K T Assemblies SAWD 8x message speech announcement pcb.
Supply Voltage. 12 to 24v DC.

All configuration changes should be made while the board is powered down. Damage can occur if the board is misconfigured or attempted to be configured while active. See the included diagram for further information.

Default settings.

Record /repeat switch.
1,2,3,4 all "Off" (Down)

Inputs set switch.
Both set to "B," normal open, close to start.

Sample Rate switch.
1 "Off" 2 "On" 40 seconds = 5 seconds for 8 inputs
Mic or Line input switch.
M "Off" L "On" this is then using the on-board microphone.

Message selection switch.
1"On" 2 "On" this is all 8 inputs selected.

Tone Select switch.
1 "Off" 2 "Off" set to door bell sound on Zone 1 & 2, Alarm sound on 3 & 4, and No tone on 5,6,7,8.
Red Jumper.
Jumper "On" on board speaker active.

How to record message.
Power up pcb, and put a normal open switch into the input you wish to make a recording on.
(Use a normal closed switch, if you have changed the input settings from n/o to n/c.)

(A.) Put record switch 4 On (UP) red led next to the switch will come on, this is in record mode now.
Close and hold the input switch, the green Led starts flashing, start your recording when finished release the input switch the led stops flashing. If the green led stops flashing before you have ended your message, you have run out of time space. Start and record again.

(B.) Turn off the record switch No 4, red led goes out, then push the input switch again to hear you recording, if OK, then move the input switch to the next zone if you wish to make another recording.

If you are not happy with the recording repeat from (A) which will over write the last recording.
If you only using say 4 inputs then change the Messages mode switch to 4x 1"Up" to "Down" this will double the message time from 5x Secs to 10x Secs.

You can get longer times by changing the sample rate.

SAWD – Speech Audible Warning Device.

The SAWD can be programmed with up to 8 audio warning or information messages, each of these messages can be triggered by a normally open or normally closed source, such as a PIR, reed switch or some other source.

When the message is triggered it is played back via the on-board SPK (Speaker) connection or to a connected speaker (Minimum 8 Ohms) or the line out connection which can be connected to an external amplifier/audio system if required.

A corresponding output is also opened for switching of an external device, such as a repeater or information panel.

Each message can be programmed by using the on-board microphone, or recorded from an external source via the line input connector, such as a CD or mp3 player.

The board can be configured in several ways using the onboard switches mounted on the PCB.
The sample rate of the speech chip can be adjusted to give a maximum record time of 30, 40 or 60 seconds, at the expense of decreasing the quality of audio recorded.
The maximum record time is then split evenly between the configured number of messages.
Using the mode switch you can configure the board to store and playback 2, 4 or 8 messages.
For example a maximum time of 30 seconds at the highest quality sample rate configured with 2x messages will give each message a length of 15 seconds.
Conversely a maximum record time of 60 seconds configured with 8 messages will give each message a length of 7.5 seconds.
The messages can be configured to repeat up to 4 times (playing the message 5 times in total) using the repeat select switches.
Messages can also be prefixed with an alarm or doorbell tone to gain attention. This can be configured so that all 8 messages are prefixed with a doorbell, all 8 are prefixed with an alarm or so that the first 2 messages are prefixed with a doorbell, the second 2 with an alarm, and the remaining 4x have no prefix. Custom prefix sounds may also be available on request.

Recording messages is performed by switching the SAWD into record mode using the on-board select switch. Once in record mode activate and hold the input corresponding to the message required, while feeding audio via the on-board microphone or line input connection.
The input selection switch must be configured correctly to use either the microphone or line in connection. If audio fails to record first check the status of the input selection switch to verify it is configured in the right way.

When all messages are configured return the SAWD to playback mode using the record select switch.

Please note:
The SAWD requires a 12-28v DC supply, and can drive up to a 12w speaker with an impedance of a minimum of 8 ohms.

MAKE SURE THE UNIT IS POWERED DOWN BEFORE MAKING SWITCH CHANGES
THESE TWO SWITCHES ARE TO CHANGE THE START CONDITIONS.
WHICH CAN BE EITHER ALL N/C OR ALL N/O NOT MIXED.
BOTH SWITCHES IN THE "A" POSITION = NORMAL CLOSED
BOTH SWITCHES IN THE "B" POSITION = NORMAL OPEN
DO NOT HAVE ONE SWITCH ON "A" AND THE OTHER ON "B"

SAMPLE RATE SWITCH "X" AND "Y"
THERE ARE THREE SAMPLE RATES 60.40 & 30 SECONDS
THE SHORTER TIME THE BETTER QUALITY SOUND.
60 SECOND OVER ALL 8 INPUTS IS 7.5 SECONDS
SWITCHES
X OFF & Y OFF = 60 SECONDS
X ON & Y OFF = 40 SECONDS
X OFF & Y ON = 30 SECONDS

MESSAGE IS BEING PLAYED
INDICATOR LED.

MODE OFF OFF DONT USE
MODE ON ON 8 MSG
MODE OFF ON 4 MSG
MODE OFF OFF 2 MSG

SYSTEM RESET SWITCH.

WHEN USING MIC INPUT, SWITCH "M" OFF AND "L" ON.
WHEN USING LINE INPUT, SWITCH "M" ON AND "L" OFF.

AMP SUPPLY HEALTHY

MESSAGE PLAY VOL CONTROL

FOR CONNECTION TO EXTERNAL AMP

SPEAKER MIN 8 OHMS

LINE IN FOR RECORDING MESSAGE
FROM EXTERNAL SORCE

SUPPLY VOLTAGE 12 TO 28 DC

IN RECORD MODE INDICATOR LED

ZONE START INPUTS

ON BOARD SPEAKER.
THIS SPEAKER IS FOR BEEP
TONES WHICH ARE USED WHEN
MAKING RECORDING MESSAGES
TO INDCATE THE START AND END.
RED JUMPER CAN BE REMOVED TO
ISOLATE THIS SPEAKER IF REQUIRED.

RECORD & REPEAT
SELECT SWITCH
4X SWITCHES
SWITCHES 1 2 3
ARE FOR MESSAGE REPEAT
No. 3 ON/OFF (UP ON)
3 OFF ONE MESSAGE ONLY
WITH 3 ON MESSAGE AS BELOW
SWITCHES
1   2
ON   ON = 2 REPEATS
ON   OFF = 3 REPEATS
OFF ON = 4 REPEATS
OFF OFF = 5 REPEATS

SWITCH 4 IS TO PUT INTO
RECORD MODE UP ON DOWN OFF

SUPPLY HEALTHY

TONE SELECT
UP ON TONE
A B   A B
ON ON   = NO TONE SECECTED
OFF ON   = ALARM ALERT TONE ALL ZONE8
ON OFF = DOOR BELL TONE ALL ZONES
OFF OFF = DOOR BELL Z1.Z2 ALARM Z3.Z4
           NO TONES ON Z5 TO Z8.

NEG
RELAY DRIVE OUTPUT
NORMAL ON.
OFF WHEN MESSAGE
IS PLAYING

IF LINKED
KILLS MESSAGE BUT
RELAY DRIVE STILL
CHANGES WHEN ZONE
IS TRIGGERED

START SELECT
SW2
A   B
SW1
A   B

X SAMPLE
Y RATE
START
An N/C
B=N/O
ON
ON

SPEECH CHIP

MODE
PLAY
L M
RST
MIC1

SUP
L=LINE JUMP
M= MIC ISO

LM380

LINE OUT
LINE SPK
VOL
LINE IN

10.6V
ALARM RELAYS
NEG DRIVERS

s1

MICRO PRO CHIP

REC
ON
B A
REP SELECT

BEEP TONE
SPK1

RED JUMPER

TONE
A   B
ON ON NT
OFF ON AL
ON OFF DB
OFF OFF
2/2/4

UP ON
A B

12v SUPP

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FILE SPEECH1
KTA LTD
01424 851754
FUSE 1

DIS + 1 2 3 4 5 6 7 8
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