

EasyStart Bluetooth Manual

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Warning

Bluetooth operation with EasyStart is designed to provide diagnostic feedback when troubleshooting EasyStart. It should be used only by qualified HVAC technicians and HVAC engineers with a good understanding of the system. Changing fault detection, limits and values in the Bluetooth application for EasyStart can damage the connected compressor or EasyStart under some circumstances. Please contact Micro-Air corp. For more details and assistance at Help@Microair.net .

Connecting to EasyStart

EasyStart must be powered to allow a Bluetooth connection. Normally this means the compressor must be running or EasyStart is stopped on a fault. Some systems remove power after a fault occurs. Power must be connected to the EasyStart white and black wires on those systems to communicate with EasyStart on Bluetooth.

EasyStart App

The EasyStart app can be downloaded from Google Play or the Apple App store. It is created by CseaTec LLC which is listed as the developer. All comments and questions should be directed to Sales@Microair.net .

Android users

Location services must have permission for the application to function. This is required in Android to use Bluetooth with EasyStart. If you have difficulty connecting, please verify this permission in Settings->Apps->EasyStart->Permissions. It should be set for “When using the app”.

Communication Setup

Note: The green light must be on inside the EasyStart box to make a connection.

Figure 1 will be the first screen shown when the app opens.

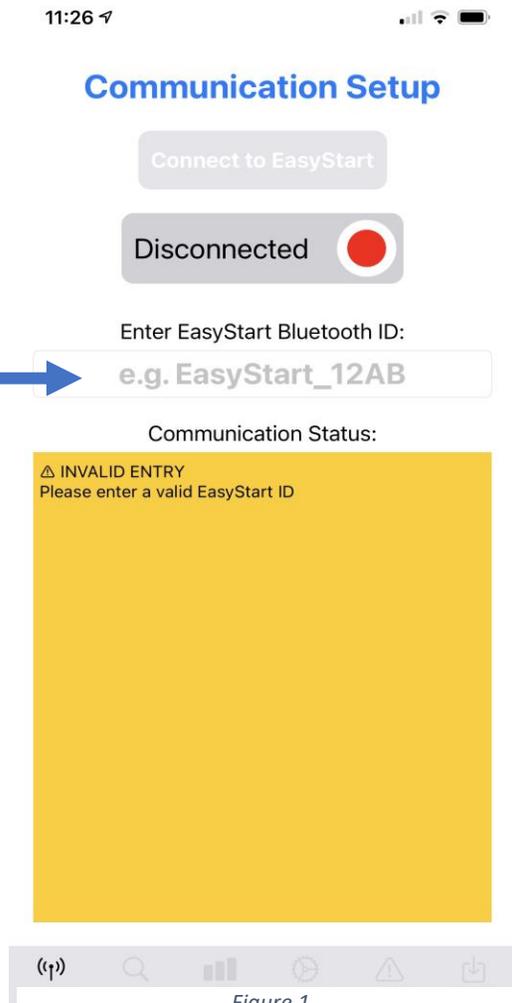


Figure 1

Step 2: Press the blue "Connect to EasyStart" button.

Connect to EasyStart

Figure 2

The screen will change to show the ID of the starter and the connect message similar to what is shown in figure 3.

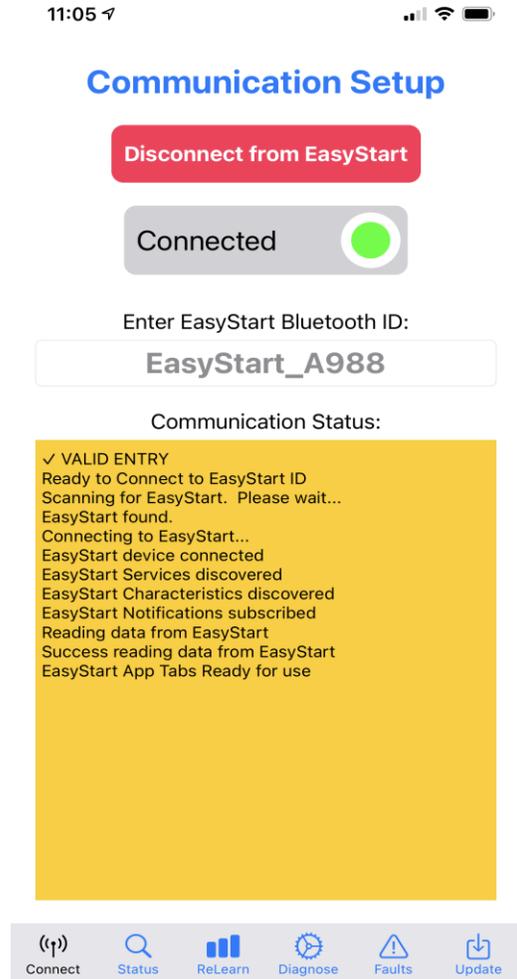


Figure 3

Status & Live Data

Press the menu tab on the bottom to show the status screen as shown in figure 3. This screen shows basic diagnostic information and detected conditions for the starter.

System State

STATE	DESCRIPTION
0	Operating normally
1	Unexpected current on start
2	Short cycle delay active
3	Power interruption detected
4	Compressor stall detected
5	Stuck start relay detected
6	Open compressor overload
7	Over current detected
8	No signal on start (orange) wire
9	High input voltage (120-volt systems)

Live Current

This value indicates the current passing through EasyStart but not the total system current. Some current passes through the run capacitor and is not measured by EasyStart. Total current should be measured using the compressor common winding.

Last Start Peak

The instantaneous peak current seen during the last start. It can be used to compare one start to another during the learning process. It is not the current to use when selecting a generator or determining overall EasyStart performance. Please see our online guide to selecting a generator for more information on that topic.

Note: Large variances in last start peak current can be an indication of a system not completely equalizing between starts. Try extending the SCPT time if this creates faults in your system.

SCPT Delay

Power to EasyStart and the compressor will regularly be cycled during normal operation. This delay sets the amount of time EasyStart will wait after a power interruption to restart the compressor. This ensures pressures are equalized within the compressor system for low current starts. EasyStart does not need to be powered for this delay to occur.

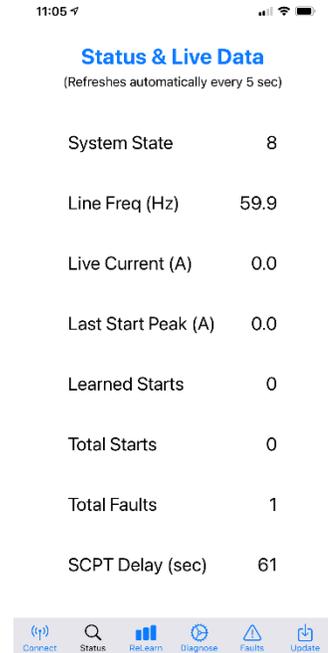


Figure 3

Relearn/Power-Up

Most operation of EasyStart should be done using the switch settings shown in figure 4. Normal operation allows the ramp to occur as detected by EasyStart. The default ramp position should only be used as a diagnostic tool since it defines a short ramp used mostly for starting problematic compressors while diagnosing them.

Switching the relearn switch will clear the memory from previous learned information. Learning should only be done on a stable power source like AC mains power or a large generator.

No power up delay is set for systems that have compressor monitoring functions and require immediate compressor starts. Setting this switch in systems without enough delay to provide equalization, can cause higher current starts, or faults from EasyStart.

SCPT minutes sets the restart time delay. Setting this switch in systems without enough delay to provide equalization, can cause higher current starts, or faults from EasyStart.

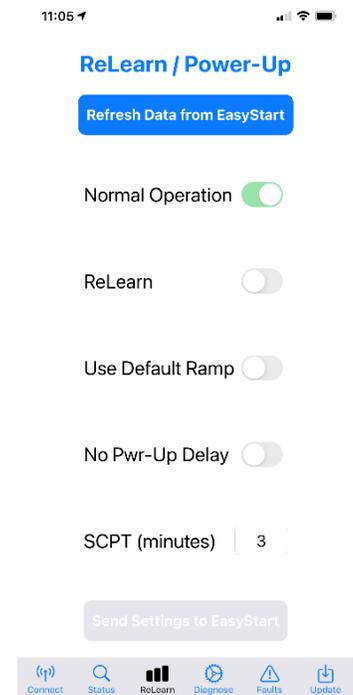


Figure 4

Diagnose & Upload

The screen shown in figure 5 allows sending data to Micro-Air for evaluation. This upload should be followed by a question or request to Help@Micro-Air.net if you are not already working with one of our technicians.

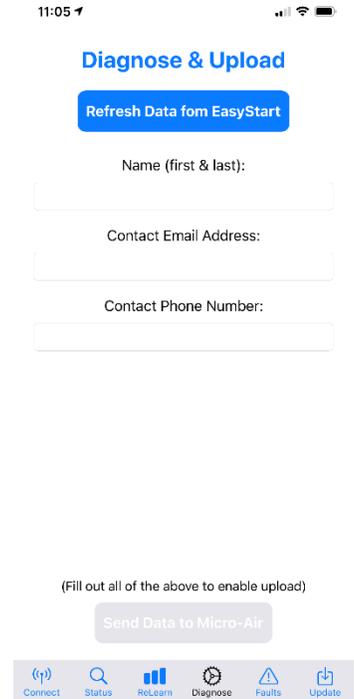


Figure 5

Fault Control

Figure 6 shows the fault control screen. These settings should be disabled only under the advice of a Micro-Air service technician. Disabling these faults can damage the connected compressor or EasyStart under some circumstances.

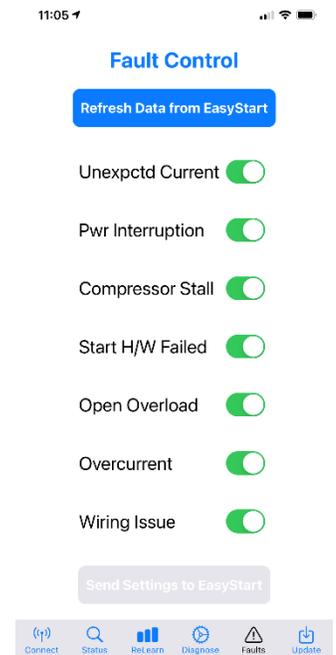


Figure 6

Firmware Update

Updates to the firmware in EasyStart may be made available by the Micro-Air technician assisting your diagnostics. You will be instructed on how to update the device should that become necessary.

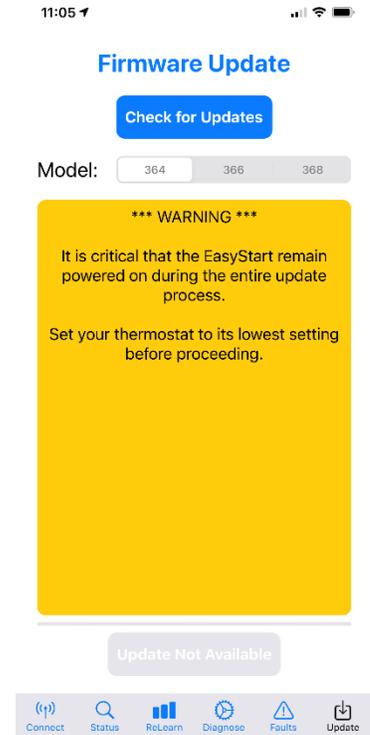


Figure 7