Action Unit Combinations – 17+23, 17+24

It is easier to learn these two combinations at the same time. Have at hand the images for these combinations and the images for the single AUs 17, 23 and 24.

A. Appearance Changes due to AU Combinations 17+23, 17+24

The changes in appearance for each combination combine most of the appearance changes associated with the single AUs that are involved.

AU 17

- 1. Pushes the chin boss upwards.
- 2. Pushes the lower lip upward.
- **3.** May cause wrinkles to appear on the chin boss as skin is stretched, and may produce a depression medially under lower lip.
- **4.** Causes the shape of mouth to appear
- **5.** If the action is strong, the lower lip may protrude; evident only with 24 not with 23.

AU 23

- 6. Tightens the lips, making the lips appear more narrow.
- **7.** May cause the lips to roll inwards and almost disappear from view.
- **8.** Produces small wrinkles in the skin above and below the lips, and muscle bulges below the lower lip. A strong 17 obscures appearance changes below the lower lip.

AU 24

- 9. Presses the lips together.
- 10. Tightens and narrows the lips.
- 11. May cause small wrinkles or lines to appear on the upper lip.
- 12. May cause a bulging of the skin above the upper lip or below the lower lip.
- **13.** A strong 17 makes it difficult to see all the appearance changes due to 24.

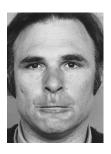
See Table 7-1 for the differences between 17+23 and 17+24. Inspect the images and video of 17+23 and 17+24. Note that the lips are de-elongated in 17+24 but this is not an essential cue of this combination.



0 page 465 page 381 for score



17 page 475 page 390 for score



23 page 492 page 407 for score



24 page 492 page 408 for score







17+24 page 495 page 410 for score



video 17+23 page 427 for score



video 17+24 page 427 for score

B. How to do AU Combinations 17+23 and 17+24

Follow the instructions, repeated below, for AU 17, AU 23, and AU 24. Push up with your lower lip, then tighten your lips by adding 23. Push up with your lower lip and then press your lips together with 24, being careful not to tighten them with 23.

AU 17 (repeated from page 98): This movement is easy to do. Push your lower lip upwards. Note the wrinkles in your chin, and the change in the shape of the lower lip. If you are unable to make this movement, place your fingers on your chin about in the middle and push the skin upwards, noting the changes that occur. Now try to hold this appearance when you take your fingers away.

AU 23 (repeated from page 237): This movement is not easy to make. Tighten your lips. Make them thin and tense. Be careful not to press them together (AU 24). Concentrate just on your lips. If you have difficulty, try tightening your lips and pressing them, then release the press holding the tightening action. You may have done or seen this movement when using the phrase "Zip your lip."

AU 24 (repeated from page 241): This movement is easy to make. Press your lips together. Be careful not to push up with your lower lip in a hard fashion, as that would involve 17. Also be careful not to tighten your lip corners as that would involve 14.

C. Intensity Scoring for AU Combinations 17+23, 17+24

The intensity criteria for AU 17 in 17+23 and 17+24 are unchanged from 17 alone and are repeated below, but the criteria for AUs 23 and 24 in these combinations are modified to a small extent from the criteria for 23 or 24 alone. If you see signs of both 23 and 24 with 17, score 17+23.

AU 17A

The appearance changes for AU 17 are sufficiently present to indicate AU 17, but are insufficient to score 17B (e.g., a *trace* of lower lip pushed up and/or *trace* of chin boss wrinkling).

AU 17B

1. *Slight* evidence of lower lip push up beyond the movement necessary to close the lips; may include lip protrusion, or depression in medial area under the red part of the lip. The lower lip may slide in front of the upper lip and expose more of the red part of the lip than usual.

or

2. *Slight* chin boss wrinkling or puckering, <u>and</u> upward movement of chin boss. If the chin boss is permanently wrinkled, it must increase *slightly*. AU 15 may cause similar chin wrinkling, but they differ in appearance. See 15 vs. 17 in subtle differences.

AU 17C

The pushing up of the lower lip and the wrinkling/puckering of the chin boss are both evident and at least one is *marked*, but the evidence is less than the criteria for 17D.

AU 17D

The pushing up of the lower lip and the wrinkling/puckering of the chin boss are both evident and at least one is *severe*, but the evidence is less than the criteria for 17E.

AU 17E

The pushing up of the lower lip and the wrinkling/puckering of the chin boss are both in the maximum range.

AU 23A in AU Combination 17+23

The appearance changes for AU 23 are sufficiently present to indicate AU 23, but are insufficient to score 23B in 17+23 (e.g., *slightly* tightened, narrowed lips and pulling in of the red parts).

AU 23B in AU Combination 17+23

- The lips are tightened and narrowed markedly. and
- 2. The skin adjacent to the red area of the lips is pulled in, not bulging out.

AU 23C in AU Combination 17+23

The criteria above for 23B in 17+23 (lip tightening and narrowing, and pulling in of red parts) are at least *pronounced*, but less than the criteria for 23D in 17+23.

AU 23D in AU Combination 17+23

The criteria above for 23B in 17+23 (lip tightening and narrowing, and pulling in of red parts) are at least *severe*, but less than the criteria for 23E in 17+23.

AU 23E in AU Combination 17+23

The criteria above for 23B in 17+23 (lip tightening and narrowing, and pulling in of red parts) are in the *maximum* range.

If the criteria for 23 are present on one lip but are <u>totally</u> absent on the other lip, with no *trace* of any criterion, score as T23 or B23. Otherwise, if the intensities are unequal, score the higher intensity. Recall that 23 cannot be scored unilaterally in a single lip.

AU 24A in AU Combination 17+24

The appearance changes for AU 24 are sufficiently present to indicate AU 24, but are insufficient to score 24B in 17+24 (e.g., *slight* lip pressing and a *trace* of lip narrowing).

AU 24B in AU Combination 17+24

- **1.** Lips pressed together *slightly*. and
- **2.** *Slight* bulge of skin above and/or below lips. and
- 3. Slight narrowing of lips.

AU 24C in AU Combination 17+24

The criteria above for 24B in 17+24 (lip pressing, bulging above and/or below lips, lip narrowing) are all at least *marked*, but the evidence is less than the criteria for 24D in 17+24.

AU 24D in AU Combination 17+24

The criteria above for 24B in 17+24 (lip pressing, bulging above and/or below lips, lip narrowing) are all at least *severe*, but the evidence is less than the criteria for 24E in 17+24.

AU 24E in AU Combination 17+24

The criteria above for 24B in 17+24 (lip pressing, bulging above and/or below lips, lip narrowing) are all in the *maximum* range.

Reference: AU Combination 17+24

Actions of Special Relevance to AU Combination 17+24

Certain head and eye movements or position changes have special significance in regard to AU Combination 17+24, and you should carefully inspect the face for these actions when you score this combination, even when not otherwise scoring head/eye positions. Use the definitions of these AUs when a 17+24 occurs, either separately or in combination with other AUs. The AUs listed below are scored with the facial event (see Event Scoring in Chapter 11) even if they precede the bilateral 17+24, rather than only when they accompany it. Note that this special rule applies only when you are scoring bilateral 17+24.

AU	Summary of AU	See Description for Details
M57	Head Thrust Forward	"Head Movement Codes M57, M59, and M60" on page 340
M59	Head Shake Up and Down	"Head Movement Codes M57, M59, and M60" on page 340
M60	Head Shake Side to Side	"Head Movement Codes M57, M59, and M60" on page 340