

Technical Data Sheet

TECPRO LS391 LOUDSPEAKER USER GUIDE

27-391 TECPRO LS391 Loudspeaker, high power, single-circuit, free-standing

INTRODUCTION

The Tecpro LS391 is a compact, mains powered, listen-only, loudspeaker, designed to provide high quality monitoring of a single intercom circuit. The 5 watt output combined with its unobtrusive size and wall mounting option make this speaker well suited to supply 'Paging' and 'Show Relay' to dressing rooms, foyer and other areas where ambient noise levels may sometimes be elevated. Tecpro's 'Override' detection circuitry ensures the LS391 will default to a pre-set volume whenever a control signal is sensed, ensuring important messages will always be heard.

FEATURES

- Aluminium diecast case, with M6 inserts on top and base for mounting bracket
- Mains powered, IEC input connector on rear
- With AC mains present, switch on is triggered when 24V DC is sensed on the intercom audio line
- When 24V DC is removed, loudspeaker defaults to off state
- Green LED indicates system operating
- Intercom connectors are XLR 3-pin male and female (for loop through) on rear
- Monitors a single intercom circuit
- 5 Watts output with rotary loudspeaker volume control
- 28kHz 'Override' signal recognition for preset volume restoration
- Orange 'Override' LED indicator
- Suitable for 'Paging' and 'Show Relay' in dressing rooms, foyers and other areas

HOUSING

The LS391 is housed in a compact diecast aluminium case. M6 threaded inserts in the top and base allow the loudspeaker to be wall-mounted horizontally or vertically using the supplied U-shaped bracket.

OPERATION

With AC mains applied and an intercom feed attached, the loudspeaker remains inert until 24V DC is sensed on the intercom line, triggering the unit to switch on. Removing the 24V causes the LS391 to switch off. A typical application would be to switch off several LS391 loudspeakers simultaneously by simply turning off the intercom system.

To ensure that important messages do not go unheard when the loudspeaker is turned down low, the LS391 is fitted with 'Override' signal-recognition circuitry, so that in the event of a 28kHz tone being generated elsewhere on the circuit, the LS391 will respond and revert to operating at a pre-set audio level. The 'Override' pre-set may be set anywhere between maximum and zero volume.

A 5 Watt audio output, combined with a 10cm high quality speaker, make the LS391 suitable not only for reproducing speech clearly, but also wider range signals associated with show relay. A rotary volume control is sited beneath the loudspeaker. A universal angle wallmount bracket with horizontal adjustment is also available as an accessory (speaker can be mounted horizontally or vertically).

WIRING CONVENTIONS

System cable connectors:

XLR 3 pin	-	Pin 1	Earth/screen
		Pin 2	+24V DC
		Pin 3	Audio

ACCESSORIES

Wall mounting bracket 27-399 Tecpro LS399WB, universal bracket.

IEC Mains lead: see AC Mains Power Leads.

XLR lead: see CANFORD XLR - XLR CABLES

TECHNICAL SPECIFICATION

Power requirements:

AC Supply voltage:	220 - 240 Volts AC
Current consumption:	0.1A maximum, with 220-240V AC supply
Tecpro Line Voltage:	24 - 30 volts DC
Current consumption:	36 mA maximum on 24V Tecpro line
Amplifier Power Output:	5W maximum
Mounting:	M6 threaded holes on top and bottom surfaces.
Dimensions:	181 x 114 x 105 (h x w x d) mm
Weight:	2.4Kg

CONNECTORS

Mains input:	IEC
Intercom line feed input:	XLR 3-pin female
Intercom line loop out:	XLR 3-pin male

TECHNICAL NOTE – SHOW RELAY.

This is typically an audio feed, derived from a microphone positioned in the auditorium, which picks up the sound of the performance and the audience. This audio signal is fed to a Tecpro Master Station, for mixing to one or more intercom circuits, so operators and performers who do not have line of sight can hear what is happening on stage. It is good practice to compress the Show Relay signal before injecting it into the intercom system. This allows quieter sounds to be heard clearly while louder noises will be reduced in level to avoid overloading the intercom audio. Bass cut is recommended to avoid low frequencies causing overload and possibly causing the system's protection limiter to operate, resulting in unpredictable audio level changes.