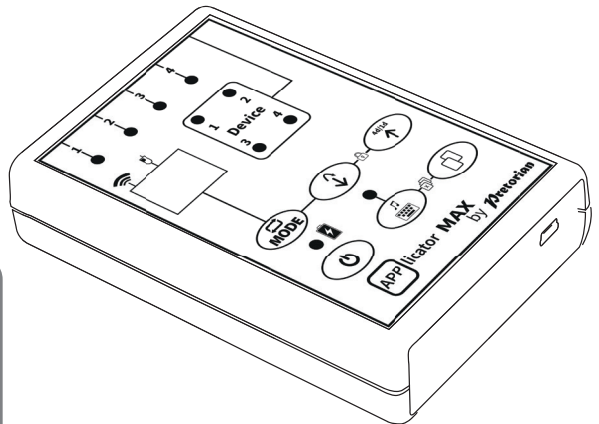


INSTRUCTIONS

APPLICATOR Max



Pack Contents

Carefully check the contents of the box, which are:

- APPLICATOR Max** unit
- USB charging cable
- These instructions

Product Description

APPLICATOR Max is a wireless switch interface specifically designed for disabled users who have multiple devices, or who need to have multiple levels of settings for use with different apps on a single device. It may be used with up to four devices of all types, including AAC devices, iPad/iPhone, Android Devices, PCs/laptops with Bluetooth support, Macs, Chromebooks and Apple TV. It allows quick and easy switching between devices using either a separate switch or an extended press of one of the functional switches.

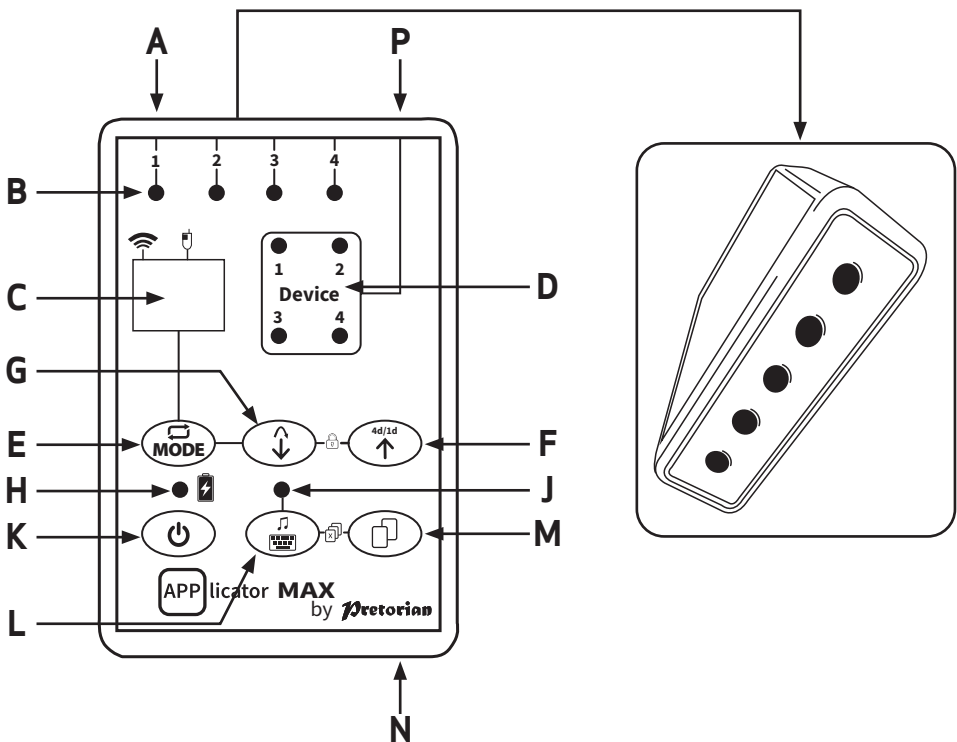
Up to four switches may be configured, each of which is programmable with a different function for each of the devices, allowing a single switch or set of switches to control your devices in any number of different ways.

It is powered from an internal lithium battery which gives many hours of use. Like APPLICATOR, it benefits from Media functions (including QuickMedia™ mode) and additionally allows any keyboard keystroke or mouse function to be selected.

APPLICATOR Max has a large number of features to give you the flexibility you need. Properly configured, **APPLICATOR Max** creates a powerful method for seamlessly connecting all of your devices to ensure you get the very best from them. Please ensure you read these instructions before first use to enable you to get the best from the product. Users who have already used **APPLICATOR** will find most of these instructions familiar.

Features

- Connects to up to four devices (Multiple Devices use-case).
- Alternatively, may be set to Single Device, Multiple Levels use-case (4 Levels).
- Allows up to four switches to be used on multiple devices/ apps without re-plugging/ re-programming.
- Fifth switch to select device (or extended press on one of the other four).
- Function of each switch may be individually selected for each device/level.
- QuickMedia™ mode allows instant access to media player functions on selected devices.
- Any keyboard keystroke can be chosen.
- Full set of mouse functions- left click, right click, double click, drag, swipe, and cursor movement.
- Integral button allows on-screen keyboard to be displayed or hidden at any time.
- Manual Power-Off button.
- Button Lock feature to prevent accidental/ unauthorised changes to settings.
- Single Shot setting to prevent multiple activations.
- 20m (64') operating range.
- Integral lithium-ion rechargeable battery, charged from any USB socket.



Compatibility

APPLICator Max is compatible with all types of devices which have Bluetooth built in. For PCs without Bluetooth, low-cost adapter 'dongles' may be purchased from most electronic retailers. To function correctly with **APPLICator Max** your devices must support Bluetooth Low Energy, sometimes known as Bluetooth LE, Bluetooth 4, Bluetooth 5, or simply BLE.

A small number of the switch functions are intended for a particular kind of device and may not be supported by other devices. For example, the Keyboard Up/Down function is supported only by Apple devices.

Use-Cases

APPLICator Max may be configured to work in one of two distinct ways:

- **Multiple Device use-case.** **APPLICator Max** connects to up to four devices and may switch between them using a dedicated switch or a long press of one of the other switches. Useful when you have several devices that you wish to control from a single switch, or set of switches.
- **Single Device, Multiple Levels use-case.** **APPLICator Max** connects to a single device and may be switched between four Levels of switch functions, allowing it to be used with multiple apps requiring differing switch functions on the same device.

Before configuring your **APPLICator Max**, please decide which use-case is appropriate to your needs. Note that if you intend to connect only to a single device and have no requirement for multiple Levels, a standard **APPLICator** may be more appropriate to your needs.

Charging your APPLICator Max

Ensure that the integral battery is fully charged by plugging the charging cable into the **APPLICator Max** charging port [N] and then into any USB port. The charging LED [H] illuminates green to show that charging is taking place. Once fully charged, the charging light is extinguished. The unit does not need to be turned on for charging to take place.

It is permissible to leave the charging cable connected, for example if using a USB power pack. **APPLICator Max** will only take charge from the charger when it is needed.

Quick Start Guide

For **Multiple Device** use-case, please adhere to the following steps to get started quickly:

1. Make sure the battery is charged as described above.
2. Turn on your **APPLICator Max** by pressing the Power button [K] briefly.
3. Press and hold the Up button [F] and ensure 4d mode is selected - see Choosing Use-Case section below.
4. Use the Device button [M] to select the slot you'd like to connect the device to (1-4). Open the device's Bluetooth Settings menu and begin the pairing process by tapping or clicking on the **APPLICator Max** listing - see Pairing Devices section below. Repeat for other devices you wish to connect on other slots.
5. Set the function of each of the switches you wish to use on each device - see Choosing Switch Functions section.
6. Select which switch you would like to use to change devices- either a dedicated switch in the Next Device/Level Socket [P] or program one of the other four to switch on extended press - see Switching from Device to Device section.
7. Plug your switches into the sockets [A, P].
8. Begin using your **APPLICator Max**!

For **Single Device, Multiple Levels** use-case, use this guide instead:

1. Make sure the battery is charged as described above.
2. Turn on your **APPLICator Max** by pressing the Power button [K] briefly.
3. Press and hold the Up button [F] and select 1d mode - see Choosing Use-Case section below.
4. In this mode, only slot 1 can be connected to a device. Device LED 1 [D] will flash. Open the device's Bluetooth Settings menu and begin the pairing process by tapping or clicking on the **APPLICator Max** listing.
5. Set the function of each of the switches you wish to use on each Level - see Choosing Switch Functions section.
6. Select which switch you would like to use to change Levels- either a dedicated switch in Next Device/Level Socket [P] or program one of the other four to switch on extended press - see Switching from Device to Device section.
7. Plug your switches into the sockets [A, P].
8. Begin using your **APPLICator Max**!

Detailed Instructions

Choosing Use-Case

To select the required use-case, press and hold the Up button [F] until the display [C] illuminates. It will display either 4d (4 devices, corresponding to Multiple Device use-case) or 1d (1 device, corresponding to Single Device, Multiple Levels use-case). If you wish to change the setting, press the Up button again briefly. Once the display shows the correct setting, simply wait for it to be extinguished and the setting will become active and be saved in memory for future use.

By default, the unit is supplied set to 4 device (Multiple Device) use-case.

Pairing Devices

In Multiple Device use-case, you can connect up to four devices, whereas in Single Device, Multiple Level use-case you can connect only one device, on slot 1. In Multiple Device use-case, Device button [M] is used to select the current device slot (1 - 4) before pairing. Press it repeatedly until the required device LED [D] is lit. If it is lit solidly (i.e. does not flash), this slot is already paired and connected to a device and is therefore unavailable. Select another device slot instead.

If the Device LED flashes slowly, this slot is available to be paired. Look in the Bluetooth menu of the device you wish to connect to and it should appear in the 'available devices' list as something similar to:

APPLICatorMax ABC1 #1

Click or tap on it and it will connect within a few seconds. Note that the number after the # sign indicates the slot number.

If it doesn't appear in the list of available devices, press and hold the Device button [M] until the Device LED [D] flashes rapidly and the device will now appear in the list. This is particularly the case with PCs.

Once connected, if you have more devices to connect, press the Device button [M] and repeat.

Choosing Switch Functions

Regardless of which use-case you select, setting the modes for each Device or Level is done in the same way:

Press the Mode button [E] briefly to turn the display on. The channel LED [B] adjacent to socket 1 lights, together with the current Device/Level LED [D]. The display now shows the function setting for socket 1 on the current Device/ Level. To change it, use the Up and Down buttons [F, G] in conjunction with Table 1 until the required setting appears. You can press and hold Up and Down if you wish.

If you wish to make further changes, use the Mode button to move to other sockets. Pressing the Mode button once the Socket 4 LED is lit will result in the Device/Level moving on and Socket 1 being lit. This allows all sixteen settings (4 switches x 4 Devices/Levels) to be cycled around and changed as you require.

Once you are happy with all the settings, simply allow the display to extinguish. All the settings then become active and are saved in memory for future use.

Accessing Media Functions

Some of the devices you connect to (for Multiple Device use-case) or apps that you access (for Single Device, Multiple Levels use-case) may be media related, for example YouTube, Spotify or Apple Music. If these Devices/ Levels are only for media access, it is best to set each of the switches individually to the required media functions using Table 1.

However, where you are accessing a device/ app which is used sometimes for media functions and sometimes for other purposes, QuickMedia™ mode may prove useful. This allows you to have any functions assigned to the switches but temporarily override them with fixed media functions and then switch back again by turning QuickMedia™ off.

To turn QuickMedia™ on or off on the current Device/ Level, simply press and hold the QuickMedia button [L]. The QuickMedia™ LED [J] will light while the setting is on. Table 2 shows the fixed functions for each socket while QuickMedia™ is on.

Socket 1	Play/Pause
Socket 2	Skip Forward
Socket 3	Skip Back
Socket 4	QuickMedia on/off

Table 2: Fixed QuickMedia™ settings >

Setting No.	Function	Type
0	No Function	Keyboard
1	Space	Keyboard
2	Enter	Keyboard
3	-1	Keyboard
4	-3	Keyboard
5	Up Arrow	Keyboard
6	Down Arrow	Keyboard
7	Left Arrow	Keyboard
8	Right Arrow	Keyboard
9	Tab	Keyboard
10	Escape	Keyboard
11	Play/Pause	Consumer
12	Skip Fwd	Consumer
13	Skip Back	Consumer
14	Volume Up	Consumer
15	Volume Down	Consumer
16	Mute	Consumer
17	Timed 10s	Consumer
18	Timed 30s	Consumer
19	Home	Consumer
20	Enter/Home	Keyboard
21	Keyboard Up/Down	Utility
22	QuickMedia™	Utility
23	Left Click	Mouse
24	Middle Click	Mouse
25	Right Click	Mouse
26	Drag	Mouse
27	Double Click	Mouse
28	Scroll Up	Mouse
29	Scroll Down	Mouse
30	Cursor Up	Mouse
31	Cursor Down	Mouse
32	Cursor Left	Mouse
33	Cursor Right	Mouse
34	Swipe Up	Utility
35	Swipe Down	Utility
36	Swipe Left	Utility
37	Swipe Right	Utility
38	0	Keyboard
39	1	Keyboard
40	2	Keyboard
41	3	Keyboard
42	4	Keyboard

Setting No.	Function	Type
43	5	Keyboard
44	6	Keyboard
45	7	Keyboard
46	8	Keyboard
47	9	Keyboard
48	A	Keyboard
49	B	Keyboard
50	C	Keyboard
51	D	Keyboard
52	E	Keyboard
53	F	Keyboard
54	G	Keyboard
55	H	Keyboard
56	I	Keyboard
57	J	Keyboard
58	K	Keyboard
59	L	Keyboard
60	M	Keyboard
61	N	Keyboard
62	O	Keyboard
63	P	Keyboard
64	Q	Keyboard
65	R	Keyboard
66	S	Keyboard
67	T	Keyboard
68	U	Keyboard
69	V	Keyboard
70	W	Keyboard
71	X	Keyboard
72	Y	Keyboard
73	Z	Keyboard
74	F1	Keyboard
75	F2	Keyboard
76	F3	Keyboard
77	F4	Keyboard
78	F5	Keyboard
79	F6	Keyboard
80	F7	Keyboard
81	F8	Keyboard
82	F9	Keyboard
83	F10	Keyboard
84	F11	Keyboard
85	F12	Keyboard

Turning QuickMedia™ on for one Device/Level does not make changes to the other three Devices/Levels. The QuickMedia™ settings are saved in memory.

Note that function 22 (in Table 1) allows any socket to be set to change the QuickMedia™ setting, although if it is to be used, it is strongly recommended to use socket 4 as this becomes QuickMedia™ on/off in QuickMedia™ mode, allowing the user to go in and out of QuickMedia™ mode using a single switch.

Switching from Device to Device (or Level to Level)

If you have your **APPLICATOR Max** set to Multiple Device use-case, you will need to be able to select between devices. This may be achieved in two ways:

Next Device/ Level Socket [P] is used solely to move from device to device (or Level to Level). Note that it will only move between slots that are occupied, so for example if you have three devices on slots 1, 2 and 3, **APPLICATOR Max** will omit slot 4. Only a brief press is required to move from device to device.

Alternatively, you may configure any one of the other sockets [A] to move between devices on a long press. Only one switch can be set this way and by default none of them are set to do this. To configure this feature, press and hold the Down button [G] until the display shows 'nd' (Next Device). If none of the channel LEDs [B] light at the same time, this indicates that none of the sockets are currently set for this feature.

If you wish to set a socket for this feature, press the Mode Down button repeatedly until the channel LED adjacent to the socket in question lights. When you are happy with the setting, simply allow the display to extinguish and the setting will become current and will be saved in memory.

Note that just like the Device/ Level Switching Socket, a **long press** on the chosen switch will only move between slots that are occupied, so for example if you have three devices on slots 1, 2 and 3, slot 4 will not be selected and **APPLICATOR Max** will instead return to slot 1. Also note that the Device/ Level Switching Socket works simultaneously with an extended press setting but if not required, simply refrain from plugging a switch into it.

Irrespective of which switch is used to move from device to device, a beep is emitted as an audible indication of the change, with the beep for device slot 1 being of a higher tone than the others, which is useful when **APPLICATOR Max** is out of sight.

If, on the other hand, **APPLICATOR Max** is set to Single Device, Multiple Levels use-case (1d), the Device/ Level Switching Socket and/or a long press on the chosen switch moves from Level to Level, the display showing L1, L2, L3 or L4 to indicate the new Level. In all other respects, operation is the same. Landing back at Level 1 causes the unit to beep with a higher tone to give an audible indication when it is out of sight.

Button Lock

To prevent unintentional/ unauthorised changes to **APPLICATOR Max** settings, the unit may be locked so that button presses have no effect. To Lock the unit, press and hold Up and Down [F, G] together. The display will show 'L'. To Unlock, press and hold Up and Down again until the display shows 'U'. When locked, you can still view all the settings but any attempt to change them will bring up the 'L' symbol.

This feature is useful when **APPLICATOR Max** is set up before first use by a therapist, carer or family member and then left with the user, who might otherwise make changes which would prevent correct operation.

Mouse functions

APPLICATOR Max includes mouse functions Left Click, Right Click, Double Click and Drag as well as cursor movement settings and swipe functions.. Although these will prove useful on devices such as PCs, Macs and Chromebooks, Left and Right Click have been included principally in support of eye-gaze devices on iPad, which cannot be used at the same time as iOS Switch Control since Assistive Touch and Switch Control cannot be engaged simultaneously. Instead, setting a switch to Left Click allows navigation using eye-gaze and selection using a switch, which for some users is a very efficient way of working. iPadOS15 and above support eye-gaze devices.

Users who have difficulty in releasing switches may benefit from turning on Single-Shot mode on channels set to Left Click or Right Click (see below for more details). Double-click is self-terminating so doesn't benefit from single-shot mode.

On-Screen Keyboard on iPad/iPhone

Because **APPLICATOR Max** appears to the iPad as a keyboard, the iPad automatically turns off the on-screen keyboard. This can cause difficulties in some Apps which require a typed input such as entering a user's name. To overcome this, **APPLICATOR Max** allows you to show/hide the on-screen keyboard manually at any time.

Simply press the QuickMedia™ button [L] briefly and the on-screen keyboard will be deployed. To turn it off again, press the QuickMedia™ button briefly once again. Note that function setting 21 (in Table 1) allows any switch to be configured to deploy the on-screen keyboard, empowering the user to do this themselves. Note that the iPad only allows the on-screen keyboard to be deployed when a text input box is selected.

Using Home functions with Apple Switch Control

The Home and Enter/Home settings (19 and 20 respectively in Table 1) are included to make **APPLICATOR Max** easier to use with Switch Control on all types of Apple device (iPad, iPhone, Mac and TV). Home is exactly equivalent to pressing the Home button on iPad or swiping an app upwards on iPads which don't have a Home button. Note that this setting can be used whether in Switch Control or not and does not need to be programmed within Switch Control.

Enter/Home gives Enter if pressed briefly or Home after an extended press. This is extremely useful when combined with Auto Scanning since it allows a single switch to carry out virtually every task on iPad. If you set a socket to be Enter/Home while the socket is also set to switch from device to device on a long press, the latter takes priority. It is best to avoid this combination.

To get the best experience from this switch when using it in Switch Control, program Enter (brief press) to Select Item in the Settings → Accessibility → Switch Control → Switches menu. Be sure to use a brief press when the device asks you to activate your external switch and then set it to Select Item. There is no need to set a function for Home (long press) since this is a built-in function. Once set up in this way, a brief press of the switch allows you to control Auto Scanning and select an item whereas a long press allows you to quit back to the home screen.

Single-Shot mode

Single-shot mode allows each switch to output a single keystroke no matter how long it remains pressed. This is useful for users who find it difficult to remove their hands from a switch quickly enough to prevent multiple keystrokes being sent to the device. It can prevent multiple instances of functions and is particularly useful with media functions such as Skip Forward and Skip Back.

Single-shot functionality may be set on each socket of each Device/Level individually. Press and hold the Mode button (E) and after a few seconds the first socket LED lights for the current Device/Level and on the LED display you will see either one bar (single-shot) or three bars (repeating)- see Figure 1. To change the setting, press Up or Down [F, G]. To move to the next socket, press the Mode button briefly. A further press of the Mode button once socket 4 LED is lit moves the display to socket 1 on the next LED/Level. Once you have made all the settings you need, simply wait until the LEDs are extinguished and the settings saved. All channels are repeating by default.

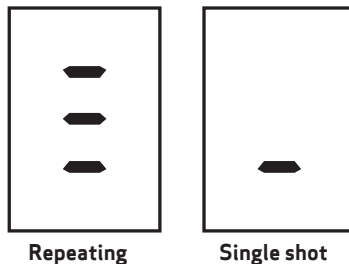


Figure 1

Forget All Devices

Once a device is connected on a particular slot, that slot will always be included when scanning between devices using the Next Device/Level Socket [P] or a long press on one of the other sockets [A]. If you move your **APPLICATOR Max** to a new configuration or change your devices, you may need to clear the connections on every slot. This can be achieved by pressing and holding both QuickMedia and Device buttons [L, M] until all the Device/Level LEDs [D] flash simultaneously.

After a short while, Device LED 1 will flash slowly to indicate that new connections can be made.

Note that 'forgetting all' does not erase the connection information at the device end and it is important to do so before making new connections. Please refer to the settings on the device and choose to forget or delete any connections with **APPLICATOR Max**.

Automatic Sleep Mode

To conserve battery life, **APPLICATOR Max** automatically enters a low-power sleep mode if it remains unused for 30 minutes. Pressing any switch or any button on the unit instantly wakes it again. While asleep, the connection to your currently selected device is lost but is automatically re-established within a few seconds of wake-up.

If the unit remains unpaired on the current slot for more than 5 minutes, it will also enter low-power sleep mode. Press any button or switch to wake the unit.

Manual Power Off

When **APPLICATOR Max** is being moved around, especially with switches still plugged in, it is advisable to manually power it down to prevent switch presses during transit from repeatedly waking up the unit and using up battery charge. To power the unit down, press and hold the Power button [K] until 'Pd' appears on the display, and then release. Pressing switches will no longer wake the unit. To wake it up and automatically reconnect to your chosen device, press the Power button [K].

Battery Life and Battery Charging

A fully charged battery gives approximately 30 hours of use. When the battery is getting low, the Charging LED (H) begins to blink red. This is an indication that you should charge the battery soon. Plug the charging cable into the charging socket [N] and then into any USB socket. While charging, the Charging LED illuminates green. Once charging is complete (a matter of 2-3 hours if fully discharged) the charging LED will be extinguished. You can then unplug the cable. Note that you can carry on using **APPLICATOR Max** while it is charging.

Should you mislay the charging cable, replacements can be purchased by asking your local electrical retailer for a camera connection lead. It has a USB type A plug at one end and either a mini-USB or USB-C plug at the other, depending which model you have. Please note that **APPLICATOR Max** plugs into a computer USB port for charging purposes only - it does not give a functional connection this way.

Maintenance

Your **APPLICATOR Max** has no user serviceable parts. If repair becomes necessary, the unit should be returned to Pretorian Technologies or an authorised distributor. **APPLICATOR Max** contains a lithium-ion battery that isn't user replaceable. Although the unit uses the very latest battery technology, it may eventually need to be replaced. Please return the unit to Pretorian Technologies for such replacement. Disposal of batteries is often subject to local laws. Please consult your local authorities for information relating to your locale. Never dispose of a battery in fire.

Troubleshooting

If your **APPLICATOR Max** doesn't operate correctly, please use the following guide to determine the cause. If, after following this guide, your unit still doesn't operate, please contact your supplier before returning it.

Symptom

Remedy

I can't select the next device using a switch in the Next Device/ Level socket

- Check that the next slot is paired using the Next Device button.
- Check that **APPLICATOR Max** is not set to Single Device, Multiple Level use-case

A long press on switch connected to sockets 1-4 does not move to the next device/level.

- Check you have the relevant socket 1-4 set to move to next device on a long press.
- Check you don't have Single Device, Multiple Level use-case selected.

APPLICATOR Max does not appear as an available device when pairing on a PC.

- PCs work slightly differently to Apple devices and will often require you to make a long press on the Next Device button. Refer to Pairing Devices section.

Warranty

Your **APPLICATOR Max** is warranted for two years against defects in manufacture and component failure. The unit is designed for domestic, educational and a limited range of medical applications. Use outside these areas will invalidate the warranty. Unauthorised repair or modification, mechanical abuse, immersion in any liquid or connection to incompatible equipment will also invalidate the warranty.

The Apple, Android, Mac and Chromebook brand names are used for identification purposes only, are the property of their respective owners, and are acknowledged.



Product
Page



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For use with firmware versions 135 onwards

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