IR TRANSMITTER CONTROL 10

ENGLISH MANUAL

Introduction

Control 10 is a programmable IR transmitter which can be programmed with IR channels from different types of existing IR remote controls for TV, VCR, HI FI and satellite sets. It has 36 different programming locations on 4 levels. The different levels are accessed by pressing one of the 10 keys. Control 10 is a part of the "Gewa Smart House" concept and can therefore be used together with all the other products in the range.

News and Improvements

Control 10 is improved in several ways compared to the earlier generation IR-9SP:

* New design on casing

* Improved battery warning

* Improved labelling of the keyboard

* Place for level indication has been moved

General Information about Control 10

Before using Control 10 there are certain things you should know.

* On delivery the Gewa Link channels are factory programmed which means that it is possible to use the transmitter as soon as a battery has been inserted. See section "Inserting the Battery".
* For programming press the programming button using a paper clip, for example, **at the same time** as you choose a function key. Choose different function keys depending on what you want to program.
* If the wrong key is pressed by mistake during programming, the programming button will function as a reset button.
* It is important not to wait too long between the different steps when programming. After a certain time Control 10 automatically leaves the programming mode to save power.

4

The picture shows various terms and functions which will be found in the text.

Fig. 1

Indicator light when programming

Indicator lights indicating different levels:
Level 1-4

Function keys 1-8

Coded channel key

Level key/function key

Programming button
🅟 (reset)

On delivery Control 10 has the following default settings:

- Delay time is set to 0.
- Sound volume is set to 3.
- Only level 3 is open, other levels are closed.
- Gewa Link channels 00-31 are on levels 1-4.
- A random code on !-key. The same code for all levels.

Symbols

The following symbols will be found in the text:

🅟	= programming button
ⓧ and ⓨ	= any Control 10 key
🆈	= any transmitter key to be programmed
①….⑧	= keys 1-8 on Control 10
⚠	= coded key
⋯	= level key
⟼	= hold level key pressed for approximately 2 seconds

Inserting the Battery

Unscrew the battery lid screw on the back of Control 10 using a screwdriver and insert four alkaline LR03 (AAA) 1.5 V batteries. Insert the batteries according to the marking at the bottom of the battery compartment. Pay attention to the polarity! It is important to use long life **alkaline** batteries that are protected against leaking battery acid. When you have inserted the new batteries, **press 🅟**

Battery Warning

Control 10 has a built-in battery warning ♩♩♩♩ indicating low battery voltage. A sound signal with short beeps is heard at an interval of 30 seconds. After a while it starts warning every ten minutes. Replace the batteries as soon as possible.

Settings

Below is a description of how the different Control 10's functions are set.

Choosing Levels

Control 10 has altogether 4 levels with 9 programmable keys. On delivery the keys are factory programmed with GewaLink channels 00-31. One, several or all 4 levels can freely be used. 4 indicator lights indicate the present level (see fig 1).
When more than one levels are active you can change to another level by pressing the ⊡-key. Each time you press the key the next level is chosen. Control 10 scans through the levels automatically if the ⊡-key is pressed continuously.

Control 10 is delivered with only **level 3** open. To open more levels see chapter "Opening/Closing a Level".
When only **one level** is open the level key automatically contains one channel which always is the first channel on the next level. In this way it is possible to control 10 functions even if only one level is open. See [1] in table 1.

Table 1 contains channels/codes for Control 10 on delivery.

Table 1

GewaLink channels				
Key on Control 10	Level 1	Level 2	Level 3	Level 4
1	00	08	16	24
2	01	09	17	25
3	02	10	18	26
4	03	11	19	27
5	04	12	20	28
6	05	13	21	29
7	06	14	22	30
8	07	15	23	31
[1]	*08*	*16*	*24*	*00*
[2] !	Code	Code	Code	Code

[1] If only one level is open the level key automatically becomes one channel. It is the first channel on the next level.
[2] Same code for all levels.

Opening/Closing a Level

1. Press ❷ and ⊡ at the same time. The indicator light for the current level is now lit.

2. Press ⊡ a number of times until the level to be opened or closed is reached.

3. Press ① to open or ② to close the chosen level.
   The indicator light for the levels is automatically moved to the next level, which thereby directly can be opened or closed.

4. Press ⊢→ for approximately 2 seconds until the indicator light for programming flashes green and goes out.

Quick guide

Open/close level: ❷ + ⊡, choose level, ① or ②...... ⊢→
Open = ①. Close = ②

Replicating Channels from another Transmitter

1. Make sure the batteries in both transmitters have full capacity. Do not place the transmitters in intense light (e.g. sunlight) when programming.

2. Place the two transmitters on a table with the original transmitter directed towards the rear part of Control 10 (fig 2).

3. Choose level which is to be programmed. Only one level at a time can be programmed.

4. Press ❷ and ① at the same time. The indicator light for the current level begins to flash.

   To check that the transmitters are in the right position, keep any key pressed on the original transmitter. The indicator light for programming now flashes green. Move the original transmitter to the left or to the right until the indicator light goes out. Then move the original transmitter backwards until the indicator light goes out (one meter for certain transmitters). Place the original transmitter centrally between these positions. Certain types of transmitters only emit a short flash each time the key is pressed. In these cases, press several times.

5. Press and release the key on Control 10, which is to be programmed. The indicator light for programming now emits a steady orange light.

6. Keep the corresponding key on the original transmitter pressed. Release the key when the indicator light goes green. It might take up to 10 seconds. If the indicator light goes orange again press the key one or more times until the light flashes green and goes out. The indicator light flashes green if the programming has been successful. If the indicator light flashes red the programming has failed. Try once more from step 4. If a beep is heard ♪♪♪ the level is locked and no programming can be made. Read the next section for how to unlock a level.

7. If the programming of the first key was successful, repeat steps 5 and 6 until all keys are programmed. Finish by pressing the ⬚ -key. The indicator light for programming flashes green to indicate that the programming is complete.

8. Now test the programmed functions using the device which is to be controlled.

Fig 2

8
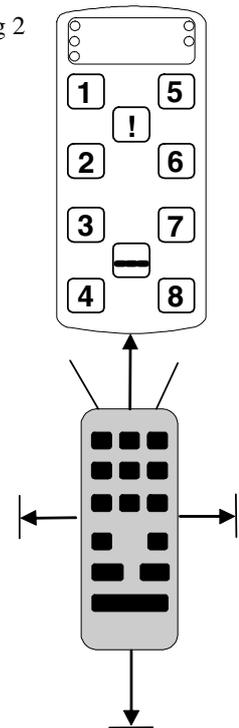
Quick guide

Programming:**Ⓟ** + ①**, Ⓧ, Y, ... ⊡**

Tip! Control 10 can record codes from most IR transmitters on the market with a few exceptions. You may have problems with a few or all of the functions for a certain IR transmitter. In these cases it is possible to try another recording method. Instead, do as follows in step 4; Press **Ⓟ** and ①at the same time but keep them pressed for approximately 2 seconds until the indicator light for programming flashes green and goes out. Control 10 is now in another recording mode. Otherwise use the same recording procedure.

Note!

When only **one level** is used the level key automatically becomes the first key of the next level (see table 1). This means that it is quite possible to program the level key but only when **one level is open.** In this case we recommend that you **begin by programming the level key** and then continue with the other keys.

Locking/Unlocking delete protection

In order to protect channels/codes from being erased by accident when new codes are programmed it is possible to lock each level separately. All levels are unlocked on delivery. A locked level is indicated by a beep ♩♩♩ when you try to program it. Do as follows to lock/unlock levels:

1. Press **Ⓟ** and ⊡ at the same time. The indicator light for the current level is now lit.
2. Change to the level to be locked/unlocked by pressing the level key.
3. Press key ③ to lock or key ④ to unlock.
   The indicator light for the levels is automatically moved to the next level, which thereby can be locked/unlocked immediately.
4. Press ⊟ for approximately 2 seconds until the indicator light for programming flashes green and goes out.

Quick guide

Lock/unlock delete protection: **Ⓟ** + ⊡**,** choose level**,** ③ or ④**,....**⊟**,**
Lock level = ③**.** Unlock level = ④.

Channel Setting

Control 10 makes it possible to set different channel intervals. When setting the channels programmed codes disappear and a new random code is programmed on the ⚠-key. The levels must be unlocked. If the levels are locked there will be no change. Read the section "Locking/Unlocking delete protection".
Table 2 shows the different settings.

Table 2

Channel interval and key command	00-31 ①	32-63 ②	64-95 ③
Level 1	00-07	32-39	64-71
Level 2	08-15	40-47	72-79
Level 3	16-23	48-55	80-87
Level 4	24-31	[1] 56-63	88-95

[1] Channel 62 is a stop code and cannot control any function. However, you can store channels/codes on this key, which in turn can then control a function.

Do as follows to set the different channel intervals:

1. Press 🅟 and ⋯ at the same time. The indicator light for the current level is now lit.

2. Press ⚠.

3. Choose channel interval according to the table and press the keys for the desired channel interval. The indicator light for programming flashes green to indicate that the operation is completed.

Quick guide

Channel setting: 🅟 + ⋯, ⚠, Ⓧ

Resetting to Factory Setting

Control 10 makes it possible to erase all keys on levels 1-4 at the same time. The erased keys are returned to the factory settings which means that they are replaced by the GewaLink channels 16-31 and a **new random code** on the ⒤- key. Other settings also return to factory defaults. To reset:

1. Press ⓟ and ③. The indicator light for the current level is now lit.
2. Press in turn the keys ⒤, ①, ②, ③, ⸱⸱⸱. The lights for levels 1-4 flash red in turn. Then the indicator light for programming flashes green to indicate that the operation is completed.

Quick guide

Resetting levels 1-4 to factory setting:
ⓟ +③, ⒤, ①, ②, ③, ⸱⸱⸱

Resetting a Key or a Level

Control 10 makes it possible to reset either one key or all keys on a level. When this is done the key or keys return to earlier chosen channel setting. Other settings are not affected. The level where the key/s is/are placed must be unlocked before resetting is possible.
Read the section "Locking/Unlocking delete protection".

Do as follows to reset:

1. Unlock the level where the key/s are to be reset.

2. Using the level key choose the level for which you want to perform the reset operation. Press ⓟ and ③ at the same time. The indicator light for the current level is now lit.
3a. Resetting a single key.

   Press the button to reset. The indicator light for programming flashes green to indicate when the operation is completed.

3b. Resetting all keys for a single level.

   Press in turn keys ⸱⸱⸱, ①, ②, ③, ⸱⸱⸱. The indicator light for programming flashes green to indicate when the operation is completed.

Quick guide

Resetting a key ⓧ:
Choose level**, ℗** + ③**,** choose ⓧ

Resetting a level:
Choose level**, ℗** + ③**,** ⚏**,** ①**,** ②**,** ③**,** ⚏

Programming 4096-Code

Control 10 is delivered with a special coded channel (4096) on the ⓘ-key. The code is selected at random. This coded channel is normally used for functions that require strict authorisation such as apartment or house doors. The code has 4096 different combinations. The ⓘ-key has always the same code irrespective of the choosen level.

Method one: Use a coded transmitter as described under "Replicating channels from another transmitter". Using this method **any key independently of level** to be used as a coded channel can be programmed.

Method two: Enter a binary code. The binary code will always be associated with the ⓘ-key and it is **the same for all levels**. Make up your own binary code or use the code already programmed in an IR receiver or transmitter.
There are two types of IR receivers. An older type where the code is set with a 12 pole switch or a newer type where the IR receiver is programmable. The principle is the same for how the binary code is created. In figure 3 a 12 pole switch is pictured. Switches 1, 4, 6 and 12 are in the "ON" position, all others in the "OFF" position.

The following example describes how the binary code is created according to figure 3:

1. Press ℗ and ⓘ at the same time. The indicator light for the current level is now lit.
2. Enter the code by pressing the ⓘ-key or the ⚏-key. ⓘ-key = switch in the On-position and the ⚏-key = switch in the Off-position. Press twelve times in turn; ⓘ, ⚏, ⚏, ⓘ, ⚏, ⓘ, ⚏, ⚏, ⚏, ⚏, ⚏, ⓘ. When you have pressed twelve times the indicator lamps for levels 1-4 flash red in turn. Then the indicator light for programming flashes green to show that the operation is completed. The code is now programmed on the ⓘ-key. Make a note of the chosen code for future usage.

Fig 3

	1	2	3	4	5	6	7	8	9	10	11	12
On	■			■		■						■
Off		■	■		■		■	■	■	■	■	
	2048	1024	512	256	128	64	32	16	8	4	2	1
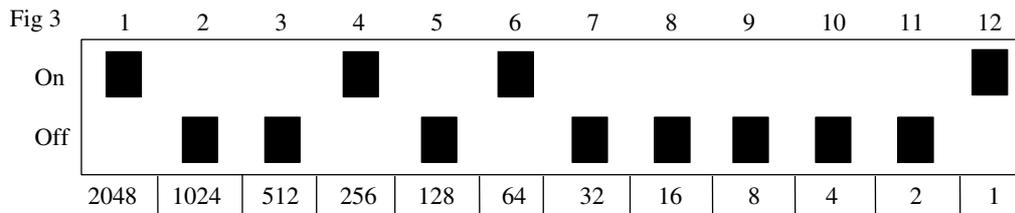
Quick guide

Setting 4096-code: **P** + !, **....**

Copying Codes

Control 10 makes it possible to copy programmed codes and basic channels to other places (keys).

1. Choose level and press the key with the code to be copied.

2. Choose the level to which you want to copy the code.

3. Press **P** and !-key at the same time. The indicator light for the current level is now lit.

4. Press ③.

5. Press the key to which you want to copy the code. The indicator light for programming flashes green to show that the operation is completed.

Quick guide

Copying code/channel from key ⓧ to key Ⓨ:
Choose level, choose ⓧ, choose level, **P**+ !, ③, choose Ⓨ.

Setting Beep Volume

Control 10 has a beep signal which sounds when a key is pressed. Set the beep volume in 6 stages (⬚, ①, ②, ③, ④, !).
⬚-key = no sound at all and !-key = maximum sound level.

Do as follows:

1. Press ❷ and ④ at the same time. The indicator light for the current level is now lit.
2. Press a key, ⬚, ①, ②, ③, ④, !, to choose beep volume. The indicator light for programming flashes green to show that the operation is completed.

Quick guide

Setting beep volume: ❷ + ④, **….**

Setting Acceptance Delay

Control 10 makes it possible to set the delay time. By acceptance delay is meant the time a key has to be pressed before a result is reached. The acceptance delay can be set in 6 steps (⬚, ①, ②, ③, ④, !).
⬚-key = no delay time and !-key = maximum delay time (0.5 second). Do as follows:

1. Press ❷ and ② at the same time. The indicator light for the current level is now lit.
2. Press a key, ⬚, ①, ②, ③, ④, !, to choose delay time. The indicator light for programming flashes green to show that the operation is completed.

Quick guide

Setting Acceptance Delay: ❷ + ②, **….**

Programming of Sequences (Macro)

Control 10 can send sequences. When you press **one key** Control 10 automatically carries out what is equivalent to pressing several keys. One available application for instance is muting the TV at the same time as you answer the telephone. Control 10 can also be programmed to change levels and it remembers how long a key should transmit. The transmission of a sequence can be terminated at any time by pressing another optional key. When a sequence is programmed Control 10 transmits at the same time what is already on the key. Max. 25.5 seconds and 48 key pressures per key can be programmed.
NOTE! The key used to store the sequence must not be part of the sequence.

1. Press 🅿 and 🛈 at the same time. The indicator light for the current level is now lit.

2. Press ①

3. Press the keys which should be used for the sequence.

4. Choose the level where you want the sequence to be.

5. Press 🅿 and 🛈 at the same time.

6. Press ②

7. Choose the key where you want the sequence to be stored. The indicator light for programming flashes green to indicate that the operation is completed.

Quick guide

Programming sequences: 🅿 + 🛈, ①, Ⓧ **….** Ⓨ, choose level, 🅿 + 🛈, ②, choose Ⓧ

Direct Choice of Level

Control 10 makes it possible to create quick keys, which means that you can reach a level by pressing a selected key. If you are at level 1 for instance and press key 2 you will directly reach level 2. And by pressing key 3 you will directly reach level 3 etc. When you are at level 2, 3 or 4 you can press a new quick key to get back to level 1. You need to create the quick keys for these levels in advance. See fig. 4.

Fig 4   Level 1

Press key 2 and you will directly get to level 2.

It is also possible to create a quick key in level 2, 3 and 4 to get back to level 1.

Press key 3 and you will directly get to level 3.

Press key 4 and you will directly get to level 4.
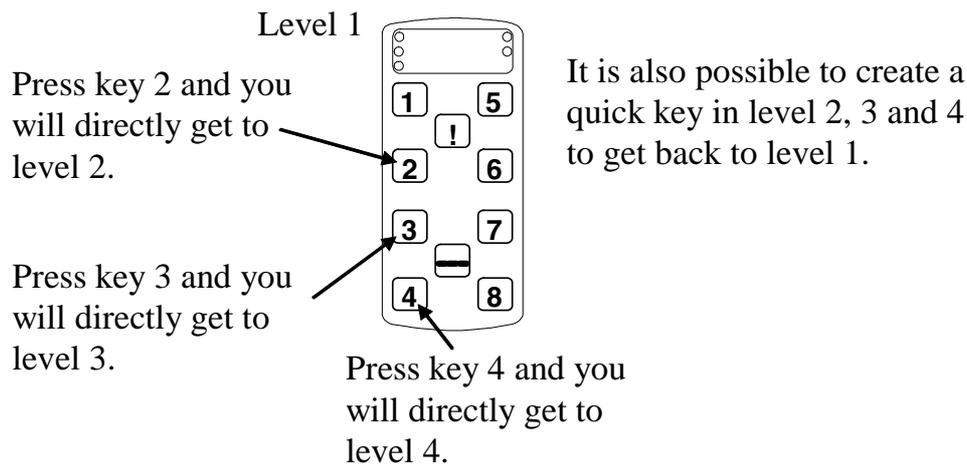
Do as follows to create quick keys:

1. Choose the level you want to reach with a quick key.
2. Press Ⓟ and ⚠ at the same time. The indicator light for the current level is now lit.
3. Press ①.
4. Choose the level where the quick key is to be stored.
5. Press Ⓟ and ⚠ at the same time.
6. Press ②.
7. Press the key which is to be used as a quick key. The indicator light for programming flashes green to indicate that the quick key is stored.

Quick guide

Create a quick key:
Choose level to be reached through direct choice, Ⓟ + ⚠, ①, choose level where the quick key is to be stored, Ⓟ + ⚠, ②, choose Ⓧ.

16

Mounting

Rubber feet are mounted on the bottom of Control 10 to prevent it from sliding away. In some cases Control 10 needs to be permanently mounted. As an additional accessory, there is a holder, which can be secured to Control 10. This holder can in its turn be mounted on a table with a 'G' clamp or attached to a tube with a 'U' clamp. The holder can also be mounted on a mobile stand (First Aid Stand).
You can attach a necklace to be able to wear it around your neck or secure it to i.g. a wheelchair.

Warning!

The string lock is a safety detail to prevent strangling. Check that the neck strap ends can easily be drawn out if the transmitter is snagged. Never make knots on the neck strap!

Labelling

Fig 6

Keyguard

As standard the keys are marked with figures. The labelling can be replaced by personal design. On the enclosed CD there is a Microsoft Word document with templates and picture to create a personal labelling. The label is printed on overhead or white paper and put into the slit on Control 10. Before the marking label is attached the keyguard must be removed. A plastic leg at each corner holds the keyguard. Put a knife blade between the keyguard and Control 10. Remove the keyguard carefully and smoothly, otherwise the plastic legs may break.

Marking Label
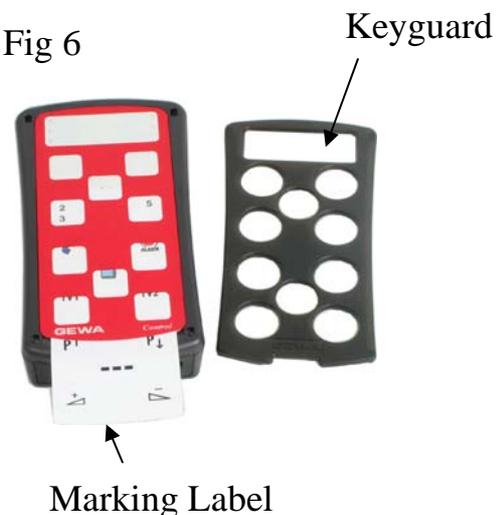
Two A-4 sheets for notes are included.

Data Communication

Transferring Data between Two Transmitters

You can easily transfer all programmed channels and settings from one Control 10 to another. This can be done for instance before servicing a transmitter or when replacing a transmitter. Before transferring data you must understand the following limitations.

If the transmitters have the same program versions, transfer is possible without any problems. Look at the back of Control 10 to check the program version (e g Ver:1.x). If the transmitters have different program versions all functions might not work properly when transferred to another transmitter.

Fig 7

To transfer data, do as follows:

Datautgång

1. Make sure that the batteries in both transmitters have full capacity.

2. Connect a data cable (Art. no: 425637) between the data terminals of the two transmitters (fig. 7).

3. Press **℗** and 🄸 at the same time and then 🄴 on the transmitter that will **receive data.** After approximately 15 seconds the transfer is complete.

Quick guide

Transfer of data between two transmitters: **℗** + 🄸, 🄴

Transferring Data between Control 10 and a Computer

Control 10 is prepared for communication with a PC. Accompanying disks contain the program Gewa Control Tool that is used for backup. Install the Gewa Control Tool on your computer. Connect the cable art. no 425618 and adapter 425636 to the computer terminal (fig. 7) of Control 10 and connect the other end of the cable to the COM port of the computer. For connection to a USB-port use an adapter 425620 Adapter USB/serial and adapter 425636. Start the computer program and choose the settings you want for Control 10. The cable can be ordered from Gewa AB or a reseller.

Cleaning

To clean Control 10 **carefully wring out the water** from a cloth which has been dipped into water with some detergent in it. Wipe off with a dry cloth afterwards.

Quick Guide

Replicating channels

🅟 + ①, Ⓧ, 🆈, ... •••

Setting Acceptance Delay

🅟 + ②, ...   (factory setting = 0 seconds)

Resetting to factory setting

🅟 + ③, ①, ①, ②, ③, •••

Resetting a single key

Choose level, 🅟 + ③, choose Ⓧ

Resetting a single level

Choose level, 🅟 + ③, •••, ①, ②, ③, •••

Setting channels

🅟 + •••, ①, ...   (factory setting = channel 16-31)

Setting beep volume

🅟 + ④, ...   (factory setting = 3)

Copying codes

Choose level, choose Ⓧ, choose level , 🅟 + ③, choose 🆈

Setting 4096-code

🅟 + ①, ...   (factory setting = random code)

Opening/closing levels

Open/close level: 🅟 + •••, choose level, ① or ②...... ⇥

Open = ① Close = ②   (factory setting = level 3 open)

Locking/unlocking delete protection

Lock/unlock 🅟 + •••, choose level, ③ or ④,....⇥

Lock level = ③ Unlock level = ④   (factory setting = all levels
unlocked)

Programming sequences

🅟 + ①, ①, Ⓧ .... 🆈, choose level, 🅟 + ①, ②, choose Ⓧ

Direct choice of level

Choose level to be reached through direct choice, 🅟 + ①, ①, choose level where a quick key is to be stored, 🅟 + ①, ②, choose Ⓧ

Data transfer between two transmitters

🅟 + ①, ④

20

Accessories

Accessories Accompanying Control 10

Art. No	Description	Function	Qty
------	CD	Gewa Control Tool	1
------	Note sheet	A4-sheet for notes concerning programmed channels	2
425712	Keyguard Control 10		1
890410	Neck strap		1

Other Control 10 Accessories

Art. no	Denomination	Description
8105	Holder	For fixing of Control 10 to stand
8375	Battery LR03 1.5 V	1.5 V Alkaline
425620	Adapter USB/Serial	Adapter for connection to Control 10/PC (USB-port)
425618	Data cable 8-pole mini DIN/D-sub 9	Cable for connecting Control 10/PC (serial port)
425636	Adapter 8-pole Mini Din/7-pole slit	
425637	Data cable 7-pole/7-pole slit	Cable for connecting Control 10/Control 10

Technical Data

Power consumption (stand-by):	Approx. 12 µA
Power consumption (transmitting):	Approx. 35 mA (GewaLink-channel)
Battery life:	Approx. 2 years (100 seconds transmitting/day with GewaLink-channel)
Programming positions:	36
Key force:	>1.0 N (100 gr.)
Range:	20-30 m (GewaLink-channels)
EMC-standard emission: ” immunity:	EN 61000-6-4:2001, EN 60601-1-1-2:2001 EN 61000-6-2:2001, EN 60601-1-1-2:2001
Data connection:	RS-232 compatible voltage level, 9600 bits/s, 8 data bits, no parity, 2 stop bits
Measurements (L x W x H):	134 x 70 x 25 mm
Weight (batteries included):	170 g
Operating temperature (not valid for batteries):	-20°- +45°C

Recycling Waste Electrical and Electronic Equipment.

Control 10 contains electronics components that must be recycled. When the product is of no use, hand it in to a recycling centre for waste electrical and electronic equipment.

Conformity with the Medical Devices Directive

Control 10 is marketed as a technical aid for people with disabilities and meets the requirements in Medical Devices Directive 93/42/EEC including relevant EMC and electrical safety requirements.

$C\!\in$

Gewa AB