#### HPR Series Powered Loudspeakers

#### **Specifications**



The HPR Series offers performers the power, technology and legendary reliability of QSC amplification combined with the simplicity and convenience of powered loudspeaker systems. Whether your application is vocal reinforcement, dance music or full-tilt rock and roll sound, there's an HPR speaker system for you.

Every HPR model is built around a high-power, reliable QSC power module using the same top-quality components and design standards as QSC rack-mount amplifiers. Thick aluminum heat sink extrusions with deep fins provide mechanical strength and plenty of surface area to keep the module running cool. While many powered speaker amplifier modules use low-cost "chip amps", the HPR series features discrete component designs that deliver the best possible performance even when pushed to the limit. The power modules incorporate sophisticated signal processing functions carefully tailored to the loudspeaker system. Each amplifier channel includes its own limiting with the parameters individually optimized for the frequency band.

All HPR models are constructed of 13-ply birch. The speaker components are protected by a heavy 16 gauge perforated steel grille with a distinctive and professional appearance. A grille-mounted power LED may be disabled by means of a rear-panel switch when desired.

The bi-amplified 15" 2-way HPR152F is a versatile speaker that is at home in nearly any sound reinforcement setting. A high-power low-frequency driver with a 3" voice-coil provides extension down to 48 Hz. The 1.75" (diaphragm) compression driver on a 90° x 60° horn delivers smooth high-frequencies up to 20 kHz. The power module includes a 100 Hz high-pass filter (HPF) for use in subwoofer equipped systems.

The HPR153F 3-way loudspeaker is a great choice when the warmth, clarity and projection of a hornloaded midrange design is desired. The 15" lowfrequency driver provides extension down to 37 Hz while the 6" mid-range driver seamlessly handles the critical vocal region. A 1.4" (diaphragm) compression driver delivers brilliant top end response.



For high-level dance music or reinforcement of bass instruments and kick drum, an HPR series subwoofer will add low-frequency extension and power to any sound system. Both HPR subwoofers use a 700 watt QSC amplifier. Flexible input signal processing and connectivity allow the subwoofers to be used in systems consisting of a single sub and two tops or larger systems employing multiple subwoofers. The signal processing complement includes a stereo electronic crossover with XLR line-level outputs for connection to any powered two or three-way mid/high speaker.

When the requirement is for compact size and tight, punchy low-end, the single 15" HPR151W subwoofer is the answer. The HPR151W is capable of producing 133 dB peak SPL with frequency response down to 43 Hz and sound quality that rivals many 18" subwoofers. A top-mounted 35mm pole socket is provided.

The HPR181W single 18" subwoofer offers truly impressive low frequency extension and output. The 4" voice-coil driver produces 134 dB SPL peak, at 1 meter with frequency response down to 39 Hz. The HPR181W also includes a top-mounted 35mm pole socket and heavy-duty 3" casters to facilitate load-in and load-out.

#### **Key Features**

- The only portable powered speakers with legendary QSC amplifier power and reliability
- Amplifiers use discrete component designs (no "chip-amps")
- High continuous power: Subwoofers 700 watts, full-range models up to 600 watts total amplifier power
- Attractive and professional appearance
- Rugged 13-ply birch enclosures
- Tour-grade 16 gauge steel grilles
- Ergonomic handles with comfortable, non-slip grip
- Pole sockets accommodate 35mm
- Subwoofer models include stereo crossover with outputs for powered satellite speakers

# HPR Series Control Panels and Block Diagrams

#### HPR152F & HPR153F



#### HPR152F & HPR153F



#### HPR151W & HPR181W



Specifications subject to change without notice.

#### HPR151W & HPR181W

## HPR Series HPR152F, HPR153F, HPR151W, HPR181W Specifications

Configuration	HPR152F 15" 2-way	HPR153F 15" 3-way	HPR151W 15" subwoofer	HPR181W 18" subwoofer
	15" cone transducer with 3" voice coil	15" cone transducer with 3" voice coil	15" cone transducer with 3" voice coil	18" cone transducer with 4" voice coil
	1.75" diaphragm compression driver	6.5" horn loaded mid-range 1.4" diaphragm compression driver		
Frequency response (-6 dB)	53 Hz – 18 kHz	42 Hz – 19 kHz	47 Hz – 110 Hz	42 Hz – 110 Hz
Frequency range (-10 dB limit)	50 Hz – 20 kHz	38 Hz – 20 kHz	43 Hz – 140 Hz	39 Hz – 140 Hz
Nominal coverage, -6 dB	90° × 60°	90° × 40°	N/A	N/A
Maximum SPL (1 meter)	135 dB peak	133 dB peak	133 dB peak	134 dB peak
Amplifiers				
Power output	400W LF Class H 100W HF Class AB+B	400W LF Class H 100W MF Class AB+B 100W HF Class AB+B	700W Class H	700W Class H
Input impedance	$22k\Omega$ balanced/11k $\Omega$ unbalanced	$22k\Omega$ balanced/11k $\Omega$ unbalanced	$22k\Omega$ balanced/11k $\Omega$ unbalanced	$22k\Omega$ balanced/11k $\Omega$ unbalanced
Controls	Gain	Gain	Gain	Gain
	Low-cut filter	Low-cut filter	Low-cut filter	Low-cut filter
	Front LED On/Off	Front LED On/Off	Front LED On/Off	Front LED On/Off
	Power	Power	Power	Power
	Circuit breaker	Circuit breaker	Circuit breaker	Circuit breaker
			Phase	Phase
Indicators	Power	Power	Power	Power
	Signal	Signal	Signal	Signal
	Limit	Limit	Limit	Limit
Cooling	Convection	Convection	Convection	Convection
Amplifier protection	Thermal and output	Thermal and output	Thermal and output	Thermal and output
	Power limiting	Power limiting	Power limiting	Power limiting
Current consumption at 120 VAC (1/8 power EIA noise)	1.5A	1.8A	2.2A	2.5A
Enclosure	Painted Birch plywood	Painted Birch plywood	Painted Birch plywood	Painted Birch plywood
Finish	Black textured paint	Black textured paint	Black textured paint	Black textured paint
Grille	Powder coated 16 gauge steel	Powder coated 16 gauge steel	Powder coated 16 gauge steel	Powder coated 16 gauge steel
Connectors	Balanced female XLR line level input	Balanced female XLR line level input	Balanced female XLR line level inputs x 2 (L+R)	Balanced female XLR line level inputs $x \ge (L+R)$
	Balanced male XLR full range line level out	Balanced male XLR full range line level out	Balanced male XLR full range line level outputs x 2 (L+R) Male XLR low-cut line level	Balanced male XLR full range line level outputs x 2 (L+R) Male XLR low-cut line level
			outputs x 2 (L+R)	outputs x 2 (L+R)
Dimensions	19" W x 32" H x 18" D	19" W x 44.75" H x 18" D	22" W x 25" H x 20.75" D	23.5" W x 28" H x 23" D
	(485mm x 813mm x 455mm)	(485mm x 1137mm x 455mm)	(559mm x 635mm x 525mm)	(559mm x 711mm x 582mm)
Net weight	100 lbs. / 45.5 kg	118 lbs. / 54 kg	98 lbs. / 44.5 kg	127 lbs. / 58 kg
Available accessories	HPR COVER 152F HPR POLE 26	HPR COVER 153F	HPR COVER 151W HPR POLE 26	HPR COVER 151W HPR POLE 26

[1] Measured in half-space.

### HPR Series Enclosure Dimensions



#### HPR151W















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