with adapter included or micro USB B input to power with adapter or USB port in the music system
DIMENSIONS	75 x 15 x 30 mm depth
WEIGHT	0.1 kg



SF-2600B

CHARACTERISTICS

Belt drive.
Professional Hi-Fi turntable for discos.
Manual operating system.
DC precision servo mechanism with quick start/stop.
Belt-drive transmission.
2 speeds: 33 & 45 r.p.m. with LED indicators.
Start/stop switch and 33/45 micro switch.
Fine speed and tone adjustment with sliding potentiometer $\pm 10\%$.
Pitch bend + and - speed controls.
Wow and flutter: 0.25% W RMS (JIS 5521).
S/N ratio: -55dB (DIN 45544).
S-shaped professional tone arm with slow rise and fall.
Tone arm height adjustment.
332 mm aluminium plate and illuminated stroboscope.
With sliding carbon disc.
Cartridge head shell with magnetic Hi-Fi cartridge.
Light on needle-record contact zone.
Remote control start/stop and fast forward/rewind connector.
Connector for a second cartridge head shell.
With black base plinth and transparent lid.

POWER SUPPLY	230/115 V AC, 15 W
DIMENSIONS	450 x 152 x 365 mm depth
WEIGHT	7.5 kg

Hi-Fi turntable with direct recording function in USB/SD. BELT DRIVE. It records vinyl records directly in MP3 format in USB storage devices or SD memory cards. You can divide the recording into consecutive files. Auxiliary level output.

REC

USB

MP3

MPEG



SF-2200U

CHARACTERISTICS

BELT DRIVE.
Hi-Fi turntable with direct recording function in USB/SD.
USB and SD ports for storing recordings in MP3 format.
Auxiliary level output.
Manual operating system.
DC precision servo motor mechanism with quick start/stop.
Belt-drive transmission.
2 speeds: 33 & 45 r.p.m.
Reject button for lifting the tone arm and speed selector (33/45).
Wow and flutter: 0.25% W RMS.
S/N ratio: 50 dB.
Tone arm with slow rise and fall.
300 mm plate.
With nonslip rubber disc.
Cartridge head shell with magnetic Hi-Fi cartridge.
Recording LED indicator.
Start/stop recording button.
Button for dividing recording.
Accepts drives up to 16 GB.
Recording quality 192 Kbps.
With black base plinth and transparent lid.

POWER SUPPLY	230 V AC, 10 W
DIMENSIONS	418 x 115 x 355 mm depth
WEIGHT	3 kg



AUDIO. Hi-Fi LOUDSPEAKERS

Pairs of compact Hi-Fi loudspeakers. High quality audio with components with many features. Manufactured in MDF wood. Finished in black with an attractive design.



MONITOR-2020

CHARACTERISTICS	Pair of compact Hi-Fi loudspeakers. High quality audio. Manufactured in MDF wood. Removable cloth grille. Paint finish.
POWER	40 W maximum, 20 W RMS
SPEAKERS	1 x 4" woofer with shielded magnet 1 x mylar tweeter with 1" dome
RESPONSE	50-20 000 Hz ±3 dB
IMPEDANCE	8 Ω
SENSITIVITY	86 dB ±1 dB at 1 W/1 m
CONNECTORS	Spring terminals
CROSSOVER	2 ways Crossover frequency at 2.500 Hz
COLOUR	Black
DIMENSIONS	145 x 252 x 135 mm depth
WEIGHT	2 x 1.8 kg



MONITOR-80

CHARACTERISTICS	Pair of compact Hi-Fi loudspeakers. High quality audio. Manufactured in MDF wood. Shielded magnet loudspeakers.
POWER	100 W maximum, 80 W RMS
SPEAKERS	1 x 6 1/2" Aramid fibre woofer, highly resistant with shielded magnet 1 x 1 1/2" silk dome tweeter with shielded magnet
RESPONSE	48-20 000 Hz ±3 dB
IMPEDANCE	6 Ω
SENSITIVITY	86 dB ±1 dB at 1 W/1 m
CONNECTORS	Screw terminals or gold-plated banana plugs
CROSSOVER	2 ways Crossover frequency at 2700 Hz
COLOUR	Matt black lacquered
DIMENSIONS	225 x 320 x 265 mm depth
WEIGHT	2 x 6.6 kg
ACCESSORIES	Hanger Rubber feet

MONITOR-100

CHARACTERISTICS	Pair of compact Hi-Fi loudspeakers. High quality audio. Manufactured in MDF wood. Shielded magnet loudspeakers.
POWER	120 W maximum, 100 W RMS
SPEAKERS	1 x 8" fibre Aramid woofer, highly resistant with shielded magnet. 1 x 1 1/2" silk dome tweeter with shielded magnet.
RESPONSE	40-20 000 Hz ±3 dB
IMPEDANCE	6 Ω
SENSITIVITY	88 dB ±2 dB at 1 W/1 m
CONNECTORS	Screw terminals or gold-plated banana plugs
CROSSOVER	2 ways Crossover frequency 2500 Hz
COLOUR	Matt black lacquered
DIMENSIONS	265 x 385 x 305 mm depth
WEIGHT	2 x 9.5 kg
ACCESSORIES	Hanger Rubber feet

AUDIO. AUTOAMPLIFIED Hi-Fi LOUDSPEAKERS

FONESTAR

Pairs of compact biamplified Hi-Fi loudspeakers. High quality audio, superior finish.



75 W max.
40 W RMS

MONITOR-40A

75 W max.
50 W RMS

MONITOR-50A

CHARACTERISTICS	Pair of biamplified compact Hi-Fi loudspeakers. Both active loudspeakers with amplifier. High performance amplifier. High quality audio. Manufactured in MDF wood. Shielded magnet loudspeakers.	Pair of biamplified compact Hi-Fi loudspeakers. Both active loudspeakers with amplifier. High performance amplifier. High quality audio. Manufactured in MDF wood. Shielded magnet loudspeakers.
AMPLIFIER	75 W maximum, 40 W RMS Bass: 50 W maximum, 30 W RMS Treble: 25 W maximum, 10 W RMS	75 W maximum, 50 W RMS Bass: 50 W maximum, 35 W RMS Treble: 25 W maximum, 15 W RMS
SPEAKERS	1 x 5 1/4" Aramid fibre woofer, highly resistant with shielded magnet 1 x 1" silk dome tweeter with shielded magnet	1 x 6 1/2" Aramid fibre woofer, highly resistant with shielded magnet. 1 x 1 1/2" silk dome tweeter with shielded magnet.
RESPONSE	53-20 000 Hz	49-20 000 Hz
INPUTS	1 auxiliary balanced line, XLR or 6.3 mm jack or unbalanced, RCA, 10 000 Ω	1 balanced auxiliary line, XLR or 6.3 mm jack or unbalanced, RCA, 10 000 Ω
CROSSOVER	Active 2 ways 24 dB/octave	Active 2 ways 24 dB/octave
CONTROLS	Volume Treble: -2, -1, 0 and +1 dB	Volume Treble: -2, -1, 0 and +1 dB
COLOUR	Matt black lacquered	Matt black lacquered
POWER SUPPLY	230/115 V AC, 75 W	230/115 V AC, 100 W
DIMENSIONS	186 x 276 x 230 mm depth	225 x 320 x 265 mm depth
WEIGHT	2 x 6.5 kg	2 x 8.8 kg
ACCESSORIES	Rubber feet	Rubber feet

RELATED PRODUCTS



SM-1632U

Professional mixer with 8 inputs, 6 channels and 2 master outputs with independent volume controls. USB/SD/MP3 player. Page 161.



SM-1621U

Professional stereo mixer with 6 inputs, 3 channels and 2 outputs with independent volume controls. USB/SD/MP3 player. Page 160.

AUDIO. MIXER

Compact DJ mixer. Specially for mixing music from mobile telephones or MP3 players. Portable, no need for batteries.



SM-1330 **N!**

CHARACTERISTICS	Compact DJ mixer. Specially for mixing music from mobile telephones or MP3 players. Portable. No need for batteries.
INPUTS	2 stereo line/headphones, 3.5 mm jack
OUTPUTS	1 master, 3.5 mm jack 1 headphone, 3.5 mm jack
CONTROLS	Channels 1 and 2: mid and treble Master: Volume control Headphones: cueing and volume control Equalizer on/off selector Crossfader: sliding control
DIMENSIONS	78 x 27 x 115 mm depth
WEIGHT	0.1 kg

Stereo mixer with basic features.



SM-1320

CHARACTERISTICS	Compact desktop stereo mixer with 8 inputs and 6 channels
INPUTS	4 unbalanced mics., 6.3 mm jack 2 stereo line/phono, 2 x RCA, selectable 2 stereo lines, 2 x RCA
OUTPUTS	1 stereo amp, 2 x RCA, 775 mV 1 stereo rec, 2 x RCA, 775 mV 1 stereo headphones, 6.3 mm jack
CONTROLS	6 sliding volume controls per channel Monitor and volume control selector for headphone output
RESPONSE	20-20 000 Hz
POWER SUPPLY	230 V AC, 5 W
DIMENSIONS	270 x 45 x 180 mm depth
WEIGHT	1 kg

AUDIO. WIRELESS HEADPHONES

FONESTAR

Wireless stereo hi-fi headphone system in 2.4 GHz. Connection to PC through USB, with headphone and microphone transmission, PC playback and volume control. Line input accepting output signal from an MP3 player, TV, etc.

- Hi-Fi
- TV
- PC
- 20 m
- 2'4 GHz



FA-8080

CHARACTERISTICS	Wireless stereo hi-fi headphone system in 2.4 GHz. Transmitter with power supply via USB adapter. USB audio and line inputs. Receiver with internal rechargeable battery. Compatible with headphones and headphones with microphone. Maximum transmission distance of 20 m in good conditions.
RESPONSE	20-20 000 Hz
INPUTS	Transmitter: 1 audio, 3.5 mm stereo jack 1 power and audio USB, mini female USB B Receiver: 1 recharge, mini female USB B
OUTPUTS	Receiver: 1 headphone and microphone, 4-contact 3.5 mm jack
CONTROLS	Transmitter: tuning and power selector, USB and line Receiver: power, tuning, mute, playback on PC and volume
INDICATORS	Transmitter: LED signal reception and power Receiver: LED signal reception, power, mute and recharge
POWER SUPPLY	Transmitter: 5 V DC, 300 mA with adapter included or through USB Receiver: rechargeable Li-ion battery, 300 mAh
DIMENSIONS	Transmitter: 67 x 21 x 57 mm depth Receiver: 62 x 23 x 63 mm depth
ACCESSORIES	1 x 3.5 mm stereo plug cable to 2 x RCA 1 cable with 2 x 3.5 mm stereo plug 1 cable with mini male USB B to male USB A Set of replacement silicone earpads Headphones Hanging strap

AUDIO. WIRELESS HEADPHONES

Wireless stereo Hi-Fi headphone system through UHF radiofrequency, composed of Hi-Fi headphone receivers and transmitter base with stand for headphones and recharge function with LED indicator.

- TV
- CD/PC
- UHF
863-865 MHz
- MULTIPLE
HEADPHONE
-



FA-8075 **N!**

FA-8075R **N!**

CHARACTERISTICS	Wireless stereo Hi-Fi headphone system through UHF radiofrequency. Transmitter base with stand for headphones and recharge function incorporated. Comfortable with high quality audio. Complete mobility, can hear through walls and ceilings. Maximum transmission distance of 100 m in favourable conditions. Several receiver headphones can be used with one transmitter base. FM modulation. 3 selectable transmission channels.	Wireless Hi-Fi headphones through UHF radiofrequency. For increasing or replacing the wireless system mod. FA-8075.
TRANSMITTER BASE	Inputs: 1 auxiliary line, 3.5 mm stereo jack and 2 x RCA Channel selector: 3 selectable transmission channels: 863.5, 864 and 864.5 MHz LED indicators: Recharge function and input signal Power: < 10 mW Power supply: 5 V DC, 0.5 A with adapter included	-
RECEIVER HEADPHONE	Response: 20-20 000 Hz THD distortion: < 1% S/N ratio: > 60 dB Channel separation: > 30 dB Loudspeakers: 40 mm Controls: Power on/off, volume and channel selector LED indicators: Power on/off and tuning Power supply: 2 x 1.2 V LR03-AAA NiMH rechargeable batteries included	Response: 20-20 000 Hz THD distortion: < 1% S/N ratio: > 60 dB Channel separation: > 30 dB Loudspeaker: 40 mm Controls: on/off switch, volume and channel selector LED indicators: Power and tuning Power supply: 2 x 1.2 V R03-AAA NiMH rechargeable batteries included
WEIGHT	0.4 kg	0.3 kg
ACCESSORIES	1 x 2 x RCA to 3.5 mm stereo plug cable 1 x 3.5 mm stereo plug to 3.5 mm stereo plug cable	-

Wireless stereo Hi-Fi headphone systems via UHF radio frequency.

3 selectable and simultaneous transmission channels.

Hi-Fi

TV

CD/PC

3 CH

UHF
863-865 MHz

MULTIPLE
HEADPHONE



FA-8050

CHARACTERISTICS	Wireless stereo Hi-Fi headphone system via UHF radio frequency. Transmitter with stereo audio input and 3 selectable transmission channels. Allows freedom of movement and comfort when listening, even through walls and ceilings. 100m maximum transmission distance in perfect conditions. 3 transmitters can be used simultaneously with 3 different programs selectable from the headphones. Several receiver headphones can be used with the same transmitter.	Wireless stereo Hi-Fi headphone system via UHF radio frequency. Transmitter with audio stereo input and 3 selectable transmission channels. Allows freedom of movement and comfort when listening, even through walls and ceilings. 100m maximum transmission distance in perfect conditions. 3 transmitters can be used simultaneously with 3 different programs selectable from the headphones. Several receiver headphones can be used with the same transmitter.
TRANSMITTER	Transmission: Via UHF radio frequency Modulation: FM stereo Power: < 10 mW Input: Audio, 3.5 mm stereo jack Channel selector (3 selectable channels): 863.5, 864 and 864.5 MHz LED indicators: Power and audio signal level Power supply: 12 V DC, 150 mA with adapter included	Transmission: Via UHF radio frequency Modulation: FM stereo Power < 10 mW Input: Audio, 3.5 mm stereo jack Channel selector (3 selectable channels): 863.5, 864 and 864.5 MHz LED indicators: power and audio signal level Power supply: 12 V DC, 150 mA with adapter included
HEADPHONE RECEIVER	Response: 30-20 000 Hz Power switch: On/off Controls: Volume and automatic tuning: 863.5, 864 and 864.5 MHz LED indicators: Power on/off and signal reception Power supply: 2 x 1.5 V LR03-AAA type batteries	Response: 30-20 000 Hz Input: 3.5 mm stereo jack to use as a cabled headphone Power switch: On/off Controls: Volume and automatic tuning for 3 channels: 863.5, 864 and 864.5 MHz LED indicators: Power on/off and signal reception Power supply: 2 x 1.5 V LR03-AAA type batteries
WEIGHT	0.3 kg (without adapter)	0.4 kg (without adapter)
ACCESSORIES	1 cable adapter, 2 x RCA to 3.5 mm stereo jack 1 x 3.5 mm stereo jack to 3.5 mm stereo jack cable	1 adapter cable, 2 x RCA to 3.5 mm stereo jack 1 cable 3.5 mm stereo jack to 3.5 mm stereo jack



FA-8050R



FA-8060R



FA-8055T

CHARACTERISTICS	Wireless Hi-Fi headphones via radio frequency. For extension or replacements, see models FA-8050 and FA-8060. Several receiver headphones can be used with the same transmitter.	Wireless Hi-Fi headphones via radio frequency. For extension or replacements, see models FA-8050 and FA-8060. Several receiver headphones can be used with the same sender.	Transmitter for wireless headphones. For extension or replacement of models FA-8050 and FA-8060. Up to 3 transmitters can be used simultaneously with 3 different programs.
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AUDIO. Hi-Fi HEADPHONES

Stereo Hi-Fi headphones.



FA-460



FA-557



FA-563

CHARACTERISTICS	Stereo stethoscope style earphones for congresses and general use.	Stereo Hi-Fi headphones. Special headband with neck support. Better support and comfort for daily activities. High quality sound and precision.	Stereo Hi-Fi headphones Especially intended for conventions, conferences, simultaneous interpretation, etc. as well as for portable MP3 players, Hi-Fi equipment, etc. Compact and ultra-light design with flexible and adjustable metal headband.
RESPONSE	20-20 000 Hz	20 - 20 000 Hz	20-20 000 Hz
IMPEDANCE	4-21 Ω	32 Ω at 1 kHz	32 Ω at 1 kHz
POWER	-	100 mW maximum	100 mW maximum
SENSITIVITY	100 dB at 1 kHz ±3 dB	94 dB (mW) ± 3 dB	100 dB (mW) ± dB
SPEAKERS	13.7 mm Mylar	30 mm	27 mm
CABLE	1 m superflexible	1.2 m, cable output on one side	1.1 m
CONNECTOR	90° 3.5 mm stereo plug	Gold-plated 3.5 mm stereo jack	3.5 mm stereo jack

Stereo Hi-Fi headphones

	FA-592	FA-592M
CHARACTERISTICS	Stereo Hi-Fi headphones.	Mono headphones.
RESPONSE	20-20 000 Hz	20-20 000 Hz
IMPEDANCE	32 Ω	32 Ω
POWER	30 mW maximum	30 mW maximum
SENSITIVITY	110 dB (mW) ±3 dB	110 dB (mW) ±3 dB
SPEAKERS	30 mm Mylar with Neodymium magnet	30 mm Mylar with Neodymium magnet.
CABLE	1.2 m ultra-thin, extra-flexible, output on one side.	1.2 m ultra-thin, extra-flexible, output on one side.
CONNECTOR	3.5 mm stereo plug	3.5 mm mono plug
ACCESSORIES	6.3 mm stereo plug adapter	-



Stereo Hi-Fi headphones. Modern and elegant design. Excellent finish for superior quality.


FA-605B
FA-605N

CHARACTERISTICS	Hi-fi stereo headphones. Modern and ergonomic design. Comfortable listening. High quality audio.	Hi-fi stereo headphones. Modern and ergonomic design. Comfortable listening. High quality audio.
RESPONSE	20-20 000 Hz	20-20 000 Hz
IMPEDANCE	32 Ω	32 Ω
POWER	100 mW maximum	100 mW maximum
SENSITIVITY	108 dB (mW) ±3 dB	108 dB (mW) ±3 dB
SPEAKERS	40 mm	40 mm
CABLE	1.5 m, cable output on one side	1.5 m, cable output on one side
CONNECTORS	3.5 mm stereo plug	3.5 mm stereo plug
COLOUR	White	Black
WEIGHT	0.2 kg	0.2 kg



Stereo Hi-Fi headphones. Modern design to achieve the best quality sound and comfort.


FA-596B
FA-596N
FA-596R

CHARACTERISTICS	Hi-fi stereo headphones. Modern ergonomic design. High quality audio.	Hi-fi stereo headphones. Modern and ergonomic design. High quality audio.	Hi-Fi stereo headphones. Modern and ergonomic design. High quality audio.
RESPONSE	20-20 000 Hz	20-20 000 Hz	20-20 000 Hz
IMPEDANCE	32 Ω	32 Ω	32 Ω
POWER	100 mW maximum	100 mW maximum	100 mW maximum
SENSITIVITY	105 dB (mW) ±3 dB	105 dB (mW) ±3 dB	105 dB (mW) ±3 dB
SPEAKERS	40 mm	40 mm	40 mm
CABLE	1.5 m. Flat, knot-free	1.5 m. Flat, knot-free	1.5 m. Flat, knot-free
CONNECTORS	3.5 mm stereo plug	3.5 mm stereo plug	3.5 mm stereo plug
COLOUR	White	Black	Red
WEIGHT	0.1 kg	0.1 kg	0.1 kg



AUDIO. Hi-Fi HEADPHONES

Stereo Hi-Fi headphones. Modern design to achieve the best audio quality and comfort.

1.2 m
CABLE

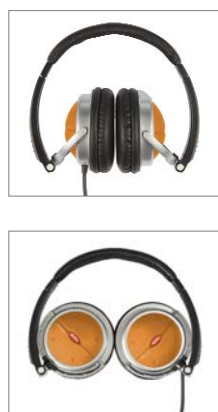
3.5 mm
STEREO





	FA-595A N!	FA-595B N!	FA-595N N!	FA-595R N!
CHARACTERISTICS	Hi-Fi stereo headphones. Modern and ergonomic design. High quality audio.	Hi-Fi stereo headphones. Modern and ergonomic design. High quality audio.	Hi-Fi stereo headphones. Modern and ergonomic design. High quality audio.	Hi-Fi stereo headphones. Modern and ergonomic design. High quality audio.
RESPONSE	20-20 000 Hz	20-20 000 Hz	20-20 000 Hz	20-20 000 Hz
IMPEDANCE	32 Ω	32 Ω	32 Ω	32 Ω
POWER	30 mW maximum	30 mW maximum	30 mW maximum	30 mW maximum
SENSITIVITY	106 dB (mW) ±3 dB	106 dB (mW) ±3 dB	106 dB (mW) ±3 dB	106 dB (mW) ±3 dB
SPEAKERS	40 mm	40 mm	40 mm	40 mm
CABLE	1.2 m, cable output on one side	1.2 m, cable output on one side	1.2 m, cable output on one side	1.2 m, cable output on one side
CONNECTORS	3.5 mm stereo jack	3.5 mm stereo jack	3.5 mm stereo jack	3.5 mm stereo jack
COLOUR	Blue	White	Black	Red
WEIGHT	0.1 kg	0.1 kg	0.1 kg	0.1 kg

Stereo Hi-Fi headphones. High fidelity audio, high quality loudspeakers with neodymium magnet and an improved bass response. Total comfort thanks to its adjustable headband and soft pads.



FA-710NA

CHARACTERISTICS	Stereo Hi-Fi headphones. Reversible, foldable, 90° rotating. High quality audio.
RESPONSE	20-20 000 Hz
IMPEDANCE	32 Ω
POWER	200 mW maximum
SENSITIVITY	98 dB (mW) at 1 kHz ±3 dB
SPEAKERS	38 mm with Neodymium magnet.
CABLE	3 m extendable, with output on one side
CONNECTORS	3.5 mm stereo plug
COLOUR	Orange
WEIGHT	0.1 kg
ACCESSORIES	6.3 mm stereo jack adapter

FA-770

CHARACTERISTICS	Stereo Hi-Fi headphones. Listening comfort. High quality audio.
RESPONSE	20-20 000 Hz
IMPEDANCE	32 Ω
POWER	200 mW maximum
SENSITIVITY	95 dB (mW) at 1 kHz ±3 dB
SPEAKERS	38 mm with Neodymium magnet
CABLE	3 m extendable, cable output on one side
CONNECTORS	3.5 mm stereo plug
COLOUR	Black
WEIGHT	0.2 kg
ACCESSORIES	6.3 mm stereo jack adapter.

Stereo Hi-Fi headphones. High fidelity audio.



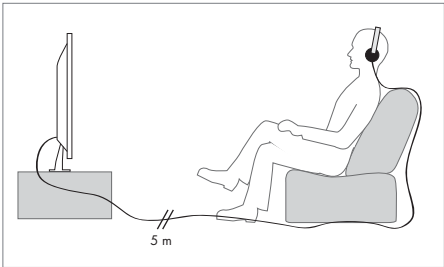
FA-980

CHARACTERISTICS	Closed stereo Hi-Fi headphones. Adaptable headphones.
RESPONSE	20-20 000 Hz
IMPEDANCE	32 Ω ±10%
POWER	100 mW maximum
SENSITIVITY	104 dB ±3 dB at 1 kHz
SPEAKERS	57 mm with cobalt magnet
CABLE	1.8 m extra-flexible, cable output on one side
CONNECTORS	Gold-plated 3.5 mm stereo plug
WEIGHT	0.3 kg
ACCESSORIES	Gold-plated 6.3 mm stereo plug adapter



AUDIO. Hi-Fi HEADPHONES

Stereo headphones for TV, Hi-Fi, etc. Long cable and volume control to make listening to the TV easier.



TV



TV



FA-745

CHARACTERISTICS	Modern design, comfortable and high quality sound features. Appropriate for listening to the TV or music from Hi-Fi sound equipment. A 5m cable with output on one side, volume control, and a mono/stereo switch incorporated allow you to distance yourself from the sound source. A new design adjustable headband with soft synthetic leather earpads offering absolute comfort.	Modern design, comfortable and high quality audio features. Appropriate for listening to the TV or music from Hi-Fi sound equipment. A 5m cable with output on one side, volume control, and a mono/stereo switch incorporated allow you to distance yourself from the sound source. A new design adjustable headband with soft synthetic leather earpads offering absolute comfort.
RESPONSE	20-20 000 Hz	20-20 000 Hz
IMPEDANCE	24 Ω at 1 kHz	32 Ω
POWER	100 mW maximum	100 mW maximum
SENSITIVITY	105 dB (mW) ±3 dB	110 dB (mW) ±3 dB
SPEAKERS	30 mm	40 mm Mylar with Neodymium magnet
CONTROLS	Volume and mono/stereo selector on the cable	Volume and mono/stereo selector on the cable
CABLE	5m, cable output on one side	5 m extra-flexible, cable output on one side
CONNECTORS	Gold-plated 3.5 mm stereo plug	Gold-plated 3.5 mm stereo plug
WEIGHT	0.1 kg	0.2 kg
ACCESSORIES	Gold-plated 6.3 mm stereo jack adapter.	Gold-plated 6.3 mm stereo plug adapter

FA-746

RELATED PRODUCTS

FA-428
Mini stereo Hi-Fi earphones.
Ergonomic, with silicone rubber ear pads.
Suitable for listening to the TV.
5 m cable with volume control incorporated.
Page 420.

TV

±VOL

5 m



AUDIO. AUDIO HEADPHONES WITH MICROPHONE

FONESTAR

Headphones with microphone for general and multimedia use, with volume control.



FMC-646V



FMC-653V



FCM-677V



FCM-694V

	FMC-646V	FMC-653V	FMC-677V	FMC-694V
HEADPHONE	Stereo backphone headphone Response: 20-20 000 Hz Sensitivity: 110 dB $\pm$ 3 dB Impedance: 32 Ω Power: 30 mW maximum Loudspeakers: Mylar 30 mm with Neodymium magnet Earpad: Foam Control: Volume on the cable	Stereo headphone Response: 20-20 000 Hz Sensitivity: 110 dB $\pm$ 3 dB Impedance: 32 Ω Power: 30 mW maximum Loudspeakers: 30 mm Mylar with Neodymium magnet Earpad: Foam Controls: Volume in the cable	Stereo headphone Response: 20 - 20 000 Hz Sensitivity: 108 dB $\pm$ 3 dB Impedance: 32 Ω Power: 150 mW maximum Loudspeakers: 40 mm Earpad: Synthetic leather Control: Volume on the cable	Stereo headphone Response: 20-20 000 Hz Sensitivity: 102 dB Impedance: 32 Ω Power: 80 mW maximum Loudspeakers: 50 mm Earpad: synthetic leather Control: volume on the cable
MICROPHONE	Capsule: Omnidirectional electret condenser Response: 30-16 000 Hz Sensitivity: -38 dB (V/Pa) $\pm$ 3 dB Impedance: 1000 Ω Mic. stand: 3.5 mm $\varnothing$ flexible tube	Capsule: Omnidirectional electret condenser Response: 30-16 000 Hz Sensitivity: -38 dB (V/Pa) $\pm$ 3 dB Impedance: 1000 Ω Mic. Stand: 3.5 mm $\varnothing$ flexible tube	Capsule: Unidirectional dynamic Response: 40-15 000 Hz Sensitivity: -36 dB (V/Pa) $\pm$ 3 dB Impedance: 600 Ω Mic. stand: Flexible tube	Capsule: Unidirectional dynamic Response: 50 - 6000 Hz Sensitivity: -36 dB (V/Pa) $\pm$ 3 dB Impedance: 600 Ω Mic. stand: flexible tube
CABLE	2 m extra flexible, cable output on one side	2 m extra flexible	2 m extra flexible, cable output on one side	3 m extra flexible, output on one side
CONNECTORS	3.5 mm stereo plug for headphone and microphone	3.5 mm stereo plug for earphone and microphone	3.5 mm stereo plug for headphone and microphone	3.5 mm stereo plug for earphone and microphone
WEIGHT	0.1 kg	0.1 kg	0.2 kg	0.3 kg
ACCESSORIES	Windshield	Windshield	Windshield	6.3 mm stereo jack adapter Windshield

AUDIO. BLUETOOTH HEADPHONES

Bluetooth stereo headphones with digital FM tuner and auxiliary input. They play music received from a mobile telephone, tablet, etc. For receiving calls and controlling playback. Modern and ergonomic design.



FA-160BTR **N!**

CHARACTERISTICS	Bluetooth headphones. FM radio Bluetooth 4.0 Microphone incorporated Transmission distance 10 m Volume, playback, operating mode selector and call control on the headphone. Cable with 3.5 mm stereo jack connector for connecting to the earphone output on mobile telephones, MP3 players or audio devices.
RESPONSE	20-20 000 Hz
SENSITIVITY	106 dB at 1 KHz
SPEAKERS	40 mm
INPUTS	1 auxiliary, 3.5 mm stereo jack
POWER SUPPLY	Rechargeable Li-ion battery, 250 mAh, 3.7 V Life: 8 h approximately Charge time: less than 3 h
COLOUR	Black
WEIGHT	0.2 kg
ACCESSORIES	Male USB A to male micro USB B cable 3.5 mm stereo jack to 3.5 mm stereo jack audio cable

AUDIO. MINI EARPHONES

Mini stereo Hi-Fi in ear earphones with ear loop and silicone ear pads, especially designed for sports.

FONESTAR

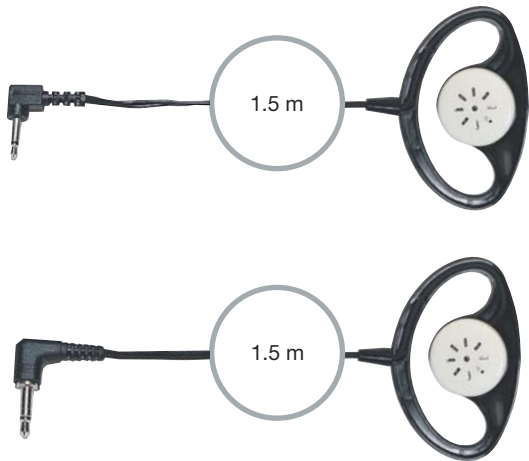
SPORT

FA-479

CHARACTERISTICS	Mini stereo Hi-Fi earphones with ear loop. Ergonomic, with silicone rubber ear pads.
RESPONSE	20-20000 Hz
IMPEDANCE	16 Ω
POWER	60 mW maximum
SENSITIVITY	98 dB at 1 kHz ±3 dB
SPEAKERS	10 mm with cobalt magnet.
CABLE	1.2 m
CONNECTORS	Gold-plated 3.5 mm stereo plug



Mini mono earphones with ear loop for radio and general use.



FA-225

CHARACTERISTICS	Mini mono earphone with ear loop
RESPONSE	40-18 000 Hz
IMPEDANCE	4-32 Ω
SPEAKERS	20 mm with samarium-cobalt magnet
CABLE	1.5 m
CONNECTORS	90° mono 2.5 mm plug

FA-235

CHARACTERISTICS	Mini mono earphone with ear loop.
RESPONSE	40-18 000 Hz
IMPEDANCE	4-32 Ω
SPEAKERS	20 mm with samarium-cobalt magnet
CABLE	1.5 m
CONNECTORS	90° 3.5 mm mono plug

FA-240

CHARACTERISTICS	Mini mono earphone with adjustable ear loop.
RESPONSE	20-20 000 Hz
IMPEDANCE	4-32 Ω
SPEAKERS	20 mm with samarium-cobalt magnet
CABLE	1 m
CONNECTORS	Gold-plated 90° 3.5 mm mono plug

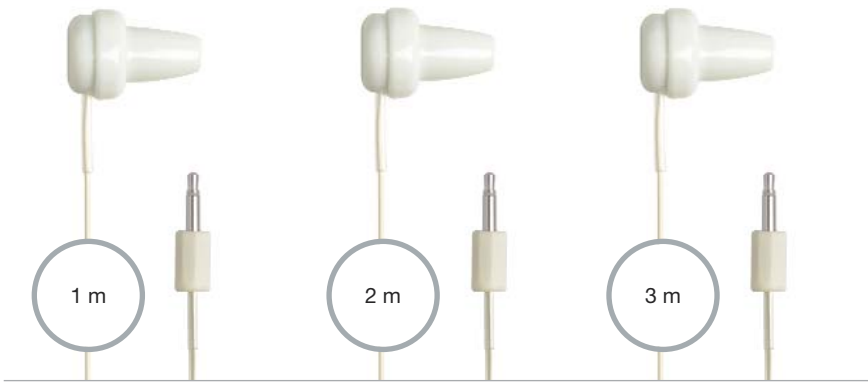
AUDIO. MINI EARPHONES

Mini mono earphones with ear loop and flexible ear pad for radio and general use.



	3344	3345	3347	3348
CHARACTERISTICS	Mini mono earphone with ear loop.	Mini mono earphone with ear loop.	Mini mono earphone with ear loop.	Mini mono earphone with ear loop.
IMPEDANCE	8 Ω	8 Ω	8 Ω	180 Ω
SENSITIVITY	95 dB ±7 dB	95 dB ±7 dB	90 dB ±7 dB	100 dB ±7 dB
CABLE	1 m twisted	3 m twisted	1 m twisted	4.6 m twisted
CONNECTORS	3.5 mm mono plug	3.5 mm mono plug	3.5 mm mono plug	3.5 mm mono plug

Mini mono earphones for radio and general use.



	3340	3341	3342
CHARACTERISTICS	Mini mono earphone.	Mini mono earphone.	Mini mono earphone.
IMPEDANCE	8 Ω	8 Ω	8 Ω
SENSITIVITY	95 dB ±7 dB	95 dB ±7 dB	95 dB ±7 dB
CABLE	1 m	2 m	3 m
CONNECTORS	3.5 mm mono plug	3.5 mm mono plug	3.5 mm mono plug

Mini stereo or mono earphones with flexible ear pad for radio and general use.


FA-260
FA-261
FA-265
FA-270

CHARACTERISTICS	Mini ergonomic stereo Hi-Fi earphones	Mini mono earphone. Ergonomic.	Ergonomic mini mono earphone.	Ergonomic mini mono earphone.
RESPONSE	40-16000 Hz	20-20 000 Hz	40-16000 Hz	40-16000 Hz
IMPEDANCE	4-32 Ω	16 Ω	4-32 Ω	4-32 Ω
SENSITIVITY	95 dB at 1 kHz ±3 dB	110 dB at 1 kHz ±3 dB	95 dB at 1 kHz ±3 dB	95 dB at 1 KHz ±3 dB
SPEAKERS	11.5 mm Mylar with ferrite magnet	9 mm Mylar with Neodymium magnet	11.5 mm Mylar with ferrite magnet.	11.5 mm Mylar with ferrite magnet.
CABLE	1 m tinsel	1.2 m	1 m tinsel	1 m tinsel
CONNECTORS	90° 3.5 mm stereo plug	3.5 mm mono plug	90° 3.5 mm mono plug	90° mono 2.5 mm plug
ACCESSORIES	-	3 different sized silicone earpads	-	-

Mini stereo Hi-Fi earphones for general use.

TV

FA-310
FA-381
FA-387
FA-421

CHARACTERISTICS	Mini stereo Hi-Fi earphones with volume control.	Mini stereo Hi-Fi earphones.	Mini stereo Hi-Fi earphones.	Mini stereo Hi-Fi earphones. Ergonomic, with silicone rubber ear pads.
RESPONSE	20-20000 Hz	20-20 000 Hz	20-20 000 Hz	20-20 000 Hz
IMPEDANCE	32 Ω	32 Ω	32 Ω	16 Ω ±10%
SENSITIVITY	110 dB at 1 kHz ±3 dB	110 dB at 1 kHz ±3 dB	110 dB at 1 kHz ±3 dB	104 dB at 1 kHz ±3 dB
SPEAKERS	15 mm Mylar with Neodymium magnet.	15 mm Mylar with Neodymium magnet	15 mm Mylar with Neodymium magnet	10 mm with cobalt magnet
CABLE	1.1 m	1.2 m	1.2 m	1.2 m
CONNECTORS	90° 3.5 mm stereo plug	3.5 mm stereo plug	3.5 mm stereo plug	Gold-plated 90° 3.5 mm stereo plug
CONTROLS	Volume on the cable	-	-	

AUDIO. MINI EARPHONES

Ergonomic mini stereo Hi-Fi earphones with silicone earpads.



	FA-422	FA-423	FA-433
CHARACTERISTICS	Mini stereo Hi-Fi earphones. Ergonomic, with silicone rubber earpads.	Mini stereo Hi-Fi earphones. Ergonomic, with silicone rubber ear pads and retractable cable.	Mini stereo Hi-Fi earphones. Ergonomic, with silicone rubber ear pads.
RESPONSE	20-20 000 Hz	20-20000 Hz	20-20000 Hz
IMPEDANCE	16 Ω	16 Ω ±10%	16 Ω
SENSITIVITY	92 dB (mW)	104 dB at 1 kHz ±3 dB	110 dB at 1 kHz ±3 dB
SPEAKERS	10 mm with Neodymium magnet	10 mm with cobalt magnet.	9 mm Mylar with Neodymium magnet.
CABLE	1.2 m	85 cm	1.2 m
CONNECTORS	Gold-plated 3.5 mm stereo plug	Gold-plated 90° 3.5 mm stereo plug	3.5 mm stereo plug
ACCESSORIES	3 pairs of different-sized silicone earpads and carry bag	-	3 pairs of different sized silicone earpads.



	FA-428	FA-437
CHARACTERISTICS	Mini stereo Hi-Fi earphones. Ergonomic, with silicone rubber ear pads. Suitable for listening to the TV. 5 m cable with volume control incorporated.	Mini stereo Hi-Fi earphones. Ergonomic, with silicone rubber ear pads.
RESPONSE	20-20 000 Hz	20-20000 Hz
IMPEDANCE	16 Ω	32 Ω
POWER	-	10 mW maximum
SENSITIVITY	92 dB (mW)	108 dB at 1 kHz ±3 dB
SPEAKERS	10 mm with Neodymium magnet	10 mm with Neodymium magnet.
CONTROLS	Volume on the cable	-
CABLE	5 m	1.2 m
CONNECTORS	Gold-plated 3.5 mm stereo plug	3.5 mm stereo plug
ACCESSORIES	3 pairs of different sized silicone earpads and carry bag.	2 pairs of equal sized silicone earpads with case.

Ergonomic mini stereo Hi-Fi earphones with silicone earpads. Flat cable that does not form knots. Easy to extend.



FA-491B

FA-491N

FA-491R

CHARACTERISTICS	Mini stereo hi-fi earphones. Ergonomic, with silicone earpads.	Mini stereo hi-fi earphones. Ergonomic, with silicone earpads.	Mini stereo hi-fi earphones. Ergonomic, with silicone earpads.
RESPONSE	20-20 000 Hz	20-20 000 Hz	20-20 000 Hz
IMPEDANCE	32 Ω	32 Ω	32 Ω
POWER	100 mW maximum	100 mW maximum	100 mW maximum
SENSITIVITY	108 dB at 1 kHz ± 2 dB	108 dB at 1 kHz ± 2 dB	108 dB at 1 kHz ± 2 dB
SPEAKERS	10 mm	10 mm	10 mm
CABLE	1.2 m. Flat, knot-free	1.2 m. Flat, knot-free	1.2 m. Flat, knot-free
CONNECTORS	Gold-plated 3.5 mm stereo plug	Gold-plated 3.5 mm stereo plug	Gold-plated 3.5 mm stereo plug
COLOUR	White	Black	Red



FA-492N

FA-492B

CHARACTERISTICS	Mini stereo Hi-Fi earphones. Ergonomic, with silicone earpads.	Mini stereo Hi-Fi earphones. Ergonomic, with silicone earpads.
RESPONSE	20-20 000 Hz	20-20 000 Hz
IMPEDANCE	16 Ω	16 Ω
POWER	10 mW maximum	10 mW maximum
SENSITIVITY	110 dB at 1 kHz ± 3 dB	110 dB at 1 kHz ± 3 dB
SPEAKERS	10 mm	10 mm
CABLE	1.2 m, Flat, knot-free	1.2 m, Flat, knot-free
CONNECTORS	90° extra-flat 3.5 mm stereo plug	90° extra-flat 3.5 mm stereo plug
COLOUR	Black	White

AUDIO. MINI EARPHONES

Mini stereo Hi-Fi earphones for general use.

MP3



FA-393

CHARACTERISTICS	Mini stereo Hi-Fi earphones with hanging strap for MP3 players.
RESPONSE	20-20000 Hz
IMPEDANCE	32 Ω
SENSITIVITY	110 dB at 1 kHz ±3 dB
SPEAKERS	15 mm Mylar with Neodymium magnet.
CABLE	65 cm with MP3 hanging strap.
CONNECTORS	90° 3.5 mm stereo plug

FA-399

CHARACTERISTICS	Mini stereo Hi-Fi earphones with hanging strap for MP3 players.
RESPONSE	20-20000 Hz
IMPEDANCE	32 Ω
SENSITIVITY	110 dB at 1 kHz ±3 dB
SPEAKERS	15 mm Mylar with Neodymium magnet.
CABLE	80 cm with adjustable hanging strap
CONNECTORS	3.5 mm stereo plug

Mini stereo Hi-Fi earphones with hanging strap for MP3 players. Ergonomic, with silicone rubber ear pads.

MP3

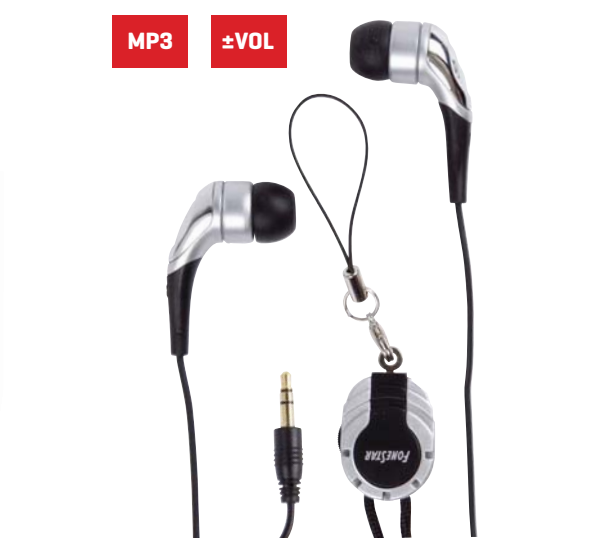


FA-401

CHARACTERISTICS	Mini stereo Hi-Fi earphones with hanging strap for MP3 players. Ergonomic, with silicone rubber ear pads.
RESPONSE	20-20 000 Hz
IMPEDANCE	16 Ω ±10%
CONTROL	-
SENSITIVITY	102 dB at 1 kHz ±3 dB
SPEAKERS	10 mm with cobalt magnet.
CABLE	60 cm with MP3 hanging strap.
CONNECTORS	Gold-plated 3.5 mm stereo plug

MP3

±VOL



FA-403

CHARACTERISTICS	Mini stereo Hi-Fi earphones with hanging strap for MP3 players. Ergonomic, with silicone rubber ear pads.
RESPONSE	20-20 000 Hz
IMPEDANCE	16 Ω ±10%
CONTROL	Volume on the hanging strap
SENSITIVITY	104 dB at 1 kHz ±3 dB
SPEAKERS	10 mm with cobalt magnet
CABLE	60 cm with MP3 hanging strap
CONNECTORS	Gold-plated 3.5 mm stereo plug

AUDIO. MINI EARPHONES WITH MICROPHONE

FONESTAR

Mini stereo Hi-Fi earphones, ergonomic with silicone earpads and microphone for mobile telephones.

MICRO **PHONE
TABLET** **HQ
SOUND**



FA-182MN **N!**

CHARACTERISTICS	Mini stereo Hi-Fi earphones with microphone. Ergonomic, with silicone earpads. Control for calls and play/pause for music in mobile phones.
RESPONSE	20-20 000 Hz
IMPEDANCE	32 Ω
CABLE	1.2 m. Flat, knot-free
CONNECTORS	Gold-plated 4-contact 3.5 mm stereo plug
COLOUR	Black

FA-183MB **N!**

CHARACTERISTICS	Mini stereo Hi-Fi earphones with microphone. Ergonomic, with silicone earpads. Control for calls and play/pause for music in mobile phones.
RESPONSE	20-20 000 Hz
IMPEDANCE	32 Ω
CABLE	1.2 m. Flat, knot-free
CONNECTORS	Gold-plated 4-contact 3.5 mm stereo plug
COLOUR	White

AUDIO. MINI BLUETOOTH HEADPHONES

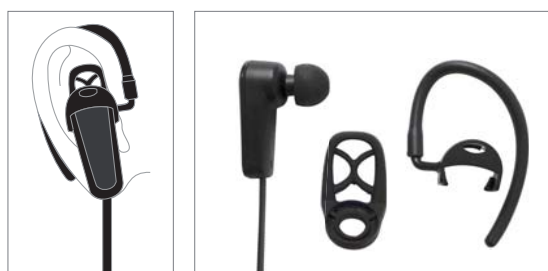
Mini bluetooth stereo earphones with two types of mounts and silicone earpads. They play music received from a mobile telephone, tablet, etc. For receiving calls and controlling playback. Attractive design, compact and lightweight. Specially designed for sporting activities.

Bluetooth **Li** **SPORT**



FA-159BT **N!**

CHARACTERISTICS	Mini bluetooth earphones. Bluetooth 4.0 Transmission distance 10 m Volume, playback and call control on the cable.
RESPONSE	20-20 000 Hz
SENSITIVITY	106 dB at 1 KHz
SPEAKERS	10 mm
CABLE	0.6 m, flat, knot-free
POWER SUPPLY	Rechargeable Li-ion battery, 110 mAh, 3.7 V Life: 6 h approximately Charge time: less than 3 h
COLOUR	Black
WEIGHT	0.1 kg
ACCESSORIES	2 types of mounts Male USB A to male micro USB B cable Silicone earpads of several sizes



AUDIO. ACCESSORIES FOR HEADPHONES

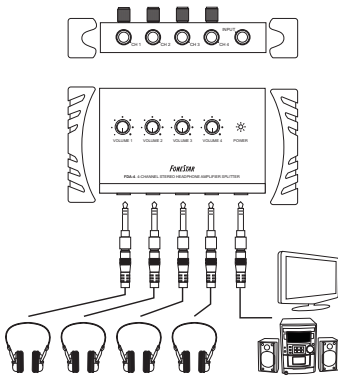
Headphone amplifier with volume control.



FDA-1A NI

CHARACTERISTICS	Headphone amplifier with volume control.
INPUTS	1 headphone/stereo line input, 3.5 mm jack and 2 x RCA
OUTPUTS	1 stereo headphone output, 3.5 mm jack and 6.3 mm jack, 2 V maximum
CONTROLS	On/off General volume
INDICATORS	LED power indicator
S/N RATIO	85 dB
POWER SUPPLY	5 V DC, 500 mA with adapter included or through micro USB connector
DIMENSIONS	64 x 30 x 97 mm depth

Headphone amplifiers/splitters. Headphone signal is amplified with the possibility of output volume adjustment.



FDA-4

CHARACTERISTICS	Headphone amplifier/splitter. 1 input and 4 outputs with independent volume control.
POWER	80 mW maximum at 32 Ω 105 mW maximum at 64 Ω
INPUTS	1 stereo headphone/line input, 6.3 mm jack
OUTPUTS	4 stereo headphone outputs, 6.3 mm jack
CONTROLS	Independent volume control in each output
S/N RATIO	78 dB
POWER SUPPLY	12 V DC, 200 mA with adapter included
DIMENSIONS	122 x 35 x 80 mm depth
WEIGHT	0.3 kg
ACCESSORIES	2 x female RCA to 6.3 mm stereo plug adapter

FDA-10

CHARACTERISTICS	Headphone amplifier/splitter. 1 input and 10 outputs with independent volume control.
POWER	220 mW maximum at 32 Ω
INPUTS	1 stereo headphone/line input, 6.3 mm jack 1 unbalanced mic. with 2.5 V power supply for condenser mics., 3.5 mm jack
OUTPUTS	10 stereo headphone outputs, 6.3 mm jack
CONTROLS	Independent volume control in each output
S/N RATIO	60 dB
POWER SUPPLY	12 V DC, 300 mA with adapter included
DIMENSIONS	191 x 45 x 95 mm depth
WEIGHT	0.6 kg
ACCESSORIES	2 m cable with 3.5 mm stereo plug to 6.3 mm stereo plug

Pairs of foam earpads for headphones and earphones.



	CHARACTERISTICS	DIAMETER	THICKNESS
ST-1	Pair of replacement headphone foam ear pads	Exterior: 42 mm Interior: 25 mm	12 mm
ST-3	Pair of replacement headphone foam ear pads	Exterior: 40 mm Interior: 15 mm	14 mm
ST-4	Pair of replacement headphone foam ear pads	Exterior: 36 mm Interior: 15 mm	12 mm
ST-5	Pair of replacement headphone foam ear pads.	Exterior: 42 mm Interior: 22 mm Hole: 8 mm	11 mm
ST-6	Pair of replacement headphone foam ear pads	Exterior: 52 mm Interior: 25 mm	12 mm
ST-7	Pair of replacement headphone foam ear pads	Exterior: 21 mm Interior: 6 mm	10 mm
ST-8	Pair of replacement headphone foam ear pads	Exterior: 65 mm Interior: 40 mm	12 mm
ST-9	Pair of replacement headphone foam ear pads	Exterior: 80 mm Interior: 60 mm	14 mm
ST-10	Pair of replacement headphone foam ear pads	Exterior: 90 mm Interior: 45 mm	14 mm

	CHARACTERISTICS	DIAMETER
SE-11	Pair of replacement foam earphone pads	Exterior: 19 mm Interior: 6 mm
SE-12	Pair of replacement foam earphone pads	Exterior: 19 mm Interior: 6 mm
SE-15	Pair of replacement foam headphone pads.	Exterior: 49 mm Interior: 22 mm

AUDIO. UNDER PILLOW LOUDSPEAKERS



3360

CHARACTERISTICS	Under pillow loudspeaker
IMPEDANCE	8 Ω
CABLE	1.8 m
CONNECTORS	3.5 mm mono plug

AUDIO. INTERCOMS

Pair of wireless intercoms. Transmission via mains power supply. Bidirectional communication, operating in manual mode, hands-free and monitor for use as intercom and for looking after babies, the sick, etc. 4 selectable transmission channels; several intercoms can be used in each channel at the same time. Easy installation. Suitable for domestic use, offices, warehouses, shops, etc.

KW-855

CHARACTERISTICS	Pair of wireless intercoms. Specially designed for single phase (with and without earth) and two and three-phase (with earth) electrical installations. Manual mode, hands-free and monitor. Transmission via mains power supply. Maximum communication distance approximately 100m. 4 transmission channels. Possibility to use several intercoms at the same time. Easy installation. Wall or desktop format.
POWER SUPPLY	100-240 V AC, 2 W
DIMENSIONS	160 x 32 x 105 mm depth
WEIGHT	0.7 kg



Intercom systems.



KE-404

CHARACTERISTICS	Pair of intercoms. Cable connection. Monitor function. Main unit with call function and audio transmission activation. Secondary unit with call to the main. Volume control. LED audio transmission indicator. Format for table or wall.
POWER SUPPLY	1 x 9 V battery or with optional AC/DC adapter only in the main unit
DIMENSIONS	135 x 30 x 90 mm depth
WEIGHT	0.3 kg
ACCESSORIES	15.5 m fine cable and staples.

KE-282-3

CHARACTERISTICS	Set of 3 intercoms Main unit and 2 secondary units. Cable connection. Monitor function. Main unit with call function, audio transmission activation and secondary selection. Secondary unit with call to the main unit. LED audio transmission indicator. Format for table or wall.
POWER SUPPLY	1 x 9 V battery or with optional AC/DC adapter only in the main unit
DIMENSIONS	135 x 30 x 90 mm depth
WEIGHT	0.5 kg
ACCESSORIES	2 x 15.5 m fine cable and staples

Counter intercom system composed of a desktop intercom microphone and an external section to ease communication through counter windows, glass partitions or windows in box offices, banks, offices, control points, private accesses, car parks, etc.



GM-20P

CHARACTERISTICS	Two-way window intercom microphone
CAPSULE	Unidirectional electret condenser
CONTROLS	Desktop intercom: On/off PTL function (hands-free) and PTT (push-to-talk) Volume control Electret or dynamic microphone selector Exterior intercom: 'Call' push button.
FUNCTIONS	Noise barrier in desktop intercom microphone
INDICATORS	LED 'power' indicator in desktop and exterior intercom
CONNECTORS	XLR for desktop intercom microphone 2 x RCA and 3.5 mm jack for exterior intercom
POWER SUPPLY	230 V AC/9 V DC with adapter included
CABLE	3 m cable, external intercom
DIMENSIONS	Desktop intercom: 100 x 60 x 180 mm depth Microphone gooseneck: 360 mm height Exterior intercom: 85 mm Ø x 30 mm height
WEIGHT	0.9 kg
ACCESSORIES	Windshield Velcro and screws for installation
OBSERVATIONS	Exterior intercom installed using Velcro or screws in 50 mm Ø holes

AUDIO. ACCESSORIES

Preamplifiers and stereo adapter for turntables, microphones, CD, amplifiers, etc.



TC-2



TC-7



TC-46

CHARACTERISTICS	Stereo preamplifier for turntables with magnetic cartridge. Earth connection terminal.	Stereo preamplifier for turntables with magnetic cartridge. Earth connection terminal.	Stereo preamplifier for line signal.
INPUTS	1 phono, 2 x RCA 50 000 Ω , 3 mV	1 phono, 2 x RCA 50 000 Ω 3 mV	1 auxiliary, 2 x RCA 100 mV adjustable 1 auxiliary, 3.5 mm stereo jack 100mV
OUTPUTS	1 auxiliary, 2 x RCA 50 000 Ω , 1.8 V	1 auxiliary, 2 x RCA 50 000 Ω 1.8 V	1 auxiliary, 2 x RCA 2.3 V, 2000 Ω
CONTROLS	-	-	Volume and power Aux input sensitivity
RESPONSE	30-20 000 Hz	30-20 000 Hz	20-20 000 Hz
S/N RATIO	-	-	> 90 dB
INDICATORS	LED power indicator	LED power indicator	LED power indicator
POWER SUPPLY	1 x 9 V battery	12 V DC, 0.2 A, with adapter included	12 V DC, 0.5 A with adapter included
DIMENSIONS	75 x 30 x 92 mm depth	75 x 30 x 95 mm depth	79 x 24 x 46 mm depth
WEIGHT	0.1 kg	0.2 kg	-
ACCESSORIES	-	Audio cable, 2 x RCA	Front panel for flush mounting Mount for assembly Power supply cable 3.5 mm stereo plug to 3.5 mm stereo plug audio cable 3.5 mm to 2.5 mm jack adapter 4 adhesive rubber feet



TC-5P



TC-6M



TC-8A

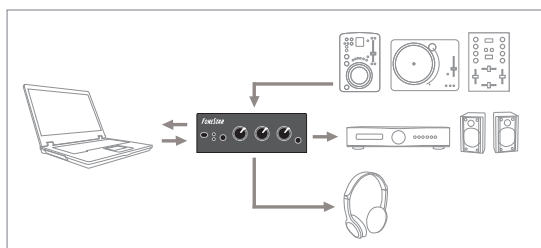
CHARACTERISTICS	Stereo preamplifier for turntables with magnetic cartridge and phono/auxiliary selector.	Stereo preamplifier for microphones/auxiliary	Stereo adapter to connect a CD, tape or auxiliary signal to the magnetic phono input.
INPUTS	1 phono, 2 x RCA 47000 Ω 5 mV 1 auxiliary, 2 x RCA 100 000 Ω 500 mV	2 mics, 6.3 mm mono jack, 600-10 000 Ω 7 mV maximum	1 auxiliary, 2 x RCA 100 000 Ω 500 mV maximum
OUTPUTS	1 auxiliary, 2 x RCA 100 000 Ω 500 mV	2 auxiliaries: RCA 100 000 Ω 2 V maximum	1 phono, 2 x RCA 47 000 Ω 10 mV maximum
GAIN	-	-	-
RESPONSE	20-20 000 Hz	20-20 000 Hz	20-20 000 Hz
S/N RATIO	> 50 dB	> 63 dB	-
POWER SUPPLY	12 V DC, 0.1 A with adapter included	12 V DC with adapter included	-
WEIGHT	0.3 kg	0.2 kg	0.2 kg

USB 2.0 phono preamplifier [digital recording interface].

Operates like an external USB audio card with phono input, that allows recording a turntable signal or any other signal connected to its phono/line input, on a computer [PC or Mac].

It also has a headphone output and line level output to send the phono/line input signal or music being played on the computer to an amplifier.

It can operate with power supply through the USB connection or with the AC/DC adapter. If it is not connected to a computer and is supplied with an adapter, it can be used as a phono preamplifier for connecting the turntable to a line input on a mixer or for listening to it through the headphone output.

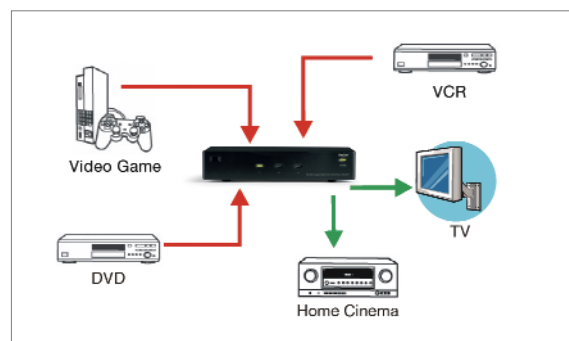


TC-20U

CHARACTERISTICS	Phono input for turntable with magnetic cartridge or selectable auxiliary line input. Low noise and high quality preamplifier circuit. Earth connection for turntable. Input gain control and LED signal and peak input indicators. Digital recording through USB without the need for PC or MAC drivers. Line and headphone outputs. Power supply through USB or with AC/DC adapter.
INPUTS	1 phono/40 mV line and +19 dBu, 2 x RCA switchable
OUTPUTS	USB 2.0 (Windows and Mac OS 9.1 or superior) 1 auxiliary, 2 x RCA 1 headphone, 3.5 mm stereo jack
RESPONSE	10-20 000 Hz
POWER SUPPLY	Through USB (5 V DC) or adapter 230 V AC/9 V DC not included
ACCESSORIES	1.8 m cable, male USB A to male USB B
DIMENSIONS	110 x 40 x 90 mm depth
WEIGHT	0.4 kg
OPTIONAL	AD-610E: AC/DC adapter



Analogue and optical digital Toslink video and audio switcher.



FO-361

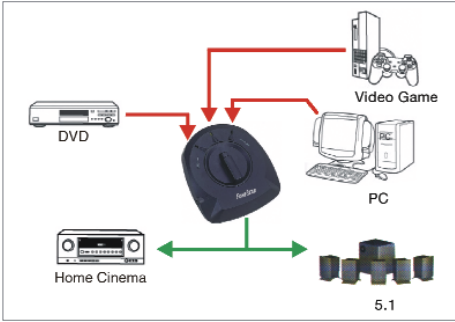
CHARACTERISTICS	Optical digital Toslink and analogue audio/video switcher. 3 inputs and 1 output. Remote control or manual selection among 3 different pieces of equipment: video cassette, DVD, VCD, TV satellite, video games, etc. with an output to a TV, video recorder or other piece of equipment.
INPUTS	3 for video: S-VHS and RCA connectors 3 for stereo audio: RCA connectors and optical digital Toslink
OUTPUTS	1 for video: S-VHS and RCA connectors 1 for stereo audio: RCA connectors and optical digital Toslink
POWER SUPPLY	9 V DC and 230 V AC with AC/DC adapter included
DIMENSIONS	240 x 40 x 105 mm depth
WEIGHT	0.7 kg

AUDIO. ACCESORIOS

Optical digital audio Toslink switchers

FO-363

CHARACTERISTICS	Optical digital audio Toslink switcher. Remote control or manual selection among 3 different pieces of audio equipment. 3 inputs and 1 output with optical Toslink connectors for audio
INPUTS	3 for optical digital audio Toslink
OUTPUTS	1 for optical digital audio Toslink
DIMENSIONS	125 x 140 mm
WEIGHT	0.2 kg



Digital audio to analogue converter.

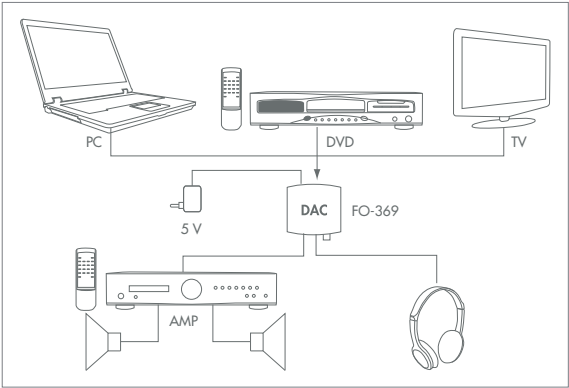
Different inputs for digital audio in PCN SPDIF format: optical, coaxial and USB. High quality audio with a 24 bit DAC, 192 kHz. Analogue audio output and headphone output with volume control.

USB



FO-369

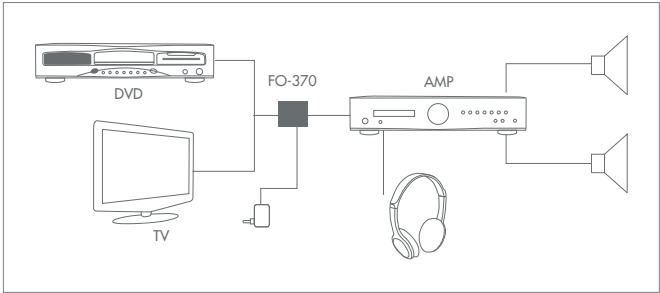
CHARACTERISTICS	Digital audio to analogue converter. PCM SPDIF format. 16-24 bit DAC, 44.1 - 192 kHz. Input selector with LED indicator.
INPUTS	SPDIF optical, 44.1 - 192 kHz toslink SPDIF coaxial, 44.1 - 192 kHz RCA USB 1.1, USB B 44-1 - 96 kHz (no need for drivers)
OUTPUTS	Stereo audio, 2 x RCA 10 kΩ 1.35 V RMS Headphones with volume control, 3.5 mm stereo jack 16 Ω 60 mW
POWER SUPPLY	5 V DC, 90 mA through USB port on the PC or the AC/DC adapter included
DIMENSIONS	105 x 30 x 111 mm depth
WEIGHT	0.2 kg



Digital to analogue audio converter. Inputs for optical and coaxial digital audio. Reduced size, easy to install and use.

FO-370

CHARACTERISTICS	Digital to analogue audio converter. Stereo PCM SPDIF format. 24 bits DAC, 32-96 KHz. LED power indicator.
INPUTS	Stereo optical SPDIF, 32-96 kHz toslink. Stereo coaxial SPDIF, 32-96 kHz RCA.
OUTPUTS	Stereo audio, 2 x RCA
POWER SUPPLY	5 V DC, 2 A with adapter included
DIMENSIONS	51 x 26 x 41 mm depth
WEIGHT	0.1 kg

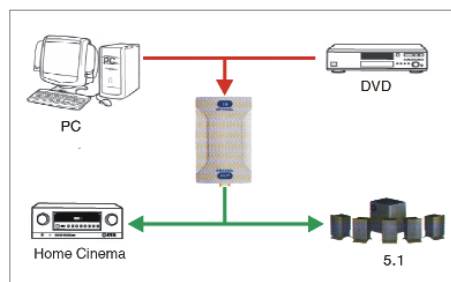


Digital audio converters.



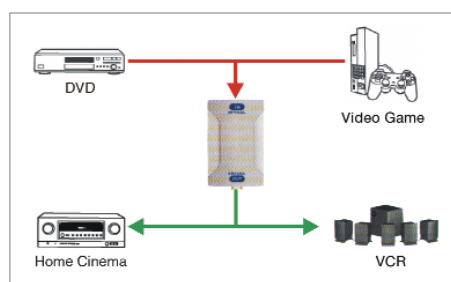
FO-365

CHARACTERISTICS	Coaxial digital audio to optical converter for audio systems with digital audio inputs and outputs.
INPUTS	Coaxial digital RCA
OUTPUTS	Optical digital Toslink
POWER SUPPLY	6 V DC with AC/DC adapter included
DIMENSIONS	47 x 20 x 70 mm depth



FO-366

CHARACTERISTICS	Optical digital audio to coaxial converter for audio equipment with digital audio inputs and outputs.
INPUTS	Optical digital toslink
OUTPUTS	Coaxial digital RCA
POWER SUPPLY	6 V DC with AC/DC adapter included
DIMENSIONS	47 x 20 x 70 mm depth



Cassette/CD/MP3 adapter.

ACD-72

CHARACTERISTICS	Plays any portable CD, MP3 track etc. through a cassette player. Allows connection through the headphone output on all types of portable players, such as CD, MPS, MD, DDC, to be heard through the radio cassette player in a car, laptop, Hi-Fi system, etc. Power supply is not necessary.
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AUDIO. CAR Hi-Fi LOUDSPEAKERS

Pairs of Hi-Fi car radio loudspeakers, powerful coaxial series.



	FAR-100CX	FAR-130CX	FAR-165CX
CHARACTERISTICS	2 coaxial ways. 4" =10 cm	2 coaxial ways. 5" = 12.5 cm	2 coaxial ways. 6 1/2" = 16.5 cm
POWER	60 W maximum	60 W maximum	80 W maximum
RESPONSE	100-22 000 Hz	80-22 000 Hz	50-22 000 Hz
IMPEDANCE	4 Ω	4 Ω	4 Ω
SENSITIVITY	85 dB at 1W/1m	87 dB at 1W/1m	87 dB at 1W/1m
MAGNET	8 Oz	8 Oz	10 Oz
DIMENSIONS	Total: 103 x 103 x 54 mm depth Insert: 103 mm Ø x 48 mm dept Bolts: 82 x 82 mm	Total: 152 (130) mm Ø x 56 mm depth Insert: 119 mm Ø x 49 mm depth Bolts: 136 mm Ø	Total: 165 mm Ø x 70 mm depth Insert: 140 mm Ø x 63 mm depth Bolts: 155 mm Ø
WEIGHT	2 x 0.6 kg	2 x 0.7 kg	2 x 0.8 kg
OPTIONAL	G-04 grilles	G-05 grilles	G-65 grilles

Pair of Hi-Fi car radio loudspeakers, powerful double cone series.



	FAR-101DC
CHARACTERISTICS	Double cone. 4" = 10 cm
POWER	40 W maximum
RESPONSE	100-18 000 Hz
IMPEDANCE	4 Ω
SENSITIVITY	88 dB at 1W/1m
MAGNET	5.4 Oz
DIMENSIONS	Total: 103 x 103 x 48 mm depth Insert: 103 mm Ø x 44 mm depth Bolts: 82 x 82 mm
WEIGHT	2 x 0.4 kg
OPTIONAL	G-04 grilles

Pairs of grilles for car-radio speakers.



G-04

G-05

CHARACTERISTICS	Pair of 4" grilles for car-radio loudspeakers, mods. FAR-100CX and FAR-101DC.	Pair of 5" grilles for car-radio loudspeakers, mods. FAR-130CX.
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AUDIO. MARINE LOUDSPEAKERS

Pairs of Hi-Fi loudspeakers for marine environments, with chassis and grille manufactured in white ABS and polypropylene cones.

MARINE

WATERPROOF



FMA-133CX

FMA-168CX

CHARACTERISTICS	2-way coaxial with grille. 5" = 12.5 cm	2-way coaxial with grille. 6 1/2" = 16.5 cm
POWER	50 W maximum, 25 W RMS	60 W maximum, 30 W RMS
RESPONSE	75-20 000 Hz	60-20 000 Hz
IMPEDANCE	8 Ohm	8 Ω
SENSITIVITY	86 dB at 1W/1m	88 dB at 1W/1m
DIMENSIONS	Total: 148 mm Ø x 66 mm depth Insert: 113 mm Ø x 47 mm depth Screws: 135 mm Ø	Total: 180 mm Ø x 80 mm depth Insert: 133 mm Ø x 62 mm depth Screws: 162 mm Ø
WEIGHT	2 x 0.5 kg	2 x 0.8 kg
ACCESSORIES	3m cable and installation accessories	3 m cable and installation accessories

ADAPTERS. USB AC/DC

AC/DC adapter with USB output connector. Switched and stabilized. Energy efficient.
For audio devices, consoles, mobile telephones or any other device that charges through USB.



AD-3U

CHARACTERISTICS	AC/DC adapter 5 V, 1000 mA. Switched and stabilized. Energy efficient. For the power supply and recharging of USB devices.
OUTPUTS	5 V DC (1000 mA)
PROTECTION	Short-circuit and overload
CONNECTORS	Female USB A
POWER SUPPLY	100-240 V AC



AD-60C **NI**

CHARACTERISTICS	AC/DC adapter, 5 V, 1000 mA. Switched and stabilized. Energy efficient. For recharging mobile telephones.
OUTPUTS	5 V DC (1000 mA)
PROTECTION	Short-circuit, overload and surge
CABLE	1 m with micro USB connector
POWER SUPPLY	100-240 V AC, 0.15 A

USB 5 in 1 charger cable for audio devices, consoles, mobile telephones, etc.



	7870
CHARACTERISTICS	USB 5 in 1 charger cable
INPUT	5 V
OUTPUTS	5 V DC (1000 mA)
CONNECTORS	5 for USB devices and following connectors: -Mini USB B 5 pin -PSP -iPod/iPhone -NDSi -3.5 mm for one of the adapters included: Nokia mobile telephones, micro USB or USB A female
OPTIONAL	AD-3U and TL-1U

AC/DC adapter with two USB outputs with charge function and plug for using the 230 V connection during recharging. It includes a folding mount for a mobile telephone.



	AD-22U
CHARACTERISTICS	AC/DC adapter, 5V, 2100 mA. Switched and stabilized. For power supply and recharging USB devices. Bipolar base plug with earth, 16 A, 250 V. Folding mount for mobile telephone, etc.
OUTPUTS	5 V DC (2100 mA)
PROTECTION	Short circuit, overload and temperature
CONNECTORS	2 x female USB A Female schuko
INDICATOR	LED power indicator
POWER SUPPLY	230 V AC
WEIGHT	0.1 kg

ADAPTERS. USB AC/DC

AC/DC adapters with USB outputs for recharging mobile telephones, tablets, etc.



AD-17U **N!**

CHARACTERISTICS	AC/DC adapter, 5 V 2100 mA. Switched and stabilized. Energy efficient. For the power supply and recharging of USB devices.
OUTPUTS	5 V DC (2100 mA)
PROTECTION	Short-circuit, overload and temperature
CONNECTORS	2 x female USB A
POWER SUPPLY	100-240 V AC



AD-184U **N!**

CHARACTERISTICS	AC/DC Adapter 5 V, 3.000 mA. Switched and stabilized. Energy efficient. For powering and recharging USB devices.
OUTPUT	5 V DC (3000 mA)
PROTECTION	Short-circuit, overload and temperature
CONNECTORS	4 x female USB A
INDICATOR	Power LED
SWITCH	On/off
POWER SUPPLY	100-240 V AC
DIMENSIONS	49 x 26 x 105 mm depth with 1.4 m cable
WEIGHT	0.1 kg

RELATED PRODUCTS



7962
Dock to USB cable for iPod/iPhone/iPad.
Page 482.



7982
Cable for synchronizing and recharging
Compatible with iPhone 5, iPad mini
Page 483.



7850
Male USB A - Male micro USB B
cable, 0.8 m.
Page 481.

ADAPTERS. SWITCHED AND STABILIZED AC/DC

FONESTAR

AC/DC adapters.

Switched and stabilized, energy efficient, with protection and interchangeable connectors for the most common DC cables.



AD-610E



AD-1010E



AD-1510E

CHARACTERISTICS	AC/DC adapter 3 to 12 V, 600mA, 7 W maximum. Switched and stabilized, energy efficient.	AC/DC adapter 3 to 12 V, 1000 mA, 12 W maximum. Switched and stabilized, energy efficient.	AC/DC adapter 3 to 12 V, 1500 mA, 18 W maximum. Switched and stabilized, energy efficient.
OUTPUTS	Manual selection for 3, 4.5, 5, 6, 7.5, 9 and 12 V DC (600 mA)	Manual selection for 3, 4.5, 5, 6, 7.5, 9 and 12 V DC (1000 mA)	Manual selection for 3, 4.5, 5, 6, 7.5, 9 and 12 V DC (1500 mA)
PROTECTION	Short circuit, limiter, overload, current and voltage surges	Short circuit, limiter, overload, current and voltage surges	Short-circuit, limiter, overload, current and voltage surges
CONNECTORS	Female USB A Male micro USB B 3.5, 5.5 x 2.1, 5 x 2.1, 4 x 1.7, 3.5 x 1.35, 2.35 x 0.75 mm plug	Female USB A Male micro USB B 3.5, 5.5 x 2.5, 5 x 2.1, 4 x 1.7, 3.5 x 1.35, 2.35 x 0.75 mm plugs	Female USB A Male micro USB B 3.5, 5.5 x 2.5, 5 x 2.1, 4 x 1.7, 3.5 x 1.35, 2.35 x 0.75 mm plug
INDICATORS	LED power indicator	LED power indicator	LED power indicator
POWER SUPPLY	100 - 240 V AC, 50-60 Hz	100-240 V AC, 50-60 Hz	100-240 V AC, 50-60 Hz
WEIGHT	0.1 kg	0.1 kg	0.1kg
ACCESSORIES	8 interchangeable connectors	8 interchangeable connectors	8 interchangeable connectors



AD-1201E



AD-2820E



AD-3020E

CHARACTERISTICS	AC/DC adapter 3 to 12 V. 1200 mA, 14 W maximum. Switched and stabilized. Energy efficient.	AC/DC adapter 5 to 24 V, 2.8 A, 36 W maximum. Switched and stabilized. Energy efficient. 90° connectors.	AC/DC adapter 5-15 V, 3 A, 24 W maximum. Switched and stabilized. Energy efficient 90° connectors.
OUTPUTS	Manual selection for 3, 4.5, 6, 7.5, 9 and 12 V DC (1200 mA)	Manual selection 5 V (2.8 A), 6 V (2.8 A), 9 V (2.5 A), 12 V (2.2 A), 15 V (2 A), 18 V (1.7 A), 24 V (1.5 A)	Manual selection 5 V (3 A), 6 V (3 A), 7.5 V (2.5 A), 9 V (2.5 A), 12 V (2 A), 13.5 V (1.6 A), 15 V (1.6 A)
PROTECTION	Short-circuit, temperature and overload	Short circuit, overload, temperature and surge	Short circuit, overload, temperature and surge
CONNECTORS	Jack - 3.5, 5.5 x 2.5, 5 x 2.1, 4 x 1.7, 3.5 x 1.35, walkman-Discman - 2.35 x 0.75 mm	Changeable connectors for the most common DC cables Female USB A, 5.5 x 2.5, 5 x 2.1, 3.5 plug, 3.5 x 1.4, 2.35 x 0.7, 4 x 1.7 (flat pin), 4.75 x 1.7 mm (flat pin)	Changeable connectors for the most common DC cables Female USB A, 5.5 x 2.5, 5 x 2.1, 3.5 plug, 3.5 x 1.4, 4 x 1.7 (flat pin), 4.75 x 1.7 (flat pin), 5 x 1 mm
INDICATORS	LED power indicator	LED power indicator	LED power indicator
POWER	100-240 V AC	100-240 V AC, 50-60 Hz, 0.63 A	100-240 V AC, 50-60 Hz, 0.55 A
PESO	0.2 kg	0.2 kg	0.2 kg
ACCESSORIES	6 interchangeable connectors	8 changeable connectors	8 changeable connectors

ADAPTERS. LAPTOP COMPUTER AC/DC

AC/DC adapters for netbooks, laptops, monitors, etc.



AD-2520E

CHARACTERISTICS	AC/DC adapter 9 to 24 V, 2.5 A, 36 W maximum Switched and stabilized, energy efficient. 90° connectors. For netbooks.
OUTPUT	Manual selection 9 V (2.5 A), 12 V (2.2 A), 13.5 V (2.1 A), 15 V (2 A), 19 V (1.7 A), 20 V (1.6 A), 24 V (1.5 A)
PROTECTION	Short circuit, overload, temperature and surge
CONNECTORS	Changeable connectors for the most common netbooks 5.5 x 2.5, 5 x 2.1, 3.5 x 1.4, 4 x 1.7 (flat pin), 4.75 x 1.7 (flat pin), 5 x 1, 5.5 x 2.1 mm (flat pin)
INDICATORS	LED power indicator
POWER SUPPLY	100-240 V AC, 50-60 Hz, 0.63 A
WEIGHT	0.2 kg
ACCESSORIES	7 changeable connectors



AD-5400E

CHARACTERISTICS	AC/DC adapter, 5 to 24 V, 4 A, 40 W maximum. Switched and stabilized, energy efficient. Straight connectors. Special voltage 19.5 V. For high consumption devices, laptop computers, netbooks, LCD monitors, TV, etc.
OUTPUTS	Manual selection 5 V (4 A), 6 V (4 A), 7 V (3.5 A), 8 V (3.2 A), 9 V (3 A), 10 V (2.8 A), 11 V (2.7 A), 12 V (2.6 A), 13 V (2.5 A), 14 V (2.4 A), 15 V (2.3 A), 16 V (2.2 A), 17 V (2.1 A), 18 V (2 A), 19 V (1.9 A), 19.5 V (1.8 A), 20 V (1.8 A), 21 V (1.8 A), 22 V (1.7 A), 23 V (1.7 A), 24 V (1.65 A)
PROTECTION	Temperature and overload
CONNECTORS	5.5 x 2.5, 5.5 x 2.1, 5 x 2.1, 3.5 x 1.4, 4 x 1.7 (flat pin), 4.75 x 1.7 (flat pin), 5.5 x 2.1 (flat pin), 5 x 1 (internal pin), 6.3 x 3, 6.5 x 1.4 (internal pin), 3-pin DELL, 7.4 x 5 x 0.6 mm
INDICATORS	LED power indicator
POWER SUPPLY	100-240 V AC, 50-60 Hz, 0.85 A
WEIGHT	0.3 kg
ACCESSORIES	12 changeable connectors



AD-5800E

CHARACTERISTICS	AC/DC adapter, 5 to 24 V, 7 A, 80 W maximum. Switched and stabilized, energy efficient. Straight connectors. Special voltage 19.5 V. For high consumption devices, laptop computers, netbooks, LCD monitors, TV, etc.
OUTPUTS	Manual selection 5 V (7 A), 6 V (6.8 A), 7 V (6.5 A), 8 V (6 A), 9 V (5.5 A), 10 V (5.2 A), 11 V (5 A), 12 V (4.8 A), 13 V (4.4 A), 14 V (4.3 A), 15 V (4.2 A), 16 V (4.1 A), 17 V (4 A), 18 V (3.9 A), 19 V (3.8 A), 19.5 V (3.7 A), 20 V (3.7 A), 21 V (3.6 A), 22 V (3.5 A), 23 V (3.4 A), 24 V (3.3 A)
PROTECTION	Temperature and overload
CONNECTORS	5.5 x 2.5, 5 x 2.1, 3.5 x 1.4, 4 x 1.7 (flat pin), 5 x 1, 6.3 x 3, 6.5 x 1.4, 4.75 x 1.7 (flat pin), 5.5 x 2.1, 5.5 x 2.1 (flat pin), 3-pin DELL, 7.4 x 5 x 0.6 mm
INDICATORS	LED power indicator
POWER SUPPLY	100-240 V AC, 50-60 Hz, 1.7 A
WEIGHT	0.5 kg
ACCESSORIES	12 changeable connectors


90 W
USB

AD-6020E

CHARACTERISTICS	AC/DC adapter, 9 to 22 V, 6 A, 77 W maximum. Switched and stabilized, energy efficient. Straight connectors. For high consumption devices, laptop computers, netbooks, LCD monitors, TV, etc.
OUTPUTS	Manual selection 9 V (6 A), 12 V (6 A), 15 V (5 A), 16 V (5 A), 18.5 V (3.5 A), 19 V (3.5 A), 22 V (3.5 A)
PROTECTION	Short circuit and overload
CONNECTORS	5.5 x 2.5, 5.5 x 2.1, 5 x 2.1, 3.5 x 1.4, 4 x 1.7 (flat pin), 4.75 x 1.7 (flat pin), 5 x 1 (internal pin), 6.3 x 3, 6.5 x 1.4 (internal pin), 5.5 x 2.1 (flat pin), 7.4 x 5 x 0.6 mm
INDICATOR	LED power indicator
POWER SUPPLY	100-240 V AC, 50-60 Hz, 0.35 A
WEIGHT	0.4 kg
ACCESSORIES	11 changeable connectors

AD-6590E

CHARACTERISTICS	AC/DC adapter 15 to 24 V, 6 A, 90 W maximum and 5 V USB port, 2 A maximum. Switched and stabilized, energy efficient. USB port for power supply and 5V charge. For notebooks and laptops.
OUTPUTS	Manual selection for 15 V, 16 V, 18 V, 19.5 V, 20 V, 22 V and 24 V DC Most common voltages for the connectors included:: 15 V (3 A), 15 V (4 A), 15 V (5 A), 15 V (6 A), 16 V (3.36 A), 16 V (3.5 A), 16 V (3.75 A), 16 V (4 A), 16 V (4.5 A), 18 V (4.74 A), 18.5 V (1.1 A), 18.5 V (2.7 A), 18.5 V (3.5 A), 18.5 V (3.52 A), 18.5 V (3.8 A), 18.5 V (4.5 A), 18.5 V (4.9 A), 19 V (1.58 A), 19 V (2.64 A), 19 V (3.16 A), 19 V (3.42 A), 19 V (3.68 A), 19 V (3.95 A), 19 V (4.2 A), 19 V (4.22 A), 19 V (4.47 A), 19 V (4.74 A), 19.5 V (2.15 A), 19.5 V (3 A), 19.5 V (3.34 A), 19.5 V (4.1 A), 19.5 V (4.62 A), 19.5 V (4.7 A), 20 V (3.25 A), 20 V (3.5 A), 20 V DC (4.5 A) USB port: 5 V DC (2 A)
PROTECTION	-
CONNECTORS	A: 6.5 x 4.4 (Sony, Fujitsu with 16, 19 y 19.5 V inputs); D: 6.3 x 3 (Toshiba with 15 V input); F: 5.5 x 2.5 (Acer, HP/Compaq, Fujitsu, Toshiba with 16, 18.5, 19, 19.5 V inputs); G: 5.5 x 3 (Samsung with 16, 19 V inputs); H: 3-pin Dell 20 V; N: 5.5 x 1.7 (Acer, Dell with 19 V input); P: 4.8 x 1.7 (Asus, HP/Compaq, LG, Sony, Benq with 18.5, 19 V inputs); S: 4 x 1.7 (HP/Compaq with 19 V inputs); Q: 7.4 x 5 (Dell with 19.5 V inputs); R: 7.4 x 5 (HP/Compaq with 18.5, 19 V inputs)
INDICATOR	LED power indicator
POWER SUPPLY	100-240 V AC, 50-60 Hz
WEIGHT	0.3 kg
ACCESSORIES	10 changeable connectors

ADAPTERS. LAPTOP COMPUTER AC/DC

AC/DC adapters for netbooks, laptops, monitors, etc.



AD-7070A 70 W

CHARACTERISTICS	AC/DC adapter for 15 to 19.5 V, 4 A, 70 W maximum. Switched and stabilized, energy efficient. For notebooks and laptops.
OUTPUTS	Automatic selection. Most common voltages for the connectors included: 15 V (3 A), 15 V (4 A), 16 V (3 A), 16 V (3.36 A), 16 V (3.5 A), 16 V (3.75 A), 16 V (4 A), 18.5 V (2.7 A), 18.5 V (3.5 A), 18.5 V (3.52 A), 18.5 V (3.8 A), 19 V (1.58 A), 19 V (2.64 A), 19 V (3.16 A), 19 V (3.42 A), 19 V (3.68 A), 19.5 V (2.15 A), 19.5 V (3 A), 19.5 V DC (3'34 A)
CONNECTORS	1: 6.5 x 4.4 (Sony, Fujitsu with 16 V input); 2: 6.5 x 4.4 (Sony, Fujitsu with 19.5 V input); 3: 6.3 x 3 (Toshiba, Nec with 15 V input); 4: 5.5 x 2.5 (IBM with 15 V input); 5: 5.5 x 2.5 (Dell, HP, Compaq, Acer, Toshiba, Lenovo with 18, 18.5, 19, 19.5 V inputs) 7: 5.5 x 1.7 (Dell, Acer, HP, Lenovo with 19 V input) 8: 4.8 x 1.7 (HP, Compaq, Asus, Acer, Nec, LG with 18, 18.5, 19, 19.5 V inputs); 9: 7.4 x 5 (Dell with 19.5 V input); 10: 7.4 x 5 (HP with 19, 19.5 V inputs)
INDICATOR	LED power indicator
POWER SUPPLY	100-240 V AC, 50-60 Hz
WEIGHT	0.4 kg
ACCESSORIES	9 interchangeable connectors



AD-7090A 90 W

CHARACTERISTICS	AC/DC adapter for 15 to 19.5 V, 6 A, 90 W maximum. Switched and stabilized, energy efficient. For notebooks and laptops.
OUTPUTS	Automatic selection. Most common voltages for the connectors included: 15 V (5 A), 15 V (6 A), 16 V (4.5 A), 18.5 V (4.9 A), 19 V (3.95 A), 19 V (4.2 A), 19 V (4.22 A), 19 V (4.74 A), 19.5 V (4.1 A), 19.5 V (4.62 A), 19.5 V DC (4.7 A)
CONNECTORS	1: 6.5 x 4.4 (Sony, Fujitsu with 16 V input); 2: 6.5 x 4.4 (Sony, Fujitsu with 19.5 V input); 3: 6.3 x 3 (Toshiba, Nec with 15 V input); 4: 5.5 x 2.5 (IBM with 15 V input); 5: 5.5 x 2.5 (Dell, HP, Compaq, Acer, Toshiba, Lenovo with 18, 18.5, 19, 19.5 V inputs) 7: 5.5 x 1.7 (Dell, Acer, HP, Lenovo with 19 V input) 8: 4.8 x 1.7 (HP, Compaq, Asus, Acer, Nec, LG with 18, 18.5, 19, 19.5 V inputs); 9: 7.4 x 5 (Dell with 19.5 V input); 10: 7.4 x 5 (HP with 19, 19.5 V inputs)
INDICATOR	LED power indicator
POWER SUPPLY	100-240 V AC, 50-60 Hz
WEIGHT	0.5 kg
ACCESSORIES	9 interchangeable connectors

AD-6001E 120 W

CHARACTERISTICS	AC/DC adapter 15 to 24 V, 6 A, 120 W maximum. Switched and stabilized. For laptops, monitors and general use. With a universal socket.
OUTPUTS	Manual selection for 15, 16, 18, 19, 20 V (6 A), 22 and 24 V DC (5 A)
PROTECTION	Short circuit, temperature, and overload
CONNECTORS	3.5 x 1.35 (Sharp, Dell), 4.75 x 1.75 (Acer, Asus, Compaq), 5.5 x 1.75 (Acer), 5.5 x 2.1 (HP, Compaq, Micron, NEC, Toshiba), 5.5 x 2.5 (Gigatech, Hitachi, IBM), 6.5 x 1 mm (Dell). Other dimensions of connectors are available. Please ASK.
INDICATORS	LED power indicator
POWER SUPPLY	100-240 V AC, 50-60 Hz
WEIGHT	0.9 kg
ACCESSORIES	6 interchangeable connectors. Universal set of travel adapters with CA connection for sockets used in GB, Australia, USA, etc.



ADAPTERS. CAR DC/DC

FONESTAR

Stabilized DC/DC adapters with USB output connector.

For audio devices, consoles, mobile telephones and any other device with charge function via USB.

TL-1U

TL-4U **NI**

CHARACTERISTICS	DC/DC 5 V adapter, 1000 mA. Stabilized. For supplying power and recharging USB devices.	DC/DC adapter 5 V, 2100 mA. Stabilized. For power supply and recharging USB devices.
OUTPUTS	5 V DC (1000 mA)	5 V DC (2100 mA)
PROTECTION	Short circuit and overload	Short circuit, overload and temperature
CONNECTORS	Female USB A	2 x female USB A
INDICATOR	LED power indicator	-
POWER SUPPLY	12-13.8 V DC	12-24 V DC



TL-1U



TL-4U

DC/DC adapters, stabilized for cars 12-24 V.

TL-8

TL-2000

CHARACTERISTICS	DC/DC adapter. 800 mA. Stabilized	DC/DC adapter. 2000 mA. Stabilized
OUTPUTS	Manual selection for 1.5, 3, 4.5, 6, 7.5, 9 and 12 V DC (800 mA)	Manual selection for 1.5, 3, 4.5, 6, 7.5 and 9 V DC (2000 mA), for input of 12 and 24 V DC (2000 mA) for 24 V input
PROTECTION	Electronic	Electronic
CONNECTORS	3.5, 5.5 x 2.5, 5 x 2.1, 4 x 1.7, 3.5 x 1.35, walkman-Discman 2.35 x 0.75 mm USB A, female	3.5, 5.5 x 2.5, 5 x 2.1, 4 x 1.7, 3.5 x 1.35 jack, walkman-Discman 2.35 x 0.75 mm USB A, female
INDICATORS	LED power indicator	LED power indicator
POWER SUPPLY	12 V DC	12-24 V DC
WEIGHT	0.1 kg	0.2 kg
ACCESSORIES	6 interchangeable connectors	6 interchangeable connectors



TL-2000

TL-8

ADAPTERS. UNIVERSAL TRAVEL

Universal travel adapters.



ADT-46

ADT-48U

CHARACTERISTICS	Universal travel adapter. Valid for Europe, UK, USA, Japan, Australia, China, Thailand. Safety shutter.	Universal travel adapter. AC/DC adapter with 2 USB ports for charging USB devices. Valid for Europe, UK, USA, Japan, Australia, China, Thailand.
OUTPUT	-	5 V DC (1 A) with LED indicator
PROTECTION	Surge	-
COLOUR	White	White
POWER SUPPLY	110-240 V AC, 10 A	100-240 V AC, 6.3 A AC/DC adapter 5 V, 1 A

BATTERIES. ALKALINE



F-LR03



F-LR6



F-LR14

CHARACTERISTICS	Blister pack with 4 alkaline LR03-AAA, 1.5 V batteries	Blister pack with 4 alkaline LR6-AA, 1.5 V batteries	Blister pack with 2 alkaline LR14-C, 1.5 V batteries
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F-LR20



F-6LR61

CHARACTERISTICS	Blister pack with 2 alkaline LR20-D, 1.5 V batteries	Blister pack with 1 6LR61 9 V alkaline battery.
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BATTERIES. RECHARGEABLE



F-900AAA



F-2200AA

CHARACTERISTICS	Blister pack with 2 rechargeable Ni-MH AAA-R03 900mAh batteries. Charge maintenance. Charged and ready to use.	Blister pack with 2 rechargeable Ni-MH AA-R6 2200 mAh batteries. Charge maintenance. Charged and ready to use.
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BATTERIES. CHARGERS

FONESTAR

Rechargeable Ni-MH/Ni-Cd battery chargers.



CP-40

CHARACTERISTICS	Rechargeable Ni-MH / Ni-Cd battery charger for 4 R03-AAA batteries or 4 R6-AA batteries.
PROTECTION	-
INDICATORS	LED indicator for the charge through timer (14-16 h).
CHARGE CURRENT	120 mA for R03-AAA batteries 250 mA for R6-AA batteries
MAINTENANCE CURRENT	-
POWER SUPPLY	230 V AC
WEIGHT	0.2 kg
ACCESSORIES	-



CP-80P

CHARACTERISTICS	Intelligent rechargeable battery charger: Ni-MH/Ni-Cd for 4 R03-AAA batteries or 4 R6-AA batteries. Quick charge. Automatic disconnection. Non-rechargeable battery detection. For home and car use.
PROTECTION	Delta V against overload and temperature
INDICATORS	LED on, charging and end of charge indicator
CHARGE CURRENT	800 mA for R6-AA batteries 300 mA for R03-AAA batteries
MAINTENANCE CURRENT	80 mA for R6-AA batteries. 30 mA for R03-AAA batteries
POWER SUPPLY	230 V AC~50 Hz, 12-13.8 V DC with adapter included
WEIGHT	0.3 kg
ACCESSORIES	Car lighter connection

BATTERIES. TESTERS

S-0344

CHARACTERISTICS	Compact battery tester: 1.5 V standard batteries of various sizes and 9 V. Tests the batteries' charge. Quick and easy reading of the state of the battery
WEIGHT	-

S-0355

Tester of standard 1.5 V batteries and accumulators of various sizes, 1.5 V button cells, 6 V types 4SR44, 4LR44 and standard 9 V. Testing sections for the different size batteries. Measuring scales for standard batteries and rechargeable accumulators. Tests the batteries and accumulators' charge. Quick and easy reading of the state of the battery.



S-0344



S-0355

BATTERIES. DISPLAY UNITS

EXP-9

CHARACTERISTICS	Display stand for FONESTAR EXTRA POWER alkaline batteries. With 9 hangers.
DIMENSIONS	29 x 55 x 21 cm depth
WEIGHT	1 kg



CLEANING ACCESSORIES. SCREENS

Cleaning kit for flat screens, computers, PDAs, monitors, cameras, etc.



	LPT-154	LPT-156
CHARACTERISTICS	Large cleaning kit for flat screens, PDAs, monitors, cameras, etc.	Cleaning kit for flat screens, computers, PDAs, monitors, cameras, etc.
CONTENTS	45 ml	30 ml
ACCESSORIES	Including washable cleaning cloths and non-drip anti-static gel cleaning spray	Including cleaning cloths, anti-static cleaning spray and brush for keyboards

CLEANING ACCESSORIES. VIDEO HEAD CLEANER



	PC-8007
CHARACTERISTICS	VHS Video head cleaner. With cleaning solution and non-abrasive tape. Cleaning accessory to conserve video heads.

CLEANING ACCESSORIES. VIDEO

DVD, CD ROM and audio CD cleaning kits.



	LCD-136	LCD-133	LCD-131
CHARACTERISTICS	Automatic DVD laser lens cleaner. Cleans the lens and maintains it in perfect reading conditions. Complete audio and video test with spectacular images and sound to check and adjust your DVD equipment. With instructions in 11 languages.	Automatic laser lens cleaner for computer CD-ROM players and audio CDs. Cleans the lens and maintains it in perfect reading conditions. With images and audio on the CD-ROM and audio on the audio CD. With instructions in 10 languages.	Laser lens cleaner disc for CD players. Cleans the lens and maintains it in perfect reading conditions. With CD and cleaning solution. With instructions in 6 languages.

CLEANING ACCESSORIES. VINYL RECORDS

Carbon fibre brush for cleaning vinyl records and screens.



	MFP-31 N!
CHARACTERISTICS	Carbon fibre brush for cleaning vinyl records and screens. Removes static and dust. Closing system to protect fibres.
DIMENSIONS	33 x 114 x 18 mm depth

ELECTRONIC ACCESSORIES. SPRAYS

FONESTAR

Cleaning and maintenance sprays for electronics, computers, telephony, electricity, etc.

**NO
CFC**

All products comply with European laws and regulations on aerosols. They do not contain CFC and are not harmful to the ozone layer. Products manufactured in the EU.



	R-11	G-22	M-33	C-70 NI
CHARACTERISTICS	Contact cleaner. Cleans and lubricates general electronic and mechanic contacts: potentiometers, switches, keypads and in general all components that require cleaning and lubrication. Protects against rust and corrosion.	Dry cleaner. Cleans the dirt caused by wear: old grease, dust, rust, damp, etc. on electronic equipment contacts, telephone installations, remote controls, tuners, computers, fax machines, relays, general micro-contacts, etc. Doesn't leave residue, evaporates completely.	Lubricant. Low viscosity colourless lubricant. Suitable for use in electronics, computers, precision mechanics: micro-motors, keyboards, cursors, power switches, switches, connectors, rotating and linear contacts, etc.	Medium viscosity silicone oil. High penetration lubricant. Can be used on all types of surfaces. Regenerates and protects joints. Eases passing cables through tubes. Excellent dielectrics, removing the corona discharge in TV aerials mounts, avoids shortcircuits and current leaks. Water repellent, protects from damp. Suitable as a release agent for plastic moulds.
CONTENTS	200 ml	200 ml	200 ml	200 ml
WEIGHT	0.2 kg	0.2 kg	0.2 kg	0.2 kg
	S-97 NI	A-44	B-55	V-66
CHARACTERISTICS	Silicone grease. For lubricating and protecting parts. Designed to protect electrical and electronic equipment from RF interference, high temperatures, atmospheric elements and oxidising agents. Avoids current leaks, shortcircuits, corona discharge and component overheating. Repels water and dust. Lubricates and conserves plastic parts and cogs, joints, mounts, etc. Quick drying, leaves a thin transparent layer, nonflammable and nonconductive. -50°C to 220°C. Does not affect plastics.	Cooling spray. Necessary for finding intermittent defects that appear in components that are sensitive to temperature changes: semiconductors, condensers, resistances, diodes, etc. By spraying on printed circuit boards, it lets you find defective soldering. 100% non inflammable.	Compressed gas. Used as a small portable compressed air bottle to remove dust from difficult to reach areas in radio receivers, televisions, computers, fotocopiers, photographic cameras, telephones, sliding and line contacts, switches, electric and mechanic devices, etc. 100 % non inflammable.	Quick drying electrical insulation spray. Suitable for coils, small solenoids or medium-sized transformers and electronic components that need electrical insulation. Good resistance to the corona discharge. Adheres to and spreads on any surface.
CONTENT	200 ml	400 ml	400 ml	200 ml
WEIGHT	0.2 kg	0.6 kg	0.6 kg	0.2 kg

ELECTRONIC ACCESSORIES. FANS

Fans and grilles for cooling audio, video and computer equipment.

	4E-230S-25	3E-230S-28	SP-1202512L
CHARACTERISTICS	Metal axial fan.	Metal axial fan.	Axial fan.
POWER	22 W 3000 r.p.m.	12 W 2.800 r.p.m.	-
POWER SUPPLY	230 V AC	230 V AC	12 V DC 0.14 A
DIMENSIONS	119 x 119 x 38 mm	80 x 80 x 38 mm	120 x 120 x 25 mm
WEIGHT	0.6 kg	0.4 kg	0.1 kg



	R-4E	R-3E
CHARACTERISTICS	Protective metal grille for FONESTAR mods.: 4E-230S-25 and SP-1202512L.	Protective metal grille for FONESTAR mod.: 3E-230S-28

