Architect’s and Engineer’s Specifications

SR-A12L

The [long throw] speaker shall be a two-way component module designed for use in a modular line array system,
TOA Electronics model SR-A12L. The low-frequency section shall consist of one direct-radiating 12” (300 mm)
transducer with 2.84” (72 mm) edgewound copper-clad aluminum ribbon voice-coil. The low-frequency transducer
shall be mounted behind a restricted-aperture baffle for control of horizontal coverage, and housed in a tuned and
ported enclosure. The high frequency section shall consist of two compression drivers, each having a 1.73” (44 mm)
diameter titanium diaphragm and edgewound copper-clad aluminum ribbon voice-coil, mounted to a single
waveguide. The high frequency waveguide shall consist of two throat sections feeding a single shared mouth, with
each throat section incorporating 16 paths of equal length from the driver throat to the waveguide mouth to obtain
effectively isophasic output for maximum efficiency of operation in a line array system. The speaker input
connectors shall include screw terminal connections for LF and HF inputs and two Neutrik NL4 type sockets, wired
in parallel for pass-through to additional speakers. The NL4 sockets shall allow for discreet connection of both the
LF and HF sections via a single NL4 plug using 4-conductor cable.

The speaker shall meet the following performance criteria. Power handling: Low Frequency input: 150 watts
continuous pink noise (24 continuous hours, 50 Hz to 1 kHz), 450 watts continuous program; High Frequency input:
60 watts continuous pink noise (24 continuous hours, 1 kHz to 20 kHz), 180 watts continuous program. Frequency
response (10 dB below rated pressure sensitivity, with recommended crossover and equalization): 50 Hz to 20 kHz.
Pressure sensitivity (1 watt at 1 m): Low Frequency: 98 dB averaged from 100 Hz to 1 kHz; High Frequency: 110
dB averaged from 1 kHz to 5 kHz. Impedance: Low Frequency: 8 ohms nominal; High Frequency: 16 ohms nominal.

The speaker’s horizontal and vertical coverage shall be tailored for use in a line array consisting of multiple units
from the same series arranged one above the other so that each pass-band section forms a vertical line. The
horizontal coverage shall be 90 degrees nominal. The vertical coverage shall be 5 degrees nominal. Extending the
vertical coverage area shall be possible by stacking multiple units from the same series. The consistency of
coverage shall not be degraded when multiple units are stacked. The combined vertical coverage of multiple units,
when stacked, shall be adjustable from that of a straight line array (coverage area defined by the height of the array)
to a curved array, to a clothoid curved array, with the combined coverage angle adjustable in 1 degree increments.

The speaker enclosure shall be made of plywood and finished with black urethane paint. The speaker grille shall be
made from a single punched steel plate and finished with black acrylic paint. The dimensions (W x H x D) shall be
29.13” x 17.05” x 18.47” (740 mm x 433 mm x 469 mm) and weight (including accessory brackets) shall be 108.03
lbs. (49 kg). The speaker enclosure shall be equipped with M10 threaded steel plates for the secure attachment of
optional accessory brackets. Available accessory brackets for suspension and stand mounting shall be

made of steel.

The loudspeaker shall be TOA model SR-A12L.
The rigging frame shall be TOA model SR-RF12.
The tilt joint plate shall be TOA model SR-TP12.

SR-A12S

The [short throw] speaker shall be a two-way component module designed for use in a modular line array system,
TOA Electronics model SR-A12S. The low-frequency section shall consist of one direct-radiating 12” (300 mm)
transducer with 2.84” (72 mm) edgewound copper-clad aluminum ribbon voice-coil. The low-frequency transducer
shall be mounted behind a restricted-aperture baffle for control of horizontal coverage, and housed in a tuned and
ported enclosure. The high frequency section shall consist of two compression drivers, each having a 1.73” (44 mm)
diameter titanium diaphragm and edgewound copper-clad aluminum ribbon voice-coil, mounted to a single
waveguide. The high frequency waveguide shall consist of two throat sections feeding a single shared mouth, with
each throat section incorporating 16 paths of equal length from the driver throat to the waveguide mouth to obtain
effectively isophasic output for maximum efficiency of operation in a line array system. The speaker input
connectors shall include screw terminal connections for LF and HF inputs and two Neutrik NL4 type sockets, wired
in parallel for pass-through to additional speakers. The NL4 sockets shall allow for discreet connection of both the
LF and HF sections via a single NL4 plug using 4-conductor cable.

The speaker shall meet the following performance criteria. Power handling: Low Frequency input: 150 watts
continuous pink noise (24 continuous hours, 50 Hz to 1 kHz), 450 watts continuous program; High Frequency input:
60 watts continuous pink noise (24 continuous hours, 1 kHz to 20 kHz), 180 watts continuous program. Frequency
response (10 dB below rated pressure sensitivity, with recommended crossover and equalization): 50 Hz to 20 kHz.
Pressure sensitivity (1 watt at 1 m): Low Frequency: 98 dB averaged from 100 Hz to 1 kHz; High Frequency: 110
dB averaged from 1 kHz to 5 kHz. Impedance: Low Frequency: 8 ohms nominal; High Frequency: 16 ohms nominal.

The speaker’s horizontal and vertical coverage shall be tailored for use in a line array consisting of multiple units
from the same series arranged one above the other so that each pass-band section forms a vertical line. The
horizontal coverage shall be 90 degrees nominal. The vertical coverage shall be 15 degrees nominal. Extending the
vertical coverage area shall be possible by stacking multiple units from the same series. The consistency of
coverage shall not be degraded when multiple units are stacked. The combined vertical coverage of multiple units,
when stacked, shall be adjustable from that of a curved array, to a clothoid curved array, with the combined
coverage angle adjustable in 1 degree increments.

The speaker enclosure shall be made of plywood and finished with black urethane paint. The speaker grille shall be
made from a single punched steel plate and finished with black acrylic paint. The dimensions (W x H x D) shall be
29.13” x 17.05” x 18.39” (740 mm x 433 mm x 467 mm) and weight (including accessory brackets) shall be 103.62

lbs. (47 kg). The speaker enclosure shall be equipped with M10 threaded steel plates for the secure attachment of
optional accessory brackets. Available accessory brackets for suspension and stand mounting shall be made of steel.

The loudspeaker shall be TOA model SR-A12S.
The rigging frame shall be TOA model SR-RF12.
The tilt joint plate shall be TOA model SR-TP12.

SR-A12LWP

The [long throw] speaker shall be a splash resistant two-way component module designed for indoor/outdoor use in
a modular line array system, TOA Electronics model SR-A12LWP. The low-frequency section shall consist of one
direct-radiating 12” (300 mm) transducer with 2.84” (72 mm) edgewound copper-clad aluminum ribbon voice-coil.
The low-frequency transducer shall be mounted behind a restricted-aperture baffle for control of horizontal
coverage, and housed in a tuned and ported enclosure. The high frequency section shall consist of two compression
drivers, each having a 1.73” (44 mm) diameter titanium diaphragm and edgewound copper-clad aluminum ribbon
voice-coil, mounted to a single waveguide. The high frequency waveguide shall consist of two throat sections
feeding a single shared mouth, with each throat section incorporating 16 paths of equal length from the driver throat
to the waveguide mouth to obtain effectively isophasic output for maximum efficiency of operation in a line array
system. The speaker shall include an integral input connection cable, 0.339” (8.6 mm) outside diameter, 4-
conductor, 118.1” (3 m) long.

The speaker shall meet the following performance criteria. Power handling: Low Frequency input: 150 watts
continuous pink noise (24 continuous hours, 50 Hz to 1 kHz), 450 watts continuous program; High Frequency input:
60 watts continuous pink noise (24 continuous hours, 1 kHz to 20 kHz), 180 watts continuous program. Frequency
response (10 dB below rated pressure sensitivity, with recommended crossover and equalization): 50 Hz to 20 kHz.
Pressure sensitivity (1 watt at 1 m): Low Frequency: 98 dB averaged from 100 Hz to 1 kHz; High Frequency: 110
dB averaged from 1 kHz to 5 kHz. Impedance: Low Frequency: 8 ohms nominal; High Frequency: 16 ohms nominal.

The speaker’s horizontal and vertical coverage shall be tailored for use in a line array consisting of multiple units
from the same series arranged one above the other so that each pass-band section forms a vertical line. The
horizontal coverage shall be 90 degrees nominal. The vertical coverage shall be 5 degrees nominal. Extending the
vertical coverage area shall be possible by stacking multiple units from the same series. The consistency of
coverage shall not be degraded when multiple units are stacked. The combined vertical coverage of multiple units,
when stacked, shall be adjustable from that of a straight line array (coverage area defined by the height of the array)
to a curved array, to a clothoid curved array, with the combined coverage angle adjustable in 1 degree increments.

The speaker enclosure shall be made of plywood and finished with black urethane paint and shall have an IEC 529
splashproof rating of IP-X4. The speaker grille shall be made from a single punched stainless steel

plate and
finished with black acrylic paint. The dimensions (W x H x D) shall be 29.13” x 17.05” x 18.47” (740 mm x 433
mm x 469 mm) and weight (including accessory brackets) shall be 112.44 lbs. (51 kg). The speaker enclosure shall
be equipped with M10 threaded steel plates for the secure attachment of optional accessory brackets. Available
accessory brackets for suspension and stand mounting shall be made of steel.

The loudspeaker shall be TOA model SR-A12L.
The rigging frame shall be TOA model SR-RF12WP.
The tilt joint plate shall be TOA model SR-TP12.

SR-A12SWP

The [short throw] speaker shall be a splash resistant two-way component module designed for indoor/outdoor use in
a modular line array system, TOA Electronics model SR-A12SWP. The low-frequency section shall consist of one
direct-radiating 12” (300 mm) transducer with 2.84” (72 mm) edgewound copper-clad aluminum ribbon voice-coil.
The low-frequency transducer shall be mounted behind a restricted-aperture baffle for control of horizontal
coverage, and housed in a tuned and ported enclosure. The high frequency section shall consist of two compression
drivers, each having a 1.73” (44 mm) diameter titanium diaphragm and edgewound copper-clad aluminum ribbon
voice-coil, mounted to a single waveguide. The high frequency waveguide shall consist of two throat sections
feeding a single shared mouth, with each throat section incorporating 16 paths of equal length from the driver throat
to the waveguide mouth to obtain effectively isophasic output for maximum efficiency of operation in a line array
system. The speaker shall include an integral input connection cable, 0.339” (8.6 mm) outside diameter, 4-
conductor, 118.1” (3 m) long.

The speaker shall meet the following performance criteria. Power handling: Low Frequency input: 150 watts
continuous pink noise (24 continuous hours, 50 Hz to 1 kHz), 450 watts continuous program; High Frequency input:
60 watts continuous pink noise (24 continuous hours, 1 kHz to 20 kHz), 180 watts continuous program. Frequency
response (10 dB below rated pressure sensitivity, with recommended crossover and equalization): 50 Hz to 20 kHz.
Pressure sensitivity (1 watt at 1 m): Low Frequency: 98 dB averaged from 100 Hz to 1 kHz; High Frequency: 110
dB averaged from 1 kHz to 5 kHz. Impedance: Low Frequency: 8 ohms nominal; High Frequency: 16 ohms nominal.

The speaker’s horizontal and vertical coverage shall be tailored for use in a line array consisting of multiple units
from the same series arranged one above the other so that each pass-band section forms a vertical line. The
horizontal coverage shall be 90 degrees nominal. The vertical coverage shall be 15 degrees nominal. Extending the
vertical coverage area shall be possible by stacking multiple units from the same series. The consistency of
coverage shall not be degraded when multiple units are stacked. The combined vertical coverage of multiple units,
when stacked, shall be adjustable from that of a curved array, to a clothoid curved array, with the combined
coverage angle adjustable in 1 degree increments.

The speaker enclosure shall be made of plywood and finished with black urethane paint and shall have an IEC 529
splashproof rating of IP-X4. The speaker grille shall be made from a single punched stainless steel plate and
finished with black acrylic paint. The dimensions (W x H x D) shall be 29.13” x 17.05” x 18.39” (740 mm x 433
mm x 467 mm) and weight (including accessory brackets) shall be 105.82 lbs. (48 kg). The speaker enclosure shall
be equipped with M10 threaded steel plates for the secure attachment of optional accessory brackets. Available
accessory brackets for suspension and stand mounting shall be made of steel.

The loudspeaker shall be TOA model SR-A12S.
The rigging frame shall be TOA model SR-RF12WP.
The tilt joint plate shall be TOA model SR-TP12.

SR-A18B

The subwoofer shall be a high-power, direct-radiating design suitable for suspension or ground placement. The
transducer shall be a heavy-duty 18” (460 mm) driver with die-cast frame, vented pole piece, and a 4” (100 mm)
edgewound copper-clad aluminum ribbon voice-coil. The enclosure shall be vented with a tuned port. The
subwoofer input connectors shall include one M5 screw terminal connection and two Neutrik NL4 type sockets,
wired in parallel for pass-through to additional speakers.

The subwoofer shall meet the following performance criteria. Power handling: 240 watts continuous pink noise (24
continuous hours, 40 Hz to 1 kHz), 720 watts continuous program. Frequency response (10 dB below rated pressure
sensitivity, with recommended equalization): 40 Hz to 400 Hz. Pressure sensitivity (1 watt at 1 m, 50 Hz - 150 Hz
avg.): 95 dB free field. Impedance: 8 ohms nominal.

The subwoofer enclosure shall be made of plywood and finished with black urethane paint. The subwoofer grille
shall be made from a single punched steel plate and finished with black acrylic paint. The dimensions (W x H x D)
shall be 29.13” x 22.56” x 27.48” (740 mm x 573 mm x 698 mm) and weight (including accessory brackets) shall be
145.5 lbs. (66 kg). The subwoofer enclosure shall be equipped with M10 threaded steel plates for the secure
attachment of optional accessory brackets. Available accessory brackets for suspension and stand mounting shall be
made of steel.

The subwoofer shall be TOA model SR-A18B.
The rigging frame shall be TOA model SR-RF12.
The tilt joint plate shall be TOA model SR-TP12.