



(Top to bottom): X-10, X-20, X-30

X-10

Passive. Built-In Speaker-Level High-Pass Filter.

CONTROL FACILITIES:

- Subwoofer Level

INPUT/OUTPUT FACILITIES:

- Speaker-Level Input
- Speaker-Level High-Pass Output
- Line-Level Subwoofer Outputs (2)

X-20

Active. Built-In Speaker-Level High-Pass Filter.

CONTROL FACILITIES:

- Subwoofer Level
- Subwoofer Cut-Off Frequency (continuously variable 35 Hz – 150 Hz)
- Sub/Sat. Phase Alignment (continuously variable 0° – 180°)

INPUT/OUTPUT FACILITIES:

- Line-Level Input
- Speaker-Level Input
- Speaker-Level High-Pass Output
- Line-Level Subwoofer Outputs (2)

X-30

Active. Built-In Line-Level High-Pass Filter.

CONTROL FACILITIES:

- Subwoofer Level
- Subwoofer Cut-Off Frequency (continuously variable 35 Hz – 150 Hz)
- Sub/Sat. Phase Alignment (continuously variable 0° – 180°)

INPUT/OUTPUT FACILITIES:

- Line-Level Subwoofer Input
- Line-Level Input
- Selectable Line-Level High-Pass Outputs (50 Hz, 80 Hz, 120 Hz)
- Line-Level Subwoofer Outputs (2)

X-SERIES CONTROL UNITS

CONTROL FREAKS

X-Series high-pass/subwoofer control units optimize your music or home theater system by directing bass to the subwoofer and away from the main speakers. They also simplify hook-up and provide more conveniently located controls. You'll wonder how you ever managed without one!

PS SERIES

	PS-1000	PS-1200
Design	Single driver, DCBS™ system, high-velocity resistive ports, built-in amplifier	Single driver, DCBS™ system, high-velocity resistive ports, built-in amplifier
Amplifier: High-Current, Discrete Output	200 watts RMS† (20 – 150 Hz @ < 0.9% THD), 750 watts Peak††	200 watts RMS† (20 – 150 Hz @ < 0.9% THD), 750 watts Peak††
Amplifier Design Features	Auto-On / Off, soft clipping, thermal protection	Auto-On / Off, soft clipping, thermal protection
Bass Driver	254-mm (10 in) polypropylene cone, 38-mm (1-1/2 in) voice coil, AVS™ die-cast heatsink chassis	305-mm (12 in) polypropylene cone, 51-mm (2 in) voice coil, AVS™ die-cast heatsink chassis
Low-Frequency Extension*	22 Hz (DIN)	21 Hz (DIN)
Subwoofer Cut-Off Frequency	Variable 50 Hz – 150 Hz	Variable 50 Hz – 150 Hz
Sub. / Sat. Phase Alignment	Variable 0° – 180°	Variable 0° – 180°
Line-Level Input	From Sub-Out / LFE-Out of receiver / processor or other line-level source	From Sub-Out / LFE-Out of receiver / processor or other line-level source
Line-Level Input Sensitivity	200 mV mono	200 mV mono
Line-Level Input Impedance	50k ohms	50k ohms
Speaker-Level Input	From left / right speaker terminals of receiver, amplifier or main / satellite speakers	From left / right speaker terminals of receiver, amplifier or main / satellite speakers
Speaker-Level Input Sensitivity	1.5 V stereo	1.5 V stereo
Internal Volume	56 L / 1.98 cu ft	76 L / 2.68 cu ft
Height, Width, Depth	42.5 cm x 38.7 cm x 52 cm 16-3/4 in x 15-1/4 in x 20-1/2 in	46.1 cm x 41.6 cm x 57.8 cm 18-1/8 in x 16-3/8 in x 22-3/4 in
Weight	25.5 kg / 56 lb each	28.8 kg / 64 lb each

PW SERIES

	PW-2100	PW-2200
Design	Single driver, bass reflex, high-velocity low-turbulence resistive port, built-in Ultra-Class-D™ amplifier	Single driver, bass reflex, high-velocity low-turbulence resistive port, built-in Ultra-Class-D™ amplifier
Amplifier: High-Current, Discrete Output	400 watts RMS† (20 – 150 Hz @ < 0.1% THD), 1500 watts Peak††	400 watts RMS† (20 – 150 Hz @ < 0.1% THD), 1500 watts Peak††
Amplifier Design Features	Auto-On/Off, soft clipping	Auto-On/Off, soft clipping
Bass Driver	254-mm (10") RCR™ mineral-filled co-polymer polypropylene cone, 38-mm (1-1/2") 4-layer voice coil, dual spiders, AVS™ die-cast heatsink chassis	305-mm (12") RCR™ mineral-filled co-polymer polypropylene cone, 51-mm (2") bifilar 2+2-layer voice coil, dual spiders, AVS™ die-cast heatsink chassis
Low-Frequency Extension*	23 Hz (DIN)	18 Hz (DIN)
Subwoofer Cut-Off Frequency	Variable 50 Hz – 150 Hz	Variable 50 Hz – 150 Hz
Sub. / Sat. Phase Alignment	Variable 0° – 180°	Variable 0° – 180°
Line-Level Input	From Sub-Out / LFE-Out of receiver / processor or other line-level source	From Sub-Out / LFE-Out of receiver / processor or other line-level source
Line-Level Input Sensitivity	100 mV stereo; 200 mV mono	100 mV stereo; 200 mV mono
Line-Level Input Impedance	15k ohms	15k ohms
Line-Level High-Pass Output	To left / right amplifier input or left / right Main-In of receiver	To left / right amplifier input or left / right Main-In of receiver
Line-Level High-Pass Output Roll-Off	3rd-order 18 dB/octave at 80 Hz	3rd-order 18 dB/octave at 80 Hz
Internal Volume	42.8 L / 1.51 cu ft	79.5 L / 2.81 cu ft
Height, Width, Depth	38.1 cm x 34.9 cm x 51 cm 15 in x 13-3/4 in x 20-1/16 in	49.5 cm x 41.9 cm x 57.8 cm 19-1/2 in x 16-1/2 in x 22-3/4 in
Weight	19 kg / 42 lb each	31.4 kg / 69 lb each

† RMS power output indicated is with amplifier operation complying to FTC subwoofer amplifier measurement standards. †† Peak power indicated is the large short term output available to meet the instantaneous dynamic requirements of digital music and movies.
* DIN 45 500. Indicates -3 dB in a typical listening room. Listed heights include feet.

X-SERIES CONTROL UNITS

	X-10	X-20	X-30
Design	Built-in speaker-level high-pass filter	Built-in speaker-level high-pass filter	Built-in line-level high-pass filter
Subwoofer Cut-Off Frequency	—	Variable 35 Hz – 150 Hz, 3rd-order 18 dB / octave	Variable 35 Hz – 150 Hz, 3rd-order 18 dB / octave
Sub. / Sat. Phase Alignment	—	Variable 0° – 180°	Variable 0° – 180°
Line-Level Input	—	From Sub-Out / LFE-Out of A/V receiver / processor (Impedance: 20k ohms)	From left / right Pre-Out of A/V receiver, preamplifier or processor; or from Sub-Out / LFE-Out of A/V receiver / processor (Impedance: 20k ohms)
Line-Level High-Pass Output	—	—	To Main-In of A/V receiver / amplifier, selectable (50 Hz, 80 Hz, 120 Hz), 3rd-order 18 dB / octave
Speaker-Level Input	From main / satellite speaker output of A/V receiver / amplifier	From main / satellite speaker output of A/V receiver / amplifier	—
Speaker-Level High-Pass Output	To main / satellite speakers, 1st-order 6 dB / octave	To main / satellite speakers, 1st-order 6 dB / octave	—
Subwoofer Output	To line-level input of powered subwoofer (two outputs provided)	To line-level input of powered subwoofer (two outputs provided)	To line-level input of powered subwoofer (two outputs provided)
Speaker-Level Input / Line-Level Subwoofer Output	1-V stereo = 100 mV	1-V stereo = 1 V	—
S/N Ratio	Better than 100 dB	Better than 100 dB	Better than 100 dB
Height, Width, Depth	5 cm x 10 cm x 10 cm 1-7/8 in x 4 in x 4 in	5 cm x 19 cm x 10 cm 1-7/8 in x 7-1/4 in x 4 in	5 cm x 19 cm x 13 cm 1-7/8 in x 7-1/4 in x 5 in
Weight	0.7 kg / 1.5 lb each	1.1 kg / 2.5 lb each	1.2 kg / 2.5 lb each