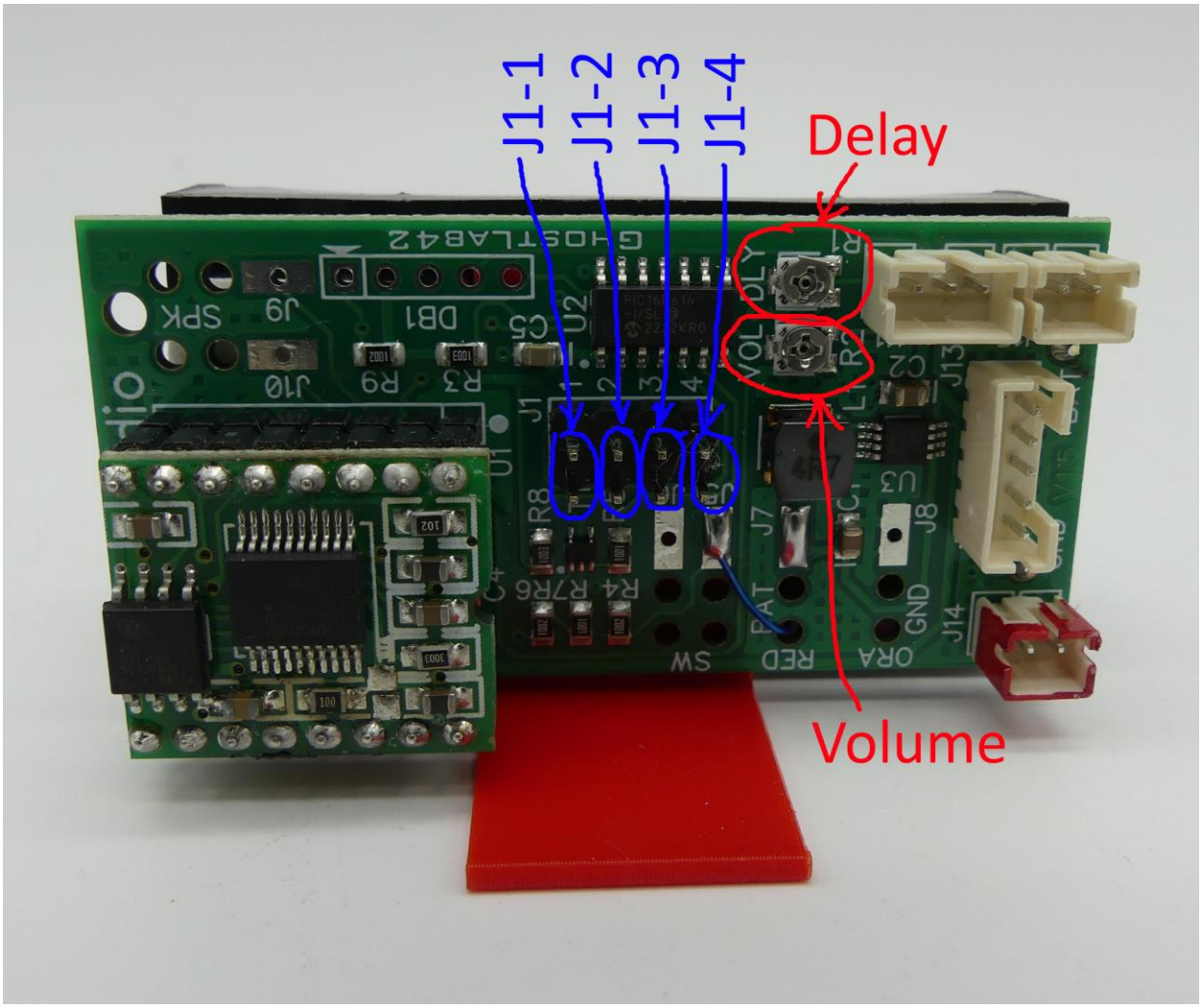
Sound Module Operating Guide:

The jumpers and two small metal potentiometers are used control the operation of the sound modules and are referenced in this orientation:



A jumper would be “shorting” together the two vertical posts if it is placed over both of them. This is considered “ON”. If the jumper (or shunt) is only on 1 pin it is considered “OFF” and will not affect operation of the sound board.

If you do not want to short between pins but do not want to lose or misplace the jumpers, just place each on a single pin at the top of the jumper pins. This will hold them and will not interfere with normal operation.

Next is a description of how the jumpers and potentiometers are used to configure the sound module’s operation.

Test mode:

Use the two jumpers to short The J1-2 and J1-3 positions. This is the default position when the sound module is shipped out to you in a kit.

The volume control is normally set to a mid-value (halfway between min and max) so it can be overridden by an external volume control potentiometer in the MT500.

**** WARNING ****
If you are using an external potentiometer and the volume control on this board is set to min or max damage to the board and wires can occur.
**** END OF WARNING ****

When powered on, the sound module will announce "Test",
followed by a two-digit revision number, followed by "Test",
then it will announce what switches are shorted.

Since the jumpers are on, it will keep announcing "2" and "3" until the two jumpers are removed.

"1" is the left most jumper position (J1-1)
"2" is the jumper position second from the left (J1-2) OR
rotary switch selection 2 (White wire)
"3" is the jumper position second from the right (J1-3) OR
rotary switch selection 3 (Yellow wire)
"4" is the right-most jumper position (J1-4) OR rotary switch selection 4 (orange wire)
"5" is the talk button when closed (red and black wires on 2 wire cable in connector J5, J6)

Normal operation with a selection switch wired to the ribbon cable

(5-wire cable's White, Yellow, and Orange wires connected to a rotary switch):

Do not use the right-most three positions; they will interfere with the frequency selection switch operation.

Left most jumper J1-1 position is used to select the order the quotes will be played:

Open: Sequential quote selection
Close: Random quote selection

The rightmost jumper positions select which groups of sounds will be played when the timer has elapsed. At most only one of the top 3 positions should be shorted:

J1-2 position shorted: Only GB 1 Movie quotes
J1-3 position shorted: Only GB 2 Movie quotes
J1-4 position shorted: Only GB Game and movie Radio Chatter
All three open: All available quotes from both movies and the game.

Starting the Next Sound Sample

In normal operation, the next sound sample will play automatically after some delay. If you want something to happen immediately, you just press the talk button.

The talk button can be used to immediately start one of several selections:

- If you press the talk button for less than 1 second, it will automatically start the next quote when you release the button.
- If you hold down the talk button for 1-3 seconds, the sound module will step through a set sequence of responses from all 4 Ghostbusters
- If you hold down the talk button for 3-5 seconds you get the Ghostbusters commercial from the first movie.
- If you hold down the talk button for over 5 seconds, the entire Walkie Talkie sequence from the first movie will play.

Volume Control

In normal operation, the top potentiometer MUST be set to a mid-volume position halfway between min and max. This will allow the use of an external volume control on the MT500.

Rotating clockwise will increase the volume, and rotating counterclockwise will decrease the volume.

The 8 available volume levels will announce a change in setting with a burst of static when a new level is requested.

Delay Timer Control

In normal operation, the bottom potentiometer is used to adjust the amount of delay between automatic play back of samples.

Rotating clockwise will increase the delay, and rotating counterclockwise will decrease the delay.

The delay is adjustable from about 1 to about 8 minutes and is announced when a delay near the next minute is reached. The delay is fairly contiguous, so you are not limited to only 8 time delay selections, though the announcements will only tell you what the delay is to the nearest minute.

List of included quotes

Selection 1 (hold the Talk button for between 1 and 3 seconds and release):

This is an "interactive" set of quotes. The suggested script below shows what you could be saying into the radio to give the impression that you are interacting with the Ghostbusters. Your lines are marked in *this color*.

Come in Ray (time it while holding the button – releasing the button will start Ray talking)
Ray: Yeah, what's up?
Can you get over here right away?
Ray: No can do. We are following a big PKEgon: signal, don't want to loose it.

You there, Peter?
Peter: Whaaaat?
Can you come over here?
Peter: Ssssorry
Please?
Peter: What about pretty please?
Pretty please? I'm just up the stairs.
Peter: I'm not taking the stairs. Uh, today's not my cardio day.

Egon can you make it over here?
Egon: I'd rather not
Why, what's going on?
Egon: Detecting a very strong anomaly here.
How strong?
I've never seen readings like this before. They are off the charts.
Now I'll have to make new charts

Winston, you there?
Winston: How you doing out there man?
Not so good Z, can you get over here right away?
Winston: That's not going to happen.
Why not?
Winston: This place is becoming very active kid, you have got to get back to the main chamber. We will meet you there.
OK! See you soon! (Don't press the button or you will start the next quote when you release it. Just hold up the radio while saying this!)

Selection 2 (hold the Talk button for between 3 and 5 seconds and release):

Ray: Pick up the phone and call the professionals.
All: Ghostbusters!
Ray: Our courteous and efficient staff is here to fill all your supernatural elimination needs!
All: We are ready to believe you

Selection 3 (hold the Talk button for at least 5 seconds and release):

Peter: Come In Ray
Ray: Venkman?
Ray: I saw it I saw It I saw it
Peter: It's right here, Ray. It's looking at me!
Ray: He's an ugly little spud isn't he?
Peter: I think he can here you, Ray.
Ray: Don't move.
Ray: It won't hurt you!
Ray: Venkman! What happened? Are you OK?
Peter: He slimed Me!
Ray: That's great! Actual physical contact! Can you move?
<Radio static>
Egon: Ray, Ray, come in please.
Ray: Spengler
Ray: I'm with Venkman.
Ray: He got slimed!
Egon: That's great ray, save some for me.
Egon: Get down here right away. It just went into a ballroom.
Ray: OK, we'll be right there.

GB 1 Movie Quotes:

Peter: back off man I'm a scientist.

Ray: Listen, do you smell something?

Peter: he he he, get her, that was your plan? was scientific

Peter: You, you've earned it!

Janine: Do you have any hobbies?
Egon: I collect spores mold and fungus.

<piano notes>
Peter: They hate this!

Dana: That's the bedroom, but nothing ever happened in there.
Peter: What a crime!

Janine: Oh of course, yes, they will be totally discreet.

Ray: You know it just occurred to me we haven't had a successful test of this equipment
Egon: I blame myself.
Peter: So do I!
Ray: Well no sense worrying about it now.
Peter: Why worry? Each one of us is wearing an unlicensed accelerator on his back!

Ray: I think we should split up.
Egon: Good idea.
Peter: Yeah, we can do more damage that way.

Radio Chatter Quotes from GB 1 Movie:

Peter: Come In Ray
Ray: Venkman?
Ray: I saw it I saw It I saw it
Peter: It's right here, Ray. It's looking at me!
Ray: He's an ugly little spud isn't he?
Peter: I think he can here you, Ray.

Ray: Don't move.
Ray: It won't hurt you!
Ray: Venkman! What happened? Are you OK?
Peter: He slimed Me!

<Radio static>
Egon: Ray, Ray, come in please.
Ray: Spengler
Ray: I'm with Venkman.
Ray: He got slimed!

Egon: That’s great ray, save some for me.
Egon: Get down here right away. It just went into a ballroom.
Ray: OK, we’ll be right there.

Egon: there is something very important I forgot to tell you
Peter: what
Egon: dont cross the streams
Peter: why
Egon: it would be bad
Peter: im fuzzy on the good bad thing what do you mean bad
Egon: try to image exploding at the speed of light
Ray: total protonic reversal Peter: thats bad

Peter: nice shootin tex

Egon: Venkman shorten your stream. I dont want my face burned off.

Peter: We came. We saw. We kicked its ass!

Ray: the light is green the trap is clean

Janine: ghostbusters what do you want

Winston: tell him about the twinkie
Peter: what about the twinkie

Louis: Does any one want to play Parcheesi
Louis: OK, who brought the dog?

Peter: That's a different look for you.
Dana: Are you the keymaster?

Peter: …4 feet above her covers

Ray: Everything was fine until they shut off the power.
Walter: They caused an explosion!
Mayor: Is this true?
Peter: Yes it’s true. This man has no dick.

Winston: Since I joined these men I have seen shit that will turn you white!

Peter: dogs and cats living together…

Are you a God?
Ray: No
Then die!
Winston: Ray, if someone asks you if you are a God you say YES!

Choose the form of the destructor.

Ray: I couldn't help it, It just popped in there.
Peter: What? What just popped in there?
Ray: No, it can’t be, it can’t be!
Peter: What did you do Ray?
Ray: It’s the Staypuft Marshmallow Man.

GB 2 Movie Quotes:

Egon: They're more interested in my epididimas.

<ringgg>
Ray: Ray's Occult
There is a pause long enough for you to say"What are your hours?"
Ray: seven oclock on weedays midnight on Saturday
There is a pause long enough for you to say"Thanks"
Ray: Thank you!

Radio Chatter Quotes from GB 2 Movie:

Peter: you all right
Ray: yah Im good speed is good boys
Ray: keep it comin

Ray: breaking through see some light
Ray: Im in some kind of a chamber it's a river of slime
Ray: theres got to be 25K gallons of it its flowing like a river

Ray: Man o Horn!
Ray: I can't believe it. It's still here!
Ray: OK Whoa, Whoa, that's good. That's good.

Peter: What do you see?
Ray: See if I can get a sample.

Ray: uhh OK boys
Ray: boys
Ray: uhh pick me up now alright
Ray: theres some kind of activity going on with this stuff

Ray: Boys, pick me up! Boys!
Peter: Ray? Start it! Start it!
Ray: Boys? Hey, what's going on up there? Get me out of this hole!

Oh my god the Scalary brothers! You gotta do something!
Egon: Tell them you don't believe in ghosts.

Peter: You know its been a couple of years since we used this stuff.
Egon: The power cells have a half life of 5000 years.

Doh… Ray… Egon…

Two in the box…

Ray: You! You worthless piece of slime!
Egon: You're nothing but an unstable short chained molecule!
Peter: This is what you do with your spare time?

Ray: Do you think there is a connection between this Vigo character and the <slime sound>
Ray: Slime?
Egon: Is the atomic weight of cobalt 58.9?

Winston: Made a toaster dance and a bathtub tried to eat his friend's baby!

Ray: We need something every can get behind we need… a symbol!

Peter: Makes you wonder if shes naked under that toga

Winston: Slime blower primed and set!
Ray: It's slime time!

Louis: I was born to wear this stuff! Boy, this is heavy!

Egon: We should have padded her feet!

Peter: Will you hose him please?
Ray: Hose him!

Ray: You want a baby then knock up some willing hellhound…

Egon: Ray, we would like to shoot the monster could you move please?

GB Game Quotes:

Egon: You guys need to get down here immediately. Our live-in science experiment is tearing apart the lobby and is not alone.
Ray: More ghosts? But we gave this hotel a clean bill of health five years ago!
Egon: New people die every day.

Egon: Be careful Peter. Remember the Ellis Island incidence?

Ray: Hey, is there a bathtub overflowing up there?
Egon: More specifically a seven thousand cubic meter bathtub filled with protonically charged sea water... and um sea cucumbers?

Winston: Uh guys, I'm right outside and so is something else!
Egon: Winston what do you see out there?
Winston: It's big, it's clean and soft and white and you all aren't going to like it

Ray: Venkman come in please. It's pandemonium up here.
Ray: You are required at this site now!
Peter: So happy to be in demand, but these sugar balls have got me nailed down. I can't get past them. They are disgusting, and they are unhealthy!
Ray: Ah, did I mention there is a spectacularly beautiful lady in distress?
Peter: I'll be right there!

Egon: He knows you are there Ray, I don't think he likes it.

Egon: Ahhh, I've got to see this! I knew I should have gone with you, Ray send me a scan.
Ray: On it.

Egon: I don't mean to alarm you but we have lost sight of Staypuft.

Egon: We've got the engine running and I have fixed the trap. We are just minutes away.

Egon: Ray, Peter, we're in position. The trap is set. We're prepared to capture Staypuft.

Egon: Ray, watch out, I think there is something coming your way.
Ray: Well I wouldn't worry too much... Aaaaahhhhhhhhhh!

Ray: Egon, did you get 'em?
Egon: I got one, but the rest slipped past me down the stairwell.

Ray: Peter, come in. You ok?
Peter: Ray, ahhhhh I, oh God…
Ray: Uh Oh! Man down, we've got a man down, Go Go Go!

Ray: Where are you? We went back down to the 12th floor and couldn't find anything.

Winston: I don’t think any self respecting destructor form would live with his mother, do you?

Ray: All right there sunshine?

Ray: Stay alert. Keep your PKEgon: meter up.

Ray: Hey! Ugly just shot around that corner!

Egon: Winston, check upstairs to see if the phantom doubled back.
Winston: Roger.

Ray: OK, so much for stick together. New plan is fan out!
Egon: Flexible approach, Ray.

Ray: There are two hostile spirits roaming around in here.
Egon: Yes, two that we know about.

Egon: Temperatures dropping. Event imminent. Brace yourselves.

Winston: OK guys, it's dead up hear … the good kind I mean … you all cool?
Egon: We may need to get back to you on that.

Ray: The natives are restless.
Egon: Well, they are certainly aware of our presence.

Egon: This dimension is extremely volatile. It seems to be tearing itself apart.
Ray: We need to get out of here!

Winston: Guys! Where are you guys?

Egon: Something very strong and very angry is here.

Ray: Uh Oh. I've got bogies. Heads up boys, wherever you are.

Peter: When you are free, no rush, open gate 3487, just for kicks…
Ray: Whoa… We're under attack. We'll get back to you.

Winston: Ray. Stay away from any posses…
Ray: ??? Kazagorbash mazshhaclum Froggah Frogahh ????
Winston: You're not pretty when you're possessed, Ray. Seriously.

Ray: I'm getting heavy interference on the monitors. Are you guys in trouble?

Egon: Ray, come in. Are you there?
Ray: Egon. What happened? We lost you for a minute there.
Egon: We had a close contact.

Egon: I think I hear you guys. Yes, that sounds like my equipment. You are getting close.

Ray: Wow! Look at the storm system.
Egon: Remember the last time we saw that kind of atmospheric disturbance?
Winston: That’s right! At Dana Barrett's building the night she turned into a dog.

Ray: Boss are you all right? How's that gate coming?

Winston: Hey. Have we ever tested proton packs in the rain?

Egon: My Ghostbuster's sense is tingling!

Ray: Anyone remember to feed Slimer?

Ray: Venkman. You’ve got to distract them!
Peter: OK, I'll take one for the team.

Egon: Can you hold the Staypuft there for a few minutes?
Ray: If by "few" you mean less then one, then sure, we could do that.