

Manual

Paletto®



Introduction

We hope that you will find PALETTO to be a very useful and enjoyable tool.

Important: Please read this manual before using PALETTO and PALETTO accessories. Save these instructions for future reference.



Contains small parts. Keep out of the reach of children under the age of three.

Manufacturer: Komikapp AB, Box 1036, SE-432 13 Varberg, Sweden

Includes the following parts:

1 PALETTO
1 adapter
1 memory card
1 microphone
8 magnetic plates
1 pair of tweezers

Accessories:

Komikapp manoeuvre
switches for scanning
function
Additional memory cards
Paletto bag

Accessories for PALETTO

Plus:

Relay box
Remote control unit
External IR
transmitter/switches

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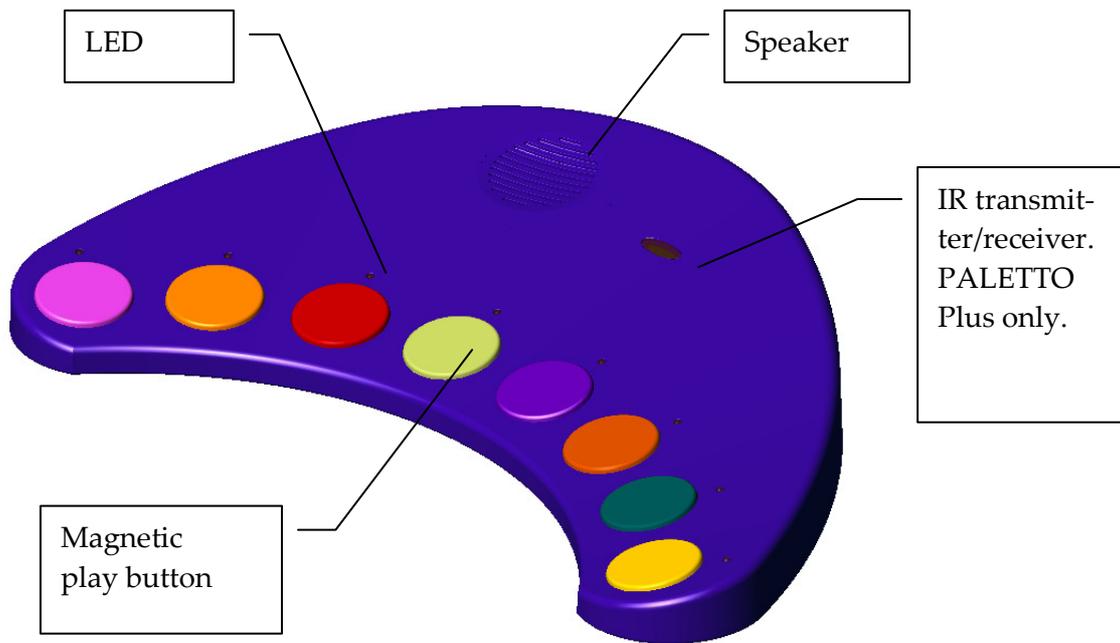
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1 PALETTO

Front

The front of PALETTO features 8 play buttons with one light-emitting diode (LED) each and an IR communications sensor (see illustration below).



Getting started:

The box contains a memory card in a separate small plastic pack. Insert the memory card with the label upward in the memory card slot on the panel labelled "MMC". Use only original PALETTO cards.

Important! Memory cards should never be removed from the memory card slot when PALETTO is connected to a power supply.

Connect the small plug on the adapter cord (DC power connector) to the 6V DC port on the panel of PALETTO. Connect the black adapter to a wall socket (220V). PALETTO is now connected and ready to use. The pre-recorded sounds have been classified into 8 groups which are selected with the **Mode** button. Pressing a play button plays a sound while the red LED indicates that the switch has been activated.

Safety

Warning! Keep small children and other persons at early levels of development under supervision. There is a risk of suffocation if the adapter cord is wrapped around the neck or if loose parts are put in the mouth.

Warning! Use only original PALETTO parts. Do not use the adapter if it is damaged. The adapter is to be connected by an adult.

PALETTO has holes for screws and can be mounted on a wall.

Protect the equipment from tampering and physical damage.

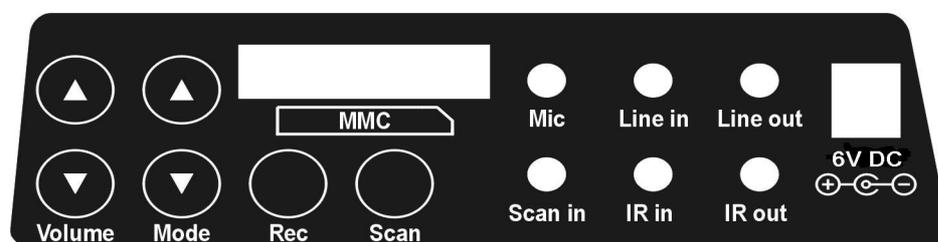
PALETTO is intended for indoor use only in a dry location at normal room temperature and with normal humidity. Protect the device from grinding, sanding and other forms of dust. Do not drop the device on the floor or subject it to sudden shocks or blows. The chassis must not be opened or removed.

Clean PALETTO with a cloth lightly dampened with a soap-based solution. Wipe it dry immediately with a dry cloth.

Important! Moisture must be prevented from entering the device, the microphone and the adapter. The memory card must be protected from moisture.

1.1 Control panel

The back of PALETTO features buttons for settings and input and output ports. This is also where the memory card with sounds is to be inserted. The illustration below shows the overlay on the back panel of PALETTO.



Name	Description
Volume ▲	Button to raise volume.
Volume ▼	Button to lower volume.
Mode ▲	Function button for selection of sound group and time for scanning mode.
Mode ▼	Function button for selection of sound group and time for scanning mode.
Rec	Recording button.
Scan	Button for choice of scanning function – manual or automatic.
MMC	MMC: Memory card slot.
Mic	Port for microphone. 3.5 mm mono jack
Line in	Connection of external audio equipment. Jack 3.5 mm stereo or mono
Line out	Audio port for connection of external amplifiers and speakers. Jack 3.5 mm stereo
Scan in	Port for external manoeuvre switch for scanning (closed contact). Jack 3.5 mm mono
IR in	PALETTO Plus: Port for connection of external IR receiver. Jack 3.5 mm mono
IR out	PALETTO Plus: Port for connection of external IR transmitter. Jack 3.5 mm mono
6VDC	Jack for connection to the adapter. 6 volt DC. DC plug, 2.0 mm. Use only original PALETTO plugs.

2 Volume controls

2.1 General description

The user can select the play volume with two buttons on the back of PALETTO. PALETTO Plus also features the possibility of controlling the volume using a remote control which transmits RC5 codes (see also the section entitled "IR communications").

The volume controls consist of 15 steps with spoken information. Each time the volume is changed, system sounds will be heard. Pressing "Volume▲" increases the sound level. To lower the volume, press "Volume▼". Several sequential steps can be made without playing the system sounds.

Warning! Never use PALETTO close to anyone's ears! Incorrect use may cause hearing loss.

3 Sound groups

3.1 General description

PALETTO features 8 pre-recorded sound groups. Each set consists of 8 different sounds, one for each play button. Sound groups 1-8 consist of permanent recordings.

PALETTO Basic, also features 1 sound group for the recording of max. 8 messages or max. 30 min.

PALETTO Plus, also features 8 sound groups for recording of max. 64 messages or max. 30 min.

The sound groups are selected with the "Mode" buttons on the panel. Use "Mode ▲" to move up and "Mode ▼" to move down. A system sound indicates the user's location in the menu.

The sound groups cannot be changed during play or while recording.

Important! Make sure that all users who wish to save messages or spoken sounds have their own memory cards.

Sound group 1: Human sounds

Freezing
Baby talk
Laughing man
Applause
Woman weeping
Whistling
Children at play
Burping

Sound group 3: Indoor sounds

Person walking on a hard floor
Doorbell
Opening and closing door
Lighting a matchstick
Beverage being poured
Ringing telephone
Cuckoo clock
Shattering glass

Sound group 5: Vehicles

Bus
Ship
Bicycle bell
Car
Helicopter
Motorcycle
Aeroplane
Tractor

Sound group 2: Hygiene

Taking a bath
Showering
Nose blowing
Gurgling and spitting
Teeth brushing
Flushing toilet
Hand washing
Rinsing laundry

Sound group 4: Animal sounds

Housefly
Pig
Dog
Horse
Chicken and rooster
Cow
Sheep
Cuckoo

Sound group 6: City sounds

Car accident
Church bells
Traffic
Police car
Walking on gravel
Restaurant environment
Letter put in letterbox
Stadium sporting event

Sound group 7: What profession?

Watchmaker
Cashier
Lorry driver
Military officer
Tennis player
Carpenter
Doctor
Cook

Sound group 8: Various sounds

Chimes
Music box
Conversation
Exotic sounds
Vintage car horn
Fireworks
Organ grinder
Whistling

4 Play

4.1 General description: Sounds can be played in the following ways:

1. With play buttons 1-8.
2. In scanning modes 1 and 2, sounds are activated via the Komikapp-switch or other manoeuvre switch inserted in the "scan in" port.
3. PALETTO Plus: Activation with the IR signal (RC5 code). (See also the section entitled "IR communications").

4.2 Play buttons

When PALETTO's play buttons are pressed, sounds are heard at the same time as the adjacent LED is lit. Since listening requires concentration, PALETTO cannot be activated again until the entire sound has been listened to. While sounds are being played, all other functions besides volume control are deactivated.

4.3 PALETTO Plus (with IR)

When one of the play buttons has been activated, **an IR signal is transmitted**, i.e. an RC5 code. This signal can be used for other PALETTO products.

Example of application: Record the names of the buttons' colours; for example, press the green play button. The word "green" will be heard at the same time as the light turns to green in a connected bubble tube, ball pool or other equipment from the Komikapp-Rehatek family of PALETTO products.

PALETTO Plus can also **receive IR signals** and each play button has individual codes, one for each sound group. When PALETTO has received an IR signal, the corresponding sound is played and the LED lights up.

Example of application: Our switches with a built-in IR transmitter can be used to activate PALETTO. Our hand-held IR transmitters can also be used as remote controls for PALETTO. See also the section entitled "IR communications".

5 Recording

5.1 General information

PALETTO Basic: Sound group 9 is intended for own recordings of up to 8 different messages.

PALETTO Plus: Sound groups 9-16 are used for recording own sound via the microphone ("Mic") or via the "Line in" port on the back panel of PALETTO. Max. 64 different messages.

An error message is played if a user attempts to record within one of the sound groups with permanent sounds.

5.2 Recording

Sounds can be recorded via two different ports: "Mic" (the microphone is connected with the 3.5 mm mono jack) and "Line in" (audio equipment is connected with a 3.5 mm stereo jack).

The recording mode is selected with the "Rec" button on the panel. Pressing "Rec" once makes PALETTO ready to receive sounds from a connected microphone. A spoken informational message will then be heard. Pressing "Rec" again prepares PALETTO for recording via "Line in". Pressing the play button again returns PALETTO to normal mode and an informational message is played. Use the included PALETTO microphone for your recordings.

The following audio equipment may also be used for "line in" recording: MP3 players, cassette players, CD players, computers, etc. Connect the equipment via "line out" to PALETTO's "line in". Suitable cables can be purchased at shops selling hi-fi equipment.

The difference between recording via a microphone and recording via the "Line-in" port is that "Line-in" plays the sound during recording. This does not take place when recording via a microphone.

Instructions:

A. Selection of sound group:

Select a suitable sound group: PALETTO Basic, sound group= 9. PALETTO Plus = 9-16.

B. Recording:

Select the recording source with the "Rec" button. A message will announce the choice of recording mode: microphone or "line in". When PALETTO is ready to receive sounds, all the LEDs will flash. Press the play button that the sound is to belong to. This activates PALETTO's recording function and it is ready to make a recording. Recordings in progress are indicated by the LED being continuously illuminated.

NB If a play button already with an accompanying sound is selected, the latter will be replaced by the new sound. This does not apply to the pre-recorded sounds on the memory card.

C. Interrupting a recording

Recording is interrupted when the play button is pressed again. If the memory capacity of the MMC card is full, recording will be stopped automatically.

When a recording is interrupted, the file system of the MMC card will be updated. This can take a few seconds; in the meantime, the LED will flash next to the play button used to record the new sound.

When the MMC card has been updated, the new sound will be played. Then PALETTO will return to normal mode.

This procedure is repeated for each message to be recorded.

Note that if the memory capacity of the MMC card is full, it will be necessary to replace existing sounds with new sounds or deleting an entire sound group of recorded sounds. A spoken message announces when the memory capacity of the MMC card is full.

Warning! Always keep small children and other persons at early levels of development under supervision. There is a risk of suffocation if the microphone cord is wrapped around someone's neck or if the microphone is put in the mouth.

Use your imagination! There are lots of ways of recording music and messages from computers, the Internet, radio, CD players, etc. There is also lots of memory for long messages and even short stories. A memory card with a longer recording time is available as an accessory.

5.3 When the memory capacity of the MMC card is full.

If the memory capacity of the MMC card is full and recording is selected, a spoken message is announced. If the memory capacity runs out during recording, the recording will be stopped and the recorded information will be played. To delete or replace recorded sounds see 5.4 and 5.5.

5.4 Deleting individually recorded sounds

A sound cannot be completely deleted, but a long sound can be replaced by a shorter one, freeing up memory on the MMC card.

5.5 Deleting an entire sound group of recorded sounds

All recordings in a sound group can be deleted. Select the sound group to be deleted, i.e. sound group 9 for PALETTO Basic or sound groups 9-16 for PALETTO Plus.

Then press the "Scan" button for at least 5 seconds and release it. All of the LEDs on PALETTO will light up and then turn off beginning from the left. When an LED turns off, it means that the sound has been deleted. When all the LEDs are no longer lit, the chosen sound group has been fully deleted and PALETTO has returned to normal mode.

6 Scanning

Users who cannot activate PALETTO by pointing may be able to use an external Komikapp- switch or her/his own manoeuvre switch. Connect the switch to the "Scan" port of the panel.

PALETTO has two different scanning modes. These are selected by pressing the "Scan" button.

Depressing a third time brings PALETTO back to normal mode. A spoken message announces the selection made. The sound selected is also indicated by the LEDs.

6.1 Scanning mode 1: Automatic scanning

The LEDs light up automatically from play button 1 to 2 to 3, etc.

After button 8, they begin to light up again from button 1. The length of time that the LEDs are lit for each button is set with "Mode ▲" and "Mode ▼". The time can be set for between 0.5 and 20 seconds.

The corresponding sound will be played when the switch that has been connected to the Scan port has been activated.

PALETTO Plus: The time lag can also be set with a remote control. See also the section entitled "IR communications".

6.2 Scanning mode 2: Manual scanning

Each time the switch is pressed, the LEDs light up from play button 1 to 2 to 3, etc. After button 8, this procedure will begin again from button 1. When the desired play button has been chosen, all you need to do is waiting until PALETTO has been activated. The time lag before the sound is played can be set between 0.5-20 seconds. This is done with the buttons "Mode ▲" and "Mode ▼".

PALETTO Plus: The time lag can also be set with a remote control. See also the section entitled "IR communications".

7 IR communications

(PALETTO Plus only.)

General description

PALETTO has an IR transmitter and an IR receiver which can activate functions from a distance. IR transmitters and receivers transmit and receive Philips RC5 codes (IR hand transmitters can be ordered from Komikapp-Rehatek). These signals activate PALETTO from a distance to play sounds. PALETTO can also be used to transmit codes to other products in the PALETTO family.

7.1 IR reception

When PALETTO is in normal mode and recording or playing of sounds is not in progress, PALETTO is capable of receiving up to 12 different RC5 codes. When a RC5 code which corresponds to one of the 8 buttons has been received, the appropriate sound is played. The sound is retrieved from the sound group chosen on PALETTO. The sound groups may also be selected with the program selector of a remote control by paging up and down.

The volume can be adjusted with a remote control's + and – volume buttons.

7.2 IR transmission

A unique IR code (RC5 code) is linked to each play button for every sound group (16 levels X 8 buttons = 128 RC5 codes). Each time a sound is played, the equivalent RC5 code is transmitted.

Important:

The transmission of IR signals is sensitive to the room's layout and decor. For example, textiles, the height of the ceiling and dark colours have a negative impact on the range of IR signals. If problems arise, PALETTO Plus can be supplemented with an external IR transmitter which is connected to "IR-out" on the panel. The IR adapter is an accessory that is available separately.

NB Be sure to always read the instructions of connected equipment for information concerning programming, etc.

Warning! Long-term exposure to infrared light can damage eyesight. Make sure that users do not rest their heads against PALETTO and look straight into the IR sensor at the same time as the switch surfaces are activated. Be especially cautious with children and persons who lack the blinking reflex or who have dilated pupils.

7.3 General information on updating PALETTO IR codes

The "Rec" button may be used to select 3 different modes for updating the IR transmission and reception codes as well as general IR codes. The general IR codes are the reception codes for level (up/down) and volume (up/down).

To access the update mode for IR codes, the "Rec" button must be depressed for at least 5 seconds and then released. PALETTO can now update the RC5 codes for transmission and the system sound "*Update mode for IR transmission codes*" will be played. Pressing the "Rec" button once again selects the mode for updating the RC5 codes for reception and the system sound "*Update mode for IR reception codes*" will be played. Pressing a third time on the "Rec" button selects the mode for updating the general IR codes and the system sound "*Update mode for general IR codes*" will be played.

Note that in the update mode for IR transmission codes, only the codes belonging to the current level can be updated. If the transmission codes for sounds 1 to 8 on level 2 are to be updated, level 2 must be selected before entering the update mode for IR codes.

7.4 Updating IR transmission codes

This mode is used to update the IR codes for transmission when playing sounds 1 to 8 for the selected sound group (1-15*). In this mode, all 8 LEDs will flash. Select the code to be updated with the play buttons 1 to 8. When a code has been selected, the corresponding LED will be lit continuously. Update the code by aiming the remote control at the IR receiver and transmitting the code to PALETTO. When PALETTO has registered the IR code, it will be saved and PALETTO will return to the beginning of this mode in case another code is to be updated.

If no code is transmitted to PALETTO within 10 seconds, PALETTO will return to the beginning of this mode and all LEDs will begin to flash again. To conclude IR transmission code updates, return to normal mode by pressing the "Rec" button.

*) *Sound group 16 is reserved for the remote control of other products in the PALETTO family, such as the PALETTO water column, etc.* A total of 128 codes can be updated (16 levels X 8 buttons = 128 RC5 codes). Updating all codes requires going to normal mode and then the applicable level to continue updating 8 other codes.

7.5 Updating IR reception codes

The IR reception codes can be updated in this mode, which leads to the playing of sounds 1 to 8 for the selected sound group. In this mode, all 8 LEDs will flash. Select the code to be updated with the

play buttons 1 to 8. When a code has been selected, the corresponding LED will be lit continuously. Update the code by aiming the remote control at the IR receiver and transmitting the code to PALETTO. When PALETTO has registered the RC5 code, it will be saved. PALETTO will then return to the beginning of this mode so that another code can be updated. If no code has been transmitted to PALETTO within 10 seconds, PALETTO will return to the beginning of this mode and all LEDs will begin to flash again. To conclude updating of RC5 codes for reception, press the "Rec" button to return to normal mode. A total of 8 codes can be updated.

7.6 Updating IR codes for system functions

The general IR codes can be updated in this mode. The general IR codes are the reception codes for level (up/down) and volume (up/down). In this mode, LEDs 1 to 4 will flash. LED 1 corresponds to the button "Volume ▲", LED 2 corresponds to "Volume ▼", LED 3 corresponds to "Mode ▲" and LED 4 "Mode ▼". Select the code to be updated with the buttons described above. Press the corresponding button on the back panel to update the code. When a code has been selected, the corresponding LED will be lit continuously. Update the code by aiming the remote control at the IR receiver and transmitting the code to PALETTO. When PALETTO has registered the RC5 code, it will be saved. PALETTO will then return to the beginning of this mode so that another code can be updated. If no code is transmitted to PALETTO within 10 seconds, PALETTO will return to the beginning of this mode and all LEDs will begin flashing again. To conclude updates of the general IR codes, press the "Rec" button to return to normal mode. A total of 4 codes can be updated.

7.7 Standard configuration of IR codes

8 IR reception codes			
Function	RC5 group	Command	Description
Buttons 1 – 8	8	1-8	The play buttons' equivalent for controls using IR. PALETTO can learn new codes for convenient television remote control use.
Volume ▲	8	16	
Volume ▼	8	17	
Mode ▲	8	32	
Mode ▼	8	33	
9 IR transmission codes			
Sound group	RC5 group	Command	Description
1	9	0-7	Sound groups 1 to 15 contain IR codes without a predetermined function for controlling relay boxes and other units that can learn IR codes.
2	9	8-15	
3	9	16-23	
4	9	24-31	
5	9	32-39	
6	9	40-47	
7	9	48-55	
8	9	56-63	
9	11	0-7	
10	11	8-15	
11	11	16-23	
12	11	24-31	
13	11	32-39	
14	11	40-47	
15	11	48-55	
16	6	1-8	Other members of the PALETTO family show colours corresponding to the buttons.

8 Memory card

General description

All sounds are stored on the memory card, i.e. the MMC (Multi-Media Card), which is inserted in the slot on the back panel of PALETTO. These memory cards are exchangeable, which means that several users can use the same PALETTO device but have messages or sounds saved on their own memory cards. Note that only original Komikapp-Rehatek memory cards may be used.

Important! PALETTO **may not** be connected to an adapter when the memory card is inserted or removed from the MMC slot. This may destroy data stored on the memory card. Komikapp AB are not responsible for destroyed data on the memory card.

9 Troubleshooting

Description of the problem	Suggestion
No sounds can be heard and no LEDs light up when pressing the play buttons of PALETTO.	Check that the adapter is connected to PALETTO and a wall socket.
No sounds can be heard but the LEDs light up when the play buttons are pressed.	1. Check that the MMC card has been inserted correctly. 2. Check which sound group has been selected. It is possible that no sound has been recorded there.
No system sounds can be heard when adjusting the volume or levels of PALETTO.	Check that the MMC card has been inserted correctly.
An error message is played when recording.	Check which sound group has been activated. PALETTO Basic only allows recording on level 9. PALETTO Plus allows recordings in sound groups 9-16.
Recording is immediately interrupted.	The storage capacity of the MMC card is full. Deletion or re-recording of new sounds is necessary to free up space on the MMC card.
PALETTO Plus: PALETTO will not receive transmissions from other devices.	Try to aim the remote control at the IR sensor on the front of PALETTO. If this works, the distance is too far and an external IR receiver should be used.
PALETTO Plus: Other devices will not receive transmissions from PALETTO.	Try to aim the IR sensor on the front of PALETTO at the other devices. If this works, the distance is too far and an external IR transmitter should be used.

10 The environment

PALETTO contains electronic parts and should therefore be disposed of at a recycling facility. The chassis and buttons are made of recyclable thermosetting plastic.