- 2. Install an 8-mm rated forged eyebolt (not included) into the safety point.
- 3. Suspend the **subwoofer** from the eyebolts using rated fittings and steel cable.
- 4. Secure the **subwoofer** from the safety eyebolt using a rated fittings and steel cable.

4.5

Installing the transformer input panel - optional accessory

To install the transformer input panel, do the following:

1. Remove the **standard input panel**.



2. Disconnect the **standard input panel**.



3. Connect the **transformer input panel**.



4. Install the transformer input panel.



5. Install the **weather cover**, if applicable.

4.6

Installing the crossover input panel - optional accessory

To install the crossover input panel, do the following:

1. Remove the **standard input panel**.



2. Disconnect the **standard input panel**.



3. Connect the **crossover input panel**.



4. Install the **crossover input panel**.



5. Install the **weather cover**, if applicable.

5 Wiring

5.1 Standard input panel

5.1.1 Mono operation



Caution!

For mono operation only use either the first two pins or the last two pins of the FR/IN connector. Do not wire the amplifier to all four pins. May cause damage to the amplifier if connected improperly.

The amplifier, the subwoofer, and the speakers are wired for MONO operation. It is highly advisable to support the unit while these connections are being made. Connect all wires to the speaker at the back terminal plate observing proper polarity of the connections. After all connections are made test the complete system operation.

A: Full-range parallel out

B: STEREO/MONO switch set to mono.



5.1.2 Stereo operation

The amplifier, the subwoofer, and the speakers are wired for STEREO operation. It is highly advisable to support the unit while these connections are being made. Connect all wires to the speaker at the back terminal plate observing proper polarity of the connections. After all connections are made test the complete system operation.

A: Full-range parallel out

B: STEREO/MONO switch set to stereo.



5.2 Transformer input panel - optional accessory

5.2.1 Mono operation



Caution!

For mono operation only use either the first two pins or the last two pins of the FR/IN connector. Do not wire the amplifier to all four pins. May cause damage to the amplifier if connected improperly.

The amplifier, the subwoofer, and the speakers are wired for MONO operation. It is highly advisable to support the unit while these connections are being made. Connect all wires to the speaker at the back terminal plate observing proper polarity of the connections. After all connections are made test the complete system operation. The speakers must be set to 70V/100V mode.

A: STEREO/MONO switch set to mono.



Figure 5.1: Mono configuration 1

A: STEREO/MONO switch set to mono.



Figure 5.2: Mono configuration 2

5.2.2 Stereo operation

The amplifier, the subwoofer, and the speakers are wired for STEREO operation. It is highly advisable to support the unit while these connections are being made. Connect all wires to the speaker at the back terminal plate observing proper polarity of the connections. After all connections are made test the complete system operation. The speakers must be set to 70V/100V mode.

A: STEREO/MONO switch set to stereo.



5.3 Crossover input panel - optional accessory

5.3.1 Mono operation



Caution!

For mono operation only use either the first two pins or the last two pins of the FR/IN connector. Do not wire the amplifier to all four pins. May cause damage to the amplifier if connected improperly.

The amplifier, the subwoofer, and the speakers are wired for MONO operation. It is highly advisable to support the unit while these connections are being made. Connect all wires to the speaker at the back terminal plate observing proper polarity of the connections. After all connections are made test the complete system operation. The option shown is using 8 ohm speakers.

A: STEREO/MONO switch set to mono.

B: HI-PASS 4 OHM/8 OHM switch set to 8 ohm.



5.3.2 Stereo operation

The amplifier, the subwoofer, and the speakers are wired for STEREO operation. It is highly advisable to support the unit while these connections are being made. Connect all wires to the speaker at the back terminal plate observing proper polarity of the connections. After all connections are made test the complete system operation. Both options shown are using 8 ohm speakers.

A: STEREO/MONO switch set to stereo.

B: HI-PASS 4 OHM/8 OHM switch set to 8 ohm.



Figure 5.3: Stereo configuration 1



B: HI-PASS 4 OHM/8 OHM switch set to 4 ohm.



Figure 5.4: Stereo configuration 2

6 Troubleshooting

Problem	Possible Causes	Action
No Sound	Amplifier	Connect a known working test speaker to the amplifier outputs. If there is no sound, check all electronics are on, the signal routing is correct, the source is active; the volume is turned up, and so on. Correct/Repair/Replace as necessary. If there is sound, the problem is in the wiring.
	Wiring	Verify you have connected the correct wire pairs to the amplifier. Play something at low level through the amplifier (for example, from a CD player or tuner). Connect the test speaker in parallel with the malfunctioning line. If the sound has gone or is very weak, the line has a short in it (possibly a severe scrape, pinch, or staple puncture). If the sound level is normal the wire is open (possibly a cut wire or missed connection). Using the test speaker, move down the line and test each connection/junction until you find the problem and correct it. Observe proper polarity.
		Verify you have the inputs and outputs connected to the correct wires. If the subwoofer input panel is not correctly wired, there will be little or no sound. Observe proper polarity.
Poor Low- Frequency Response	Speakers Wired Out- of-Polarity	When two speakers are connected out of polarity (out of phase), the low frequencies will cancel each other acoustically. Carefully observe the wire markings or tracers on your speaker wires. Verify the amplifier (+) terminal is connected to the red speaker terminals and the amplifier (-) terminal is connected to the black speaker terminals.
	Improperly Wired Subwoofer Panel	Using a test speaker as described above, verify all amplifier and speaker wires are connected to their proper terminals with the correct polarity. Reversing just one set of amplifier wires can cut out all bass output from the subwoofer.
Intermittent Output such as, Crackling or Distortion	Faulty Connection	Check all connections at amplifier and speakers to ensure they are clean and tight. If the problem persists, it may be in the amplifier or wiring. See other actions above.
Constant Noise such as Buzzing, Hissing, Humming	Defective Amplifier or other Electronic Device	If the noise is present but no program material is playing, the likely cause is the signal chain in the electronics. Evaluate each component as necessary to isolate the problem.
	Poor System Grounding or Ground Loop	Check and correct the system grounding, as required.

7

Technical data

Frequency response (-10 dB):	33 Hz – 500 Hz ¹
Sensitivity:	94 dB ²
Max. SPL (Calculated):	120 dB (126 dB Peak)
Power handling:	400 W (1600 W Peak) Continuous Pink Noise (100 hours)
Low Z:	Yes
Nominal impedance:	(2) 8 Ω (stereo mode); (1) 4 Ω (mono mode)
Recommended High-Pass:	40 Hz (24 dB/octave)
Input transformer (70 V/100 V):	Optional accessory
Transformer taps:	Optional accessory
LF transducer:	Two 10 inch (254 mm)
Connectors:	Two removable locking 4-pin connector (Euroblock) – Input and output. Max. wire size 12 AWG (2.5 mm).
Environmental:	IP-54 (per IEC-60529); IP-65 with port covers
Color:	Black (RAL 9004) or white (RAL 9003)
Dimensions (H x W x D):	356 mm x 651 mm x 491 mm (14.0 in x 25.6 in x 19.3 in) ³
Net weight:	17.9 kg (39.5 lb) ³
Shipping weight:	21 kg (46.3 lb)
Included hardware:	(2) Subwoofer feet, Allen wrench, weather input cover,(8) screws for the weather input cover, (2) IP65 port covers, (12) IP65 port cover screws
Packaged quantity:	1

¹Half space (wall mounting).

 $^{2}\mbox{Half}$ space (on wall) averaged 50 Hz – 150 Hz, 1 W. $^{3}\mbox{Without U-Bracket}.$

7.1 Dimensions





Frequency response and impedance



Figure 7.1: Frequency response and impedance



Figure 7.2: Frequency response and impedance with cross-over

8

U-bracket dimensions - optional accessory

The U-bracket dimensions are not to scale and are for reference only.



Bosch Security Systems B.V.

Torenallee 49 5617 BA Eindhoven Netherlands www.boschsecurity.com © Bosch Security Systems B.V., 2017