

ENGL



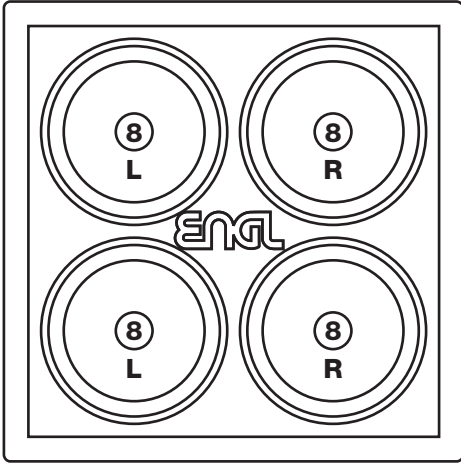
**Amp
Technology**



**Guitar Speaker Cabinet
E412**

Technical Information

1. basic technical information to all ENGL 412 speaker cabinets



**E412 cabinet:
Front layout**

THRU / RIGHT INPUT jack

in Mono mode:
you can use this jack as thru connector
to route the signal to an additional cabinet,
refer to example #3;

in Stereo mode:
use this jack as input connector
for the right speaker side (R;)

INPUT / LEFT jack

in Mono mode:
use this jack as input connector;

in Stereo mode:
use this jack as input connector
for the left speaker side (L;)

MONO / STEREO switch

select Mono or Stereo mode;

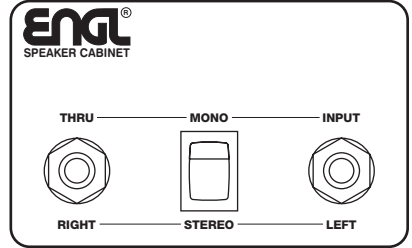
Mono mode:

4 speakers overall impedance 8 ohms;

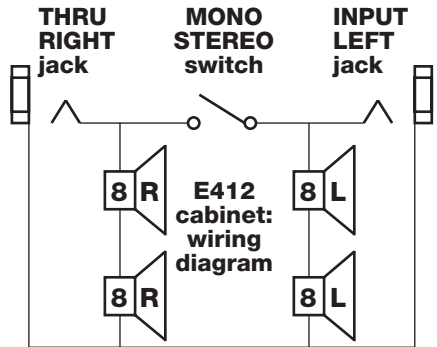
Stereo mode:

2 speakers each stereo channel,
16 ohms impedance per channel;

The following pages depicts a few
samples for diverse setups between
amplifiers an speaker 412 cabinets.



**E412 speaker cabinet:
rear connection panel**



8: 8 ohms speaker impedance

R: speaker right side
right stereo channel

L: speaker left side
left stereo channel

overall impedance Mono mode:

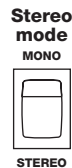
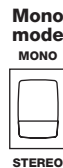
8 ohms

overall impedance Stereo mode:

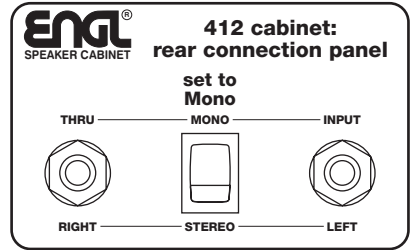
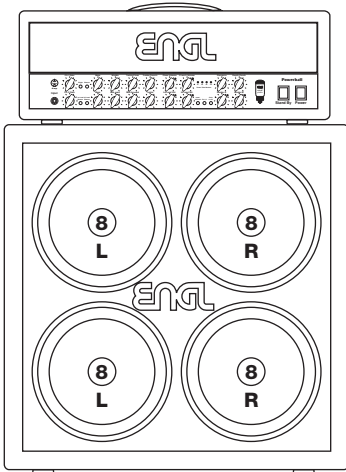
2 x 16 ohms

Important note:

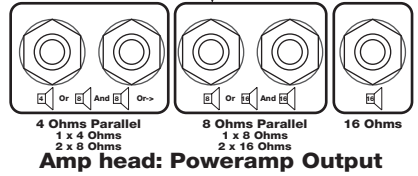
ensure that the Mono / Stereo switch
is set to **"Stereo"** before you connect
the cabinet to **2 poweramp outputs!**
switch setting:



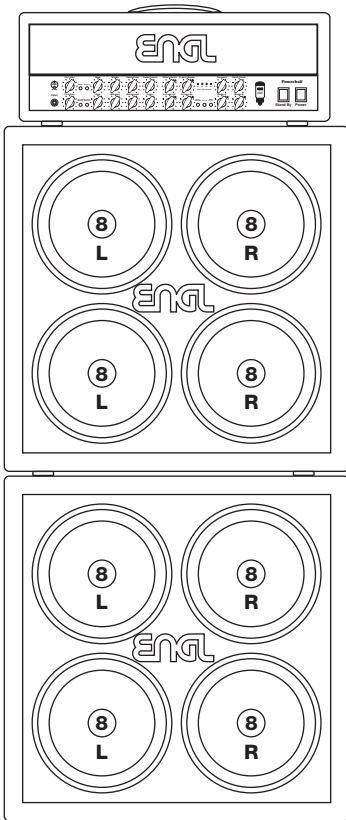
2. one 100 watts amp head combined with one ENGL 412 speaker cabinet



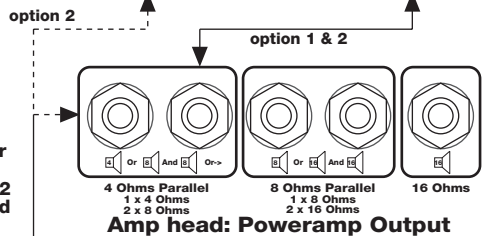
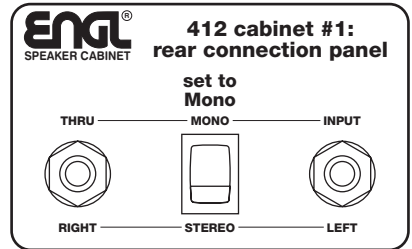
speaker impedance: 8 ohms
output impedance: 8 ohms



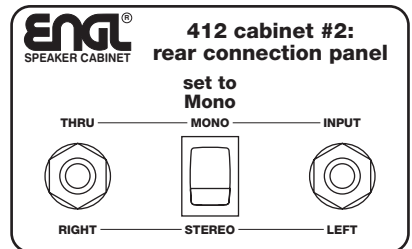
3. one 100 watts head combined with two ENGL 412 speaker cabinets



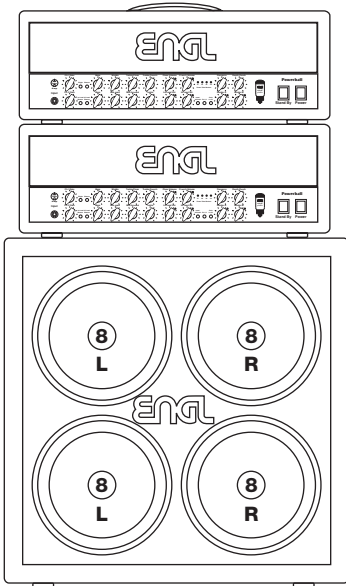
speaker impedance:
cabinet #1
8 ohms;
cabinet #2
8 ohms;
connected
in parallel:
4 ohms;
output impedance:
4 ohms;



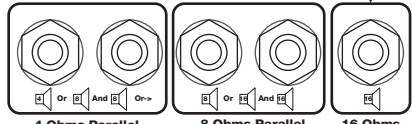
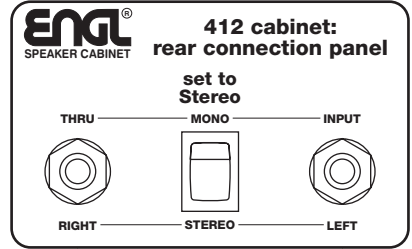
use either
option 1:
cabinet #2
connected to
the 4 ohms
Poweramp
Output
or
option 2:
cabinet #2
connected to
THRU
jack of
cabinet #1



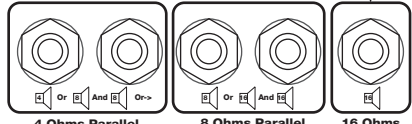
4. two 100 watts amp heads or a Stereo Poweramp (e.g. E850) combined with one ENGL 412 speaker cabinet set to stereo mode



speaker impedance:
 16 ohms Left side
 16 ohms Right side
 output impedance:
 16 ohms
 at each poweramp
 or stereo channel

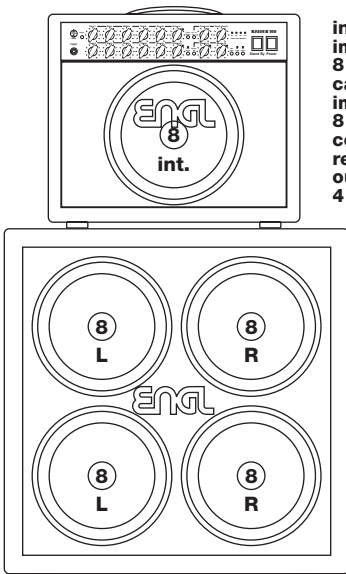


Amp head #1: Poweramp Output
Stereo Poweramp: Left channel

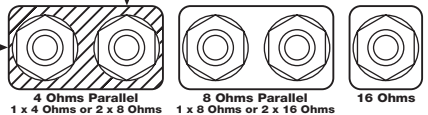
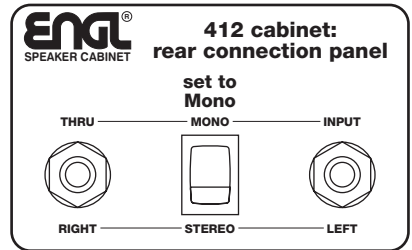


Amp head #2: Poweramp Output
Stereo Poweramp: Right channel

5. a 100 watts combo amp combined with one ENGL 412 speaker cabinet



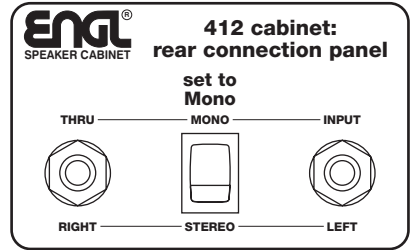
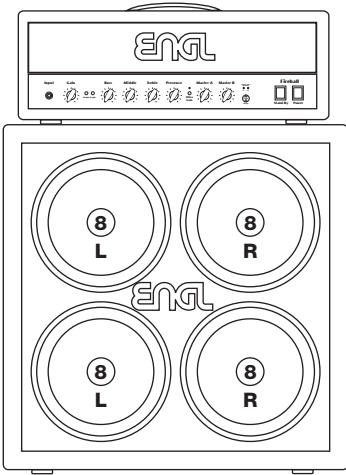
internal speaker
 impedance:
 8 ohms
 cabinet speaker
 impedance:
 8 ohms
 connected in parallel
 results 4 ohms
 output impedance:
 4 ohms



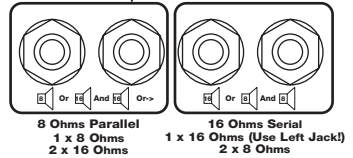
Combo Amp: Poweramp Output

internal
 speaker

6. one 50 watts amp head combined with one ENGL 412 speaker cabinet

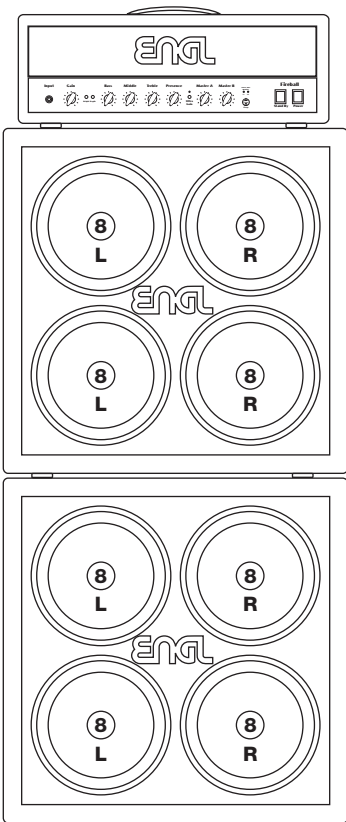


speaker impedance: 8 ohms
output impedance: 8 ohms

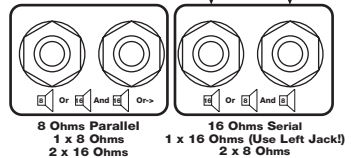
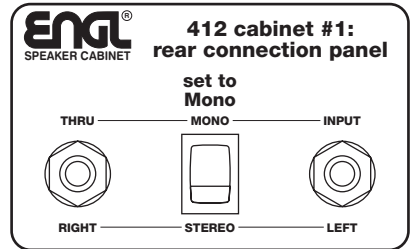


Amp head: Poweramp Output

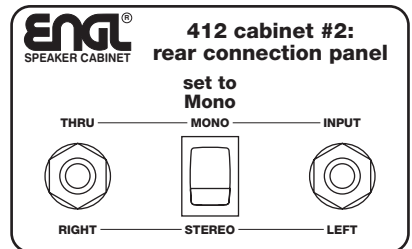
7. one 50 watts amp head combined with two ENGL 412 speaker cabinets



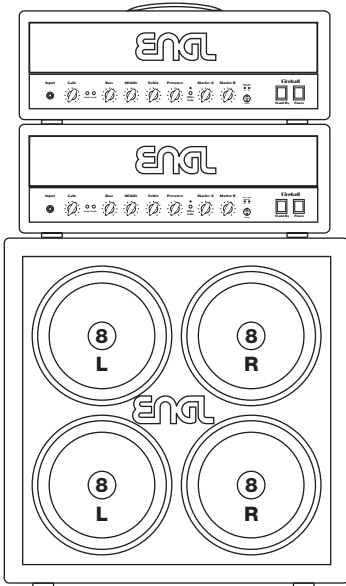
speaker impedance:
cabinet #1
8 ohms
cabinet #2
8 ohms
connected
in serial:
16 ohms
output impedance:
16 ohms



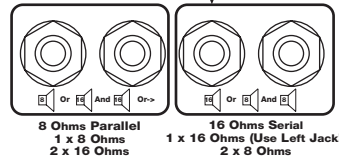
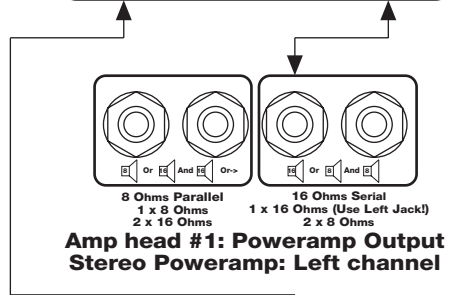
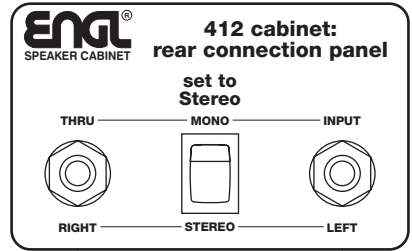
Amp head: Poweramp Output



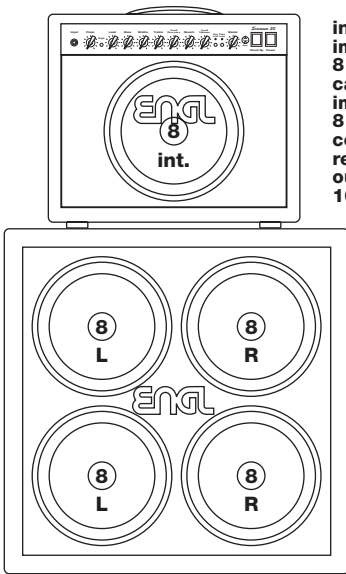
8. two 50 watts amp heads or a Stereo Poweramp (e.g. E840) combined with one ENGL 412 speaker cabinet set to stereo mode



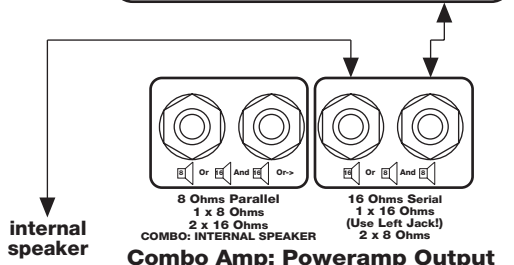
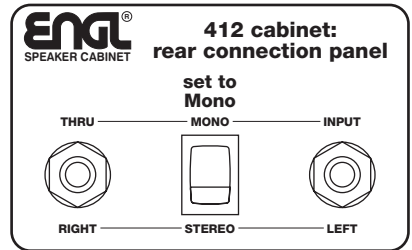
speaker impedance:
 16 ohms Left side
 16 ohms Right side
 output impedance:
 16 ohms
 at each poweramp
 or stereo channel



9. a 50 watts combo amp combined with one ENGL 412 speaker cabinet



internal speaker impedance:
 8 ohms
 cabinet speaker impedance:
 8 ohms
 connected in serial
 results 16 ohms
 output impedance:
 16 ohms



ENGL



**Amp
Technology**

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We reserve the right to make unannounced technical upgrades!