LogiBit 1200 teleloop amplifier
LogiBit 1260 teleloop and loudspeaker amplifier

specifications:

**LogiBit 1200
teleloop amplifier**

**LogiBit 1260
teleloop and loudspeaker
amplifier**

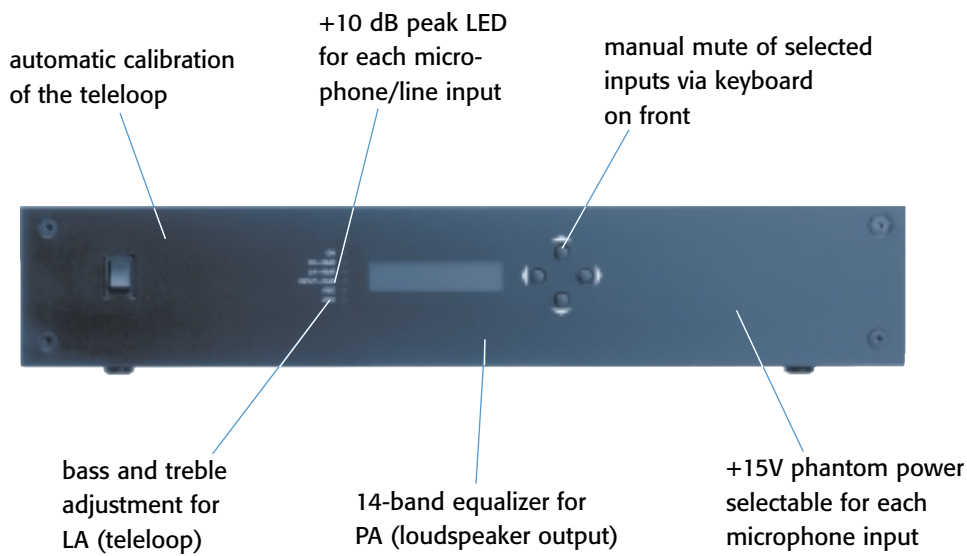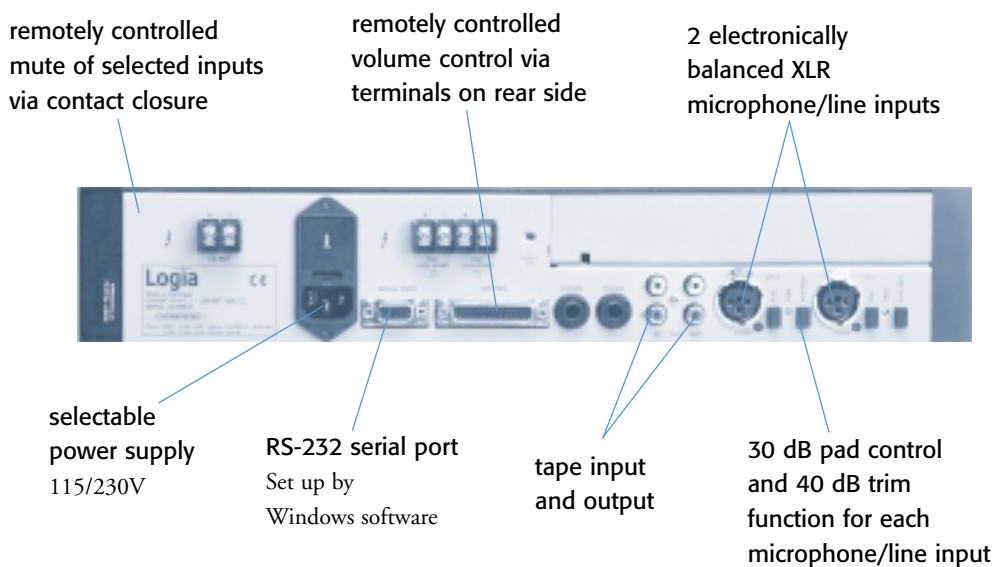|	
description	The LogiBit amplifier is available in two models. The LogiBit 1200 is a teleloop amplifier and the LogiBit 1260 is a combined teleloop and loudspeaker amplifier.
application	The LogiBit amplifier can be used in many different environments, e.g., in churches, residential homes for the elderly, auditoriums, conference centers, and theatres.
key features	Bass and treble adjustment for LA (teleloop), 2 x loudspeaker outputs (2 x 30 W or bridged 1 x 50 W), possibility of building in 2 x 100 V output transformers for PA, possibility of building in 3 electronically balanced XLR microphone/line inputs or 2 TOA WTU 4800 diversity receivers (800 MHz), +15 V phantom power, selectable for each microphone input.
coverage	Up to 1200 m².

LogiBit amplifier (front)

automatic calibration
of the teleloop

+10 dB peak LED
for each micro-
phone/line input

manual mute of selected
inputs via keyboard
on front

bass and treble
adjustment for
LA (teleloop)

14-band equalizer for
PA (loudspeaker output)

+15V phantom power
selectable for each
microphone input

LogiBit amplifier (back)

remotely controlled
mute of selected inputs
via contact closure

remotely controlled
volume control via
terminals on rear side

2 electronically
balanced XLR
microphone/line inputs

selectable
power supply
115/230V

RS-232 serial port
Set up by
Windows software

tape input
and output

30 dB pad control
and 40 dB trim
function for each
microphone/line input

LogiBit specifications

bandwidth	LA (teleloop): 100 Hz - 5 kHz (+/- 3 dB) PA (loudspeaker): 20 Hz - 20 kHz (+/- 3 dB)	power consumption	Basis model: Medium output: 140 W Maximum output: 330 W With PA module: Medium output: 190 W Maximum output: 450 W
distortion	LA (teleloop): <1,0% PA (loudspeaker): < 0,1%	frequency stability	0-100 m²: 0,75$^\Omega$/14 AWG, single turn 100-150 m²: 1,5$^\Omega$/12 AWG, single turn 150-600 m²: 2,5$^\Omega$/10 AWG, single turn 600-1000 m²: 4$^\Omega$/11 AWG, single turn 1000-1200 m²: 6$^\Omega$/9 AWG, single turn The impedance of the loop wire should be minimum 0.5 Ω
cross talk	< 60 dB		
signal-to-noise ratio	> 64 dB		
AGC: longtime averaging	Attack time: 1-2 sek. Release time: 10-15 sek. Max amplification: 12 dB Max attenuation: 20 dB		
AGC: limiter	Attack time: 1,5 ms (typ.) Release time: 120 ms (typ.) Attack level: +12 dB	coverage	Up to 1200 m² (according to the IEC 118-4 standard)
sensitivity	Microphone input: 1,8 k/-64 dBu (0,5 mV) Phantom power: 15 V Line input: 2,5 kΩ/-34 dBu (15 mV) Patch input: > 7 kΩ/-10 dBu (250 mV) Tape input: 47 kΩ/-10 dBu (150 mV)	dimensions	Height: Without 19in fittings: 82 mm/3.23in With 19in fittings: 88,9 mm/3.5in (2U) Width: Without 19in fittings: 430 mm/17in With 19in fittings: 483 mm/19in Depth: 270 mm/10.7in
tone control	LA (teleloop): Bass: +/- 6 dB ved 100 Hz Treble: +/- 6 dB ved 5 kHz PA (loudspeaker): 14-band equalizer: +/- 12 dB, 25 Hz-10 kHz	weight	Basis model: 9.5 kg 2 x 100 V transformers: 1.15 kg 3 x balanced XLR input module: 0.25 kg 2 x WTU module: 0.50 kg
output level	Patch output: 100Ω/-78 dBu ➜ -10 dBu (1 uV ➜ 250 mV) Tape output: 600Ω/ -14 dBu (150 mV) PA output: 2 x 30 W or bridged 1 x 50 W (8Ω/100 V) LA output: 4 A RMS, continuous 16 A peak (125 ms) 65 V RMS	color	Black

LogiBit options

Optional PA module activating in LogiBit 1200 and optional built into in LogiBit 1260. In addition to that there is an optional wireless module or a microphone-/line module available for both LogiBit 1200 and LogiBit 1260.

activating PA module in LogiBit 1200
- 2 x 30 W or bridged 1 x 50 W (8Ω /100V)
- 14-band equalizer
- 2 patch connectors

built into a LogiBit 1260
- 2 x 100 V output transformers

mounting of wireless module
- 2 x TOA WTU 4800 diversity receivers (800 MHz)

microphone-/line module

TOA WTU receiver kit

mounting of microphone/line module
- 3 electronically balanced XLR microphone/line inputs. Individually selectable
- 30 dB pad control and 40 dB trim function for each microphone/line input
- +10 dB peak LED for each microphone/line inputs
- +15 V phantom power, selectable for each microphone input

LogiBit features

new unique amplifier principal

LogiBit is a digital amplifier based on a pulse width modulated principle, which is one of the amplifier's completely unique qualities. LogiBit sets new standards for teleloop amplifiers.

greater capacity and greater area coverage

LogiBit sends a much stronger signal than other teleloop amplifiers. Therefore, LogiBit can cover a much bigger area – up to 1200 m^2.

fewer problems with loss of signal and electric interference

Loss of signal caused by building materials (e.g., steel reinforcing) and background noise caused by electrical installations (e.g., light dimmers) result in a considerably weaker signal on the teleloop, creating problems for users. LogiBit can, to a large extent, compensate for loss of signal and electrical interference because it is possible to increase the signal on the teleloop.

secure for the future

LogiBit comes standard as a teleloop amplifier, but the same unit can easily be used as a combined teleloop and loudspeaker amplifier. The end result is a flexible amplifier that can be used for many years.

easy to use

LogiBit is easy to install. All adjustments are made using Windows software or by using the four easy-touch keys on the front of the unit. The text in the display guides the installer through the menu. On the back of the amplifier there are also a number of user-friendly adjustment parameters and tuning possibilities. It is also very easy for the end user to operate.

natural sound and good speech reproduction

Since LogiBit adapts automatically to the size of the teleloop it is always adjusted perfectly. LogiBit is also equipped with dual AGC functions – one ensures that sudden loud noises are eliminated, while the other function ensures that the user hears dynamic, equalized sound.
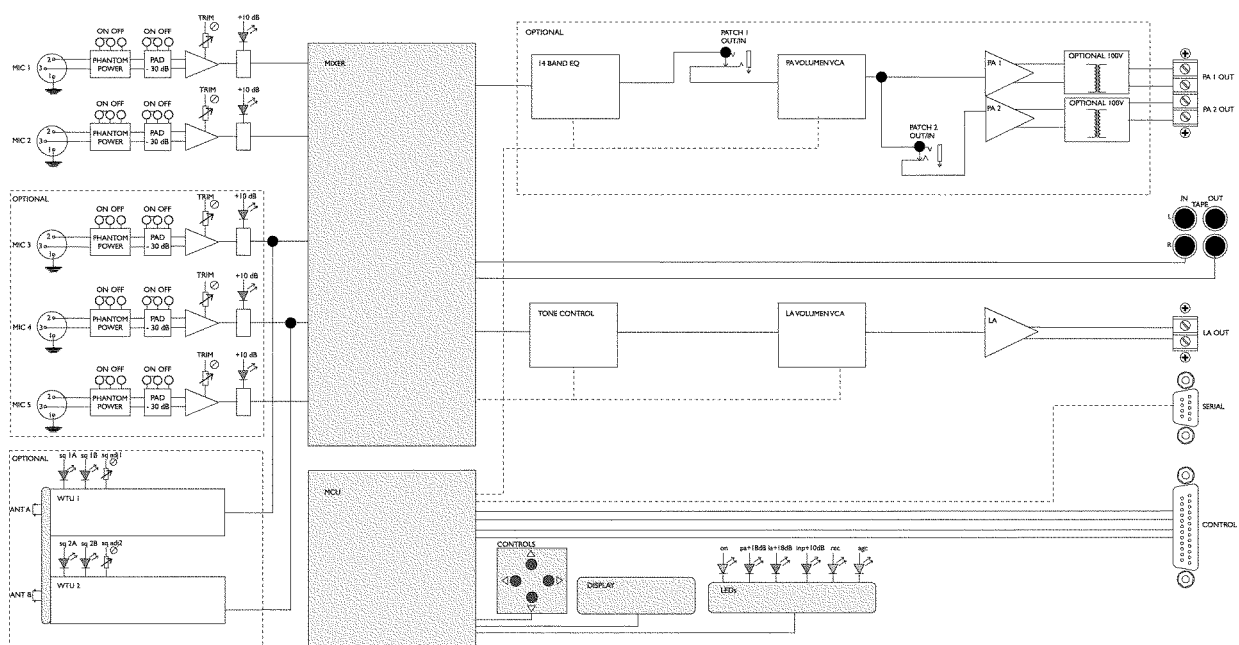
longer lifetime

LogiBit generates much less heat than other similar amplifiers, resulting in a longer lifetime for it and all its components.
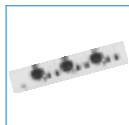
flexible

As shown in the many connection possibilities, LogiBit is extremely flexible. Individual needs can, to a greater degree, be fulfilled by using LogiBit than by using any other amplifier.

LogiBit block diagram

accessories

Module with 3 electronically balanced XLR microphone/line inputs. Individually selectable
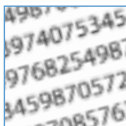
Antennas for TOA WTU receiver kit

Wall mounting bracket

TOA WTU receiver kit

Code for activating the PA module in LogiBit 1200

19 in rack mounting bracket

TOA WTU receiver module (800 MHz)

2 x 100 V output transformers

Loop design programme

LogiBit 1200 teleloop amplifier
LogiBit 1260 teleloop and loudspeaker amplifier

Your local dealer:

))))))||||**Phonic Ear** ®

Strandvejen 58 • 2900 Hellerup • Denmark

tel **+45 3917 7101** · fax **+45 3927 7900** · e-mail **info@phonicearlogia.com** · web **www.phonicearlogia.com**