

DETAIL SHEET FOR iLs FOCUS PROTOCOLS

To assist professionals customizing programs for clients using the Focus

The Focus is designed as a user-friendly school or home-based product. With 696 tracks of music, it is not designed to be managed on a track-by-track basis. For those who wish to emphasize specific zones, your iPod can be loaded with tracks emphasizing zones 1 and 2. (Note: as of February 21, 2008, all Focus iPods will come loaded with the extra tracks emphasizing Zone 1 and Zone 2.)

Generally speaking, the music choices are based on criteria established by iLs, as influenced by Dr. Tomatis, and tested through years of clinical application. We have personally selected music from Mozart's repertoire that includes his later symphonies, the violin concerti and a number of serenades and divertimenti. These were chosen for their aesthetic value, as well as for the rich high-frequency content from the strings providing frequencies above 20,000 Hz. We have also included some Vivaldi, and a little bit of Bach and Beethoven

Each piece of music has been listened to repeatedly and carefully selected for its dynamic range, the quality of technical recording production, as well as musicianship. One might ask why iLs has chosen only symphonies and compositions that emphasize the string instruments. The main reason is that the string instruments are rich in overtones and harmonics that reach into the highest frequencies of human perception when processed (filtered). As much as one may love the piano, when filtered it sounds much like a hammer on a tin drum, which is neither pleasing nor therapeutic.

The range of selected music includes symphonies, concerti, waltz, cello suites, as well as chant. The symphonies do include tympani, brass and woodwinds to complement the range of instruments that provide even more depth and richness to the compositions.

Gregorian Chant is chosen for its calming and relaxing effect. Given that the rhythm of the music is sung on the breath, rather than counted out in a fixed meter, Chant has the effect of calming heart rate and respiration, thereby bringing about a relaxing effect. Typical Gregorian Chant is sung by male voices, whose low frequencies generally create a restful, 'grounding' response, particularly for those who are stressed, anxious or become somewhat tense listening to more highly-filtered music.

Yet, some young children prefer female voices over deep voices of the male Gregorian, and for this reason ancient music sung by females is available as an alternative. It is equally soothing and very popular with male and female listeners of all ages. Chants are the only pieces not gated.

We include a number of very rhythmic Strauss waltzes in the music selections and protocols for their effectiveness in resonating with the body (created by the strong rhythm of the "one, two, three"), either as full spectrum or filtered to the sensory motor band width.

To move from one protocol to another, you may use the following guidelines: if your client started with a sensory motor program and you wish to include more Zone 2 bandwidths, you may switch after session 8 of the Sensory Motor Protocol to session 8 of the Reading, Auditory Processing Protocol and proceed through the rest of the Reading Protocol until the end.

To extend the length of time at Filtered Music 3000 Hz, you may simply repeat the sessions within a protocol where the music is filtered at FM 3K. For example, in the Phonemic Awareness Protocol, this would mean repeating sessions 17-20 two or three times. Or, for variety, you might have the client switch to the Concentration protocol and listen to sessions 16-20 on or two times.

Note: a high pass filter allows the passing through of higher frequencies. For example, FM 750 Hz allows frequencies to pass through that are 750 Hz and higher. Gating occurs on all pieces, except Chant, subtle at first and gradually increasing as each program progresses.

Sensory Motor Protocol

Designed to help balance, coordination, motor planning, muscle tone, a sense of where the body is in space, as well as a sense of direction. It is also a very good protocol to begin with if you plan to do multiple protocols. For example, if you are working with a client who has both motor and speech difficulties, you could begin with this protocol and continue with the second half of the Reading & Language protocol.

This protocol is slow and gentle. It begins with six sessions of full spectrum music and music with a low-frequency bandwidth emphasis to help with motor coordination and balance.

Each session includes a combination of 3 or 4 out of following 7 processing techniques: **FSM, FM, SpL, SI/SM, ELS, EHS and Sweep***. **We have noted the introduction of new frequencies and the location of EHS to assist you in monitoring your client's program. Chants are noted below.**

<u>Zones</u>	<u>Session</u>	<u>Description + Emphasis</u>
1-3	1-4	FS, S-M bandwidths, no EHS
1-3	5	EHS Track 3
1-3	6	EHS Tracks 1, 3
1-3	7	Filtration at 250 Hz
1-3	8	EHS Track 2
1-3	9	Filtration at 500Hz
1-3	10	EHS Track 4
1-3	11	Filtration at 750Hz, EHS Track 2
1-3	12	EHS Track 2
1-3	13	Filtration at 1KHz, EHS Tracks 2, 4
1-3	14	EHS Track 2
1-3	15	Filtration at 1.5 Hz, EHS Track 2
1-3	16	EHS Track 2
1-3	17	Filtration at 2K Hz, EHS Track 2
1-3	19	Filtration at 2.5K Hz, EHS Track2
2-3	20	Filtration at 3K Hz, EHS Track 4
(Optional 2 – 3 Week Break)		
2-3	21	Filtration at 2.5K, EHS Track 4
2-3	22	Filtration at 2K
2-3	23	Filtration at 1.5K, EHS Track 4
2-3	24	Filtration at 1K, EHS Track 2
1-3	25	Filtration at 750, EHS Track 2
1-3	26	Filtration at 500, EHS Track 2
1-3	27	Filtration at 250, EHS Track 2
1-3	28	Full Spectrum, EHS Track 2
1-3	29	Sweep, EHS Track 2
1-3	30	Sweep, EHS Track 3

Male chants are located in Session 1, 8, 11, 14, 24, 27, 30

Female chants are located in Session 4, 18, 22, 25, 28

Mixed chants are located in Session 6, 9, 12, 15, 19

* **You will find a new term** in these protocols. Sweep™ refers to the fluid, or moving, filtration of a particular piece of music as it is played. This differs from the standard type of filtration in which a piece of music is filtered at one level, followed by another piece of music filtered at another level, etc. The purpose could be likened to de-compression in deep sea diving, one becomes acclimated to the new filtration levels in a relatively rapid, but safe, manner.

Reading & Auditory Processing Protocol for Reading, Auditory Processing, Language and Phonemic Awareness

After an introductory period of waking up the body, this protocol emphasizes the middle frequency zone of language. These frequencies stimulate the speech and language center and improve the understanding and interpretation of different sounds, decoding, auditory sequencing and processing speed.

This protocol offers a gentle entrance into opening the ear to language. It begins with six sessions of FSM and music with low-frequency bandwidths that help with motor coordination and balance. If your client has completed the Sensory Motor Protocol and wishes to continue with a second protocol after a break, you may have them start with session 7. Gating levels are also gradual, increasing from low levels in sessions 1-6, moderate from sessions 7-16, and clinic-level from sessions 17-30.

Each session includes a combination of 3 or 4 out of following 7 processing techniques: **FSM, FM, SpL, SI/SM, ELS, EHS and Sweep***. We have noted the introduction of new frequencies and the location of EHS to assist you in monitoring your client's program. Chants are noted below.

<u>Zones</u>	<u>Session</u>	<u>Description & Emphasis</u>
1-3	1-5	FS, S-M bandwidths, no EHS
1-3	6	EHS Track 4
1-3	7	Filtration at 250 Hz
1-3	8	Filtration at 500, EHS Track 2
2,3	10	Filtration at 750, EHS Track 4
2-3	11	Filtration at 1K Hz, EHS Track 2
2-3	13	Filtration at 1.5K Hz, EHS Tracks 2 and 4
2-3	14	Filtration at 2K Hz
2-3	16	Filtration at 2.5K Hz, EHS Track 2
2-3	17	Filtration at 3K Hz, EHS Track 2
2-3	19	EHS Track 2
2-3	20	EHS Track 4
(Optional 2 – 3 Week Break)		
2-3	21	Filtration at 2.5K, EHS Track 4
2-3	22	Filtration at 2K
2-3	23	Filtration at 1.5K, EHS Track 4
2-3	24	Filtration at 1K, EHS Track 2
1-3	25	Filtration at 750, EHS Track 2
1-3	26	Filtration at 500, EHS Track 2
1-3	27	Filtration at 250, EHS Track 3
1-3	28	Full Spectrum, EHS Track 2
1-3	29	Sweep, EHS Track 2
1-3	30	Sweep, EHS Track 2

Male chants are located in Session 1, 8, 11, 24, 27, 30

Female chants are located in Session 2, 7, 14, 18, 22, 25, 28

Mixed chants are located in Session 3, 5, 9, 12, 15, 19, 29

* **You will find a new term** in these protocols. Sweep™ refers to the fluid, or moving, filtration of a particular piece of music as it is played. This differs from the standard type of filtration in which a piece of music is filtered at one level, followed by another piece of music filtered at another level, etc. The purpose could be likened to de-compression in deep sea diving, one becomes acclimated to the new filtration levels in a relatively rapid, but safe, manner.

Concentration & Attention Protocol

After an introductory period of waking up the body, this protocol emphasizes the middle frequency zone, which influences our ability for concentration and focus. These frequencies overlap the language protocol but progress slightly faster to higher FM, and vary in terms of blended FSM, FM and EHS1 and EHS2.

As with the other protocols, the first week begins with a gradual introduction to FSM and Zone1 frequencies, yet accelerates more quickly to Zone 2-specific frequencies. Gating occurs on all pieces, except Chant, and increases gradually as the program progresses.

Each session includes a combination of 3 or 4 out of following 7 processing techniques: **FSM, FM, SpL, SI/SM, ELS, EHS and Sweep**. **We have noted the introduction of new frequencies and the location of EHS to assist you in monitoring your client's program.**

<u>Zones</u>	<u>Session</u>	<u>Description & Emphasis</u>
1-3	1-3	FS, S-M bandwidths, no EHS
1-3	4	Filtration at 250 Hz
1-3	5	Filtration at 500 Hz
2-3	7	Filtration at 750 Hz, EHS Track 4
2-3	8	EHS Track 2
2,3	9	EHS Track 2
2-3	10	Filtration at 1K Hz, EHS Track 2
2-3	11	EHS Tracks 2 and 4
2-3	12	Filtration at 1.5K, EHS Track 2
2-3	13	Filtration at 2K Hz, EHS Track 2
2-3	14	EHS Tracks 2 and 4
2-3	15	Filtration at 2.5K Hz, EHS Track 2
2-3	16	Filtration at 3K Hz, EHS Track 2
2-3	17	EHS Track 2
1-3	19	EHS Track 2
2-3	20	EHS Track 4
(Optional 2 – 3 Week Break after Session 20)		
2-3	21	Filtration at 3K and 2.5K, EHS Track 4
2-3	22	Filtration at 2K, EHS Track 2
2-3	23	Filtration at 1.5K, EHS Track 4
2-3	24	Filtration at 1K, EHS Track 2
1-3	25	Filtration at 750, EHS Track 2
1-3	26	Filtration at 500, EHS Track 2
1-3	27	Filtration at 250
1-3	28	Full Spectrum, EHS Track 2
1-3	29	Sweep, EHS Track 2
1-3	30	Sweep

Male chants are located in Session 1, 9, 12, 15, 18, 24, 27, 30

Female chants are located in Session 3, 8, 25, 28

Mixed chants are located in Session 2, 5, 10, 13, 16, 19

* **You will find a new term** in these protocols. Sweep™ refers to the fluid, or moving, filtration of a particular piece of music as it is played. This differs from the standard type of filtration in which a piece of music is filtered at one level, followed by another piece of music filtered at another level, etc. The purpose could be likened to de-compression in deep sea diving, one becomes acclimated to the new filtration levels in a relatively rapid, but safe, manner.

Optimal Performance: Phase I - for Teens and Adults
also for
children 7 years of age and older who have completed
one or more of the previous protocols

The higher frequencies are emphasized here for their positive influence on our high cognitive centers (executive functions). In using this protocol, be aware that emotional or mental blocks are often in the way of fully engaging our creativity. These blocks may be brought to the surface as we learn to 'listen.'

After an introductory period of waking up the body to movement and organization, the Optimal Performance Protocol progresses quickly to an emphasis on Zone 3. A relatively longer period of time is spent at the energizing higher frequency levels before beginning a descent at Session 17. Gating occurs on all pieces, except Chant, and increases gradually as the program progresses.

Each session includes a combination of 3 or 4 out of following 7 processing techniques: **FSM, FM, SpL, SI/SM, ELS, EHS and Sweep***. **We have noted the introduction of new frequencies and the location of EHS to assist you in monitoring your client's program.**

<u>Zones</u>	<u>Session</u>	<u>Description & Emphasis</u>
1-3	1	FS, S-M bandwidths
1-3	2	EHS Track 2
1-3	3	Filtration at 250 Hz, EHS Track 3
1-3	4	Filtration at 500 Hz
1-3	5	Filtration at 750 Hz, EHS Track 3
2-3	6	Filtration at 1K Hz, EHS Track 4
2-3	7	Filtration at 1.5K Hz, EHS Track 3
2-3	8	Filtration at 2K Hz
2-3	9	Filtration at 3K Hz, EHS Track 3
2-3	10	Filtration at 3K Hz
2-3	11	EHS Track 2
2-3	14	EHS Track 2
2-3	16	EHS Track 2
(Optional 2 – 3 Week Break)		
2-3	17	Filtration at 2.5 K and 2K Hz, EHS Track 4
2-3	18	Filtration at 1.5K Hz, EHS Track 4
2-3	19	Filtration at 1.0K Hz, EHS Track 2
2-3	20	Filtration at 750K Hz, EHS Track 4
1-3	21	Filtration at 500 Hz, EHS Track 2
1-3	22	Filtration at 250 Hz, EHS Track 2
1-3	23	Sweep, Full Spectrum, EHS Track 2
1-3	24	Sweep, Full Spectrum

Male chants are located in Session 1, 5, 9, 12, 21, 24
 Female chants are located in Session 3, 7, 8, 22
 Mixed chants are located in Session 2, 10, 13, 15, 16

* **You will find a new term** in these protocols. Sweep™ refers to the fluid, or moving, filtration of a particular piece of music as it is played. This differs from the standard type of filtration in which a piece of music is filtered at one level, followed by another piece of music filtered at another level, etc. The purpose could be likened to de-compression in deep sea diving, one becomes acclimated to the new filtration levels in a relatively rapid, but safe, manner.

Optimal Performance: Phase II - for Teens and Adults

also for children 9 years of age and older

who have completed one or more of the previous protocols

The higher frequencies are emphasized here for their positive influence on our high cognitive centers (executive functions). In using this protocol, be aware that emotional or mental blocks are often in the way of fully engaging our creativity. These blocks may be brought to the surface as we learn to 'listen.'

After an introductory period of waking up the body to movement and organization, the Optimal Performance Protocol II progresses quickly to an emphasis on Zone 3. A longer period of time is spent at the energizing higher frequency levels than in Optimal Performance I before beginning a rapid descent at Session 19. Gating occurs on all pieces, except Chant, and increases gradually as the program progresses.

Each session includes a combination of 3 or 4 out of following 7 processing techniques: **FSM, FM, SpL, SI/SM, ELS, EHS and Sweep***. We have noted the introduction of new frequencies and the location of EHS to assist you in monitoring your client's program.

<u>Zones</u>	<u>Session</u>	<u>Description & Emphasis</u>
1-3	1	FS, S-M bandwidths, EHS Track 3
1-3	2	EHS Track 3
1-3	3	FS, S-M bandwidths
1-3	4	Filtration at 250 and 500 Hz
1-3	5	Filtration at 500 and 750 Hz
2-3	6	Filtration at 750 Hz, EHS Track 4
2-3	7	Filtration at 1K and 1.5K Hz, EHS Track 4
2-3	8	Filtration at 1.5K and 2K Hz, EHS Track 4
2-3	9	Filtration at 3K Hz, EHS Tracks 2 and 4
2-3	10	Filtration at 4K Hz, Sweep, EHS Track 2
2-3	11	EHS Tracks 2 and 4
2-3	12	EHS Track 2
2-3	13	EHS Tracks 2 and 4
2-3	14	EHS Track 2
2-3	15	EHS Tracks 2 and 4
2-3	16	EHS Track 2
2-3	17	EHS Tracks 2 and 4
2-3	18	EHS Track 2
(Optional 2- Week Break)		
2-3	19	Filtration at 4K and 3K Hz, EHS Tracks 2 and 4
2-3	20	Filtration at 3K and 2Hz
1-3	21	Filtration at 2K and 1K Hz, EHS Track 4
1-3	22	Filtration at 750 and 500 Hz, EHS Track 4
1-3	23	Filtration at 250 Hz, Full Spectrum
1-3	24	Sweep, Full Spectrum

Male chants are located in Session 3, 12, 18

Female chants are located in Session 1, 10, 16, 24

Mixed chants are located in Session 4, 14, 20

* **You will find a new term** in these protocols. Sweep™ refers to the fluid, or moving, filtration of a particular piece of music as it is played. This differs from the standard type of filtration in which a piece of music is filtered at one level, followed by another piece of music filtered at another level, etc. The purpose could be likened to de-compression in deep sea diving, one becomes acclimated to the new filtration levels in a relatively rapid, but safe, manner.

Spectrum Protocol

This protocol is specifically designed for children who are on the spectrum and/or children who have been slower to reach developmental milestones. Years of experience have demonstrated that these children often need longer and more frequent interventions to allow them to achieve established goals. Therefore, we have created a special 60-session protocol.

This protocol may be used independent of, or in conjunction with an in-clinic listening program. It may also be used in conjunction with an occupational therapy program. Please consult your therapist and follow the guidelines outlined in our User Guide as to whether an iLs program might be considered based on personal medical history.

The schedule below lists the introduction of new frequencies and the location of EHS to assist you in monitoring your client's program.

Zones	Session	Description & Emphasis
1,3	1-10	FS, strong emphasis on S-M bandwidths
1-3	11	Add Communication Zone bandwidths
1-3	12-30	Strong emphasis on both Motor and Communication Zones
	17	EHS Track 3
	18, 19, 20	EHS Track 1
(Optional 2 – 3 Week Break after session 30)		
1-3	31	FSM, Zone 1-2 filter
1-3	32	Filtration at 250 Hz
1-3	34	Filtration at 500 Hz
1-2	36	Filtration at 750 Hz
1-3	38	Filtration at 1K Hz, EHS Track 3
1-3	40	Filtration at 1.5K Hz
1-3	42	Filtration at 2K Hz, EHS Track 1
1-3	44	Filtration at 2.5K Hz, EHS Track 1
1-3	45	EHS Track 1
1-3	46	Filtration at 3K Hz, emphasis Communication Zone
2-3	47-54	Filtration at 3K Hz, emphasis Communication Zone
(Optional 2 – 3 Week Break after session 50)		
2-3	55	Filtration at 2.5K Hz, EHS Track 2
2-3	56	Filtration at 2K Hz, 1.5K Hz, EHS Track 2
2-3	57	Filtration at 1K Hz, 750 Hz, EHS Track 2
1-3	58	Filtration at 500 Hz, 250 Hz
1-3	59	Sweep*, Full Spectrum
1-3	60	Sweep, Full Spectrum

Male chants are located in Sessions 1-7, , 9, 10, 12, 13, 15, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 60

Female chants are located in Session 8, 11, 14, 17, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 59

Mixed chants are located in Session 18, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56,

* **You will find a new term** in these protocols. Sweep™ refers to the fluid, or moving, filtration of a particular piece of music as it is played. This differs from the standard type of filtration in which a piece of music is filtered at one level, followed by another piece of music filtered at another level, etc. The purpose could be likened to de-compression in deep sea diving, one becomes acclimated to the new filtration levels in a relatively rapid, but safe, manner.