FlagShip

Installation Guide / User Manual Effective: January 1st, 2016

Please go to our website for the most current version of the FlagShip Installation and Instruction Manual at www.schaller-electronic.com, under products/producthelp/FlagShip.

Dort finden Sie auch eine deutsche Übersetzung.

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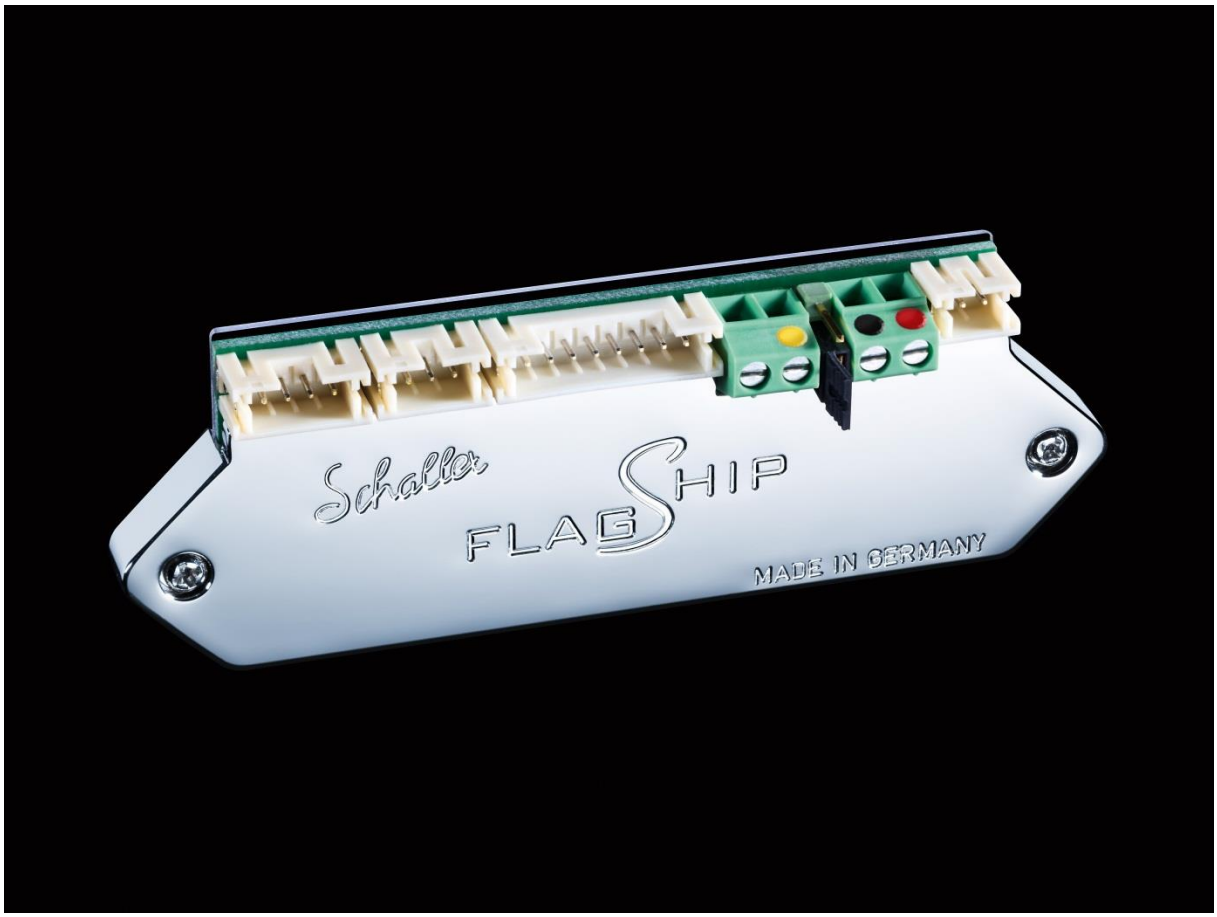
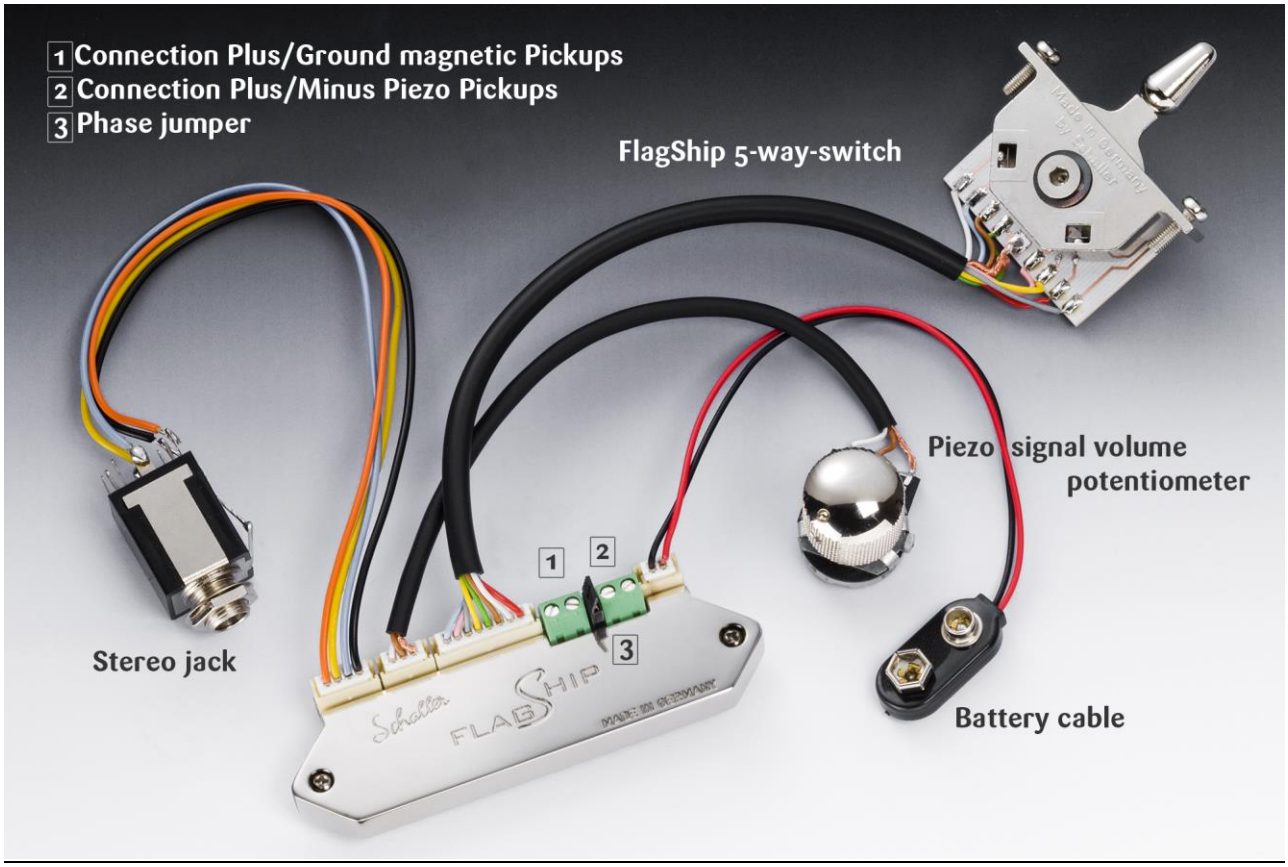


1. FlagShip Preconfiguration

- Stereo jack

- Piezo volume control
- 5-way Megaswitch or 3-way rotary switch
- Battery cable

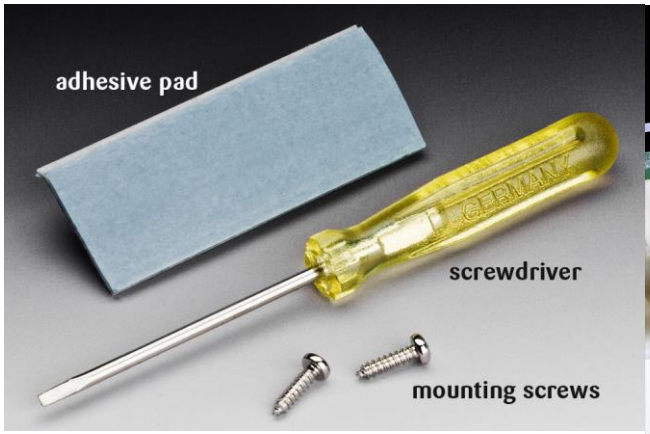


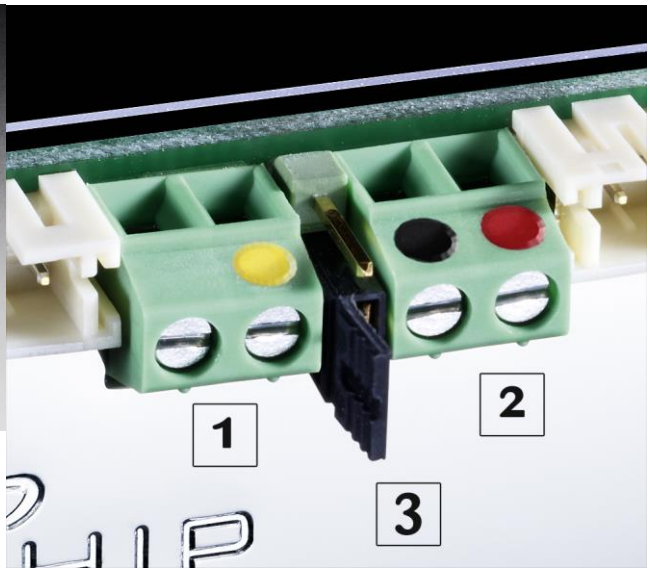
2. Scope of Supply

1.) FlagShip preconfigured (see above)

2.) Two screws and one adhesive pad for fixing the FlagShip unit into place

3.) Screwdriver for green crimp connectors





3. Installation (if required please seek assistance from a guitar builder or technician)

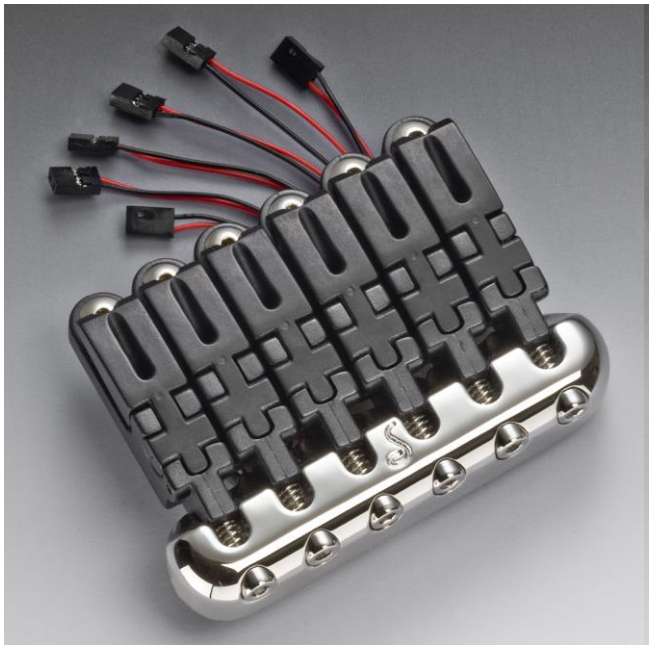
1.) Attach the FlagShip unit with the two screws supplied or alternatively with the adhesive pad provided. If necessary, drill suitable holes for the screws in advance.

2.) Install the Stereo jack
3.) Position and install the 5-way Megaswitch (switch position 1 in the direction of the bridge, i.e. position the circuit board 'away from the strings') 3-way rotary switch.
4.) Position and install the tone potentiometer
5.) Connect the plus and minus cables of the piezo bridge to the crimp connector (see below)
6.) Connect the plus and minus cables of the magnetic pickup to the crimp connector (see below)
7.) Attach the Phase jumper plug
8.) Connect the battery

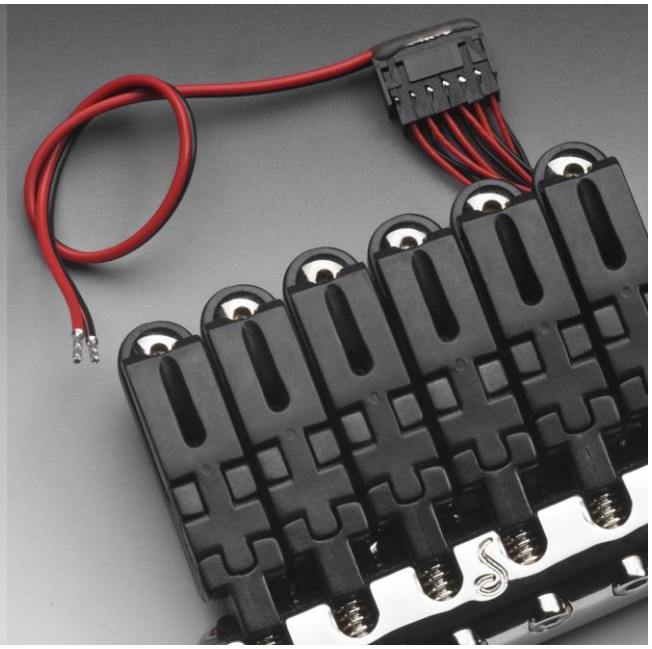
For the Hannes Piezo:

The plus and minus cable of each of the string saddles/piezo elements are bundled in the crimp connector. Simply plug the crimp connector into the multi-connector/adapter (Cables can be assigned (i.e. plugged) at random). Next plug both the plus and the minus cables of the adapter into their corresponding crimp connector on the FlagShip preamp. Screw tight with the small screwdriver provided.

Plug the crimp connector into the adapter. Make sure plus (red) and minus (black) are both on the correct side of the adapter (one side only), i.e. red to red and black to black. See image below.



Hannes Piezo bridge with crimp connector



Adapter socket for the Hannes Piezo

<u>On item 5):</u>

Piezo positive (red multi-connector of the Hannes bridge) to the crimp connector marked with a red dot.
Piezo negative (black multi-connector of the Hannes bridge) to the crimp connector marked with a black dot.
Please note: piezo negative is ***not*** the general shield of the guitar!

<u>On item 6):</u>

Magnetic positive on the crimp connector is marked with a yellow dot.
Magnetic shield on the crimp connector is *not* marked with a dot.

For magnetically positive and negative poles, for example, the cable that was soldered to the jack plug socket can be used. The following steps should be taken:

- Positive and negative poles that come from the pickup are to be removed from the jack plug socket by heating the solder connections.

- Plug this cable into the Flagship connector ("yellow" and "green/without" colour markings).
- Install the new jack plug socket that is delivered with the Flagship and plug the cable connected to the amplifier into the new cable socket.

On item 7):

The jumper can be positioned by either plugging onto pins 1 and 2 or onto pins 2 and 3 and determines whether the piezo-signal is 'in phase' with the magnetic signal or 'out of phase' - the latter providing inferior sound quality.
The required positioning of the jumper is dependent on the individual switching characteristics of the guitar. For correct 'in-phase' positioning of the jumper we recommend testing 'by ear' once all connetions are made and the preamp is hooked up to an amp.

This only applies to our Hannes Piezo bridges. Piezo systems with the same earthing (grounding) may need to be brought "in phase“ by reversing the existing poles on socket 1 (input for magnetic pickups).

- Caution: When a connection is made to pickups that are already live, the output signal increases automatically!
- A 9 volt battery can be used as a general power supply.
- Please note that piezo bridges are not earthed.

4. Switching Modes 5-way Megaswitch

Switching modes in mono and stereo
The mono and stereo switching positions 2 through 5 feature identical controls and switching functions for user-friendly layout.
Both positions 1 mono and 1 stereo feature additional options.

MONO

Pos 1 acoustic raw*
Pos 2 acoustic active
Pos 3 magnetic + acoustic active
Pos 4 magnetic active
Pos 5 magnetic bypass

* For reference purposes use this option to hear the raw piezo signal

STEREO

Pos 1 mute - inactive **
Pos 2 acoustic active
Pos 3 magnetic + acoustic active
Pos 4 magnetic active
Pos 5 magnetic bypass

** when playing live use this option for silently changing instruments

5. Potentiometer Functions 5 way Megaswitch

Legend:

V = existing volume control for the magnetic signal
P = new piezo volume control
T = existing tone control for the magnetic pickups

Position 1:

Mono: Piezo raw

Stereo: mute, silent

V = inactive
P = inactive (volume adjustment via amplifier)
T = inactive (tone adjustment via amplifier)

Position 2 (Mono and Stereo): Piezo active

V = inactive
P = Piezo signal volume control
T = inactive (tone adjustment via amplifier)

Position 3 (Mono and Stereo): Piezo active and magnetic active combined

V = Magnetic pickup volume control
P = Piezo signal volume control
T = Magnetic pickup tone control

Position 4 (Mono and Stereo): magnetic active

V = Magnetic pickup volume control
P = inactive
T = Magnetic pickup tone control

Position 5 (Mono and Stereo): magnetic hardwire bypass

V = Magnetic pickup volume control
P = inactive
T = Magnetic pickup tone control

6. Switching Modes 3-way rotary switch

Switching modes in mono and stereo

The mono and stereo switching positions 2, 3 and 5 feature identical controls and switching functions for user-friendly layout.

MONO

Pos 2 acoustic active
Pos 3 magnetic + acoustic active
Pos 5 magnetic bypass

STEREO

Pos 2 acoustic active
Pos 3 magnetic + acoustic active
Pos 5 magnetic bypass

7. Potentiometer Functions 3-way rotary switch

Legend:

V = existing volume control for the magnetic signal
P = new piezo volume control
T = existing tone control for the magnetic pickups

Position 2 (Mono and Stereo): Piezo active

V = inactive
P = Piezo signal volume control
T = inactive (tone adjustment via amplifier)

Position 3 (Mono and Stereo): Piezo active and magnetic active combined

V = Magnetic pickup volume control
P = Piezo signal volume control
T = Magnetic pickup tone control

Position 5 (Mono and Stereo): magnetic hardwire bypass

V = Magnetic pickup volume control
P = inactive
T = Magnetic pickup tone control

8. Addendum

1.) In case one of the pickup systems is not connected to the guitar's circuitry (whether magnetic or piezo), a wire tap must be connected on the respective input for effective noise reduction.
2.) To keep electromagnetic interference to a minimum all conductive parts of the guitar must be thoroughly grounded, particularily the Hannes retainer block and the FlagShip enclosure.
3.) For Stereo operation of the FlagShip preamp use a Y-cable with the following connectors:
One 6.3 mm stereo jack (guitar signal output) into two 6.3 mm mono jacks (to amplifier or mixing desk inputs).
Required wiring:

- Stereo jack inner ring to ring of mono jacks A and B simultaneously
- Stereo jack middle ring to tip of mono jack A
- Stereo jack tip to tip of mono jack B

Schaller Flagship preamp – Stereo / Mono Operation

For mono and for stereo use the Flagship preamp features an advanced mono / stereo selfsensing output stage. The Flagship preamp senses whether a mono 1/4“ or a stereo 1/4“ plug is inserted and switches into the appropriate mode automatically. Not only does this prevent misuse so commonly known from mono/stereo toggle switches. It also allows for just one output jack (see stereo jack enclosed) in your guitar to operate the Flagship to its fullest potential.

In mono mode the sound of the magnetic pickups is mixed with the sound of the piezo pickups within the preamp. We recommend using a regular 1/4“ plug guitar cable. Please refer to the Flagship manual for all dedicated sound options in this mode.

In stereo mode the sound of the magnetic pickups and the sound of the piezo pickups are sent seperately to the stereo output jack. Please refer to the Flagship manual for all dedicated sound options in this mode.
We recommend two ways for routing the signals:

1. Using a stereo cable with two 1/4“ plugs for routing the magnetic and piezo signal seperately to a mixing console’s stereo input.

2. Using a Y-cable with two 1/4“ mono plugs and one 1/4“ stereo plug for splitting your signal between a guitar amp for the magnetic pickups and a PA or acoustic amp for the piezo signal.

The stereo and mono plugs should be connected as follows:

Tip of stereo plug goes to tip of mono plug left.

Ring of stereo plug goes to tip of mono plug right.

Sleeve of stereo plug goes to sleeve of mono plug left.

Sleeve of stereo plug goes to sleeve of mono plug right.

Please note that by connecting the grounds of two amps or an amp with a PA a low-frequency ground hum may occur. This is an inherent problem caused by ground loops and in no way a fault within the Flagship preamp.