EKX
SUPERIOR SOUND
Precise coverage & superior sound quality at high SPLs

BEST CONTROL & MONITORING
EV QuickSmartDSP

BEST DESIGN & QUALITY
Versatile for all applications: portable & installed
Powered Speaker Demo

- EKX-12P
- EKX-15SP
- EKX-18SP
- EKX-15P (Passive versions also available)
Song Selection
* Use only uncompressed Audio Format for Demo ( Wav/FLAC/ALAC )*
EKX-12P Full Range

- Soundtrack demonstrates dynamic abilities with soft guitar entry with wide range leading vocal
- Male voice sounding clear without low mid muddiness or mid frequency shrill (harshness)
- Demo Track: Thinking out loud – Ed Sheeran
- Alternative Track: Yesterday – Boys II Men
EKX-12P DSP settings

• DSP setting:
  – Mode: Music,
  – Location : Tripod
  – Subwoofer: None

• Ensure no other settings such as EQ have been adjusted.
EKX-15P Full Range

- Reproducing good “pop” and attack and decay from the snare
- Good definition of the bass guitar notes
- Electric guitar demonstrates good instrument separation at 0:34 onwards.
- Demo Track: Where the boat leave from – Zac Brown
- Alternative track: Billie Jean – Michael Jackson
EKX-15P DSP settings

- DSP setting:
  - Mode: Music,
  - Location: Tripod
  - Subwoofer: None

- Ensure no other settings such as EQ have been adjusted.
EKX Powered Tops with Subs
EKX-12P with EKX-15SP

- Contemporary music recording that shows no harshness from the balanced system
- Tight bass and forwardness of vocals at the track opening
- Demo Track: Sledgehammer – Fifth Harmony
- Alternative Track: Fast Company – The Eagles
EKX-12P with EKX-15SP - DSP settings

- DSP setting for EKX-12P:
  - Mode: Music,
  - Location: Tripod
  - Subwoofer: EKX-15SP

- DSP setting for EKX-15SP:
  - Mode: Music,
  - Location: Normal
  - Low Pass: EKX-12P
Rock track emphasizes good coupling of 15 inch top and 18 inch sub with low distortion.

Maintaining tight LF response from drums, instrument separation clearly maintained in this genre of music which is often difficult to reproduce.

“Closed in” vocals don’t get “muddied” amongst other instruments in the band.

Demo Track:
Something for Nothing – Foo Fighters

Alternative Track:
Black Cat – Janet Jackson
EKX-15P with EKX-18SP - DSP settings

• DSP setting for EKX-15P:
  – Mode: Music,
  – Location: Tripod
  – Subwoofer: EKX-18SP

• DSP setting for EKX-18SP:
  – Mode: Music,
  – Location: Normal
  – Low Pass: EKX-15P
EKX-12P with 2 EKX-15SP

• Ultra low frequency bass without resonance at the beginning followed by clarity of finger snaps
• R&B genre demonstrating more impact with the addition of one more sub without being overly “bloated”
• Voice of the lead rapper demonstrates voice clarity with rich natural mids at the opening 0:25 without being voice getting thin
• Demo track: Trampoline – Kalin & Myles
• Alternative track: Pitbull – Ay Chico
EKX-12P with 2 EKX-15SP - DSP settings

- **DSP setting for EKX-12P:**
  - Mode: Music,
  - Location: Tripod
  - Subwoofer: EKX-15SP

- **DSP setting for EKX-15SP:**
  - Mode: Music,
  - Location: Normal
  - Low Pass: EKX-12P
E.KX-15P with 2 E.KX-18SP

- High energy track that demands headroom
- Most powerful combination
- Tight rounded Bass with great control and balanced output
- Clean sounding without aggression (low distortion at extremes), sound of digital synthesizers well separated in the track
- Demo track:
  Beg for it – Iggy Azalea
- Alternative Track:
  Ramstein - Ramstein
EKX-15P with 2 EKX-18SP - DSP settings

- **DSP setting for EKX-15P:**
  - Mode: Music,
  - Location: Tripod
  - Subwoofer: EKX-18SP

- **DSP setting for EKX-18SP:**
  - Mode: Music,
  - Location: Normal
  - Low Pass: EKX-15P
Recommended configuration
Analog or AES/EBU input

1: EKX-12P
2: EKX-12P
3: EKX-15P
4: EKX-15P
5: EKX-15SP
6: EKX-15SP

1: EKX-12P + EKX-15SP x2
2: EKX-12P + EKX-15SP x2
3: EKX-15P + EKX-18SP x2
4: EKX-15P + EKX-18SP x2
5: EKX-18SP
6: EKX-18SP

Unit 1
Unit 2
Equipment list

For optimum demo equipment using DX 46 signalprocessors:

1) DX46 – 2 pcs. (AES/EBU preferred, due to wider dynamic range and lower noise floor)

2) 4 x EKX-12P
3) 4 x EKX-15P
4) 6 x EKX-15SP
5) 6 x EKX-18SP

This quantity allows single/dual subs demonstration where needed
Speaker positions

To audience
Sequence Of Events

Full Range
• Check modes on DSP
• ->EKX-12P DX46 1/2 PRESET 1
• ->EKX-15P DX46 1/2 PRESET 2
• Mute all subwoofers

Tops + Subs
• ->EKX-12P + EKX-15SP DX46 1/2 PRESET 3
• ->EKX-15P + EKX-18SP DX46 1/2 PRESET 4
• ->EKX-12P + 2X EKX-15SP DX46 1/2 PRESET 5
• ->EKX-15P + 2X EKX-18SP DX46 1/2 PRESET 6
Powered Speaker Checklist
Demo check list for EKX top Full Range

DSP setting
→ Mode: Music, Location: Tripod, Sub: Off
→ All gain trims knobs at “0dB”

DX 46 Presets ( unit 1 + 2 )
→ Preset 1 for EKX 12P Full range followed by Preset 2 for EKX 15P

Demo track EKX-12P
→ Thinking out loud – Ed Sheeran

Demo track EKX-15P
→ Where the boat leave from – Zac Brown

End of full range demo
→ Prepare to change DSP settings to be used with Subs
Demo check list for EKX-12P with Subs

**DSP setting EKX-12P**
- Mode: Music, Location: Tripod, Sub: EKX-15SP
- All gain trims knobs at “0dB”

**DSP setting EKX-15SP**
- Mode: Music, Location: Normal, Low Pass: EKX-12P
- All gain trims knobs at “0dB”

**DX 46 Presets ( unit 1 + 2 )**
- Preset 3 for EKX-12P + EKX-15SP
- Preset 5 for EKX-12P + 2x EKX-15SP

**Demo tracks**
- Sledgehammer – Fifth Harmony 1x Sub
- Trampoline – Kalin & Myles 2 x Subs
Demo check list for EKX-15P with Subs

**DSP setting EKX-15P**
- Mode: Music, Location: Tripod, Sub: EKX-18SP
- All gain trims knobs at “0dB”

**DSP setting EKX-18SP**
- Mode: Music, Location: Normal, Low Pass: EKX-15P
- All gain trims knobs at “0dB”

**DX 46 Presets ( unit 1 + 2 )**
- Preset 4 for EKX-15P + EKX-18SP
- Preset 6 for EKX-15P + 2x EKX-18SP

**Demo tracks**
- Something from nothing – Foo Fighters 1x Sub
- Beg for it – Iggy Azalea 2 x Subs
EKX-12P + 2 x EKX-15SP example
Cardioid Demo
Cardioid Subwoofer options

A

Rejection direction

B

Audience direction

C
Cardioid Demo for non believers

• Ensure subs are placed as illustrated for maximum cardioid effect

• Make sure all feet of top sub feet falls into feet cutout of bottom sub

• Use only one input source to EACH sub, set both subs to same level, ‘0dB’, ensure top sub location “Normal” and bottom “Cardioid”

• Use pink noise source and move around the 2 subs to observe difference in bass output from one side to the other
DSP structure for cardioid subwoofer setup, cabinet facing the audience

- **Function**: 
  - Music

- **Location**: 
  - Normal

- **Low Pass**: 
  - EKX 15SP/EKX 18SP
DSP structure for cardioid subwoofer setup, cabinet facing the stage

<table>
<thead>
<tr>
<th>Function</th>
<th>Location</th>
<th>Low Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Music</td>
<td>• Cardioid</td>
<td>• EKX 15SP/EKX 18SP</td>
</tr>
</tbody>
</table>
DSP Final Checks
DSP structure for EKX tops

DSP
- Mode/Location/Subwoofer settings the same
- Input and Output Level settings normalized at ‘0’

EQ
- All Bass/Mid/Treble at 0dB

Check
- Audio tracks, change if necessary
- Maximum limit, at input and output levels before audio degradation (use LED limit function to guide)
DSP structure for EKX subs

DSP
- Mode/Location/Low Pass settings the same
- Output Level settings normalized at ‘0’

Check
- Audio tracks, change if necessary
- Maximum limit, at input and output levels before audio degradation (use LED limit function to guide)
Passive Speaker Demo
Speaker positions

To audience
Passive subs settings in IRIS-Net

- Enter values subwoofer crossover frequencies
- Use 80/90/100 Hz settings depending on preference
- Enter ‘0’ for subwoofer gain and adjust higher or lower when needed
- Store the preset in DX46 (unit 3+4) after changes
Amplifiers needed for Demo

- For normal systems, recommended amps are:
  for all EKX tops, Q99/Q1212
  for all EKX subs Q1212
  for more headroom,

  Ensure for all Q series amplifiers: LPN is ‘Off’.

- For ultimate audio performance during demo, each speaker shall be driven by TG-5 amplifiers without RCM modules, but ensure proper limiter settings and take care not to over drive the system.
Passive Speaker Checklist
Demo check list for EKX tops Full Range

**DX 46 Presets ( unit 3 + 4 )**
- Preset 7 for EKX-12 Full range followed by Preset 8 for EKX-15

**Demo track EKX-12**
- Thinking out loud – Ed Sheeran

**Demo track EKX-15**
- Where the boat leave from – Zac Brown
Demo check list for EKX-12 with Subs

**DX 46 Presets ( unit 3 + 4 )**
- Preset 9 for EKX-12 + EKX-15S
- Preset 11 for EKX-12 + 2x EKX-15S

**Demo tracks**
- Sledgehammer – Fifth Harmony 1x Sub
- Trampoline – Kalin & Myles 2 x Subs
Demo check list for EKX-15 with Subs

DX 46 Presets ( unit 3 + 4 )
→ Preset 10 for EKX-15 + EKX-18S
→ Preset 12 for EKX-15 + 2x EKX-18S

Demo tracks
→ Something from nothing – Foo Fighters 1x Sub
→ Beg for it – Iggy Azalea 2 x Subs
Thank you