



# DATONG

ELECTRONICS LIMITED

## MORSE TUTOR

An instantly available source of precision Morse for training purposes at all levels of skill.



**THE REVOLUTIONARY NEW WAY TO PRACTICE MORSE CODE RECEPTION. AN UNLIMITED SUPPLY OF PRECISION MORSE AT THE TURN OF A SWITCH, PLUS BUILT-IN OSCILLATOR FOR SENDING PRACTICE.**

- Sends a continuous stream of precision Morse in five character groups which never repeat.
- Variable speed and variable delay between characters for optimum learning efficiency.
- Letters only, numbers only, or mixed.
- Built-in tone oscillator for sending practice (key required).
- Earphone socket for private listening.
- Eleven IC, CMOS circuit for long internal battery life.

**PRECISION MORSE**

The Datong Morse Tutor sends a continuous stream of precision Morse code in random five letter groups. Its sending is impeccable; it never repeats and it never tires.

You can select letters only, numbers only, or letters and numbers mixed, at the flick of a switch.

**OPTIMUM LEARNING TECHNIQUE**

Best of all not only can you vary the basic sending speed from 6.5 to 37 words per minute, you can also increase the delay between letters from the "correct" value (3 dot periods) to a maximum of over 3 seconds.

This delay facility means that right from the start you can learn each letter and number as it ought to be learnt, that is with the dots and dashes within a letter fast enough to form a complete sound pattern, but with a long delay between each letter. As you improve you simply reduce the delay between letters.

**USES YOUR TIME TO BEST ADVANTAGE**

Skill at Morse reception only comes with practice and this uses up valuable leisure time. With Model D70 you can make every minute count because you can tailor the level of difficulty exactly to your own ability.

Moreover you are no longer tied to someone else's timetable. Morse Tutor is available at any time day or night so can you snatch a few minutes practice whenever it suits you. This way your practice sessions can make use of time which would otherwise be wasted, while travelling for example.

**ALWAYS FRESH**

Unlike tapes and records whose sequence becomes familiar surprisingly quickly, the Morse Tutor never repeats the same sequence twice. This means you don't have to ration the supply to avoid wasting it.

**LEARN WITH CONFIDENCE**

Morse Tutors' calibrated controls mean there will be no doubt about when you are up to examination speed. With today's examination fees it pays to pass first time.

**AFTER THE MORSE EXAM**

After Morse Tutor has helped you to pass the Morse Exam it will painlessly help you to the still higher speeds which are needed to get full enjoyment from real-life operating. Its wide speed range means that even experts can use Morse Tutor to keep in trim or as a refresher course.

**HOW TO LEARN MORSE WITH THE DATONG TUTOR**

The key to learning Morse is to learn each character as a complete sound pattern not as a set of individual dots and dashes. It is important also to be able to receive Morse reasonably well before you begin to practice sending.

Start with Morse Tutor set to between 8 and 12 words per minute but with maximum delay between characters. This way you learn the correct rhythmic sound of each character while the delay gives you time to look up the character in the code list. As you become familiar with the code, gradually reduce the delay between letters. Ideally the speed should always be slightly faster than you are able to read comfortably.

Many short practice sessions are much better than few long ones. Take advantage of Morse Tutor's portability and personal earpiece to snatch as many practice sessions as possible. You can learn Morse with minimum disruption to your normal activities by using time which would otherwise be wasted for example while travelling to and from work.

Once you have learnt the basic code and can recognise the characters from memory, your main practice should consist of writing down the output from Morse Tutor. Use longhand right from the start rather than printing, otherwise as you progress your ability to copy Morse will outstrip your speed of writing. It is also beneficial to listen to Morse Tutor's output even at times when you are unable to write it down. This helps you to recognise the "tune" of each character and to split up the continuous stream into separate characters.

Do not be discouraged if your progress appears to come to a halt at various stages. This is quite normal and in fact is normally a prelude to a significant jump in receiving speed.

When you have reached a speed of about six words per minute you are ready to begin sending practice. Simply plug a conventional Morse Key into the "KEY" jack on the rear panel of Morse Tutor. This disables the automatic sending circuitry and the unit will produce a tone whenever the key is pressed (the key should close a contact when pressed).

**INTERNATIONAL MORSE CODE**

Morse code comprises a stream of dots and dashes. If the duration of a dot represents one time unit, a dash is three units, the space between dots and dashes within a character is one unit, the space between letters in a word is three units, and the space between words is seven units.

When the "DELAY" control is set to the "CALIBRATE" position (fully clockwise) Morse Tutor produces Morse with the above timing and in five character groups. As extra delay is introduced between letters the delay between words becomes just twice the delay between letters. Timings within each letter are determined only by the "SPEED" control.

The basic Morse characters are given below in the form of dots and dashes. When saying them either aloud or mentally use "dit" to represent a dot and "dah" for a dash. Letter C for example is pronounced dahdidahdit. It is important to learn the code as sounds not as visual patterns.

A ..-	N --.	1 .-----
B -....	O ---	2 .-----
C -.-.-.	P -.-.-.	3 .-----
D -..	Q -.-.-	4 .-----
E .	R .-..	5 .-----
F -....	S ...	6 .-----
G ---	T -	7 .-----
H ....	U ...	8 .-----
I ..	V ...-	9 .-----
J .-.-.-	W -.-	0 .-----
K -.-	X -.-.-	
L -.-.-	Y -.-.-	
M --	Z -.-.-	

**AUDIO NOTE**

The frequency of the audio tone can be altered if desired by adjusting the preset potentiometer labelled "NOTE" on the printed circuit board. To open proceed as described under "battery replacement"

**BATTERY REPLACEMENT**

When Morse Tutor produces all dots or all dashes the battery should be replaced.

First switch off the unit. Then remove the top two screws on both front and rear panel and lift off the upper half of the case. The battery can then be replaced. Take care to observe the correct polarity. **WARNING:** When replacing the panel screws take care not to strip the threads by over-tightening.



Spence Mills, Mill Lane, Bramley,  
Leeds LS13 3HE, England.  
Telephone: (0532) 552461

**Morse Tutor is supplied complete with personal earphone and battery and ready for use**