AGRONOMICAL TERMS OF USE

Careful reading and thorough understanding of this document is essential prior to product utilization.

SAFETY NOTE

The proper utilization and trouble-free operation of the Augmenta™ System and its dynamic algorithms for the Variable Rate Applications is highly dependent on accurate input of information. Misleading information and unauthorized modification of the information provided can lead to malfunctions, inaccurate operation, and first or third-party property damage. The manufacturer does not accept liability (legal or otherwise) for any damages incurred.

SPECS OF USE

Because Augmenta's dynamic algorithms control the application of the dose recommended by the agronomist (MAX dose), certain points should be realized.

Important Note #1:

A large variety of solid and liquid agrochemicals are available in the market at variable concentrations. In the interests of standardization, the Augmenta™ System operates using input dosages measured in kilograms/litres per hectare or pounds/gallon per acre. The user will have to make conversions accordingly.

Important Note #2:

Each Augmenta™ System session should be restricted to "a single field", defined as a continuous and uninterrupted area, irrespective of size. The entirety of 'a single field' should be seeded with the same crop type sown at the same time. Operations over multiple fields, even with the same crop type, negatively affect the algorithm's accuracy since they might comprise different cultivars, growth stages, and so on. Therefore, they should be regarded as their own respective 'single fields' when it comes to Augmenta™ System operations.

Important Note #3:

The pause button should be used if a session is to be temporarily interrupted (e.g., for refilling the tank mixture) while making sure that the device has sufficient power supply so as not to terminate the session and the active task in the VT is not stopped. Stopping the session and starting a new one implies that all the information regarding the performance of the agronomic algorithms (AUG Index min, AUG Index max, etc.) will have to be recalculated.

Important Note #4:

It is advisable to implement the exact dose of an agrochemical recommended by the collaborating agronomist or farm manager that should be within the rate labelled by the manufacturers. Exceptions should be considered with caution and under the advice of a qualified agronomist and/or farm manager.

Important Note #5:

The unimpeded operation of the agronomic algorithms is based on the proper utilization of the AUG Index values monitored. AUG Index is a vegetation index the accuracy of which can be affected by multiple parameters:

A. Conditions on the scanned surface of the field, such as the presence of water, ice, and snow on the field, will import unaccounted errors in the data gathered during operation. The greater area these regions cover, the greater the risk they might compromise the accuracy of the operation. Thus, operations under such circumstances should be carried out with caution or completely avoided.
B. Presence of weeds in a field will inevitably affect the Vegetation Index (VI). Their presence has been accounted for to a certain extent during specific VRA services (NVRA, PGR VRA, HA VRA, and FUNG VRA). However, if weed coverage exceeds a specific percentage of the dataset (>5%), it will eventually affect the operation. The greater area these regions cover, the greater the risk they might compromise the accuracy of the operation.

C. Presence of flowers in the crop will mildly affect the VI. Their presence has been accounted for to a certain extent in key crops via our agronomic algorithms, e.g., flowering initiation in rapeseed. However, operations during full blooming should be avoided.
D. Operating under atmospheric conditions, where visibility is altered or impeded (e.g., rainfall, snowfall, dense fog, and dust storm), should be avoided or the accuracy of the operation might be compromised.
E. Accuracy of operations in recently irrigated fields, in early-stage row crops, might be compromised since the different water content of the soil will inevitably affect the VI. Operations under such circumstances should be carried out with caution.
F. If significant variability is expected in the soil properties of a single session it is recommended to seek advice from a dedicated contact person within the company since other options e.g., Multi-zone NVRA might be more suitable.
G. Presence of crop stubble in a field might compromise the quality of operations in the early stages. Proprietary algorithms compensate to a certain extent for the presence of crop stubble on a field and the glares they create. However, different densities or orientations of the crop stubble due to standard agronomic practices will eventually impact the VI and consequently the respective operations.
H. Scanning of man-made objects e.g., buildings and roads might have an impact on the data set gathered. The greater the portion of the operation these regions cover, the greater the risk they might compromise its accuracy.

Important Note #6:

Optimal control of the implement will improve the accuracy of operations. Towards that end, the user should utilize his VT to automatically control sections with respect to overlaps. In addition, by setting the proper field boundaries on the set task, section control will be engaged when part of the boom(s) are out of the field. Currently, such parameters are beyond the control of Augmenta™ and might result in over-application due to overlaps or applying agrochemicals outside the boundaries.

e-mail: info@augmenta.ag | www.augmenta.ag

HOLDING | 40 rue des Blancs Manteaux, 75004 Paris, France

ENGINEERING HUB | 40 Irakliou str., 14451 Athens, Greece

COMMERCIAL HUB | 11801 Domain Blvd 3rd Fl, Austin, TX 78758, USA