

Böhm
ORGELN | KEYBOARDS

SEMPRA 2.0

Installation and playing instructions



**GST-Update for
SEMPRA 2.0 instruments**

www.boehm-organs.com

GST update for instruments with SEMPRA 2.0 equipment
Installation and playing instructions

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SEMPRA GST: Real guitars accompany you!

GST - the new **Guitar Strumming technology** for the SEMPRA - was first introduced with the SEMPRA Arpeggiator app and is so far unique in organ building:

The guitar in all its variations is without question one of the most important accompanying and also solo instruments. Rhythm guitars are an integral part of any band, they play the chords, but also runs or sequential sequences of notes.

Playing a guitar differs considerably from playing a piano or organ keyboard. Until now, this has been insufficiently taken into account in the style accompaniments of keyboards or organs, for example. The new GST Guitar Strumming technology developed by Böhm for the SEMPRA instruments addresses this issue and creates absolutely realistic guitar chord strummings (by the way, the term "strumming" refers to the simultaneous striking of the guitar strings while playing a chord) and also guitar runs in the corresponding templates of the SEMPRA Arpeggiator and now also in the factory SEMPRA Styles.

For the GST Style Update, the Arpeggiator app is not absolutely necessary, but of course both types of accompaniment complement each other perfectly, and therefore the versatile Arpeggiator is once again strongly recommended here, if it is not already available in your SEMPRA.

To illustrate what exactly GST is all about, we quote the corresponding explanations from the installation and playing instructions for the Arpeggiator app again here. These now also apply to the guitar tracks of the new GST Styles that you receive with this update:

Guitar chord playing and runs perfectly simulated

Let's take a quick look at how real guitars play:

1. Guitars play on a different, "narrower" tonal range than, say, pianists.
2. For physical reasons, guitar strings - even when strumming - can only be struck one after the other.
3. Guitar strings are struck from top to bottom and from bottom to top.
4. Guitars can create short accents (by stopping the sides).
5. Chords are played differently than strumming or plucking individual strings.
6. Guitar chords are also played as open chords or with barré fingerings. In pop and rock music, we also know the power chords, which do without the third.

These rules are now also followed by the guitar tracks in the SEMPRA GST styles, i.e. only the strings of a guitar that would correspond to the current chord are played. In addition, the attack of a whole chord on a guitar is also simulated. In the guitar templates it is recognized whether the strings are played from top to bottom or from bottom to top. Even the extremely short, but existing time between the individual string strokes is reproduced exactly. So you can literally "hear" the up and down stroke and the "succession" of the strings just like on a real instrument! Strings either sound out or are stopped musically correct.

Style tracks that play guitar runs, i.e. sequences of single notes, use notes like on a plucked guitar, i.e. only the strings that would correspond to the chord just played on the chord manual on a guitar! This way, runs can be played that could never be created so realistically with a normal style accompaniment, even by repeating within a key-window!

For "swing"-like rhythms that call for triplet-like playing, a special swing parameter is also used to shift the "swing point" of triplets slightly. It gets spectacular when you let the calculated and the felt "triplet point" play from two guitar tracks at the same time. More sonority is not possible!

In total, there are over 900 (!) different fingerings and a multitude of algorithms behind the guitar tracks of the GST Styles, which were created with the help of professional guitarists. You can hear the difference, even if you are not a guitarist yourself!

Template Types and Chord Modes of the GST Style Tracks

The following explanations are important if, for example, you want to modify or create new GST styles. For pure playing with the existing GST styles, this information is for information purposes only.

To create the guitar tracks in the GST Styles, the same technique was used as in the SEMPRA Arpeggiator. These tracks were first created as templates by our musicians with the help of professional guitarists and then imported into the styles via the **Easy Editor Arpeggio** import function.

As in the SEMPRA Arpeggiator, the two template types **Guitars - Chords** and **Guitars - Notes** are used here, each with typical **chord or playing modes**, which can be selected in the Style Editor in the new **Chord** parameter field (replaces the **Reverse Point** field on the GST tracks):



Guitars - Chords: Tracks of this template type emulate **typical** chord strumming, i.e. guitars playing a rhythmic chord accompaniment. The chord modes **Open 1** (lower), **Open 2** (higher), **Barré 1** (lower), **Barré 2** (higher) and **Power**(chords) are available for this.

About the three chord modes: When a guitarist plays "**open**" chords, the strings that are not pressed or fingered also sound. In a "**barré**" fingering, several or all strings are pressed or fingered simultaneously in the same section or fret. These chords are played here in the styles as fingered, with 4-6 strings. "**Power chords**" consist only of root and fifth with up to 3 strings played.

Guitar - Notes: This template type is used for guitar tracks that play runs or melody lines. Single notes and runs are played over all 6 strings. The corresponding tracks use **melody 1** or **melody 2** mode, with melody 2 playing slightly higher.

And since there are not only guitars in an accompaniment band: In addition to the already mentioned playing modes for GST guitar tracks, there are three more modes selectable in the **Chord** field of the Style Editor: **piano 1...3**. These three modes are intended for those tracks/templates that play single notes or runs, but are NOT instrumented with a guitar. Because here the strings of a guitar are not played, but the keys of a manual in three different inversions from low (Piano 1) to high (Piano 3).

If you enjoy editing styles, take the time to try out the different modes on different tracks in the Style Editor, and you'll quickly get a feel for what's "happening" sonically and which modes are appropriate for which track type.

If you later edit styles and perhaps also import guitar templates from your arpeggiator library into styles (see SEMPRA Arpeggiator Installation and Playing Instructions), you should make sure to select a type that matches the template under **Chord**. For example, choosing one of the "Run" modes for a guitar track that plays chord strummings makes no musical sense, as this would create chord fingerings that a real guitarist could never play!

Contents of the GST update

The size of the files you receive with the GST update varies slightly depending on whether or not your SEMPRA already has the Arpeggiator app. Let's take a look at the individual data types:



GST styles and sound update (folder 59301 - always included)

The GST update consists primarily of a new version of the factory style library. These are the same factory styles that you already know from your SEMPRA 2.0 basic organ but updated to the new GST technology. In addition, 12 new GST styles are added in the factory style bank 5. The previous "conventional" guitar tracks in the Styles have been replaced with new tracks created using GST technology. In order to bring the Guitar Strumming perfectly into the Styles, about 600 additional Guitar templates (strummings and special runs on the 6 strings) were also used in our studios. You will hear the difference to the previous version of the 2.0 Styles directly after the installation when playing.

But that's not all: In addition, each style has now been expanded to 10 fill-ins. Our musicians have programmed more than 1,500 new fills. A good two thirds of the intros and endings have also been optimized. By the way, the style names, characters, tempos, etc. do not change, so you will find everything right away and do not have to "rethink" when playing on the SEMPRA. Even your own registrations, in which you use factory styles, "work" right away with the new GST version of the styles.

Note: The styles of the optional style packs are not currently covered by the GST update and remain unchanged.

The style update also includes some new sounds that have been adapted to GST and are used in the new version of the styles.

SONG preset update (folders 59302 and 59303 - always included)

In addition to the update for the Styles, the GST package also includes a **new version of the SEMPRA 2.0 SONG registrations** (SONG banks for Sound Basics, Style Basics I-VI, SEMPRA SONGs I-IV of the 2.0 basic organ). As with the Styles, these are also updated versions of the familiar factory SONGs or registrations. Many of them have been optimized again in the course of the GST integration and adapted to the new style versions.

In addition, many registrations are now already provided with arpeggios from the factory arpeggio stock. This means that you can now use the Arpeggiator - if the app is already present on your SEMPRA - even more conveniently and comprehensively, since arpeggios are now already stored in many factory SONGs. These are not necessarily always activated immediately, but can easily be switched on via the arpeggio buttons or via the extended arpeggio basic screen.

SONGs that contain arpeggios are indicated by a check mark in the Arpeggio tab at the top center of the main screen:



On the Arpeggio page of the basic screen or via the Arpeggio button group, the individual arpeggio templates can then be activated as desired, or they are activated automatically according to musical relevance by the individual SONG presets.

For more information about using the Arpeggiator, see the separate operating instructions for the app.

Arpeggio update (folder 59261 - only with existing Arpeggiator app)

If you have already purchased the Arpeggiator app for your SEMPRA, you will also receive an **update for the factory Arpeggiator data** and the factory Arpeggiator **template archive with** the GST update. Also included is an updated version of the Arpeggiator's sample SONG bank (loaded as a user file if needed, see the Arpeggiator User Guide).

The factory arpeggios were optimized in some details in the course of the GST adjustment and the corresponding new template versions were also renewed in the template archive. The template archive already available on USB stick for importing into your own arpeggios or styles should therefore be updated with this new data. This is also described on the following pages in the notes on installing the GST package.

Note on previous factory data that may have been changed by the user

As described above, with the GST update you will receive modified versions of the previous factory data (styles and, if applicable, arpeggios and SONG registrations on the corresponding firm banks). We have deliberately not changed the names of the Styles or SONGs, so you will find all your favorite Styles and SONGs as before.

If you have already made your own adjustments in the previous version of the data, e.g. edited factory styles or SONG presets and saved them at their respective original positions, your own user versions in SEMPRA memory will overlay the original factory data there at the corresponding positions. This remains the case even if you now install the new GST data. This data is installed in the SEMPRA plant data memory and updates the previous plant data there. However, overlaying user data continues to "hide" the (new) plant data located at the corresponding positions. If necessary, such user data must first be deleted so that the new GST factory data can be heard at the corresponding positions.

If you want to preserve your user data in such cases, it is recommended that you first copy it to free user song or style positions and then delete the user data at the positions of the firm banks.

Installing the update data

You will receive the data for the GST update either online via e-mail (or via the free transfer service WeTransfer.com), or directly on a USB stick.

- If you purchase online, you will receive the following files:

INSTALL.ARC A data archive containing the installation data (the new GST styles including the new sounds and, if applicable, the new versions of the SONG and Arpeggiator data).

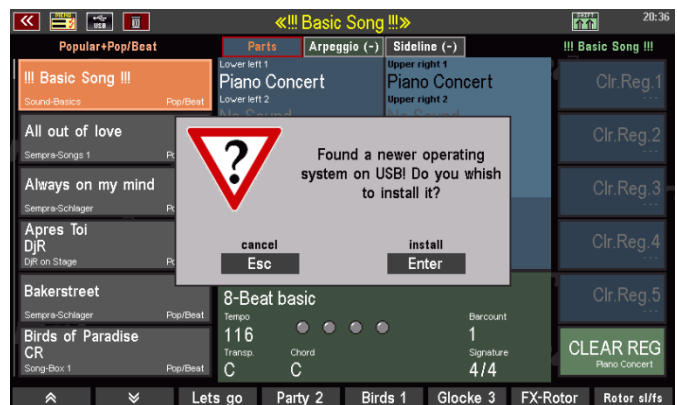
TEMPLATES.ARC This data archive is only available if you have already purchased the Arpeggiator App for your SEMPRA. The Arpeggiator app for your SEMPRA. It contains an updated version of the Arpeggiator template library, from which you can compose your own arpeggios or insert templates into styles.

- Save this archive file(s) on your PC to a USB stick formatted on the SEMPRA.

If you have received the GST update directly on a USB stick, it contains the installation files (already unpacked here and thus directly usable) and possibly also the archive TEMPLATES.ARC with the updated template library for the arpeggiator.

- **Step 1: (If necessary). Updating the SEMPRA operating system** Insert the stick with the GST installation data into the SEMPRA. The data also includes a current version of the SEMPRA operating system (BOS). If an older version is currently installed on the instrument, the display will now indicate that a newer version has been found.

In this case, confirm with **[ENTER]** to load the new operating system version.



- The successful installation is indicated by a display message. Confirm with **[Enter]**. The new version will be used from the next system start.



ATTENTION: If your SEMPRA is already working with a BOS version that corresponds at least to the version on the stick, there will be no indication to reinstall the operating system. **Step 1** can therefore be omitted.

If the new Arpeggiator data is available on your installation stick, the display now asks - or directly after inserting the stick, if no newer operating system has been detected - whether the file archive "TEMPLATES.ARC" should be unpacked to USB1.



Before you confirm with [ENTER], please read on:

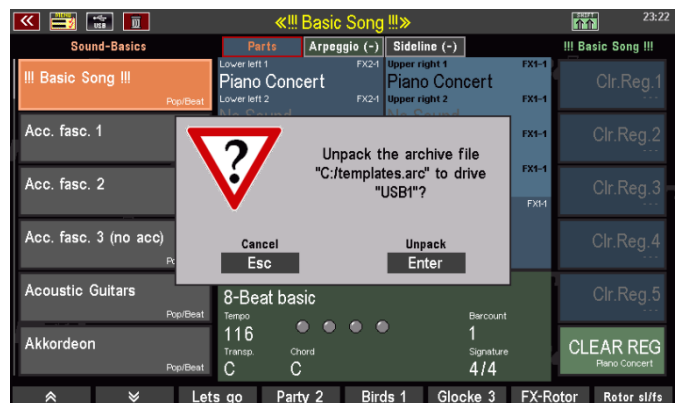
- **Step 2: Unpack TEMPLATES.ARC (only if arpeggiator is present):** If your SEMPRA has the Arpeggiator, you have learned in the associated instructions how to unpack the factory template library to a separate USB stick so that you can use it from this stick later if necessary. Of course, you can also have your own templates archived in a separate User library on this stick.
- If you have created such a template stick for the arpeggiator, it makes sense to unpack the new version of the factory template library that comes with the GST update onto this stick and thus update the existing library. In this case, please follow the instructions below under **A**:

However, you can also unpack the new template archive to the GST installation stick you are using now. In this case please continue at **B**:

A If you want to unpack to the already existing template stick, please first remove the currently inserted installation stick and insert your existing template stick. This will be recognized as **USB 1**.

Now insert the GST installation stick in addition to the template stick. A display query appears asking whether **TEMPLATES.ARC** should be unpacked to drive **USB 1**.

Confirm with [ENTER]. The new template archive is now unpacked onto the inserted template stick.

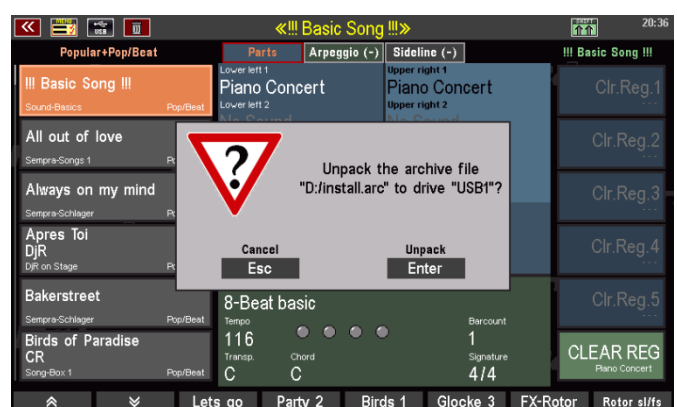


The existing directory with the factory templates is updated and the previous template versions are replaced by the new ones.

Attention: If the file **INSTALL.ARC** is also on your installation stick, you will be asked by the display after unpacking the templates whether you also want to unpack **INSTALL.ARC** to **USB1**.

If you now simply confirm with [Enter], the GST installation files would also be unpacked to the template stick that is still plugged in.

But we want to have these data on the GST-Stick. So please cancel the unpacking here first, unplug both sticks, plug in only the GST installation stick again, cancel the question for unpacking **TEMPLATE.ARC** with [ESC] (we have already unpacked this data in the last step) and confirm the now following query for unpacking **INSTALL.ARC** with [ENTER].



- The data will now be unpacked onto the GST installation stick.

If you have received the GST update directly on a USB stick, this step is not necessary, as the data is then already available in an unpacked version on the stick.

- Go on now with Step 3 Installing the GST update.

B If you want to unpack the new template archive onto the GST installation stick now being

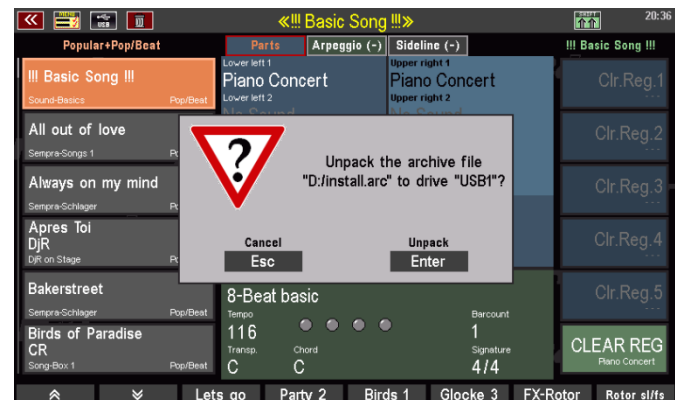
used, you do not need to insert another stick first. Just insert the GST installation stick and confirm the display query for unpacking **TEMPLATE.ARC** directly with **[ENTER]**.

The archive is now unpacked onto the GST installation stick.



If the **INSTALL.ARC** file is also on your installation stick, the display will ask you whether you also want to unpack **INSTALL.ARC** to **USB1** after unpacking the templates. Confirm the query with **[ENTER]**.

The GST installation data is now unpacked to the GST installation stick.



If you have received the GST update directly on a USB stick, this step is not necessary, as the data is then already available in an unpacked version on the stick.

- Step 3: Installing the GST update.** We can now proceed with the actual installation of the GST data.

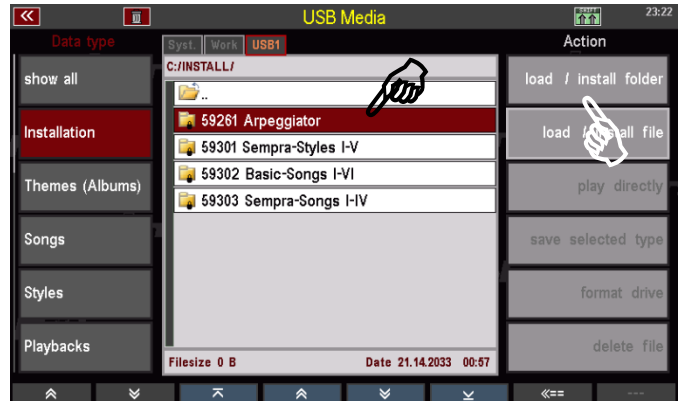
Open the USB menu and tap on Installation on the left of the display. The installation folder on the GST stick will now be opened and you will see the file folders contained in the middle of the display:



The **59301 Sempra Styles I-V**, **59302 Basic Songs I-VI**, and **59303 Sempra Songs I-IV** folders are always present. They contain the new GST factory styles as well as the new sounds (folder **59301**) or the new versions of the factory SONG banks with the registrations (folders **59303** and **59303**).

Folder **59261 Arpeggiator** is only present if you have already purchased the Arpeggiator app with your SEMPRA. This folder contains the update for the Arpeggiator data.

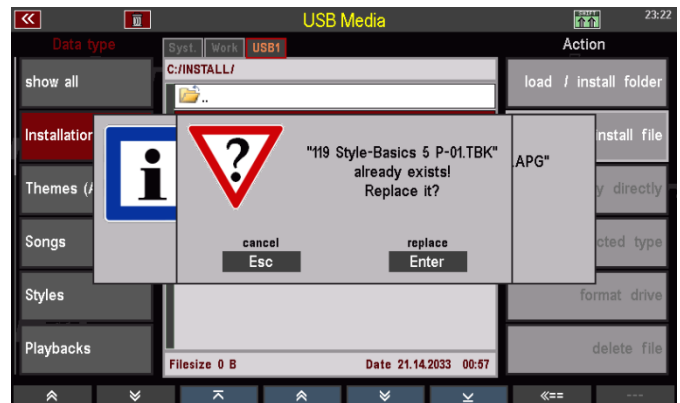
- To install the individual data, select the top folder with the cursor and tap on **Load/Install folder** in the top right corner.



You will be asked whether you really want to install the data. Confirm this with **[ENTER]**. The contents of the folder will now be installed.

- Then install the remaining folders in the same way until all folders are installed.

Attention: During the installation you may get several hints like this:



As already explained, the installation data contains updates for the factory data present on the SEMPRA. During the installation of the Arpeggiator and SONG files, the system "notices" that there is already installed data with the same name. Please confirm all messages with **[Enter]**.

- If all existing installation folders are present, the GST update is complete. You can remove the installation stick.
- If you first performed an operating system update during the GST installation (step 1 of the installation), you should now switch SEMPRA off and on again once so that the new operating system is activated.

The new GST factory data is now available to play with.

Playing with the new GST data

There are no changes whatsoever with regard to playing. You can use the new factory data just as before. Also, no names for the Styles or SONGs have changed. It was important to us that the SEMPRA with the new GST technology works perfectly in many details without rethinking and without "I have to adjust something first".

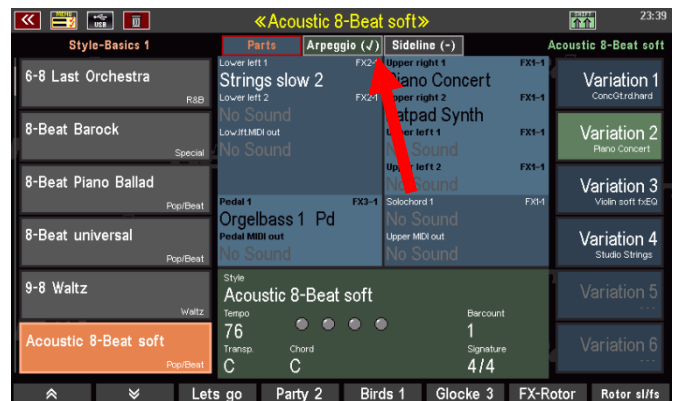
Newly added are 12 styles in the factory style bank 5 (list in the appendix). For each of these new styles there is of course also a Style Basics SONG with 4 one-touch presets.

When playing with the Styles, you should of course listen more closely, especially to the guitars. You'll notice right away that these tracks now sound much more realistic and lively. Call up various Styles in the Style Editor and examine the settings for the guitar tracks from the point of view described in the introduction to this tutorial.



When using the factory SONG registrations, you will notice that often arpeggios are now already stored in the registrations. You can immediately see if an arpeggio is assigned by looking at the "Arpeggio (-)" tab at the top of the basic screen:

A "check mark" indicates that an arpeggio is stored.



It's play, play, play. There is so much new to hear! Please also pay attention to the countless details in the **fill up** and **fill down of** the styles. In addition to drums and guitars, listen to the bass, for example, which leads to the next variation (and back) in a musically meaningful way. A lot of loving details have gone into the styles, which for example only come into their own with seventh chords and make for musically perfect and interesting transitions. All this makes the new SEMPRA in unison - without thinking and without Excel tables - so outstanding and so valuable.

We now hope you enjoy playing with the new GST accompaniment on your SEMPRA!

Your BÖHM Team

Appendix 1: Overview of new AMADEUS sounds in the GST update:

In the course of the revision of the factory styles for the GST update, some sound variants were added to the accompaniment sound banks 111 ff. These are automatically installed with the style update.

Bank 111, sound no. 043: "**Str. Ens.1 octAC**"

Bank 112, sound no. 044: "**M3 Symphony HS**".

Bank 112, Sound No. 045: "**Epic Horns HS**"

Bank 113, Sound No. 108: "**Ukulele Rainbow**"

Bank 114, Sound No. 058: "**Warm Gr.1 Pd fx**"

Bank 114, sound no. 059: "**Warm Grand 1 fx**"

Appendix 2: Overview new Firm Arpeggiobank 2:

Arpeggios 044 - 064 new:

Bnk|Num|Name

| | |
|---|--|
| 102 001 3Z Brass slow swing mix 2 | 102 033 Arp. Synths 6-8 tr soft 3 4bars |
| 102 002 3Z Brass slow swing mix 3 trigger | 102 034 Arp. chord share waltz pizzic. 1 |
| 102 003 3Z Brass Party mix 2 trigger | 102 035 Arp. chord share swing brass 1 |
| 102 004 Arp. Pizzicato Waltz 4-var. | 102 036 Chord share Piano Ballad 1 |
| 102 005 Arp. Pizz.+ Harp Waltz mix 1 | 102 037 Chord share Piano Ballad 2 |
| 102 006 Arp. 2-Guit. strings Harp Waltz mix 2 | 102 038 Chord share Brass Medium swing 1 |
| 102 007 Arp. Perc. + Synth. moves 1 | 102 039 Chord share Brass Party 1 |
| 102 008 Arp. 2+2 Harps 6-8 + Slow-Waltz | 102 040 Arp. soft Ballad mix 1 |
| 102 009 Arp. Synths 6-8 1 | 102 041 Arp. soft Ballad mix 3 |
| 102 010 Arp. Synths 6-8 1-16tr machine | 102 042 Chord share Brass swing 102 043 Pop |
| 102 011 Tush 3-4 Version 1 | Rock easy guitars 1 |
| 102 012 Tush 3-4 Version 2 | 102 044 Chord share Slow-Rock E-Piano 1 |
| 102 013 Tush short 3-4 Version 1 | 102 045 Chord share 2-4 Polka accordion 1 |
| 102 014 Tush 3-4 Version 3 | 102 046 Chord share 3-4 accordion 1 |
| 102 015 Tush 4-4 Version 1 | 102 047 Chord share Classic Bossa E.P. 1 |
| 102 016 Tush 4-4 Version 2 | 102 048 Polka and march Brass + more 1 |
| 102 017 Narhalla-Art Theme | 102 049 Mixed slow Swing Set |
| 102 018 Arp. Strings down 1 1-8tr | 102 050 Arp. Italy hit mix |
| 102 019 Arp. Strings down 2 6-8tr | 102 051 Cha Cha Piano chord share |
| 102 020 Arp. Strings up 1 1-8tr | 102 052 Cha Cha Brass chord share |
| 102 021 Arp. + E.Gt. party promised | 102 053 Modern Latin mix (medium tempo) |
| 102 022 Arp. Synth. timemix | 102 054 Latin Guitar-mix |
| 102 023 Arp. Synth. up down 7 var. on 4 | 102 055 Super soft unpl. Latin mix |
| 102 024 Arp. Synth. ultimate 7th | 102 056 Funky mix 1 brass-guit-arp.-clap |
| 102 025 E.Gt. and Pepes Brass 1 | 102 057 Piano soft ballad mix |
| 102 026 E.Gt. and Pepes Brass 2 | 102 058 Chord share Bossa Piano |
| 102 027 Arp. synth 1 7th up | 102 059 Waltz Piano chord share 1 |
| 102 028 Arp. Synths 6-8 3-down on 7th | 102 060 Country picked Guit. chord share |
| 102 029 Arp. + E.Gt. party entertain | 102 061 Latin mix 1 brass-guit-arp.-clap |
| 102 030 Arp. soft Ballad mix 2 | 102 062 Last Brass Polka mix 2 |
| 102 031 Arp. Synths 6-8 soft 1 1-16tr | 102 063 Latin + more mix 2 univ. |
| 102 032 Arp. Synths 6-8 soft 2 1-16tr | 102 064 Piano Ballad 5 3-Piano 1-Harp |

Appendix 3: New Styles in Style-Factory Bank 5

| Bank No. | Name |
|-----------------|------------------------------|
| 105 013 | Walzer Böhmisch |
| 105 014 | Polka Böhmisch 2-Viertel |
| 105 015 | 8-Beat 2-4 (2-4 + 4-4 Fills) |
| 105 016 | J.L. Orchestra Samba |
| 105 017 | 70s Disco-Funk remixed |
| 105 018 | Caribic dance |
| 105 019 | Schlager 4 fans |
| 105 020 | Bajon |
| 105 021 | 80th Baroque |
| 105 022 | Schlager Rumba |
| 105 023 | Acoustic Jazz Lounge |
| 105 024 | Slow-Rock (3-4 + 6-4 Fills) |



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