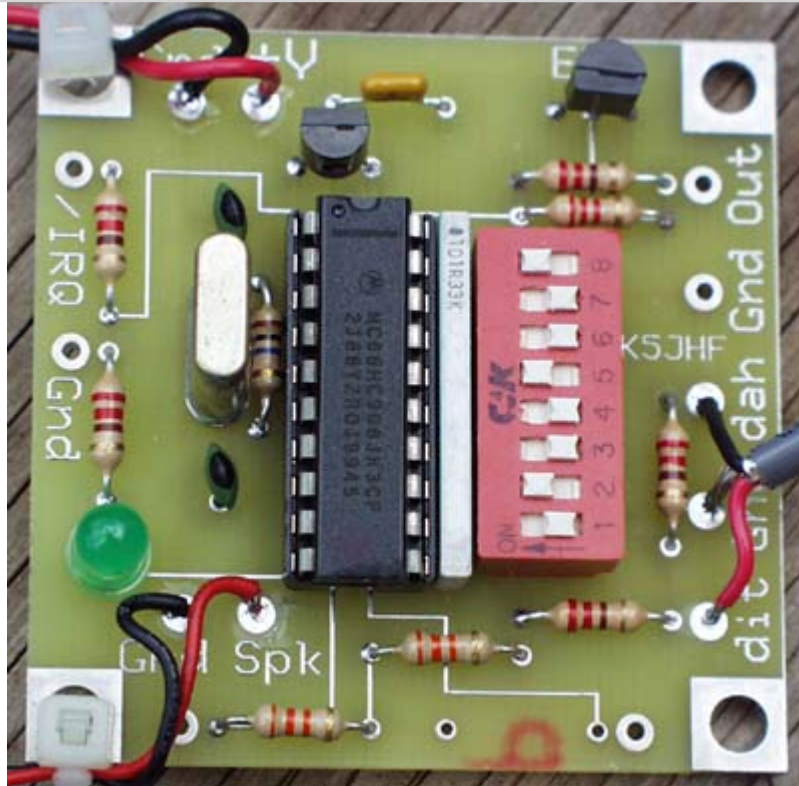


# "MoCo Trainer"

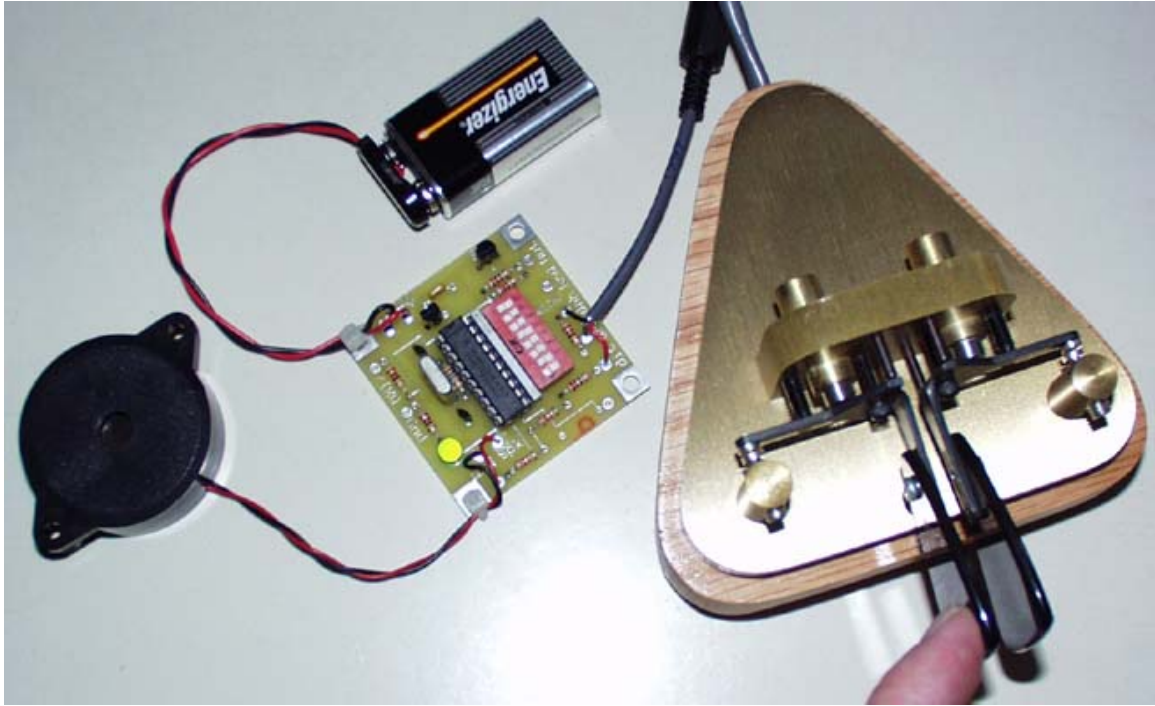
( Morse Code Training Device )

John H. Fisher - K5JHF - Austin, Texas



## MoCo Trainer Features:

- ◆ Eight Different Dip Switch Selectable Operating Modes or Functions implemented in Software
- ◆ 1 to 25, 30, 35, 40, 45, 50, 55, 60 WPM Training or Practicing Speeds in 32 Steps
- ◆ Random Characters Re-Shuffled and Dealt Like a Deck of Cards for even Distribution in 5 letter groups
- ◆ Random Words from 570 of the Most Commonly Used Words Stored Internally
- ◆ Serial ASCII output at 9600 Baud of all characters for Computer Observation (External 0 and +5 volt to RS-232 level converter required - MAX232 not included)
- ◆ Iambic B Keyer with 800Hz sidetone and Transistor Output Pull Down
- ◆ 800Hz Straight Key Oscillator for Sending Practice
- ◆ Three Koch Training Modes Selectable from 2 to 43 Characters in 32 steps
- ◆ Koch Training with Preselected Characters or Sequential Characters at 18/5 or 18/10 WPM
- ◆ Ten Minute "ID" Timer with 1 sec blinking LED indicator - Restartable by Key Paddle Press
- ◆ Input Voltage up to 30 Volts with onboard 5 Volt regulator
- ◆ 20 to 30 Hour 9 volt Battery Life - Microcontroller 10 ma - LED 5 ma - Piezo Speaker 5 ma
- ◆ Motorola MC68HC908JK3CP "Digital DNA" Microcontroller Technology with 4k Reprogrammable "Flash" Memory for software upgrades



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#### Official Program Function Settings Table

123	Switch Position	0 = down	1 = up
000	Random Characters with Even Distribution in 5 letter groups		
001	Random Words from Internal 570 Word List		
010	Iambic "B" Keyer with Transistor Pull Down		
011	Straight Key using either Key		
100	Koch 18/5 Preselected Order		
101	Koch 18/10 Preselected Order		
110	Koch 18/5 Sequential Order		
111	Ten Minute "ID" Timer with either Key Paddle Restart		

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Official Koch Training List

KMRSUAPTLOWI.NJEF0Y,VG5/Q9ZH38B?427C1D6X=\*+

Official WPM - Koch Preselected Order Settings Table

45678 Switch Position 0 = down 1 = up

00000	1 WPM	KM
00001	2 WPM	KMR
00010	3 WPM	KMRS
00011	4 WPM	KMRSU
00100	5 WPM	KMRSUA
00101	6 WPM	KMRSUAP
00110	7 WPM	KMRSUAPT
00111	8 WPM	KMRSUAPTL
01000	9 WPM	KMRSUAPTLO
01001	10 WPM	KMRSUAPTLOW
01010	11 WPM	KMRSUAPTLOWI
01011	12 WPM	KMRSUAPTLOWI.
01100	13 WPM	KMRSUAPTLOWI.N
01101	14 WPM	KMRSUAPTLOWI.NJ
01110	15 WPM	KMRSUAPTLOWI.NJE
01111	16 WPM	KMRSUAPTLOWI.NJEF
10000	17 WPM	KMRSUAPTLOWI.NJEF0
10001	18 WPM	KMRSUAPTLOWI.NJEF0Y
10010	19 WPM	KMRSUAPTLOWI.NJEF0Y,
10011	20 WPM	KMRSUAPTLOWI.NJEF0Y,V
10100	21 WPM	KMRSUAPTLOWI.NJEF0Y,VG
10101	22 WPM	KMRSUAPTLOWI.NJEF0Y,VG5
10110	23 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q
10111	24 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q9Z
11000	25 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q9ZH3
11001	30 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q9ZH38B
11010	35 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q9ZH38B?4
11011	40 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q9ZH38B?427
11100	45 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q9ZH38B?427C1
11101	50 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q9ZH38B?427C1D6
11110	55 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q9ZH38B?427C1D6X=
11111	60 WPM	KMRSUAPTLOWI.NJEF0Y,VG5/Q9ZH38B?427C1D6X=*+

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## Official Koch Sequential Order Training List

ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890.,?=/\*

## Official WPM - Koch Sequential Order Settings Table

45678 Switch Position 0 = down 1 = up

00000	1 WPM	AB
00001	2 WPM	ABC
00010	3 WPM	ABCD
00011	4 WPM	ABCDE
00100	5 WPM	ABCDEF
00101	6 WPM	ABCDEFG
00110	7 WPM	ABCDEFGH
00111	8 WPM	ABCDEFGHI
01000	9 WPM	ABCDEFGHIJ
01001	10 WPM	ABCDEFGHIJK
01010	11 WPM	ABCDEFGHIJKL
01011	12 WPM	ABCDEFGHIJKLM
01100	13 WPM	ABCDEFGHIJKLMN
01101	14 WPM	ABCDEFGHIJKLMNO
01110	15 WPM	ABCDEFGHIJKLMNOP
01111	16 WPM	ABCDEFGHIJKLMNOPQ
10000	17 WPM	ABCDEFGHIJKLMNOPQR
10001	18 WPM	ABCDEFGHIJKLMNOPQRS
10010	19 WPM	ABCDEFGHIJKLMNOPQRST
10011	20 WPM	ABCDEFGHIJKLMNOPQRSTU
10100	21 WPM	ABCDEFGHIJKLMNOPQRSTUV
10101	22 WPM	ABCDEFGHIJKLMNOPQRSTUVW
10110	23 WPM	ABCDEFGHIJKLMNOPQRSTUVWXY
10111	24 WPM	ABCDEFGHIJKLMNOPQRSTUVWXYZ1
11000	25 WPM	ABCDEFGHIJKLMNOPQRSTUVWXYZ123
11001	30 WPM	ABCDEFGHIJKLMNOPQRSTUVWXYZ12345
11010	35 WPM	ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567
11011	40 WPM	ABCDEFGHIJKLMNOPQRSTUVWXYZ123456789
11100	45 WPM	ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890.
11101	50 WPM	ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890.,?
11110	55 WPM	ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890.,?=/
11111	60 WPM	ABCDEFGHIJKLMNOPQRSTUVWXYZ1234567890.,?=/*

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