

VCM-Series Product Data Sheet

Model Name: **VCM-01X Digital Voice Module** Rev.C

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Model Name: **VCM-01X Digital Voice Module** Rev.C

Introduction

VCM-01X is a digital voice module. It directly plays back 8-bit mono PCM sound files digitized at 8,11,16,22,24,32 KHz. Sound files are programmed and stored in nonvolatile EPROM chips for instant, random access. There is no restriction on the length of each sound, as long as the total length of all sounds combined fit to the chips.

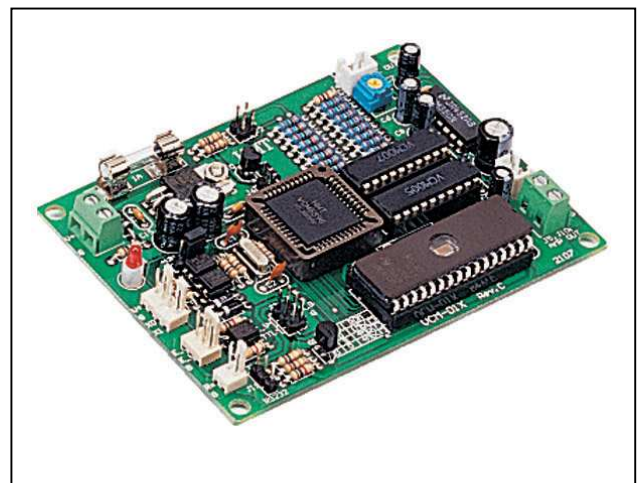
The board is designed to be a standalone device, and powered by a single voltage supply. Sound playback can be triggered by a number of devices such as push buttons, motion sensors and dry contact closures. The built-in power amplifier can deliver up to 3W into a speaker, with a volume control tuner.

The board can be configured to operate in different modes. The configuration data is stored in EPROM chips along with sound bytes. On power up the board will configure itself automatically. There is no need to set switches manually.

Feature

- *Max. Quantity of Messages:
2 Messages in Direct Single Mode
- *Memory Type:
EPROM (27Cxxx), 1Mb/4Mbits
- *Max. Memory Capacity:
4M-bits x 1
- *Voice Length: (Max. 4Mbits)
63 Seconds at 8KHz
31 Seconds at 16KHz
- * Voltage Supply: 12 VDC, 300mA
- *Output amplifier: 3W (Ro = 4 ohm)

Product Photo



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Function / Specification

Input trigger pins number	2 pins, Photo coupler isolated	
Input trigger acknowledge	Active Low.	
Exterior response signal	Busy signal and EOVS signal Output.(End of Voice Signal.)	
EPROM IC socket quantity	1 pc	
EPROM IC type	1Mbits / 4Mbits with jumper selections.	
Sampling rate support	8KHz / 11KHz / 16KHz / 22KHz / 24KHz / 32 KHz	
Max. Total length	63 seconds / 8KHz sampling rate/ 8Mbits x 1	
Max. quantity of messages	2 messages in Serial mode.	
Max. address quantity of digital voice files	160 files	
Properties for every message	Edge / Level , Hold / Unhold , Retrigger / Irretrigger (All of trigger pins can be set individually.)	
Trigger Mode Support / Trigger Pins Description / Max. Number of message		
Direct Single mode	X0, X1	2 messages
Single Circulating mode	X0, X1	2 messages

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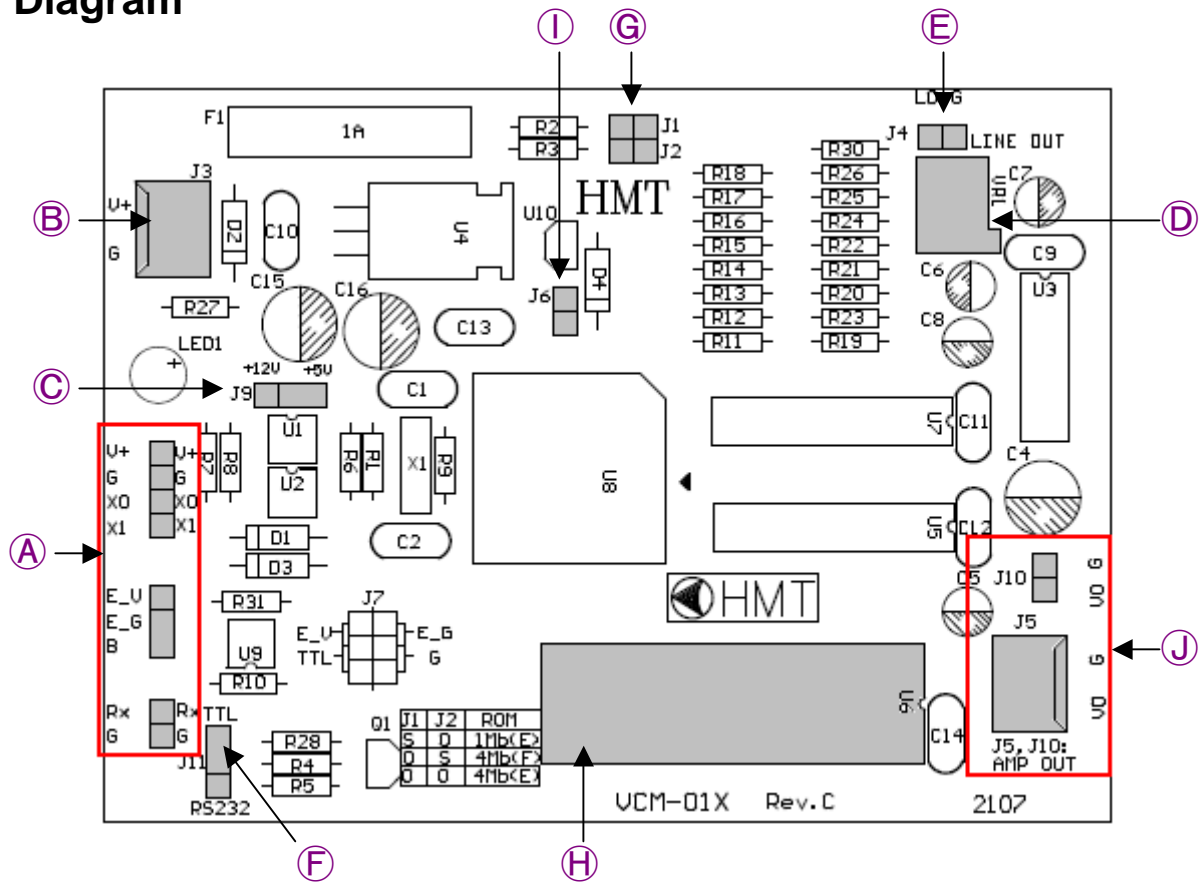
Electronic Specification

Voltage Supply	DC 12V / 0.8A
Amplifier output	3 watt, Ro = 4 ohm
Consumption (Audio Output)	0.25mA at DC 12Vin
Consumption (Without Audio Output)	130mA at DC 12V
Trigger Inputs De-bounce Time	Signal length 80ms at least
Watch Dog Function	Yes
Operating temperature	0°C - 70°C
Line Out	Yes
Volume Control	Yes
PCB Dimension (L x W x H)	106 x 78 (mm)
Metal Box (Option)	No

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PCB Diagram



Jumpers & Connectors Description

A	Input Pins Information See PCB label: Input Trigger Pins : X0-X1, Rx / G : Serial signal interface B: Busy signal output E: End of voice signal output.(Setting by J7.)		
B	Power Supply: DC 9-13V, 0.5A	G	EPROM Type with jumper Selections
C	J9: Normal set at 5V side	H	EPROM IC Socket #1
D	Volume Controller	I	J6: System Reset
E	J4: Audio line out	J	J10, J5: Audio Out with Amplifier
F	J11: Serial mode input level selections		

Operation Note:

When Power supply is on, the system should sound out “Beep! Beep!(two times)” It represents the P.C.B. and EPROM data programming are ready. If not, please check out Rom-link software setting and all connections.

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PCB Dimension Diagram

