DS 1642
16 CHANNEL
SPEAKER STATION

QUICK GUIDE

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1.0 INTRODUCTION

The DS 1642 is a 16-channel Speaker Station (19”/1RU) with for each channel a TALK and a LISTEN button.

This unit has to be connected to mains power (100 – 240 V AC, 50/60 Hz, 100 watts).

A channel is assigned to a user group as defined by the system administrator in the configuration software. Besides having conference communication via the groups, the user may initiate PTP (Person to Person) communication (like a private telephone call) and send/receive Text Messages (SMS).

The channel displays show for each channel the listen level (volume bar), the group name and “Audio Detect”. The master display shows the assignments of the function buttons, the menu items and the text messages.

The master section has programmable function buttons, a MIC ON button, a SOLO button and a PTP button.
The alpha-numerical keypad allows to enter ID numbers and user names. The MENU button is used to enter or exit the Menu.

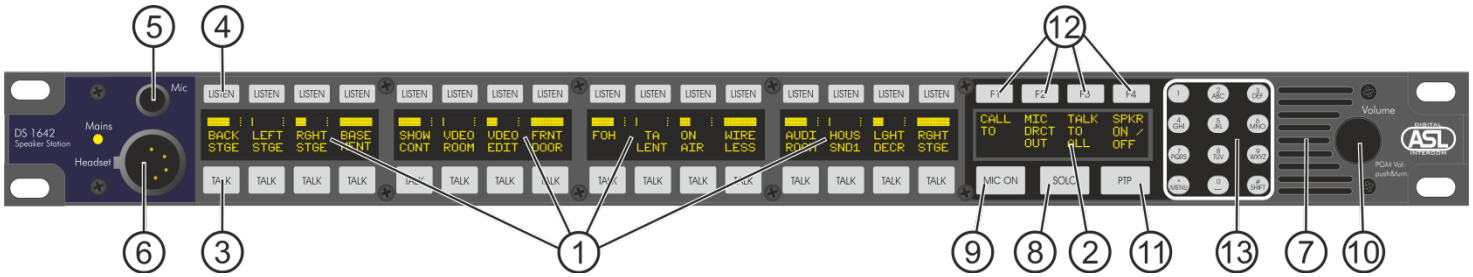
Connecting the DS 1642 speaker station to an intercom line ('string'), one uses the 'Intercom In' connector. The 'Intercom Link Out' connector is used in case of a daisy chain wiring topology.

A headset may be connected to the XLR-4 connector on the front panel. A binaural DS 1642 has an XLR-5 connector for left-centre-right use of the headset cans. Limiters for the headset- and gooseneck microphone prevent the mic signal path from clipping. A proprietary frequency correction provides high intelligibility.

<u>See the ASL Digital User Manual for:</u>

- Dashboard lighting & LED brightness
- Assigning functions to function Buttons
- Functions to assign to the function buttons
- Changing group positions at ones station
- Connecting the DS 1642 to the network
- Auto Login
- Logging in & Stand-by Mode
- PTP (person to person) operation
- Text Messaging (SMS)
- Menu operation & Menu items

2.0 FRONT PANEL CONTROLS & CONNECTORS



1 Channel Displays

Show for each channel the listen level (volume bar), Audio Detect” and the assigned group

2 Master Display

Shows the functions assigned to the function buttons, the menu functions (after entering the menu), the PTP functions (during PTP mode) and user ID number (during login procedure).

3 TALK buttons

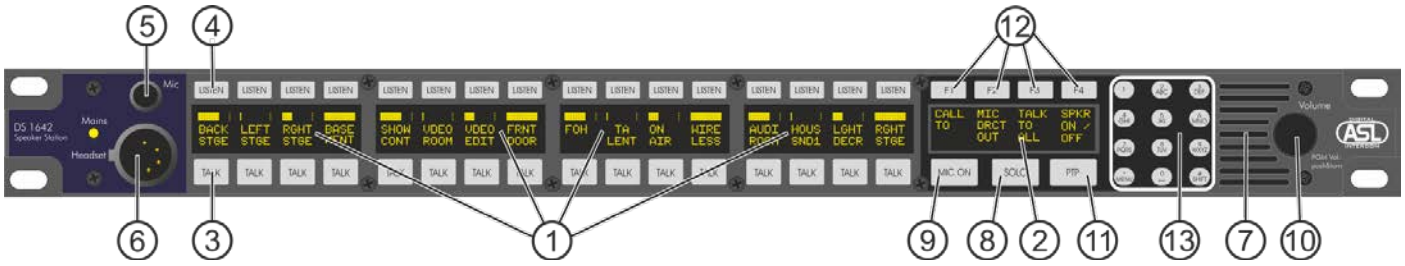
One for each channel, latching or momentary.
Latching:
If a TALK button is pushed shortly it latches and the mic signal is sent to the corresponding channel . If pushed again the button switches off. The latching function can be disabled by the system administrator in ConfigurIT™.

Momentary:
If a TALK button is pushed for at least 2 seconds, the microphone signal is sent to the corresponding channel until the button is released.

If a TALK button is switched on, it is lit green provided the MIC On button was activated.
If a TALK button is switched on but not the MIC ON button, the TALK button is lit yellow.

4 LISTEN buttons

To enable the listen function of each channel.
If enabled, the buttons are lit green. The listen level of each channel is shown in the channel display by a volume bar. The level may be adjusted by turning the Volume encoder whilst keeping the equivalent listen button pushed.



5 GOOSENECK jack connector
To hold a the gooseneck microphone which may be of the electret or dynamic type.
The mic signal path for either mic type has to be adjusted by the user, via menu item #9 'GOOSENECK MIC TYPE' or by the system administrator in the configuration software.

6 HEADSET connector (XLR-4)
To connect a headset. The DS 1642 speaker station accepts headsets with microphones of the dynamic or electret type. The mic signal path for either type has to be adjusted by the user, via menu item #7 'HEADSET MIC TYPE' or by the system administrator in the configuration software.

If a headset is plugged in, the gooseneck mic and the loudspeaker are automatically disabled.
The speaker can be enabled again by pushing the SPKR On/Off Function Button. Both the headset can(s) and the speaker are now on.

7 LOUDSPEAKER
To hear the intercom and PTP communication as well as the PGM signals and the Error, Ring, and Engaged tones.

8 SOLO button
To activate the SOLO mode of the station. If a TALK button of a channel is pushed whilst the unit is in SOLO mode, the user talks and listens to the selected channel only. The TALK button is now momentary only and the equivalent LISTEN button switches on automatically. All TALK and LISTEN functions of the remaining channels are disabled and the MIC ON button switches on automatically (if it was switched off before).

9 MIC ON button
If switched on, the MIC ON button is lit yellow if none of the TALK buttons are activated.
If the MIC ON button is switched on and one or several TALK buttons are activated, the MIC ON button is lit green and the mic signal is sent to the selected channels. TALK buttons which are pushed whilst the MIC ON is switched off are lit yellow, indicating no signal is sent to the selected channels.

10 VOLUME knob
By turning this rotary encoder the volume of the intercom and PGM audio signals are controlled, for both loudspeaker and headset.
By pushing and turning the rotary encoder, the volume of the PGM signals (see #19) may be adjusted in the required balance with the intercom signals. In that case the rotary encoder is the MASTER volume control for intercom and the PGM signals. However, the encoder may be programmed to adjust the Intercom volume and the PGM volume independently (see menu item #24 'Master Volume')

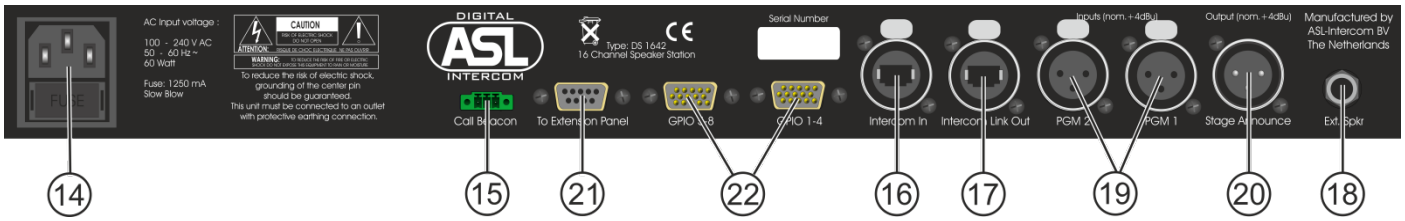
The rotary encoder is also used:
- to adjust the listen level of a channel by turning the volume encoder whilst keeping the LISTEN button of that channel pushed
- to scroll through the Menu and PTP items.
- to adjust the PTP listen level when being on a PTP call.

11 PTP button
To initiate a PTP (Person to Person) call or 'taking' an incoming PTP call (see description of PTP communication). The button is also used in Text Messaging (SMS) procedures.

12 FUNCTION buttons (F1, F2, F3, F4)
To these function buttons a various functions may be assigned. By pushing the SHIFT button in the keypad, four other functions may be assigned to these buttons. Assigned functions are shown in the master display, below each of the function buttons.
To activate a function the corresponding function button is pushed. The functions are listed in the ASL Digital user manual..

13 Keypad
This alpha-numerical keypad is to enter ID numbers and names and includes a MENU button and a SHIFT button. The MENU button is to enter the Menu (keep the button pushed for 2 seconds) or to exit the Menu and to confirm the ID number when logging in. With the SHIFT button the speaker station can be put in Standby Mode (keep this button pushed for 4 seconds)

3.0 REAR PANEL CONTROLS & CONNECTORS



14 MAINS connector
To connect the DS 1642 to mains (100 - 240 VAC, 50/60 HZ, 100 watts).

15 PHOENIX connector
To connect an IS 141 Sound/Light Beacon

16 INTERCOM IN connector
To connect the CAT-5 intercom line (“String”) coming from a matrix unit or from another user station (‘daisy chain’ wiring) or from a hub (‘star’ wiring) or from a wall box (‘Line’ wiring)

17 INTERCOM LINK OUT connector
When having a daisy chain wiring topology, to connect the intercom line to next user station.

18 EXTERNAL SPKR connector
This 6.3 mm jack allows the connection of an external speaker. When one connects such a external speaker the internal speaker switches off automatically.

19 PGM inputs (2x XLR-F)
Accept Program audio signals (locally fed program signals) on balanced line level being routed directly to the speaker and/or headset, not to the intercom channels.

20 MIC DIRECT OUT connector
This XLR-3M connector outputs the microphone signal on balanced line level and is often used for ‘Stage Announce’. It is activated by pushing and holding the function button to which the “Mic Direct Out” function has been assigned.

21 EXTENSION PANEL connector
Usage to be announced

22 GPI/O connectors 1 and 2
Each D-connector holds 4 general purpose inputs and 4 general purpose outputs (in total 8x GP Input and 8x GP Output).

4.0 MISCELLANEOUS

Side Tone:
Using a headset, ones own voice is heard in the headset cans. This is called 'Side Tone', which may be adjusted by the user via menu item #6 ‘SIDE TONE HEADSET’ or by the system administrator in the configuration software.

Amplifiers for headset:
The output amplifiers have a current limiter.
The bridged amplifiers are optimized for 200 ohm (2 headset cans parallel, each 400 ohm). Lower and higher impedances are supported but performance may decrease.

Amplifier for loudspeaker:
The output amplifier has a current limiter, set to max 1,25A.

Speaker Attenuator :
If the gooseneck microphone is switched on, the output of the loudspeaker is attenuated. This to avoid the signal from the speaker enters the microphone (feedback). The degree of attenuation may be adjusted by the user via menu item #25 ‘Speaker Attenuator’ or by the system administrator in the Configuration software.

Mic Input Circuitry:
A built-in limiter preserves the mic signal path from clipping. A presence filter (proprietary frequency correction) provides high intelligibility. This filter may be switched on or off, by the user via menu item #12 'PRESENCE FILTER' or by the system administrator in the configuration software

For each type of gooseneck or headset microphone there is a default gain setting. These default settings may be adjusted with -4 dB to +20 dB, by the user via menu item #8 ‘HEADSET MIC GAIN’ and menu item #10 ‘GOOSENECK MIC GAIN’ or by the system administrator in the configuration software.

Dimensions & Weight:

Width:	19” (483 mm)
Height:	1.75” (44,5 mm)
Depth:	184 mm
Weight:	2490 grams