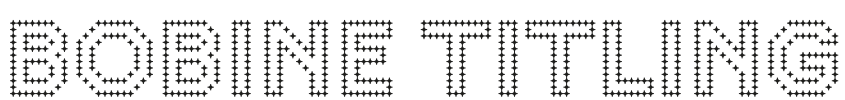

BOBINE



About Bobine

Low-res, hi-octane, mad-chill… Bobine is the result of an investigation by Arthur Calame into the dot matrix genre of types. Arthur has managed to successfully tame a coarse pixel grid into a design that is remarkably legible at smaller sizes, resulting in a design that feels just as futuristic as it does classic. Bobine belongs up in the heavens. Soaring high above the cirrostratus. Catching wind and dazzling those who stand below.

The design started off as a spark and has since grown into a whole constellation of fonts. The family includes both regular and italic styles built from a 4-pointed star. To achieve the bold weights, the unit itself changes shape rather than growing in scale to achieve more density. The bold weights feature an 8-pointed star for a punchier impact. Both weights come with italic counterparts; slightly more condensed and boast extensive character-sets with oldstyle figures, diacritics, symbols, and a myriad of other typographic niceties.

The cherry on top is Bobine's Titling style, inspired by classical in-line capitals. Two units taller than the regular and bold styles, it provides a higher resolution whilst harmonising comfortably with the rest of the family. The titling set offers two capital forms; a serif set in the uppercase, and a sans-serif set in the lowercase. The titling set also includes a glittering array of symbols, pictograms and emoji's.

Arthur Calame is a Paris-based designer who established his practice, Calame.Bureau, in 2018. The bureau designs typefaces, visual identities, and editorial objects for clients across a wide range of fields.

OpenType Features: Regular, Italic, Bold, Bold Italic	Alternative a	ss01
	Alternative g	ss02
	Alternative x	ss03
	Ligatures	liga
	Localised Forms	locl
	Oldstyle Figures	onum
	Lining Figures	lnum
	Slashed Zero	zero
OpenType Features: Titling	Alternative S	ss04
	Alternative J	ss05
	Localised Forms	locl
	Discretionary Ligatures	dlig
	Small capitals	smcp
	Caps to small caps	c2sc
Language Support	262 Languages	p 32
Design	Arthur Calame (Calame.Bureau)	
Mastering	Jacob Wise	
First Release	April 2025	
Version	1.0	

OpenType Features

In the majority of design software, you can enable OpenType features to max out your typographic experience!

These can usually be accessed in the Character/OpenType/Type options in most programmes. For websites, you can use the font-feature-settings CSS property to enable a specific feature. You can enable a feature by referencing its unique four-letter tag e.g., ss01, ornm, liga, dlig.

For instance, if you'd like to switch to the alt a, you could write: font-feature-settings: "ss01";

Regular, Italic, Bold, Bold Italic

Titling

		Off	On
Alternative a	ss01	abbreviate	abbreviate
Swaps the default 'a' to a simpler design.			
Alternative g	ss02	blogging	blogging
Swaps the default, double story 'g' to a simpler, single story alternative.			
Alternative t	ss03	Expression	Expression
Swaps the default 'x' to a simpler design.			
Ligatures	liga	affirming	affirming
Standard ligatures improve legibility by combining certain glyph pairings. They do not impact spelling or hyphenation.			
Localised Forms	locl	dijk fagi	dijk fagi
Localised forms adjust characters to match the typographic conventions of different languages or regions. The following localisations are supported: Moldovan [MOL], Romanian [ROM], Dutch [NDL].			
Oldstyle Figures	onum	2006–2024	2006–2024
Oldstyle figures are figures with varying heights and alignments. Sometimes referred to as 'lowercase' figures since they function better within large bodies of text.			

Titling set

In the Titling set, the uppercase features serif glyphs, whilst the lowercase features sans serif glyphs. Keep this in mind when setting mixed-case text. In most cases, you'll want to make sure it's either all uppercase or all lowercase.

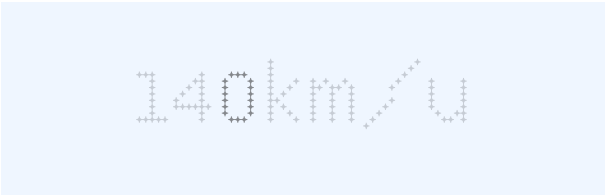
Off | On

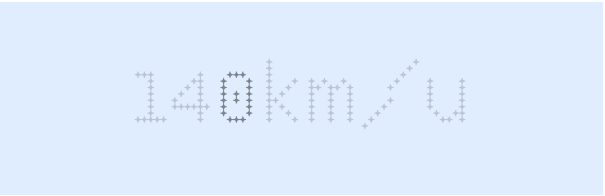
Lining Figures — lnum

Reverses the effect of 'Oldstyle Figures' [onum] by swapping Oldstyle figures to a default lining set.

Slashed Zero — zero

Replaces the standard zero with a slashed alternative to distinguish it from similar looking glyphs.

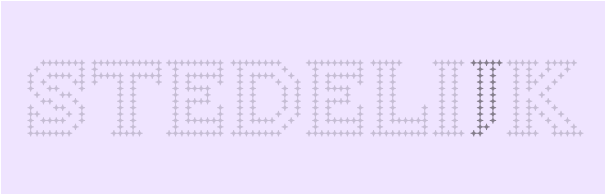


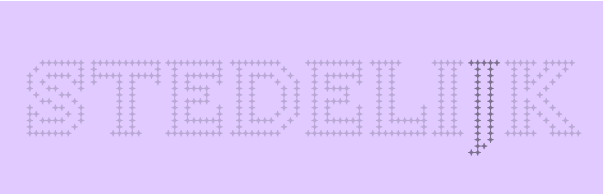


Alternative J — ss04

Swaps the capital 'J' to descending alternative.

*Titling only

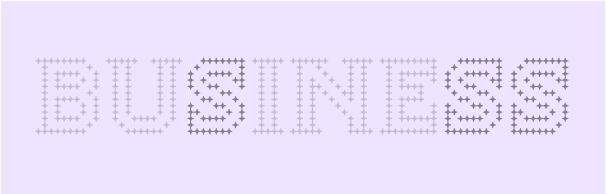


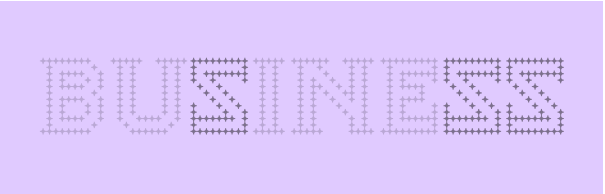


Alternative S — ss05

Swaps the 'S' to an alternative design.

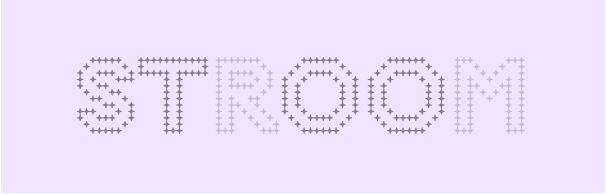
*Titling only

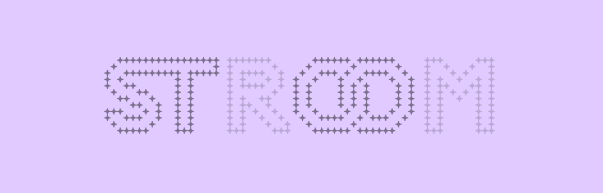




Discretionary Ligatures — dlig

The Titling set features a range of discretionary ligatures for both upper and lowercase forms. Take a look at the character set for a full overview.

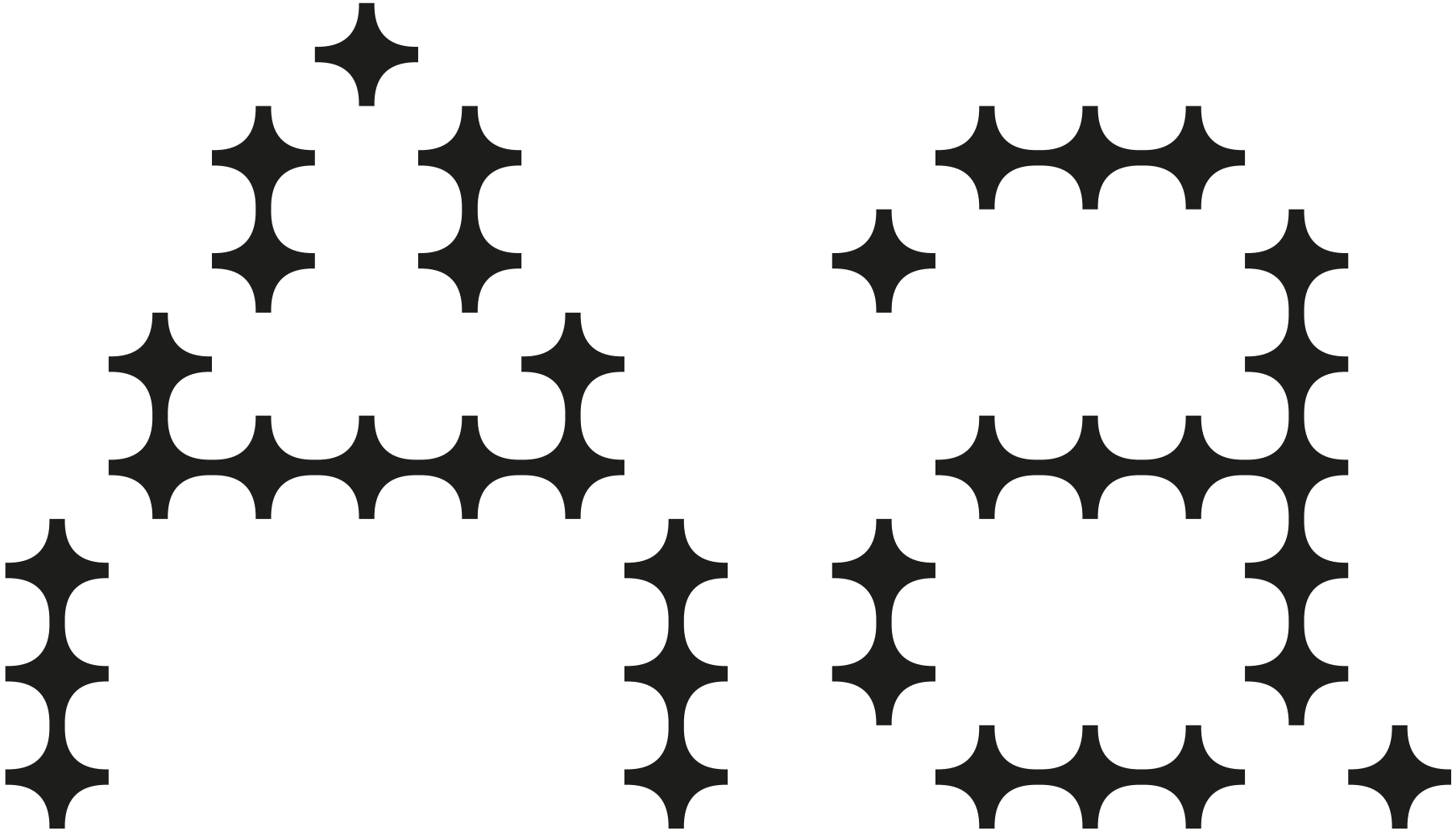




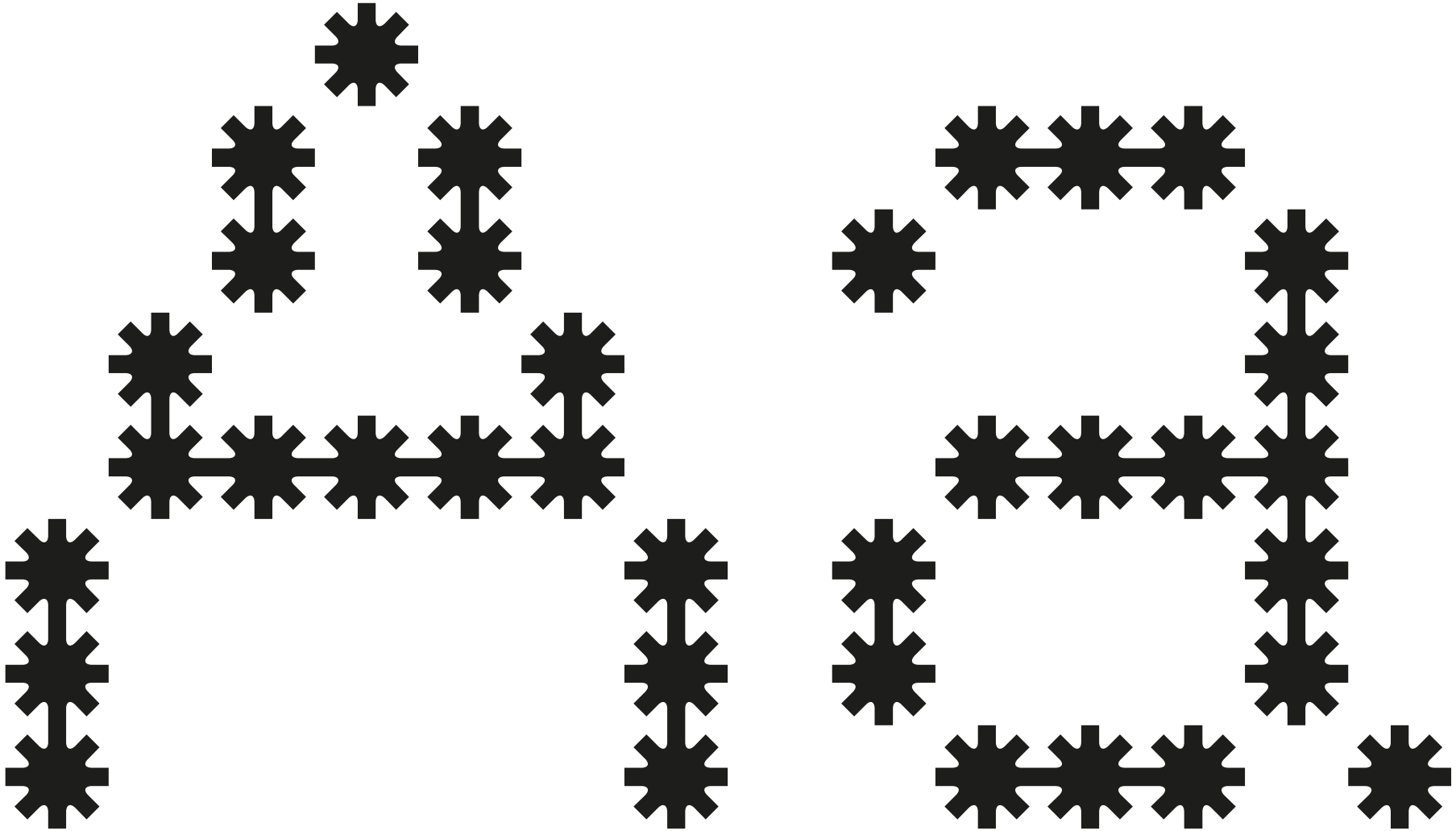
Regular, Italic, Bold, Bold Italic

Titling

Regular 600 pt

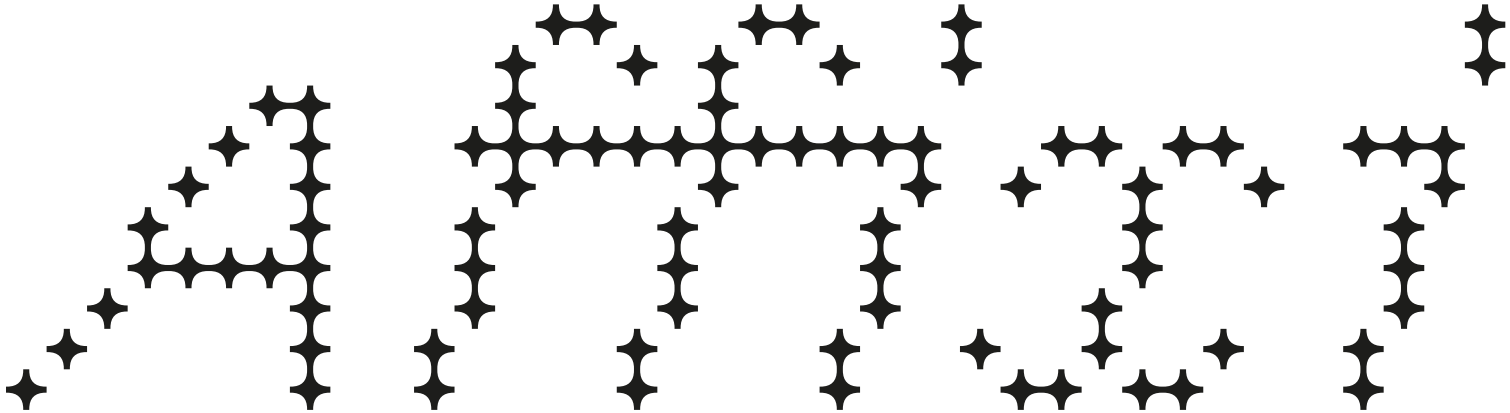


Bold 600 pt



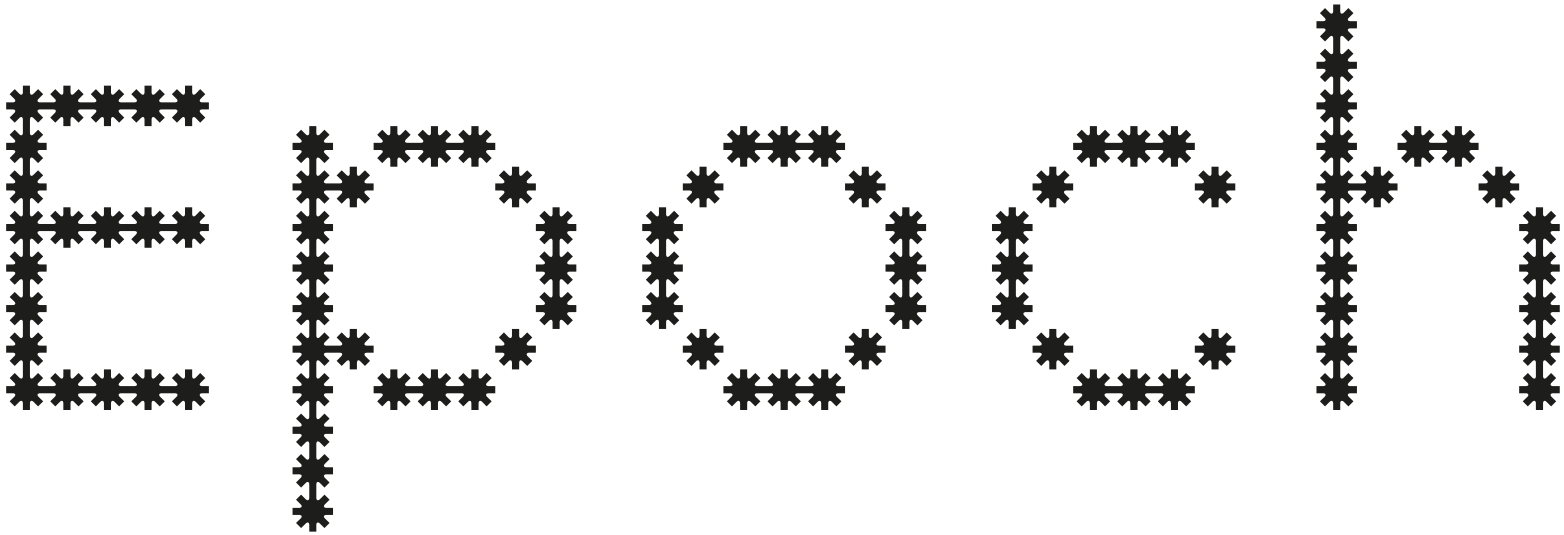
Regular 190 pt

Italic 190 pt

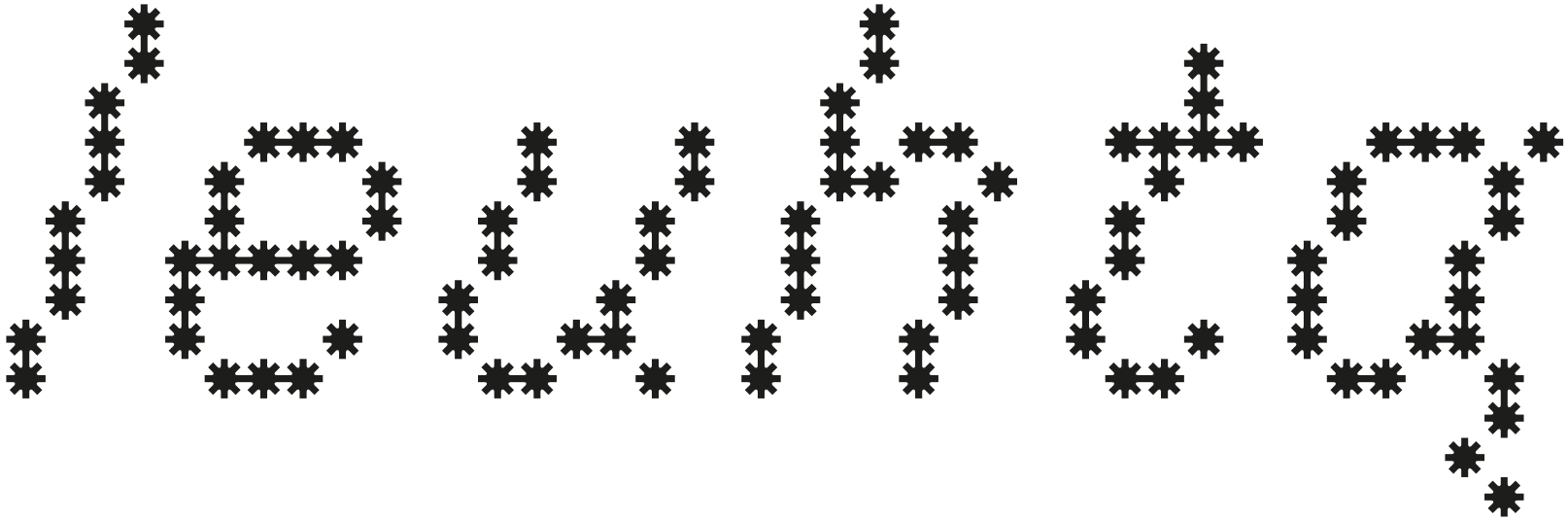


Ligatures

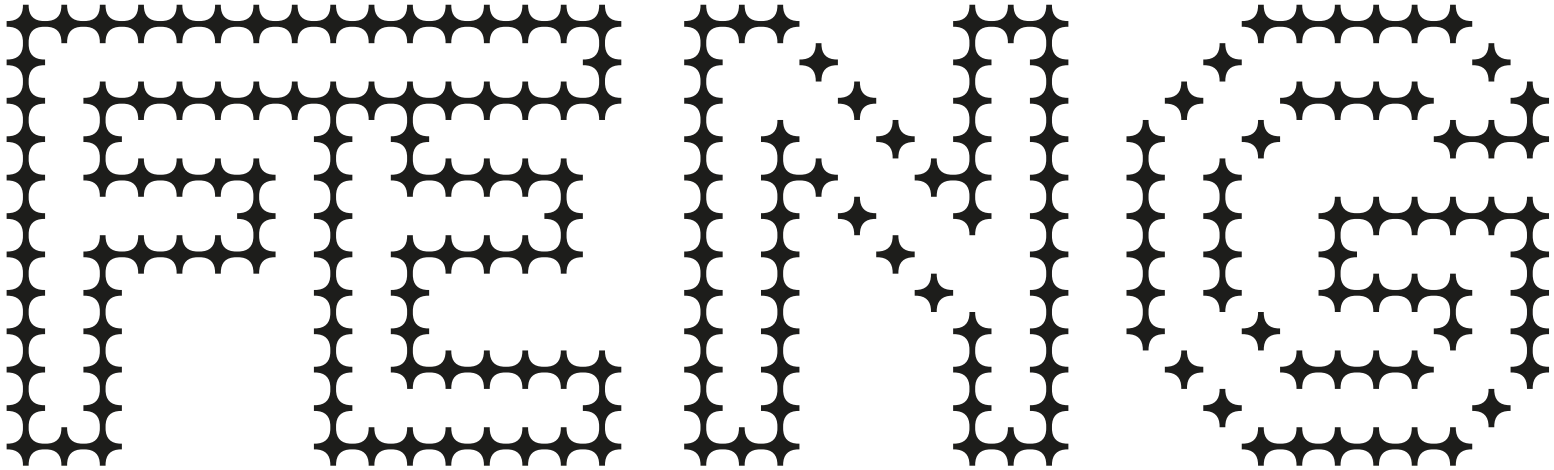
Bold 190 pt



Bold italic 190 pt



Titling 180 pt



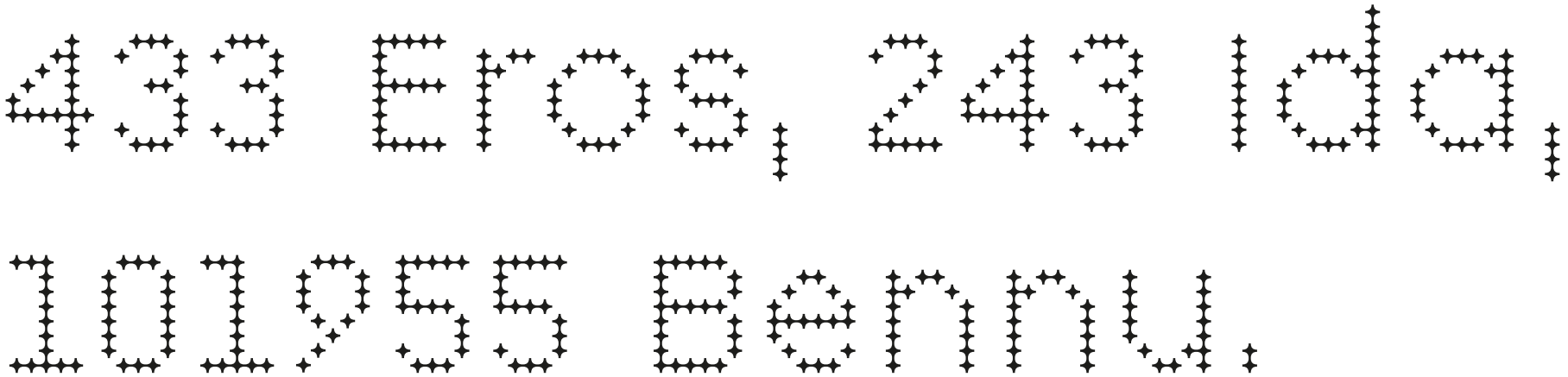
Discretionary Ligatures

Titling 180 pt

Titling 180 pt

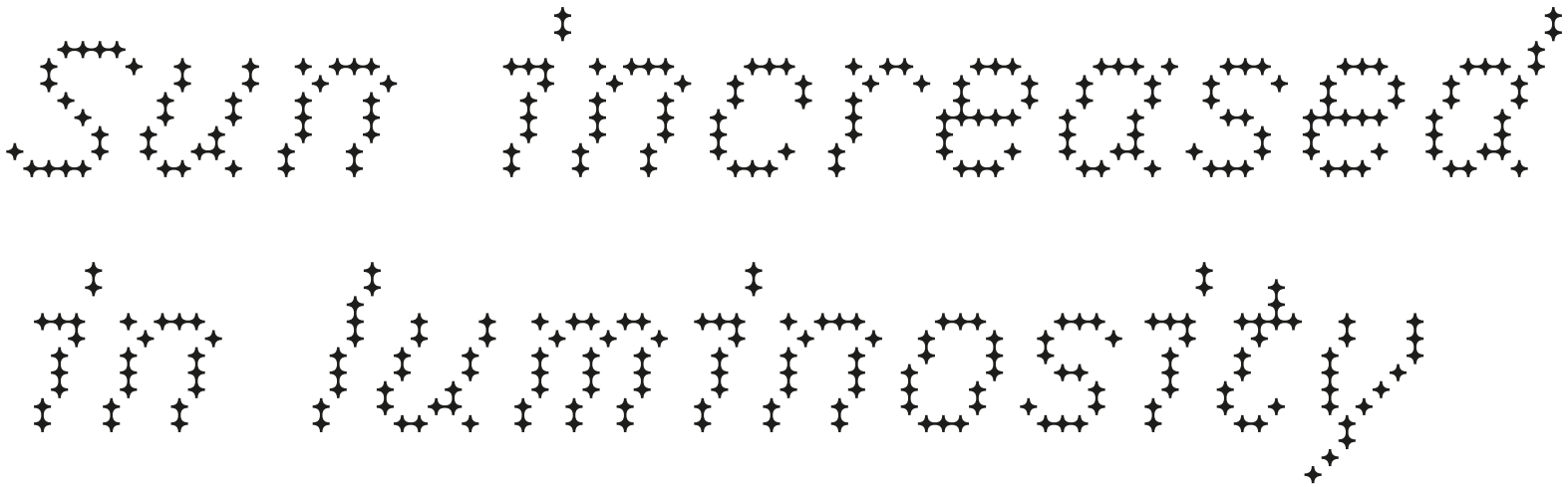
Titling 180 pt

Regular 80 | 96 pt

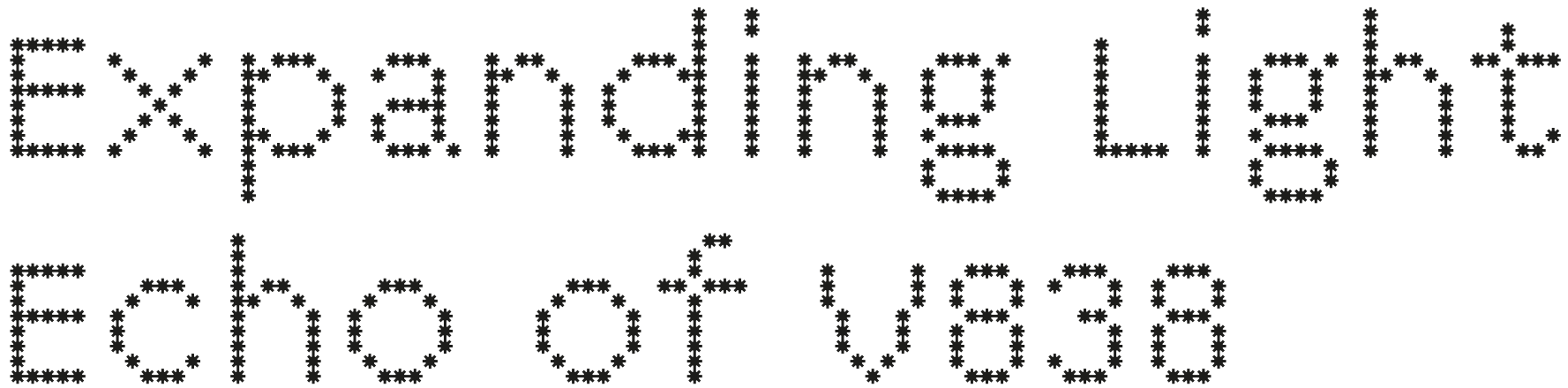


Alt a

Italic 80 | 96 pt

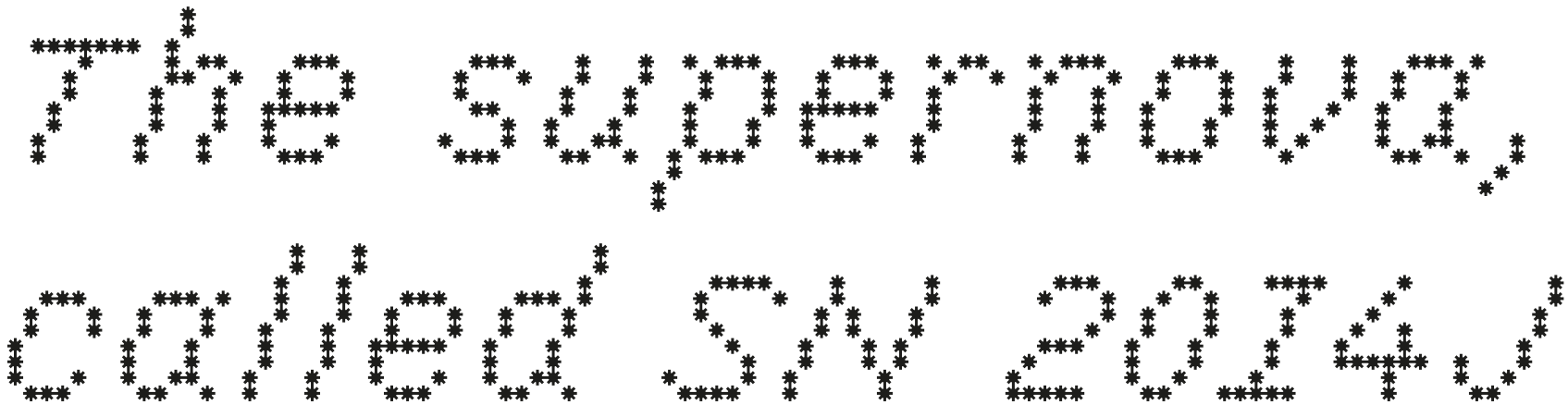


Bold 80 | 96 pt

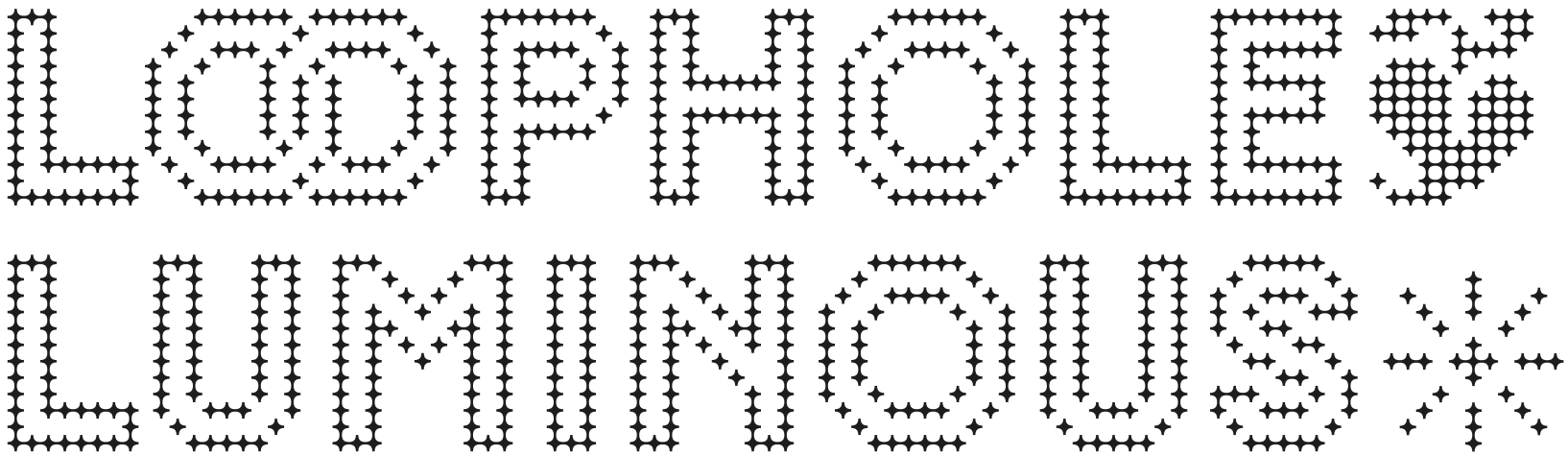


Alt x

Bold Italic 80 | 96 pt

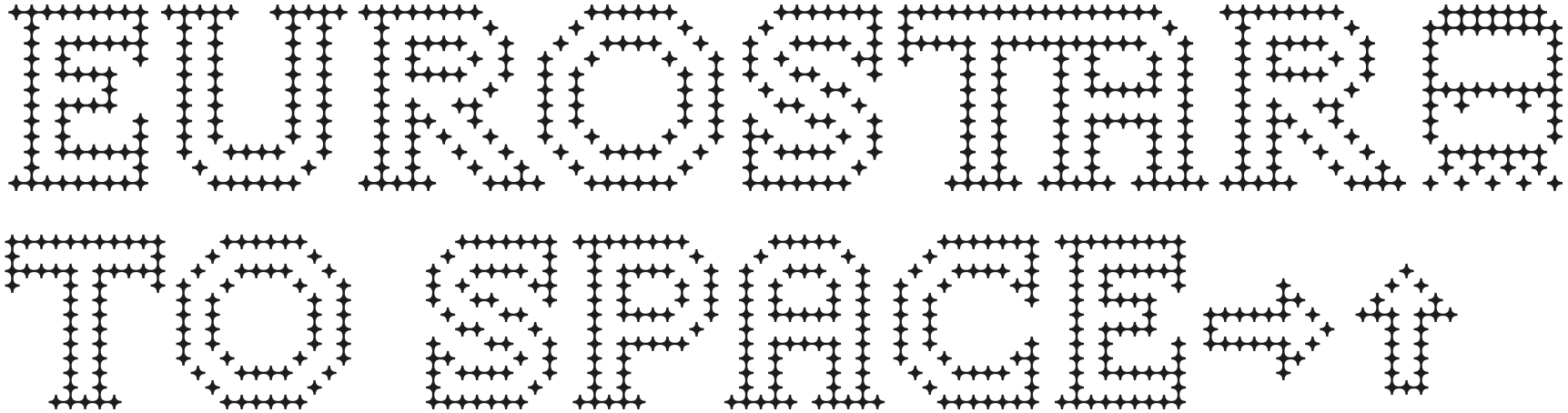


Titling 80 | 96 pt



Discretionary Ligatures

Titling 80 | 96 pt



Discretionary Ligatures

Regular 40 | 48 pt

Hydrogen and helium make up
98% of the mass of the ISM, with
the remaining 2% being heavier
elements astronomers call

Alt g

Italic 40 | 48 pt

Asteroids, called minor planets,
are rocky, airless remnants left
over from the early formation of
our solar system 4.6 billion years

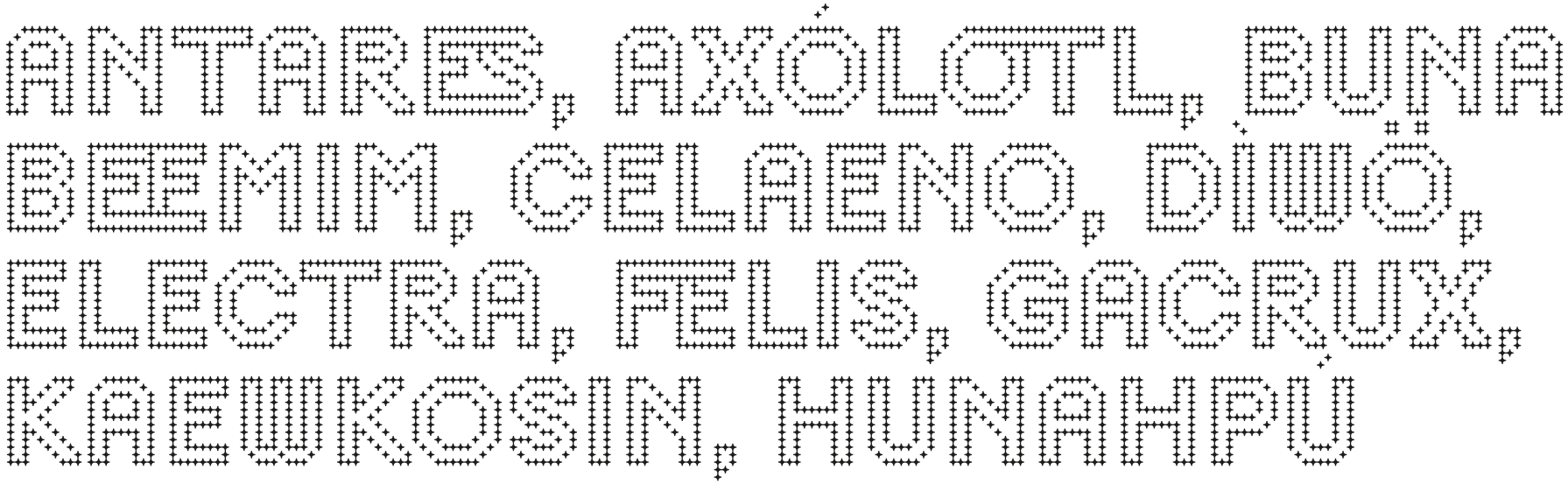
Bold 40 | 48 pt

VESTA: the largest at about 329 miles (530 kilometers) in diameter to bodies that are less than 33 feet (10 meters) ↔ across.

Bold 40 | 48 pt

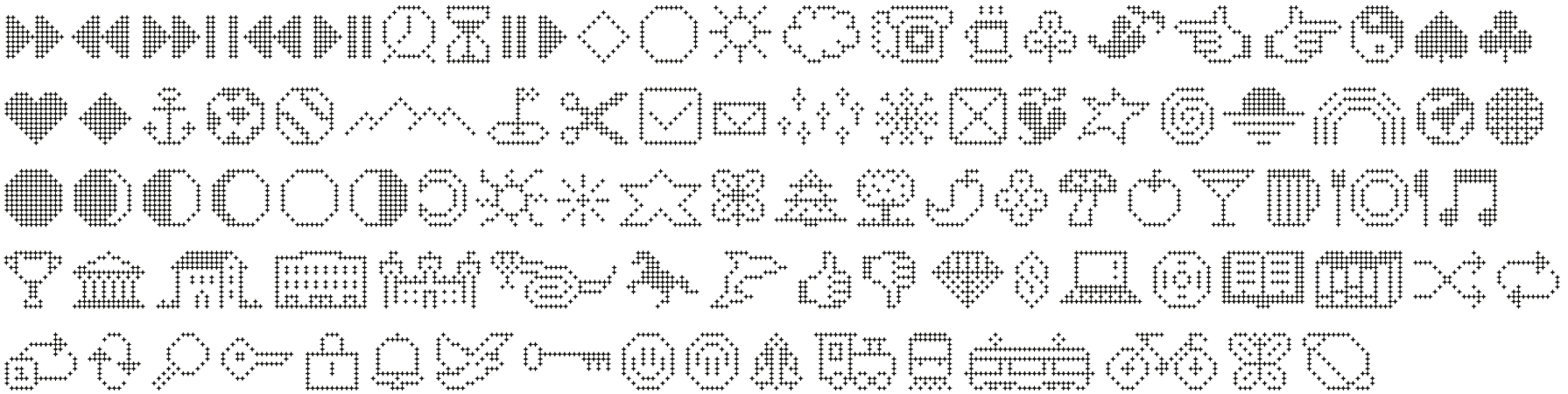
The data were taken while the planets, HD 209458b and TrES-2, disappeared behind their stars in what's called "secondary eclipse."

Titling 40 | 50 pt



Discretionary Ligatures

Titling 26 | 35 pt



Regular 24 | 28 pt

In physics, the term "light" refers more broadly to electromagnetic radiation of any wavelength, whether visible or not. Its speed in vacuum, 299792458 m/s, is one of the fundamental constants of nature. The main source of natural light on Earth is the Sun. Historically, another source of light for

Oldstyle Figures
Alt g

Italic 24 | 28 pt

The speed of light in vacuum, commonly denoted c, is a universal physical constant that is exactly equal to 299,792,458 metres per second (approximately 300,000 kilometres per second; 186,000 miles per second; 671 million miles per hour). All forms of electromagnetic radiation, including visible light,

Oldstyle Figures

Bold 24 | 28 pt

verður nokkurn tíma hægt að ferðast til annarrar vetrarbrautar? Nei, ekki í fyrirsjáanlega framtíð. Við eigum enn eftir að ná næstu *stjörnu* við sólu, 4,3 ljósár, og næsta stórvetrarbraut er um það bil 2–1/2 *milljón* ljósára fjarlægð (Andrómeduvetrarbrautin, M31). En það er nóg pláss hér í sólkerfinu.

Bold Italic 24 | 28 pt

The nearest star is about 39,900,000,000,000 kilometers away. It would take the fastest rockets that we have thousands of years to reach it. It is always possible that sometime in the future people may find a way to travel to the stars, but right now we just do not have the technology.

Titling 24 | 28 pt

CLOUDS THAT FORM IN THE MESOSPHERE COME IN A VARIETY OF FORMS SUCH AS VEILS, BANDS, AND BILLOWS, BUT ARE NOT GIVEN LATIN NAMES BASED ON THESE CHARACTERISTICS. THESE CLOUDS ARE THE HIGHEST IN THE ATMOSPHERE AND

Discretionary Ligatures

Titling 24 | 28 pt

CIRRUS FIBRATUS (V-1). HIGH CLOUDS HAVING THE TRADITIONAL "MARE'S TAIL" APPEARANCE. THESE CLOUDS ARE LONG, FIBROUS, AND CURVED, WITH NO TUFTS OR CURLS AT THE ENDS.CIRRUS UNCINUS (V-2) FILAMENTS WITH HOOKS OR CURLS.

Discretionary Ligatures

Regular 16 | 20 pt

Maria clara Eimmart fertigte zwischen 1693 und 1698 etwa 250 Zeichnungen des Mondes an, die der kartographischen Darstellung des Mondes dienen sollten und als Vorarbeiten für die Erstellung einer eigenen Mondkarte gelten. Außerdem beobachtete sie am 12. Mai 1706 die totale Sonnenfinsternis und fertigte zwei Gemälde an. Sie galten lange Zeit als verschollen, bis 2012 in der Kartenabteilung der Staatsbibliothek zu Berlin eines (kart A2398) davon wiederentdeckt wurde. Die meisten ihrer Skizzen des Mondes liegen zusammen mit dem Nachlass ihres Vaters in St. Petersburg. Einige ihrer astronomischen Gemälde haben sich in der Sternwarte in Bologna erhalten.

Oldstyle Figures

Italic 16 | 20 pt

L'astronomie amateur est une activité de loisirs qui consiste en l'observation d'objets du ciel diurne et nocturne situés au-delà du globe terrestre. Comme la plupart des activités de loisir, elle peut se pratiquer seul, en groupe non organisé ou en groupe organisé (club, société). Elle peut se différencier de l'astronomie professionnelle par deux principaux aspects : Contrairement à l'astronome professionnel dont l'objectif premier est de produire un résultat scientifique, plus précisément d'approfondir nos connaissances en astrophysique, l'astronome amateur, quant à lui, considère rarement l'observation astronomique comme un « moyen »

Bold 16 | 20 pt

Her indgår forskellige esoteriske og pseudovidenskabelige traditioner eller systemer, ifølge hvilke kendskab til himmellegemers, primært solen, månen og planeternes indbyrdes positioner og relative bevægelser kan bruges til at forklare menneskelige egenskaber, og til dels forudsige vigtige begivenheder i et menneskes liv. En udøver af astrologi kaldes en astrolog. Der findes astrologer som forsøger at forklare astrologien ud fra videnskabelige principper, men for de fleste er astrologi en teknik som forener intuitive og analytiske fremgangsmåder. I vore dage praktiseres astrologien stadig. De fleste danske ugeblade og magasiner bringer de meget populære

Alt a

Bold Italic 16 | 20 pt

Pas na de middeleeuwen en bij de opkomst van de natuurwetenschappen voltrok zich een scheiding tussen astrologie als occulte wetenschap en astronomie als moderne wetenschap. Het was een geleidelijk proces. Na de verwetenschappelijking van het wereldbeeld en het primaat van de wetenschappelijke methode kwam de astrologie hoe langer hoe meer in de marginaliteit en werd niet meer ernstig genomen. De huidige controverse tussen astronomen en astrologen stoelt op de veranderde visie op hemellichamen. Astrologen handhaven voor de duiding van de horoscoop nog steeds het klassieke geocentrische wereldbeeld met de aarde als middelpunt.

Regular + Italic 16 | 20 pt

Understanding stars and their evolution is key to understanding our universe and its history. However, the process of star formation remains a complex problem to understand and any progress is a major step into progress in *cosmology*. The sun is a standard star in our Galaxy and the most dominant stellar population is composed of standard suns called main sequence stars. More massive stars get rarer; actually the second dominant stellar population are *white dwarfs*. The mass of a star is what determines how it is going to evolve, for how long and what chemical elements it is going to synthesise before the end of its life. The size of stars can only be

Italic 16 | 20 pt

The life of a star is sustained by the interplay between gravitational energy and nuclear energy. When this equilibrium is broken the star enters a runaway process that leads to a final explosion called supernova where the light emitted outshines the total light of the host galaxy. There are two classes of supernovae: Type Ia (SNIa) and Type II (SNII). The populations of both types are statistically equal. SNIa are dominated by heavy elements (Oxygen to Iron) and a little contribution of Hydrogen. They can form in all types of galaxies and anywhere in a galaxy. They are not known to leave a remnant like a neutron star. Their light curve (that is the variation of their luminosity with time).

Regular + Italic 12 | 16 pt

Language has conventionally been considered an instrument of communication. Writing is generally considered a more or less adequate means of transcribing language so that it may serve its communicative function. *But throughout history, the letters of the alphabet have occasioned imaginative speculation about the possible hidden value of their, visual form.*

In oracular and ritual practices, mystic and kabbalistic doctrine, Gnostic and humanistic beliefs, the letters have been considered as fundamental elements of the cosmos, or of divine or human knowledge. The attributes of their visual forms have been assigned values which extend far beyond their capacity to function as the orthography (mere spelling or spoken sound) and instead have allowed them to be construed as indices of the most *profound mysteries* of the universe. While most of the historical symbolic values attached to letter forms in these interpretations would be discounted by contemporary scholars, the history of such conceptions provides a fascinating insight into the history of ideas.

The interpretation of the letter 'e' as produced by the oracle -at Delphi and detailed in a record by Plutarch may have little to tell us about the concrete historical lineage of the fifth letter of our alphabet but serves to reveal much about Greek concepts of symbolic form. As written forms, the letters of the alphabet have been used for centuries in the production of written and printed documents. Many visually inventive versions of letter forms have been produced, and as a device for the arrangement of pictorial elements, the alphabet has enjoyed the attention of calligraphic artists, type designers, and mystics.
I shall not dwell extensively here on alphabet use that is purely decorative in nature, or attaches no extra meaning or value to the character of the letters, or gives no insight into intellectual thought. Instead, the focus of this study has been on *the interpretation of the alphabet as a symbolic matrix whose letters are assumed to encode in their visual shape the history of their origins, of some fundamental cosmological or philosophical truth, or some mystic or ritual power.* This research moves far afield from the domain of archaeological debate and linguistic inquiry, into the realm of imagination and philosophical speculation, but the framework for understanding these symbolic interpretations must be established in the history of the serious and systematic inquiry into the actual origin of the alphabet.

Fewer than a dozen instances of the invention of writing are recorded in human

Regular + Italic 8 | 11 pt

In the classical period, the Greek attitude toward the alphabet contained elements of historical consciousness, mythical belief, linguistic analysis and symbolic thought. This array of positions is evidenced in the many classical texts which attempt to describe the origins, value, or function of the alphabet. Both the Greeks and the Romans had explicit faith in the performative efficacy of written forms, and in later antiquity the blend of mythical and magical practices expanded to include Jewish, Egyptian and Christianizing influences as well (as will be seen in the next chapter). The alphabet was involved in a wide range of cultural activities between the 5th century BC and the first centuries AD, but the legacy of classicism extends into the 20th century. Later writers making use of classical mythology did not always ground their work in the texts of this earlier period and often granted themselves considerable latitude in interpreting the classical tradition. This chapter focuses on the discussion of the alphabet and its history as it was manifest in antiquity, with some indications of classical themes taken up in later history and symbolism.

Current debates about the precise historical moment at which the alphabet was transmitted to the Greek islands and mainland leave many issues unresolved. Research into the effects of the alphabet upon Greek culture has been extensive. The claims for the superiority of the Greek modifications of alphabetic writing have been *symptomatic of the European tendency to privilege all aspects of Greek culture over that of the much older civilizations of Africa and the ancient Near East*. The Greeks themselves made few such claims though their discussions of history and symbolism in connection with writing are embedded in a complex of concerns about their own history, identity, and culture.

Arguments for the superiority of the Greek alphabet, as mentioned earlier, centered on the importance of vowel notation and on the impact of alphabetic literacy on Greek culture in general. The distinctions between the mechanics of the Semitic alphabet, particularly the Phoenician prototype from which the Greek alphabet was derived, and that of the Greek were amplified by 19th and especially 20th-century classicists for whom the literary significance of the Homeric epics eclipses that of all previous literary works in scope and quality. These scholars reduce the law books of Ur (around 2100 BC), the Code of Hammurabi (about 1750 BC), the Epic of Gilgamesh and the Old Testament (the books of Deuteronomy and story of creation are dated to about 600 BC) to the status of minor productions of essentially preliterate societies. The bias of such a position is sufficiently obvious to need little elaboration, but the features which distinguish the Greek writing system and the various changes which the Greeks found efficacious in adopting the alphabet to their own linguistic needs deserve descriptive attention. The linguistic structure of Semitic languages is centered on word roots, or morphemes, which have a consonantal structure. In such a language a sequence of syllables such as t-r-n are sufficient, in context, to indicate a semantic value, such as 'torn', rather than being modified by its vocalic notation (as in the case of English and other Indo-European languages) to have a range of values such as: *tern*, *turn*, or *torn*. When the Indo-European speaking Greeks adopted the alphabet from the Phoenicians, an event which archaeologists place between 1000 and 800 BC, the Greeks transformed several of the consonants in the Phoenician alphabet into letters used to notate the vowels which performed an essential, rather than supplementary, function in their linguistic system. Vocalic notation did exist even in Semitic precedents, however, with a form of writing known as plene or full writing, which might have been known to Greeks through the same contacts with the Phoenician settlements from which they acquired their alphabet.

That the Phoenicians were the source of the letters of the Greek alphabet is undisputed. The sequence of the letters, their graphic forms, and their names (which have no semantic value in Greek and are strictly Greek pronunciations of the Phoenician letter names) are the same in the two systems. fo fact, the Greeks recorded this origin in semi-mythic form, to be discussed below, invoking the figure of Cadmus, the Phoenician, as the source of their alphabet. Archaeological evidence for contact has been found throughout the entire region which stretches from the Phoenician cities of Tyre and Sidon west to Cyprus, from Phrygia in western Asia Minor along the islands of Lesbos, Sarnos,• throughout the. Cycladic islands and onto the mainland areas of Boeotia, Euboia and the Peloponnese.• But whether it was the presence of Phoenicians in these regions or the travels of Greeks to Phoenician trade centers which was responsible for the contact between the cultures is unclear. One spot recently proposed as the point of alphabet transmission is inland at Al Mina on the northernmost edge of what was ancient Phoenicia.1 Even if the concept of writing in classical culture may have been given impetus from other sources such as contacts with Egypt, or the Near Eastern users of cuneiform writing, the Phoenicians were the immediate source for both Greek and Latin alphabets.

The adaptive transformations of the letters, though linguistically complex, may be sketched out in relatively simple terms. *Aleph, he, yod, ain* which had had consonantal values in Phoenician, became the vowels *alpha, epsilon, iota* and *omicron* in Greek. The Phoenician *wau*, which kept its name in Greek, became two letters. One stayed in the sixth place in alphabetical order, but was represented by a new visual sign, known as the *digamma* (a letter which resembles a Roman 'F') while the original vocalic function of 'u' came to be represented by the Greek *upsilon* which was placed at the end of the alphabetic sequence. The additional distinction between long and short vowels led to the creation of a variant on the *omicron*, the *omega*, which even in

Regular + Italic 6 | 8 pt

The classical text which provides the most extensive discussion of the alphabet is that of the *Cratylus* of Plato. It is a philosophical text which examines the nature of language as a form of representation, and poses a number of questions about the mimetic or imitative character of writing. Plato had had personal contact with Egyptian culture and writing. Plato's attitude towards his own writing system seems to have been enhanced by his contrast of the alphabet with the other, more visually striking forms of hieroglyphics since he questiones the value of the Greek letters in symbolic Greeks; terms. he clearly Plato's work, understands however, the letters reveals in the their phonolorelation to gical the bias sound of sthoef language first and foremost, rather than as visual elements in their own right.

Plato believed that writing had been invented in Egypt, and he attributed the origin to the god Thoth, or Theuth. In the Phaedrus Plato states that Thoth had come to Thamus, the King of Egypt, to show him many inventions including writin'g. Thoth claimed that the letters would 'make the Egyptians wiser and give them better memories.' Thamus was not convinced. He argued that *the discovery would 'create forgetfulness' because his people would no longer rely on memory but would 'trust to the external written characters and remember of themselves.*' Writing, therefore, was not to be 'an aid to memory, but to reminiscence.'

According to the basic tenets of Platonic idealism visal signs, images, letters, glyphs: were inferior to the transcendent Ideal. Plato held all visual images in low esteem and he even banished painters from his imaginary Republic. For if apparent reality were a mere shadow of the Ideal, then any image imitating reality was at best yet another degree removed from the Ideal. The mark or letter, like any image, served a merely mechanical function and could not in any sense serve the highest function of human knowledge, to reveal Truth. But as a thing in itself, a letter might contain an essence. Plato attempted to reconcile both this Idealist disregard for signs of signs and the typically Greek atomistic understanding of cosmic structure in the dialogue he stages in the *Cratylus*. On the one hand, the text shows a concern with analysing language as a system of formal logic, an approach which is anti-idealistic. On the other, it struggles with origins and first causes, looking for Truth in every letter or sign. To give full play to the conflicted opinions, Plato situated the figure of Socrates between two speakers· who articulate opposing positions within the dialogue of the *Cratylus*. The first of these, Hermogenes, argues for a conventional, socially determined link between language and meaning, letters and their values, linguistic forms and sense. He puts forth the concept that language is an arbitrary system which produces meaning through formal rules and logical propositions. By contrast to this conven- ' tionalist position, the figure of Cratylus espouses a naturalist (i.e. atomistic) attitude, stating that the letters are elements which contain an essence. From this it follows that meaning in language is built up out of these smaller units. If the value of these elemental units could be divined, then the meaning of words could be calculated in terms of the combination of letters used in their production. The philosophical issues at stake here are complex, since they involve a distinction between the concept of a mutable universe and that of a stable, permanent fixed order of essences, such as Aristotle would assume as the basis for his analysis of the natural world.

Leaving such issues aside, the particulars of the analysis of the alphabet which emerge from Cratylus' propositions and Socrates' interrogation revolve, ultimately, on the discussion of the function of the letters in the production of linguistic meaning. *This in turn raises the central issue of whether or not an Idea is equivalent to the material form of its expression, such as its expression in language. Cratylus argues that a word must be either the perfect expression of a thing or mere, arbitrary, inarticulate sound*: it cannot be anything else. He further claims that language and writing were invented by an Imitator who understood the essence of things and encoded this into their names. Hermogenes, however, counters by stating that all words are conventional names for things, used and agreed upon through social contract and invented by a Legislator. Socrates introduces confusion by pointing out that the letters themselves are not the same as their names. A word such as 'alpha' or 'beta' contains many letters not contained in the letter itself, and this introduces a conflict of identity into language at the very elemental level of the letters. Socrates suggests that this may be the result of mutation over time and that the original names have been lost, buried, in this process. In looking for these original names, Socrates makes an analogy between the letters as elements of language and colors as elements of a painting, stating that just as a painter composes an image by combining a percentage of purple, white or other pigment, so a word may be understood in terms of its component parts, the letters.

Cratylus and Socrates assess the values of particular letters by examining groups of words in which the same letter appears to indicate a common theme. For instance, they conclude that *rho* is a sign of motion because it is found in words such as *tremor*, *tremble, strike, crush, bruise, crumble* and *whirl*. The cause of this association of letter and meaning was not merely incidental, it was linked to the physical activity of pronunciation. According to Socrates, the tongue was 'most agitated and least at rest in the pronunciation of this letter' and therefore the original imitating inventor used it 'in order to express motion.' By the same principle, he goes on to say, *iota* was used to 'express the subtle elements which pass through all things.' In fact, the principle by which the iota might express this capacity is linked to its graphic character, not its pronunciation. As the smallest letter it was capable of fitting into spaces - both between other letters and other things - with the very least amount of difficulty. The rest of the analysis of selective, specific letters emphasizes the physical act of pronunciation: *phi*, *psi* and *sigma* require 'great expenditure of breath' and are used 'in imitation of such notions as shivering, seething, shock and shaking' or anything else 'which is windy.' *Lamda* with its liquid smoothness, produced by the slipping of the tongue, expresses this smoothness in such words as *level, slip* and *sleek*. The 'heavier sound of *gamma*,' in which the tongue is detained combines with *lamda* to express the notion of stickiness, as in the words *glutinous* and *glucous*. Their analysis is incomplete, irregular, and unsystematic. But it makes clear that there was an attempt to examine both the philosophical and physiological underpinnings of language through analysis of its smallest elements, the letters of the alphabet. The struggle to find links between idea and expression concentrated on these atomic forms. In addition, it shows the kernels of the phonological analysis of the language still used in phonetics today: into categories identified by the mechanics of pronunciation such as gutterals, labials, dentals and so forth. Plato had Socrates apply these principles to an analysis of his name in the *Thaetetus*, only to have him meet with frustration. He is unable to find any atomistic analysis which accounts for the relation between his identity and his name given that it is used to designate other individuals as well. *But he continues to assert that the letters are 'the primeval elements out of which you and I and all things are compounded here*.'

Plato was not the only Greek author to understand the phonetic structure of the language: Dionysius of Halicarnassus, writing in *On Literary Composition* (approximately 20-10 BC) gave another such analysis of the letters. t8 He linked the atomic character of the letters to their capacity to represent speech, saying that 'every sound made by the voice originates in these and is resolvable into them.' He understood the distinction between the function of vowels and that of the consonants and was more thorough in his description of the physical acts of pronunciation. In place of Plato's impressionistic terms - *slipperiness* or *stickiness* - Dionysius states that the *lamda* pronounced by 'the tongue rising to the palate and by the windpipe helping the sound.' Like his predecessor, he does not extend his analysis into a visual realm, and the graphic character of the letters remains unnoticed in his work. It is worth pointing out that most linguists and classicists are in agreement upon the suitability of the early Greek alphabet to adequately notate the sounds of the Greek language. In a situation such as the current English language use of the Latin alphabet, the mismatch between the forty or so phonemes of speech and the twenty-six graphemes used for notation would never support a cosmological analysis of language into *letters* (rather than sounds) as its fundamental parts.

Number Symbolism: No aspect of the conflation of the concepts of *stoicheia* (elements) and letters carried more weight in the classical period than that associated with the cosmological system of number symbolism. *The notion that the order of the universe was fundamentally mathematical, and that all structures, beings, and forms could be expressed in terms of number was central to the tradition known as Pythagoreanism.*

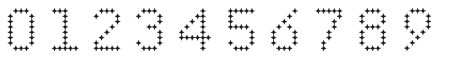
Pythagoras himself presumably lived in the 6th century BC. His image as a legendary figure, which developed on the basis of his writings and his supposedly exemplary life, waxes and wanes in popularity throughout the classical period. Much of the symbolic quality ascribed to his work was in fact the work of his followers, and the Neo-Pythagoreanism which arose in the early centuries of the Christian era has as much in common with Gnosticism, Hermeticism, Neoplatonism and other contemporary systems of belief as with its authentic forbear. The writings of Nicomachus of Gerasa, and others, will therefore be considered in the following chapter, and strains of Neo-Pythagoreanism will continue to weave through this study up through the Renaissance.

In early Pythagoreanism, however, *numbers were considered to be things, and things numbers.* Things could not therefore be derived from numbers, by Pythagorean logic, since a thing could not be derived from, or different from, itself. But by the time that Pythagoreanism became popular in the work of 5th- and 4th-century BC writers such as Speusippus and Aristoxenus, the prevailing concept was that sensible things were in fact derivatives of the higher order of numbers. Thus the notion of the symbolic content of numbers, and in particular, of

Uppercase

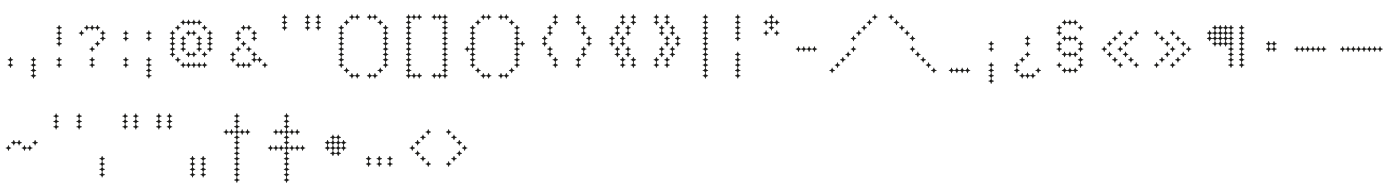
Lowercase

Standard Figures



Oldstyle Figures

Punctuation

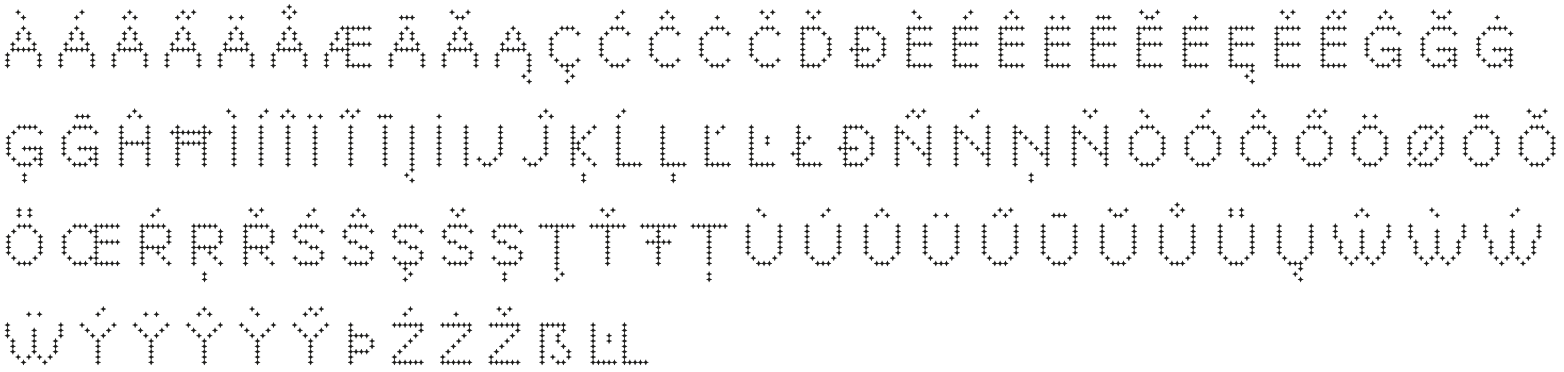


Currency Symbols

Currency Symbols

Symbols

Uppercase Extended



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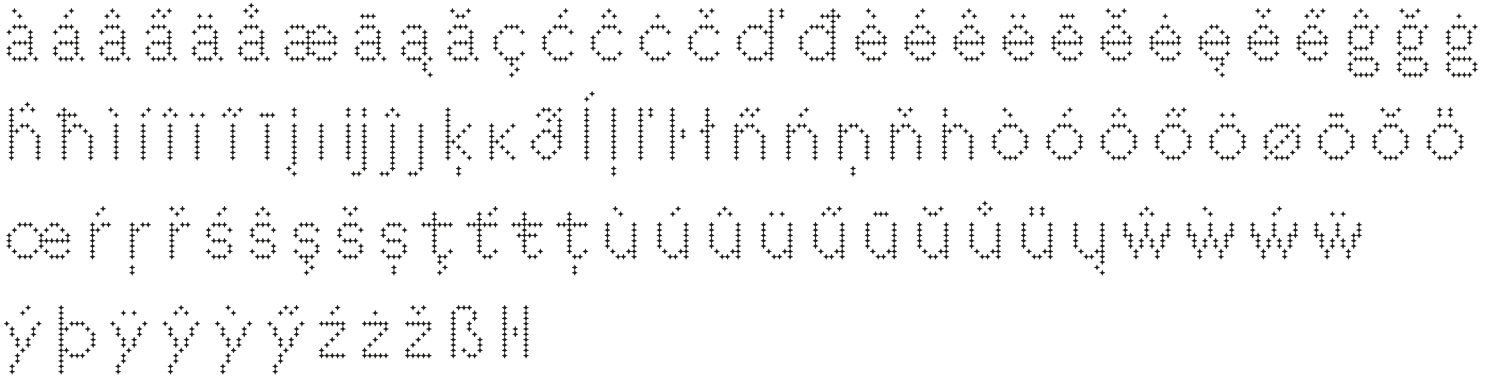


Ligatures

Arrows

Alt a

Alt g

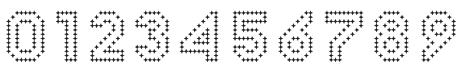
Alt x

Slashed Zero [zero]

Titling uppercase

Lowercase

Standard Figures



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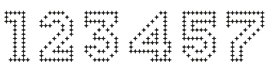

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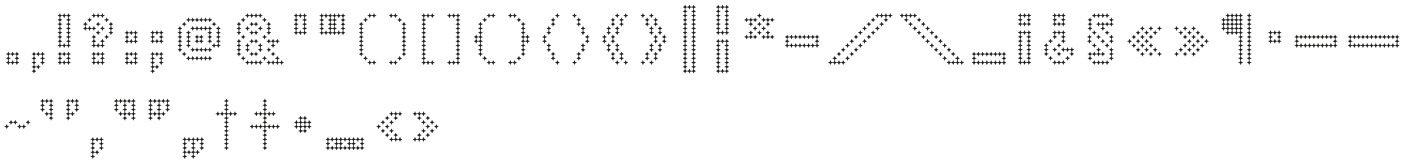
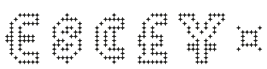


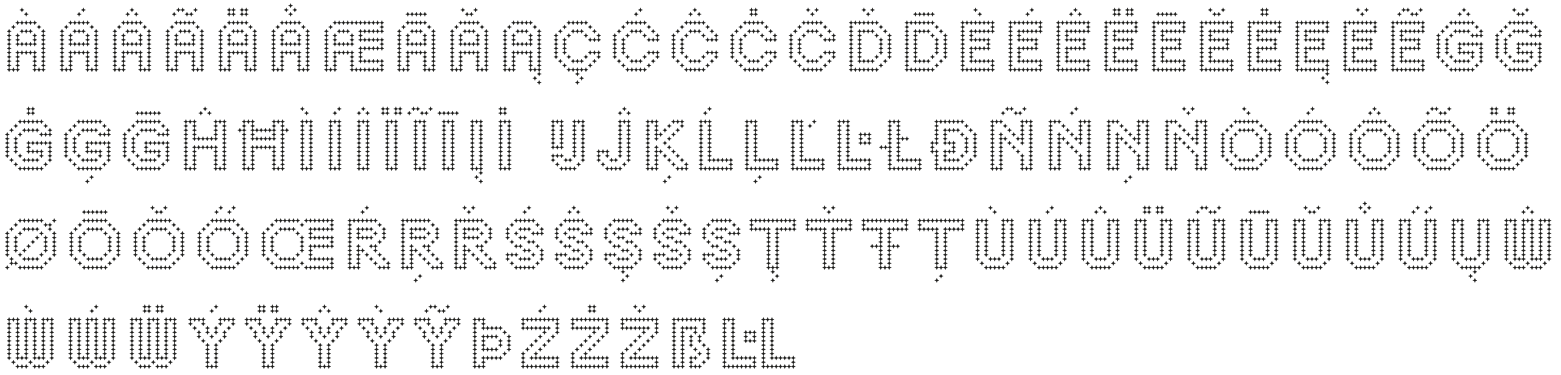
Currency Symbols



Math Symbols

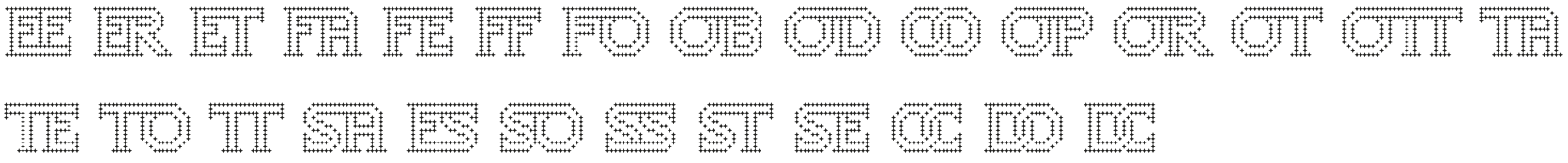
Uppercase Extended

Lowercase Extended

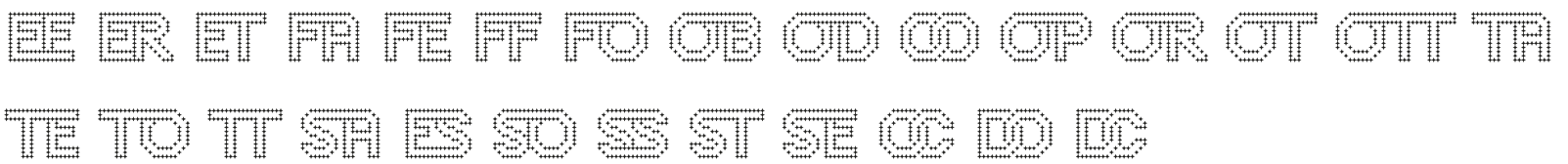


Small Capitals

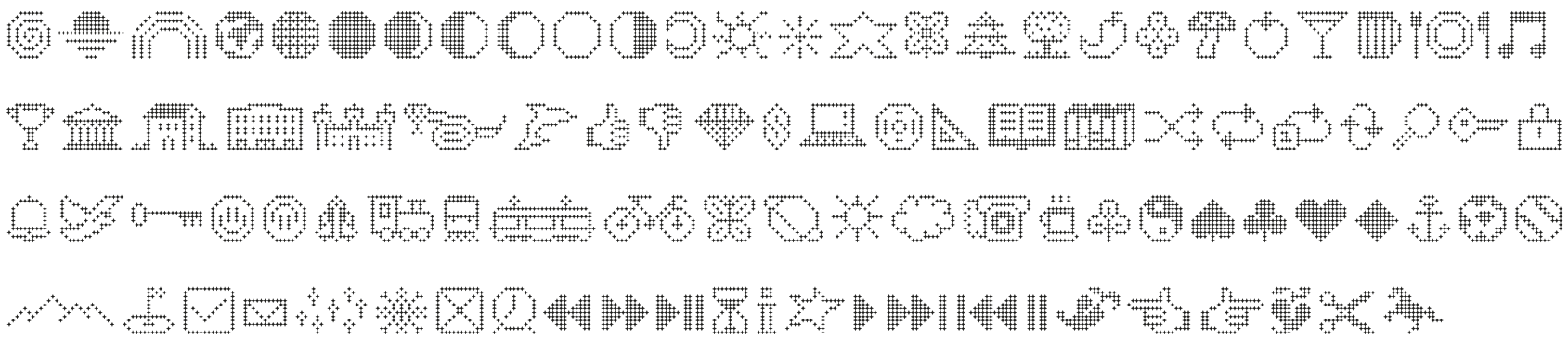
Uppercase Titling Ligatures



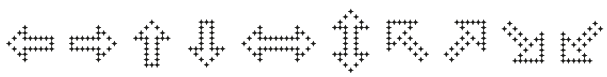
Lowercase Titling Ligatures



Symbols



Arrows



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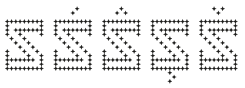

Alt Forms

262 Languages

For languages with multiple writing scripts, the Latin version is supported.

Acheron
Achinese
Achuar
Shiwiar
Afar
Afrikaans
Aguaruna
Alekano
Aleut
Alonquin
Amahuaca
Amarakaeri
Amis
Anaang
Andaandi, Dongolawi
Anuta
Aragonese
Arbëreshë Albanian
Asháninka
Ashéninka Perené
Balinese
Banjar
Basque
Batak Dairi
Batak Karo
Batak Mandailing
Batak Simalungun
Batak Toba
Bemba (Zambia)
Bena (Tanzania)
Bikol
Bislama
Borana-Arsi-Guji-Oromo
Bosnian
Breton
Buginese
Candoshi-Shapra
Caquinte
Caribbean Hindustani
Cashibo
Cacataibo
Cashinahua
Catalan
Cebuano
Central Aymara
Central Kurdish
Chachi
Chamorro
Chavacano
Chiga
Chiltepec Chinantec
Chokwe
Chuukese
Cimbrian
Cofán
Cook Islands Māori
Cornish
Corsican
Creek
Crimean Tatar
Croatian
Czech
Danish
Dehu
Dutch
Eastern Arrernte
Eastern Oromo
English
Faroese
Fijian
Filipino
Finnish
French
Friulian
Gagauz
Galician
Garifuna
German
Gheg Albanian
Gilbertese
Gooniyandi
Guadeloupean Creole French
Gusii
Haitian
Hani
Hiligaynon
Hopi
Huastec
Hungarian
Icelandic
Iloko
Indonesian
Irish
Istro Romanian
Italian
Ixcatlán Mazatec
Jamaican Creole English
Japanese
Javanese
K'iche'
Kabuverdianu
Kaingang
Kalaallisut
Kalenjin
Kamba (Kenya)
Kaonde
Karelian
Kashubian
Kekchí
Kenzi, Mattokki
Khasi
Kimbundu
Kinyarwanda
Kituba (DRC)
Kongo
Konzo
Kven Finnish
Kölsch
Ladin
Ladino
Latgalian
Lithuanian
Lombard
Low German
Lower Sorbian
Luba
Lulua
Luo (Kenya and Tanzania)
Luxembourgish
Macedo-Romanian
Makonde
Malagasy
Malaysian
Maltese
Manx
Maore Comorian
Maori
Mapudungun
Marshallese
Matsés
Mauritian Creole
Meriam Mir
Meru
Minangkabau
Mirandese
Mohawk
Montenegrin
Munsee
Murrinh-Patha
Mwani
Mískito
Naga Pidgin
Ndonga
Neapolitan
Ngazidja Comorian
Niuean
Nobiin
Nomatsiguenga
North Ndebele
Northern Kurdish
Northern Qiandong Miao
Northern Uzbek
Norwegian
Nyankole
Occitan
Ojitlán Chinantec
Orma
Oroqen
Palauan
Pampanga
Papantla Totonac
Papiamento
Pedi
Picard
Pichis Asháninka
Piemontese
Pijin
Pintupi
Luritja
Pipil
Pohnpeian
Polish
Portuguese
Potawatomi
Purepecha
Páez
Quechua
Romanian
Romansh
Rotokas
Rundi
Samoan
Sango
Sangu (Tanzania)
Saramaccan
Sardinian
Scots
Scottish Gaelic
Sena
Seri
Seselwa Creole French
Shawnee
Shipibo
Conibo
Shona
Shuar
Sicilian
Silesian
Slovak
Slovenian
Soga
Somali
Soninke
South Ndebele
Southern Aymara
Southern Qiandong Miao
Southern Sami
Southern Sotho
Spanish
Sranan Tongo
Standard Estonian
Standard Latvian
Standard Malay
Sundanese
Swahili
Swedish
Swiss German
Tagalog
Tahitian
Tedim Chin
Tetum
Tetun Dili
Toba
Tok Pisin
Tokelau
Tonga (Tonga Islands)
Tonga (Zambia)
Tosk Albanian
Tumbuka
Turkish
Turkmen
Tzeltal
Tzotzil
Uab Meto
Umbundu
Upper Guinea Crioulo
Upper Sorbian
Venetian
Veps
Võro
Walloon
Walser
Waray (Philippines)
Warlpiri
Wayuu
Welsh
West Central Oromo
Western Abnaki
Western Frisian
Wiradjuri
Xhosa
Yanesha'
Yao
Yucateco
Zapotec
Zulu
Záparo