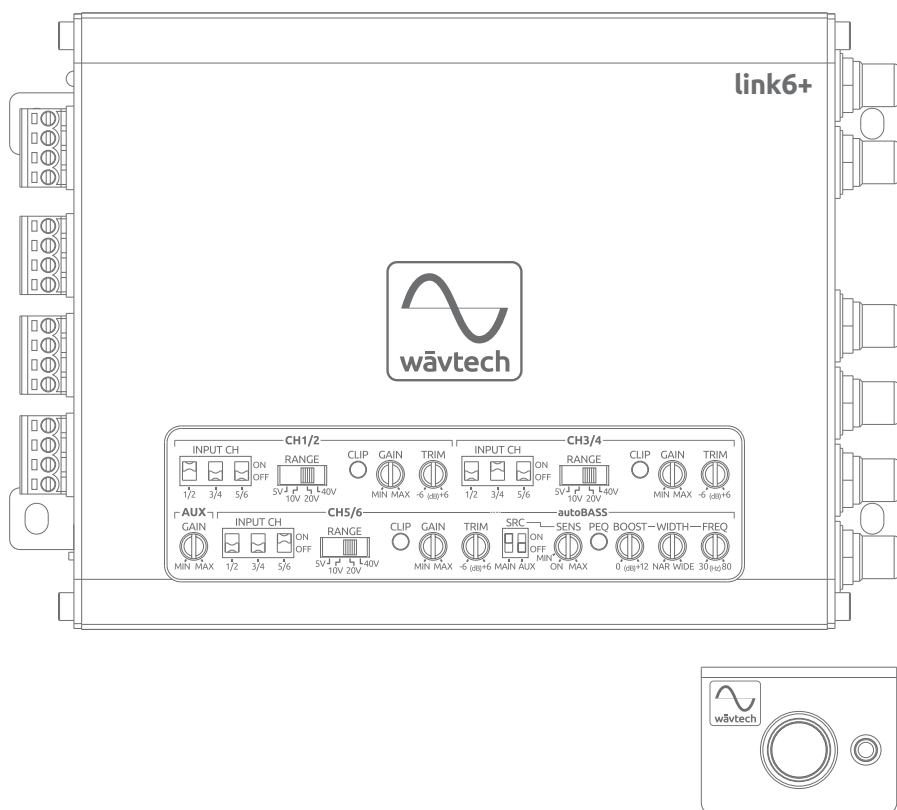


link6+

6-Channel LOC / Line Driver

Matrix Summing • PEQ + autoBASS • Multi-Function Remote

Owner's Manual



www.wavtech-usa.com

 WARNING	This symbol means important instructions. Failure to heed them can result in serious injury or death.
 CAUTION	This symbol means important instructions. Failure to heed them can result in injury or property damages.

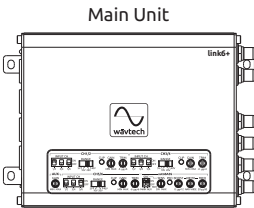
WARNING

- **DO NOT DRIVE WHILE DISTRACTED.** Any function that requires your prolonged attention should not be performed while driving. Always stop the vehicle in a safe location before performing any such function. Failure to do so may result in an accident.
- **KEEP THE VOLUME AT MODERATE LEVELS WHILE DRIVING.** Excess volume levels can obscure sounds such as emergency vehicle sirens or road warning signals and may result in an accident. Continuous exposure to high sound pressure levels may cause permanent hearing loss. Use common sense and practice safe sound.
- **FOR USE WITH 12V NEGATIVE GROUND VEHICLE APPLICATIONS ONLY.** Using this product other than in its designed application and specified operating voltage may result in fire, injury or product damage.
- **MAKE THE CORRECT WIRING CONNECTIONS AND USE PROPER FUSE PROTECTION.** Failure to connect wiring correctly or use appropriate fuse protection may result in fire, injury or product damage. Ensure proper fusing of all system power wiring and install a 1-ampere in-line fuse (not included) with the power lead to the unit's B+ power supply terminal.
- **DISCONNECT THE NEGATIVE BATTERY TERMINAL BEFORE INSTALLATION.** Failure to do so may result in fire, injury or damage to the unit.
- **DO NOT ALLOW CABLES TO BECOME ENTANGLED IN SURROUNDING OBJECTS.** Arrange wiring and cables to prevent obstructions when driving. Cables or wiring that obstruct or hang up on places such as steering wheel, brake pedals, etc. can be extremely hazardous.
- **DO NOT DAMAGE VEHICLE SYSTEMS OR WIRING WHEN DRILLING HOLES.** When drilling holes in the chassis for installation, take precautions so as not to contact, puncture or obstruct brake lines, fuel lines, fuel tanks, electrical wiring, etc. Failure to take such precautions may result in fire or an accident.
- **DO NOT UTILIZE OR CONNECT TO ANY PART OF VEHICLE SAFETY SYSTEMS.** Bolts, nuts or wires used in the brake, airbag, steering or any other safety-related systems or fuel tanks should NEVER be used for mounting, power or ground connections. Using such parts may disable control of the vehicle or result in fire.

CAUTION

- **STOP USE IMMEDIATELY IF A PROBLEM OCCURS.** Failure to do so may result in personal injury or damage to the product. Return it to your authorized Wävttech dealer.
- **HAVE AN EXPERT DO THE WIRING AND INSTALLATION.** This unit requires special technical skill and experience for wiring and installation. To insure safety and proper function, always contact the authorized dealer where you purchased the product to have it done professionally.
- **INSTALL THE UNIT SECURELY WITH SPECIFIED PARTS.** Be sure to use only the included parts and specified installation accessories (not included). Use of other than designated parts may damage this unit. Install the unit securely so that it will not come loose during a collision or sudden jolt.
- **ROUTE WIRING AWAY FROM SHARP EDGES AND MOVING PARTS.** Arrange cables and wiring away from sharp or pointed edges and avoid moving parts such as seat hinges or rails to prevent pinching or wear. Use loom protection where appropriate and always use a grommet for any wiring routed through metal.
- **NEVER RUN SYSTEM WIRING OUTSIDE OR UNDERNEATH THE VEHICLE.** All wiring must be routed, secured and protected inside the vehicle. Failure to do so may result in fire, injury or property damage.
- **INSTALL THE UNIT IN A DRY AND VENTILATED LOCATION.** Avoid mounting locations where the unit will likely be exposed to high moisture or heat without adequate ventilation. Moisture penetration or heat buildup may result in product failure.
- **REDUCE GAIN AND SOURCE VOLUME TO MINIMUM LEVELS FOR INITIAL SYSTEM TUNING AND BEFORE CONNECTION TO AN AMPLIFIER.** Ensure amplifier power is off before connecting RCA cables and follow proper system gain setting procedures. Failure to do so may result in damage to the amplifier and/or connected components.

Package Contents:

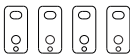


Terminals

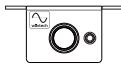


PWR/SPK

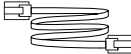
Mounting Tabs
(pre-attached)



Multi-Function Remote



Remote Cable
(16.4ft / 5m)



Accessories Required for Installation (not included):

- RCA Interconnects
- 18AWG Wire
- In-line Fuse Holder w/1A fuse
- Battery Ring Terminal
- Ground Terminal
- Wire Crimp Connectors
- Grommets and Loom
- Cable Ties
- Mounting Screws

Introduction

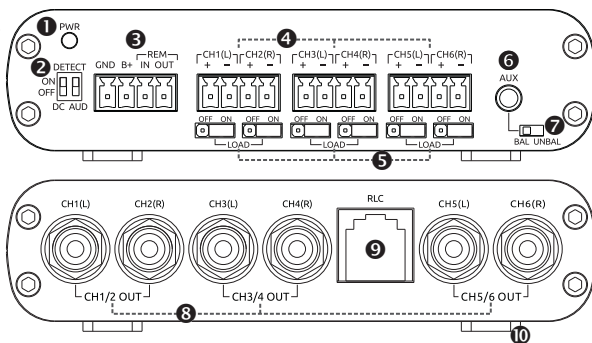
Welcome to Wävtch, exceptional mobile audio integration products for audiophiles. Our products are engineered to provide a truly remarkable listening experience. Built for the professional installer, our OEM integration and signal processor models are simply the best solution available for unlimited sound system upgrades with factory receivers or aftermarket sources.

Features

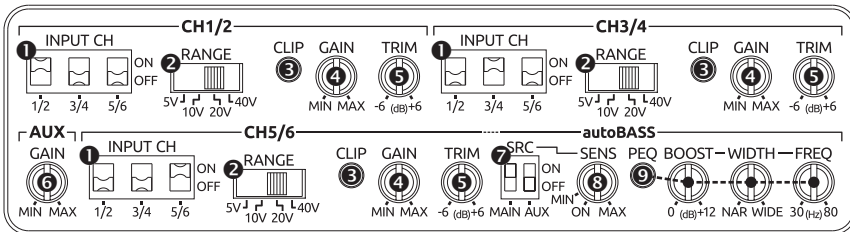
- 6-Channel LOC / Line Driver
- 6-Channel Matrix Summing Processor
- Parametric EQ with autoBASS™
- Multi-Function Remote
 - Main Master Volume & Sub Level
 - AUX Master Volume & Sub Level
 - Main & AUX Fader Control
 - Independent Source Settings Memory
- AUX 3.5mm Input
- Differential Balanced Inputs
- Low Impedance Outputs
- 4-Level Selectable Input Range
- 2/4/6-Channel Input with Independent Channel Select
- 2/3-Way Summing w/Retained Sub Level Control
- Channel Assignable Fader Control
- Auto Turn-On via DC-Offset and Audio Detect
- Generated Switched Remote B+ Output
- Adaptive Loading for OEM Load Detect Systems
- Stop/Start Vehicle Compatible
- Locking Detachable Power/Speaker Terminals
- Panel Mount RCA Jacks
- Compact Aluminum Chassis w/Detachable Mounting Tabs

Connections & Functions

- 1 Power Indicator:** This blue LED indicates when the link6+ is powered on. Once illuminated, there will be a short delay before audio signal output is enabled. During initial power connection, the LED may illuminate briefly.
- 2 Auto Turn-On Detect:** By default, the link6+ is set to detect both DC-offset and audio signal for turning itself on/off automatically. These switches allow either mode to be independently defeated for cases where only one turn-on mode is preferred or to bypass both modes when a switched B+ trigger is available and connected to the REM IN terminal.
- 3 Power Supply Terminal:** For battery positive (B+), chassis ground (GND), remote input (REM IN) and remote output (REM OUT) wire connections. A minimum of 18AWG wire is recommended for power and ground connections. Always protect the B+ power wire with a 1-amp fuse.
- 4 Main Input Terminals:** For up to six channels of wired speaker level or low level signal input connections to the source. Input signals ranging from 0.5Vrms to 40Vrms will produce up to 10Vrms RCA output from maximum to minimum gain, divided into four input sensitivity ranges (5V, 10V, 20V or 40V), selectable via the input RANGE switches (see Top Panel Controls on pg3).
- 5 Load Jumpers:** These jumpers allow the built-in adaptive loading to be defeated for each input channel. Loading is for OEM sources with load detect protection or Class-D sources, but may not be necessary with some factory amplified systems. Note that the loading must be defeated when connecting a low level source to the main inputs, such as an aftermarket head unit or DSP.
- 6 AUX Input Jack:** This 3.5mm stereo AUX input is for connecting an auxiliary source such as a smartphone or bluetooth receiver, but may also be used for other low level sources with a 3.5mm adapter. AUX may be selected as a separate source via the multi-function remote, or programmed as the primary source for AUX only systems. Input signals ranging from 0.5Vrms to 5Vrms will produce up to 10Vrms RCA output from maximum to minimum gain.
- 7 AUX Input Bal/Unbal:** This switch allows the AUX input to be changed from a balanced differential circuit to an unbalanced (grounded) circuit if required for a particular source to eliminate noise.
- 8 RCA Output Jacks:** These six channels of RCA outputs are for signal connections to a downstream processor or directly to amplifier(s). For a main source, signal output from CH1/2, CH3/4 and CH5/6 will depend upon their respective INPUT CH settings (see Top Panel Controls on pg3). For an AUX source, left/right stereo signals will be routed to all output channel pairs. Use quality interconnects to ensure stable connections and minimize the possibility for induced noise.
- 9 Remote Level Control Jack:** This RJ45 jack is for connecting the multi-function remote to the main unit with the supplied cable. A standard ethernet cable may also be used.
- 10 Mounting Tabs:** These mounting tabs are for securing the link6+ during installation with screws or cable ties. They are removable if the unit can be safely secured by another method.



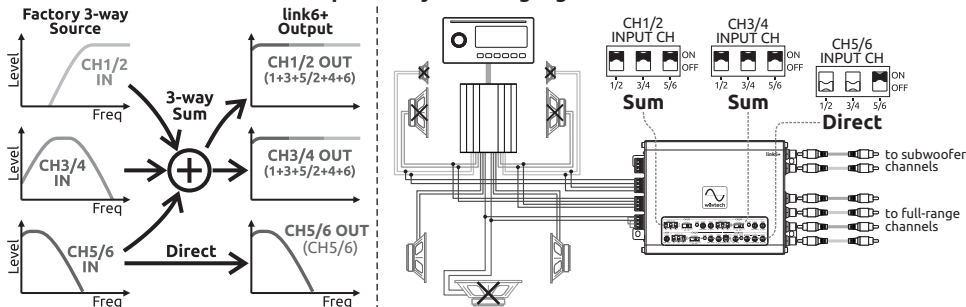
Top Panel Controls



1 Input Select: These dip switches are for selecting which input signal is routed to each channel pair's output stage. They provide for 2-channel, 4-channel or 6-channel input, as well as various independent and summed input configurations:

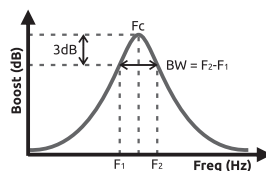
- **Copy:** If selecting a channel pair other than the direct signal input, the signal will be copied from after the selected channel pair's gain stage and routed to the outputs of the present channel pair. This bypasses the gain adjustment of the present channel pair, so the output is controlled by the other channel pair's gain. If independent gain is desired, use jumper wires at the speaker input terminals and select the channel's direct input instead.
- **Direct:** When the channel pair's own input signal is selected, this will route its input signal directly to its gain and output stages.
- **Sum:** If more than one channel pair is selected for a present channel pair, those signals will be summed from after their respective gain stages and the combined signals will be routed to its outputs. For example, if CH3/4's input select is set to 1/2 and 3/4, CH1+3 will be sent to the CH3(L) output, and CH2+4 will be sent to the CH4(R) output. For vehicles without an available full-range signal, this function can be used to sum pre-filtered signals together to create a useable frequency range output from up to a 3-way factory system. Front and rear channels may also be summed together to ensure output will always retain at least 50% signal regardless of fader changes made at the source (a.k.a. "Never-Zero"), such as for CH5/6's output for a subwoofer amp. Also summing can be used to reduce chime volume when mixed with channel pairs that do not have the chime.

Example: 3-way Summing Signal Flow



- 2 Input Range:** Four input sensitivity ranges are provided for each channel pair to optimize source volume range while minimizing the gain required to achieve full output for best signal-to-noise. Choose the input range that will accommodate the source's maximum output signal voltage without excessive clipping, 5V or 10V for low level (RCA) inputs, and 10V, 20V or 40V for speaker level inputs.
- 3 Clipping LED:** These yellow LEDs indicate when the output signal from each channel pair is at maximum level before clipping (distortion) occurs, whether the source is Main or AUX input. Each will be dimly lit just before the onset of clipping and full bright at clipping. Since the link6+ can produce up to 10Vrms output before clipping, it is likely that gain(s) will need to be reduced below the illumination point(s) to match your amplifier(s) maximum input capability or optimize source volume range. Note that the AUX input is controlled by its own unified gain that affects all output channel pairs equally and will illuminate all LEDs simultaneously when clipping.
- 4 Gain:** These gain adjustments are for matching each output channel pair's signal level with the source's maximum unclipped signal range and the maximum input capability of connected amplifier(s). When summing channels together, these gain adjustments should be used for matching relative output levels so that the combined signals sum to the desired frequency response, usually as flat as possible. If output volume difference between channel pairs is desired, use the Level Trim. If more difference is needed, try to minimize any applied amplifier gain for best S/N.

- 5 **Level Trim:** When using copy or summing functions (after setting gains for the desired frequency response), these adjustments allow the output of each channel pair to be increased or decreased independently by up to +/-6dB for final volume differences between them while preserving the summing ratio established by the gains. This allows downstream processor or amplifier gains to be turned all the way down for simplified adjustment and maximum S/N. Note that increasing level trim of channels already at maximum output will require re-adjusting gains lower to avoid clipping.
- 6 **AUX Input Gain:** This adjustment sets the gain for all output channels from a low level source connected to the AUX input jack. In systems using both the link6+'s main inputs and auxiliary input, this gain adjustment is primarily for matching the AUX output level with that of the main source. It is recommended to set the main input gains first, particularly when summing.
- 7 **autoBASS Source:** These switches set CH5/6 Main input and/or AUX input to be the source signal that is detected by the autoBass circuit for automatically activating the PEQ. It is set to Main input by default. Note that there is only one SENS adjustment, so if detecting both sources, gains should be adjusted to achieve similar output volume between Main and AUX at which the PEQ is activated.
- 8 **autoBASS Sensitivity:** This SENS adjustment sets the signal detection threshold that activates CH5/6's parametric EQ section automatically, or the dial may be rotated fully counter-clockwise to the ON position so the PEQ is always on for traditional bass tuning. For factory systems or sources that have bass roll-off at a certain volume, autoBASS can be set to automatically compensate or enhance bass near that volume and above for a more seamless bass experience with aftermarket sound system upgrades. Note that the sensitivity range scales with the selected input range and gain adjustment for CH5/6, so if CH5/6 gain is changed, SENS will need to be re-adjusted for keeping the same trigger threshold. Follow the basic steps below for setting autoBASS:
 - Step-1:** Set the source's volume to where the bass roll-off normally occurs with music.
 - Step-2:** Starting with SENS at minimum (just above the ON click), slowly turn up the dial (clockwise) until the PEQ LED illuminates. This indicates the PEQ is now on, activated by the signal.
 - Note:** There is up to an 8sec turn-off delay, so if you need to re-adjust, first decrease the dial to below the trigger point and wait for the LED to turn off before increasing again.
 - Step-3:** Now that autoBASS has activated the PEQ, adjust the Boost, Width and Freq dials to appropriately compensate for the bass roll-off or desired bass tuning.
- 9 **Parametric EQ:** This blue LED will be illuminated when the PEQ is activated, and this section provides full adjustment over all parameters of a single EQ band, including boost, width and frequency. Unlike traditional bass boost or a bass shelf, a parametric EQ provides the tuning flexibility required for correcting bass roll-off and differences between vehicles, subwoofers and enclosures.
 - **Boost:** This adjustment sets the amount of boost at the center frequency (F_c) of the parametric EQ band from 0dB up to +12dB. Note that adding boost may cause the output to clip or over-drive the connected amplifier or subwoofer, so it may be necessary to re-adjust the gain, subsonic and low-pass filters.
 - **Width:** Also known as Q, width sets the bandwidth (BW) of boost for the parametric EQ band. A wide setting will include more adjacent frequencies for a broad boost, while a narrow setting will only boost frequencies close to the chosen center frequency (F_c). The range of Q adjustment is 1.5 (wide) to 5 (narrow). To calculate the bandwidth between the -3dB points that are boosted by the EQ band, use the formula $BW = F_c/Q$.
 - **Frequency:** This adjustment allows the center frequency (F_c) of the parametric EQ band to be set between 30Hz and 80Hz. Note that boosted frequencies that overlap with the subsonic and low-pass filters will be attenuated from the chosen cut-off frequencies.



Multi-Function Remote

- 1 Remote Housing:** This 2-piece housing design provides both convenient mounting and simple disassembly for customization. If the housing is removed, it is recommended to protect the exposed PCB with heat shrink. For LED relocation, carefully release the LED from the back of the snap ring, then push the snap ring through to the front to remove. Follow the reverse process for re-mounting.
- 2 Rotary Encoder:** This knob can adjust CH1-6 Master Volume, Sub Level (CH5/6), Fader (when programmed) and Source Select (Main/AUX). The factory default setting is System Type-1 for Sub Level only for a Main source, while other knob configurations for each source can be enabled via the dip-switches at the back of the remote (see **4** below). For basic operation and fader programming, see the description below. For full operation and programming details, see the software flow chart for each System Type on the next page.
- Basic Operation:** To toggle between Main and AUX sources, short-press the knob. To enter the selected source's Sub Level adjustment, press for 1sec (or just rotate if already knob priority). To reset sub level to 0dB (max), long-press for 5sec while LED is flashing in Sub Level adjust mode. To access the fader (after programmed), after entering Sub level adjust mode, press again for 1sec while LED is still flashing, LED will then flash purple for Fader Adjust mode. To reset Fader to the middle (Front = Rear), long-press for 5sec while LED is still flashing purple. To reset everything to factory defaults, long-press the knob for >10sec.
- Fader Programming:** To activate Fader, first enter Sub Level adjust mode for the selected source. Then press for 1sec to enter Fader Mode, LED will flash purple/red (from Main), or purple/blue (from AUX). Press again for 2sec to enter Fader CH List, which will load the default Fader CH Assignments for the first time (CH1/2=Front, CH3/4=Rear, CH5/6=Sub), and the LED will be flashing purple. Note that this will not be saved unless the knob is pressed again for 2sec to exit. While in Fader CH List, rotating the knob will cycle through the channel pair list (1-flash = CH1/2, 2-flashes = CH3/4, 3-flashes = CH5/6) where the LED color indicates what group it's assigned to (Red = Front, Blue = Rear, Purple = Sub). Note that only CH5/6 can be assigned as Sub, but it can be changed from Sub to Front or Rear. To change the channel assignment, rotate through the channel list, short press on the desired channel pair, then rotate the knob to the desired group. Short press to enter and go back to the channel list, and then a 2sec press to store and exit.
- 3 Source/Mode LED:** Depending upon which system type is selected (see **4** below), this LED will indicate which source or mode is currently active. There are 3 LED colors (Red, Blue and Purple) with various flashing patterns for menu context. In the default system Type-1, the only LED indication is Solid Red, unless Fader is programmed. For the other system types, Solid Red indicates Main source and Solid Blue is for AUX source. Flashing indicates Sub Level adjust mode is active for the current source, which will timeout after 5 seconds if no adjustments are made.
- 4 System Type Select:** These dip-switches are for selecting one of four available system types for knob functions and priority. System Type can be changed at any time, but note that each has its own memory for each source, so any level changes or programming will start from default if changed. Fader control may be programmed for any of the system types below.



Type-1: Main Sub Level (default)
For systems where only subwoofer level control is needed with a Main source. In this setting, the knob's short-press source select function is disabled to prevent accidental selection.



Type-2: Main Sub Level, AUX Volume & AUX Sub Level
For systems where the factory radio is master volume for Main input and an auxiliary source is connected to the link6+'s AUX input. For the Main source, the knob adjusts sub level. When AUX is selected, knob priority is volume while sub level mode can be accessed with a 1sec press.



Type-3: AUX Volume & AUX Sub Level
For stand-alone applications where only the link6+'s AUX input is used. The knob adjusts master volume, and sub level can be accessed with a 1sec press. Source select function is disabled.



Type-4: Main/AUX Volume & Sub Level
This setting is for systems that need master volume for a Main source, and may also have an AUX source connected the link6+. All knob functions are enabled, where knob priority is master volume for either source, and sub level mode can be accessed with a 1sec press.

- Remote Level Control Jack:** This RJ45 jack is for connecting the remote to the RLC port on the main link6+ unit with the supplied cable. A standard 8-conductor ethernet cable may also be used.

Note: If the remote is connected, link6+ will remember all volume, sub level and fader settings for each source when last powered on, even if the battery was disconnected.

Remote Operation & Programming Guide

Source	Knob Function	Type-1	Type-2	Type-3	Type-4
Main	Master Volume	-	-	-	knob direct
	Source Select	-	short press	-	short press
	Sub Level Mode	knob direct	knob direct	-	1sec press
	↳Reset Sub Level (0dB)	↳5sec press	↳5sec press	-	↳5sec press
	↳Fader Mode	1sec press	1sec press	-	↳1sec press
	↳Fader CH List	↳2sec press	↳2sec press	-	↳2sec press
	↳Edit CH Assignment	↳short press	↳short press	-	↳short press
	↳Return to CH List	↳short press	↳short press	-	↳short press
	↳Store Fader Settings	↳2sec press	↳2sec press	-	↳2sec press
	↳Reset Fader (center)	↳5sec press	↳5sec press	-	↳5sec press
	Factory Reset	10sec press	10sec press	-	10sec press
AUX	Master Volume	-	knob direct	knob direct	knob direct
	Source Select	-	short press	short press	short press
	Sub Level Mode	-	1sec press	1sec press	1sec press
	↳Reset Sub Level (0dB)	-	↳5sec press	↳5sec press	↳5sec press
	↳Fader Mode	-	↳1sec press	↳1sec press	↳1sec press
	↳Fader CH List	-	↳2sec press	↳2sec press	↳2sec press
	↳Edit CH Assignment	-	↳short press	↳short press	↳short press
	↳Return to CH List	-	↳short press	↳short press	↳short press
	↳Store Fader Settings	-	↳2sec press	↳2sec press	↳2sec press
	↳Reset Fader (center)	-	↳5sec press	↳5sec press	↳5sec press
	Factory Reset	-	10sec press	10sec press	10sec press

Note: Short press is <0.5sec, 1sec press is >0.5sec to <2s, 2sec press is 2sec to <5sec and 5sec press is 5sec to <10sec.

Installation & System Wiring

It is important to read this manual thoroughly before starting your installation and always plan accordingly. Before installing any Wävttech product, disconnect the negative (ground) wire from the vehicle's battery to avoid damage to the vehicle or yourself. Following all guidelines will help provide years of enjoyment with your Wävttech link6+ audio interface.

Ground Connection (GND): The GND terminal must be connected to a metal part of the vehicle that is welded to the vehicle body with ground plane back to the main battery ground attachment point (a.k.a. chassis ground). This wire should be a minimum of 18AWG and as short as possible to minimize potential for noise to enter the system. The chassis ground connection point should have all of the paint removed and be scuffed to the bare metal. The ground wire should be terminated by a ground specific interlocking terminal such as an EARL terminal or a ring terminal securely bolted to the vehicle with star or lock washer and nut to prevent from coming loose. Avoid using factory ground points to reduce the chance of induced noise from other components.

Power Connection (B+): The constant power connection should be made at the vehicle battery when practical. For direct battery connection, a 1-amp fuse must be installed in-line with the power wire within 18" of the battery and securely connected to the positive battery terminal bolt with a ring terminal. If connecting to another available constant B+ power source, a 1-amp in-line fuse must be added at the connection point. The power wire should be a minimum of 18AWG. Do not install the fuse until all other system connections have been made.

Speaker Level Inputs (SPK): Connect the speaker wires from the source unit to corresponding input terminals at the interface. Always ensure correct polarity of each channel when making these connections, as failure to do so can severely effect sound performance.

Remote Input (REM IN): If a switched B+ or remote trigger wire is available, it is recommended to connect it to the REM IN terminal. If unavailable, the link6+ also has an auto turn-on circuit that simultaneously detects audio signal from SPK and AUX inputs as well as DC-offset from SPK inputs. While auto turn-on will work well in most applications, a switched trigger may be required for satisfactory results under certain vehicle or system conditions. Additionally, DC-offset and/or audio signal detect functions can be independently defeated via the DETECT switches if necessary.

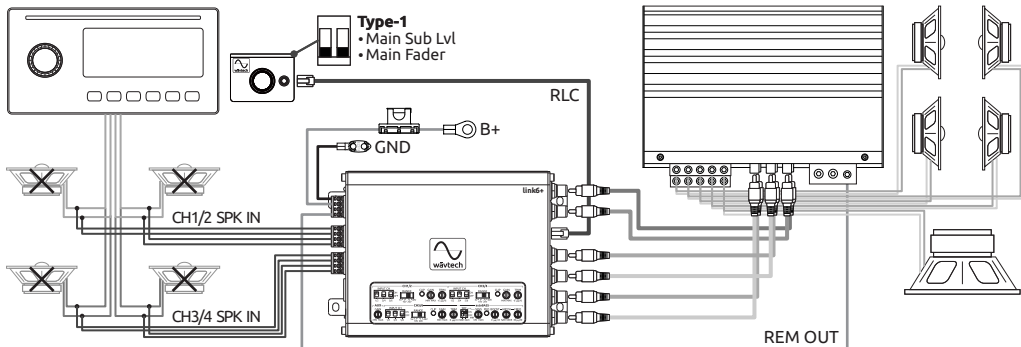
Remote Output (REM OUT): Use the remote output for connecting a trigger wire to turn on amplifiers and other components. This switched B+ output is generated internally by the interface when turned on either by REM IN or auto sensing, and will provide over 500mA continuous current for external devices.

Auxiliary Input (AUX): Connect the auxiliary low level source to the 3.5mm AUX input jack with a quality 3-conductor stereo 3.5mm audio cable. If the source has RCA outputs, an adapter will be required. Ensure the audio cable is routed away from power wires to minimize potential for induced noise.

Remote Level Control (RLC): Connect the multi-function remote to the link6+'s RLC port with the supplied 16.4ft/5m cable. Plan cable routing before mounting the remote to ensure proper length. If additional length is required, a standard 8-conductor CAT5 or CAT6 ethernet cable or extension may be used. The cable may also be shortened and re-terminated with a RJ45 connector.

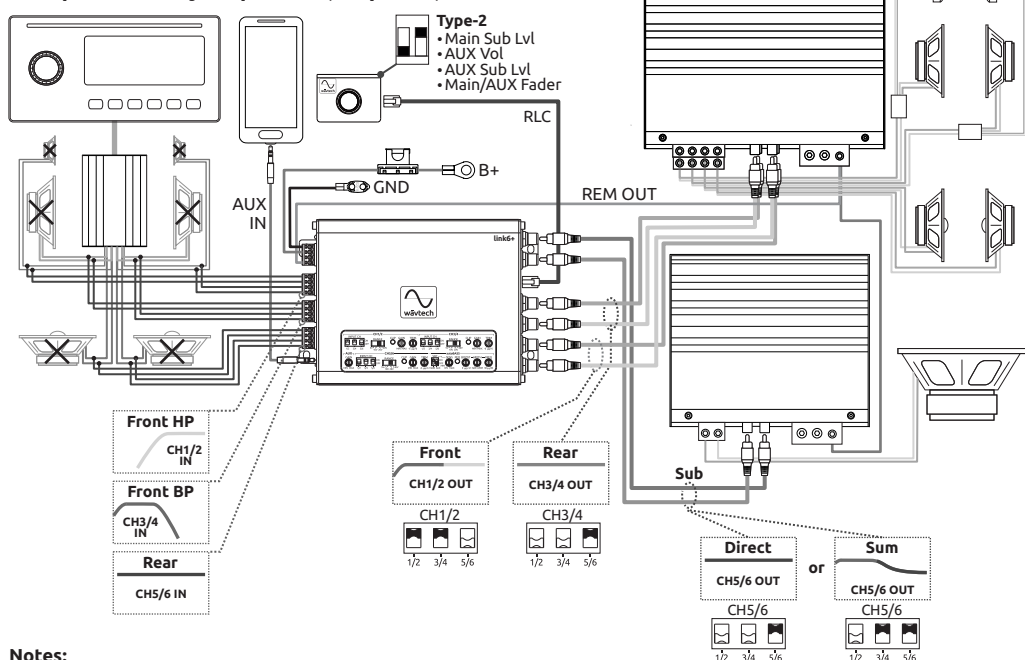
System Examples

Example-1: Factory Radio (4-in/6-out)



Note: For systems where sub level control is only needed for a Main speaker level source, select system Type-1 (factory default) at the multi-function remote. For a 4-channel source as shown, there are multiple input configurations possible with the link6+. This particular 5-channel front/rear/sub system could benefit from retaining fader, as well as a "Never-Zero" subwoofer output. To achieve this, set CH1/2 and CH3/4 to direct input, while setting CH5/6 to sum 1/2 (front) and 3/4 (rear) channels together. Note that this way CH5/6's signal comes from after the gains of CH1/2 and CH3/4, so Level Trim would be used to adjust CH5/6's output further. Or for independent gain, use external jumper wires from CH1/2 or CH3/4 to CH5/6, and set CH5/6 to direct input instead.

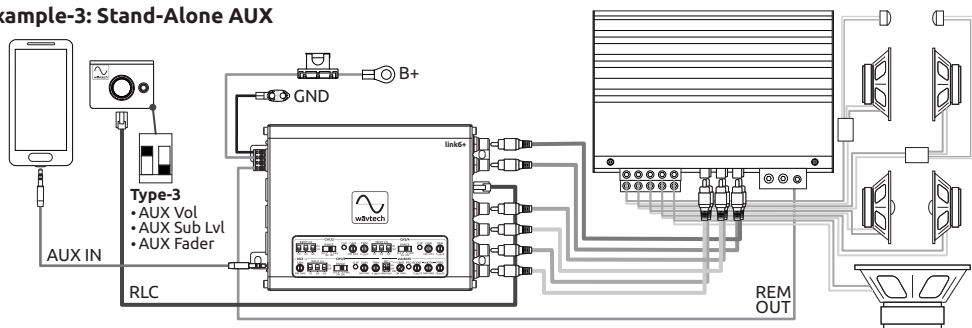
Example-2: Factory Amp + AUX (6-in/6-out)



Notes:

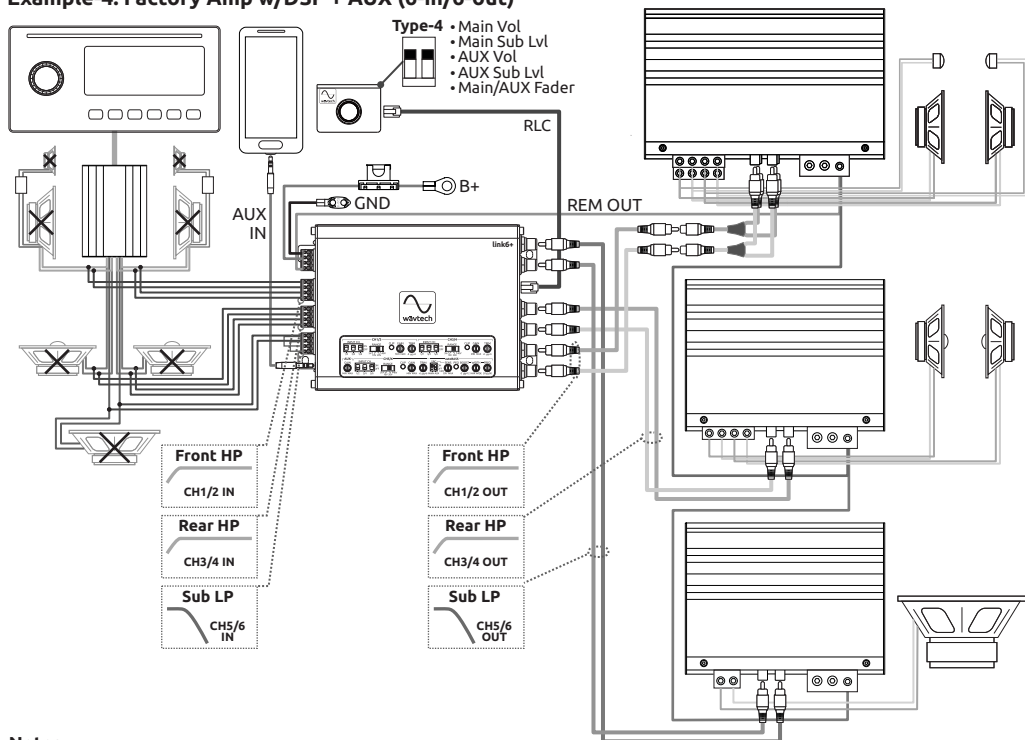
- For systems with a Main source that will serve as the master volume control, and an auxiliary source is connected to the link6+'s AUX input jack, select system Type-2 at the multi-function remote. This provides AUX volume control as well as independent sub level (CH5/6) adjustment for both main and AUX sources, and optional fader behavior.
- As a typical factory amplified system example, a front 2-way signal needs to be summed to full-range for an aftermarket component set with passive crossovers. There are a few options for what to do for the rear and subwoofer channels, depending upon frequency content and desired fader behavior:
 - In this example the factory front door signal content is sufficient for components but its bass rolls off a bit too high for a sub, whereas the rear channel has more bass content. Therefore CH5/6's input select switch can be set to direct or sum, where summing will help reduce subwoofer volume changes if the factory fader is adjusted later.
 - If the factory system has a volume dependent bass roll-off that kicks in at a specific volume, use the autoBASS function and PEQ to compensate as needed.

Example-3: Stand-Alone AUX



Note: For stand-alone systems where only the AUX input is used, select system Type-3 at the multi-function remote. This disables the remote's source select function and sets knob priority to master volume control for AUX input. For 2-channel systems like this, it may be desirable to use the link6+'s optional fader capability. Note that portable devices such as smartphones or bluetooth dongles typically have an output voltage of 1Vrms or less, so it is recommended to maximize the device's unclipped output level and use the link6+'s remote as the system's master volume.

Example-4: Factory Amp w/DSP + AUX (6-in/6-out)



Notes:

- For factory amplified systems with more extreme volume dependent DSP effects such as EQ or limiters, or for a stand-alone system where the source volume will not be accessible after installation, select system Type-4 at the multi-function remote. This enables all remote functions and sets knob priority to master volume control for both Main and AUX inputs. Once the system is tuned for a specific source volume where the factory signal is optimized (make note of the volume setting), leave it set there and use the multi-function remote as the system's sole master volume.
- In this example, all factory amplifier signal outputs are useable without summing so all INPUT CH switches are set to direct, since the front and rear high-pass crossover points are low enough for aftermarket speakers and it has a dedicated subwoofer channel. Note that when using the link6+'s AUX input for an auxiliary source in addition to the Main input, all speakers must be powered by amplifier(s) connected to link6+'s RCA outputs and not powered directly by the original factory system.

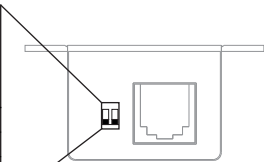
Specifications

Frequency Response	Max Flat (+0/- 1dB)			<10Hz to >100kHz	
Input Impedance	Main Input	Load On/Off		≤20Ω- 180Ω / 20KΩ	
	AUX Input			50KΩ	
Input Sensitivity	Main Input	GAIN Max- Min	5V Range	500mV - 5V	
			10V Range	1V - 10V	
			20V Range	2V - 20V	
			40V Range	4V - 40V	
	AUX Input	GAIN Max- Min	500mV - 5V		
Max Input Voltage	Main Input	w/Load On	Peak, <5sec	40V	
Output Impedance				<50Ω	
Max Output Voltage	at 1% THD+N			>10V	
THD+N	Main/AUX Input		20-20kHz	<0.04% / <0.04%	
S/N	Main/AUX Input	at 2V Output	CH1-4	-102dBA / -103dBA	
			CH5/6	-99dBA / -100dBA	
		at 4V Output	CH1-4	-108dBA / -109dBA	
			CH5/6	-105dBA / -106dBA	
		at 10V Output	CH1-4	-116dBA / -117dBA	
			CH5/6	-113dBA / -114dBA	
Remote Level Control	Master Volume	Max- Min		0dB to -80dB	
	Sub Level (CH5/6)	Min- Max Δ vs. Mstr Vol		0dB to -30dB	
	Fader (CH assignable)	F/R Min- Max		0dB to -50dB	
Parametric EQ	Boost			0dB to +12dB	
	Width (Q)			1 to 5	
	Frequency (Fc)			30Hz - 80Hz	
autoBASS™	Turn-on Sensitivity	SENS Min- Max (total all ranges)		16mV-36V	
	Turn-off delay			up to 8sec	
Turn-On Trigger	Remote	via REM IN		10V	
	DC-offset Detect	via Main Input		1.5V	
	Audio Signal Detect	via Main Input	1kHz/100Hz	45mV / 120mV	
		via AUX Input	1kHz/100hz	10mV / 40mV	
		Turn-off Delay		up to 60sec	
Remote Output	Output Current Capacity			>500mA	
	Output Voltage	w/500mA Load			within 5% of B+
Current Draw	Max Draw	not incl. REM OUT			450mA
	Sleep Current			2.4mA	
Supply Voltage	B+ Power On	Startup (un-mute)			10V
	B+ Operating Range	LVC (after startup) to OVP			7.2V - 16.5V
Product Dimensions	Main Chassis (HxWxL not incl. tabs, terminals, jacks)			1.1"x4.7"x5.8"	
				29x120x148mm	
	Remote Housing (HxWxL not incl. tabs, knobs)			1.1"x1.5"x1.8"	
				28x38x45mm	

Note: All specifications are subject to change without notice

Remote System Type Settings

		Type-1	Type-2	Type-3	Type-4
Source	Knob Function				
Main	Master Volume	—	—	—	✓
	Sub Level (CH5/6)	✓	✓	—	✓
	Fader (optional)	✓	✓	—	✓
AUX	Master Volume	—	✓	✓	✓
	Sub Level (CH5/6)	—	✓	✓	✓
	Fader (optional)	—	✓	✓	✓



Warranty & Service Care

Wävtech warrants this product to be free from defects in material and workmanship for a period of one (1) year when purchased from an authorized Wävtech retailer within the United States. This warranty will be extended to a period of two (2) years when the installation is performed by an authorized Wävtech retailer. A valid sales receipt is required to verify eligibility of purchase and installation.

This warranty is valid only to the original purchaser and is not transferrable to subsequent parties. This warranty is void if the product serial number has been altered or removed. Any applicable implied warranties are limited in duration to a period of express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether expressed or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties, therefore these exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

If your product needs service, you should contact Wävtech Customer Service to receive a Return Authorization (RA) Number. Any product received without an RA number will be returned to sender. Once your product is received and inspected by customer service, Wävtech at its sole discretion, will repair or replace it with a new or remanufactured product at no charge. Damage caused by the following is not covered under warranty: accident, abuse, failure to follow instructions, misuse, modification, neglect, unauthorized repair or water damage. This warranty does not cover incidental or consequential damages. This warranty does not cover the cost of removing or reinstalling the product. Cosmetic damage and normal wear are not covered under warranty.

For Service within the United States:

Wävtech Customer Service: (480) 454-7017
Monday – Friday, 8:30am to 5:00pm MST

Serial Number: _____
Installation Date: _____
Place of Purchase: _____

Important Notice for International Customers:

For products purchased outside the United States of America or its Territories, please contact your local distributor concerning specific procedures for your country's warranty policy. International purchases are not covered by Wävtech, LLC.

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