

Giant Morse Key



KISC  100

1923 - 2023

HB 100 JAM

Kander 100: Radio Scouting activities

1. Activity

Giant Morse Key

2. SDGs

4

3. GG hub

-

4. Ages

11+

5. Duration of the activity

10 minutes

6. Minimum of participants

1

7. Materials needed

- Oversized Giant Morse Key
- Laminated morse alfabet
- Electronics for the taste
- Raspberry pi
- Computer display
- Wielen stapelbedjes



8. Location of materials

keep locked at Uncle Sams Cabin

9. Location of the activity

Area in front of Uncle Sams Cabin

10. Description

Exercise your morse code skills on a giant morse key.

Morse is a communication code, consisting of signals transmitted at intervals, representing letters, punctuation marks and numbers. The code was invented and developed by Samuel Morse in 1835 for use in telegraphy. With the telegraph, one could only choose between two states: key down (= power) or key not operated (= no power) and duration (short or long). Telegraphy is generally considered a precursor to later digital communication.

Timing and coding:

Morse has two symbols: dots and dashes, or dits and dahs. The length of the 'dit' determines the speed at which the message is transmitted and is used as a 'unit'. The speed of Morse code is expressed in words per minute (wpm) and indicates how many times the standard word PARIS can be sent in one minute.

Try to signal your name with the very large Morse code and get it written correctly on the screen.

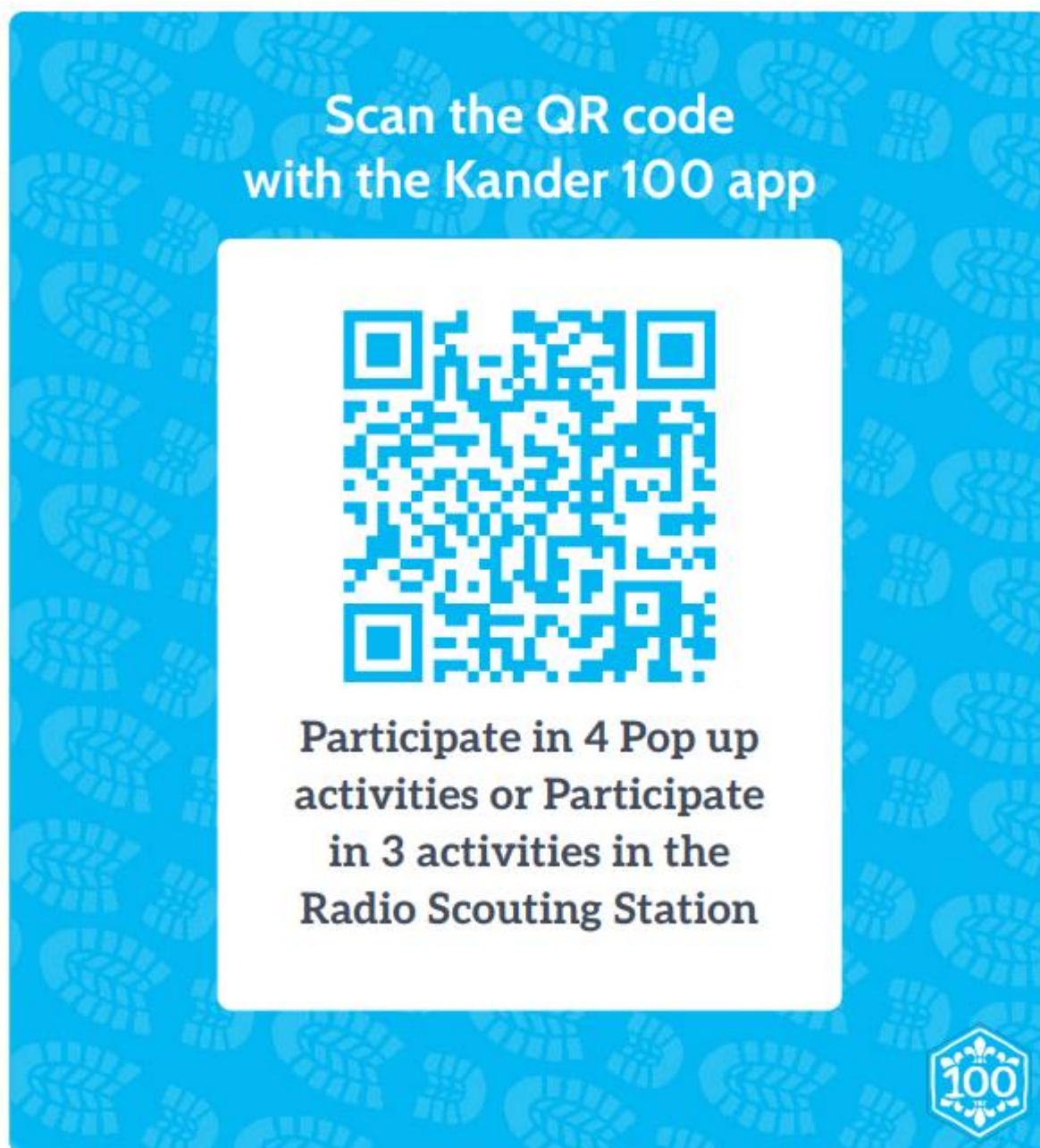
11. Badge

International Friendship Award


Radio Scouting Award

[12. QR code to earn the badge.](#)


International Friendship Award



Scan the QR code
with the Kander 100 app



Participate in 4 Pop up
activities or Participate
in 3 activities in the
Radio Scouting Station



Radio Scouting Award



13. Educational objective

Learn morse code.

14. Before the activity

All equipment is stored at Uncle Sams Cabin.

Put up and connect all devices in the morning (takes 5 minutes).

Test functioning.

15. Instructions

See 10. Description

system startup:

- take the cabinet with the screen and computer outside and set it up.
- connect the cables to the giant key.
- keep an eye on the participants if they handle the material properly.

16. Reflective question

Can you signal your name with a morse key?

17. After the activity

Short information on the other activities in the Radio Scouting area and JOTA-JOTI.

Only in the evening/night (when the station is closed down):

Disconnect all devices, store everything in Uncle Sams Cabin, lock the door!

18. Training notes

None

19. Safety

Nothing particular

20. Accessibility

No limitations

Giant Morse-Key

The key is really huge, see the photos. Be aware that you need a lot of wooden plates, if you like to build this key. This key was first constructed by PE1MEW for Swiss national scout camp „mowa 2022“ and now used at „Kander100“.

It was not only an eye-catcher, but also very popular and successful.



In addition to the key, a device is required that generates the sound and reads the signals. Both were realised with a Raspberry Pi and software.

The programme code can be found here:

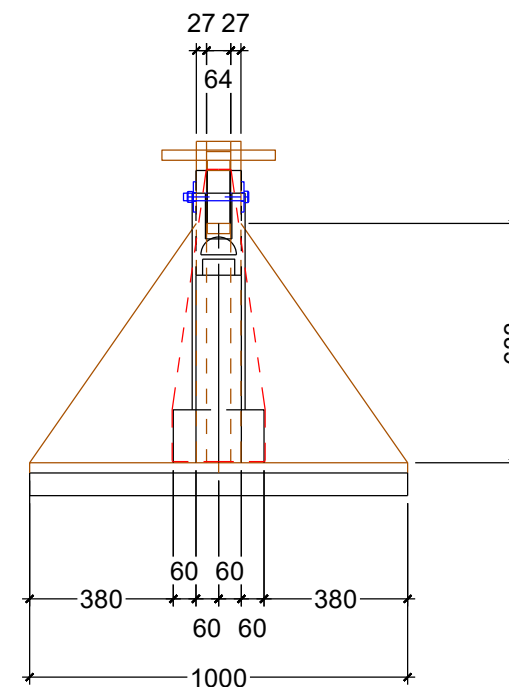
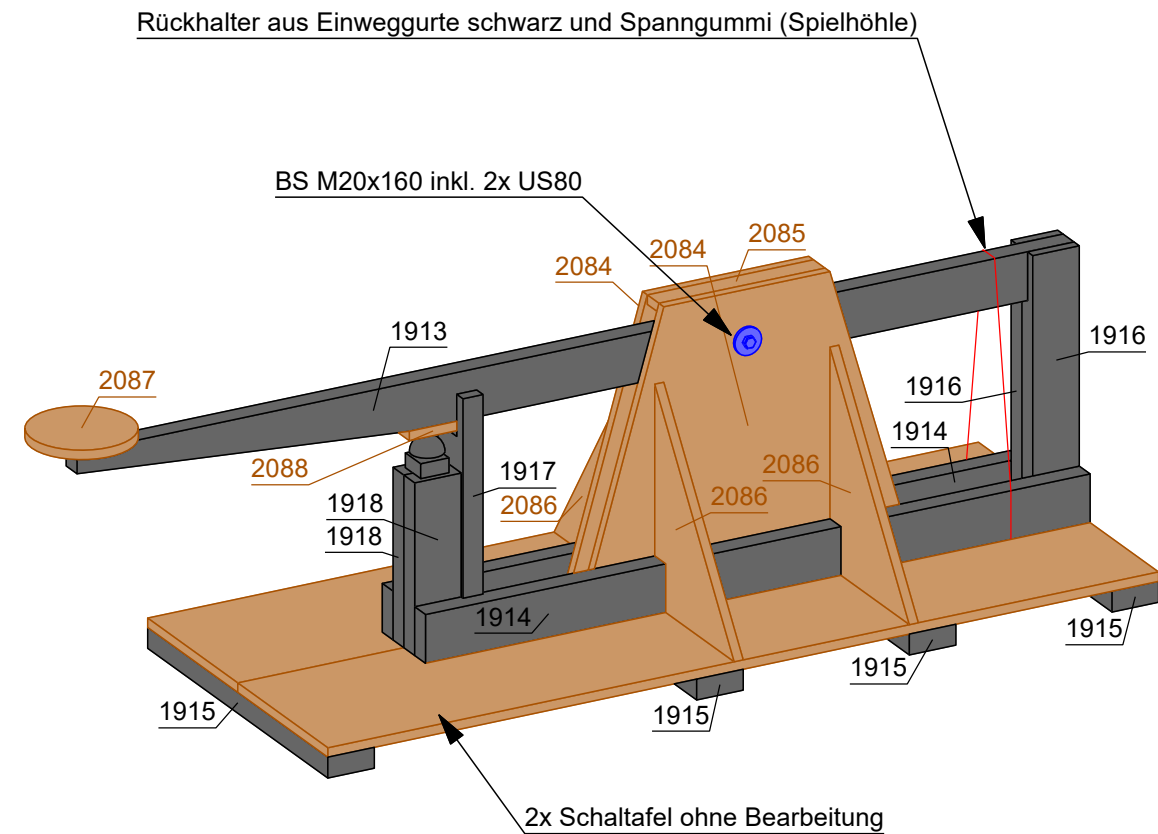
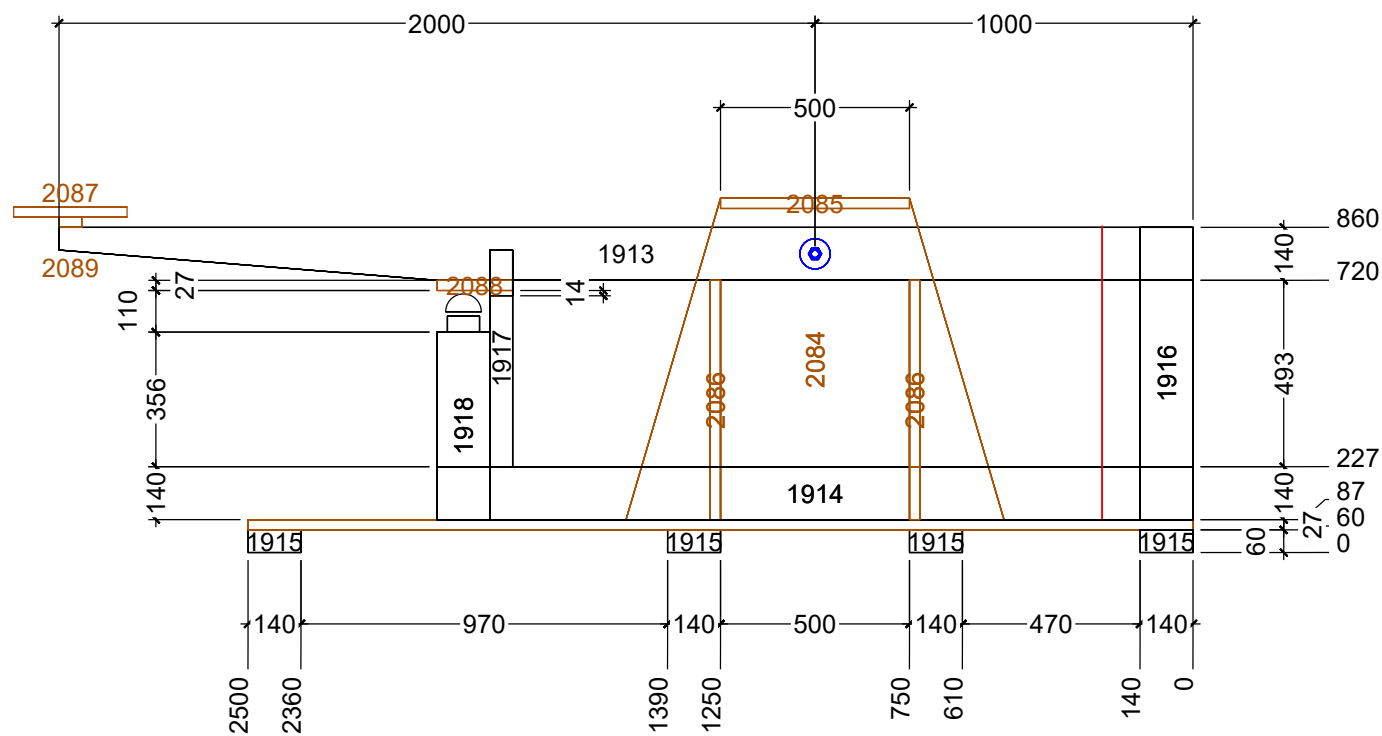
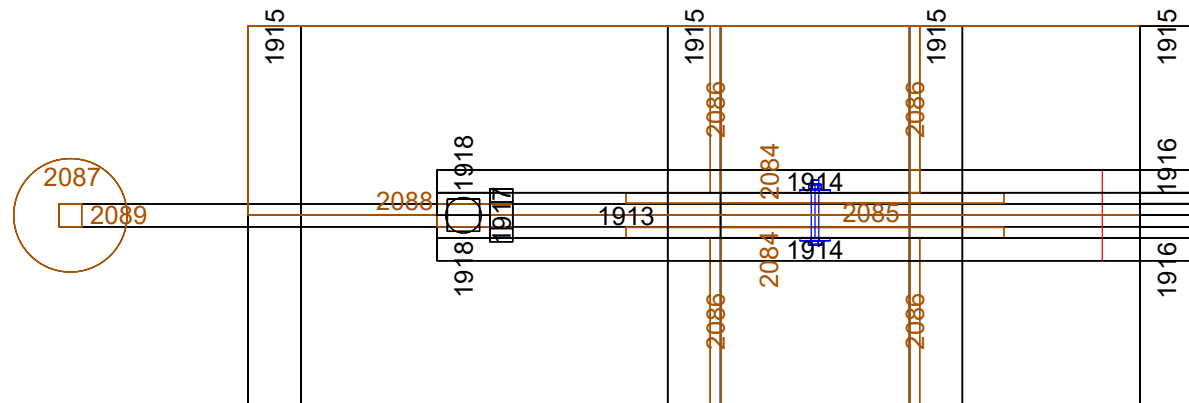
<https://github.com/pe1mew/mova-2022-spiel-hohle/tree/main/GiantMorseKey/programCode>

The plan for the construction of the key can be found on the next page.



HB 100 JAM

Kander 100: Radio Scouting activities



Blumer Lehmann Erlenhof 9200 Gossau Schweiz T +41 71 388 58 58 www.blumer-lehmann.ch	A	Zeichnung erstellt	28.06.2022	feho	
	Rev.:	Bez.:	Datum:	gez.:	Visum:
Auftraggeber: Verein Bula 2021, c/o Pfadibewegung Schweiz, Speichergasse 3	Kom. Nr.:	91002	Plan-Nr.:	91002 -0422-A	Masst.: 1:20
Objekt: BULA Turm	Zusammenbau Morse-Key				
EDV-Bez.: 220619_Vormontagepläne Bau					

Morse Code Signals

Letters

A	• —	di dah
B	— •••	da di di dit
C	— • — •	da di da dit
D	— ••	da di dit
E	•	dit
F	•• — •	di di da dit
G	— — •	da da dit
H	••••	di di di dit
I	••	di dit
J	• — — —	di da da dah
K	— • —	da di dah
L	• — ••	di da di dit
M	— —	da dah
N	— •	da dit
O	— — —	da da dah
P	• — — •	di da da dit
Q	— — • —	da da di dah
R	• — •	di da dit
S	•••	di di dit
T	—	dah
U	•• —	di di dah
V	••• —	di di di dah
W	• — —	di da dah
X	— •• —	da di di dah
Y	— • — —	da di da dah
Z	— — ••	da da di dit

Figures

1	• — — — —	di da da da dah
2	•• — — —	di di da da dah
3	••• — —	di di di da dah
4	•••• —	di di di di dah
5	•••••	di di di di dit
6	— ••••	da di di di dit
7	— — •••	da da di di dit
8	— — — ••	da da da di dit
9	— — — — •	da da da da dit
0	— — — — —	da da da da dah

Punctuation marks and miscellaneous signs

Full stop	• — • — • —	di da di da di dah
Comma	— — •• — —	da da di di da dah
?	•• — — ••	di di da da di dit
/	— •• — •	da di di da dit
:	— — — •••	da da da di di dit
-	— •••• —	da di di di di dah
+	• — • — •	di da di da dit
=	— ••• —	da di di di dah
Error	••••••••	di di di di di di di dit
@	• — — • — •	di da da di da dit
Starting	— • — • —	da di da di dah
End	••• — • —	di di di da di dah

Source: Recommendation ITU-R M.1677-1 (10/2009)

