This is how Mr.Seidel thinks the system works:

The system uses a phased array - meaning an array capable of steering and aiming electromagnetic waves and waveforms

The system is hooked into some sort of tracking system that is either built into the phased array or also integrated into the system (the tracking system uses the unique return of electromagnetic waves off a landmark on the subjects body or brain - so that electromagnetic waves and be continuously tracked in a precise manner onto the subject - this system is capable of tracking with precision (smaller than a millimeter of the brain - to aim the emf beam steered(googlethis) beam and waveforms onto the precise location of the brain in real time using the phases array) >

The tracking system works similiar to how a radar works - meaning it tracks the location of a user in real time providing the real time coordinates of the brain and body to the computer system . Persons told Mr.Seidel over "voice to skull" that it uses a "landmarking " feature - meaning it calculates the distance to the brain region of interest from a landmark on the users body. This landmark is continuously tracked using emf (and the backscatter (google this how it relates to electromagnetic waves) -- and the backscatter of the emf off the landmark (unknown if that information is transmitted through a carrier wave first to provide the information about the backscatter or if the system just picks up the backscatter and runs it through an information processing algorithm first)) -

Persons told Mr.Seidel over "voice to skull" that it uses a "landmarking " feature - meaning it calculates the distance to the brain region of interest from a landmark on the users body -- meaning that the system tracks the return of the emf off the landmark and has the distances to the brain region of interest (i.e the motor cortex , or the auditory cortex , or any other region of the brain of interest) programmed into the source code -- so that emf waves can be aimed onto the region of interest in near real time without missing. This emf waves that are aimed at the brain to cause physiological and neurological effect are controlled by precise algorithms and computer software and have had features of the electromagnetic wave altered such as the - amplitude , frequency ,polarization , waveform shape, beam direction, waveform duration and other advanced features modulated to produce the desired electromagnetic effects (and induction magnitudes on the correct region of the brain to produce the desired physiological and neurological effect)

(the landmarking feature is tracked in real time using the return of emf off the body/landmark and the distance to the brain region of interest is calculated - persons said they can landmark off the brain and regions of the brain and the unique emf return signatures off regions of the brain - but it also might be more simple then that to calculate where to aim the emf in the brain in real time)

(persons said they are working on a unique system for the real time tracking to replace the landmarking feature that was described as this: that tracks the unique return of emf off the brain instead of a landmarking feature - but who knows??)

The system is just a phased array linked to a real time tracking system(that tracks based on the backscatter of a person -possibly with the emf being modulated through a carrier wave back to the receiver - to update real time coordinates of the individual). The system then can aim emf from the landmarking feature onto specific regions of the brain at below millimeter accuracy . The emf aimed onto the brain can cause induction currents in the neurons on the brain to cause synthetic and induced action potentials with the special access program having access to computer programs that can precisely control these synthetic action potentials using algorithms and software that have been constructed from a lot of research(on firing what in which order , firing which groups of neurons in which magnitude , firing which groups of neurons in which magnitude and sequence) - the software is advanced and can be set to fire neurons continuously or on timers (and other stuff) .

The system utilizes carrier waves to bring information back to the receiver to continuously update the computer program of the real time locations of the brain regions of interest and the real time location

of the subjects body. Also the carrier waves are utilized to bring back to the receiver the real time data about the subjects brain and nervous system output.
(persons are actively wanting to research using different frequencies for the whole system such as new carrier frequencies and new tracking frequencies and new frequencies for neurological effect)

The system also can aim frequencies over the brain/brain regions of interest to pull the "real time visual field , real time auditory information(real time sound) , and real time internal monologue , and other real time status of different parts of the brain , such as real time heart rate, and other real time rates of brain region firing and nerve band firing (which has more data it in - ie(real time nerve firing of other regions of the brain or other nerve bands)

The system pulses and streams electromagnetic flux at the brain and the electric fields of the brain interact with the electric field of the emf stream to change the applied stream. This information is picked up because it then changes some sort of carrier wave (or the bakcscatter of it does) and then it goes back to the receiver and is processes using ADVANCED processing algorithms along with demodulation. The system can pull out information from the brain at various points - it is like a remote EEG/MEG system (this explanation is simplified because the math involved is extremally advanced)

How it probally works - somewhat

There has been precise mapping of the ventorlateral prefrontal cortex and the Superior temporal gyrus so that persons within a undisclosed special access program who have access to a phased array which is capable of aiming electromagnetic flux onto a subjects brain (even if they are on the move) in precise waveforms and fashions (by tracking them in real time using a reflected return (or the pertubation of the subject through an electromagnetic field) - as one must remember that electromagnetic waves move at the speed of light - meaning an electromagnetic wave an circle the earth nearly 5-7 times a second) . Persons in the special access program have access to precise mapping of the ventrolateral prefrontral cortex and the superior temporal gyrus as such they can aim and cause induction currents by pulsing and fluxing the correct beamsterred beams and waveforms at the correct parts of these brain regions to induce and render synthetic internal monolougue and thought.

Persons can also somehow modulkate the Primary AAuditory Cortex and/or the belta area and or the superior temproal gyrus to change the pitch , volume and timbre , when causing induction currents within the correct regions of the ventrolateral prefrontal cortex and the superior temporal gyrus whose purpose is to render synthetic internal monologue in the head. Persons who are victims of this technology refer to it as "voice to skull"

The ventrolateral prefrontal cortex and the superior temporal gyrus have been precisely mapped within an undisclosed special access program. Participants of this program possess a phased array capable of directing electromagnetic flux toward a subject's brain with remarkable accuracy, even while the subject is in motion. By tracking the subject in real-time using reflected signals or perturbations in the electromagnetic field, the program can manipulate electromagnetic waves (as they travel at the speed of light), g an electromagnetic wave circles the Earth approximately 5-7 times per second.

Individuals in the special access program are equipped with detailed knowledge of the ventrolateral prefrontal cortex and the superior temporal gyrus. This enables them to aim and induce specific electrical currents by pulsing and modulating precise beam patterns and waveforms at targeted areas within these brain regions. The intention is to create an artificial internal monologue and thoughts.

Moreover, through some means, these individuals can also modulate the primary auditory cortex, the beta area, and/or the superior temporal gyrus. By inducing currents in the appropriate regions of the ventrolateral prefrontal cortex and the superior temporal gyrus, they can manipulate the pitch, volume, and timbre of perceived sounds. Those subjected to this technology commonly refer to it as "voice to skull."

The system has akin to a "key" which is the ability to transmit audio to the brain off a prerecording - meaning it has the necessary locations , pulse power, pulse rate , pulse width , and other features of the electromagnetic waves necessary to recreate the sylabbales and thus the word and sentences for a message - that can be transmitted to the brain

The "key" would be a software package with the corespeonding calculations needed on the specific region/regions of the brain needed to recreate a word/sentence - meaning it has the proper features of the electromagnetic waves (in reality it has the proper equations for calculating the correct features of the electromagnetic waves in real time stored) -- needed to produce the correct induction current in the groups of neurons and cortical columns (of the correct brain region) needed to produce speech inside the internal monologue

____

A highly advanced undisclosed special access program has successfully mapped the ventrolateral prefrontal cortex and the superior temporal gyrus with great precision. Participants in this program possess a phased array device capable of directing electromagnetic flux toward a subject's brain, even while they are in motion. By employing real-time tracking through reflected returns or subject perturbations within an electromagnetic field (bearing in mind that electromagnetic waves propagate at the speed of light, allowing them to circle the Earth multiple times per second), individuals in this program can achieve precise targeting of specific brain regions.

By pulsing and manipulating the correct beamsterred beams and waveforms, these individuals can induce currents and alter the neural activity in the designated areas of the ventrolateral prefrontal cortex and the superior temporal gyrus. This modulation leads to the creation of synthetic internal monologues and thoughts within the affected individuals. Additionally, it seems that they have the capability to modulate the primary auditory cortex, the delta area, and/or the superior temporal gyrus to modify aspects such as pitch, volume, and timbre. This manipulation, when combined with the induction currents in the relevant regions of the ventrolateral prefrontal cortex and the superior temporal gyrus, results in what victims of this technology commonly refer to as "voice to skull" experiences.

Possible ability?? ability to influence neural activity within the arcuate fasciculus, a crucial pathway involved in language processing. Through their sophisticated techniques, they can drive electromagnetic activity specifically within this region, inducing synthetic speech-like patterns. By precisely modulating the electromagnetic flux and employing the correct waveforms, the program can effectively simulate speech within the arcuate fasciculus, resulting in the perception of spoken words or phrase

---

Please check research into incase the region is "incorrect"
(Persons could be driving inputs into the Superior Temporal Gyrus using the regions connected , or they could also be driving electromotive force into these other areas at the same time the beams hit the Ventrolateral Prefrontal cortex or the Superior Temporal Gyrus to modulate the sound or to have other physiological effect

Left inferior frontal gyrus (IFG)
Superior Frontal Gyrus

supplemary motor area (SMA)
superior and middle temporal gyri(STG and MTG)
medial prefrontal cortex (mPFC)
Posterioir cingulate/preceneus
temporoparietal junction(TPJ)
Brocca area
Angylur gyrus
Prefrontal Cortex
Cingulate Cortex
Insula
Parietal cortex
Hippocampus
Thalmus
Amygdala
arculate fasiculus
superior longitudinal fasiculus
inferior fronto-occiptal fasiculus

____

To determine the minimum ELF or VLF frequency required to cause an action potential, we need to consider the effects of electromagnetic fields on the neuronal membrane potential. ELF and VLF electromagnetic fields can induce electric fields in the body, which in turn can affect the membrane potential of neurons.

Assuming that the electric field induced in the body by the ELF or VLF electromagnetic field is E, we can use Gauss's law to relate this electric field to the charge density ρ:

$$\nabla \cdot E = \rho/\varepsilon_0$$

If we assume that the charge density is localized at the surface of the neuronal membrane, we can approximate the charge density as ρ = q/area, where q is the charge on the membrane and area is the surface area of the membrane. Using this approximation, we can rewrite Gauss's law as:

$$E = q/(\text{area} * \varepsilon_0)$$

Now we can use Faraday's law to relate the induced electric field E to the time rate of change of the magnetic field B:

$$\nabla \times E = -dB/dt$$

Assuming that the magnetic field is uniform and perpendicular to the direction of propagation of the action potential, we can simplify this equation to:

$$E = -dB/dt * c$$

where c is the speed of light. Combining this equation with our previous equation for E, we get:

$$-dB/dt * c = q/(\text{area} * \varepsilon_0)$$

Solving for the time rate of change of the magnetic field dB/dt, we get:

$$dB/dt = -(q/\text{area}) * (1/(\varepsilon_0 * c))$$

Now we can use Ampere's law to relate the time rate of change of the magnetic field to the current density J:

$$\nabla \times B = \mu_0(J + \varepsilon_0(dE/dt))$$

Assuming that the magnetic field is uniform and that there is no current flow in the neuron except for the action potential, we can simplify this equation to:

$$\nabla \times B = \mu_0(dE/dt)$$

Using our equation for dB/dt, we can rewrite this as:

$$\nabla \times B = \mu_0 * (q/area) * (1/(\varepsilon_0 * c))$$

Assuming that the magnetic field is perpendicular to the direction of propagation of the action potential, we can simplify this equation to:

$$B * dL = \mu_0 * (q/area) * (1/(\varepsilon_0 * c)) * dA$$

where B is the magnetic field strength, dL is the length of the path around the loop, dA is the area of the loop, and μ_0 is the permeability of free space. Taking the line integral of both sides of this equation around a closed loop, we get:

$$\oint B \cdot dl = \mu_0 * (q/area) * (1/(\varepsilon_0 * c)) * \oint dA$$

Using Ampere's law of induction, we can relate the line integral of the magnetic field to the time rate of change of the electric flux through the loop:

$$\oint B \cdot dl = \mu_0\varepsilon_0(d\Phi\_E/dt)$$

Assuming that the area of the loop is equal to the surface area of the neuronal membrane, we can rewrite our equation for the line integral of the magnetic field as:

$$\oint B \cdot dl = B * 2\pi r$$

where r is the radius of the neuron. Substituting this into our equation for Ampere's law of induction, we get:

$$B * 2\pi r = \mu_0\varepsilon_0(d\Phi\_E/dt)$$

Let's assume that the action potential is triggered by an influx of sodium ions (Na+) into the neuron. We can use the Nernst equation to calculate the equilibrium potential for sodium:

ENa = (RT/zF) * ln([Na+]_out/[Na+]_in)

where ENa is the equilibrium potential for sodium, R is the gas constant, T is the temperature, z is the valence of sodium (which is +1), F is the Faraday constant, [Na+]_out is the extracellular sodium concentration, and [Na+]_in is the intracellular sodium concentration.

The Roy model of the neuron describes the relationship between the membrane potential (V), the capacitance (C), the resting membrane potential (V_rest), the membrane conductance (g), and the ionic current (I_ion). Let's consider the ionic current due to sodium (I_Na):

$$C(dV/dt) + g(V - V_{rest}) + I_{Na} = 0$$

For simplicity, let's assume that the membrane conductance is mainly due to sodium channels, so g can be considered as the sodium conductance (g_{Na}). Thus, we have:

$$C(dV/dt) + g_{Na}(V - V_{rest}) + I_{Na} = 0$$

The Muler and Markin model of nerve velocity relates the velocity of the action potential (v) to the resistance (R) and capacitance (C) of the axon:

$$v = 1/\sqrt{(RC)}$$

To determine the minimum ELF or VLF field required to cause an action potential, we need to consider the threshold condition for the action potential. The threshold condition occurs when the sodium current (I_{Na}) is sufficient to depolarize the neuron's membrane potential to the threshold level.

Let's assume that the threshold membrane potential ($V_{threshold}$) is the point at which the action potential is triggered. At this point, the sodium current (I_{Na}) is equal to the membrane capacitance (C) multiplied by the rate of change of the membrane potential (dV/dt). Thus, we have:

$$I_{Na} = C * (dV/dt)$$

Substituting this into the Roy model equation:

$$C(dV/dt) + g_{Na}(V - V_{rest}) + C * (dV/dt) = 0$$

Simplifying, we get:

$$2C(dV/dt) + g_{Na}(V - V_{rest}) = 0$$

Now, let's assume a sinusoidal ELF or VLF field with frequency f and amplitude E. This field induces an electric field (E_{field}) within the neuron, which can be related to the rate of change of the electric flux through the neuronal membrane ($d\Phi_E/dt$) using Ampere's law of induction:

$$E_{field} = \mu_0\varepsilon_0(d\Phi_E/dt)$$

Substituting this into the equation for the induced electric field (E) derived earlier:

$$E = -dB/dt * c$$

we get:

$$E = -c * d(B_{field})/dt$$

Assuming that the induced magnetic field (B_{field}) is directly proportional to the electric field (E_{field}) within the neuron, we can write:

$$B_{field} = k * E_{field}$$

where k is a proportionality constant. Substituting this into the equation for the induced electric field:

$$E = -c * d(k * E_{field})/dt$$

$E = -c * k * dE\_field/dt$

Using the Nernst equation, we can express the extracellular sodium concentration ([Na+]_out) in terms of the equilibrium potential (ENa), the intracellular sodium concentration ([Na+]_in), and the amplitude of the induced electric field (E):

$[Na+]\_out = [Na+]\_in * \exp((ENa * F)/(RT)) * \exp(-(z * F * E)/(RT))$

Considering that the induced electric field (E) is sinusoidal, we can express it as:

$E = E\_0 * \sin(2\pi f\ t)$

where E_0 is the peak amplitude of the electric field, f is the frequency, and t is time.

To determine the minimum ELF or VLF field required to cause an action potential, we need to solve the coupled differential equations for the membrane potential (V) and the induced electric field (E) while considering the threshold condition for the sodium current (I_Na). However, this involves complex calculations and requires detailed modeling of the specific neuronal system under consideration.

Persons said over v2k that they use a CUSTOM INTEGRAL - to be able to do it to the brain (one that is not in the public domain)

To induce a current in a neuron or bundle of neurons, you can use electromagnetic fields at ULF (Ultra Low Frequency) or ELF (Extremely Low Frequency) ranges.

That being said, the primary equation governing the interaction between electromagnetic fields and neurons is the induction equation, which describes Faraday's law of electromagnetic induction. In integral form, it can be expressed as:

$\oint E \cdot dl = -d/dt \int B \cdot dA$

where:

$\oint$ represents a closed loop integral around an arbitrary path,
E is the electric field vector,
dl is an infinitesimal vector element along the closed path,
B is the magnetic field vector, and
dA is an infinitesimal vector element normal to the surface enclosed by the path.
In simpler terms, this equation states that the electric field integrated around a closed loop is equal to the negative rate of change of the magnetic flux through the surface enclosed by the loop.

To induce a current in a neuron or a bundle of neurons, you need to create a time-varying magnetic field. This can be achieved by modulating the amplitude or frequency of the ULF or VLF wave. The changing magnetic field will generate an electric field according to Faraday's law of electromagnetic induction. The induced electric field in the vicinity of the neurons, leading to the desired current flow and polrization of the membrane and an action potential .

To quantify the relationship between the induced electric field and the changing magnetic field, you can use Maxwell's equations. Specifically, Ampere's law in integral form relates the magnetic field to the current density:

$$\oint B \cdot dl = \mu_0 \int J \cdot dA$$

where:

μ_0 is the permeability of free space (a constant),
J is the current density vector, and
dl and dA have the same meanings as before.
By manipulating the geometry of the setup and considering the specific properties of the neuron or bundle of neurons, you can determine the appropriate coil design, driving frequency, and magnetic field strength to induce a current sufficient to cause an action potential.

nduced Electric Field and Current:
Assuming the changing magnetic flux induces an electric field E inside the neuron, we can use Faraday's law of electromagnetic induction to relate the electric field and the changing magnetic flux:
$$E = -(d\Phi/dt) / (\pi * r^2)$$

This induced electric field E can lead to an induced current in the neuron if it is strong enough to cause depolarization and initiate an action potential.

o initiate an action potential, the induced current needs to exceed the threshold for depolarization. The exact threshold and dynamics depend on the specific properties of the neuron and its ion channels.
Once the induced current reaches the threshold, the Hodgkin-Huxley equations come into play. These equations describe the dynamics of ion channels and the resulting changes in membrane potential during an action potential.

$$Cm * dV/dt = I(t) - gNa * m^3 * h * (V - VNa) - gK * n^4 * (V - VK) - gL * (V - VL)$$
$$dm/dt = alpha\_m * (1 - m) - beta\_m * m$$
$$dh/dt = alpha\_h * (1 - h) - beta\_h * h$$
$$dn/dt = alpha\_n * (1 - n) - beta\_n * n$$

Here, Cm is the membrane capacitance, I(t) is the input current, gNa, gK, and gL are the conductances of sodium, potassium, and leakage channels, respectively. m, h, and n are gating variables, and VNa, VK, and VL are the reversal potentials for sodium, potassium, and leakage channels, respectively. alpha and beta terms represent voltage-dependent rate constants for channel gating.

By solving these differential equations numerically, you can simulate the dynamics of the membrane potential and observe the initiation and propagation of an action potential in response to the induced current

To initiate an action potential, the induced current needs to exceed the threshold for depolarization. The threshold and dynamics depend on the specific properties of the neuron and its ion channels.

Electric Field Calculation:
Using Faraday's law of electromagnetic induction, the induced electric field E can be calculated as:
$$E = -(d\Phi/dt) / (\pi * r^2)$$

To determine the minimum electric field required, we need to consider the threshold for action potential initiation.

Action Potential Initiation:
The threshold for action potential initiation depends on the specific properties of the neuron and its ion channels. Let's assume a simplified threshold of 15 mV/mm for depolarization to initiate an action

potential.

Ionic Current Equation:
The ionic current flowing across the membrane can be estimated using the ionic current equation:

$$I = g * (V - Vm)$$

Here, g represents the membrane conductance, V is the membrane potential, and Vm is the reversal potential.

Capacitive Current:
The change in membrane potential due to the charging of the membrane capacitance can be estimated using the equation:
$$Ic = Cm * dV/dt$$

Combining these equations, we can calculate the minimum electric field required for action potential initiation:

First, we calculate the induced current:

$$I\_induced = E * Cm * \pi * r^2$$

Then, we calculate the induced voltage:

$$V\_induced = I\_induced * Rm$$

If V_induced exceeds the threshold for action potential initiation, an action potential can be triggered.