

```
#include "Receiver.h"

//
//DWORD WINAPI Receiver::thread(PVOID pvoid){
// Receiver *instance = (Receiver*)pvoid;
//
//
// static HANDLE hEvent[
//
//
// bool running = true;
//
// hEvent[0] = CreateEvent(NULL, TRUE,FALSE,TEXT("START EVENT"));
// hEvent[1] = CreateEvent(NULL, TRUE,FALSE,TEXT("DIE EVENT"));
//
// while(running){
//     if (WaitForMultipleObjects(2, hEvent, FALSE, INFINITE) == 1);
//     break;
//     instance->run();
// }
// return 0;
//}

void Receiver::run() {
    Packet packet;
    int tCount = 0;

    pSerial_>sendPacket(Packet(ACK0));

    while(true){
        // TODO: check received packet vs RVI mode order
        if(pBuffer_>danger()) {
            enterRVIMode();
        }

        // Get Packet
        try{
            packet = pSerial_>getPacket(TIMEOUT_TIME);
        }catch(const int i) {
            ENSURE_EXCEPTION(i, TIMEOUT_EXCEPTION);
            throw GOTO_RESET_EXCEPTION;
        }

        // Check Packet
        if (!packet.valid()) {
            pSerial_>sendPacket(Packet(NACK));
        } else {
            if (!packet.cmd()) {
```

```
        pGUI_>DisplayReceivedText(packet.data().c_str());
        pSerial_>sendPacket(Packet(ACK1));
        continue;
    } else {
        if(packet.flags() == NTS) {
            throw GOTO_IDLE_EXCEPTION;
        }
    }
}

}

}

void Receiver::enterRVIMode(){
    int flag;
    int tCount = 0 ;
    pSerial_>sendPacket(Packet(RVI));
    while(true){
        try{
            flag = pSerial_>getPacket(TIMEOUT_TIME).flags();
            if (flag == ACK1) {
                break;
            }
        }
        catch(int i){
            ENSURE_EXCEPTION(i, TIMEOUT_EXCEPTION);
            throw GOTO_RESET_EXCEPTION;
        }
    }

    while(!(pBuffer_>safe())) {
        pSerial_>sendPacket((pBuffer_>peek()));
        pBuffer_>pop();
    }
    if(pBuffer_>safe()) {
        throw GOTO_IDLE_EXCEPTION;
    }
}
```