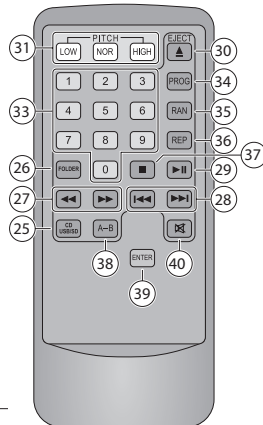
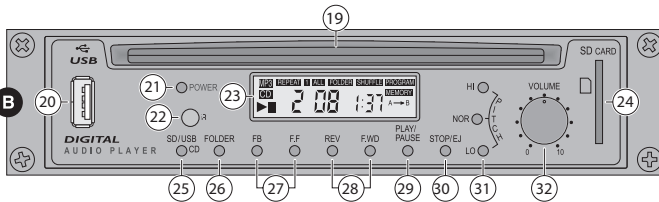
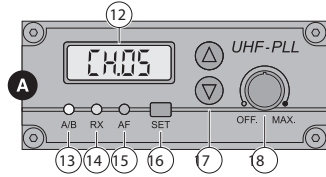
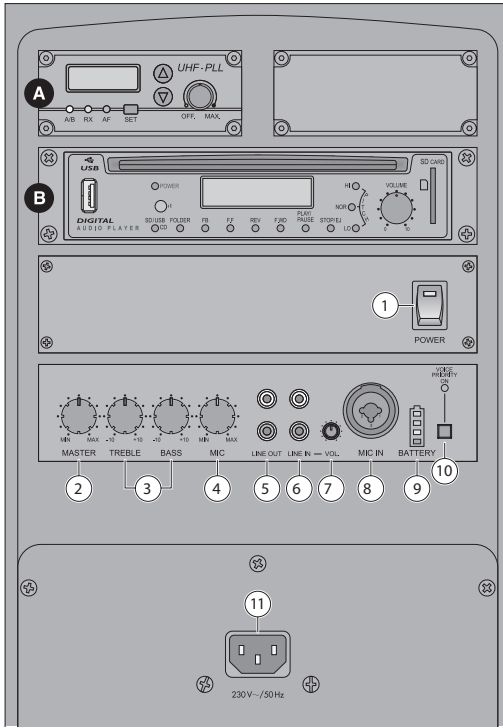


GPA-770

Portable active speaker

Installation Guide





Speaker

- 1 POWER switch; lits up
- 2 MASTER for overall volume
- 3 TREBLE (high frequencies); BASS (low frequencies)
- 4 Volume control for MIC IN (8)
- 5 LINE OUT (RCA jacks) to pass on the mixed signal e. g. to a second active speaker system; the LINE OUT signal is not affected by the control MASTER (2) but by the tone controls (3)
- 6 LINE IN (RCA jacks) for connection of an audio source with line signal level, e. g. CD/MP3 player, tape deck, radio
- 7 Volume control for the input signal of LINE IN (6)
- 8 MIC IN (combined jack XLR / 6.3mm jack, bal.) for connection of a microphone
- 9 Battery meter
- 10 VOICE PRIORITY indicator: When the button is pressed (LED lights up), the volume of the remaining audio sources is substantially attenuated when announcements are made via the wireless transmitter or the microphone connected.
- 11 DC Input (230 V~ / 50 Hz)

A. Wireless receiver

- 12 Display to indicate the transmission channel [indication of the radio frequency when keeping an arrow key (17) pressed]
- 13 Diversity LED: red: antenna A ; green: antenna B. Indicates which of the two internal reception antennas is active at present
- 14 LED RX: lights up when a matching transmitter is switched on and set to the channel of the receiver
- 15 LED AF: lights up when receiving an audio signal
- 16 SET to activate the channel selection mode (channel indication on the display flashes) and to confirm a channel selection
- 17 Arrow keys and channel selection. The keys can also be used to shortly switch over the display to indicate the radio frequency (keep the key pressed down).
- 18 On / off switch and volume control

B. Player module (accessory)

- 19 CD slot
- 20 USB port for connection of a USB mass storage device
- 21 POWER button
- 22 IR sensor for the signals of the remote control
- 23 Display

For audio CDs

The insertion "CD" and the track number (in the stop mode: total number of tracks)

For MP3 playing media

The insertion "MP3", the folder number and the track number in the folder (in the stop mode: total number of folders and total number of tracks)

- the time played of the track (min. : sec.)
- for replay, for pause
- insertion for the repeat function selected ("REPEAT 1", "REPEAT FOLDER" or "REPEAT ALL") button REP (36)
- insertion "SHUFFLE" for replay of the tracks in a random order
- insertion "PROGRAM" when programming an individual track sequence
- insertion "MEMORY" for replaying a programmed track sequence
- insertion "A B" when replaying a loop

24 SD card slot

25 Button to select CD, USB storage device or SD card

26 Button FOLDER to select the next folder (for MP3 mode)

27 Button FF for fast forward and button FB for fast reverse: Shortly press the respective button and when the desired spot is reached, press the replay/pause button (29).

28 Buttons for track selection REV = reverse, FWD = forward

29 Replay/ pause button

30 Button to change to the stop mode (the first time button is pressed) and to eject a CD (the second time button is pressed)

31 Buttons to change the playing speed in 10 steps: press the button HI / HIGH (to increase speed) or LO / LOW (to decrease speed) repeatedly until the desired speed is reached; to return to standard speed, press the button NOR.

32 Volume control

33 Numerical keys for track selection by entering its number (MP3 mode: number of the track on the playing medium, not in the folder!) after the input press the button ENTER (39) to confirm

34 Button to program an individual track sequence See chapter 6.2.11

35 Button for track replay in a random order

36 Button to select

- "REPEAT 1": repeat of the track
- "REPEAT FOLDER" (for MP3 mode only): repeat of all tracks in the folder
- "REPEAT ALL": repeat of all tracks of the playing medium
- No "REPEAT" insertion: no repeat function activated

37 Button to stop the replay

38 Button to replay a loop (repeat of a section in the track). The first time, button is pressed to define the starting point of the section. The second time, button is pressed to define the end point of the section: replay of the loop will start. The third time, button is pressed to terminate the replay of the loop.

39 Button to confirm an input, e. g. after track selection via the numerical keys (33)

40 Button to activate / deactivate the sound

Applications

The active speaker system GPA-770 is a combination of a speaker system and an amplifier with two mixable inputs (1 input for a microphone, 1 input for an audio source, e. g. CD player). A CD / MP3 player capable of replaying USB mass storage devices and SD cards and a receiver for a wireless transmitter have been integrated. The 16-channel receiver operates with Diversity technique in the range of 863 – 865 MHz. The matching transmitters are e. g. EJ-7XT or EJ-701 TM and other transmitters of the EJ-series. The transmission range depends on the local conditions and may extend to up to approx. 30m.

The speaker system is specially designed for mains-independent operation. For power supply, two rechargeable NiMH batteries are integrated which will be recharged in case of mains connection. The system is ideally suited for mobile PA applications at events, lectures, etc. Via a line output the mixed signal can be passed on to another amplifier system. The speaker system can be placed as desired or be mounted onto a PA speaker stand via the stand sleeve on its lower side.

Power supply





The unit can be operated at a mains socket or via the internal rechargeable batteries.

Mains operation/ recharging the batteries

- 1) To operate the active speaker system via the mains and / or to recharge the internal batteries, connect the mains cable provided to the mains jack (11) and to a mains socket (100-240V).
- 2) In case of mains connection, the automatic charging for the batteries is active: During the charging process the four LEDs of the battery indication (9) light up successively. For charging, it is not necessary to switch on the unit. It is possible to operate it during charging. When the charging process is terminated, the upper green LED lights up continuously.
- 3) After the operation or after charging the batteries, disconnect the unit from the mains socket to prevent unnecessary power consumption.

Battery operation

Prior to the first use, fully recharge the batteries (see above). During battery operation the charging status of the batteries is shown on the respective LED of the battery indication (9):

	green battery charged 80 – 100%
	green battery charged less than 80%
	yellow battery charged less than 50%
	red battery charged less than 20%

To prevent damage to the batteries due to deep discharge, please note: Recharge discharged batteries as soon as possible. When storing the unit, consider the selfdischarge of the batteries: Charge the batteries sufficiently prior to storage and during storage regularly check their charging status and recharge them, if required.

Audio Connections

All connections should only be made with the speaker system switched off.

Inputs MIC IN and LINE IN

A microphone and an audio unit with line output level (e. g. CD / MP3 player, tape deck, radio) may be connected as audio sources :

- Connect the microphone via an XLR cable or a 6.3 mm cable to the jack MIC IN (8). The microphone input is balanced.
- Connect the audio unit to the stereo input LINE IN (6) via RCA cable. The signals of the left and the right channels are converted to a mono signal.

Output LINE OUT

A recorder or another active speaker system for PA applications can be connected to the RCA jacks LINE OUT (5). At both jacks the mixed mono signal of the speaker system is available.

The control MASTER (2) does not affect the LINE OUT signal. However, it is affected by the adjustment of the tone controls (3).

It is possible to set up several active speaker systems GPA-770 which receive and reproduce the signal of one wireless transmitter. No additional cabling is required.

Operation

CAUTION Never adjust the active speaker system to a very high volume. Permanent high volumes may damage your hearing!

- 1) Prior to switching on the speaker system, set the control MASTER (2) to "MIN".
 - 2) Turn on the speaker system with the POWER switch (1). The switch lights up. The battery indication (9) shows the charging status of the batteries (chapter 4).
 - 3) Turn on the audio sources used: microphone / audio unit connected, wireless receiver (see **Wireless receiver**), CD / MP3 player (See **CD/MP3 player**).
 - 4) Turn the control MASTER (2) for the overall volume of the speaker system to the desired level.
 - 5) Mix the signals of the audio sources in the desired volume ratio or fade in and out single sources as required:
 - for the unit at the input LINE IN (6) use the volume control VOL. (7)
 - for the microphone at the input MIC IN (8) use the volume control MIC (4)
 - for the signal received of the wireless transmitter use the receiver volume control (18)
 - for the CD / MP3 player use the volume control VOLUME (32)
- Set the volume controls of the sources not used to minimum or switch off the sources.
- 6) Adjust the sound with the control TREBLE for the high frequencies and the control BASS (3) for the low frequencies and the definitive volume for the active speaker system with the control MASTER.

7) The priority feature of the microphone may be activated with the button VOICE PRIORITY (10). When the button is pressed (LED above it will light up), the volume of the music currently replayed will be substantially attenuated when announcements are made via the microphone connected or via the wireless transmitter used. To deactivate the feature, disengage the button.

Note: The priority feature of the microphone will also affect the output signal of the jacks LINE OUT (5).

8) After operation and, to prevent unnecessary battery discharge, also for longer breaks, switch off the speaker system with the POWER switch.

Wireless receiver

Turn receiver power on/off control and volume control (18) clockwise from the position "OFF" until a click occurs. The LED A / B (13) shows red or green, depending on the internal receiving antenna (A or B) which is active at present. The display (12) shows the transmission channel adjusted. To display the radio frequency of the channel, press down button (17).

2) For selection of an unused channel free of interference, leave the transmitter switched off and adjust the channel at the receiver first:

1. Press the button SET (16) to st channel: The channel indication on the display flashes.
2. Select the channel with the arrow keys (17): for channel selection "up" or for channel selection "down".
3. Press the button SET to confirm. Note: If no button is pressed in the selection mode for 10 seconds, it is exited.

If the LED RX (14) lights up after the channel adjustment with the transmitter switched off, signals of interference or signals of other transmitters are received on this channel. In this case choose another channel.

3) Turn on the transmitter and adjust it to the same channel. The LED RX lights up to indicate that a radio signal is received. The LED AF (15) lights up when the transmitter transmits an audio signal with sufficient level on the channel.

4) Adjust the volume for the audio signal received with the control (18).

CD/MP3 player (Accessory)

The player allows to replay standard audio CDs and CDs, USB mass storage devices and SD cards with MP3 files.

Note: With rewritable CDs (CD-RW), problems may occur when replaying according to the CD type, the CD burner and the burning programme used.

The anti-shock memory of the player will be able to compensate temporary shocks or vibrations occurring during the CD sampling; however, it will not be able to compensate continuous, severe vibrations. For CD operation, the system must therefore always be operated in a stationary way, i. e. it must be placed on a solid, immobile ground.

Note concerning sound interruptions and reading errors

Cigarette smoke and dust will easily penetrate through all openings of the unit and also settle on the optics of the laser sampling system. This deposit may cause reading errors and sound interruptions.

Remote control

The IR remote control for the player is supplied with a battery. Prior to initial operation, remove the foil from the battery holder. When pressing a button, always direct it to the infrared sensor (22) of the player. There must be no obstacles between the sensor and the remote control.

If the unit is not used for a longer time, remove the battery from the remote control as a precaution so that it will not be damaged in case the battery should leak.

Replacing the battery:

- 1) Push the latch of the battery holder to the right and remove the holder.
- 2) Remove the old battery and insert the new battery (3 V button cell, type CR 2025) into the holder with the positive pole pointing upwards.
- 3) Push the holder back into the remote control.

Turning on and off/inserting and removing the playing medium

The player is turned on and off with the POWER button (21).

Inserting a playing medium:

- Insert a CD with the lettering showing upwards into the CD slot (19) until it is retracted automatically and / or
- connect a USB storage device (e. g. USB flash drive, USB hard disk with separate power supply) to the USB port (20) and / or
- insert an SD card (bevelled corner upward and contacts to the right) into the slot (24).

Removing a playing medium:

To extract the CD, press the eject button STOP/EJ or EJECT (30) twice (first time: switching to stop, second time: CD is ejected). After ejecting, the CD can be retracted again by pressing the eject button.

Disconnect the USB storage device from the USB port and to remove the SD card, first unlock it by pushing it into the slot, then remove it. USB storage device and SD card should not be removed during their replay.

Selecting the playing medium

Each time the speaker system is activated, the CD player mechanism is automatically selected. It is possible to select the playing media with the button CD / USB / SD (25): After pressing the button, the selected medium is shown on the display. Shortly after that its replay will start.

If a USB storage device or an SD card has been selected and is then removed, the player automatically switches over to the CD player mechanism. The same happens when a new CD is retracted.

Replay /pause/stop

After reading in the playing medium, the replay starts. To interrupt the replay and to continue it again, press the button PLAY/ PAUSE or (29). The display shows the time already played of the track (min.: sec.).

To stop the replay, the following buttons may be pressed:

- Button (37)

- Button STOP/ EJECT or EJECT (30)

In the stop mode the display is switched to the time indication "00 : 00". To restart the replay with the first track, press the button PLAY/ PAUSE.

Adjusting the volume/muting

Adjust the volume with the control VOLUME (32). To deactivate and reactivate the sound, press the button (40).

Track selection

Audio CDs

For audio CDs (insertion "CD") the display shows the track number during replay and pause and the total number of all tracks in the stop mode.

1. Advancing or reversing tracks: Use the buttons REV/ F.WD (28) = return to the beginning of the played track, then one more track is reversed each time the button is pressed, F.WD = one track forward.
2. Entering track number: Enter the track number via the numerical keys (33) and confirm with the button ENTER (39).

MP3 playing media

For playing media with MP3 files (insertion "MP3") the display shows the folder number and the track number within the folder during replay and pause. Tracks without folder in the main directory are assigned to folder No. 1. In the stop mode the total number of the folders and the total number of the tracks of the playing medium are shown.

1. Advancing or reversing tracks: Each time the button FOLDER (26) is pressed, the player goes to the next folder. For track selection use the buttons REV/ F.WD = return to the track beginning first, then one more track is reversed, each time the button is pressed, F.WD = one track forward.
2. Entering the track number: Via the numerical keys (33) enter the number of the track on the playing medium (not the number within the folder!) and confirm with the button ENTER (39).

Note: In some cases the player does not go to the beginning of the played track when pressing the return button but immediately goes to the previous track (e. g. in case of CD operation in the pause mode)

Repeat functions/random track

Three repeat functions are available. The selected function is shown on the display.

Use the button REP (36) to select:

- "REPEAT 1": continuous repeat of the track
- "REPEAT FOLDER" (for MP3 mode only): continuous repeat of all tracks in the folder
- "REPEAT ALL": continuous repeat of all tracks on the playing medium
- No REPEAT insertion: no repeat function activated; after playing all tracks, the player is set to stop

To replay the tracks in a random order, press the button RAN (35). "SHUFFLE" is inserted on the display. To turn off the shuffle function, press the button again.

An activated repeat function is deactivated when activating the shuffle function and vice versa.

Playing a loop

A section within a track can be continuously repeated as a loop.

- 1) If the starting point of the section is reached in the track currently playing, press the button A – B (38). The display shows "A".
- 2) If the end point of the section to be repeated is reached, press the button again. The display shows "A B". The section is repeated permanently.
- 3) To finish the loop, press the button a third time. "A – B" will be removed.

Changing the replay speed and pitch

The PITCH buttons (31) allow to change the replay speed and thus the pitch.

- button HI or HIGH: to increase the replay speed in 10 steps
- button LO or LOW: to decrease the replay speed in 10 steps

Press the corresponding button repeatedly until the desired speed is reached. Each time the button is pressed, the display shortly shows the selected adjustment.

To return to standard speed, press the button NOR once.

Programming a track sequence

- 1) To switch to the programming mode, press the button PROG (34). "PROGRAM" is inserted on the display.
- 2) Select the first track of the track sequence: either
 - go to the track with the buttons REV/ FWD (28); for MP3 operation first select the folder with the button FOLDER (26), if required or
 - enter the track number directly via the numerical keys (28) [for MP3 operation: the number of the track on the playing medium, not in the folder! and press the button ENTER (39) to confirm.

The display shows the memory location number instead of the time indication.

For all further tracks proceed the same way until the complete track sequence (10 max.) has been programmed.

- 3) To start the track sequence, press the button PLAY/ PAUSE or (29). "PROGRAM" will be removed and "MEMORY" will be inserted. To return to replay in standard order, press the button PROG. "MEMORY" will be removed and the programming will be deleted.
- 4) If no repeat function is activated, the player is set to stop after playing the track sequence, thus the track sequence is deleted. ("REPEAT 1" and "REPEAT ALL" are available in chapter **Repeat functions/Random track**)

Specifications

Amplifier power: 80WMAX/50WRMS

Frequency range: 70 – 16 000 Hz

Input sensitivity

MIC IN: 6mV

LINE IN: 700mV

Level LINE OUT: 1 V

Audio connections

MIC IN: combined jack XLR/6.3 mm, balanced

LINE IN, LINE OUT: RCA jacks

Tone control

BASS: ± 15 dB / 100 Hz

TREBLE: ± 10 dB / 10 kHz

Radio frequency range: 863 – 865 MHz, divided into 16 channels (table below)

Power supply: via internal batteries (2 × rechargeable NiMH battery pack 12 V/4.5 Ah) or via mains connection (230 V~ / 50 Hz / 150 VA)

Operating time of rechargeable batteries: up to 6 – 7 hours approx.

Charging time of batteries: 11 – 12 hours approx.

Ambient temperature: 0 – 40 °C

Dimensions: 300 × 470 × 230mm

Weight: 9.8 kg

Channel	Frequency	Channel	Frequency
1	863.1 MHzv	9	863.2 MHz
2	864.1 MHz	10	864.2 MHz
3	863.6 MHzv	11	863.7 MHz
4	864.6 MHz	12	864.7 MHz
5	863.3 MHz	13	863.4 MHz
6	864.3 MHz	14	864.4 MHz
7	863.8 MHz	15	863.9 MHz
8	864.8 MHz	16	864.9 MHz

Safety and warranty

- The equipment should be installed by a competent audio visual technician observing 'good electrical and audio practice' at all times and following all the instructions contained within this document.
- The installer is responsible for installing the product in a way that may not cause risk of fire.



Do not remove any covers as there is a risk of electric shock. Please observe that the product warranty doesn't include faults caused by tampering with the product, carelessness, incorrect connection/ mounting or maintenance.

- The unit is suitable for indoor use only. Protect it against dripping water and splash water, high air humidity and heat (admissible ambient temperature range 0 – 40 °C).
- Do not place any vessels filled with liquid, e. g. a drinking glass, on the unit.
- Do not set the unit into operation, and immediately disconnect the mains plug from the mains socket
 1. if there is visible damage to the unit or to the mains cable,
 2. if a defect might have occurred after a drop or similar accident,
 3. if malfunctions occur.
- Never pull the mains cable to disconnect the mains plug from the mains socket, always seize the plug,

Maintenance

Under normal circumstances the product does not need any special maintenance. Should the unit become dirty, wipe it with a clean damp cloth. Do not use solvent or strong detergents.

Environment

Please follow existing disposal regulations in your country. If you respect these instructions you ensure human health and environmental protection.



(Univox) Bo Edin AB
Stockby Hantverksby 3,
SE-181 75 Lidingö, Sweden

+46 (0)8 767 18 18
info@edin.se
www.univox.eu